



UL Solutions Evaluation Report

UL ER10128-02

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UL Category Code: ULFB – Membrane Roofing

CSI MasterFormat®

DIVISION: 07 00 00 - THERMAL AND MOISTURE PROTECTION

Sub-level 2: 07 50 00 - Membrane Roofing

Sub-level 3: 07 54 00 - Elastomeric Membrane Roofing

Sub-level 4: 07 54 23 – Thermoplastic-Polyolefin Roofing

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1. Subject

DURO-LAST Duro-Tech TPO and Duro-Tech TPO Fleece Roofing Membranes

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2. Scope of evaluation

- 2024 *International Building Code*® (IBC)
- 2024 *International Residential Code*® (IRC)
- 2024 *International Energy Conservation Code*® (IECC)
- ICC ES Acceptance Criteria for Membrane Roof-Covering Systems (AC75)
- ICC ES Acceptance Criteria for Quality Documentation (AC10)

The products were evaluated for the following properties:

- Roofing Systems for Exterior Fire Exposure (UL790, ASTM E108)
- Roofing Systems, Wind Uplift Resistance (UL1897, FM 4474)
- Physical Properties (ASTM D4637, ASTM G155)
- Impact Resistance (FM 4470)
- Foot Traffic Resistance (FM 4470)

3. Referenced documents

- UL790 (ASTM E108), Standard Test Methods for Fire Tests of Roof Covering
- UL1897, Uplift Tests for Roof Covering Systems
- FM 4470, The Approval Standard for Single-Ply, Polymer-Modified Sheet, Built-Up Roof (BUR) and Liquid Applied Roof Assemblies For Use in Class 1 and Noncombustible Roof Deck Construction
- FM 4474, American National Standard for Evaluating the Simulated Wind Uplift Resistance of Roof Assemblies Using Static Positive and/or Negative Differential Pressures
- ASTM D6878 Standard Specification for Thermoplastic Polyolefin Based Sheet Roofing
- ASTM G154 Standard Practice for Operating Fluorescent Ultraviolet (UV) Lamp Apparatus for Exposure of Nonmetallic Materials
- ASTM D312, Standard Specification for Asphalt Used in Roofing

4. Uses

The single-ply roofing systems covered in this report are used as roof coverings in mechanically fastened or fully adhered Class A, B, or C roof assemblies installed on combustible or noncombustible decks.

5. Product description

5.1 General

Duro-Tech TPO, Duro-Tech TPO Fleece and Membrane Roofing Systems are single-ply roofing membranes designed to be used in adhered roofing systems or mechanically fastened roofing systems as described in this report. The membranes are provided in rolls of various lengths and widths.

The roofing assemblies incorporating the membranes comply with the following properties when installed as described in this report.

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5.2 Fire Classification

Roofing assemblies covered under this report have been tested for fire classification Class A, B, or C in accordance with UL 790 (ASTM E108), as required by Section 1505.1 of the IBC and Section R902.1 of the IRC.

5.3 Wind Uplift Resistance

Roofing assemblies covered under this report have been tested for wind uplift resistance in accordance with FM 4474 or UL 1897, and therefore qualify for use under Roofing membranes Section 1504.4.1 of the IBC.

The roofing assemblies shall be designed to resist the design wind load pressures for components and cladding in accordance with Section 1609 of the IBC.

5.4 Physical Properties

The roofing membranes covered under this Report have been tested for physical properties in accordance with ASTM D6878 and ASTM G154 and therefore qualify for use under Section 1507.12.2 of the IBC.

5.5 Impact Test

Duro-Last single ply membranes covered under this Report have been tested for impact resistance in accordance with "Resistance to Foot Traffic Test" in Section 5.5 of FM 4470 and therefore qualify for use under Section 1504.7 of the IBC.

5.6 Membranes

The following roof covers are mechanically attached or fully adhered to Approved substrates using fasteners, stress plates and adhesives, as outlined in the Limitations / Conditions of Use herein.

5.6.1 Duro-Last Duro-Tech TPO is a nominal 45-mil (1.1 mm), 60-mil (1.5 mm), or 80-mil (2.0 mm) thick, polyester scrim reinforced single-ply roof membrane.

5.6.2 Duro-Last Duro-Tech TPO Fleece is a nominal 45-mil (1.1 mm) (XR 100), 60-mil (1.5 mm) (XR 115), or 80-mil (2.0 mm) (XR 135) thick, polyester reinforced, single-ply roof membrane produced with an 8-oz polyester backing.

5.7 Insulations

Foam Plastic insulation when used shall have a flame spread index of not more than 75 when tested at the maximum thickness intended for use in accordance with UL 723 or ASTM E 84 to qualify for use under Section 2603.3 Exception 3 of the IBC. To qualify for use under Section 2603.4.1.5 of the IBC, a thermal barrier is not required for foam plastic insulation that is part of a Class A, B, or C roof-covering assembly, provided the assembly with foam plastic insulation complies with FM 4450 or UL 1256.

5.8 Adhesives

The adhesives used for adhering Duro-Tech TPO, Duro-Tech TPO Fleece or membranes to the insulation or roofing substrate shall be used as noted in the Appendix of this Report.

5.9 Fasteners

Fasteners used to mechanically fasten insulation and membranes to the roof deck, shall be corrosion resistant and shall be one of the fasteners identified in Note 2 in the Appendix of this Report.

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5.10 Asphalt

Hot roofing asphalt, when specified in the roofing assemblies shall conform to ASTM D312, Type III or Type IV.

6. Installation

Duro-Last single ply membranes shall be installed in accordance with the applicable code, this report and the manufacturer's published installation instructions. The membranes shall be installed in accordance with Section 1507.12 of the IBC or Section 905.12 of the IRC, as applicable, except as noted in this report.

The manufacturer's published installation instructions shall be available at all times on the jobsite during installation.

The slope of the roof on which the membranes are installed shall be a minimum of ¼:12 (2%) slope and shall not be more than the maximum slope indicated in UL Online Certifications Directory Roofing Systems (TGFU) and in the Appendix of this Report.

Penetrations and terminations of the roof covering shall be flashed and made watertight in accordance with the requirements of the membrane manufacturer and applicable code.

- 6.1** Duro-Last Duro-Tech TPO, Duro-Tech TPO Fleece and shall be installed in accordance with Duro-Last Duro-Last's published installation instructions.
- 6.2** System attachment requirements for wind load resistance are set forth in Appendix 1. "MDP" = Maximum Design Pressure is the result of testing for wind load resistance based on allowable wind loads.
- 6.3** For mechanically fastened membrane systems (Type D) over profiled steel deck, membrane shall be installed running perpendicular to steel deck flutes.
- 6.4** For DuroBond installations, care shall be taken to ensure that the DuroBond Plates do not align with seams in the TPO membrane. This condition precludes proper induction welding of the membrane to the DuroBond Plates.

6.5 Fire Classification

6.5.1 New Construction: Roof assemblies utilizing Duro-Last Duro-Tech TPO, Duro-Tech TPO Fleece or membranes are described in [Product iQ® database](#) for Roofing Systems (TGFU) under File R10128 and in Tables provided in the Appendix.

6.5.2 Reroofing: The existing roof shall be inspected in accordance with the provisions and limitations of Section 1512 of the IBC or Section R908 of the IRC as applicable. The existing deck shall be inspected to verify that the structure to be reroofed is structurally sound and adequate to support and secure the roofing membrane. Prior to installation of new roof coverings, inspection by and approval from the code official having jurisdiction is required.

Duro-Last Duro-Tech TPO, Duro-Tech TPO Fleece or membranes may be installed over existing Classified Class A, B or C roofing systems as described in the UL Product Certification Category for Roofing Materials (TGFU) File R10128, under the heading of Maintenance and Repair.

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6.6 Wind Resistance

6.6.1 New Construction: The allowable wind uplift pressures for the roof assemblies are noted in Table 2. Metal edge securement for all systems shall be designed in accordance with SPRI ES-1, complying with IBC Section 1504.6. For certifications of metal edge securement systems in accordance with SPRI ES-1, see Product iQ® database for Roof-edge Systems, Metal, for Use with Low-slope Roofing Systems (TGJZ).

6.6.2 Reroofing: Roof covering systems employing mechanical fasteners shall be qualified, to the satisfaction of the code official, as to the adequacy of fasteners penetrating through existing roof coverings into structural substrates. Since the composition and/or condition of any particular underlying existing roofing materials may vary, reroofing material may vary, reroofing with adhered systems is outside the scope of this report.

7. Conditions of use

Duro-Last single ply membranes described in this Report comply with, or are suitable alternatives to, what is specified in those codes listed in Section 2 of this Report, subject to the following conditions:

- 7.1 The products must be manufactured, identified, and installed in accordance with this report, the manufacturer's published installation instructions, and the applicable code. If there is a conflict between the manufacturer's published installation instructions and this report, this report governs.
- 7.2 The membrane is to be installed by authorized applicators approved by Duro-Last.
- 7.3 See UL Product iQ® database for Roofing Systems (TGFU) File R10128. Also refer to the Appendix provided in this Report.
- 7.4 Above-deck thermal insulation board shall comply with the applicable standards listed in the Table of Section 1508.2 of the IBC.
- 7.5 Wind uplift pressures on any roof area, including edges and corner zones shall not exceed the allowable wind pressure for the roof covering installed in that particular area. Refer to the Appendix of this report.
- 7.6 The allowable wind uplift pressures listed in the Appendix of this report are for the roof systems only. The deck and framing to which the roofing system is attached shall be designed for the applicable components and cladding and wind loads in accordance with the applicable code.
- 7.7 When application is over an existing roof, documentation of the wind uplift resistance of the composite roof construction shall be submitted to the code official.
- 7.8 The metal edge securement shall be designed and installed for wind loads in accordance with Chapter 16 of the IBC and tests for pull resistance in accordance with Test Methods RE-1, RE-2, and RE-3 of SPRI ES-1, except Vult wind speed shall be determined from the wind maps in Section 1609 of the IBC, as applicable.
- 7.9 The products are manufactured at the locations listed in Table 1 of this Report under the UL LLC Classification and Follow-Up Service Program, which includes audits in accordance with quality elements of ICC-ES Acceptance Criteria for Quality Documentation, AC 10.

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Duro-Last roofing membranes described in this report comply with, or are suitable alternatives to what is specified in, those codes listed in Section 2.0 of this report, subject to the following conditions:

- 7.10** The products must be manufactured, identified, and installed in accordance with this report, the manufacturer's published installation instructions, and the applicable code. If there is a conflict between the manufacturer's published installation instructions and this report, this report governs.
- 7.11** For a listing of applicable UL Solutions Certifications for Duro-Last roofing membranes, see UL Solution's Product iQ® for the following categories:
- Class A, B or C roof-covering assemblies UL Classified in accordance with UL 790 ([TGFU](#)).
 - Roofing Systems UL Classified for uplift resistance in accordance with UL 1897 ([TGIK](#)).
- 7.12** Duro-Last roofing membranes are manufactured at the following locations under the UL Solutions Certification and Follow-Up Service Program, which includes audits in accordance with the quality elements of ICC-ES Acceptance Criteria for Quality Documentation, AC10.

Manufacturer Name	City, State	Factory Identification
Amrize Building Envelope, LLC	Wellford SC 29385	WMF
Amrize Building Envelope, LLC	Tuscumbia AL 35674	MSK

8. Supporting evidence

- 8.1** Data in accordance with ICC-ES Acceptance Criteria for Membrane Roof-Covering Systems, AC75.
- 8.2** UL Classification reports in accordance with UL 790 and UL 1897.
- 8.3** Data in accordance with FM 4470 and FM 4474.
- 8.4** Data in accordance with ASTM D4637 and ASTM G154.
- 8.5** Documentation of quality system elements described in AC10.

9. Identification

Duro-Last roofing membranes as described in this evaluation report are identified by a marking bearing the report holder's name (Amrize Building Envelope LLC d/b/a Duro-Last), the plant identification, the product designation, the UL Solutions Classification Mark, and the evaluation report number "UL ER10128-02." The validity of the evaluation report is contingent upon this identification appearing on the product or on the smallest unit container in which the product is packaged.

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10. Use of UL Solutions Evaluation Report

- 10.1 The approval of building products, materials or systems is under the responsibility of the applicable authorities having jurisdiction.
- 10.2 UL Solutions Evaluation Reports shall not be used in any manner that implies an endorsement of the product, material or system by UL.
- 10.3 The current status of this report, as well as a complete directory of UL Solutions Evaluation Reports may be found at UL.com via our UL Product iQ®:

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APPENDIX 1: ATTACHMENT REQUIREMENTS FOR WIND UPLIFT RESISTANCE

Table	Deck	Application	Type	Description
1A-1	Wood	New, Reroof (Tear-Off), Recover	A-1A	Bonded Insulation, Bonded Roof Cover
1C-1	Wood	New, Reroof (Tear-Off), Recover	C-1	Mechanically Attached Insulation, Bonded Roof Cover
1C-2	Wood	New, Reroof (Tear-Off), Recover	C-2	Plate-Bonded Roof Cover
1D-1	Wood	New, Reroof (Tear-Off), Recover	D-1A	Insulated, Mechanically Attached Roof Cover (Stress Plates)
1D-2	Wood	New, Reroof (Tear-Off), Recover	D-1C	Insulated, Mechanically Attached Roof Cover (RMA Strips)
1E	Wood	New, Reroof (Tear-Off), Recover	E	Non-Insulated, Mechanically Attached Roof Cover
2A-1	Steel or Concrete	New, Reroof (Tear-Off), Recover	A-1A	Bonded Insulation, Bonded Roof Cover
2A-2	Steel or Concrete	New, Reroof (Tear-Off), Recover	A-1B	Bonded Temp Roof, Bonded Top Insulation, Bonded Roof Cover
2A-3	Steel or Concrete	New, Reroof (Tear-Off), Recover	A-1C	Thermal Barrier, Bonded Temp Roof, Bonded Top Insulation, Bonded Roof Cover
2A-4	Steel or Concrete	New, Reroof (Tear-Off)	A-1D	Base Insulation, Mechanically Attached Temp Roof, Bonded Roof Cover
2B-1	Steel or Concrete	New, Reroof (Tear-Off), Recover	B-1	Mech. Attached Base Insulation, Bonded Top Insulation, Bonded Roof Cover
2C-1	Steel or Concrete	New, Reroof (Tear-Off), Recover	C-1	Mechanically Attached Insulation, Bonded Roof Cover
2C-2	Steel or Concrete	New, Reroof (Tear-Off), Recover	C-2	Plate-Bonded Roof Cover
2D-1	Steel or Concrete	New, Reroof (Tear-Off), Recover	D-1A	Insulated, Mechanically Attached Roof Cover (Stress Plates)
2D-2	Steel or Concrete	New, Reroof (Tear-Off), Recover	D-1B	Insulated, Mechanically Attached Roof Cover (Battens)
2D-3	Steel or Concrete	New, Reroof (Tear-Off), Recover	D-1C	Insulated, Mechanically Attached Roof Cover (Strips)
2D-4	Steel or Concrete	New, Reroof (Tear-Off)	D-2	Vapor retarder, Insulated Mechanically Attached Roof Cover
3A-1	Concrete	New, Reroof (Tear-Off)	A-1A	Bonded Insulation, Bonded Roof Cover
3A-2	Concrete	New, Reroof (Tear-Off)	A-1B	Bonded Temp Roof, Bonded Insulation, Bonded Roof Cover
3F	Concrete	New, Reroof (Tear-Off)	F	Non-Insulated, Bonded Roof Cover
4A	LWIC	New, Reroof (Tear-Off)	A-1A	Bonded Insulation, Bonded Roof Cover
4B	LWIC	New, Reroof (Tear-Off), Recover	B-1	Mech. Attached Anchor Sheet, Bonded Insulation, Bonded Roof Cover
4C	LWIC	New, Reroof (Tear-Off), Recover	C-2	Plate-Bonded Roof Cover
4D-1	LWIC	New, Reroof (Tear-Off), Recover	D-1A	Insulated, Mechanically Attached Roof Cover (Stress Plates)
4D-2	LWIC	New, Reroof (Tear-Off), Recover	D-1B	Insulated, Mechanically Attached Roof Cover (Battens)
4F	LWIC	New, Reroof (Tear-Off)	F	Non-Insulated, Bonded Roof Cover
5A	CWF	New, Reroof (Tear-Off)	A-1A	Bonded Insulation, Bonded Roof Cover
5B	CWF	New, Reroof (Tear-Off)	A-2	Mech. Attached Anchor Sheet, Bonded Insulation, Bonded Roof Cover
6A	Gypsum	Reroof (Tear-Off)	A-1A	Bonded Insulation, Bonded Roof Cover
6B	Gypsum	Reroof (Tear-Off)	A-2	Mech. Attached Anchor Sheet, Bonded Insulation, Bonded Roof Cover
7A	Various	Recover	A-1A	Bonded Insulation, Bonded Roof Cover
7B	Steel	Recover	C-2	Plate-Bonded Roof Cover
7C	Steel	Recover	D-1	Insulated, Mechanically Attached Roof Cover
7D	Steel	Recover	E	Non-Insulated, Mechanically Attached Roof Cover
7E	Various	Recover	F	Non-Insulated, Bonded Roof Cover

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The following notes apply to the systems outlined herein:

1. Roof decks shall be in accordance with IBC or IRC requirements to the satisfaction of the AHJ. Wind load resistance of the roof deck shall be documented through proper codified Approval documentation.
2. Unless otherwise noted, fasteners and stress plates for insulation attachment shall be as follows. Fasteners shall be of sufficient length for the following engagements:

Wood Deck:	Duro-Last #15 Heavy-duty Screw Fasteners and Duro-Last 3 inch metal plate. Minimum 1.0-inch plywood penetration or wood plank embedment.
Steel Deck:	Elevate All-Purpose or Heavy-Duty Fasteners with Elevate Insulation Fastening Plates. Minimum 3/4-inch steel penetration, engage the top flute of the steel deck.
Concrete Deck:	Duro-Last #15 Heavy Duty Screw Fastener or Duro-Last concrete Nail with and Duro-Last 3 inch Metal Plate. Minimum 1.0-inch embedment. Fasteners installed with a pilot hole in accordance with the fastener manufacturer's published installation instructions
3. Minimum 200 psi, minimum 2-inch thick lightweight insulating concrete may be substituted for rigid insulation board for System Type D-1 (mechanically attached membrane), whereby the membrane fasteners are installed through the LWIC to engage the structural steel or concrete deck. The structural deck shall be of equal or greater configuration to the steel and concrete deck listings.
4. Preliminary insulation attachment for System Type D = Minimum four fasteners per 4 x 8 ft. board or minimum two fasteners per 4 x 4 ft. board.
5. Insulation adhesive bead width listed below is at the time of application; the beads shall expand as noted in the manufacturer's published instructions.
 - INSTA STIK QUIK SET: Continuous 3/4 to 1-inch beads
 - Millennium One Step: Continuous 1/2 to 3/4-inch beads
 - OlyBond 500: Continuous 3/4 to 1-inch beads
 - Millennium PG-1: Continuous 1/2 to 3/4-inch beads

Unless otherwise noted, the spacing of insulation adhesive is 12-inch o.c. Ribbons.
6. Unless otherwise noted, all insulations are offered in flat stock or tapered board of the minimum thickness noted. Tapered ISO 95+ GL or Tapered RESISTA at the following thickness limitations may be substituted with the following Maximum Design Pressure (MDP) limitations. In no case, shall these values be used to 'increase' the MDP listings in the tables; rather if MDP listing below meets or exceeds that listed for a system in the tables, then the thinner board listed below may be used as a drop-in for the equivalent thicker material listed in the table.

INSTA STIK QUIK SET:	MDP	-195.5 psf	(Min. 1/2-inch thick)
Millennium One Step:	MDP	-262.5 psf	(Min. 1/2-inch thick)
OlyBond 500:	MDP	-262.5 psf	(Min. 1/2-inch thick)
Millennium PG-1:	MDP	-262.5 psf	(Min. 1/2-inch thick)
7. For Recover Applications using System Type D, the insulation is optional. Alternatively, min. 1/2-inch DURO-GUARD ISO HD-E2 or min. 1/4-inch GP DensDeck, DensDeck Prime, USG SECUROCK Gypsum-Fiber Roof Board or SECUROCK Glass-Mat Roof Board or CertainTeed GlassRoc may be used as a separator board, preliminarily attached prior to roof cover installation. The existing roof system shall be suitable for a recover application.
8. For membrane attachment using batten-strips, batten-strip end laps shall be spliced with sufficient dimension to allow for minimum 2-fasteners at each batten-strip lap.
9. For adhered membrane systems, side laps shall be minimum 3-inch wide sealed with min. 1.5-inch heat weld. Membrane adhesive application rates are as follows:

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Membrane	Adhesive	Method	Rate
Duro-Tech TPO	UltraPly Bonding Adhesive (UP-BA)	Contact Application	45 to 60 ft. ² /gal
Duro-Tech TPO	Water Based Bonding Adhesive-P (WBBA-P)	Contact Application	100 to 120 ft. ² /gal
Duro-Tech TPO	Single-Ply LVOC Bonding Adhesive (LVOC-BA)	Contact Application	45 to 60 ft. ² /gal
Duro-Tech TPO	Single-Ply LVOC Bonding Adhesive 1168 (LVOC-BA-1168)	Contact Application	45 to 60 ft. ² /gal
	Self Adhered (SA)	Contact Application	Not Applicable
Duro-Tech Fleece	TPO Hot Mopped, ASTM D 312, Type IV Asphalt (Asphalt)	Contact Application	25 to 30 lbs/100 ft. ²
Duro-Tech Fleece	TPO XR Bonding Adhesive (XR-BA)	Contact Application	70 to 90 ft. ² /gal
Duro-Tech Fleece	TPO XR Stick Membrane Adhesive	Contact Application	Continuous ³ / ₄ to 1-inch wide ribbons
Duro-Tech Fleece	TPO Millennium PG-1	Contact Application	Continuous ¹ / ₂ to ³ / ₄ -inch wide ribbons
10.	TPO Induction Welded Systems (Type C-2):		
	A. Duro-Tech TPO bonded to Duro-Tech TPO DuroBond Plates with RhinoBond Portable Plate Bonding Tool and weighted RhinoBond Cooling Clamps.		
	B. Duro-Tech TPO bonded to Duro-Tech TPO Isoweld TPO Plates with IsoWeld Portable Plate Bonding Tool and weighted IsoWeld Cooling Clamps.		
	Care shall be taken to ensure that the DuroBond Plates do not line-up with seams in the TPO membrane. This condition precludes proper induction welding of the membrane to the DuroBond Plates. Side laps shall be minimum 3-inch wide sealed with minimum 1.5-inch heat weld.		
11.	"Asphaltic" Vapor Barrier / Temp Roof noted herein consists of 1 or 2 plies Ply IV (4) or Ply VI (6) or 1 ply MB Base, SBS Base, SBS PolyBase or SBS Premium Base in hot asphalt.		
12.	"MA Base" Use one of the following: Channel Venting Base; MB Base; SBS Base; SBS Base-P; SBS Glass Torch Base; SBS Glass Torch Base 1.5; SBS Premium Base; SBS PolyBase; SBS Premium PolyBase; SBS Poly Torch Base; or SBS Smooth		
13.	"MDP" = Maximum Design Pressure is the result of testing for wind load resistance based on allowable wind loads. Refer to IBC Section 1609 or FBC 1609.1.5 for determination of design wind pressures.		
14.	Addition of 4-6 mil polyethylene vapor barrier does not impact the rating of the Certification when used beneath the insulation layer or barrier product in all systems listed.		

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**Table 1A-1: Wood Decks- New Construction, Reroof (Tear off), or Recover
System Type A-1A: Bonded Insulation, Bonded Roof Cover**

System No.	Deck (See Note 1)	Insulation				Roof Cover		MDP (psf)	Fire Rating UL790/E108	
		Base Insulation	Base Insulation attachment	Top Insulation	Top Insulation Attachment	Membrane	Membrane Attachment		Class	Max Incline (in.)
W-1	Min. 15/32-inch plywood at max. 24-inch spans	Min. ¼-inch DensDeck or SECUROCK Gypsum-Fiber Roof Board	OlyBond 500	Min. 1.0-inch ISO 95+ GL	OlyBond 500	Duro-Tech TPO, Duro-Tech TPO	UP-BA, LVOC-BA, LVOC-BA-1168, SA	-45.0	A	¼
W-2	Min. 15/32-inch plywood at max. 24-inch spans	None	None	RESISTA	OlyBond 500	Duro-Tech TPO,	UP-BA, LVOC-BA, LVOC-BA-1168, SA	-45.0	A	¼
W-3	Min. 7/16-inch OSB at max. 24-inch spans	None	None	Min. ¼-inch DensDeck Prime	Millennium One Step	Duro-Tech TPO,	UP-BA, LVOC-BA, LVOC-BA-1168, SA	-45.0	A	2
W-4	Min. 19/32-inch plywood at max 24-inch spans using 8d ring shank nails spaced 6-inch o.c	None	None	Min. ¼-inch DensDeck Prime or SECUROCK Gypsum Fiber Roof Board	INSTA STIK Quik Set 6-inch o.c. ribbons	Duro-Tech TPO,	UP-BA, LVOC-BA, LVOC-BA-1168, WBBA-P, SA	-67.5	A	2
DURO-TECH TPO FLEECE SYSTEMS:										
W-5	Min. 7/16-inch OSB OR 15/32-inch Plywood at max. 24- inch spans	None	None	Min. ¼-inch DensDeck Prime	Millennium One Step	Duro-Tech TPO Fleece	XR-BA, Asphalt	-45.0	A	1
W-6	Min. 19/32-inch plywood at max 24-inch spans using 8d ring shank nails spaced 6-inch o.c	None	None	Min. ¼-inch DensDeck Prime or SECUROCK Gypsum Fiber Roof Board	INSTA STIK Quik Set 6-inch o.c. ribbons	Duro-Tech TPO Fleece	Asphalt	-67.5	A	1
W-7	Min. 7/16-inch OSB at max. 24-inch spans attached using 8d ring shank nails spaced 6-inch o.c	None	None	Min. ¼-inch DensDeck Prime	Millennium PG-1	Duro-Tech TPO Fleece	Millennium PG-1 12-inch o.c. ribbons	-75.0	A	½
W-8	Min. 7/16-inch OSB OR 15/32-inch Plywood at max. 24-inch spans using 8d ring shank nails spaced 6-inch o.c	None	None	Min. ¼-inch SECUROCK Gypsum Fiber Roof Board	Millennium PG-1 6-inch o.c. ribbons	Duro-Tech TPO Fleece	Millennium PG-1 6-inch o.c. ribbons	-90.0	A	¼

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**TABLE 1C-1: WOOD DECKS - NEW CONSTRUCTION or REROOF (Tear-Off) or RECOVER
SYSTEM TYPE C-1: MECHANICALLY ATTACHED INSULATION, BONDED ROOF COVER**

System No.	Deck (See Note 1)	Base Insulation Layer	Top Insulation Layer			Roof Cover	Adhesive	MDP (psf)	Fire Rating UL790/E108	
			Type	Fasteners	Attach				Class	Max Incline (in.)
W-9	Min. 7/16-inch OSB at max 24-inch spans	(Optional) One or more layers, any combination (Loose Laid)	Min. ¼-inch, SECUROCK Gypsum Fiber Roof Board	See Note 2	1 per 3.2 ft. ²	Duro-Tech TPO,	UP-BA, LVOC-BA-1168, LVOC-BA, WBBA-P, SA	-30.0	A	2
W-10	Min. 7/16-inch OSB or 15/32-inch plywood at max 24-inch spans	(Optional) One or more layers, any combination (Loose Laid)	Min. ¼-inch, DensDeck	See Note 2	1 per 2.67 ft. ²	Duro-Tech TPO,	UP-BA, LVOC-BA-1168, LVOC-BA, WBBA-P, SA	-37.5	A	2
W-11	Min. 7/16-inch OSB at max 24-inch spans attached using 8d ring shank nails spaced 6-inch o.c	(Optional) One or more layers, any combination (Loose Laid)	Min. 1.0 inch RESISTA	See Note 2	1 per 1.78 ft. ²	Duro-Tech TPO,	UP-BA, LVOC-BA-1168, LVOC-BA, WBBA-P, SA	-37.5	A	½
W-12	Min. 15/32-inch plywood at max 24-inch spans	(Optional) One or more layers, any combination (Loose Laid)	Min. ½-inch, SECUROCK Gypsum Fiber Roof Board	See Note 2	1 per 4.0 ft. ²	Duro-Tech TPO,	UP-BA, LVOC-BA-1168, LVOC-BA, WBBA-P, SA	-37.5	A	2
W-13	Min. 19/32-inch plywood at max 24-inch spans	(Optional) One or more layers, any combination (Loose Laid)	Min. ½-inch DURO-GUARD ISO HD-E2	See Note 2	1 per 2.67 ft. ²	Min. 60 mil Duro-Tech TPO,	UP-BA, LVOC-BA-1168, LVOC-BA, WBBA-P, SA	-37.5	B	¼
W-14	Min. 19/32-inch plywood at max 24-inch spans	(Optional) One or more layers, any combination (Loose Laid)	Min. 2.0-inch RESISTA	See Note 2	1 per 4.0 ft. ²	Min. 60 mil Duro-Tech TPO,	UP-BA, LVOC-BA-1168, LVOC-BA, WBBA-P, SA	-42.5	A	¼
W-15	Min. 7/16-inch OSB at max 24-inch spans	(Optional) One or more layers, Minimum 1.0-inch RESISTA or ISO 95+ GL, loose laid	Min. ¼-inch or SECUROCK Gypsum-Fiber Roof Board or DensDeck Prime	See Note 2	1 per 2.67 ft. ²	Duro-Tech TPO,	UP-BA, LVOC-BA, LVOC-BA-1168, SA	-45.0	A	2
W-16	Min. 7/16-inch OSB at max 24-inch span attached using 8d ring shank nails spaced 6-inch o.c s	(Optional) One or more layers, any combination (Loose Laid)	Min. 1.0 inch RESISTA	See Note 2	1 per 1.6 ft. ²	Duro-Tech TPO,	UP-BA, LVOC-BA-1168, LVOC-BA, WBBA-P, SA	-45.0	A	¼
W-17	Min. 7/16-inch OSB at max 24-inch spans attached using 8d ring shank nails spaced 6-inch o.c	(Optional) One or more layers, any combination (Loose Laid)	Min. ½-inch thick, SECUROCK Gypsum Fiber Roof Board or DensDeck Prime	See Note 2	1 per 1.78 ft. ²	Duro-Tech TPO,	UP-BA, LVOC-BA-1168, LVOC-BA, WBBA-P, SA	-45.0	A	2

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**TABLE 1C-1: WOOD DECKS - NEW CONSTRUCTION or REROOF (Tear-Off) or RECOVER
SYSTEM TYPE C-1: MECHANICALLY ATTACHED INSULATION, BONDED ROOF COVER**

System No.	Deck (See Note 1)	Base Insulation Layer	Top Insulation Layer			Roof Cover	Adhesive	MDP (psf)	Fire Rating UL790/E108	
			Type	Fasteners	Attach				Class	Max Incline (in.)
W-18	Min. 7/16-inch OSB at max 24-inch spans attached using 8d ring shank nails spaced 6-inch o.c	(Optional) One or more layers, any combination (Loose Laid)	Min. 1.5-inch Duro-Guard ISO Composite-E2 or Min. 2.0 inch RESISTA	See Note 2	1 per 1.78 ft. ²	Duro-Tech TPO,	UP-BA, LVOC-BA-1168, LVOC-BA, WBBA-P, SA	-45.0	A	1/4
W-19	Min. 15/32-inch plywood at max 24-inch spans	(Optional) One or more layers, any combination, loose laid	Min. 1.0 inch RESISTA	See Note 2	1 per 1.6 ft. ²	Duro-Tech TPO,	UP-BA, LVOC-BA, LVOC-BA-1168, SA	-45.0	A	1/4
W-20	Min. 15/32-inch plywood at max 24-inch spans	(Optional) One or more layers, any combination, loose laid	Min. 1/2-inch SECUROCK Gypsum-Fiber Roof Board	See Note 2	1 per 4.0 ft. ²	Duro-Tech TPO,	UP-BA, LVOC-BA, LVOC-BA-1168, SA	-45.0	A	2-1/2
W-21	Min. 15/32-inch plywood at max 24-inch spans attached using 8d ring shank nails spaced 6-inch o.c	(Optional) One or more layers, any combination (Loose Laid)	Min. 1/4-inch, DensDeck Prime	See Note 2	1 per 1.78 ft. ²	Duro-Tech TPO,	UP-BA, LVOC-BA-1168, LVOC-BA, WBBA-P, SA	-45.0	A	2
W-22	Min. 15/32-inch plywood at max 24-inch spans	Min. 1/4-inch thick, DensDeck or SECUROCK Gypsum Fiber Roof Board	Min. 1.5-inch ISO 95+ GL	See Note 2	1 per 2.67 ft. ²	Duro-Tech TPO,	UP-BA, LVOC-BA-1168, LVOC-BA, WBBA-P, SA	-45.0	A	1/4
W-23	Min. 15/32-inch plywood at max 24-inch spans attached using 8d ring shank nails spaced 6-inch o.c	(Optional) One or more layers, any combination (Loose Laid)	Min. 1.5-inch Duro-Guard ISO Composite-E2 or RESISTA	See Note 2	1 per 2.67 ft. ²	Duro-Tech TPO,	UP-BA, LVOC-BA-1168, LVOC-BA, WBBA-P, SA	-45.0	A	1/4
W-24	Min. 15/32-inch plywood at max 24-inch spans	Min. 1/4-inch thick, DensDeck or SECUROCK Gypsum Fiber Roof Board	Min. 2.0-inch ISO 95+ GL	See Note 2	1 per 4.0 ft. ²	Duro-Tech TPO,	UP-BA, LVOC-BA-1168, LVOC-BA, WBBA-P, SA	-45.0	A	1/4
W-25	Min. 15/32-inch plywood at max 24-inch spans	(Optional) One or more layers, any combination (Loose Laid)	Min. 2.0-inch RESISTA	See Note 2	1 per 4.0 ft. ²	Duro-Tech TPO,	UP-BA, LVOC-BA-1168, LVOC-BA, WBBA-P, SA	-45.0	A	1/4
W-26	Min. 19/32-inch plywood at max 24-inch spans	Min. 1/4-inch thick, DensDeck or SECUROCK Gypsum Fiber Roof Board (Loose Laid)	Min. 2.0-inch ISO 95+ GL	See Note 2	1 per 1.78 ft. ²	Duro-Tech TPO,	UP-BA, LVOC-BA-1168, WBBA-P, SA	-45.0	A	1/4
W-27	Min. 19/32-inch plywood at max 24-inch spans	(Optional) One or more layers, any combination, (Loose Laid)	Min. 1/2-inch SECUROCK Gypsum-Fiber Roof Board, or DensDeck Prime	See Note 2	1 per 1.6 ft. ²	Duro-Tech TPO,	UP-BA, LVOC-BA-1168, LVOC-BA, WBBA-P, SA	-45.0	A	2-1/2

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**TABLE 1C-1: WOOD DECKS - NEW CONSTRUCTION or REROOF (Tear-Off) or RECOVER
SYSTEM TYPE C-1: MECHANICALLY ATTACHED INSULATION, BONDED ROOF COVER**

System No.	Deck (See Note 1)	Base Insulation Layer	Top Insulation Layer			Roof Cover	Adhesive	MDP (psf)	Fire Rating UL790/E108	
			Type	Fasteners	Attach				Class	Max Incline (in.)
W-28	Min. 19/32-inch plywood at max 24-inch spans	(Optional) One or more layers, Minimum 1.0-inch RESISTA or ISO 95+ GL, (Loose Laid)	Min. ¼-inch SECUROCK Gypsum-Fiber Roof Board or DensDeck Prime	See Note 2	1 per 2.13 ft. ²	Duro-Tech TPO,	UP-BA, LVOC-BA-1168, LVOC-BA, WBBA-P, SA	-45.0	A	2
W-29	Min. 7/16-inch OSB at max 24-inch spans attached using 8d ring shank nails spaced 6-inch o.c	(Optional) One or more layers, any combination (Loose Laid)	Min. 1.0 inch RESISTA	See Note 2	1 per 1.33 ft. ²	Duro-Tech TPO,	UP-BA, LVOC-BA-1168, LVOC-BA, WBBA-P, SA	-52.5	A	¼
W-30	Min. 15/32-inch plywood at max 24-inch spans	(Optional) One or more layers, any combination (Loose Laid)	Min. ½-inch, DensDeck Prime	See Note 2	1 per 1.78 ft. ²	Duro-Tech TPO,	UP-BA, LVOC-BA-1168, LVOC-BA, WBBA-P, SA	-52.5	A	2-½
W-31	Min. 15/32-inch plywood at max 24-inch spans	(Optional) One or more layers, any combination (Loose Laid)	Min. ½-inch, SECUROCK Gypsum Fiber Roof Board	See Note 2	1 per 2.13 ft. ²	Duro-Tech TPO,	UP-BA, LVOC-BA-1168, LVOC-BA, WBBA-P, SA	-52.5	A	2-½
W-32	Min. 19/32-inch plywood at max 24-inch spans	(Optional) One or more layers, any combination (Loose Laid)	Min. ½-inch, DensDeck Prime	See Note 2	1 per 2.67 ft. ²	Min. 60 mil Duro-Tech TPO,	UP-BA, LVOC-BA-1168, LVOC-BA, WBBA-P, SA	-52.5	A	2-½
W-33	Min. 19/32-inch plywood at max 24-inch spans	(Optional) One or more layers, any combination (Loose Laid)	Min. ½-inch DURO-GUARD ISO HD-E2	See Note 2	1 per 2.13 ft. ²	Min. 60 mil Duro-Tech TPO,	UP-BA, LVOC-BA-1168, LVOC-BA, WBBA-P, SA	-55.0	B	¼
W-34	Min. 7/16-inch OSB at max 24-inch spans attached using 8d ring shank nails spaced 6-inch o.c	(Optional) One or more layers, any combination (Loose Laid)	Min. ½-inch, SECUROCK Gypsum Fiber Roof Board	See Note 2	1 per 1.45 ft. ²	Duro-Tech TPO,	UP-BA, LVOC-BA-1168, LVOC-BA, WBBA-P, SA	-60.0	A	2-½
W-35	Min. 7/16-inch OSB at max 24-inch spans attached using 8d ring shank nails spaced 6-inch o.c	(Optional) One or more layers, any combination (Loose Laid)	Min. 1.5-inch Duro-Guard ISO Composite-E2	See Note 2	1 per 1.45 ft. ²	Duro-Tech TPO,	UP-BA, LVOC-BA-1168, LVOC-BA, WBBA-P, SA	-60.0	A	¼
W-36	Min. 15/32-inch plywood at max 24-inch spans attached using 8d ring shank nails spaced 6-inch o.c	(Optional) One or more layers, any combination (Loose Laid)	Min. 1.5-inch RESISTA	See Note 2	1 per 1.78 ft. ²	Duro-Tech TPO,	UP-BA, LVOC-BA-1168, LVOC-BA, WBBA-P, SA	-60.0	A	¼

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**TABLE 1C-1: WOOD DECKS - NEW CONSTRUCTION or REROOF (Tear-Off) or RECOVER
SYSTEM TYPE C-1: MECHANICALLY ATTACHED INSULATION, BONDED ROOF COVER**

System No.	Deck (See Note 1)	Base Insulation Layer	Top Insulation Layer			Roof Cover	Adhesive	MDP (psf)	Fire Rating UL790/E108	
			Type	Fasteners	Attach				Class	Max Incline (in.)
W-37	Min. 15/32-inch plywood at max 24-inch spans attached using 8d ring shank nails spaced 6-inch	(Optional) One or more layers, any combination, loose laid	Min. 1/2-inch SECUROCK Gypsum-Fiber Roof Board	See Note 2	1 per 1.78 ft. ²	Duro-Tech TPO,	UP-BA, LVOC-BA, LVOC-BA-1168, SA	-67.5	A	2-1/2

**TABLE 1C-1: WOOD DECKS - NEW CONSTRUCTION or REROOF (Tear-Off) or RECOVER
SYSTEM TYPE C-1: MECHANICALLY ATTACHED INSULATION, BONDED ROOF COVER**

System No.	Deck (See Note 1)	Base Insulation Layer	Top Insulation Layer			Roof Cover	Adhesive	MDP (psf)	Fire Rating UL790/E108	
			Type	Fasteners	Attach				Class	Max Incline (in.)
DURO-TECH TPO FLEECE SYSTEMS:										
W-38	Min. 7/16-inch OSB at max 24-inch spans	(Optional) One or more layers, Minimum 1.0-inch RESISTA or ISO 95+ GL, (Loose Laid)	Min. 1/4-inch, SECUROCK Gypsum Fiber Roof Board	See Note 2	1 per 3.2 ft. ²	Duro-Tech TPO Fleece	Asphalt; XR-BA	-30.0	A	1
W-39	Min. 7/16-inch OSB or 15/32-inch plywood at max 24-inch spans	(Optional) One or more layers, Minimum 1.0-inch RESISTA or ISO 95+ GL, (Loose Laid)	Min. 1/4-inch, DensDeck	See Note 2	1 per 2.67 ft. ²	Duro-Tech TPO Fleece	XR Stick or ISO Spray R, 12-inch o.c. Ribbons	-37.5	A	1/2
W-40	Min. 7/16-inch OSB or 15/32-inch plywood at max 24-inch spans	(Optional) One or more layers, Minimum 1.0-inch RESISTA or ISO 95+ GL, (Loose Laid)	Min. 1/4-inch, DensDeck	See Note 2	1 per 2.67 ft. ²	Duro-Tech TPO Fleece	Asphalt; XR-BA	-37.5	A	1
W-41	Min. 7/16-inch OSB at max 24-inch spans attached using 8d ring shank nails spaced 6-inch o.c	(Optional) One or more layers, any combination (Loose Laid)	Min. 1.0 inch RESISTA	See Note 2	1 per 1.78 ft. ²	Duro-Tech TPO Fleece	XR Stick, 6-in. o.c. Ribbons or ISO Spray R, 12-in. o.c. Ribbons	-37.5	B	1/2
W-42	Min. 15/32-inch plywood at max 24-inch spans	(Optional) One or more layers, any combination (Loose Laid)	Min. 1/2-inch, SECUROCK Gypsum Fiber Roof Board	See Note 2	1 per 4.0 ft. ²	Duro-Tech TPO Fleece	Asphalt; XR-BA	-37.5	A	1
W-43	Min. 7/16-inch OSB or 15/32-inch plywood at max 24-inch spans	(Optional) One or more layers, Minimum 1.0-inch RESISTA or ISO 95+ GL, (Loose Laid)	Min. 1/4-inch, SECUROCK Gypsum Fiber Roof Board or DensDeck Prime	See Note 2	1 per 2.67 ft. ²	Duro-Tech TPO Fleece	XR Stick or ISO Spray R, 12-in. o.c. Ribbons	-45.0	A	1/2

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TABLE 1C-1: WOOD DECKS - NEW CONSTRUCTION or REROOF (Tear-Off) or RECOVER SYSTEM TYPE C-1: MECHANICALLY ATTACHED INSULATION, BONDED ROOF COVER										
System No.	Deck (See Note 1)	Base Insulation Layer	Top Insulation Layer			Roof Cover	Adhesive	MDP (psf)	Fire Rating UL790/E108	
			Type	Fasteners	Attach				Class	Max Incline (in.)
DURO-TECH TPO FLEECE SYSTEMS:										
W-44	Min. 7/16-inch OSB or 15/32-inch plywood at max 24-inch spans	(Optional) One or more layers, Minimum 1.0-inch RESISTA or ISO 95+ GL, (Loose Laid)	Min. ¼-inch, SECUROCK Gypsum-Fiber Roof Board or DensDeck Prime	See Note 2	1 per 2.67 ft. ²	Duro-Tech TPO Fleece	Asphalt; XR-BA	-45.0	A	1
W-45	Min. 7/16-inch OSB at max 24-inch spans attached using 8d ring shank nails spaced 6-inch o.c	(Optional) One or more layers, any combination (Loose Laid)	Min. 1.0 inch RESISTA	See Note 2	1 per 1.6 ft. ²	Duro-Tech TPO Fleece	XR Stick, 6-in. o.c. Ribbons or ISO Spray R, 12-in. o.c. Ribbons	-45.0	B	½
W-46	Min. 7/16-inch OSB at max 24-inch spans attached using 8d ring shank nails spaced 6-inch o.c	(Optional) One or more layers, any combination (Loose Laid)	Min. ½-inch thick, SECUROCK Gypsum Fiber Roof Board or DensDeck Prime	See Note 2	1 per 1.78 ft. ²	Duro-Tech TPO Fleece	XR Stick, 6-in. o.c. Ribbons or ISO Spray R, 12-in. o.c. Ribbons	-45.0	A	½
W-47	Min. 7/16-inch OSB at max 24-inch spans attached using 8d ring shank nails spaced 6-inch o.c	(Optional) One or more layers, any combination (Loose Laid)	Min. ½-inch thick, SECUROCK Gypsum Fiber Roof Board or DensDeck Prime	See Note 2	1 per 1.78 ft. ²	Duro-Tech TPO Fleece	Asphalt; XR-BA	-45.0	A	1
W-48	Min. 7/16-inch OSB at max 24-inch spans attached using 8d ring shank nails spaced 6-inch o.c	(Optional) One or more layers, any combination (Loose Laid)	Min. 1.5-inch Duro-Guard ISO Composite-E2 or Min. 2.0 inch RESISTA	See Note 2	1 per 1.78 ft. ²	Duro-Tech TPO Fleece	XR Stick, 6-in. o.c. Ribbons or ISO Spray R, 12-in. o.c. Ribbons	-45.0	B	½
W-49	Min. 15/32-inch plywood at max 24-inch spans attached using 8d ring shank nails spaced 6-inch o.c	(Optional) One or more layers, Minimum 1.0-inch RESISTA or ISO 95+ GL, (Loose Laid)	Min. ¼-inch, DensDeck	See Note 2	1 per 1.78 ft. ²	Duro-Tech TPO Fleece	XR Stick or ISO Spray R, 12-in. o.c. Ribbons	-45.0	A	½
W-50	Min. 15/32-inch plywood at max 24-inch spans attached using 8d ring shank nails spaced 6-inch o.c	(Optional) One or more layers, Minimum 1.0-inch RESISTA or ISO 95+ GL, (Loose Laid)	Min. ¼-inch, DensDeck	See Note 2	1 per 1.78 ft. ²	Duro-Tech TPO Fleece	Asphalt; XR-BA	-45.0	A	1

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TABLE 1C-1: WOOD DECKS - NEW CONSTRUCTION or REROOF (Tear-Off) or RECOVER SYSTEM TYPE C-1: MECHANICALLY ATTACHED INSULATION, BONDED ROOF COVER										
System No.	Deck (See Note 1)	Base Insulation Layer	Top Insulation Layer			Roof Cover	Adhesive	MDP (psf)	Fire Rating UL790/E108	
			Type	Fasteners	Attach				Class	Max Incline (in.)
DURO-TECH TPO FLEECE SYSTEMS:										
W-51	Min. 15/32-inch plywood at max 24-inch spans	(Optional) One or more layers, any combination (Loose Laid)	Min. ½-inch, SECUROCK Gypsum-Fiber Roof Board	See Note 2	1 per 4.0 ft. ²	Duro-Tech TPO Fleece	XR Stick or ISO Spray R, 12-in. o.c. Ribbons	-45.0	A	½
W-52	Min. 15/32-inch plywood at max 24-inch spans	(Optional) One or more layers, any combination (Loose Laid)	Min. ½-inch, SECUROCK Gypsum-Fiber Roof Board	See Note 2	1 per 4.0 ft. ²	Duro-Tech TPO Fleece	Asphalt	-45.0	A	1
W-53	Min. 15/32-inch plywood at max 24-inch spans attached using 8d ring shank nails spaced 6-inch o.c	(Optional) One or more layers, any combination (Loose Laid)	Min. 1.5-inch Duro-Guard ISO Composite-E2 or RESISTA	See Note 2	1 per 2.67 ft. ²	Duro-Tech TPO Fleece	XR Stick or ISO Spray R, 12-in. o.c. Ribbons	-45.0	B	½
W-54	Min. 15/32-inch plywood at max 24-inch spans	Min. ¼-inch thick, DensDeck or SECUROCK Gypsum Fiber Roof Board	Min. 1.5-inch ISO 95+ GL	See Note 2	1 per 2.67 ft. ²	Duro-Tech TPO Fleece	ISO Spray R, 12-in. o.c. Ribbons	-45.0	A B	½ ¾
W-55	Min. 15/32-inch plywood at max 24-inch spans	Min. ¼-inch thick, DensDeck or SECUROCK Gypsum Fiber Roof Board	Min. 2.0-inch ISO 95+ GL	See Note 2	1 per 4.0 ft. ²	Duro-Tech TPO Fleece	ISO Spray R, 12-in. o.c. Ribbons	-45.0	A B	½ ¾
W-56	Min. 15/32-inch plywood at max 24-inch spans	(Optional) One or more layers, any combination (Loose Laid)	Min. 2.0-inch RESISTA	See Note 2	1 per 4.0 ft. ²	Duro-Tech TPO Fleece	ISO Spray R, 12-in. o.c. Ribbons	-45.0	B	½
W-57	Min. 19/32-inch plywood at max 24-inch spans	(Optional) One or more layers, Minimum 1.0-inch RESISTA or ISO 95+ GL, loose laid	Min. ¼-inch DensDeck or SECUROCK Gypsum-Fiber Roof Board or DensDeck Prime	See Note 2	1 per 2.13 ft. ²	Duro-Tech TPO Fleece	Asphalt; XR-BA	-45.0	A	1
W-58	Min. 7/16-inch OSB at max 24-inch spans attached using 8d ring shank nails spaced 6-inch o.c	(Optional) One or more layers, any combination (Loose Laid)	Min. 1.0 inch RESISTA	See Note 2	1 per 1.33 ft. ²	Duro-Tech TPO Fleece	XR Stick, 6-in. o.c. Ribbons or ISO Spray R, 12-in. o.c. Ribbons	-52.5	B	½
W-59	Min. 15/32-inch plywood at max 24-inch spans	(Optional) One or more layers, any combination (Loose Laid)	Min. ½-inch, DensDeck Prime	See Note 2	1 per 1.78 ft. ²	Duro-Tech TPO Fleece	XR Stick or ISO Spray R, 12-in. o.c. Ribbons	-52.5	A	½
W-60	Min. 15/32-inch plywood at max 24-inch spans	(Optional) One or more layers, any combination (Loose Laid)	Min. ½-inch, DensDeck Prime	See Note 2	1 per 1.78 ft. ²	Duro-Tech TPO Fleece	Asphalt; XR-BA	-52.5	A	1
W-61	Min. 15/32-inch plywood at max 24-inch spans	(Optional) One or more layers, any combination (Loose Laid)	Min. ½-inch, SECUROCK Gypsum-Fiber Roof Board	See Note 2	1 per 2.13 ft. ²	Duro-Tech TPO Fleece	XR Stick or ISO Spray R, 12-in. o.c. Ribbons	-52.5	A	½

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TABLE 1C-1: WOOD DECKS - NEW CONSTRUCTION or REROOF (Tear-Off) or RECOVER SYSTEM TYPE C-1: MECHANICALLY ATTACHED INSULATION, BONDED ROOF COVER										
System No.	Deck (See Note 1)	Base Insulation Layer	Top Insulation Layer			Roof Cover	Adhesive	MDP (psf)	Fire Rating UL790/E108	
			Type	Fasteners	Attach				Class	Max Incline (in.)
DURO-TECH TPO FLEECE SYSTEMS:										
W-62	Min. 15/32-inch plywood at max 24-inch spans	(Optional) One or more layers, any combination (Loose Laid)	Min. ½-inch, SECUROCK Gypsum-Fiber Roof Board	See Note 2	1 per 2.13 ft. ²	Duro-Tech TPO Fleece	Asphalt; XR-BA	-52.5	A	1
W-63	Min. 7/16-inch OSB at max 24-inch spans attached using 8d ring shank nails spaced 6-inch o.c	(Optional) One or more layers, any combination (Loose Laid)	Min. ½-inch, SECUROCK Gypsum Fiber Roof Board	See Note 2	1 per 1.45 ft. ²	Duro-Tech TPO Fleece	XR Stick, 6-in. o.c. Ribbons or ISO Spray R, 12-in. o.c. Ribbons	-60.0	A	½
W-64	Min. 7/16-inch OSB at max 24-inch spans attached using 8d ring shank nails spaced 6-inch o.c	(Optional) One or more layers, any combination (Loose Laid)	Min. ½-inch, SECUROCK Gypsum Fiber Roof Board	See Note 2	1 per 1.45 ft. ²	Duro-Tech TPO Fleece	Asphalt; XR-BA	-60.0	A	1
W-65	Min. 7/16-inch OSB at max 24-inch spans attached using 8d ring shank nails spaced 6-inch o.c	(Optional) One or more layers, any combination (Loose Laid)	Min. 1.5-inch Duro-Guard ISO Composite-E2	See Note 2	1 per 1.45 ft. ²	Duro-Tech TPO Fleece	XR Stick, 6-in. o.c. Ribbons or ISO Spray R, 12-in. o.c. Ribbons	-60.0	B	½
W-66	Min. 15/32-inch plywood at max 24-inch spans	(Optional) One or more layers, any combination (Loose Laid)	Min. 1.5-inch RESISTA	See Note 2	1 per 1.78 ft. ²	Duro-Tech TPO Fleece	XR Stick or ISO Spray R, 12-in. o.c. Ribbons	-60.0	B	½
W-67	Min. 15/32-inch plywood at max 24-inch spans attached using 8d ring shank nails spaced 6-inch o.c	(Optional) One or more layers, any combination (Loose Laid)	Min. ½-inch, SECUROCK Gypsum-Fiber Roof Board	See Note 2	1 per 1.78 ft. ²	Duro-Tech TPO Fleece	Asphalt; XR-BA	-67.5	A	1

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**TABLE 1C-2: WOOD DECKS - NEW CONSTRUCTION, REROOF (Tear-Off) or RECOVER
SYSTEM TYPE C-2: PLATE-BONDED ROOF COVER**

System No.	Deck (See Note 1)	Insulation		Attachment		Duro-Tech TPO Membrane Attachment	MDP (psf)	Fire Rating UL790/E108	
		Base Layer	Top Layer	Fasteners	Density / Pattern			Class	Max Incline (in.)
W-68	Min. 15/32-inch plywood at max. 24-inch spans	(Optional) Min. 1.0-inch ISO 95+ GL or RESISTA	Min. ¼-inch DensDeck or SECUROCK Gypsum-Fiber Roof Board	Duro-Last Heavy Duty Fasteners	1 fastener per 5.33 ft. ² (6 per 4' x 8' board)	See Note 10A or 10B	-30.0	A	1
W-69	Min. 15/32-inch plywood at max. 24-inch spans	(Optional) Min. 1.0-inch ISO 95+ GL or RESISTA	Min. 1.0 inch RESISTA	Duro-Last Heavy Duty Fasteners	1 fastener per 5.33 ft. ² (6 per 4' x 8' board)	See Note 10A or 10B	-30.0	A B	½ 1-½
W-70	Min. 15/32-inch plywood at max. 24-inch spans	(Optional) Min. 1.0-inch ISO 95+ GL or RESISTA	Min. 1.5-inch Duro-Guard ISO Composite-E2	Duro-Last Heavy Duty Fasteners	1 fastener per 5.33 ft. ² (6 per 4' x 8' board)	See Note 10A or 10B	-30.0	A	½
W-71	Min. 7/16-inch OSB or 15/32-inch plywood at max 24-inch spans	(Optional) Min. 1.0-inch ISO 95+ GL or RESISTA	Min. ¼-inch DensDeck or SECUROCK Gypsum-Fiber Roof Board	Duro-Last Heavy Duty Fasteners	Plates secured 24-in. o.c. through deck into wood joists in rows spaced 48-inch o.c.	See Note 10A or 10B	-45.0	A	1
W-72	Min. 7/16-inch OSB or 15/32-inch plywood at max 24-inch spans	(Optional) Min. 1.0-inch ISO 95+ GL or RESISTA	Min. 1.0-inch RESISTA	Duro-Last Heavy Duty Fasteners	Plates secured 24-in. o.c. through deck into wood joists in rows spaced 48-inch o.c.	See Note 10A or 10B	-45.0	A B	½ 1-½
W-73	Min. 7/16-inch OSB or 15/32-inch plywood at max 24-inch spans	(Optional) Min. 1.0-inch ISO 95+ GL or RESISTA	Min. 1.5-inch Duro-Guard ISO Composite-E2	Duro-Last Heavy Duty Fasteners	Plates secured 24-inch o.c. through deck into wood joists in rows spaced 48-inch o.c.	See Note 10A or 10B	-45.0	A	½
W-74	Min. 15/32-inch plywood at max. 24-inch spans attached using 8d ring shank nails spaced 6-inch o.c	(Optional) Min. 1.0-inch ISO 95+ GL or RESISTA	Min. ¼-inch DensDeck or SECUROCK Gypsum-Fiber Roof Board	Duro-Last Heavy Duty Fasteners	1 fastener per 4.0 ft. ² (8 per 4' x 8' board)	See Note 10A or 10B	-45.0	A	1
W-75	Min. 15/32-inch plywood at max. 24-inch spans attached using 8d ring shank nails spaced 6-inch o.c	(Optional) Min. 1.0-inch ISO 95+ GL or RESISTA	Min. 1.0-inch RESISTA	Duro-Last Heavy Duty Fasteners	1 fastener per 4.0 ft. ² (8 per 4' x 8' board)	See Note 10A or 10B	-45.0	A B	½ 1-½
W-76	Min. 15/32-inch plywood at max. 24-inch spans attached using 8d ring shank nails spaced 6-inch o.c	(Optional) Min. 1.0-inch ISO 95+ GL or RESISTA	Min. 1.5-inch Duro-Guard ISO Composite-E2	Duro-Last Heavy Duty Fasteners	1 fastener per 4.0 ft. ² (8 per 4' x 8' board)	See Note 10A or 10B	-45.0	A	½
W-77	Min. 19/32-inch OSB at max. 24-inch spans	(Optional) Min. 1-inch ISO 95+ GL or RESISTA	Min. ¼-inch DensDeck or SECUROCK Gypsum-Fiber Roof Board	Duro-Last Heavy Duty Fasteners	1 fastener per 5.33 ft. ² (6 per 4' x 8' board)	See Note 10A or 10B	-45.0	A	1

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**TABLE 1C-2: WOOD DECKS - NEW CONSTRUCTION, REROOF (Tear-Off) or RECOVER
SYSTEM TYPE C-2: PLATE-BONDED ROOF COVER**

System No.	Deck (See Note 1)	Insulation		Attachment		Duro-Tech TPO Membrane Attachment	MDP (psf)	Fire Rating UL790/E108	
		Base Layer	Top Layer	Fasteners	Density / Pattern			Class	Max Incline (in.)
W-78	Min. 19/32-inch OSB at max. 24-inch spans	(Optional) ISO 95+ GL or RESISTA	Min. ¼-inch Dens Deck or SECUROCK Gypsum-Fiber Roof Board	Duro-Last Heavy Duty Fasteners	1 fastener per 5.33 ft. ² (6 per 4' x 8' board)	See Note 10A or 10B	-45.0	A B	½ 1-½
W-79	Min. 19/32-inch OSB at max. 24-inch spans	(Optional) ISO 95+ GL or RESISTA	Min. ¼-inch Dens Deck or SECUROCK Gypsum-Fiber Roof Board	Duro-Last Heavy Duty Fasteners	1 fastener per 5.33 ft. ² (6 per 4' x 8' board)	See Note 10A or 10B	-45.0	A	½
W-80	15/32-inch Plywood at max. 24-inch spans	(Optional) Min. 1-inch ISO 95+ GL or RESISTA	Min. ¼-inch Dens Deck or SECUROCK Gypsum-Fiber Roof Board	Duro-Last Heavy Duty Fasteners	1 fastener per 2.7 ft. ² (12 per 4' x 8' board)	See Note 10A or 10B	-52.5	A	1
W-81	15/32-inch Plywood at max. 24-inch spans	(Optional) ISO 95+GL or RESISTA	Min. 1.0-inch RESISTA	Duro-Last Heavy Duty Fasteners	1 fastener per 2.7 ft. ² (12 per 4' x 8' board)	See Note 10A or 10B	-52.5	A B	½ 1-½
W-82	15/32-inch Plywood at max. 24-inch spans	(Optional) ISO 95+GL or RESISTA	Min. 1.5-inch Duro-Guard ISO Composite-E2	Duro-Last Heavy Duty Fasteners	1 fastener per 2.7 ft. ² (12 per 4' x 8' board)	See Note 10A or 10B	-52.5	A	½
W-83	Min. 7/16-inch OSB or 15/32-inch plywood at max 24-inch spans attached using 8d ring shank nails spaced 6-inch o.c	(Optional) Min. 1-inch ISO 95+ GL or RESISTA	Min. ¼-inch Dens Deck or SECUROCK Gypsum-Fiber Roof Board	Duro-Last Heavy Duty Fasteners	Plates secured 6-inch o.c. into rafters/trusses in rows spaced 96-inch o.c.	See Note 10A or 10B	-75.0	A	1
W-84	Min. 7/16-inch OSB or 15/32-inch plywood at max 24-inch spans attached using 8d ring shank nails spaced 6-inch o.c	(Optional) ISO 95+GL or RESISTA	Min. 1.0 inch RESISTA	Duro-Last Heavy Duty Fasteners	Plates secured 6-inch o.c. into rafters/trusses in rows spaced 96-inch o.c.	See Note 10A or 10B	-75.0	A B	½ 1-½
W-85	Min. 7/16-inch OSB or 15/32-inch plywood at max 24-inch spans attached using 8d ring shank nails spaced 6-inch o.c	(Optional) ISO 95+GL or RESISTA	Min. 1.5-inch Duro-Guard ISO Composite-E2	Duro-Last Heavy Duty Fasteners	Plates secured 6-inch o.c. into rafters/trusses in rows spaced 96-inch o.c.	See Note 10A or 10B	-75.0	A	½

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**TABLE 1D-1: WOOD DECKS - NEW CONSTRUCTION, REROOF (Tear-Off) or RECOVER
SYSTEM TYPE D-1A: INSULATED, MECHANICALLY ATTACHED ROOF COVER (Stress Plates)**

System No.	Deck (See Note 1)	Insulation			Roof Cover			MDP (psf)	Fire Rating UL790/E108	
		Base Layer	Top Layer	Attach	Membrane	Fasteners	Attachment		Class	Max Incline (in.)
W-86	Min. 7/16-inch OSB or min. 15/32-inch Plywood at max 24-inch span attached using 8d ring shank nails spaced 6-inch o.c	(Optional) Duro-Last Vapor Barrier; (Optional) one or more layers, Min. 1.0-inch ISO 95+ GL or RESISTA	Min. ¼-inch DensDeck or SECUROCK Gypsum Fiber Roof Board	Prelim. attached	Duro-Tech TPO	Duro-Last HD Fasteners with Duro-Last HD Seam Plates	6-inch o.c. within 6-inch wide laps spaced 4.5-ft. o.c. Laps sealed with 1.5-inch heat weld.	-30.0	A	3
W-87	Min. 7/16-inch OSB or min. 15/32-inch Plywood at max 24-inch span attached using 8d ring shank nails spaced 6-inch o.c	(Optional) one or more layers, ISO 95+ GL or RESISTA	Min. 1.0-inch RESISTA or Min. 1.5-inch Duro-Guard ISO Composite-E2	Prelim. attached	Duro-Tech TPO	Duro-Last HD Fasteners with Duro-Last HD Seam Plates	6-inch o.c. within 6-inch wide laps spaced 4.5-ft. o.c. Laps sealed with 1.5-inch heat weld.	-30.0	A	½
W-88	Min. 7/16-inch OSB or min. 15/32-inch Plywood at max 24-inch span attached using 8d ring shank nails spaced 6-inch o.c	(Optional) one or more layers, ISO 95+ GL or RESISTA	Min. ½-inch DURO-GUARD ISO HD-E2	Prelim. attached	Duro-Tech TPO	Duro-Last HD Fasteners with Duro-Last HD Seam Plates	6-inch o.c. within 6-inch wide laps spaced 4.5-ft. o.c. Laps sealed with 1.5-inch heat weld.	-30.0	B	½
W-89	Min. 19/32-inch OSB at max 24-inch spans attached using 8d ring shank nails spaced 6-inch o.c	(Optional) one or more layers, Min. 1.0-inch ISO 95+ GL or RESISTA	Min. ¼-inch DensDeck or SECUROCK Gypsum Fiber Roof Board	Prelim. attached	Duro-Tech TPO	Duro-Last HD Fasteners with Duro-Last HD Seam Plates	9-inch o.c. within 6-inch wide laps spaced 90-inch o.c. Laps sealed with 1.5-inch heat weld.	-30.0	A	3
W-90	Min. 19/32-inch OSB at max 24-inch spans attached using 8d ring shank nails spaced 6-inch o.c	(Optional) one or more layers, ISO 95+ GL or RESISTA	Min. 1.0-inch RESISTA or Min. 1.5-inch Duro-Guard ISO Composite-E2	Prelim. attached	Duro-Tech TPO	Duro-Last HD Fasteners with Duro-Last HD Seam Plates	9-inch o.c. within 6-inch wide laps spaced 90-inch o.c. Laps sealed with 1.5-inch heat weld.	-30.0	A	½
W-91	Min. 19/32-inch OSB at max 24-inch spans attached using 8d ring shank nails spaced 6-inch o.c	(Optional) one or more layers, ISO 95+ GL or RESISTA	Min. ½-inch DURO-GUARD ISO HD-E2	Prelim. attached	Duro-Tech TPO	Duro-Last HD Fasteners with Duro-Last HD Seam Plates	9-inch o.c. within 6-inch wide laps spaced 90-inch o.c. Laps sealed with 1.5-inch heat weld.	-30.0	B	½
W-92	Min. 7/16-inch OSB or min. 15/32-inch Plywood at max 24-inch spans attached using 8d ring shank nails spaced 6-inch o.c	(Optional) one or more layers, Min. 1.0-inch ISO 95+ GL or RESISTA	Min. ¼-inch DensDeck or SECUROCK Gypsum Fiber Roof Board	Prelim. attached	Duro-Tech TPO	Duro-Last HD Fasteners with Duro-Last HD Seam Plates	18-inch o.c. within 6-inch wide laps spaced 3.5-ft. o.c. Laps sealed with 1.5-inch heat weld.	-37.5	A	3

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**TABLE 1D-1: WOOD DECKS - NEW CONSTRUCTION, REROOF (Tear-Off) or RECOVER
SYSTEM TYPE D-1A: INSULATED, MECHANICALLY ATTACHED ROOF COVER (Stress Plates)**

System No.	Deck (See Note 1)	Insulation			Roof Cover			MDP (psf)	Fire Rating UL790/E108	
		Base Layer	Top Layer	Attach	Membrane	Fasteners	Attachment		Class	Max Incline (in.)
W-93	Min. 7/16-inch OSB or min. 15/32-inch Plywood at max 24-inch spans attached using 8d ring shank nails spaced 6-inch o.c	(Optional) one or more layers, ISO 95+ GL or RESISTA	Min. 1.0-inch RESISTA or Min. 1.5-inch Duro-Guard ISO Composite-E2	Prelim. attached	Duro-Tech TPO	Duro-Last HD Fasteners with Duro-Last HD Seam Plates	18-inch o.c. within 6-inch wide laps spaced 3.5-ft. o.c. Laps sealed with 1.5-inch heat weld.	-37.5	A	1/2
W-94	Min. 7/16-inch OSB or min. 15/32-inch Plywood at max 24-inch spans attached using 8d ring shank nails spaced 6-inch o.c	(Optional) one or more layers, ISO 95+ GL or RESISTA	Min. 1/2-inch DURO-GUARD ISO HD-E2	Prelim. attached	Duro-Tech TPO	Duro-Last HD Fasteners with Duro-Last HD Seam Plates	18-inch o.c. within 6-inch wide laps spaced 3.5-ft. o.c. Laps sealed with 1.5-inch heat weld.	-37.5	B	1/2
W-95	Min. 19/32-inch OSB at max 24-inch spans attached using 8d ring shank nails spaced 6-inch o.c	(Optional) one or more layers, Min. 1.0-inch ISO 95+ GL or RESISTA	Min. 1/4-inch DensDeck or SECUROCK Gypsum Fiber Roof Board	Prelim. attached	Duro-Tech TPO 60 or 80 mil	Duro-Last HD Fasteners with Duro-Last HD Seam Plates	6-inch o.c. within 6-inch wide laps spaced 90-inch o.c. Laps sealed with 1.5-inch heat weld.	-37.5	A	3
W-96	Min. 19/32-inch OSB at max 24-inch spans attached using 8d ring shank nails spaced 6-inch o.c	(Optional) one or more layers, ISO 95+ GL or RESISTA	Min. 1.0-inch RESISTA or Min. 1.5-inch Duro-Guard ISO Composite-E2	Prelim. attached	Duro-Tech TPO 60 or 80 mil	Duro-Last HD Fasteners with Duro-Last HD Seam Plates	6-inch o.c. within 6-inch wide laps spaced 90-inch o.c. Laps sealed with 1.5-inch heat weld.	-37.5	A	1/2
W-97	Min. 19/32-inch OSB at max 24-inch spans attached using 8d ring shank nails spaced 6-inch o.c	(Optional) one or more layers, ISO 95+ GL or RESISTA	Min. 1/2-inch DURO-GUARD ISO HD-E2	Prelim. attached	Duro-Tech TPO 60 or 80 mil	Duro-Last HD Fasteners with Duro-Last HD Seam Plates	6-inch o.c. within 6-inch wide laps spaced 90-inch o.c. Laps sealed with 1.5-inch heat weld.	-37.5	B	1/2
W-98	Min. 19/32-inch OSB at max 24-inch spans attached using 8d ring shank nails spaced 6-inch o.c	(Optional) one or more layers, Min. 1.0-inch ISO 95+ GL or RESISTA	Min. 1/4-inch DensDeck or SECUROCK Gypsum Fiber Roof Board	Prelim. attached	Duro-Tech TPO 60 or 80 mil	Duro-Last HD Fasteners with Duro-Last HD Seam Plates	6-inch o.c. within 6-inch wide laps spaced 114-inch o.c. Laps sealed with 1.5-inch heat weld.	-37.5	A	3
W-99	Min. 19/32-inch OSB at max 24-inch spans attached using 8d ring shank nails spaced 6-inch o.c	(Optional) one or more layers, ISO 95+ GL or RESISTA	Min. 1.0-inch RESISTA or Min. 1.5-inch Duro-Guard ISO Composite-E2	Prelim. attached	Duro-Tech TPO 60 or 80 mil	Duro-Last HD Fasteners with Duro-Last HD Seam Plates	6-inch o.c. within 6-inch wide laps spaced 114-inch o.c. Laps sealed with 1.5-inch heat weld.	-37.5	A	1/2
W-100	Min. 19/32-inch OSB at max 24-inch spans attached using 8d ring shank nails spaced 6-inch o.c	(Optional) one or more layers, ISO 95+ GL or RESISTA	Min. 1/2-inch DURO-GUARD ISO HD-E2	Prelim. attached	Duro-Tech TPO 60 or 80 mil	Duro-Last HD Fasteners with Duro-Last HD Seam Plates	6-inch o.c. within 6-inch wide laps spaced 114-inch o.c. Laps sealed with 1.5-inch heat weld.	-37.5	B	1/2

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**TABLE 1D-1: WOOD DECKS - NEW CONSTRUCTION, REROOF (Tear-Off) or RECOVER
SYSTEM TYPE D-1A: INSULATED, MECHANICALLY ATTACHED ROOF COVER (Stress Plates)**

System No.	Deck (See Note 1)	Insulation			Roof Cover			MDP (psf)	Fire Rating UL790/E108	
		Base Layer	Top Layer	Attach	Membrane	Fasteners	Attachment		Class	Max Incline (in.)
W-101	Min. 7/16-inch OSB or min. 15/32-inch Plywood at max 24-inch spans	(Optional) one or more layers, Min. 1.0-inch ISO 95+ GL or RESISTA	Min. ¼-inch DensDeck or SECUROCK Gypsum Fiber Roof Board	Prelim. attached	Duro-Tech TPO	Duro-Last HD Fasteners with Duro-Last HD Seam Plates	6-inch o.c. within 6-inch wide laps spaced 3.5-ft. o.c. Laps sealed with 1.5-inch heat weld.	-45.0	A	3
W-102	Min. 7/16-inch OSB or min. 15/32-inch Plywood at max 24-inch spans	(Optional) one or more layers, ISO 95+ GL or RESISTA	Min. 1.0-inch RESISTA or Min. 1.5-inch Duro-Guard ISO Composite-E2	Prelim. attached	Duro-Tech TPO	Duro-Last HD Fasteners with Duro-Last HD Seam Plates	6-inch o.c. within 6-inch wide laps spaced 3.5-ft. o.c. Laps sealed with 1.5-inch heat weld.	-45.0	A	½
W-103	Min. 7/16-inch OSB or min. 15/32-inch Plywood at max 24-inch spans	(Optional) one or more layers, ISO 95+ GL or RESISTA	Min. ½-inch DURO-GUARD ISO HD-E2	Prelim. attached	Duro-Tech TPO	Duro-Last HD Fasteners with Duro-Last HD Seam Plates	6-inch o.c. within 6-inch wide laps spaced 3.5-ft. o.c. Laps sealed with 1.5-inch heat weld.	-45.0	B	½
W-104	Min. 15/32-inch plywood at max. 24-inch spans attached using 8d ring shank nails spaced 6-inch o.c.	(Optional) one or more layers, Min. 1.0-inch ISO 95+ GL or RESISTA;	Min. ¼-inch DensDeck or SECUROCK Gypsum Fiber Roof Board	Prelim. attached	Duro-Tech TPO 60 or 80 mil	Duro-Last HD Fasteners with Duro-Last HD Seam Plates	5-inch o.c. within 6-inch wide laps spaced 114-inch o.c. Laps sealed with 1.5-inch heat weld.	-45.0	A	3
W-105	Min. 15/32-inch plywood at max. 24-inch spans attached using 8d ring shank nails spaced 6-inch o.c.	(Optional) one or more layers, ISO 95+ GL or RESISTA	Min. 1.0-inch RESISTA or Min. 1.5-inch Duro-Guard ISO Composite-E2	Prelim. attached	Duro-Tech TPO 60 or 80 mil	Duro-Last HD Fasteners with Duro-Last HD Seam Plates	5-inch o.c. within 6-inch wide laps spaced 114-inch o.c. Laps sealed with 1.5-inch heat weld.	-45.0	A	½
W-106	Min. 15/32-inch plywood at max. 24-inch spans attached using 8d ring shank nails spaced 6-inch o.c.	(Optional) one or more layers, ISO 95+ GL or RESISTA	Min. ½-inch DURO-GUARD ISO HD-E2	Prelim. attached	Duro-Tech TPO 60 or 80 mil	Duro-Last HD Fasteners with Duro-Last HD Seam Plates	5-inch o.c. within 6-inch wide laps spaced 114-inch o.c. Laps sealed with 1.5-inch heat weld.	-45.0	B	½
W-107	Min. 19/32-inch OSB at max 24-inch spans attached using 8d ring shank nails spaced 6-inch o.c	(Optional) one or more layers, Min. 1.0-inch ISO 95+ GL or RESISTA	Min. ¼-inch DensDeck or SECUROCK Gypsum Fiber Roof Board	Prelim. attached	Duro-Tech TPO 60 or 80 mil	Duro-Last HD Fasteners with Duro-Last HD Seam Plates	6-inch o.c. within 6-inch wide laps spaced 114-inch o.c. Laps sealed with 1.5-inch heat weld.	-45.0	A	3
W-108	Min. 19/32-inch OSB at max 24-inch spans attached using 8d ring shank nails spaced 6-inch o.c	(Optional) one or more layers, ISO 95+ GL or RESISTA	Min. 1.0-inch RESISTA or Min. 1.5-inch Duro-Guard ISO Composite-E2	Prelim. attached	Duro-Tech TPO 60 or 80 mil	Duro-Last HD Fasteners with Duro-Last HD Seam Plates	6-inch o.c. within 6-inch wide laps spaced 114-inch o.c. Laps sealed with 1.5-inch heat weld.	-45.0	A	½

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**TABLE 1D-1: WOOD DECKS - NEW CONSTRUCTION, REROOF (Tear-Off) or RECOVER
SYSTEM TYPE D-1A: INSULATED, MECHANICALLY ATTACHED ROOF COVER (Stress Plates)**

System No.	Deck (See Note 1)	Insulation			Roof Cover			MDP (psf)	Fire Rating UL790/E108	
		Base Layer	Top Layer	Attach	Membrane	Fasteners	Attachment		Class	Max Incline (in.)
W-109	Min. 19/32-inch OSB at max 24-inch spans attached using 8d ring shank nails spaced 6-inch o.c	(Optional) one or more layers, ISO 95+ GL or RESISTA	Min. ½-inch DURO-GUARD ISO HD-E2	Prelim. attached	Duro-Tech TPO 60 or 80 mil	Duro-Last HD Fasteners with Duro-Last HD Seam Plates	6-inch o.c. within 6-inch wide laps spaced 114-inch o.c. Laps sealed with 1.5-inch heat weld.	-45.0	B	½
W-110	Min. 19/32-inch plywood at max 24-inch spans	(Optional) one or more layers, Min. 1.0-inch ISO 95+ GL or RESISTA	Min. ¼-inch DensDeck or SECUROCK Gypsum Fiber Roof Board	Prelim. attached	Duro-Tech TPO	Duro-Last HD Fasteners with Duro-Last HD Seam Plates	24-inch o.c. within 6-inch wide laps spaced 3.5-ft. o.c. Laps sealed with 1.5-inch heat weld.	-45.0	A	3
W-111	Min. 19/32-inch plywood at max 24-inch spans	(Optional) one or more layers, ISO 95+ GL or RESISTA	Min. 1.0-inch RESISTA or Min. 1.5-inch Duro-Guard ISO Composite-E2	Prelim. attached	Duro-Tech TPO	Duro-Last HD Fasteners with Duro-Last HD Seam Plates	24-inch o.c. within 6-inch wide laps spaced 3.5-ft. o.c. Laps sealed with 1.5-inch heat weld.	-45.0	A	½
W-112	Min. 19/32-inch plywood at max 24-inch spans	(Optional) one or more layers, ISO 95+ GL or RESISTA;	Min. ½-inch DURO-GUARD ISO HD-E2	Prelim. attached	Duro-Tech TPO	Duro-Last HD Fasteners with Duro-Last HD Seam Plates	24-inch o.c. within 6-inch wide laps spaced 3.5-ft. o.c. Laps sealed with 1.5-inch heat weld.	-45.0	B	½
W-113	Min. 19/32-inch OSB at max 24-inch spans attached using 8d ring shank nails spaced 6-inch o.c	(Optional) one or more layers, Min. 1.0-inch ISO 95+ GL or RESISTA	Min. ¼-inch DensDeck or SECUROCK Gypsum Fiber Roof Board	Prelim. attached	Duro-Tech TPO 60 or 80 mil	Duro-Last HD Fasteners with Duro-Last HD Seam Plates	5-inch o.c. within 6-inch wide laps spaced 90-inch o.c. Laps sealed with 1.5-inch heat weld.	-52.5	A	3
W-114	Min. 19/32-inch OSB at max 24-inch spans attached using 8d ring shank nails spaced 6-inch o.c	(Optional) one or more layers, ISO 95+ GL or RESISTA	Min. 1.0-inch RESISTA or Min. 1.5-inch Duro-Guard ISO Composite-E2	Prelim. attached	Duro-Tech TPO 60 or 80 mil	Duro-Last HD Fasteners with Duro-Last HD Seam Plates	5-inch o.c. within 6-inch wide laps spaced 90-inch o.c. Laps sealed with 1.5-inch heat weld.	-52.5	A	½
W-115	Min. 19/32-inch OSB at max 24-inch spans attached using 8d ring shank nails spaced 6-inch o.c	(Optional) one or more layers, ISO 95+ GL or RESISTA	Min. ½-inch DURO-GUARD ISO HD-E2	Prelim. attached	Duro-Tech TPO 60 or 80 mil	Duro-Last HD Fasteners with Duro-Last HD Seam Plates	5-inch o.c. within 6-inch wide laps spaced 90-inch o.c. Laps sealed with 1.5-inch heat weld.	-52.5	B	½

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**TABLE 1D-1: WOOD DECKS - NEW CONSTRUCTION, REROOF (Tear-Off) or RECOVER
SYSTEM TYPE D-1A: INSULATED, MECHANICALLY ATTACHED ROOF COVER (Stress Plates)**

System No.	Deck (See Note 1)	Insulation			Roof Cover			MDP (psf)	Fire Rating UL790/E108	
		Base Layer	Top Layer	Attach	Membrane	Fasteners	Attachment		Class	Max Incline (in.)
W-116	Min. 19/32-inch plywood or wood plank at max. 24-inch spans attached using 10d ring shank nails spaced 4-inch o.c. at board edges and 8d ring shank nails spaced 6-inch o.c. in the field	Min. ¼-inch thick, DensDeck or SECUROCK Gypsum Fiber Roof Board	Min. 1.5-inch thick, one or more layers, ISO 95+ GL and/or DURO-GUARD ISO HD-E2	Prelim. attached	Duro-Tech TPO	Duro-Last HD Fasteners with Duro-Last HD Seam Plates	6-inch o.c. within 6-inch wide laps spaced 9½-inch o.c. Laps sealed with 5-inch heat weld.	-60.0	A	1

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**TABLE 1D-2: WOOD DECKS - NEW CONSTRUCTION, REROOF (Tear-Off) or RECOVER
SYSTEM TYPE D-1C: Insulated, Mechanically Attached Roof Cover (RMA Strips)**

System No.	Deck (See Note 1)	Insulation			Roof Cover			MDP (psf)	Fire Rating UL790/E108	
		Base Layer	Top Layer	Attach	Fasteners	Density / Pattern	Attachment		Class	Max Incline (in.)
W-117	Min. 7/16-inch OSB or 15/32-inch at max 24-inch spans	(Optional) one or more layers, ISO 95+ GL or RESISTA	¼-inch Dens Deck or SECUROCK Gypsum-Fiber Roof Board	Prelim. attached	Duro-Last AP Fasteners with Duro-Last HD Seam Plates	UltraPly QuickSeam R.M.A Strip is attached in rows of 4-ft. o.c. Fasteners are spaced 12-inch o.c. through the R.M.A. strip.	Duro-Tech TPO is adhered to each strip by first priming with Single-Ply QuickPrime Primer then rolling into place with a hand roller.	-30.0	A	3
W-118	Min. 7/16-inch OSB OR 15/32-inch plywood at max 24-inch spans	¼-inch DensDeck or SECUROCK Gypsum-Fiber Roof Board	one or more layers, ISO 95+ GL	Prelim. attached	Duro-Last AP Fasteners with Duro-Last HD Seam Plates	UltraPly QuickSeam R.M.A Strip is attached in rows of 4-ft. o.c. Fasteners are spaced 12-inch o.c. through the R.M.A. strip.	Duro-Tech TPO is adhered to each strip by first priming with Single-Ply QuickPrime Primer then rolling into place with a hand roller.	-30.0	A	½
W-119	Min. 7/16-inch OSB OR 15/32-inch plywood at max 24-inch spans	(Optional) one or more layers, ISO 95+ GL or RESISTA	Min. 1.0-inch RESISTA or Min. 1.5-inch Duro-Guard ISO Composite-E2	Prelim. attached	Duro-Last AP Fasteners with Duro-Last HD Seam Plates	UltraPly QuickSeam R.M.A Strip is attached in rows of 4-ft. o.c. Fasteners are spaced 12-inch o.c. through the R.M.A. strip.	Duro-Tech TPO is adhered to each strip by first priming with Single-Ply QuickPrime Primer then rolling into place with a hand roller.	-30.0	A	½
W-120	Min. 7/16-inch OSB OR 15/32-inch plywood at max 24-inch spans	(Optional) one or more layers, ISO 95+ GL or RESISTA	Min. ½-inch DURO-GUARD ISO HD-E2	Prelim. attached	Duro-Last AP Fasteners with Duro-Last HD Seam Plates	UltraPly QuickSeam R.M.A Strip is attached in rows of 4-ft. o.c. Fasteners are spaced 12-inch o.c. through the R.M.A. strip.	Duro-Tech TPO is adhered to each strip by first priming with Single-Ply QuickPrime Primer then rolling into place with a hand roller.	-30.0	B	½
W-121	Min. 7/16-inch OSB OR 15/32-inch plywood at max 24-inch span attached using 8d ring shank nails spaced 6-inch o.c	(Optional) one or more layers, ISO 95+ GL or RESISTA	Min. ¼-inch DensDeck or SECUROCK Gypsum-Fiber Roof Board	Prelim. attached	Duro-Last AP Fasteners with Duro-Last HD Seam Plates	UltraPly QuickSeam R.M.A Strip is attached in rows of 5-ft. o.c. Fasteners are spaced 6-inch o.c. through the R.M.A. strip.	Duro-Tech TPO is adhered to each strip by first priming with Single-Ply QuickPrime Primer then rolling into place with a hand roller	-30.0	A	3
W-122	Min. 15/32-inch plywood at max. 24- inch spans	(Optional) one or more layers, ISO 95+ GL or RESISTA	Min. ½-inch Dens Deck, DensDeck Prime, or SECUROCK Gypsum-Fiber Roof Board	Prelim. attached	Duro-Last AP or HD Fasteners and polymer batten strips	UltraPly QuickSeam R.M.A. is attached in rows 8-ft. o.c. Fasteners are spaced 6-inch o.c. center through the polymer Batten Strip.	Duro-Tech TPO is adhered to each strip by first priming with Single-Ply QuickPrime Primer then rolling into place with a hand roller.	-30.0	A	3
W-123	Min. 7/16-inch OSB OR 15/32-inch plywood at max 24-inch spans	((Optional) one or more layers, ISO 95+GL or RESISTA	¼-inch Dens Deck or SECUROCK Gypsum-Fiber Roof Board	Prelim. attached	Duro-Last All Purpose Fasteners, Heavy-Duty Seam Plates	UltraPly QuickSeam R.M.A Strip is attached in rows of 4-ft. o.c. Fasteners are spaced 6-inch o.c. through the R.M.A. strip.	Duro-Tech TPO is adhered to each strip by first priming with Single-Ply QuickPrime Primer then rolling into place with a hand roller.	-45.0	A	3

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**TABLE 1D-2: WOOD DECKS - NEW CONSTRUCTION, REROOF (Tear-Off) or RECOVER
SYSTEM TYPE D-1C: Insulated, Mechanically Attached Roof Cover (RMA Strips)**

System No.	Deck (See Note 1)	Insulation			Roof Cover			MDP (psf)	Fire Rating UL790/E108	
		Base Layer	Top Layer	Attach	Fasteners	Density / Pattern	Attachment		Class	Max Incline (in.)
W-124	Min. 7/16-inch OSB OR 15/32-inch plywood at max 24-inch spans	Min. ¼-inch DensDeck or SECUROCK Gypsum-Fiber Roof Board	One or more layers, ISO 95+ GL	Prelim. attached	Duro-Last All Purpose Fasteners, Heavy-Duty Seam Plates	UltraPly QuickSeam R.M.A Strip is attached in rows of 4-ft. o.c. Fasteners are spaced 6-inch o.c. through the R.M.A. strip.	Duro-Tech TPO is adhered to each strip by first priming with Single-Ply QuickPrime Primer then rolling into place with a hand roller.	-45.0	A	½
W-125	Min. 7/16-inch OSB OR 15/32-inch plywood at max 24-inch spans	(Optional) one or more layers, ISO 95+ GL or RESISTA	Min. 1.0-inch RESISTA or Min. 1.5-inch Duro-Guard ISO Composite-E2	Prelim. attached	Duro-Last All Purpose Fasteners, Heavy-Duty Seam Plates	UltraPly QuickSeam R.M.A Strip is attached in rows of 4-ft. o.c. Fasteners are spaced 6-inch o.c. through the R.M.A. strip.	Duro-Tech TPO is adhered to each strip by first priming with Single-Ply QuickPrime Primer then rolling into place with a hand roller.	-45.0	A	½
W-126	Min. 7/16-inch OSB OR 15/32-inch plywood at max 24-inch spans	(Optional) one or more layers, ISO 95+ GL or RESISTA	Min. ½-inch DURO-GUARD ISO HD-E2	Prelim. attached	Duro-Last All Purpose Fasteners, Heavy-Duty Seam Plates	UltraPly QuickSeam R.M.A Strip is attached in rows of 4-ft. o.c. Fasteners are spaced 6-inch o.c. through the R.M.A. strip.	Duro-Tech TPO is adhered to each strip by first priming with Single-Ply QuickPrime Primer then rolling into place with a hand roller.	-45.0	B	½

**TABLE 1E: WOOD DECKS - NEW CONSTRUCTION, REROOF (Tear-Off) or RECOVER
SYSTEM TYPE E: NON-INSULATED, MECHANICALLY ATTACHED ROOF COVER**

System No.	Deck (See Note 1)	Roof Cover			MDP (psf)	Fire Rating UL790/E108	
		Membrane	Fasteners	Attachment		Class	Max Incline (in.)
W-127	Min. 19/32-inch plywood at max. 24-inch spans attached using 8d ring shank nails spaced 6-inch o.c	GAF VersaShield Underlayment and Duro-Tech TPO	Duro-Last HD Fasteners with Duro-Last HD Seam Plates	6-inch o.c. within 6-inch wide laps spaced 72-inch o.c. Laps sealed with 1.5-inch heat weld.	-45.0	B	1

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Table 2A-1: Steel or Concrete Decks- New Construction, Reroof (Tear off)
System Type A-1A: Bonded Insulation, Bonded Roof Cover

System No.	DeckDeck (See Note 1)	Insulation				Roof Cover		MDP (psf)	Fire Rating UL790/E108	
		Base Insulation	Base Insulation attachment	Top Insulation	Top Insulation Attachment	Membrane	Membrane Attachment		Class	Max Incline (in.)
SC-1	Min. 22 ga., type B, Grade 33 steel or structural concrete	None	None	One or more layers min. ½ -inch ISO 95+ GL, optional Tapered ISO 95+ GL	OlyBond 500 or Millennium One Step	Duro-Tech TPO,	UP-BA, LVOC-BA-1168, LVOC-BA, SA	-45.0	A	¼
SC-2	Min. 22 ga., type B, Grade 33 steel or structural concrete	None	None	Min. 2.0" ISO 95+ GL	Millennium One Step	Duro-Tech TPO,	UP-BA, LVOC-BA-1168, LVOC-BA, SA	-75.0	A	¼

Table 2A-2: Steel or Concrete Decks- New Construction, Reroof (Tear off)
System Type A-1B: Bonded Temp Roof, Bonded Insulation, Bonded Roof Cover

System No.	DeckDeck (See Note 1)	Temp Roof	Insulation	Insulation Attachment	Roof Cover		MDP (psf)	Fire Rating UL790/E108	
					Membrane	Membrane Attachment		Class	Max Incline (in.)
SC-3	Min. 22 ga., type B, Grade 33 steel or structural concrete	Duro-Last	One or more layers min. ½ -inch ISO 95+ GL, optional Tapered ISO 95+ GL	OlyBond 500 or Millennium One Step	Duro-Tech TPO,	UP-BA, LVOC-BA-1168, LVOC-BA, SA	-45.0	A	¼
SC-4	Min. 22 ga., type B, Grade 33 steel or structural concrete	Duro-Last	Min. 2.0" ISO 95+ GL	Millennium One Step	Duro-Tech TPO,	UP-BA, LVOC-BA-1168, LVOC-BA, SA	-60.0	A	¼

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**TABLE 2A-3: STEEL or CONCRETE DECKS - NEW CONSTRUCTION or REROOF (Tear-Off) or RECOVER
SYSTEM TYPE A-1C: THERMAL BARRIER, BONDED TEMP ROOF, BONDED TOP INSULATION, BONDED ROOF COVER**

System No.	Deck (See Note 1)	Thermal Barrier			Temp Roof	Insulation			Roof Cover	Adhesive	MDP (psf)	Fire Rating UL790/E108	
		Type	Fast.	Attach		Base Layer	Top Layer	Attach				Class	Max Incline (in.)
SC-5	Min. 22 ga., type B, Grade 33 steel or structural concrete	Min. 1/2-inch DensDeck	See Note 2	1 per 2.67 ft. ²	Duro-Last VB Primer (concrete only); Duro-Last Vapor Barrier	One or more layers, Min. 1.5-inch ISO 95+ GL	(Optional) Tapered ISO 95+ GL	Millennium One Step	Duro-Tech TPO,	UP-BA, LVOC-BA-1168, LVOC-BA, SA	-37.5	A	1/4
SC-6	Min. 22 ga., type B, Grade 33 steel or structural concrete	Min. 3/4-inch perlite	See Note 2	1 per 2.0 ft. ²	Two plies Duro-Last Type IV or Type VI in hot asphalt	Min. 1.5-inch ISO 95+ GL	Min. 1/4-inch DensDeck Prime	Asphalt or OlyBond 500	Duro-Tech TPO,	UP-BA, LVOC-BA-1168, LVOC-BA, WBBA-P, SA	-45.0	A	2-1/2
SC-7	Min. 22 ga., type B, Grade 33 steel or structural concrete	Min. 1/4-inch DensDeck	See Note 2	1 per 4.0 ft. ²	Duro-Last VB Primer (concrete only); Duro-Last Vapor Barrier	One or more layers, Min. 1.5-inch ISO 95+ GL	(Optional) Tapered ISO 95+ GL	OlyBond 500	Duro-Tech TPO,	UP-BA, LVOC-BA-1168, LVOC-BA, WBBA-P, SA	-45.0	A	1/4
SC-8	Min. 22 ga., type B, Grade 33 steel or structural concrete	Min. 1/4-inch DensDeck	See Note 2	1 per 4.0 ft. ²	Duro-Last VB Primer (concrete only); Duro-Last Vapor Barrier	One or more layers, Min. 1.5-inch ISO 95+ GL	(Optional) Min. 1/2-inch Tapered ISO 95+ GL; Min. 1/2-inch DURO-GUARD ISO HD-E2	OlyBond 500	Duro-Tech TPO,	UP-BA, LVOC-BA-1168, LVOC-BA, WBBA-P, SA	-45.0	A	1/2
SC-9	Min. 22 ga., type B, Grade 33 steel or structural concrete	Min. 1/4-inch DensDeck	See Note 2	1 per 4.0 ft. ²	Duro-Last VB Primer (concrete only); Duro-Last Vapor Barrier	One or more layers, Min. 1.5-inch ISO 95+ GL	(Optional) Min. 1/2-inch Tapered ISO 95+ GL; Min. 7/16-inch OSB	OlyBond 500	Duro-Tech TPO,	UP-BA, LVOC-BA-1168, LVOC-BA, WBBA-P, SA	-45.0	A	1-1/4
SC-10	Min. 22 ga., type B, Grade 33 steel or structural concrete	Min. 1/4-inch DensDeck	See Note 2	1 per 4.0 ft. ²	Duro-Last VB Primer (concrete only); Duro-Last Vapor Barrier	One or more layers, Min. 1.5-inch ISO 95+ GL	(Optional) Min. 1/2-inch Tapered ISO 95+ GL; Min. 1/4-inch DensDeck Prime	OlyBond 500	Duro-Tech TPO,	UP-BA, LVOC-BA-1168, LVOC-BA, WBBA-P, SA	-45.0	A	2-1/2
SC-11	Min. 22 ga., type B, Grade 33 steel or structural concrete	Min. 1/4-inch DensDeck	See Note 2	1 per 4.0 ft. ²	Duro-Last VB Primer (concrete only); Duro-Last Vapor Barrier	One or more layers, Min. 1.5-inch ISO 95+ GL	(Optional) Min. 1/2-inch Tapered ISO 95+ GL; Min. 1/4-inch DensDeck	OlyBond 500	Duro-Tech TPO,	UP-BA, LVOC-BA, WBBA-P, SA	-45.0	A	2-1/2
SC-12	Min. 22 ga., type B, Grade 33 steel or structural concrete	Min. 1/2-inch DensDeck	See Note 2	1 per 2.67 ft. ²	Duro-Last VB Primer (concrete only); Duro-Last Vapor Barrier	One or more layers, Min. 1.5-inch ISO 95+ GL	(Optional) Tapered ISO 95+ GL	OlyBond 500	Duro-Tech TPO,	UP-BA, LVOC-BA-1168, LVOC-BA, WBBA-P, SA	-45.0	A	1/4

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**TABLE 2A-3: STEEL or CONCRETE DECKS - NEW CONSTRUCTION or REROOF (Tear-Off) or RECOVER
SYSTEM TYPE A-1C: THERMAL BARRIER, BONDED TEMP ROOF, BONDED TOP INSULATION, BONDED ROOF COVER**

System No.	Deck (See Note 1)	Thermal Barrier			Temp Roof	Insulation			Roof Cover	Adhesive	MDP (psf)	Fire Rating UL790/E108	
		Type	Fast.	Attach		Base Layer	Top Layer	Attach				Class	Max Incline (in.)
SC-13	Min. 22 ga., type B, Grade 33 steel or structural concrete	Min. 1/2-inch DensDeck	See Note 2	1 per 4.0 ft. ²	Duro-Last Vapor Barrier	One or more layers, Min. 1.5-inch ISO 95+ GL	(Optional) Tapered ISO 95+ GL; Min. 1/4-inch DensDeck Prime	Millennium PG-1	Duro-Tech TPO,	UP-BA, LVOC-BA-1168, LVOC-BA, SA	-45.0	A	1/4
SC-14	Min. 22 ga., type B, Grade 33 steel or structural concrete	Min. 1/2-inch DensDeck	OlyBond 500	12 inch o.c. along top flange of the deck ribs	Duro-Last Vapor Barrier	Min. 1/2-inch ISO 95+ GL	Additional layers of base insulation	Asphalt	Duro-Tech TPO,	UP-BA, LVOC-BA-1168, LVOC-BA, SA	-45.0	A	1/4
DURO-TECH TPO FLEECE SYSTEMS													
SC-15	Min. 22 ga., type B, Grade 33 steel or structural concrete	Min. 1/4-inch DensDeck	See Note 2	1 per 4.0 ft. ²	Duro-Last VB Primer (concrete only) and Duro-Last Vapor Barrier	One or more layers, Min. 1.5-inch ISO 95+ GL	(Optional) Min. 1/2-inch Tapered ISO 95+ GL; Min. 1/4-inch DensDeck Prime	OlyBond 500	Duro-Tech TPO Fleece	Millennium PG-1; XR Stick, 12-inch o.c. Ribbons; XR-BA	-45.0	A	2

**TABLE 2A-4: STEEL or CONCRETE DECKS - NEW CONSTRUCTION or REROOF (Tear-Off) or RECOVER
SYSTEM TYPE A-1D: BASE INSULATION, MECHANICALLY ATTACHED TEMP ROOF, BONDED ROOF COVER**

System No.	Deck (See Note 1)	Base Insulation Layer			Temp Roof			Roof Cover	Adhesive	MDP (psf)	Fire Rating UL790/E108	
		Type	Fastener	Attach	Type	Fastener	Attach				Class	Max Incline (in.)
SC-14	Min. 22 ga., type B, Grade 33 steel or structural concrete	One or more layers, 1/2-inch min., any combination	See Note 2	Prelim. Attached	SBS PolyBase	Duro-Last Insulation Fastening Plates Duro-Last HD Fasteners or Duro-Last Concrete Drive (concrete only)	Secured 12-inch o.c. in the torched side lap	Duro-Tech TPO Fleece	Millennium PG-1, 12-inch o.c. Ribbons	-37.5	A	1/4
SC-15	Min. 22 ga., type B, Grade 33 steel or structural concrete	One or more layers, 1/2-inch min., any combination	See Note 2	Prelim. Attached	MB Base, SBS Base, or Channel Venting Base	Duro-Last Insulation Fastening Plates Duro-Last AP Fasteners or HD Fasteners or Duro-Last Concrete Drive (concrete only)	Secured 12-inch o.c. in the side lap and 12-inch o.c. in two staggered, intermediate rows	Duro-Tech TPO Fleece	Asphalt	-45.0	A	1/2
SC-16	Min. 22 ga., type B, Grade 33 steel or structural concrete	One or more layers, 1/2-inch min., any combination	See Note 2	Prelim. Attached	SBS Base	Duro-Last Insulation Fastening Plates Duro-Last AP Fasteners or HD Fasteners or Duro-Last Concrete Drive (concrete only)	Secured 12-inch o.c. in the side lap and 12-inch o.c. in two staggered, intermediate rows	Duro-Tech TPO Fleece	Millennium PG-1, XR Stick; Ribbons spaced 12-inch o.c. and located directly over the base sheet fastener rows	-45.0	A	1/4

**TABLE 2B-1: STEEL or CONCRETE DECKS - NEW CONSTRUCTION or REROOF (Tear-Off) or RECOVER
SYSTEM TYPE B-1: MECHANICALLY ATTACHED BASE INSULATION, BONDED TOP INSULATION, BONDED ROOF COVER**

System No.	Deck (See Note 1)	Base Insulation Layer			Top Insulation Layer		Roof Cover	Adhesive	MDP (psf)	Fire Rating UL790/E108	
		Type	Fastener	Attach	Type	Attach				Class	Max Incline (in.)
SC-19	Min. 22 ga., type B, Grade 33 steel or structural concrete	Min.1.5-inch ISO 95+ GL	See Note 2	1 per 2.67 ft. ²	Min. 1.5-inch ISO 95+ GL	Millennium One Step; Millennium PG-1; INSTA STIK Quik Set; OlyBond 500	Duro-Tech TPO,	UP- BA, SA	-30.0	A	1/4
SC-20	Min. 22 ga., type B, Grade 33 steel or structural concrete	Min. 2.0-inch ISO 95+ GL	See Note 2	1 per 4.0 ft. ²	Min. 1.5-inch ISO 95+ GL	Millennium One Step; Millennium PG-1; INSTA STIK Quik Set; OlyBond 500	Duro-Tech TPO,	UP- BA, SA	-37.5	A	1/4
SC-21	Min. 22 ga., type B, Grade 33 steel or structural concrete	Min. 2.0-inch ISO 95+ GL or RESISTA	See Note 2	1 per 4.0 ft. ²	Min. 1/2-inch DURO-GUARD ISO HD-E2	INSTA STIK QUIK SET; Millennium PG-1; OlyBond 500; Millennium One Step	Duro-Tech TPO,	UP- BA, LVOC-BA-1168, LVOC-BA, SA	-37.5	A	1/4
SC-22	Min. 22 ga., type B, Grade 33 steel or structural concrete	Min. 2.0-inch ISO 95+ GL	See Note 2	1 per 1.0 ft. ²	Min. 1/2-inch DURO-GUARD ISO HD-E2	INSTA STIK QUIK SET; OlyBond 500; Millennium One Step; Millennium PG-1	Duro-Tech TPO	WBBA-P	-45.0	A	1/4
SC-23	Min. 22 ga., type B, Grade 33 steel or structural concrete	Min. 1.5-inch ISO 95+ GL	See Note 2	1 per 2.0 ft. ²	Min. 1/2-inch DURO-GUARD ISO HD-E2	Millennium One Step; Millennium PG-1; INSTA STIK Quik Set; OlyBond 500	Duro-Tech TPO,	UP- BA, LVOC-BA-1168, SA	-45.0	A	1/4
SC-24	Min. 22 ga., type B, Grade 33 steel or structural concrete	Min. 1.5-inch ISO 95+ GL	See Note 2	1 per 2.0 ft. ²	Min. 1/4-inch DensDeck Prime	Millennium One Step, OlyBond 500; Millennium PG-1; INSTA STIK Quik Set	Duro-Tech TPO,	UP-BA, LVOC-BA-1168, SA	-45.0	A	2-1/2
SC-25	Min. 22 ga., type B, Grade 33 steel or structural concrete	Min. 1.5-inch ISO 95+ GL	See Note 2	1 per 2.0 ft. ²	(Optional) min. 1.5-inch ISO 95+ GL; Min. 1/2-inch Tapered ISO 95+ GL	Millennium PG-1; INSTA STIK QUIK SET; OlyBond 500; Millennium One Step	Duro-Tech TPO,	UP- BA, LVOC-BA-1168, LVOC-BA, WBBA-P, SA	-45.0	A	1/4
SC-26	Min. 22 ga., type B, Grade 33 steel or structural concrete	Min. 1.5-inch ISO 95+ GL	See Note 2	1 per 2.0 ft. ²	(Optional) min. 1.5-inch ISO 95+ GL or min. 1/2-inch Tapered ISO 95+ GL; Min. 1/2-inch DURO-GUARD ISO HD-E2	Millennium PG-1; INSTA STIK QUIK SET; OlyBond 500; Millennium One Step	Duro-Tech TPO,	UP- BA, LVOC-BA-1168, LVOC-BA, WBBA-P, SA	-45.0	A	1/4
SC-27	Min. 22 ga., type B, Grade 33 steel or structural concrete	Min. 1/2-inch DensDeck or DensDeck Prime	See Note 2	1 per 2.0 ft. ²	Min. 1.5-inch ISO 95+ GL followed by min. 1/4-inch DensDeck Prime	INSTA STIK QUIK SET; OlyBond 500; Millennium One Step; Millennium PG-1	Duro-Tech TPO,	UP- BA, LVOC-BA-1168, LVOC-BA, WBBA-P, SA	-45.0	A	2-1/2

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**TABLE 2B-1: STEEL or CONCRETE DECKS - NEW CONSTRUCTION or REROOF (Tear-Off) or RECOVER
SYSTEM TYPE B-1: MECHANICALLY ATTACHED BASE INSULATION, BONDED TOP INSULATION, BONDED ROOF COVER**

System No.	Deck (See Note 1)	Base Insulation Layer			Top Insulation Layer		Roof Cover	Adhesive	MDP (psf)	Fire Rating UL790/E108	
		Type	Fastener	Attach	Type	Attach				Class	Max Incline (in.)
SC-28	Min. 22 ga., type B, Grade 33 steel or structural concrete	Min. 1.5-inch ISO 95+ GL	See Note 2	1 per 2.0 ft. ²	(Optional) Min. ½-inch ISO 95+ GL or RESISTA; 1/2-inch High Density Wood Fiber Board.	INSTA STIK QUIK SET; Millennium PG-1; OlyBond 500; Millennium One Step	Duro-Tech TPO,	UP- BA, LVOC-BA-1168, LVOC-BA, SA	-45.0	A	1/2
SC-29	Min. 22 ga., type B, Grade 33 steel or structural concrete	Min. 1.5-inch ISO 95+ GL	See Note 2	1 per 2.0 ft. ²	(Optional) ½-inch min. ISO 95+ GL or RESISTA; Min. ½-inch DURO-GUARD ISO HD-E2 or 1.0-inch ISO 95+ GL	INSTA STIK QUIK SET; Millennium PG-1; OlyBond 500; I.S.O. Twin Pack	Duro-Tech TPO,	UP- BA, LVOC-BA-1168, LVOC-BA, SA	-45.0	A	1/4
SC-30	Min. 22 ga., type B, Grade 33 steel or structural concrete	Min. 1.5-inch ISO 95+ GL	See Note 2	1 per 2.0 ft. ²	(Optional) ½-inch min. ISO 95+ GL or RESISTA; ¼-inch DensDeck Prime	INSTA STIK QUIK SET; Millennium PG-1; OlyBond 500; Millennium One Step	Duro-Tech TPO,	UP- BA, LVOC-BA-1168, LVOC-BA, SA	-45.0	A	2-1/2
SC-31	Min. 22 ga., type B, Grade 33 steel or structural concrete	Min. 1.5-inch ISO 95+ GL	See Note 2	1 per 2.67 ft. ²	Min. 1.5 inch Duro-Guard ISO Composite-E2	INSTA STIK QUIK SET; Millennium PG-1; OlyBond 500; Millennium One Step	Duro-Tech TPO,	UP- BA, LVOC-BA-1168, LVOC-BA, SA	-45.0	A	1/4
SC-32	Min. 22 ga., type B, Grade 33 steel or structural concrete	Min. 1.5-inch RESISTA	See Note 2	1 per 2.67 ft. ²	(Optional) min. 1.5-inch RESISTA; Min. ½-inch Tapered RESISTA	INSTA STIK QUIK SET; Millennium PG-1; OlyBond 500; Millennium One Step	Duro-Tech TPO,	UP- BA, LVOC-BA-1168, LVOC-BA, SA	-45.0	A	1/4
SC-33	Min. 22 ga., type B, Grade 33 steel or structural concrete	Min. ½-inch DensDeck Prime	See Note 2	1 per 4.0 ft. ²	(Optional) min. 1.5-inch RESISTA; Min. ½-inch Tapered RESISTA	INSTA STIK QUIK SET; Millennium PG-1; OlyBond 500; Millennium One Step	Duro-Tech TPO,	UP- BA, LVOC-BA-1168, LVOC-BA, SA	-45.0	A	1/4
SC-34	Min. 22 ga., type B, Grade 33 steel or structural concrete	Min. 2.0-inch ISO 95+ GL	See Note 2	1 per 4.0 ft. ²	Min. 1.5-inch Duro-Guard ISO Composite-E2	INSTA STIK QUIK SET; Millennium PG-1; OlyBond 500; Millennium One Step	Duro-Tech TPO,	UP- BA, LVOC-BA-1168, LVOC-BA, SA	-45.0	A	1/4
SC-35	Min. 22 ga., type B, Grade 33 steel or structural concrete	Min. 2.0-inch RESISTA	See Note 2	1 per 4.0 ft. ²	(Optional) Min. 1.5-inch RESISTA; Min. ½-inch Tapered RESISTA	INSTA STIK QUIK SET; Millennium PG-1; OlyBond 500; Millennium One Step	Duro-Tech TPO,	UP- BA, LVOC-BA-1168, LVOC-BA, SA	-45.0	A	1/4
SC-36	Min. 22 ga., type B, Grade 33 steel or structural concrete	Min. 1.5-inch ISO 95+ GL or RESISTA	See Note 2	1 per 1.78 ft. ²	Min. 1.5-inch Duro-Guard ISO Composite-E2	OlyBond 500; INSTA STIK QUIK SET; Millennium PG-1; Millennium One Step	Duro-Tech TPO,	UP-BA, SA	-60.0	A	1/4

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**TABLE 2B-1: STEEL or CONCRETE DECKS - NEW CONSTRUCTION or REROOF (Tear-Off) or RECOVER
SYSTEM TYPE B-1: MECHANICALLY ATTACHED BASE INSULATION, BONDED TOP INSULATION, BONDED ROOF COVER**

System No.	Deck (See Note 1)	Base Insulation Layer			Top Insulation Layer		Roof Cover	Adhesive	MDP (psf)	Fire Rating UL790/E108	
		Type	Fastener	Attach	Type	Attach				Class	Max Incline (in.)
SC-37	Min. 22 ga., type B, Grade 33 steel or structural concrete	Min. 2.0-inch ISO 95+ GL	See Note 2	1 per 1.78 ft. ²	Min. ½-inch ISO 95+ GL or RESISTA followed by DURO-GUARD ISO HD-E2	INSTA STIK QUIK SET; OlyBond 500; Millennium One Step; Millennium PG-1, 6-inch o.c. Ribbons	Duro-Tech TPO,	UP- BA, LVOC-BA-1168, LVOC-BA, SA	-60.0	A	¼
SC-38	Min. 22 ga., type B, Grade 33 steel or structural concrete	Min. 2.0-inch ISO 95+ GL	See Note 2	1 per 1.78 ft. ²	Min. ¼-inch SECUROCK Gypsum-Fiber Roof Board	OlyBond 500; INSTA STIK QUIK SET; Millennium PG-1; Millennium One Step	Duro-Tech TPO,	UP-BA, LVCO-BA, SA	-67.5	A	2-½
SC-39	Min. 22 ga., type B, Grade 33 steel or structural concrete	Min. 2.0-inch ISO 95+ GL or RESISTA	See Note 2	1 per 1.78 ft. ²	Min. ½-inch DURO-GUARD ISO HD-E2	INSTA STIK QUIK SET; OlyBond 500; Millennium One Step; Millennium PG-1, 6-inch o.c. Ribbons	Duro-Tech TPO,	UP-BA, LVCO-BA, LVOC-BA-1168, WBBA-P, SA	-67.5	A	¼
SC-40	Min. 22 ga., type B, Grade 33 steel or structural concrete	Min. 2.0-inch ISO 95+ GL or RESISTA	See Note 2	1 per 1.6 ft. ²	1.5-inch ISO 95+ GL or RESISTA	Millennium One Step INSTA STIK QUIK SET; Millennium PG-1; OlyBond 500	Duro-Tech TPO,	UP- BA, LVOC-BA-1168, LVOC-BA, SA	-75.0	A	¼
SC-41	Min. 22 ga., type B, Grade 33 steel or structural concrete	Min. 2.0-inch ISO 95+ GL or RESISTA	See Note 2	1 per 1.6 ft. ²	Min. ½-inch DURO-GUARD ISO HD-E2	INSTA STIK QUIK SET; OlyBond 500; Millennium One Step; Millennium PG-1, 6-inch o.c. Ribbons	Duro-Tech TPO,	UP- BA, LVOC-BA-1168, LVOC-BA, SA	-87.5	A	¼
SC-42	Min. 22 ga., type B, Grade 33 steel or structural concrete	Min. 2.0-inch ISO 95+ GL	See Note 2	1 per 1.0 ft. ²	Min. ½-inch DURO-GUARD ISO HD-E2	INSTA STIK QUIK SET; OlyBond 500; Millennium One Step; Millennium PG-1	Duro-Tech TPO,	UP- BA, LVOC-BA-1168, LVOC-BA, SA	-90.0	A	¼
SC-43	Min. 22 ga., type B, Grade 33 steel or structural concrete	Min. 2.0-inch ISO 95+ GL	See Note 2	1 per 1.0 ft. ²	Min. 1.5-inch ISO 95+ GL	Millennium PG-1, 6-inch o.c. Ribbons	Duro-Tech TPO	UP- BA, LVOC-BA-1168, LVOC-BA	-105.0	A	¼
SC-44	Min. 22 ga., type B, Grade 33 steel or structural concrete	Min. 2.0-inch ISO 95+ GL	See Note 2	1 per 1.0 ft. ²	Min. 1.5-inch ISO 95+ GL followed by min. ½-inch DURO-GUARD ISO HD-E2 or min. 7/16-inch OSB	Millennium PG-1, 6-inch o.c. Ribbons	Duro-Tech TPO	UP- BA, LVOC-BA-1168, LVOC-BA	-105.0	A	¼
SC-45	Min. 22 ga., type B, Grade 33 steel or structural concrete	Min. 2.0-inch ISO 95+ GL	See Note 2	1 per 1.0 ft. ²	Min. 1-inch ISO 95+ GL	Millennium One Step; Millennium PG-1, 4-inch o.c. Ribbons	Duro-Tech TPO	UP- BA, LVOC-BA-1168, LVOC-BA	-112.5	A	¼

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**TABLE 2B-1: STEEL or CONCRETE DECKS - NEW CONSTRUCTION or REROOF (Tear-Off) or RECOVER
SYSTEM TYPE B-1: MECHANICALLY ATTACHED BASE INSULATION, BONDED TOP INSULATION, BONDED ROOF COVER**

System No.	Deck (See Note 1)	Base Insulation Layer			Top Insulation Layer		Roof Cover	Adhesive	MDP (psf)	Fire Rating UL790/E108	
		Type	Fastener	Attach	Type	Attach				Class	Max Incline (in.)
SC-46	Min. 22 ga., type B, Grade 33 steel or structural concrete	Min. 2.0-inch ISO 95+ GL	See Note 2	1 per 1.0 ft. ²	Min. ½-inch DURO-GUARD ISO HD-E2	Millennium One Step; Millennium PG-1, 4-inch o.c. Ribbons	Duro-Tech TPO	LVOC- BA-1168	-112.5	A	¼
SC-47	Min. 22 ga., type B, Grade 33 steel or structural concrete	Min. 2.0-inch ISO 95+ GL	See Note 2	1 per 1.0 ft. ²	Min. ½-inch DensDeck Prime	Millennium One Step; Millennium PG-1, 4-inch o.c. Ribbons	Duro-Tech TPO	LVOC- BA-1168	-112.5	A	2-½
SC-48	Min. 22 ga., type B, Grade 33 steel or structural concrete	Min. 1.5-inch RESISTA	See Note 2	1 per 1.0 ft. ²	Min. 1.5-inch RESISTA	INSTA STIK QUIK SET; OlyBond 500; Millennium One Step; Millennium PG-1	Duro-Tech TPO	UP- BA, LVOC-BA-1168, LVOC-BA	-120.0	A	¼
SC-49	Min. 22 ga., type B, Grade 33 steel or structural concrete	Min. 2.0-inch ISO 95+ GL	See Note 2	1 per 1.0 ft. ²	Min. 1-inch ISO 95+ GL	Millennium One Step; Millennium PG-1, 4-inch o.c. Ribbons	Duro-Tech TPO	UP- BA, LVOC-BA-1168, LVOC-BA	-127.5	A	¼
SC-50	Min. 22 ga., type B, Grade 80 steel or min. 20 ga., type B, Grade 33 steel or structural concrete	Min. 2.0-inch ISO 95+ GL or RESISTA	See Note 2	1 per 1.0 ft. ²	Min. ½-inch DURO-GUARD ISO HD-E2	INSTA STIK QUIK SET; Millennium PG-1; OlyBond 500; Millennium One Step, 4 in. o.c. Ribbons	Duro-Tech TPO	UP- BA, LVOC-BA-1168, LVOC-BA	-135.0	A	¼

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**TABLE 2B-1: STEEL or CONCRETE DECKS - NEW CONSTRUCTION or REROOF (Tear-Off) or RECOVER
SYSTEM TYPE B- 1: MECHANICALLY ATTACHED BASE INSULATION, BONDED TOP INSULATION, BONDED ROOF COVER**

System No.	Deck (See Note 1)	Base Insulation Layer			Top Insulation Layer		Roof Cover	Adhesive	MDP (psf)	Fire Rating UL790/E108	
		Type	Fastener	Attach	Type	Attach				Class	Max Incline (in.)
DURO-TECH TPO FLEECE SYSTEMS											
SC-51	Min. 22 ga., type B, Grade 33 steel or structural concrete	Min. 1.5-inch ISO 95+ GL	See Note 2	1 per 2.67 ft. ²	Min. 1.5-inch ISO 95+ GL	INSTA STIK QUIK SET; Millennium PG-1; OlyBond 500; Millennium One Step	Duro-Tech TPO Fleece	Millennium PG-1, XR Stick, 12-inch o.c. Ribbons	-30.0	A	1/2
SC-52	Min. 22 ga., type B, Grade 33 steel or structural concrete	Min. 2.0-inch ISO 95+ GL	See Note 2	1 per 4.0 ft. ²	Min. 1.5-inch ISO 95+ GL	INSTA STIK QUIK SET; Millennium PG-1; OlyBond 500; Millennium One Step	Duro-Tech TPO Fleece	Millennium PG-1, XR Stick, 12-inch o.c. Ribbons	-37.5	A	1/2
SC-53	Min. 22 ga., type B, Grade 33 steel or structural concrete	Min. 1/2-inch DensDeck or DensDeck Prime	See Note 2	1 per 2.0 ft. ²	Min. 1.5-inch ISO 95+ GL followed by min. 1/4-inch DensDeck Prime	INSTA STIK QUIK SET; OlyBond 500; Millennium One Step	Duro-Tech TPO Fleece	XR-BA	-45.0	A	2
SC-54	Min. 22 ga., type B, Grade 33 steel or structural concrete	Min. 1/2-inch DensDeck	See Note 2	1 per 2.0 ft. ²	Min. 1.5-inch ISO 95+ GL followed by Min. 1/2-inch DensDeck Prime	Millennium PG-1	Duro-Tech TPO Fleece	Millennium PG-1, XR Stick, 12-inch o.c. Ribbons	-45.0	A	2
SC-55	Min. 22 ga., type B, Grade 33 steel or structural concrete	Min. 1/2-inch DensDeck	See Note 2	1 per 2.0 ft. ²	Min. 1.5-inch ISO 95+ GL followed by Min. 1/2-inch DURO-GUARD ISO HD-E2	Millennium PG-1	Duro-Tech TPO Fleece	Millennium PG-1, XR Stick, 4-inch o.c. Ribbons	-45.0	A	1/2
SC-56	Min. 22 ga., type B, Grade 33 steel or structural concrete	Min. 1.5-inch ISO 95+ GL	See Note 2	1 per 2.0 ft. ²	Min. 1-inch ISO 95+ GL followed by Min. 1/4-inch DensDeck Prime	INSTA STIK QUIK SET; Millennium PG-1; OlyBond 500; Millennium One Step	Duro-Tech TPO Fleece	Millennium PG-1, XR Stick, 12-inch o.c. Ribbons	-45.0	A	2
SC-57	Min. 22 ga., type B, Grade 33 steel or structural concrete	Min. 1.5-inch ISO 95+ GL	See Note 2	1 per 2.0 ft. ²	Min. 1-inch ISO 95+ GL followed by Min. 1/2-inch DURO-GUARD ISO HD-E2	INSTA STIK QUIK SET; Millennium PG-1; OlyBond 500; Millennium One Step	Duro-Tech TPO Fleece	Millennium PG-1, XR Stick, 4-inch o.c. Ribbons	-45.0	A B	1/2 1
SC-58	Min. 22 ga., type B, Grade 33 steel or structural concrete	Min. 2.25-inch ISO 95+ GL	See Note 2	1 per 4.0 ft. ²	Min. 1.5-inch ISO 95+ GL	INSTA STIK QUIK SET; Millennium PG-1; OlyBond 500; Millennium One Step	Duro-Tech TPO Fleece	Millennium PG-1, XR Stick, 12-inch o.c. Ribbons	-45.0	A	1/2
SC-59	Min. 22 ga., type B, Grade 33 steel or structural concrete	Min. 1.5-inch ISO 95+ GL	See Note 2	1 per 1.6 ft. ²	Min. 1/2-inch DensDeck Prime	INSTA STIK QUIK SET; OlyBond 500; Millennium One Step; Millennium PG-1, 6-inch o.c. Ribbons	Duro-Tech TPO Fleece	Millennium PG-1, XR Stick, 6-inch o.c. Ribbons	-60.0	A	2

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TABLE 2B-1: STEEL or CONCRETE DECKS - NEW CONSTRUCTION or REROOF (Tear-Off) or RECOVER											
SYSTEM TYPE B- 1: MECHANICALLY ATTACHED BASE INSULATION, BONDED TOP INSULATION, BONDED ROOF COVER											
System No.	Deck (See Note 1)	Base Insulation Layer			Top Insulation Layer		Roof Cover	Adhesive	MDP (psf)	Fire Rating UL790/E108	
		Type	Fastener	Attach	Type	Attach				Class	Max Incline (in.)
DURO-TECH TPO FLEECE SYSTEMS											
SC-60	Min. 22 ga., type B, Grade 33 steel or structural concrete	Min. 2.0-inch ISO 95+ GL	See Note 2	1 per 1.78 ft. ²	Min. ½-inch ISO 95+ GL or RESISTA followed by Min. ½-inch DURO-GUARD ISO HD-E2	INSTA STIK QUIK SET; Millennium PG-1; OlyBond 500; Millennium One Step, 6-inch o.c. Ribbons	Duro-Tech TPO Fleece	Millennium PG-1, XR Stick, 12-inch o.c. Ribbons	-60.0	A	½
SC-61	Min. 22 ga., type B, Grade 33 steel or structural concrete	Min. 2.0-inch ISO 95+ GL or RESISTA	See Note 2	1 per 1.78 ft. ²	Min. ½-inch DURO-GUARD ISO HD-E2	INSTA STIK QUIK SET; OlyBond 500; Millennium One Step; Millennium PG-1, 6-inch o.c. Ribbons	Duro-Tech TPO Fleece	Millennium PG-1, XR Stick, 12-inch o.c. Ribbons	-67.5	A	½
SC-62	Min. 22 ga., type B, Grade 33 steel or structural concrete	Min. 2.0-inch ISO 95+ GL	See Note 2	1 per 1.6 ft. ²	Min. ½-inch DURO-GUARD ISO HD-E2	INSTA STIK QUIK SET; OlyBond 500; Millennium One Step; Millennium PG-1, 6-inch o.c. Ribbons	Duro-Tech TPO Fleece	XR Stick, 6-inch o.c. Ribbons	-82.5	A	½
SC-63	Min. 22 ga., type B, Grade 33 steel	Min. 2.0-inch ISO 95+ GL or RESISTA	See Note 2	1 per 1.0 ft. ²	Min. ½-inch DensDeck Prime	Millennium PG-1	Duro-Tech TPO Fleece	Millennium PG-1	-82.5	A	2
SC-64	Min. 22 ga., type B, Grade 80 steel	Min. 2.0-inch ISO 95+ GL or RESISTA	See Note 2	1 per 1.0 ft. ²	Min. ½-inch DensDeck Prime	Millennium PG-1	Duro-Tech TPO Fleece	Millennium PG-1	-97.5	A	2
SC-65	Min. 22 ga., type B, Grade 33 steel or structural concrete	Min. 2.0-inch ISO 95+ GL	See Note 2	1 per 1.0 ft. ²	Min. ½-inch DensDeck Prime	INSTA STIK QUIK SET; OlyBond 500; Millennium One Step; Millennium PG-1, 4-inch o.c. Ribbons	Duro-Tech TPO Fleece	Millennium PG-1, XR Stick, 4-inch o.c. Ribbons	-127.5	A	2

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**TABLE 2C-1: STEEL or CONCRETE DECKS - NEW CONSTRUCTION or REROOF (Tear-Off) or RECOVER
SYSTEM TYPE C-1: MECHANICALLY ATTACHED INSULATION, BONDED ROOF COVER**

System No.	Deck (See Note 1)	Base Insulation Layer	Top Insulation Layer			Roof Cover	Adhesive	MDP (psf)	Fire Rating UL790/E108	
			Type	Fasteners	Attach				Class	Max Incline (in.)
SC-66	Min. 22 ga., type B, Grade 33 steel or structural concrete	(Optional) One or more layers, any combination, loose laid	Min. 2.0-inch ISO 95+ GL	See Note 2	1 per 4.0 ft. ²	Duro-Tech TPO,	UP- BA, LVOC-BA-1168, SA	-30.0	A	1/4
SC-67	Min. 22 ga., type B, Grade 33 steel or structural concrete	(Optional) One or more layers, any combination, loose laid	Min. 1.5-inch ISO 95+ GL	See Note 2	1 per 2.67 ft. ²	Duro-Tech TPO,	UP- BA, LVOC-BA-1168, SA	-30.0	A	1/4
SC-68	Min. 22 ga., type B, Grade 33 steel or structural concrete	(Optional) One or more layers, any combination, loose laid	Min. 1.0-inch RESISTA	See Note 2	1 per 3.2 ft. ²	Duro-Tech TPO,	UP- BA, LVOC-BA-1168, LVOC-BA, WBBA-P, SA	-30.0	A	1/4
SC-69	Min. 22 ga., type B, Grade 33 steel or structural concrete	(Optional) One or more layers, any combination, loose laid	Min. 1/2-inch DensDeck Prime	See Note 2	1 per 3.2 ft. ²	Duro-Tech TPO,	UP- BA, LVOC-BA-1168, LVOC-BA, SA	-30.0	A	2-1/2
SC-70	Min. 22 ga., type B, Grade 33 steel or structural concrete	(Optional) One or more layers, any combination, loose laid	Min. 2.0-inch ISO 95+ GL	See Note 2	1 per 4.0 ft. ²	Duro-Tech TPO,	UP- BA, LVOC-BA-1168, SA	-30.0	A	1/4
SC-71	Min. 22 ga., type B, Grade 33 steel or structural concrete	(Optional) One or more layers, any combination, loose laid	Min. 3/8-inch SECUROCK Gypsum-Fiber Roof Board	See Note 2	1 per 4.0 ft. ²	Duro-Tech TPO,	UP- BA, LVOC-BA-1168, SA	-30.0	A	2-1/2
SC-72	Min. 22 ga., type B, Grade 33 steel or structural concrete	(Optional) One or more layers, any combination, loose laid	Min. 2.0-inch RESISTA	See Note 2	1 per 5.33 ft. ²	Duro-Tech TPO,	UP- BA, LVOC-BA-1168, LVOC-BA, SA	-37.5	A	1/4
SC-73	Min. 22 ga., type B, Grade 33 steel or structural concrete	Min. 1.5-inch thick, one or more layers, any combination, loose laid	Min. 1/2-inch DURO-GUARD ISO HD-E2	See Note 2	1 per 1.33 ft. ²	Duro-Tech TPO	WBBA-P	-45.0	A	1/4
SC-74	Min. 22 ga., type B, Grade 33 steel or structural concrete	(Optional) One or more layers, any combination, loose laid	Min. 1.5-inch Duro-Guard ISO Composite-E2	See Note 2	1 per 1.33 ft. ²	Duro-Tech TPO	WBBA-P	-45.0	A	1/4
SC-75	Min. 22 ga., type B, Grade 33 steel or structural concrete	Min. 1.0-inch ISO 95+ GL or RESISTA, loose laid	Min. 1/4-inch SECUROCK Gypsum-Fiber Roof Board	See Note 2	1 per 1.78 ft. ²	Duro-Tech TPO,	UP-BA, LVOC-BA-1168, LVOC-BA, WBBA-P, SA	-45.0	A	2-1/2
SC-76	Min. 22 ga., type B, Grade 33 steel or structural concrete	(Optional) One or more layers, any combination, loose laid	Min. 1.0-inch RESISTA	See Note 2	1 per 2.0 ft. ²	Duro-Tech TPO,	UP- BA, LVOC-BA-1168, LVOC-BA, WBBA-P, SA	-45.0	A	1/4
SC-77	Min. 24 ga Type HF Form Deck (Min. Grade 33 Steel)	(Optional) One or more layers, any combination, loose laid	Min. 2.0-inch ISO 95+ GL or RESISTA	See Note 2	1 per 2.13 ft. ²	Duro-Tech TPO,	UP- BA, LVOC-BA-1168, LVOC-BA, WBBA-P, SA	-45.0	A	1/4
SC-78	Min. 22 ga., type B, Grade 33 steel or structural concrete	Min. 1.5-inch thick, one or more layers, any combination, loose laid	Min. 7/16-inch OSB	See Note2 Duro-Last HD HailGard Fastener (steel only)	1 per 2.67 ft. ²	Duro-Tech TPO,	UP- BA, LVOC-BA-1168, SA	-45.0	A	1-1/4

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**TABLE 2C-1: STEEL or CONCRETE DECKS - NEW CONSTRUCTION or REROOF (Tear-Off) or RECOVER
SYSTEM TYPE C-1: MECHANICALLY ATTACHED INSULATION, BONDED ROOF COVER**

System No.	Deck (See Note 1)	Base Insulation Layer	Top Insulation Layer			Roof Cover	Adhesive	MDP (psf)	Fire Rating UL790/E108	
			Type	Fasteners	Attach				Class	Max Incline (in.)
SC-79	Min. 22 ga., type B, Grade 33 steel or structural concrete	(Optional) One or more layers, any combination, loose laid	Min. ½-inch DURO-GUARD ISO HD-E2	See Note 2	1 per 2.67 ft. ²	Duro-Tech TPO,	UP- BA, LVOC-BA-1168, SA	-45.0	A	¼
SC-80	Min. 22 ga., type B, Grade 33 steel or structural concrete	(Optional) One or more layers, any combination, loose laid	Min. 1.5-inch RESISTA	See Note 2	1 per 2.67 ft. ²	Duro-Tech TPO,	UP- BA, LVOC-BA-1168, LVOC-BA, WBBA-P, SA	-45.0	A	¼
SC-81	Min. 22 ga., type B, Grade 33 steel or structural concrete	(Optional) One or more layers, any combination, loose laid	Min. ¼-inch DensDeck Prime	See Note 2	1 per 2.67 ft. ²	Duro-Tech TPO,	UP- BA, LVOC-BA, LVOC-BA-1168, SA	-45.0	A	2-½
SC-82	Min. 22 ga., type B, Grade 33 steel or structural concrete	(Optional) One or more layers, any combination, loose laid	Min. ¼-inch SECUROCK Gypsum-Fiber Board	See Note 2	1 per 3.2 ft. ²	Duro-Tech TPO,	UP- BA, LVOC-BA-1168, LVOC-BA, WBBA-P, SA	-45.0	A	2-½
SC-83	Min. 22 ga., type B, Grade 33 steel or structural concrete	(Optional) One or more layers, any combination, loose laid	Min. 1.5-inch Duro-Guard ISO Composite-E2	See Note 2	1 per 4.0 ft. ²	Duro-Tech TPO,	UP- BA, LVOC-BA-1168, LVOC-BA, WBBA-P, SA	-45.0	A	¼
SC-84	Min. 22 ga., type B, Grade 33 steel or structural concrete	(Optional) One or more layers, any combination, loose laid	Min. 2.0-inch ISO 95+ GL	See Note 2	1 per 4.0 ft. ²	Duro-Tech TPO,	UP- BA, LVOC-BA-1168, LVOC-BA, SA	-45.0	A	¼
SC-85	Min. 22 ga., type B, Grade 33 steel or structural concrete	Min. 1.0-inch ISO 95+ GL or RESISTA	Min. ½ -inch SECUROCK Gypsum-Fiber Board	See Note 2	1 per 4.0 ft. ²	Duro-Tech TPO,	UP- BA, LVOC-BA, LVOC-BA-1168, SA	-45.0	A	2-½
SC-86	Min. 22 ga., type B, Grade 33 steel or structural concrete	Min. 1.5-inch thick, one or more layers, any combination, loose laid	Min. 1.0-inch RESISTA	See Note 2	1 per 1.6 ft. ²	Duro-Tech TPO,	UP-BA, SA	-52.5	A	¼
SC-87	Min. 22 ga., type B, Grade 33 steel or structural concrete	Min. 1.5-inch thick, one or more layers, any combination, loose laid	Min. 7/16-inch OSB	See Note 2 Duro-Last HD HailGard Fastener (steel only)	1 per 1.6 ft. ²	Duro-Tech TPO,	UP- BA, LVOC-BA-1168, SA	-52.5	A	1-¼
SC-88	Min. 22 ga., type B, Grade 33 steel or structural concrete	(Optional) One or more layers, any combination, loose laid	Min. ¼-inch DensDeck Prime	See Note 2	1 per 1.78 ft. ²	Duro-Tech TPO,	UP- BA, LVOC-BA-1168, LVOC-BA, WBBA-P, SA	-52.5	A	2-½
SC-89	Min. 22 ga., type B, Grade 33 steel or structural concrete	Min. 1.5-inch thick, one or more layers, any combination, loose laid	Min. ½-inch DURO-GUARD ISO HD-E2	See Note 2	1 per 1.33 ft. ²	Duro-Tech TPO,	UP- BA, LVOC-BA-1168, LVOC-BA, SA	-60.0	A	¼
SC-90	Min. 22 ga., type B, Grade 33 steel or structural concrete	(Optional) One or more layers, any combination, loose laid	Min. 1.5-inch Duro-Guard ISO Composite-E2	See Note 2	1 per 1.33 ft. ²	Duro-Tech TPO,	UP- BA, LVOC-BA-1168, LVOC-BA, SA	-60.0	A	¼
SC-91	Min. 22 ga., type B, Grade 33 steel or structural concrete	Min. 1.5-inch thick, one or more layers, any combination, loose laid	Min. ½-inch SECUROCK Gypsum-Fiber Roof Board	See Note 2	1 per 1.78 ft. ²	Duro-Tech TPO,	UP-BA, SA	-60.0	A	2-½

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**TABLE 2C-1: STEEL or CONCRETE DECKS - NEW CONSTRUCTION or REROOF (Tear-Off) or RECOVER
SYSTEM TYPE C-1: MECHANICALLY ATTACHED INSULATION, BONDED ROOF COVER**

System No.	Deck (See Note 1)	Base Insulation Layer	Top Insulation Layer			Roof Cover	Adhesive	MDP (psf)	Fire Rating UL790/E108	
			Type	Fasteners	Attach				Class	Max Incline (in.)
SC-92	Min. 22 ga., type B, Grade 33 steel or structural concrete	(Optional) One or more layers, any combination, loose laid	Min. 1.5-inch ISO 95+ GL	See Note 2	1 per 1.78 ft. ²	Duro-Tech TPO,	UP- BA, LVOC-BA-1168, SA	-60.0	B	1
SC-93	Min. 22 ga., type B, Grade 33 steel or structural concrete	(Optional) One or more layers, any combination, loose laid	Min. ½-inch SECUROCK Gypsum-Fiber Roof Board	See Note 2	1 per 2.13 ft. ²	Duro-Tech TPO,	UP- BA, LVOC-BA-1168, LVOC-BA, SA	-60.0	A	2-½
SC-94	Min. 22 ga., type B, Grade 33 steel or structural concrete	(Optional) One or more layers, any combination, loose laid	Min. 1.5-inch Duro-Guard ISO Composite-E2	See Note 2	1 per 2.13 ft. ²	Duro-Tech TPO,	UP-BA, SA	-67.5	A	¼
SC-95	Min. 22 ga., type B, Grade 33 steel or structural concrete	(Optional) One or more layers, any combination, loose laid	Min. ½-inch SECUROCK Gypsum-Fiber Roof Board	See Note 2	1 per 1.6 ft. ²	Duro-Tech TPO,	UP- BA, LVOC-BA-1168, LVOC-BA, SA	-67.5	A	2-½
SC-96	Min. 22 ga., type B, Grade 33 steel or structural concrete	(Optional) One or more layers, any combination, loose laid	Min. ½-inch DensDeck Prime	See Note 2	1 per 1.78 ft. ²	Duro-Tech TPO,	LVOC-BA-1168, LVOC-BA, SA	-67.5	A	2-½
SC-97	Min. 22 ga., type B, Grade 33 steel or structural concrete	(Optional) One or more layers, any combination, loose laid	Min. 2.0-inch RESISTA	See Note 2	1 per 1.0 ft. ²	Duro-Tech TPO	WBBA-P	-75.0	A	¼
SC-98	Min. 22 ga., type B, Grade 33 steel or structural concrete	Min. 1.5-inch thick, one or more layers, any combination, loose laid	Min. ½-inch DensDeck Prime	See Note 2	1 per 1.33 ft. ²	Duro-Tech TPO,	UP- BA, LVOC-BA-1168, SA	-75.0	A	2-½
SC-99	Min. 22 ga., type B, Grade 33 steel or structural concrete	(Optional) One or more layers, any combination, loose laid	Min. 2.0-inch ISO 95+ GL	See Note 2	1 per 1.6 ft. ²	Duro-Tech TPO,	UP- BA, LVOC-BA-1168, SA	-75.0	B	1
SC-100	Min. 22 ga., type B, Grade 33 steel or structural concrete	(Optional) One or more layers, any combination, loose laid	Min. 1.5-inch RESISTA	See Note 2	1 per 1.6 ft. ²	Duro-Tech TPO,	UP- BA, LVOC-BA-1168, LVOC-BA, SA	-75.0	A	¼
SC-101	Min. 22 ga., type B, Grade 33 steel or structural concrete	(Optional) One or more layers, any combination, loose laid	Min. ½-inch DensDeck Prime	See Note 2	1 per 1.6 ft. ²	Duro-Tech TPO,	LVOC-BA-1168, LVOC-BA, SA	-75.0	A	2-½
SC-102	Min. 22 ga., type B, Grade 33 steel or structural concrete	Min. 1.5-inch thick, one or more layers, any combination, loose laid	Min. 7/16-inch OSB	Duro-Last Insulation Fastening Plates Duro-Last HD Fasteners or Duro-Last Concrete Drive (concrete only)	1 per 2.0 ft. ²	Duro-Tech TPO,	UP- BA, LVOC-BA-1168, SA	-75.0	A	1-¼
SC-103	Min. 22 ga., type B, Grade 33 steel or structural concrete	(Optional) One or more layers, any combination, loose laid	Min. 1.5-inch Duro-Guard ISO NB-E2	Duro-Last Insulation Fastening Plates with Duro-Last HD Fasteners or Duro-Last Concrete Drive (concrete only)	1 per 2.0 ft. ²	Duro-Tech TPO,	UP- BA, LVOC-BA-1168, SA	-75.0	A	½
SC-104	Min. 22 ga., type B, Grade 33 steel or structural concrete	(Optional) One or more layers, any combination, loose laid	Min. 2.0-inch RESISTA	See Note 2	1 per 1.6 ft. ²	Duro-Tech TPO,	UP- BA, LVOC-BA-1168, LVOC-BA, SA	-82.5	A	¼

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**TABLE 2C-1: STEEL or CONCRETE DECKS - NEW CONSTRUCTION or REROOF (Tear-Off) or RECOVER
SYSTEM TYPE C-1: MECHANICALLY ATTACHED INSULATION, BONDED ROOF COVER**

System No.	Deck (See Note 1)	Base Insulation Layer	Top Insulation Layer			Roof Cover	Adhesive	MDP (psf)	Fire Rating UL790/E108	
			Type	Fasteners	Attach				Class	Max Incline (in.)
SC-105	Min. 22 ga., type B, Grade 33 steel or structural concrete	(Optional) One or more layers, any combination, loose laid	Min. ½-inch SECUROCK Gypsum-Fiber Roof Board	See Note 2	1 per 1.78 ft. ²	Duro-Tech TPO,	UP-BA, SA	-82.5	A	2-½
SC-106	Min. 22 ga., type B, Grade 33 steel or structural concrete	(Optional) One or more layers, any combination, loose laid	Min. 1.5-inch ISO 95+ GL	See Note 2	1 per 1.33 ft. ²	Duro-Tech TPO,	UP- BA, LVOC-BA-1168, SA	-90.0	A	¼
SC-107	Min. 22 ga., type B, Grade 33 steel or structural concrete	(Optional) One or more layers, any combination, loose laid	Min. 2.0-inch RESISTA	See Note 2	1 per 1.33 ft. ²	Duro-Tech TPO	UP- BA, LVOC-BA-1168, LVOC-BA	-105.0	A	¼
SC-108	Min. 22 ga., type B, Grade 33 steel or structural concrete	Min. 1.5-inch thick, one or more layers, any combination, loose laid	Min. ½-inch DensDeck Prime	See Note 2	1 per 1.0 ft. ²	Duro-Tech TPO	UP- BA, LVOC-BA-1168	-105.0	A	2-½
SC-109	Min. 22 ga., type B, Grade 33 steel or structural concrete	(Optional) One or more layers, any combination, loose laid	Min. 2.0-inch RESISTA	See Note 2	1 per 1.0 ft. ²	Duro-Tech TPO	UP- BA, LVOC-BA-1168	-112.5	A	¼
SC-110	Min. 22 ga., type B, Grade 33 steel or structural concrete	(Optional) One or more layers, any combination, loose laid	Min. 1.5-inch Duro-Guard ISO Composite-E2	See Note 2	1 per 1.33 ft. ²	Duro-Tech TPO	UP- BA, LVOC-BA-1168	-112.5	A	¼
SC-111	Min. 22 ga., type B, Grade 33 steel or structural concrete	(Optional) One or more layers, any combination, loose laid	Min. 2.0-inch Duro-Guard ISO Composite-E2	See Note 2	1 per 1.33 ft. ²	Duro-Tech TPO	UP- BA, LVOC-BA-1168	-120.0	A	¼
SC-112	Min. 22 ga., type B, Grade 33 steel or structural concrete	(Optional) One or more layers, any combination, loose laid	Min. 2.0-inch RESISTA	See Note 2	1 per 1.0 ft. ²	Duro-Tech TPO	UP- BA, LVOC-BA-1168	-150.0	A	¼
SC-113	Min. 22 ga., type B, Grade 33 steel or structural concrete	Min. 1.5-inch thick, one or more layers, any combination, loose laid	Min. 7/16-inch OSB	Duro-Last Insulation Fastening Plates Duro-Last HD Fasteners or Duro-Last Concrete Drive (concrete only)	1 per 1.0 ft. ²	Duro-Tech TPO	UP- BA, LVOC-BA-1168	-150.0	A	1-¼
SC-114	Min. 22 ga., type B, Grade 33 steel or structural concrete	(Optional) One or more layers, any combination, loose laid	Min. 1.5-inch Duro-Guard ISO NB-E2	Duro-Last Insulation Fastening Plates Duro-Last HD Fasteners or Duro-Last Concrete Drive (concrete only)	1 per 1.0 ft. ²	Duro-Tech TPO	UP- BA, LVOC-BA-1168	-150.0	A	½

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**TABLE 2C-1: STEEL or CONCRETE DECKS - NEW CONSTRUCTION or REROOF (Tear-Off) or RECOVER
SYSTEM TYPE C-1: MECHANICALLY ATTACHED INSULATION, BONDED ROOF COVER**

System No.	Deck (See Note 1)	Base Insulation Layer	Top Insulation Layer			Roof Cover	Adhesive	MDP (psf)	Fire Rating UL790/E108	
			Type	Fasteners	Attach				Class	Max Incline (in.)
DURO-TECH TPO FLEECE SYSTEMS:										
W-115	Min. 22 ga., type B, Grade 33 steel or structural concrete	(Optional) One or more layers, any combination, loose laid	Min. ½-inch DensDeck Prime	See Note 2	1 per 3.2 ft. ²	Duro-Tech TPO Fleece	Millennium PG-1, XR Stick, 12-inch o.c. Ribbons	-30.0	A	2
W-116	Min. 22 ga., type B, Grade 33 steel or structural concrete	(Optional) One or more layers, any combination, loose laid	Min. ½-inch DensDeck Prime	See Note 2	1 per 3.2 ft. ²	Duro-Tech TPO Fleece	XR BA	-30.0	A	4
W-117	Min. 22 ga., type B, Grade 33 steel or structural concrete	(Optional) One or more layers, any combination, loose laid	Min. ½-inch DensDeck Prime	See Note 2	1 per 3.2 ft. ²	Duro-Tech TPO Fleece	Asphalt	-30.0	A B	1 2
SC-118	Min. 22 ga., type B, Grade 33 steel or structural concrete	(Optional) One or more layers, any combination, loose laid	Min. 1.0-inch ISO 95+ GL	See Note 2	1 per 2.67 ft. ²	Duro-Tech TPO Fleece	Millennium PG-1, XR Stick, 12-inch o.c. Ribbons	-37.5	A B	1/2 3/4
SC-119	Min. 22 ga., type B, Grade 33 steel or structural concrete	Min. 1.0-inch ISO 95+ GL or RESISTA, loose laid	Min. ¼ inch SECUROCK Gypsum Fiber Roof Board	See Note 2	1 per 1.78 ft. ²	Duro-Tech TPO Fleece	Millennium PG-1, XR Stick; XR-BA, Asphalt	-45.0	A	2
SC-120	Min. 22 ga., type B, Grade 33 steel or structural concrete	Min. 1.0-inch ISO 95+ GL or RESISTA, loose laid	Min. ¼ inch SECUROCK Gypsum Fiber Roof Board	See Note 2	1 per 1.78 ft. ²	Duro-Tech TPO Fleece	XR-BA	-45.0	A	4
SC-121	Min. 22 ga., type B, Grade 33 steel or structural concrete	Min. 1.0-inch ISO 95+ GL or RESISTA, loose laid	Min. ¼ inch SECUROCK Gypsum Fiber Roof Board	See Note 2	1 per 1.78 ft. ²	Duro-Tech TPO Fleece	Asphalt	-45.0	A B	1 2
SC-122	Min. 22 ga., type B, Grade 33 steel or structural concrete	(Optional) One or more layers, any combination, loose laid	Min. 7/16-inch OSB	See Note 2	1 per 2.0 ft. ²	Duro-Tech TPO Fleece	Millennium PG-1, XR Stick, 12-inch o.c. Ribbons	-45.0	A	1/2
SC-123	Min. 22 ga., type B, Grade 33 steel or structural concrete	(Optional) One or more layers, any combination, loose laid	Min. ¼-inch DensDeck Prime	See Note 2	1 per 2.0 ft. ²	Duro-Tech TPO Fleece	Millennium PG-1, XR Stick, 12-inch o.c. Ribbons	-45.0	A	2
SC-124	Min. 22 ga., type B, Grade 33 steel or structural concrete	(Optional) One or more layers, any combination, loose laid	Min. ½-inch DURO-GUARD ISO HD-E2	See Note 2	1 per 2.0 ft. ²	Duro-Tech TPO Fleece	Millennium PG-1, XR Stick, 4-inch o.c. Ribbons	-45.0	A B	1/2 1
SC-125	Min. 22 ga., type B, Grade 33 steel or structural concrete	(Optional) One or more layers, any combination, loose laid	Min. 1.5-inch ISO 95+ GL	See Note 2	1 per 2.0 ft. ²	Duro-Tech TPO Fleece	Millennium PG-1, XR Stick, 12-inch o.c. Ribbons	-45.0	A B	1/2 3/4
SC-126	Min. 22 ga., type B, Grade 33 steel or structural concrete	(Optional) One or more layers, any combination, loose laid	Min. ¼-inch DensDeck Prime	See Note 2	1 per 2.67 ft. ²	Duro-Tech TPO Fleece	XR-BA	-45.0	A	4
SC-127	Min. 22 ga., type B, Grade 33 steel or structural concrete	(Optional) One or more layers, any combination, loose laid	Min. ¼-inch SECUROCK Gypsum-Fiber Board	See Note 2	1 per 3.2 ft. ²	Duro-Tech TPO Fleece	XR-BA	-45.0	A	4

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TABLE 2C-1: STEEL or CONCRETE DECKS - NEW CONSTRUCTION or REROOF (Tear-Off) or RECOVER										
SYSTEM TYPE C-1: MECHANICALLY ATTACHED INSULATION, BONDED ROOF COVER										
System No.	Deck (See Note 1)	Base Insulation Layer	Top Insulation Layer			Roof Cover	Adhesive	MDP (psf)	Fire Rating UL790/E108	
			Type	Fasteners	Attach				Class	Max Incline (in.)
DURO-TECH TPO FLEECE SYSTEMS:										
SC-128	Min. 22 ga., type B, Grade 33 steel or structural concrete	(Optional) One or more layers, any combination, loose laid	Min. ¼-inch SECUROCK Gypsum-Fiber Board	See Note 2	1 per 3.2 ft. ²	Duro-Tech TPO Fleece	Asphalt	-45.0	A B	1 2
SC-129	Min. 22 ga., type B, Grade 33 steel or structural concrete	(Optional) One or more layers, any combination, loose laid	Min. 2.25-inch ISO 95+ GL	See Note 2	1 per 4.0 ft. ²	Duro-Tech TPO Fleece	Millennium PG-1, XR Stick, 12-inch o.c. Ribbons	-45.0	A	2
SC-130	Min. 22 ga., type B, Grade 33 steel or structural concrete	(Optional) One or more layers, any combination, loose laid	Min. ¼-inch DensDeck Prime	See Note 2	1 per 1.78 ft. ²	Duro-Tech TPO Fleece	XR-BA	-52.5	A	4
SC-131	Min. 22 ga., type B, Grade 33 steel or structural concrete	(Optional) One or more layers, any combination, loose laid	Min. ¼-inch DensDeck Prime	See Note 2	1 per 1.78 ft. ²	Duro-Tech TPO Fleece	Asphalt	-52.5	A B	1 2
SC-132	Min. 22 ga., type B, Grade 33 steel or structural concrete	(Optional) One or more layers, any combination, loose laid	Min. ½-inch SECUROCK Gypsum-Fiber Roof Board	See Note 2	1 per 2.13 ft. ²	Duro-Tech TPO Fleece	XR-BA	-60.0	A	4
SC-133	Min. 22 ga., type B, Grade 33 steel or structural concrete	(Optional) One or more layers, any combination, loose laid	Min. ½-inch SECUROCK Gypsum-Fiber Roof Board	See Note 2	1 per 2.13 ft. ²	Duro-Tech TPO Fleece	Asphalt	-60.0	A B	1 2
SC-134	Min. 22 ga., type B, Grade 33 steel or structural concrete	(Optional) One or more layers, any combination, loose laid	Min. ½-inch SECUROCK Gypsum-Fiber Roof Board	See Note 2	1 per 1.6 ft. ²	Duro-Tech TPO Fleece	XR-BA	-67.5	A	4
SC-135	Min. 22 ga., type B, Grade 33 steel or structural concrete	(Optional) One or more layers, any combination, loose laid	Min. ½-inch SECUROCK Gypsum-Fiber Roof Board	See Note 2	1 per 1.6 ft. ²	Duro-Tech TPO Fleece	Asphalt	-67.5	A B	1 2
SC-136	Min. 22 ga., type B, Grade 33 steel or structural concrete	(Optional) One or more layers, any combination, loose laid	Min. 2.0-inch ISO 95+ GL	See Note 2	1 per 1.6 ft. ²	Duro-Tech TPO Fleece	Millennium PG-1, XR Stick, 6-inch o.c. Ribbons	-82.5	A B	1/2 3/4
SC-137	Min. 22 ga., type B, Grade 33 steel or structural concrete	(Optional) One or more layers, any combination, loose laid	Min. 2.0-inch ISO 95+ GL	See Note 2	1 per 1.0 ft. ²	Duro-Tech TPO Fleece	Millennium PG-1, XR Stick, 4-inch o.c. Ribbons	-142.5	A B	1/2 3/4

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TABLE 2C-2: STEEL or CONCRETE DECKS - NEW CONSTRUCTION, REROOF (Tear-Off) or RECOVER
SYSTEM TYPE C-2: PLATE-BONDED ROOF COVER

System No.	Deck (See Note 1)	Insulation		Attachment		Roof Cover	MDP (psf)	Fire Rating UL790/E108	
		Base Layer	Top Layer	Fasteners	Density / Pattern			Class	Max Incline (in.)
SC-138	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi concrete	(Optional) One or more layers, ISO 95+ GL	Min. 1.0-inch ISO 95+ GL	Duro-Last Heavy Duty Fasteners or Duro-Last Concrete Drive (concrete only)	Max. 18-inch o.c. in rows max. 60-inch o.c.	See Note 10A or 10B	-30.0	A	3/4
SC-139	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi concrete	(Optional) One or more layers, ISO 95+ GL	Min. 1.0-inch ISO 95+ GL	Duro-Last Heavy Duty Fasteners or Duro-Last Concrete Drive (concrete only)	Max. 12-inch o.c. in rows max. 60-inch o.c.	See Note 10A or 10B	-45.0	A	3/4
SC-140	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi concrete	Min. 1.0-inch ISO 95+ GL or RESISTA	(Optional) Min. 1/2-DURO-GUARD ISO HD-E2 or Min. 1.5-inch Duro-Guard ISO Composite-E2	Duro-Last Heavy Duty Fasteners or Duro-Last Concrete Drive (concrete only)	1 fastener per 4.0 ft. ² (8 per 4-ft. x 8-ft. board)	See Note 10A or 10B	-45.0	A	3/4
SC-141	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi concrete	Min. 1.0-inch ISO 95+ GL or RESISTA	Min. 1/4-inch DensDeck or SECUROCK Gypsum Fiber Roof Board	Duro-Last Heavy Duty Fasteners or Duro-Last Concrete Drive (concrete only)	1 fastener per 4.0 ft. ² (8 per 4-ft. x 8-ft. board)	See Note 10A or 10B	-45.0	A	3-1/2
SC-142	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi concrete	(Optional) Min. 1.5-inch ISO 95+ GL or RESISTA	Min. 1/2-inch DURO-GUARD ISO HD-E2	Duro-Last Heavy Duty Fasteners or Duro-Last Concrete Drive (concrete only)	1 fastener per 5.33 ft. ² (6 per 4-ft. x 8-ft. board); Plate pattern offset 12-inches from each adjacent row of insulation boards; Boards set with length perpendicular to deck ribs.	See Note 10A or 10B	-45.0	A	3/4
SC-143	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi concrete	(Optional) Min. 1.5-inch ISO 95+ GL or RESISTA	Min. 7/16-inch OSB	Duro-Last Heavy Duty Fasteners or Duro-Last Concrete Drive (concrete only)	1 fastener per 5.33 ft. ² (6 per 4-ft. x 8-ft. board); Plate pattern offset 12-inches from each adjacent row of insulation boards; Boards set with length perpendicular to deck ribs.	See Note 10A or 10B	-45.0	A	1-3/4
SC-144	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi concrete	(Optional) Min. 1.5-inch ISO 95+ GL or RESISTA	Min. 1/4-inch DensDeck or SECUROCK Gypsum Fiber Roof Board	DURO-LAST Heavy Duty Fasteners or DURO-LAST Concrete Drive (concrete only)	1 fastener per 5.33 ft. ² (6 per 4-ft. x 8-ft. board); Plate pattern offset 12-inches from each adjacent row of insulation boards; Boards set with length perpendicular to deck ribs.	See Note 10A or 10B	-45.0	A	3-1/2

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**TABLE 2C-2: STEEL or CONCRETE DECKS - NEW CONSTRUCTION, REROOF (Tear-Off) or RECOVER
SYSTEM TYPE C-2: PLATE-BONDED ROOF COVER**

System No.	Deck (See Note 1)	Insulation		Attachment		Roof Cover	MDP (psf)	Fire Rating UL790/E108	
		Base Layer	Top Layer	Fasteners	Density / Pattern			Class	Max Incline (in.)
SC-145	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi concrete	Duro-Last (installed as air barrier) followed by Optional ISO 95+ GL or RESISTA	Min. 2.5-inch ISO 95+ GL, RESISTA, or Duro-Guard ISO Composite-E2	DURO-LAST Heavy Duty Fasteners or DURO-LAST Concrete Drive (concrete only)	1 fastener per 4.0 ft. ² (8 per 4-ft. x 8-ft. board)	See Note 10A or 10B	-52.5	A	3/4
SC-146	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi concrete	Duro-Last (installed as air barrier) adhered over Min. ¼-inch SECUROCK Gypsum Fiber Roof Board loose laid; followed by Optional ISO 95+ GL or RESISTA	Min. 2.5-inch ISO 95+ GL, RESISTA, or Duro-Guard ISO Composite-E2	DURO-LAST Heavy Duty Fasteners or DURO-LAST Concrete Drive (concrete only)	1 fastener per 4.0 ft. ² (8 per 4-ft. x 8-ft. board)	See Note 10A or 10B	-52.5	A	3/4
SC-147	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi concrete	(Optional) Min. 1.5-inch ISO 95+ GL or RESISTA	Min. ½-inch DURO-GUARD ISO HD-E2	Duro-Last Heavy Duty Fasteners or Duro-Last Concrete Drive (concrete only)	1 fastener per 4.0 ft. ² (8 per 4-ft. x 8-ft. board); Plate pattern offset 12-inches from each adjacent row of insulation boards; Boards set with length perpendicular to deck ribs.	See Note 10A or 10B	-60.0	A	3/4
SC-148	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi concrete	(Optional) Min. 1.5-inch ISO 95+ GL or RESISTA	Min. 7/16-inch OSB	Duro-Last Heavy Duty Fasteners or Duro-Last Concrete Drive (concrete only)	1 fastener per 4.0 ft. ² (8 per 4-ft. x 8-ft. board); Plate pattern offset 12-inches from each adjacent row of insulation boards; Boards set with length perpendicular to deck ribs.	See Note 10A or 10B	-60.0	A	1-3/4
SC-149	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi concrete	(Optional) Min. 1.5-inch ISO 95+ GL or RESISTA	Min. ¼-inch DensDeck or SECUROCK Gypsum Fiber Roof Board	Duro-Last Heavy Duty Fasteners or Duro-Last Concrete Drive (concrete only)	1 fastener per 4.0 ft. ² (8 per 4-ft. x 8-ft. board); Plate pattern offset 12-inches from each adjacent row of insulation boards; Boards set with length perpendicular to deck ribs.	See Note 10A or 10B	-60.0	A	3-1/2
SC-150	Min. 22 ga., type B, Grade 80 steel or min. 2,500 psi concrete	(Optional) One or more layers, ISO 95+ GL or RESISTA	Min. 1.0-inch ISO 95+ GL or RESISTA	Duro-Last Heavy Duty Fasteners or Duro-Last Concrete Drive (concrete only)	1 fastener per 4.0 ft. ² (8 per 4-ft. x 8-ft. board)	See Note 10A or 10B	-60.0	A	3/4
SC-151	Min. 22 ga., type B, Grade 80 steel or min. 2,500 psi concrete	(Optional) One or more layers, ISO 95+ GL or RESISTA	Min. ½-inch DURO-GUARD ISO HD-E2 or Min. 1.5-inch Duro-Guard ISO Composite-E2	Duro-Last Heavy Duty Fasteners or Duro-Last Concrete Drive (concrete only)	1 fastener per 4.0 ft. ² (8 per 4-ft. x 8-ft. board)	See Note 10A or 10B	-60.0	A	1-3/4

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**TABLE 2C-2: STEEL or CONCRETE DECKS - NEW CONSTRUCTION, REROOF (Tear-Off) or RECOVER
SYSTEM TYPE C-2: PLATE-BONDED ROOF COVER**

System No.	Deck (See Note 1)	Insulation		Attachment		Roof Cover	MDP (psf)	Fire Rating UL790/E108	
		Base Layer	Top Layer	Fasteners	Density / Pattern			Class	Max Incline (in.)
SC-152	Min. 22 ga., type B, Grade 80 steel or min. 2,500 psi concrete	(Optional) One or more layers, ISO 95+ GL or RESISTA	Min. ¼-inch DensDeck or SECUROCK Gypsum Fiber Roof Board	Duro-Last Heavy Duty Fasteners or Duro-Last Concrete Drive (concrete only)	1 fastener per 4.0 ft. ² (8 per 4-ft. x 8-ft. board)	See Note 10A or 10B	-60.0	A	3-½
SC-153	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi concrete	(Optional) One or more layers, ISO 95+ GL	Min. 1.0-inch ISO 95+ GL or Min. ½-inch DURO-GUARD ISO HD-E2	Duro-Last Heavy Duty Fasteners with alternating Rows of: 1.) Duro-Last UltraPly TPO DuroBond Plates 2.) Duro-Last Insulation Fastening Plates	1 fastener per 2.0 ft. ² (16 per 4-ft. x 8-ft. board)	See Note 10A or 10B	-67.5	A	¾
SC-154	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi concrete	(Optional) Min. 1.5-inch ISO 95+ GL or RESISTA	Min. ½-inch DURO-GUARD ISO HD-E2	Duro-Last Heavy Duty Fasteners or Duro-Last Concrete Drive (concrete only)	1 fastener per 2.67 ft. ² (12 per 4-ft. x 8-ft. board); Plate pattern offset 12-inches from each adjacent row of insulation boards; Boards set with length perpendicular to deck ribs.	See Note 10A or 10B	-75.0	A	¾
SC-155	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi concrete	(Optional) Min. 1.5-inch ISO 95+ GL or RESISTA	Min. 7/16-inch OSB	Duro-Last Heavy Duty Fasteners or Duro-Last Concrete Drive (concrete only)	1 fastener per 2.67 ft. ² (12 per 4-ft. x 8-ft. board); Plate pattern offset 12-inches from each adjacent row of insulation boards; Boards set with length perpendicular to deck ribs.	See Note 10A or 10B	-75.0	A	1-¾
SC-156	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi concrete	(Optional) Min. 1.5-inch ISO 95+ GL or RESISTA	Min. ¼-inch DensDeck or SECUROCK Gypsum Fiber Roof Board	Duro-Last Heavy Duty Fasteners or Duro-Last Concrete Drive (concrete only)	1 fastener per 2.67 ft. ² (12 per 4-ft. x 8-ft. board); Plate pattern offset 12-inches from each adjacent row of insulation boards; Boards set with length perpendicular to deck ribs.	See Note 10A or 10B	-75.0	A	3-½
SC-157	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi concrete	(Optional) One or more layers, ISO 95+ GL or RESISTA	Min. 1.0-inch ISO 95+ GL or RESISTA	Duro-Last Heavy Duty Fasteners or Duro-Last Concrete Drive (concrete only)	1 fastener per 2.67 ft. ² (12 per 4-ft. x 8-ft. board) (Alt. Pattern)	See Note 10A or 10B	-75.0	A	¾
SC-158	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi concrete	(Optional) One or more layers, ISO 95+ GL or RESISTA	Min. ½-inch DURO-GUARD ISO HD-E2 or Min. 1.5-inch Duro-Guard ISO Composite-E2	Duro-Last Heavy Duty Fasteners or Duro-Last Concrete Drive (concrete only)	1 fastener per 2.67 ft. ² (12 per 4-ft. x 8-ft. board) (Alt. Pattern)	See Note 10A or 10B	-75.0	A	¾

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**TABLE 2C-2: STEEL or CONCRETE DECKS - NEW CONSTRUCTION, REROOF (Tear-Off) or RECOVER
SYSTEM TYPE C-2: PLATE-BONDED ROOF COVER**

System No.	Deck (See Note 1)	Insulation		Attachment		Roof Cover	MDP (psf)	Fire Rating UL790/E108	
		Base Layer	Top Layer	Fasteners	Density / Pattern			Class	Max Incline (in.)
SC-159	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi concrete	(Optional) One or more layers, ISO 95+ GL or RESISTA	Min. ¼-inch DensDeck or SECUROCK Gypsum Fiber Roof Board	Duro-Last Heavy Duty Fasteners or Duro-Last Concrete Drive (concrete only)	1 fastener per 2.67 ft. ² (12 per 4-ft. x 8-ft. board) (Alt. Pattern)	See Note 10A or 10B	-75.0	A	3-1/2
SC-160	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi concrete	(Optional) One or more layers, ISO 95+ GL	Min. 1.0-inch ISO 95+ GL or Min. ½-inch DURO-GUARD ISO HD-E2	Duro-Last Heavy Duty Fasteners or Duro-Last Concrete Drive (concrete only)	Max. 6-inch o.c. in rows max. 60-inch o.c.	See Note 10A or 10B	-82.5	A	¾
SC-161	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi concrete	(Optional) One or more layers, ISO 95+ GL or RESISTA	Min. ½-inch DURO-GUARD ISO HD-E2	Duro-Last Heavy Duty Fasteners or Duro-Last Concrete Drive (concrete only)	1 fastener per 2.0 ft. ² (16 per 4-ft. x 8-ft. board); Plate pattern offset 12-inches from each adjacent row of insulation boards; Boards set with length perpendicular to deck ribs.	See Note 10A or 10	-105.0	A	¾
SC-162	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi concrete	(Optional) Min. 1.5-inch ISO 95+ GL or RESISTA	Min. 7/16-inch OSB	Duro-Last Heavy Duty Fasteners or Duro-Last Concrete Drive (concrete only)	1 fastener per 2.0 ft. ² (16 per 4-ft. x 8-ft. board); Plate pattern offset 12-inches from each adjacent row of insulation boards; Boards set with length perpendicular to deck ribs.	See Note 10A or 10	-105.0	A	1-¾
SC-163	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi concrete	(Optional) Min. 1.5-inch ISO 95+ GL or RESISTA	Min. ¼-inch DensDeck or SECUROCK Gypsum Fiber Roof Board	Duro-Last Heavy Duty Fasteners or Duro-Last Concrete Drive (concrete only)	1 fastener per 2.0 ft. ² (16 per 4-ft. x 8-ft. board); Plate pattern offset 12-inches from each adjacent row of insulation boards; Boards set with length perpendicular to deck ribs.	See Note 10A or 10	-105.0	A	3-1/2

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**TABLE 2D-1: STEEL or CONCRETE DECKS - NEW CONSTRUCTION or REROOF (Tear-Off) or RECOVER
SYSTEM TYPE D-1A: INSULATED, MECHANICALLY ATTACHED ROOF COVER (STRESS PLATES)**

System No.	Deck (See Note 1)	Insulation		Roof Cover			MDP (psf)	Fire Rating UL790/E108	
		Type	Attach	Membrane	Fasteners	Attachment		Class	Max Incline (in.)
SC-164	Min. 22 ga., type B, Grade 80 steel or min. 20 ga., type B, Grade 33 steel or structural concrete	Min. 1.5-inch thick, one or more layers, ISO 95+ GL, RESISTA and/or Duro-Guard ISO Composite-E2	Prelim. attached	Duro-Tech TPO	Duro-Last HD Fasteners or Duro-Last Concrete Drive (concrete only) with Duro-Last HD Seam Plates	Fasteners 18-inch o.c. within 6-inch wide laps spaced 72-inch o.c. Laps sealed with 1.5-inch heat weld.	-30.0	A	1/2
SC-165	Min. 22 ga., type B, Grade 33 steel	Min. 1.5-inch thick, one or more layers, ISO 95+ GL, RESISTA and/or Duro-Guard ISO Composite-E2	Prelim. attached	Duro-Tech TPO	Duro-Last HD Plus Fasteners Duro-Last HD Plus Seam Plates	Fasteners 18-inch o.c. within 6-inch wide laps spaced 90-inch o.c. Laps sealed with 1.5-inch heat weld	-30.0	A	1/2
SC-166	Min. 22 ga., type B, Grade 33 steel or structural concrete	Min. 1.5-inch thick, one or more layers, ISO 95+ GL, RESISTA and/or Duro-Guard ISO Composite-E2	Prelim. attached	Duro-Tech TPO	Duro-Last HD Fasteners or Duro-Last concrete Drive (concrete only) with Duro-Last HD Seam Plates	Fasteners 12-inch o.c. within 6-inch wide laps spaced 114-inch o.c. Laps sealed with 1.5-inch heat weld.	-30.0	A	1/2
SC-167	Min. 22 ga., type B, Grade 33 steel	Min. 1.5-inch thick, one or more layers, ISO 95+ GL, RESISTA and/or Duro-Guard ISO Composite-E2	Prelim. attached	Duro-Tech TPO	Duro-Last HD Plus Fasteners with Duro-Last HD Plus Seam Plates	Fasteners 12-inch o.c. within 6-inch wide laps spaced 142-inch o.c. Laps sealed with 1.5-inch heat weld.	-30.0	A	1/2
SC-168	Min. 22 ga., type B, Grade 80 steel or min. 20 ga., type B, Grade 33 steel	Min. 1.5-inch thick, one or more layers, ISO 95+ GL, RESISTA and/or Duro-Guard ISO Composite-E2	Prelim. attached	Duro-Tech TPO	Duro-Last HD Plus Fasteners with Duro-Last HD Plus Seam Plates	Fasteners 18-inch o.c. within 6-inch wide laps spaced 90-inch o.c. Laps sealed with 5-inch heat weld that encapsulates plates.	-37.5	A	1/2
SC-169	Min. 22 ga., type B, Grade 33 steel or structural concrete	Min. 1.5-inch thick, one or more layers, ISO 95+ GL, RESISTA and/or Duro-Guard ISO Composite-E2	Prelim. attached	Duro-Tech TPO	Duro-Last HD Fasteners or Duro-Last concrete Drive (concrete only) with Duro-Last HD Seam Plates	Fasteners 18-inch o.c. within 6-inch wide laps spaced 90-inch o.c. Laps sealed with 1.5-inch heat weld	-37.5	A	1/2
SC-170	Min. 22 ga., type B, Grade 33 steel	Min. 1.5-inch thick, one or more layers, ISO 95+ GL, RESISTA and/or Duro-Guard ISO Composite-E2	Prelim. attached	Duro-Tech TPO	Duro-Last HD Plus Fasteners with Duro-Last HD Plus Seam Plates	Fasteners 12-inch o.c. within 6-inch wide laps spaced 114 in-inch oc. Laps sealed with 1.5-inch heat weld.	-37.5	A	1/2
SC-171	Min. 22 ga., type B, Grade 80 steel or min. 20 ga., type B, Grade 33 steel	Min. 1.5-inch thick, one or more layers, ISO 95+ GL, RESISTA and/or Duro-Guard ISO Composite-E2	Prelim. attached	Duro-Tech TPO	Duro-Last HD Fasteners with Duro-Last HD Seam Plates	Fasteners 12-inch o.c. within 6-inch wide laps spaced 72-inch o.c. Laps sealed with 1.5-inch heat weld.	-45.0	A	1/2
SC-172	Min. 22 ga., type B, Grade 33 steel or structural concrete	Min. 1.5-inch thick, one or more layers, ISO 95+ GL, RESISTA and/or Duro-Guard ISO Composite-E2	Prelim. attached	Duro-Tech TPO	Duro-Last HD Fasteners or Duro-Last concrete Drive (concrete only) with Duro-Last HD Seam Plates	Fasteners 12-inch o.c. within 6-inch wide laps spaced 72 in-inch oc. Laps sealed with 1.5-inch heat weld.	-45.0	A	1/2

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**TABLE 2D-1: STEEL or CONCRETE DECKS - NEW CONSTRUCTION or REROOF (Tear-Off) or RECOVER
SYSTEM TYPE D-1A: INSULATED, MECHANICALLY ATTACHED ROOF COVER (STRESS PLATES)**

System No.	Deck (See Note 1)	Insulation		Roof Cover			MDP (psf)	Fire Rating UL790/E108	
		Type	Attach	Membrane	Fasteners	Attachment		Class	Max Incline (in.)
SC-173	Min. 22 ga., type B, Grade 33	Min. 1.5-inch thick, one or more layers, ISO 95+ GL, RESISTA and/or Duro-Guard ISO Composite-E2	Prelim. attached	Duro-Tech TPO	Duro-Last HD Plus Fasteners and Duro-Last HD Plus Seam Plates	Fasteners 12-inch o.c. within 6-inch wide laps spaced 90-inch o.c. Laps sealed with 1.5-inch heat weld.	-45.0	A	1/2
SC-174	Min. 22 ga., type B, Grade 80 steel or min. 20 ga., type B, Grade 33 steel or structural concrete	Min. 1.5-inch thick, one or more layers, ISO 95+ GL, RESISTA and/or Duro-Guard ISO Composite-E2	Prelim. attached	Duro-Tech TPO	Duro-Last HD Fasteners or Duro-Last Concrete Drive (concrete only) with Duro-Last HD Seam Plates	Fasteners 12-inch o.c. within 6-inch wide laps spaced 90-inch o.c. Laps sealed with 5-inch heat weld that encapsulates plates.	-45.0	A	1/2
SC-175	Min. 22 ga., type B, Grade 80 steel or min. 20 ga., type B, Grade 33 steel or structural concrete	Min. 1.5-inch thick, one or more layers, ISO 95+ GL, RESISTA and/or Duro-Guard ISO Composite-E2	Prelim. attached	Duro-Tech TPO	Duro-Last HD Fasteners or Duro-Last Concrete Drive (concrete only) with Duro-Last HD Seam Plates	Fasteners 12-inch o.c. within 6-inch wide laps spaced 90-inch o.c. Laps sealed with 1.5-inch heat weld.	-45.0	A	1/2
SC-176	Min. 22 ga., type B, Grade 80 steel or min. 20 ga., type B, Grade 33 steel	Min. 1.5-inch thick, one or more layers, ISO 95+ GL, RESISTA and/or Duro-Guard ISO Composite-E2	Prelim. attached	Duro-Tech TPO	Duro-Last HD Plus Fasteners with Duro-Last HD Plus Seam Plates	Fasteners 12-inch o.c. within 6-inch wide laps spaced 90-inch o.c. Laps sealed with 5-inch heat weld that encapsulates plates.	-45.0	A	1/2
SC-177	Min. 22 ga., type B, Grade 80 steel or min. 20 ga., type B, Grade 33 steel	Min. 1.5-inch thick, one or more layers, ISO 95+ GL, RESISTA and/or Duro-Guard ISO Composite-E2	Prelim. attached	Duro-Tech TPO or TPO XR	Duro-Last HD Plus Fasteners with Duro-Last HD Plus Seam Plates	Fasteners 12-inch o.c. within 6-inch wide laps spaced 114-inch o.c. Laps sealed with 1.5-inch heat weld.	-45.0	A	1/2
SC-178	Min. 22 ga., type B, Grade 80 steel or min. 20 ga., type B, Grade 33 steel	Min. 1.5-inch thick, one or more layers, ISO 95+ GL, RESISTA and/or Duro-Guard ISO Composite-E2	Prelim. attached	Duro-Tech TPO	Duro-Last HD Plus Fasteners with Duro-Last HD Plus Seam Plates	Fasteners 12-inch o.c. within 6-inch wide laps spaced 114-inch o.c. Laps sealed with 5-inch heat weld that encapsulates plates.	-45.0	A	1/2
SC-179	Min. 22 ga., type B, Grade 80 steel or min. 20 ga., type B, Grade 33 steel or structural concrete	Min. 1.5-inch thick, one or more layers, ISO 95+ GL, RESISTA and/or Duro-Guard ISO Composite-E2	Prelim. attached	Duro-Tech TPO	Duro-Last HD Fasteners or Duro-Last Concrete Drive (concrete only) with Duro-Last HD Seam Plates	Fasteners 6-inch o.c. within 6-inch wide laps spaced 72-inch o.c. Laps sealed with 1.5-inch heat weld.	-52.5	A	1/2
SC-180	Min. 22 ga., type B, Grade 33, or structural concrete	Min. 1.5-inch thick, one or more layers, ISO 95+ GL, RESISTA and/or Duro-Guard ISO Composite-E2	Prelim. attached	Duro-Tech TPO	Duro-Last HD Fasteners or Duro-Last Concrete Drive (concrete only) with Duro-Last HD Seam Plates	Fasteners 6-inch o.c. within 6-inch wide laps spaced 90-inch o.c. Laps sealed with 1.5-inch heat weld.	-52.5	A	1/2
SC-181	Min. 22 ga., type B, Grade 33 steel or structural concrete	Min. 1.5-inch thick, one or more layers, ISO 95+ GL, RESISTA and/or Duro-Guard ISO Composite-E2	Prelim. attached	Duro-Tech TPO	Duro-Last HD Fasteners or Duro-Last concrete Drive (concrete only) with Duro-Last HD Seam Plates	Fasteners 6-inch o.c. within 6-inch wide laps spaced 114-inch o.c. Laps sealed with 1.5-inch heat weld	-52.5	A	1/2

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**TABLE 2D-1: STEEL or CONCRETE DECKS - NEW CONSTRUCTION or REROOF (Tear-Off) or RECOVER
SYSTEM TYPE D-1A: INSULATED, MECHANICALLY ATTACHED ROOF COVER (STRESS PLATES)**

System No.	Deck (See Note 1)	Insulation		Roof Cover			MDP (psf)	Fire Rating UL790/E108	
		Type	Attach	Membrane	Fasteners	Attachment		Class	Max Incline (in.)
SC-182	Min. 22 ga., type B, Grade 80 steel or min. 20 ga., type B, Grade 33 steel or structural concrete	Min. 1.5-inch thick, one or more layers, ISO 95+ GL, RESISTA and/or Duro-Guard ISO Composite-E2	Prelim. attached	Duro-Tech TPO or TPO XR	Duro-Last HD Fasteners or Duro-Last Concrete Drive (concrete only) with Duro-Last HD Seam Plates	Fasteners 6-inch o.c. within 6-inch wide laps spaced 114-inch o.c. Laps sealed with 1.5-inch heat weld.	-52.5	A	1/2
SC-183	Min. 22 ga., type B, Grade 80 steel or structural concrete	Min. 1.5-inch thick, one or more layers, ISO 95+ GL, RESISTA and/or Duro-Guard ISO Composite-E2	Prelim. attached	Duro-Tech TPO	Duro-Last HD Fasteners or Duro-Last Concrete Drive (concrete only) with Duro-Last HD Seam Plates	Fasteners 6-inch o.c. within 6-inch wide laps spaced 142-inch o.c. Laps sealed with 1.5-inch heat weld.	-52.5	A	1/2
SC-184	Min. 22 ga., type B, Grade 33	Min. 1.5-inch thick, one or more layers, ISO 95+ GL, RESISTA and/or Duro-Guard ISO Composite-E2	Prelim. attached	Duro-Tech TPO	Duro-Last HD Plus Fasteners and Duro-Last HD Plus Seam Plates	Fasteners 6 in. o.c. within 6-inch wide laps spaced 114-inch o.c. laps sealed with 1.5-inch heat weld	-52.5	A	1/2
SC-185	Min. 22 ga., type B, Grade 33	Min. 1.5-inch thick, one or more layers, ISO 95+ GL, RESISTA and/or Duro-Guard ISO Composite-E2	Prelim. attached	Duro-Tech TPO	Duro-Last Heavy Duty Fastener and Heavy Duty Seam Plates	Fasteners 6 inch o.c. within 7-inch wide laps spaced 89-inch o.c. Laps sealed with 1.5-inch heat weld.	-60.0	A	1/2
SC-186	Min. 22 ga., type B, Grade 33	Min. 1.5-inch thick, one or more layers, ISO 95+ GL, RESISTA and/or DURO-GUARD ISO HD-E2	Prelim. attached	Duro-Tech TPO 60 or 80 mil	Duro-Last Heavy Duty Fastener and Heavy Duty Seam Plates	Fasteners 6-inch o.c. within 6-inch wide laps spaced 114-inch o.c. Laps sealed with 1.5-inch heat weld.	-60.0	A	1/2
SC-187	Min. 22 ga., type B, Grade 33 steel or structural concrete	Min. 1.5-inch thick, one or more layers, ISO 95+ GL, RESISTA and/or Duro-Guard ISO Composite-E2	Prelim. attached	Duro-Tech TPO	Duro-Last HD Plus Fasteners or Duro-Last Concrete Drive (concrete only) with Duro-Last HD Plus Seam Plates	Fasteners 6-inch o.c. within 6-inch wide laps spaced 142-inch o.c. Laps sealed with 1.5-inch heat weld.	-60.0	A	1/2
SC-188	Min. 22 ga., type B, Grade 33 steel	Min. 1.5-inch thick, one or more layers, ISO 95+ GL, RESISTA and/or Duro-Guard ISO Composite-E2	Prelim. attached	Duro-Tech TPO or TPO XR	Duro-Last HD Plus Fasteners with Duro-Last HD Plus Seam Plates	Fasteners 6-inch o.c. within 6-inch wide laps spaced 114-inch o.c. Laps sealed with 1.5-inch heat weld.	-67.5	A	1/2
SC-189	Min. 22 ga., type B, Grade 33	Min. 1.5-inch thick, one or more layers, ISO 95+ GL, RESISTA and/or Duro-Guard ISO Composite-E2	Prelim. attached	Duro-Tech TPO 60 or 80 mil	Duro-Last HD Plus Fasteners and Duro-Last HD Plus Seam Plates	Fasteners 6-inch o.c. within 6-inch wide laps spaced 114-inch o.c. Laps sealed with 1.5-inch heat weld.	-67.5	A	1/2
SC-190	Min. 22 ga., type B, Grade 80 steel or min. 20 ga., type B, Grade 33 steel	Min. 1.5-inch thick, one or more layers, ISO 95+ GL, RESISTA and/or Duro-Guard ISO Composite-E2	Prelim. attached	Duro-Tech TPO	Duro-Last HD Plus Fasteners with Duro-Last HD Plus Seam Plates	Fasteners 6-inch o.c. within 6-inch wide laps spaced 90-inch o.c. Laps sealed with 5-inch heat weld that encapsulates plates.	-90.0	A	1/2

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**TABLE 2D-2: STEEL or CONCRETE DECKS - NEW CONSTRUCTION or REROOF (Tear-Off) or RECOVER
SYSTEM TYPE D-1B: INSULATED, MECHANICALLY ATTACHED ROOF COVER (BATTENS)**

System No.	Deck (See Note 1)	Insulation		Roof Cover			MDP (psf)	Fire Rating UL790/E108	
		Type	Attach	Membrane	Fasteners	Attachment		Class	Max Incline (in.)
SC-191	Min. 22 ga., type B, Grade 33 steel or structural concrete	Min. 1.5-inch thick, one or more layers, ISO 95+ GL, RESISTA and/or DURO-GUARD ISO HD-E2	Prelim. attached	Duro-Tech TPO	Duro-Last HD Fasteners or Duro-Last Concrete Drive (concrete only) with Duro-Last Polymer Batten Strip	Fasteners 12-inch o.c. through batten within 6-inch wide laps spaced 90-inch o.c. Laps sealed with 5-inch heat weld that encapsulates batten.	-30.0	A	1/2
SC-192	Min. 22 ga., type B, Grade 33 steel	Min. 1.5-inch thick, one or more layers, ISO 95+GL, RESISTA and/or Duro-Guard ISO Composite-E2	Prelim. attached	Duro-Tech TPO	Duro-Last HD Plus Fasteners with Duro-Last Coiled Metal Batten Strip	Fasteners 12-inch o.c. through batten within 6-inch wide laps spaced 142-inch o.c. Laps sealed with 5-inch heat weld that encapsulates batten.	-30.0	A	1/2
SC-193	Min. 22 ga., type B, Grade 33 steel	Min. 1.5-inch thick, one or more layers, ISO 95+ GL, RESISTA and/or Duro-Guard ISO Composite-E2	Prelim. attached	Duro-Tech TPO	Duro-Last HD Fasteners with Duro-Last Coiled Metal Batten Strip	Fasteners 12-inch o.c. through batten within 6-inch wide laps spaced 90-inch o.c. Laps sealed with 5-inch heat weld that encapsulates batten.	-37.5	A	1/2
SC-194	Min. 22 ga., type B, Grade 80 steel or min. 20 ga., type B, Grade 33 steel	Min. 1.5-inch thick, one or more layers, ISO 95+ GL, RESISTA and/or Duro-Guard ISO Composite-E2	Prelim. attached	Duro-Tech TPO	Duro-Last HD Plus Fasteners with Duro-Last Coiled Metal Batten Strip	Fasteners 12-inch o.c. through batten within 6-inch wide laps spaced 90-inch o.c. Laps sealed with 5-inch heat weld that encapsulates batten.	-45.0	A	1/2
SC-195	Min. 22 ga., type B, Grade 80 steel or structural concrete	Min. 1.5-inch thick, one or more layers, ISO 95+ GL, RESISTA and/or Duro-Guard ISO Composite-E2	Prelim. attached	Duro-Tech TPO	Duro-Last HD Fasteners with Duro-Last Coiled Metal Batten Strip	Fasteners 6-inch o.c. through batten within 6-inch wide laps spaced 142-inch o.c. Laps sealed with 5-inch heat weld that encapsulates batten.	-52.5	A	1/2
SC-196	Min. 22 ga., type B, Grade 80 steel or min. 20 ga., type B, Grade 33 steel or structural concrete	Min. 1.5-inch thick, one or more layers, ISO 95+ GL, RESISTA and/or Duro-Guard ISO Composite-E2	Prelim. attached	Duro-Tech TPO	Duro-Last HD Fasteners or Duro-Last Concrete Drive (concrete only) with Duro-Last Batten Strip or Coiled Metal Batten Strip	Fasteners 6-inch o.c. through batten in field of the roof spaced 144-inch o.c. Battens sealed with 5-inch wide cover strip, with 1.5-inch heat weld on each side of the strip or by applying Duro-Last TPO QuickSeam Flashing atop batten.	-60.0	A	1/2
SC-197	Min. 22 ga., type B, Grade 80 steel or min. 20 ga., type B, Grade 33 steel or structural concrete	Min. 1.5-inch thick, one or more layers, ISO 95+ GL, RESISTA and/or Duro-Guard ISO Composite-E2	Prelim. attached	Duro-Tech TPO	Duro-Last HD Fasteners or Duro-Last Concrete Drive (concrete only) with Duro-Last Polymer Batten Strips	Fasteners 6-inch o.c. through batten within 6-inch wide laps spaced 114-incho.c. Laps sealed with 5-inch heat weld that encapsulates batten.	-60.0	A	1/2

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**TABLE 2D-2: STEEL or CONCRETE DECKS - NEW CONSTRUCTION or REROOF (Tear-Off) or RECOVER
SYSTEM TYPE D-1B: INSULATED, MECHANICALLY ATTACHED ROOF COVER (BATTENS)**

System No.	Deck (See Note 1)	Insulation		Roof Cover			MDP (psf)	Fire Rating UL790/E108	
		Type	Attach	Membrane	Fasteners	Attachment		Class	Max Incline (in.)
SC-198	Min. 22 ga., type B, Grade 33 steel	Min. 1.5-inch thick, one or more layers, ISO 95+ GL, RESISTA and/or Duro-Guard ISO Composite-E2	Prelim. attached	Duro-Tech TPO	Duro-Last HD Plus Fasteners with Duro-Last Coiled Metal Batten Strip	Fasteners 6-inch o.c. through batten within 6-inch wide laps spaced 142-inch o.c. Laps sealed with 5-inch heat weld that encapsulates batten.	-60.0	A	1/2
SC-199	Min. 22 ga., type B, Grade 33 steel or structural concrete	Min. 1.5-inch thick, one or more layers, ISO 95+ GL, RESISTA and/or Duro-Guard ISO Composite-E2	Prelim. attached	Duro-Tech TPO	Duro-Last HD Fasteners or Duro-Last Concrete Drive (concrete only) with Duro-Last Coiled Metal Batten Strip or Duro-Last Polymer Batten Strip	Fasteners 6-inch o.c. through batten within 6-inch wide laps spaced 90-inch o.c. Laps sealed with 5-inch heat weld that encapsulates batten.	-67.5	A	1/2
SC-200	Min. 22 ga., type B, Grade 33 steel	Min. 1.5-inch thick, one or more layers, ISO 95+ GL, RESISTA and/or Duro-Guard ISO Composite-E2	Prelim. attached	Duro-Tech TPO	Duro-Last HD Plus Fasteners with Duro-Last Coiled Metal Batten Strip	Fasteners 6-inch o.c. through batten within 6-inch wide laps spaced 114-inch o.c. Laps sealed with 5-inch heat weld that encapsulates batten.	-67.5	A	1/2
SC-201	Min. 22 ga., type B, Grade 80 steel or min. 20 ga., type B, Grade 33 steel or structural concrete	Min. 1.5-inch thick, one or more layers, ISO 95+ GL, RESISTA and/or Duro-Guard ISO Composite-E2	Prelim. attached	Duro-Tech TPO	Duro-Last HD Fasteners or Duro-Last Concrete Drive (concrete only) with Duro-Last Batten Strip or Coiled Metal Batten Strip or Duro-Last HD Plus Fasteners or Duro-Last Concrete Drive (concrete only) with Duro-Last Polymer Batten Strip	Fasteners 6-inch o.c. through batten within 6-inch wide laps spaced 114-inch o.c. Laps sealed with 5-inch heat weld that encapsulates batten.	-75.0	A	1/2
SC-202	Min. 22 ga., type B, Grade 33 steel	Min. 1.5-inch thick, one or more layers, ISO 95+ GL, RESISTA and/or Duro-Guard ISO Composite-E2	Prelim. attached	Duro-Tech TPO	Duro-Last HD Plus Fasteners with Duro-Last Batten Strip or Coiled Metal Batten Strip	Fasteners 6-inch o.c. through batten within 6-inch wide laps spaced 90-inch o.c. Laps sealed with 5-inch heat weld that encapsulates batten.	-82.5	A	1/2
SC-203	Min. 22 ga., type B, Grade 80 steel	Min. 1.5-inch thick, one or more layers, ISO 95+ GL, RESISTA and/or Duro-Guard ISO Composite-E2	Prelim. attached	Duro-Tech TPO	Duro-Last HD Plus Fasteners with Duro-Last 3/4-inch Polymer Batten Strips	Fasteners 6-inch o.c. through batten within 6-inch wide laps spaced 68-inch o.c. Laps sealed with 5-inch heat weld that encapsulates battens.	-82.5	A	1/2
SC-204	Min. 22 ga., type B, Grade 80 steel or min. 20 ga., type B, Grade 33 steel	Min. 1.5-inch thick, one or more layers, ISO 95+ GL, RESISTA and/or Duro-Guard ISO Composite-E2	Prelim. attached	Duro-Tech TPO	Duro-Last HD Fasteners with Duro-Last Coiled Metal Batten Strip	Fasteners 6-inch o.c. through batten within 6-inch wide laps spaced 90-inch o.c. Laps sealed with 5-inch heat weld that encapsulates batten.	-90.0	A	1/2
SC-205	Min. 22 ga., type B, Grade 80 steel or min. 20 ga., type B, Grade 33 steel	Min. 1.5-inch thick, one or more layers, ISO 95+ GL, RESISTA and/or Duro-Guard ISO Composite-E2	Prelim. attached	Duro-Tech TPO	Duro-Last HD Plus Fasteners with Duro-Last Batten Strip or Coiled Metal Batten Strip	Fasteners 6-inch o.c. through batten within 6-inch wide laps spaced 90-inch o.c. Laps sealed with 5-inch heat weld that encapsulates batten.	-97.5	A	1/2

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**TABLE 2D-2: STEEL or CONCRETE DECKS - NEW CONSTRUCTION or REROOF (Tear-Off) or RECOVER
SYSTEM TYPE D-1B: INSULATED, MECHANICALLY ATTACHED ROOF COVER (BATTENS)**

System No.	Deck (See Note 1)	Insulation		Roof Cover			MDP (psf)	Fire Rating UL790/E108	
		Type	Attach	Membrane	Fasteners	Attachment		Class	Max Incline (in.)
SC-206	Min. 22 ga., type B, Grade 33 steel	Min. 1.5-inch thick, one or more layers, ISO 95+ GL, RESISTA and/or Duro-Guard ISO Composite-E2	Prelim. attached	Duro-Tech TPO	Duro-Last HD Plus Fasteners with Duro-Last Coiled Metal Batten Strip	Fasteners 6-inch o.c. through batten within 6-inch wide laps spaced 54-inch o.c. Laps sealed with 5-inch heat weld that encapsulates batten.	-112.5	A	1/2
SC-207	Min. 22 ga., type B, Grade 33 steel	Min. 1/2-inch Dens Deck or Dens Deck Prime loose laid over min. 1.5-inch thick, one or more layers, any combination	Prelim. attached	Duro-Tech TPO	Duro-Last HD Plus Fasteners with Duro-Last Coiled Metal Batten Strip	Fasteners 6-inch o.c. through batten within 6-inch wide laps spaced 54-inch o.c. Laps sealed with 5-inch heat weld that encapsulates batten.	-112.5	A	3-1/2
SC-208	Min. 22 ga., type B, Grade 33 steel	Min. 1.5-inch thick, one or more layers, ISO 95+ GL, RESISTA and/or Duro-Guard ISO Composite-E2	Prelim. attached	Duro-Tech TPO	Duro-Last HD Plus Fasteners with Duro-Last 3/4-inch Polymer Batten Strips	Lap Row: Fasteners 6-inch o.c. through battens within 6-inch wide laps spaced 142-inch o.c. Laps sealed with 5-inch heat weld that encapsulates the batten. Field Row: Fasteners 6-inch o.c. through battens in one intermediate row between laps. Batten strips covered with 5-inch wide Duro-Tech TPO strips sealed on both sides with 1.5-inch heat weld.	-135.0	A	1/2

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TABLE 2D-3: STEEL or CONCRETE DECKS - NEW CONSTRUCTION or REROOF (Tear-Off) or RECOVER SYSTEM TYPE D-1C: INSULATED, MECHANICALLY ATTACHED ROOF COVER (RMA STRIPS)

System No.	Deck (See Note 1)	Insulation		Roof Cover			MDP (psf)	Fire Rating UL790/E108	
		Type	Attach	Membrane	Fasteners	Attachment		Class	Max Incline (in.)
SC-209	Min. 22 ga., type B, Grade 33 steel or structural concrete	Min. 1.5-inch thick, one or more layers, ISO 95+ GL, RESISTA and/or Duro-Guard ISO Composite-E2	Prelim. attached	Duro-Tech TPO	UltraPly QuickSeam R.M.A. Strips with Duro-Last HD Fasteners or Duro-Last Concrete Drive (concrete only) with Duro-Last Polymer Batten Strip	UltraPly QuickSeam R.M.A. Strips are applied over the insulation spaced 72-inch o.c. The batten is centered over each strip and fastened 12-inch o.c. Roof cover adhered to each strip by first priming with Single-Ply QuickPrime Primer at the strip location, then rolling into place with a hand roller.	-37.5	A	1/2
SC-210	Min. 22 ga., type B, Grade 33 steel or structural concrete	Min. 1.5-inch thick, one or more layers, ISO 95+ GL, RESISTA and/or Duro-Guard ISO Composite-E2	Prelim. attached	Duro-Tech TPO	UltraPly QuickSeam R.M.A. Strips with Duro-Last HD Fasteners with Duro-Last Coiled Metal Batten Strip	UltraPly QuickSeam R.M.A. Strips are applied over the insulation spaced 120- inch o.c. The batten is centered over each strip and fastened 6-inch o.c. Roof cover adhered to each strip by first priming with Duro-Tech TPO QuickPrime at the strip location, then rolling into place with a hand roller.	-45.0	A	1/2

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**Table 2D-4: Steel or Concrete Decks – New Construction or Reroof (Tear-off)
System Type D-2 Vapor Retarder, Insulated Mechanically Attached Roof Cover**

System No.	DeckDeck (See Note 1)	Vapor Retarder	Insulation				Roof Cover		MDP (psf)	Fire Rating UL790/E108	
			Base Insulation	Base Insulation attachment	Top Insulation	Top Insulation Attachment	Membrane	Membrane Attachment		Class	Max Incline (in.)
SC-211	Min. 22 ga., type B, Grade 33 steel or structural concrete	Duro-Last Vapor Barrier Membrane adhered to loose laid DensDeck Prime	Optional insulation	Preliminary secured or secured with Top layer	Min. 2.0-inch ISO 95+ GL or RESISTA	Insulation Fastening Plates and Duro-Last Heavy Duty fasteners secured 8 per 4-ft. x 8-ft. board	Duro-Tech TPO	Attached in lap 12-inch o.c. with HD Fasteners & Plates, row spacing 114-inch o.c.	-30.0	A	1/2
SC-212	Min. 22 ga., type B, Grade 33 steel or structural concrete	Duro-Last Vapor Barrier Membrane adhered to loose laid DensDeck Prime	Optional insulation	Preliminary secured or secured with Top layer	Min. 2.0-inch ISO 95+ GL or RESISTA	Insulation Fastening Plates and Duro-Last Heavy Duty fasteners secured 8 per 4-ft. x 8-ft. board	Duro-Tech TPO	Attached in lap 6-inch o.c. with HD Fasteners & Plates, row spacing 114-inch o.c.	-37.5	A	1/2
SC-213	Min. 22 ga., type B, Grade 33 steel or structural concrete	Duro-Last Vapor Barrier Membrane adhered to steel deck	Optional insulation	Preliminary secured or secured with Top layer	Min. 2.0-inch ISO 95+ GL, RESISTA, Duro-Guard ISO Composite-E2	Insulation Fastening Plates and Duro-Last Heavy Duty fasteners secured 6 per 4-ft. x 8-ft. board	Duro-Tech TPO	Attached in lap 12 in-inch o.c. with HD Fasteners & Plates, row spacing 142 inch o.c.	-37.5	A	1/2
SC-214	Min. 22 ga., type B, Grade 33 steel or structural concrete	Duro-Last Vapor Barrier Membrane adhered to steel deck	Optional insulation	Preliminary secured or secured with Top layer	Min. 1/2 inch ISO 95+ GL, RESISTA, or Duro-Guard ISO Composite-E2	Insulation Fastening Plates and Duro-Last Heavy Duty fasteners secured 4 per 4-ft. x 8-ft. board	Duro-Tech TPO	Attached in lap 12-inch o.c. with HD Fasteners & Plates, row spacing 114 inch o.c.	-45.0	A	1/2
SC-215	Min. 22 ga., type B, Grade 33 steel or structural concrete	Duro-Last Vapor Barrier Membrane adhered to steel deck	Optional insulation	Preliminary secured or secured with Top layer	Min. 1/2 inch ISO 95+ GL, RESISTA, or Duro-Guard ISO Composite-E2	Insulation Fastening Plates and Duro-Last Heavy Duty fasteners secured 6 per 4-ft. x 8-ft. board	Duro-Tech TPO	Attached in lap 12-inch o.c. with HD Fasteners & Plates, row spacing 142-inch o.c.	-45.0	A	1/2
SC-216	Min. 22 ga., type B, Grade 33 steel or structural concrete	Duro-Last Vapor Barrier Membrane adhered to loose laid DensDeck Prime	Optional insulation	Preliminary secured or secured with Top layer	Min. 2.0-inch ISO 95+ GL, RESISTA, or Duro-Guard ISO Composite-E2	Insulation Fastening Plates and Duro-Last Heavy Duty fasteners secured 8 per 4-ft. x 8-ft. board	Duro-Tech TPO	Attached in lap 12 in-inch o.c. with HD Fasteners & Plates, row spacing 114 inch o.c.	-45.0	A	1/2
SC-217	Min. 22 ga., type B, Grade 33 steel or structural concrete	Duro-Last Vapor Barrier Membrane adhered to steel deck	Optional insulation	Preliminary secured or secured with Top layer	Min. 3.0-inch ISO 95+ GL, RESISTA, or Duro-Guard ISO Composite-E2	Insulation Fastening Plates and Duro-Last Heavy Duty fasteners secured 8 per 4-ft. x 8-ft. board	Duro-Tech TPO	Attached in lap 12 in-inch o.c. with HD Fasteners & Plates, row spacing 114 inch o.c.	-45.0	A	1/2
SC-218	Min. 22 ga., type B, Grade 33 steel or structural concrete	Duro-Last Vapor Barrier Membrane adhered to loose laid SECUROCK	Optional insulation	Preliminary secured or secured with Top layer	Min. 3.0-inch ISO 95+ GL, RESISTA, or Duro-Guard ISO Composite-E2	Insulation Fastening Plates and Duro-Last Heavy Duty fasteners secured 8 per 4-ft. x 8-ft. board	Duro-Tech TPO	Attached in lap 12 in-inch o.c. with HD Fasteners & Plates, row spacing 114 inch o.c.	-52.5	A	1/2

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**Table 2D-4: Steel or Concrete Decks – New Construction or Reroof (Tear-off)
System Type D-2 Vapor retarder, insulated Mechanically Attached Roof Cover**

System No.	DeckDeck (See Note 1)	Vapor Retarder	Insulation				Roof Cover		MDP (psf)	Fire Rating UL790/E108	
			Base Insulation	Base Insulation attachment	Top Insulation	Top Insulation Attachment	Membrane	Membrane Attachment		Class	Max Incline (in.)
SC-219	Min. 22 ga., type B, Grade 33 steel or structural concrete	Duro-Last Vapor Barrier Membrane adhered to Steel deck	1.5 inch ISO 95+ GL or RESISTA insulation	Preliminary secured or secured with Top layer	Min. ½ inch ISO 95+ GL, RESISTA, Duro-Guard ISO Composite-E2	Insulation Fastening Plates and Duro-Last Heavy Duty fasteners secured 6 per 4-ft. x 8-ft. board	Duro-Tech TPO	Attached in lap 12-inch o.c. with HD Fasteners & Plates, row spacing 142-inch o.c.	-52.5	A	½
SC-220	Min. 22 ga., type B, Grade 33 steel or structural concrete	Duro-Last Vapor Barrier membrane adhered to the steel deck	Optional insulation	Preliminary secured or secured with Top layer	Min. 2.5-inch ISO 95+ GL, RESISTA, Duro-Guard ISO Composite-E2	Induction plate with Duro-Last Heavy Duty fastener secured at a rate of 8 per 4 ft. x 8 ft. board	Duro-Tech TPO	See Note 10A or 10B	-52.5	A	½
SC-221	Min. 22 ga., type B, Grade 33 steel or structural concrete	Duro-Last Vapor Barrier membrane adhered over loose laid SECUROCK	Optional insulation	Preliminary secured or secured with Top layer	Min. 2.5-inch ISO 95+ GL, RESISTA, Duro-Guard ISO Composite-E2	Induction plate with Duro-Last Heavy Duty fastener secured at a rate of 8 per 4 ft. x 8 ft. board	Duro-Tech TPO	See Note 10A or 10B	-52.5	A	½
SC-222	Min. 22 ga., type B, Grade 33 steel or structural concrete	(2) layers of Duro-Last Vapor Barrier Membrane adhered to steel deck	Optional insulation	Preliminary secured or secured with Top layer	Min. 3.0-inch ISO 95+ GL, RESISTA, Duro-Guard ISO Composite-E2	Insulation Fastening Plates and Duro-Last Heavy Duty fasteners secured 6 per 4-ft. x 8-ft. board	Duro-Tech TPO	Attached in lap 12-inch o.c. with HD Fasteners & Plates, row spacing 142-inch o.c.	-82.5	A	½

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**TABLE 3A-1: CONCRETE DECKS - NEW CONSTRUCTION or REROOF (Tear-Off)
SYSTEM TYPE A-1A: BONDED INSULATION, BONDED ROOF COVER**

System No.	Deck (See Note 1)	Primer	Base Insulation Layer		Top Insulation Layer		Roof Cover	Adhesive	MDP (psf)	Fire Rating UL790/E108	
			Type	Attach	Type	Attach				Class	Max Incline (in.)
C-1	Min. 2,500 psi concrete	None	Min. 1.0-inch ISO 95+ GL	Millennium PG-1	(Optional) Additional layers of base insulation and/or min. ½-inch Tapered ISO 95+ GL	Millennium PG-1	Duro-Tech TPO	WBBA-P	-45.0	A	¼
C-2	Min. 2,500 psi concrete	None	One or more layers, Min. ½-inch ISO 95+ GL or Min. 1.0-inch RESISTA	Millennium One Step; Millennium PG-1; OlyBond 500	Min. ¼-inch DensDeck	Millennium One Step; Millennium PG-1; OlyBond 500	Duro-Tech TPO	WBBA-P	-45.0	A	2-½
C-3	Min. 2,500 psi concrete	None	One or more layers, Min. ½-inch ISO 95+ GL or Min. 1.0-inch RESISTA	Millennium One Step; Millennium PG-1; OlyBond 500	Min. ¼-inch DensDeck	Millennium One Step; Millennium PG-1; OlyBond 500	Duro-Tech TPO	LVOC-BA	-112.5	A	2-½
C-4	Min. 2,500 psi concrete	None	One or more layers, Min. ½-inch ISO 95+ GL or Min. 1.0-inch RESISTA	Millennium One Step; Millennium PG-1; OlyBond 500	Min. ¼-inch SECUROCK Gypsum-Fiber Roof Board	Millennium One Step; Millennium PG-1; OlyBond 500	Duro-Tech TPO,	UP-BA, LVOC-BA-1168, LVOC-BA, WBBA-P, SA	-112.5	A	2-½
C-5	Min. 2,500 psi concrete	None	Min. 1.5-inch ISO 95+ GL	Millennium One Step; Millennium PG-1	Min. ¼-inch DensDeck Prime	Millennium One Step; Millennium PG-1	Duro-Tech TPO,	UP-BA, LVOC-BA-1168, SA	-127.5	A	2-½
C-6	Min. 2,500 psi concrete	None	One or more layers, min. 1.5-inch ISO 95+ GL	INSTA STIK QUIK SET	Min. ½-inch DURO-GUARD ISO HD-E2	INSTA STIK QUIK SET	Duro-Tech TPO	WBBA-P	-135.0	A	¼
C-7	Min. 2,500 psi concrete	None	Min. ½-inch DURO-GUARD ISO HD-E2	INSTA STIK QUIK SET, 4-inch o.c. Ribbons	None	N/A	Duro-Tech TPO	WBBA-P	-135.0	A	¼
C-8	Min. 2,500 psi concrete	None	One or more layers, Min. ½-inch ISO 95+ GL or Min. 1.0-inch RESISTA	Millennium One Step; Millennium PG-1; OlyBond 500	Min. ½-inch DURO-GUARD ISO HD-E2	Millennium One Step; Millennium PG-1; OlyBond 500	Duro-Tech TPO	WBBA-P	-135.0	A C	¼ ¾

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**TABLE 3A-1: CONCRETE DECKS - NEW CONSTRUCTION or REROOF (Tear-Off)
SYSTEM TYPE A-1A: BONDED INSULATION, BONDED ROOF COVER**

System No.	Deck (See Note 1)	Primer	Base Insulation Layer		Top Insulation Layer		Roof Cover	Adhesive	MDP (psf)	Fire Rating UL790/E108	
			Type	Attach	Type	Attach				Class	Max Incline (in.)
C-9	Min. 2,500 psi concrete	None	One or more layers, Min. ½-inch ISO 95+ GL or Min. 1.0-inch RESISTA	Millennium One Step; Millennium PG-1; OlyBond 500	Min. ¼-inch DensDeck Prime	Millennium One Step; Millennium PG-1; OlyBond 500	Duro-Tech TPO	WBBA-P	-135.0	A	2-½
C-10	Min. 2,500 psi concrete	None	Min. ½-inch ISO 95+ GL or RESISTA	Millennium One Step; OlyBond 500; INSTA STIK QUIK SET	Min. ¼-inch SECUROCK Gypsum Fiber Roof Board	OlyBond 500	Duro-Tech TPO,	UP-BA, SA	-175.0	A	2-½
C-11	Min. 2,500 psi concrete	ASTM D41	Min. 1.5-inch ISO 95+ GL or RESISTA	Asphalt	(Optional) Tapered ISO 95+ GL	Asphalt	Duro-Tech TPO,	UP-BA, LVOC-BA 1168, SA	-180.0	A	¼
C-12	Min. 2,500 psi concrete	None	One or more layers, Min. ½-inch ISO 95+ GL or Min. 1.0-inch RESISTA	OlyBond 500; Millennium PG-1	Min. ¼-inch DensDeck	OlyBond 500; Millennium PG-1	Duro-Tech TPO	UP-BA	-187.5	A	2-½
C-13	Min. 2,500 psi concrete	None	One or more layers, Min. ½-inch ISO 95+ GL or Min. 1.0-inch RESISTA	OlyBond 500; Millennium PG-1	Min. ½-inch DURO-GUARD ISO HD-E2	OlyBond 500; Millennium PG-1	Duro-Tech TPO	UP-BA, LVOC-BA, LVOC-BA 1168, SA	-187.5	A C	¼ ¾
C-14	Min. 2,500 psi concrete	None	One or more layers, Min. ½-inch ISO 95+ GL or Min. 1.0-inch RESISTA	OlyBond 500; Millennium PG-1	Min. 7/16-inch OSB	OlyBond 500; Millennium PG-1	Duro-Tech TPO	UP-BA, LVOC-BA, LVOC-BA 1168, WBBA-P, AS	-187.5	A	1-¼
C-15	Min. 2,500 psi concrete	None	One or more layers, Min. ½-inch ISO 95+ GL or Min. 1.0-inch RESISTA	OlyBond 500; Millennium PG-1	Min. ¼-inch DensDeck Prime	OlyBond 500; Millennium PG-1	Duro-Tech TPO	UP-BA, LVOC-BA, LVOC-BA 1168, SA	-187.5	A	2-½
C-16	Min. 2,500 psi concrete	ASTM D41	Min. 1.5-inch ISO 95+ GL with optional Tapered ISO 95+ GL	Asphalt	Min. ¼-inch DensDeck or DensDeck Prime	Asphalt	Duro-Tech TPO,	UP-BA, SA	-195.0	A	2-½
C-17	Min. 2,500 psi concrete	ASTM D41	Min. 1.5-inch ISO 95+ GL with optional Tapered ISO 95+ GL	Asphalt	Min. ¼-inch DensDeck Prime	Asphalt	Duro-Tech TPO	LVOC-BA-1168	-195.0	A	2-½

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**TABLE 3A-1: CONCRETE DECKS - NEW CONSTRUCTION or REROOF (Tear-Off)
SYSTEM TYPE A-1A: BONDED INSULATION, BONDED ROOF COVER**

System No.	Deck (See Note 1)	Primer	Base Insulation Layer		Top Insulation Layer		Roof Cover	Adhesive	MDP (psf)	Fire Rating UL790/E108	
			Type	Attach	Type	Attach				Class	Max Incline (in.)
C-18	Min. 2,500 psi concrete	None	One or more layers, Min. ½-inch ISO 95+ GL	Millennium One Step; OlyBond 500; Millennium PG-1; INSTA STIK Quik Set	Min. ½-inch DURO-GUARD ISO HD-E2	OlyBond 500; Millennium PG-1; INSTA STIK Quik Set	Duro-Tech TPO,	UP-BA, LVOC-BA, LVOC-BA 1168, WBBA-P, SA	-195	A C	¼ ¾
C-19	Min. 2,500 psi concrete	None	Min. 1-inch ISO 95+ GL	Millennium PG-1	Min. ¼-inch DensDeck Prime	Millennium PG-1	Duro-Tech TPO,	UP-BA, SA	-205.0	A	2-½
C-20	Min. 2,500 psi concrete	None	One or more layers, min. 1.5-inch ISO 95+ GL	Millennium One Step	Min. ½-inch DURO-GUARD ISO HD-E2	Millennium One Step	Duro-Tech TPO	WBBA-P	-222.5	A C	¼ ¾
C-21	Min. 2,500 psi concrete	None	One or more layers, Min. ½-inch ISO 95+ GL or Min. 1.0-inch RESISTA	Millennium One Step; Millennium PG-1	Min. ½-inch DURO-GUARD ISO HD-E2	Millennium One Step; Millennium PG-1	Duro-Tech TPO	LVOC-BA-1168	-225.0	A C	¼ ¾
C-22	Min. 2,500 psi concrete	None	One or more layers, min. ½-inch ISO 95+ GL	Millennium One Step	Min. ½-inch DensDeck	Millennium One Step	Duro-Tech TPO	WBBA-P	-240.0	A	2-½
C-23	Min. 2,500 psi concrete	None	One or more layers, Min. ½-inch ISO 95+ GL	Millennium One Step; OlyBond 500; Millennium PG-1	(Optional) Additional layers of base insulation	Millennium One Step; OlyBond 500; Millennium PG-1	Duro-Tech TPO	WBBA-P	-247.5	A	¼
C-24	Min. 2,500 psi concrete	None	One or more layers, Min. 1.0-inch RESISTA	Millennium One Step; OlyBond 500; Millennium PG-1	(Optional) Additional layers of base insulation	Millennium One Step; OlyBond 500; Millennium PG-1	Duro-Tech TPO	WBBA-P	-247.5	A	¼
C-25	Min. 2,500 psi concrete	None	One or more layers, Min. ½-inch ISO 95+ GL or Min. 1.0-inch RESISTA	Millennium One Step; Millennium PG-1	Min. ¼-inch DensDeck Prime	Millennium One Step; Millennium PG-1	Duro-Tech TPO,	UP-BA, LVOC-BA, SA	-247.5	A	2-½
C-26	Min. 2,500 psi concrete	None	One or more layers, min. 1.5-inch ISO 95+ GL	OlyBond 500	Min. ½-inch DURO-GUARD ISO HD-E2	OlyBond 500	Duro-Tech TPO	WBBA-P	-247.5	A	¼
C-27	Min. 2,500 psi concrete	None	Min. 1.5-inch RESISTA	INSTA STIK QUIK SET, 6-inch o.c. Ribbons	(Optional) Additional layers of base insulation	INSTA STIK QUIK SET, 6-inch o.c. Ribbons	Duro-Tech TPO	WBBA-P	-247.5	A	¼

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**TABLE 3A-1: CONCRETE DECKS - NEW CONSTRUCTION or REROOF (Tear-Off)
SYSTEM TYPE A-1A: BONDED INSULATION, BONDED ROOF COVER**

System No.	Deck (See Note 1)	Primer	Base Insulation Layer		Top Insulation Layer		Roof Cover	Adhesive	MDP (psf)	Fire Rating UL790/E108	
			Type	Attach	Type	Attach				Class	Max Incline (in.)
C-28	Min. 2,500 psi concrete	None	Min. ½-inch DURO-GUARD ISO HD-E2	INSTA STIK QUIK SET, 4-inch o.c. Ribbons	None	N/A	Duro-Tech TPO,	UP-BA, LVOC-BA-1168, SA	-247.5	A	¼
C-29	Min. 2,500 psi concrete	None	Min. 1.5-inch ISO 95+ GL	Millennium PG-1	None	N/A	Duro-Tech TPO,	UP-BA, LVOC-BA-1168, LVOC-BA, WBBA-P, SA	-255.0	A	¼
C-30	Min. 2,500 psi concrete	None	One or more layers, Min. ½-inch ISO 95+ GL	Millennium One Step; OlyBond 500; Millennium PG-1	(Optional) Additional layers of base insulation	Millennium One Step; OlyBond 500; Millennium PG-1	Duro-Tech TPO	UP-BA, LVOC-BA, LVOC-BA 1168	-255.0	A	¼
C-31	Min. 2,500 psi concrete	None	Min. two layers min. 1.5-inch ISO 95+ GL	INSTA STIK QUIK SET, Millennium One Step, OlyBond 500; Millennium PG-1	Min. ¼-inch DensDeck Prime	INSTA STIK QUIK SET, Millennium One Step, OlyBond 500; Millennium PG-1	Duro-Tech TPO	LVOC-BA-1168	-262.5	A	2-½
C-32	Min. 2,500 psi concrete	None	One or more layers, Min. ½-inch ISO 95+ GL or Min. 1.0-inch RESISTA	Millennium One Step; Millennium PG-1	Min. ¼-inch DensDeck Prime	Millennium One Step; I.S.O. Spray	Duro-Tech TPO	LVOC-BA-1168	-262.5	A	2-½
C-33	Min. 2,500 psi concrete	None	Min. ½-inch DURO-GUARD ISO HD-E2	Millennium One Step	None	N/A	Duro-Tech TPO,	UP-BA, LVOC-BA-1168, WBBA-P, SA	-300.0	A	¼
C-34	Min. 2,500 psi concrete	None	One or more layers, Min. ½-inch ISO 95+ GL or Min. 1.0-inch RESISTA	Millennium One Step; Millennium PG-1	Min. ½-inch DURO-GUARD ISO HD-E2	Millennium One Step; Millennium PG-1	Duro-Tech TPO,	UP-BA, SA	-300.0	A C	¼ ¾
C-35	Min. 2,500 psi concrete	None	One or more layers, min. 1.5-inch ISO 95+ GL	OlyBond 500; INSTA STIK QUIK SET	Min. ½-inch DURO-GUARD ISO HD-E2	OlyBond 500; INSTA STIK QUIK SET	Duro-Tech TPO,	UP-BA, LVOC-BA-1168, SA	-300.0	A	¼
C-36	Min. 2,500 psi concrete	None	Min. ½-inch ISO 95+ GL	Millennium One Step; OlyBond 500; Millennium PG-1	(Optional) Additional layers of base insulation	Millennium One Step; OlyBond 500; Millennium PG-1		SA	-337.5	A	¼

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**TABLE 3A-1: CONCRETE DECKS - NEW CONSTRUCTION or REROOF (Tear-Off)
SYSTEM TYPE A-1A: BONDED INSULATION, BONDED ROOF COVER**

System No.	Deck (See Note 1)	Primer	Base Insulation Layer		Top Insulation Layer		Roof Cover	Adhesive	MDP (psf)	Fire Rating UL790/E108	
			Type	Attach	Type	Attach				Class	Max Incline (in.)
C-37	Min. 2,500 psi concrete	None	Min. ½-inch ISO 95+ GL or RESISTA	Millennium One Step, OlyBond 500, INSTA STIK QUIK SET; 6-inch o.c. Ribbons	Min. ¼-inch SECUROCK Gypsum Fiber Roof Board	OlyBond 500; 6-inch o.c. Ribbons	Duro-Tech TPO,	UP-BA, LVOC-BA, LVOC-BA 1168, WBBA-P	-347.5	A	2-½
C-38	Min. 2,500 psi concrete	None	Min. 1.0-inch RESISTA	Millennium One Step; OlyBond 500; Millennium PG-1	(Optional) Additional layers of base insulation	Millennium One Step; OlyBond 500; Millennium PG-1	Duro-Tech TPO,	UP-BA, LVOC-BA, SA	-360.0	A	¼
C-39	Min. 2,500 psi concrete	None	One or more layers, Min. ½-inch ISO 95+ GL or Min. 1.0-inch RESISTA	Millennium One Step; Millennium PG-1	Min. ½-inch DURO-GUARD ISO HD-E2	Millennium One Step; Millennium PG-1	Duro-Tech TPO	LVOC-BA	-360.0	A C	¼ ¾
C-40	Min. 2,500 psi concrete	None	Min. 1.5-inch RESISTA	INSTA STIK QUIK SET, 6-inch o.c. Ribbons	(Optional) Additional layers of base insulation	INSTA STIK QUIK SET, 6-inch o.c. Ribbons	Duro-Tech TPO,	UP-BA, LVOC-BA-1168, LVOC-BA, SA	-360.0	A	¼
C-41	Min. 2,500 psi concrete	None	Min. ½-inch DURO-GUARD ISO HD-E2	INSTA STIK QUIK SET, 4-inch o.c. Ribbons	None	N/A	Duro-Tech TPO	LVOC-BA	-360.0	A	¼
C-42	Min. 2,500 psi concrete	None	Min. 1.5-inch RESISTA	Millennium One Step; INSTA STIK QUIK SET, 6-inch o.c. Ribbons	Min. ½-inch DURO-GUARD ISO HD-E2	Millennium One Step, INSTA STIK QUIK SET; 6-inch o.c. Ribbons	Duro-Tech TPO,	UP-BA, LVOC-BA-1168, LVOC-BA, SA	-360.0	A	¼
C-43	Min. 2,500 psi concrete	None	Min. ½-inch RESISTA	INSTA STIK QUIK SET	None	N/A	Duro-Tech TPO,	UP-BA, LVOC-BA-1168, WBBA-P, SA	-405.0	A	¼
C-44	Min. 2,500 psi concrete	None	None	N/A	Min. ½-inch DURO-GUARD ISO HD-E2	Millennium One Step; OlyBond 500; Millennium PG-1; INSTA STIK Quik Set	Duro-Tech TPO,	UP-BA, LVOC-BA-1168, LVOC-BA, SA	-445.0	A C	¼ ¾
C-45	Min. 2,500 psi concrete	None	Min. 1.0-inch RESISTA	Millennium One Step; OlyBond 500; INSTA STIK QUIK SET	Min. 1.0-inch RESISTA	Millennium One Step OlyBond 500; INSTA STIK QUIK SET	Duro-Tech TPO	LVOC-BA-1168	-450.0	A	¼

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TABLE 3A-1: CONCRETE DECKS - NEW CONSTRUCTION or REROOF (Tear-Off)											
SYSTEM TYPE A-1A: BONDED INSULATION, BONDED ROOF COVER											
System No.	Deck (See Note 1)	Primer	Base Insulation Layer		Top Insulation Layer		Roof Cover	Adhesive	MDP (psf)	Fire Rating UL790/E108	
			Type	Attach	Type	Attach				Class	Max Incline (in.)
C-46	Min. 2,500 psi concrete	None	None	N/A	Min. ¼-inch SECUROCK Gypsum Fiber Roof Board	Millennium One Step; OlyBond 500; INSTA STIK Quik Set	Duro-Tech TPO	UP-BA	-495.0	A	2-1/2

TABLE 3A-1: CONCRETE DECKS - NEW CONSTRUCTION or REROOF (Tear-Off)											
SYSTEM TYPE A-1A: BONDED INSULATION, BONDED ROOF COVER											
System No.	Deck (See Note 1)	Primer	Base Insulation Layer		Top Insulation Layer		Roof Cover	Adhesive	MDP (psf)	Fire Rating UL790/E108	
			Type	Attach	Type	Attach				Class	Max Incline (in.)
DURO-TECH TPO FLEECE SYSTEMS											
C-47	Min. 2,500 psi concrete	None	One or more layers, Min. ½-inch ISO 95+ GL or Min. 1.0-inch RESISTA	Millennium One Step; OlyBond 500; Millennium PG-1	Min. ½-inch DURO-GUARD ISO HD-E2	Millennium One Step; OlyBond 500; Millennium PG-1	Duro-Tech TPO Fleece	Millennium PG-1; XR Stick, 12-inch o.c. Ribbons	-45.0	A B	1/2 1
C-48	Min. 2,500 psi concrete	None	One or more layers, Min. ½-inch ISO 95+ GL or Min. 1.0-inch RESISTA	Millennium One Step; OlyBond 500; Millennium PG-1	Min. 7/16-inch OSB	Millennium One Step; OlyBond 500; Millennium PG-1	Duro-Tech TPO Fleece	Millennium PG-1; XR Stick, 12-inch o.c. Ribbons	-45.0	A	1/2
C-49	Min. 2,500 psi concrete	None	Min. ½-inch ISO 95+ GL or Min. 1.0-inch RESISTA	Millennium One Step; OlyBond 500; Millennium PG-1	(Optional) Additional layers of base insulation	Millennium One Step; OlyBond 500; Millennium PG-1	Duro-Tech TPO Fleece	XR BA	-112.5	C	1/2
C-50	Min. 2,500 psi concrete	None	Min. ½-inch ISO 95+ GL or Min. 1.0-inch RESISTA	Millennium One Step; OlyBond 500; Millennium PG-1	(Optional) Additional layers of base insulation	Millennium One Step; OlyBond 500; Millennium PG-1	Duro-Tech TPO Fleece	Millennium PG-1; XR Stick, 12-inch o.c. Ribbons	-142.5	A	1/2
C-51	Min. 2,500 psi concrete	None	Min. ½-inch ISO 95+ GL or RESISTA	Millennium One Step; OlyBond 500; INSTA STIK QUIK SET	Min. ¼-inch SECUROCK Gypsum Fiber Roof Board	OlyBond 500	Duro-Tech TPO Fleece	Millennium PG-1; XR Stick, 12-inch o.c. Ribbons	-175.0	A	2
C-52	Min. 2,500 psi concrete	None	Min. ½-inch ISO 95+ GL or Min. 1.0-inch RESISTA	OlyBond 500; Millennium PG-1	(Optional) Additional layers of base insulation	OlyBond 500; Millennium PG-1	Duro-Tech TPO Fleece	Asphalt	-187.5	A	1/2

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TABLE 3A-1: CONCRETE DECKS - NEW CONSTRUCTION or REROOF (Tear-Off)											
SYSTEM TYPE A-1A: BONDED INSULATION, BONDED ROOF COVER											
System No.	Deck (See Note 1)	Primer	Base Insulation Layer		Top Insulation Layer		Roof Cover	Adhesive	MDP (psf)	Fire Rating UL790/E108	
			Type	Attach	Type	Attach				Class	Max Incline (in.)
DURO-TECH TPO FLEECE SYSTEMS											
C-53	Min. 2,500 psi concrete	None	One or more layers, Min. ½-inch ISO 95+ GL or Min. 1.0-inch RESISTA	OlyBond 500; Millennium PG-1	Min. ½-inch DURO-GUARD ISO HD-E2	OlyBond 500; Millennium PG-1	Duro-Tech TPO Fleece	Asphalt	-187.5	A C	¾ 2
C-54	Min. 2,500 psi concrete	None	One or more layers, Min. ½-inch ISO 95+ GL or Min. 1.0-inch RESISTA	OlyBond 500; Millennium PG-1	Min. ¼-inch DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	OlyBond 500; Millennium PG-1	Duro-Tech TPO Fleece	Asphalt	-187.5	A B	1 2
C-55	Min. 2,500 psi concrete	None	One or more layers, Min. ½-inch ISO 95+ GL or Min. 1.0-inch RESISTA	OlyBond 500; Millennium PG-1	Min. ½-inch DURO-GUARD ISO HD-E2	OlyBond 500; Millennium PG-1	Duro-Tech TPO Fleece	XR-BA	-187.5	A B	½ 1
C-56	Min. 2,500 psi concrete	None	One or more layers, Min. ½-inch ISO 95+ GL or Min. 1.0-inch RESISTA	OlyBond 500; Millennium PG-1	Min. ¼-inch DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	OlyBond 500; Millennium PG-1	Duro-Tech TPO Fleece	XR-BA	-187.5	A	4
C-57	Min. 2,500 psi concrete	None	One or more layers, Min. ½-inch ISO 95+ GL	Millennium One Step; OlyBond 500; Millennium PG-1; INSTA STIK Quik Set	Min. ½-inch DURO-GUARD ISO HD-E2	OlyBond 500; Millennium PG-1; INSTA STIK Quik Set	Duro-Tech TPO Fleece	Millennium PG-1; XR Stick, 12-inch o.c. Ribbons	-195.0	A B	½ 1
C-58	Min. 2,500 psi concrete	None	Min. 1.5-inch ISO 95+ GL	Millennium PG-1	Min. ¼-inch DensDeck Prime	Millennium PG-1	Duro-Tech TPO Fleece	Millennium PG-1; XR Stick, 12-inch o.c. Ribbons	-205.0	A	2-½
C-59	Min. 2,500 psi concrete	ASTM D41	Min. ¼-inch DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	Asphalt	None	N/A	Duro-Tech TPO Fleece	XR-BA	-232.5	A	2-½
C-60	Min. 2,500 psi concrete	(Optional) ASTM D41	Min. ¼-inch DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	Asphalt	None	N/A	Duro-Tech TPO Fleece	Asphalt	-232.5	A	1
C-61	Min. 2,500 psi concrete	None	Min. 1.5-inch ISO 95+ GL	Millennium PG-1	None	N/A	Duro-Tech TPO Fleece	Millennium PG-1; XR Stick, 12-inch o.c. Ribbons	-255.0	A	¼

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TABLE 3A-1: CONCRETE DECKS - NEW CONSTRUCTION or REROOF (Tear-Off) SYSTEM TYPE A-1A: BONDED INSULATION, BONDED ROOF COVER											
System No.	Deck (See Note 1)	Primer	Base Insulation Layer		Top Insulation Layer		Roof Cover	Adhesive	MDP (psf)	Fire Rating UL790/E108	
			Type	Attach	Type	Attach				Class	Max Incline (in.)
DURO-TECH TPO FLEECE SYSTEMS											
C-62	Min. 2,500 psi concrete	None	None	N/A	Min. ½-inch DURO-GUARD ISO HD-E2	Millennium One Step; OlyBond 500; Millennium PG-1; INSTA STIK Quik Set	Duro-Tech TPO Fleece	Millennium PG-1; XR Stick, 12-inch o.c. Ribbons	-285.0	A B	½ 1
C-63	Min. 2,500 psi concrete	ASTM D41	One or two layers min. 1.5-inch ISO 95+ GL	Asphalt	Min. ¼-inch DensDeck Prime	Asphalt	Duro-Tech TPO Fleece	XR-BA	-300.0	A	2-½
C-64	Min. 2,500 psi concrete	None	One or more layers, Min. ½-inch ISO 95+ GL or Min. 1.0-inch RESISTA	Millennium One Step; Millennium PG-1	Min. ¼-inch DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	Millennium One Step; Millennium PG-1	Duro-Tech TPO Fleece	XR-BA	-300.0	A	4
C-65	Min. 2,500 psi concrete	(Optional) ASTM D41	One or Two layers min. 1.5-inch ISO 95+ GL	Asphalt	Min. ¼-inch DensDeck Prime	Asphalt	Duro-Tech TPO Fleece	Asphalt	-300.0	A	1
C-66	Min. 2,500 psi concrete	None	One or more layers, Min. ½-inch ISO 95+ GL or Min. 1.0-inch RESISTA	Millennium One Step; Millennium PG-1	Min. ½-inch DURO-GUARD ISO HD-E2	Millennium One Step; Millennium PG-1	Duro-Tech TPO Fleece	Asphalt	-337.5	A C	¾ 2
C-67	Min. 2,500 psi concrete	None	Min. ½-inch ISO 95+ GL or RESISTA	Millennium One Step; OlyBond 500; INSTA STIK QUIK SET, 6-inch o.c. Ribbons	Min. ¼-inch SECUROCK Gypsum Fiber Roof Board	OlyBond 500; 6-inch o.c. Ribbons	Duro-Tech TPO Fleece	XR Stick, 12-inch o.c. Ribbons	-347.5	A	2
C-68	Min. 2,500 psi concrete	None	(Optional) Min. 1-inch ISO 95+ GL	Millennium PG-1	Min. ¼-inch DensDeck Prime	Millennium PG-1	Duro-Tech TPO Fleece	Millennium PG-1, 12-inch o.c. Ribbons	-360.0	A	½
C-69	Min. 2,500 psi concrete	None	One or more layers, Min. ½-inch ISO 95+ GL or Min. 1.0-inch RESISTA	Millennium One Step	Min. ½-inch DURO-GUARD ISO HD-E2	Millennium One Step	Duro-Tech TPO Fleece	XR-BA	-390.0	A B	½ 1
C-70	Min. 2,500 psi concrete	None	One or more layers, Min. ½-inch ISO 95+ GL or Min. 1.0-inch RESISTA	Millennium One Step	(Optional) Additional layers of base insulation	Millennium One Step	Duro-Tech TPO Fleece	Asphalt	-390.0	A C	¼ ½

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TABLE 3A-1: CONCRETE DECKS - NEW CONSTRUCTION or REROOF (Tear-Off)											
SYSTEM TYPE A-1A: BONDED INSULATION, BONDED ROOF COVER											
System No.	Deck (See Note 1)	Primer	Base Insulation Layer		Top Insulation Layer		Roof Cover	Adhesive	MDP (psf)	Fire Rating UL790/E108	
			Type	Attach	Type	Attach				Class	Max Incline (in.)
DURO-TECH TPO FLEECE SYSTEMS											
C-71	Min. 2,500 psi concrete	None	One or more layers, Min. ½-inch ISO 95+ GL or Min. 1.0-inch RESISTA	Millennium One Step	Min. ¼-inch DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	Millennium One Step	Duro-Tech TPO Fleece	Asphalt	-390.0	A B	1 2
C-72	Min. 2,500 psi concrete	None	None	N/A	Min. ¼-inch SECUROCK Gypsum Fiber Roof Board	Millennium One Step; OlyBond 500; INSTA STIK Quik Set	Duro-Tech TPO Fleece	XR Stick, 12-inch o.c. Ribbons	-445.0	A	2
C-73	Min. 2,500 psi concrete	(Optional) ASTM D41	Min. 1.5-inch ISO 95+ GL	Asphalt	Min. ¼-inch DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	Asphalt	Duro-Tech TPO Fleece	Asphalt	-457.5	A	1

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**TABLE 3A-2: CONCRETE DECKS - NEW CONSTRUCTION or REROOF (Tear-Off)
SYSTEM TYPE A-1B: BONDED TEMP ROOF, BONDED INSULATION, BONDED ROOF COVER**

System No.	Deck (See Note 1)	Primer	Vapor Barrier/ Temporary Roof	Base Insulation Layer		Top Insulation Layer		Roof Cover	Adhesive	MDP (psf)	Fire Rating UL790/E108	
				Type	Attach	Type	Attach				Class	Max Incline (in.)
C-74	Min. 2,500 psi concrete	Duro-Last VB Primer	Duro-Last Vapor Barrier	Min. 1.5-inch ISO 95+ GL	Millennium One Step; OlyBond 500	(Optional) Additional layers of base insulation	Millennium One Step; OlyBond 500	Duro-Tech TPO	WBBA-P	-45.0	A	1/4
C-75	Min. 2,500 psi concrete	Duro-Last VB Primer	Duro-Last Vapor Barrier	Min. 1.5-inch ISO 95+ GL	OlyBond 500	None	N/A	Duro-Tech TPO,	UP-BA, LVOC-BA-1168, LVOC- BA, SA	-45.0	A	1/4
C-76	Min. 2,500 psi concrete	None	APP 80 Glass Base, torched	One or more layers, Min. 1/2-inch ISO 95+ GL or Min. 1.0-inch RESISTA	Millennium One Step; Millennium PG-1	Min. 1/4-inch DensDeck	Millennium One Step; Millennium PG-1	Duro-Tech TPO	WBBA-P	-45.0	A	2-1/2
C-77	Min. 2,500 psi concrete	Duro-Last VB Primer	Duro-Last Vapor Barrier	Min. 1.5-inch ISO 95+ GL	OlyBond 500	(Optional) Additional layers of base insulation	OlyBond 500	Duro-Tech TPO,	UP-BA, LVOC-BA-1168, LVOC- BA, SA	-57.5	A	1/4
C-78	Min. 2,500 psi concrete	Duro-Last VB Primer	Duro-Last Vapor Barrier	Min. 1.5-inch ISO 95+ GL	OlyBond 500	None	N/A	Duro-Tech TPO,	UP-BA, LVOC-BA-1168, LVOC- BA, SA	-75.0	A	1/4
C-79	Min. 2,500 psi concrete	Duro-Last VB Primer	Duro-Last Vapor Barrier	Min. 1.5-inch ISO 95+ GL	Millennium One Step; Millennium PG-1	(Optional) Additional layers of base insulation	I.S.O. Twin Pack; Millennium PG-1	Duro-Tech TPO,	UP-BA, LVOC-BA-1168, LVOC- BA, SA	-97.5	A	1/4
C-80	Min. 2,500 psi concrete	None	APP 80 Glass Base, torched	One or more layers, Min. 1/2-inch ISO 95+ GL or Min. 1.0-inch RESISTA	Millennium One Step; Millennium PG-1	Min. 1/4-inch DensDeck	Millennium One Step; Millennium PG-1	Duro-Tech TPO	LVOC-BA	-112.5	A	2-1/2
C-81	Min. 2,500 psi concrete	None	APP 80 Glass Base, torched	One or more layers, Min. 1/2-inch ISO 95+ GL or Min. 1.0-inch RESISTA	Millennium One Step; Millennium PG-1	Min. 1/4-inch SECUROCK Gypsum Fiber Roof Board	Millennium One Step; Millennium PG-1	Duro-Tech TPO,	UP-BA, LVOC-BA-1168, LVOC- BA, WBBA-P, SA	-112.5	A	2-1/2

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**TABLE 3A-2: CONCRETE DECKS - NEW CONSTRUCTION or REROOF (Tear-Off)
SYSTEM TYPE A-1B: BONDED TEMP ROOF, BONDED INSULATION, BONDED ROOF COVER**

System No.	Deck (See Note 1)	Primer	Vapor Barrier/ Temporary Roof	Base Insulation Layer		Top Insulation Layer		Roof Cover	Adhesive	MDP (psf)	Fire Rating UL790/E108	
				Type	Attach	Type	Attach				Class	Max Incline (in.)
C-82	Min. 2,500 psi concrete	Duro-Last VB Primer	Duro-Last Vapor Barrier	Min. 1.5-inch ISO 95+ GL	OlyBond 500	(Optional) Additional layers of base insulation or Min. ½-inch Tapered ISO 95+ GL; Min. ½- inch DURO-GUARD ISO HD-E2	OlyBond 500	Duro-Tech TPO	WBBA-P	-135.0	A C	¼ ¾
C-83	Min. 2,500 psi concrete	Duro-Last VB Primer	Duro-Last Vapor Barrier	Min. 1.5-inch ISO 95+ GL	OlyBond 500	(Optional) Additional layers of base insulation or Min. ½-inch Tapered ISO 95+ GL; Min. ¼-inch DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	OlyBond 500	Duro-Tech TPO	WBBA-P	-135.0	A	2-½
C-84	Min. 2,500 psi concrete	None	APP 80 Glass Base, torched	One or more layers, Min. ½-inch ISO 95+ GL or Min. 1.0-inch RESISTA	Millennium One Step; Millennium PG-1	Min. ½-inch DURO-GUARD ISO HD-E2	Millennium One Step; Millennium PG-1	Duro-Tech TPO	WBBA-P	-135.0	A C	¼ ¾
C-85	Min. 2,500 psi concrete	None	APP 80 Glass Base, torched	One or more layers, Min. ½-inch ISO 95+ GL or Min. 1.0-inch RESISTA	Millennium One Step; Millennium PG-1	Min. ¼- inch DensDeck Prime	Millennium One Step; Millennium PG-1	Duro-Tech TPO	WBBA-P	-135.0	A	2-½
C-86	Min. 2,500 psi concrete	Duro-Last VB Primer	Duro-Last Vapor Barrier	Min. ½-inch ISO 95+ GL	Millennium PG-1	Min. ¼- inch DensDeck Prime	Millennium PG-1	Duro-Tech TPO,	UP-BA, LVOC-BA-1168, LVOC- BA, WBBA-P, SA	-163.5	A	2-½
C-87	Min. 2,500 psi concrete	None	APP 80 Glass Base, torched	One or more layers, Min. ½-inch ISO 95+ GL or Min. 1.0-inch RESISTA	Millennium One Step; Millennium PG-1	Min. ½-inch DURO-GUARD ISO HD-E2	Millennium One Step; Millennium PG-1	Duro-Tech TPO	LVOC-BA 1168	-225.0	A C	¼ ¾

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**TABLE 3A-2: CONCRETE DECKS - NEW CONSTRUCTION or REROOF (Tear-Off)
SYSTEM TYPE A-1B: BONDED TEMP ROOF, BONDED INSULATION, BONDED ROOF COVER**

System No.	Deck (See Note 1)	Primer	Vapor Barrier/ Temporary Roof	Base Insulation Layer		Top Insulation Layer		Roof Cover	Adhesive	MDP (psf)	Fire Rating UL790/E108	
				Type	Attach	Type	Attach				Class	Max Incline (in.)
C-88	Min. 2,500 psi concrete	ASTM D41	MB Base, adhered in Millennium One Step	Min. 1.5-inch ISO 95+ GL	Millennium One Step; Millennium PG-1	Min. ¼-inch DensDeck or DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	Millennium One Step; Millennium PG-1	Duro-Tech TPO,	UP- BA, LVOC-BA-1168, SA	-232.5	A	2-½
C-89	Min. 2,500 psi concrete	ASTM D41	SBS Poly Torch or SBS Glass Torch Base, torch applied	Min. 1.5-inch ISO 95+ GL	Millennium One Step; Millennium PG-1	Min. ¼-inch DensDeck or DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	Millennium One Step; Millennium PG-1	Duro-Tech TPO,	UP- BA, LVOC-BA-1168, SA	-232.5	A	2-½
C-90	Min. 2,500 psi concrete	ASTM D41	Asphaltic (See Note 11)	Min. 1.0-inch RESISTA	Millennium PG-1, 6-inch o.c. Ribbons	(Optional) Additional layers of base insulation and/or min. ½-inch Tapered RESISTA	Millennium PG-1, 6-inch o.c. Ribbons	Duro-Tech TPO	WBBA-P	-247.5	A	¼
C-91	Min. 2,500 psi concrete	ASTM D41	Asphaltic (See Note 11)	Min. 1.0-inch ISO 95+ GL or RESISTA	Millennium PG-1, 6-inch o.c. Ribbons	(Optional) Additional layers of base insulation or Min. ½-inch Tapered ISO 95+GL or Tapered RESISTA; Min. ¼-inch DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	Millennium PG-1, 6-inch o.c. Ribbons	Duro-Tech TPO,	UP- BA, LVOC-BA, SA	-247.5	A	2-½
C-92	Min. 2,500 psi concrete	ASTM D41	Asphaltic (See Note 11)	Min. 1.0-inch ISO 95+ GL or RESISTA	Millennium PG-1, 6-inch o.c. Ribbons	(Optional) Additional layers of base insulation or Min. ½-inch Tapered ISO 95+GL or Tapered RESISTA; Min. 7/16-inch OSB	Millennium PG-1, 6-inch o.c. Ribbons	Duro-Tech TPO,	UP- BA, LVOC-BA-1168, LVOC-BA, WBBA-P, SA	-247.5	A	1-¼

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**TABLE 3A-2: CONCRETE DECKS - NEW CONSTRUCTION or REROOF (Tear-Off)
SYSTEM TYPE A-1B: BONDED TEMP ROOF, BONDED INSULATION, BONDED ROOF COVER**

System No.	Deck (See Note 1)	Primer	Vapor Barrier/ Temporary Roof	Base Insulation Layer		Top Insulation Layer		Roof Cover	Adhesive	MDP (psf)	Fire Rating UL790/E108	
				Type	Attach	Type	Attach				Class	Max Incline (in.)
C-93	Min. 2,500 psi concrete	Duro-Last VB Primer	Duro-Last Vapor Barrier	Min. 1.5-inch ISO 95+ GL	OlyBond 500	(Optional) Additional layers of base insulation or Min. ½-inch Tapered ISO 95+ GL; Min. ¼- inch DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	OlyBond 500	Duro-Tech TPO,	UP- BA, LVOC-BA, SA	-247.5	A	2-½
C-94	Min. 2,500 psi concrete	Duro-Last VB Primer	Duro-Last Vapor Barrier	Min. 1.5-inch ISO 95+ GL	OlyBond 500	(Optional) additional layers of base insulation or Min. ½-inch Tapered ISO 95+ GL; Min. 7/16-inch OSB	OlyBond 500	Duro-Tech TPO,	UP- BA, LVOC-BA-1168, LVOC-BA, WBBA-P, SA	-247.5	A	1-¼
C-95	Min. 2,500 psi concrete	None	APP 80 Glass Base, torched	One or more layers, Min. ½-inch ISO 95+ GL or Min. 1.0-inch RESISTA	Millennium One Step; Millennium PG-1	(Optional) Additional layers of base insulation	Millennium One Step; Millennium PG-1	Duro-Tech TPO	WBBA-P	-247.5	A	¼
C-96	Min. 2,500 psi concrete	None	APP 80 Glass Base, torched	One or more layers, Min. ½-inch ISO 95+ GL or Min. 1.0-inch RESISTA	Millennium One Step; Millennium PG-1	Min. ¼-inch DensDeck	Millennium One Step; Millennium PG-1	Duro-Tech TPO	UP-BA	-247.5	A	2-½
C-97	Min. 2,500 psi concrete	None	APP 80 Glass Base, torched	One or more layers, Min. ½-inch ISO 95+ GL or Min. 1.0-inch RESISTA	Millennium One Step; Millennium PG-1	Min. 7/16-inch OSB	Millennium One Step; Millennium PG-1	Duro-Tech TPO,	UP-BA, LVOC-BA, 1168, WBBA-P, SA	-247.5	A	1-¼
C-98	Min. 2,500 psi concrete	None	APP 80 Glass Base, torched	One or more layers, Min. ½-inch ISO 95+ GL or Min. 1.0-inch RESISTA	Millennium One Step; Millennium PG-1	Min. ¼-inch DensDeck Prime	Millennium One Step; Millennium PG-1	Duro-Tech TPO,	UP-BA, LVOC-BA, SA	-247.5	A	2-½

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**TABLE 3A-2: CONCRETE DECKS - NEW CONSTRUCTION or REROOF (Tear-Off)
SYSTEM TYPE A-1B: BONDED TEMP ROOF, BONDED INSULATION, BONDED ROOF COVER**

System No.	Deck (See Note 1)	Primer	Vapor Barrier/ Temporary Roof	Base Insulation Layer		Top Insulation Layer		Roof Cover	Adhesive	MDP (psf)	Fire Rating UL790/E108	
				Type	Attach	Type	Attach				Class	Max Incline (in.)
C-99	Min. 2,500 psi concrete	ASTM D41	Asphaltic (See Note 11)	Min. 1-inch ISO 95+ GL or RESISTA	Millennium PG-1, 6-inch o.c. Ribbons	(Optional) Additional layers of base insulation and/or Min. ½- inch Tapered ISO 95+ GL or Tapered RESISTA	Millennium PG-1, 6-inch o.c. Ribbons	Duro-Tech TPO,	UP- BA, LVOC-BA-1168, LVOC-BA, SA	-255.0	A	¼
C-100	Min. 2,500 psi concrete	ASTM D41	Asphaltic (See Note 11)	Min. 1-inch ISO 95+ GL or RESISTA	Millennium PG-1, 6-inch o.c. Ribbons	Optional additional layers of base insulation or min. ½-inch Tapered ISO 95+GL or Tapered RESISTA; Min. ½-inch DURO-GUARD ISO HD-E2	Millennium PG-1, 6-inch o.c. Ribbons	Duro-Tech TPO,	UP- BA, LVOC-BA-1168, LVOC-BA, SA	-255.0	A C	¼ ¾
C-101	Min. 2,500 psi concrete	ASTM D41	Asphaltic (See Note 11)	Min. 1-inch ISO 95+ GL or RESISTA	Millennium PG-1, 6-inch o.c. Ribbons	Optional additional layers of base insulation or min. ½-inch Tapered ISO 95+GL or Tapered RESISTA; Min. ½-inch DensDeck Prime or SECURUCK Gypsum-Fiber Roof Board	I.S.O. SprayR, 6-inch o.c. Ribbons	Duro-Tech TPO	LVOC-BA-1168	-255.0	A	2-½
C-102	Min. 2,500 psi concrete	None	Duro-Last; 1-2 ply of Ply VI or VI in hot asphalt; APP 80 Glass Base, SBS Glass FR Torch, or SBS Poly Torch Base, torched	Min. ½-inch ISO 95+ GL	Millennium One Step; Millennium PG-1	(Optional) Additional layers of base insulation	Millennium One Step; Millennium PG-1	Duro-Tech TPO,	UP- BA, LVOC-BA-1168, LVOC-BA, WBBA-P, SA	-255.0	A	¼
C-103	Min. 2,500 psi concrete	None	APP 80 Glass Base, torched	Min. 1.0-inch RESISTA	Millennium One Step; Millennium PG-1	(Optional) Additional layers of base insulation	Millennium One Step; Millennium PG-1	Duro-Tech TPO	LVOC-BA 1168	-255.0	A	¼
C-104	Min. 2,500 psi concrete	Duro-Last VB Primer	Duro-Last Vapor Barrier	Min. 1.5-inch ISO 95+ GL	OlyBond 500	(Optional) Additional layers of base insulation	OlyBond 500	Duro-Tech TPO,	UP- BA, LVOC-BA-1168, LVOC-BA, SA	-262.5	A	¼

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**TABLE 3A-2: CONCRETE DECKS - NEW CONSTRUCTION or REROOF (Tear-Off)
SYSTEM TYPE A-1B: BONDED TEMP ROOF, BONDED INSULATION, BONDED ROOF COVER**

System No.	Deck (See Note 1)	Primer	Vapor Barrier/ Temporary Roof	Base Insulation Layer		Top Insulation Layer		Roof Cover	Adhesive	MDP (psf)	Fire Rating UL790/E108	
				Type	Attach	Type	Attach				Class	Max Incline (in.)
C-105	Min. 2,500 psi concrete	Duro-Last VB Primer	Duro-Last Vapor Barrier	Min. 1.5-inch ISO 95+ GL	OlyBond 500	(Optional) Additional layers of base insulation or Min. ½-inch Tapered ISO 95+ GL; Min. ½- inch DURO-GUARD ISO HD-E2	OlyBond 500	Duro-Tech TPO,	UP- BA, LVOC-BA-1168, LVOC-BA, SA	-262.5	A C	¼ ¾
C-106	Min. 2,500 psi concrete	Duro-Last VB Primer	Duro-Last Vapor Barrier	Min. 1.5-inch ISO 95+ GL	OlyBond 500	(Optional) Additional layers of base insulation or Min. ½-inch Tapered ISO 95+ GL; Min. ¼-inch DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	OlyBond 500	Duro-Tech TPO	LVOC-BA-1168	-262.5	A	2-½
C-107	Min. 2,500 psi concrete	None	APP 80 Glass Base, torched	One or more layers, Min. ½-inch ISO 95+ GL or Min. 1.0-inch RESISTA	Millennium One Step; Millennium PG-1	Min. ¼-inch DensDeck Prime	Millennium One Step; Millennium PG-1	Duro-Tech TPO	LVOC-BA-1168	-262.5	A	2-½
C-108	Min. 2,500 psi concrete	None	Duro-Last; 1-2 ply of Ply VI or VI in hot asphalt; APP 80 Glass Base, SBS Glass FR Torch, or SBS Poly Torch Base, torched	Min. ½-inch ISO 95+ GL	Millennium One Step; Millennium PG-1	Min. ½- inch DURO-GUARD ISO HD-E2	Millennium One Step; Millennium PG-1	Duro-Tech TPO,	UP- BA, LVOC-BA-1168, LVOC-BA, SA	-262.5	A C	¼ ¾
C-109	Min. 2,500 psi concrete	Duro-Last VB Primer	Duro-Last Vapor Barrier	Min. 1.5-inch ISO 95+ GL	Millennium One Step; OlyBond 500	None	N/A	Duro-Tech TPO,	UP- BA, LVOC-BA-1168, LVOC-BA, SA	-277.5	A	¼
C-110	Min. 2,500 psi concrete	None	APP 80 Glass Base. Torch Adhered	Min. 1.0-inch RESISTA	Millennium One Step; Millennium PG-1	(Optional) Additional layers of base insulation	Millennium One Step; Millennium PG-1	Duro-Tech TPO,	UP-BA, LVOC-BA, SA	-277.5	A	¼
C-111	Min. 2,500 psi concrete	None	APP 80 Glass Base. Torch Adhered	Min. ½-inch ISO 95+ GL	Millennium One Step; Millennium PG-1	(Optional) Additional layers of base insulation	Millennium One Step; Millennium PG-1		SA	-277.5	A	¼

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**TABLE 3A-2: CONCRETE DECKS - NEW CONSTRUCTION or REROOF (Tear-Off)
SYSTEM TYPE A-1B: BONDED TEMP ROOF, BONDED INSULATION, BONDED ROOF COVER**

System No.	Deck (See Note 1)	Primer	Vapor Barrier/ Temporary Roof	Base Insulation Layer		Top Insulation Layer		Roof Cover	Adhesive	MDP (psf)	Fire Rating UL790/E108	
				Type	Attach	Type	Attach				Class	Max Incline (in.)
C-112	Min. 2,500 psi concrete	None	APP 80 Glass Base. Torch Adhered	Min. ½-inch ISO 95+ GL or Min. 1.0-inch RESISTA	Millennium One Step; Millennium PG-1	Min. ½- inch DURO-GUARD ISO HD-E2	Millennium One Step; Millennium PG-1	Duro-Tech TPO,	UP-BA, LVOC-BA, SA	-277.5	A C	¼ ¾
C-113	Min. 2,500 psi concrete	None	Duro-Last; 1-2 ply of Ply VI or VI in hot asphalt; APP 80 Glass Base, SBS Glass FR Torch, or SBS Poly Torch Base, torched	Min. ½-inch ISO 95+ GL	Millennium One Step; Millennium PG-1	Min. ¼-inch SECUROCK Gypsum Fiber Roof Board	Millennium One Step; Millennium PG-1	Duro-Tech TPO	UP-BA	-347.5	A	2-½
C-114	Min. 2,500 psi concrete	None	Duro-Last; 1-2 ply of Ply VI or VI in hot asphalt; APP 80 Glass Base, SBS Glass FR Torch, or SBS Poly Torch Base, torched	Min. ½-inch ISO 95+ GL	Millennium One Step; Millennium PG-1	Min. ¼-inch SECUROCK Gypsum Fiber Roof Board	Millennium One Step; Millennium PG-1	Duro-Tech TPO	UP-BA	-400.0	A	2-½
C-115	Min. 2,500 psi concrete	None	Duro-Last; 1-2 ply of Ply VI or VI in hot asphalt; APP 80 Glass Base, SBS Glass FR Torch, or SBS Poly Torch Base, torched	Min. ½-inch ISO 95+ GL	Millennium One Step; Millennium PG-1	Min. ¼-inch SECUROCK Gypsum Fiber Roof Board	Millennium One Step; Millennium PG-1	Duro-Tech TPO	UP-BA	-495.0	A	2-½

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TABLE 3A-2: CONCRETE DECKS - NEW CONSTRUCTION or REROOF (Tear-Off) SYSTEM TYPE A-1B: BONDED TEMP ROOF, BONDED INSULATION, BONDED ROOF COVER												
System No.	Deck (See Note 1)	Primer	Vapor Barrier/ Temporary Roof	Base Insulation Layer		Top Insulation Layer		Roof Cover	Adhesive	MDP (psf)	Fire Rating UL790/E108	
				Type	Attach	Type	Attach				Class	Max Incline (in.)
DURO-TECH TPO FLEECE SYSTEMS:												
C-116	Min. 2,500 psi concrete	Duro-Last VB Primer	Duro-Last Vapor Barrier	Min. 1.5-inch ISO 95+ GL	OlyBond 500	None	N/A	Duro-Tech TPO Fleece	Millennium PG-1, XR Stick, 12-inch o.c. Ribbons	-57.5	A	1/4
C-117	Min. 2,500 psi concrete	Duro-Last VB Primer	Duro-Last Vapor Barrier	Min. 1.5-inch ISO 95+ GL	Millennium One Step, Millennium PG-1	None	N/A	Duro-Tech TPO Fleece	Millennium PG-1, XR Stick, 12-inch o.c. Ribbons	-97.5	A	1/4
C-118	Min. 2,500 psi concrete	Duro-Last VB Primer	Duro-Last Vapor Barrier	Min. 1.5-inch ISO 95+ GL	Millennium One Step	None	N/A	Duro-Tech TPO Fleece	XR-BA	-112.5	A	1/4
C-119	Min. 2,500 psi concrete	None	APP 80 Glass Base torch adhered	Min. 1.5-inch ISO 95+ GL or RESISTA	Millennium One Step	(Optional) Additional layers of base insulation and/or Min. 1/2-inch Tapered ISO 95+ GL or Tapered RESISTA	Millennium One Step, Millennium PG-1	Duro-Tech TPO Fleece	XR-BA	-112.5	A	1/4
C-120	Min. 2,500 psi concrete	None	APP 80 Glass Base, torched	One or more layers, Min. 1/2-inch ISO 95+ GL or Min. 1.0-inch RESISTA	Millennium One Step; Millennium PG-1	Min. 1/4-inch SECUROCK Gypsum Fiber Roof Board	Millennium One Step; Millennium PG-1	Duro-Tech TPO Fleece	Millennium PG-1, XR Stick, 12-inch o.c. Ribbons	-112.5	A	2
C-121	Min. 2,500 psi concrete	None	APP 80 Glass Base, torched	One or more layers, Min. 1/2-inch ISO 95+ GL or Min. 1.0-inch RESISTA	Millennium One Step; Millennium PG-1	Min. 1/4-inch SECUROCK Gypsum Fiber Roof Board	Millennium One Step; Millennium PG-1	Duro-Tech TPO Fleece	XR-BA, Asphalt	-112.5	A	1
C-122	Min. 2,500 psi concrete	None	APP 80 Glass Base torch adhered	Min. 1.5-inch ISO 95+ GL or RESISTA	Millennium One Step	(Optional) Additional layers of base insulation and/or Min. 1/2-inch Tapered ISO 95+ GL or Tapered RESISTA	Millennium One Step, Millennium PG-1	Duro-Tech TPO Fleece	XR Stick	-142.5	A	1/4
C-123	Min. 2,500 psi concrete	Duro-Last VB Primer	Duro-Last Vapor Barrier	Min. 1/2-inch ISO 95+ GL	Millennium PG-1	Min. 1/4-inch DensDeck Prime	Millennium PG-1	Duro-Tech TPO Fleece	Millennium PG-1, XR Stick, 12-inch o.c. Ribbons Asphalt, XR-BA	-163.5	A	2-1/2

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**TABLE 3A-2: CONCRETE DECKS - NEW CONSTRUCTION or REROOF (Tear-Off)
SYSTEM TYPE A-1B: BONDED TEMP ROOF, BONDED INSULATION, BONDED ROOF COVER**

System No.	Deck (See Note 1)	Primer	Vapor Barrier/ Temporary Roof	Base Insulation Layer		Top Insulation Layer		Roof Cover	Adhesive	MDP (psf)	Fire Rating UL790/E108	
				Type	Attach	Type	Attach				Class	Max Incline (in.)
DURO-TECH TPO FLEECE SYSTEMS:												
C-124	Min. 2,500 psi concrete	ASTM D41	Asphaltic (See Note 11)	Min. 1-inch ISO 95+ GL or RESISTA	Millennium PG-1, 6-inch o.c.	(Optional) Additional layers of base insulation or Min. ½-inch Tapered ISO 95+GL or Tapered RESISTA; Min. ¼-inch DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	Millennium PG-1, 6-inch o.c.	Duro-Tech TPO Fleece	XR-BA	-255.0	A	1
C-125	Min. 2,500 psi concrete	Duro-Last VB Primer	Duro-Last Vapor Barrier	Min. 1.5-inch ISO 95+ GL	OlyBond 500	(Optional) Additional layers of base insulation or Min. ½-inch Tapered ISO 95+GL; Min. ¼-inch DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	OlyBond 500	Duro-Tech TPO Fleece	XR-BA	-262.5	A	1
C-126	Min. 2,500 psi concrete	None	Duro-Last; 1-2 ply of Ply VI or VI in hot asphalt; APP 80 Glass Base, SBS Glass FR Torch, or SBS Poly Torch Base, torched	Min. ½-inch ISO 95+ GL	Millennium One Step; Millennium PG-1	Min. ½-inch DURO-GUARD ISO HD-E2	Millennium One Step; Millennium PG-1	Duro-Tech TPO Fleece	Millennium PG-1, XR Stick, 12-inch o.c. Ribbons	-262.5	A B	½ 1
C-127	Min. 2,500 psi concrete	None	Duro-Last; 1-2 ply of Ply VI or VI in hot asphalt; APP 80 Glass Base, SBS Glass FR Torch, or SBS Poly Torch Base, torched	Min. ½-inch ISO 95+ GL	Millennium One Step; Millennium PG-1	Min. ¼-inch SECUROCK Gypsum Fiber Roof Board	Millennium One Step; Millennium PG-1	Duro-Tech TPO Fleece	XR Stick, 12-inch o.c. Ribbons	-347.5	A	2
C-128	Min. 2,500 psi concrete	None	Duro-Last; 1-2 ply of Ply VI or VI in hot asphalt; APP 80 Glass Base, SBS Glass FR Torch, or SBS Poly Torch Base, torched	Min. ½-inch ISO 95+ GL	Millennium One Step; Millennium PG-1	Min. ¼-inch SECUROCK Gypsum Fiber Roof Board	Millennium One Step; Millennium PG-1	Duro-Tech TPO Fleece	XR Stick, 12-inch o.c. Ribbons	-400.0	A	2

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**TABLE 3F: CONCRETE DECKS - NEW CONSTRUCTION or REROOF (Tear-Off)
SYSTEM TYPE F: NON-INSULATED, BONDED ROOF COVER**

System No.	Deck (See Note 1)	Primer	Roof Cover				MDP (psf)	Fire Rating UL790/E108	
			Base Ply	Application	Top Ply	Application		Class	Max Incline (in.)
C-129	Min. 2,500 psi concrete	None	None	N/A	Duro-Tech TPO Fleece	XR Stick, 12-inch o.c. Ribbons	-97.5	A	1/2
C-130	Min. 2,500 psi concrete	None	None	N/A	Duro-Tech TPO Fleece	XR Stick, 6-inch o.c. Ribbons	-150.0	A	1/2
C-131	Min. 2,500 psi concrete	ASTM D41	None	N/A	Duro-Tech TPO Fleece	XR-BA	-180.0	A	1
C-132	Min. 2,500 psi concrete	ASTM D41	One or two plies Duro-Last Ply IV (4) or Ply VI (6) or one ply of MB Base, SBS Base, SBS PolyBase or SBS Premium Base	Asphalt	Duro-Tech TPO Fleece	Millennium PG-1, 4-inch o.c. Ribbons	-240.0	C	1/2
C-133	Min. 2,500 psi concrete	ASTM D41	One or two plies Duro-Last Ply IV (4) or Ply VI (6) or one ply of MB Base, SBS Base, SBS PolyBase or SBS Premium Base	Asphalt	Duro-Tech TPO Fleece	XR Stick, 4-inch o.c. Ribbons	-315.0	C	1/2
C-134	Min. 2,500 psi concrete	None	None	N/A	Duro-Tech TPO Fleece	XR-BA	-360.0	A	1
C-135	Min. 2,500 psi concrete	ASTM D41	One or two plies Duro-Last Ply IV (4) or Ply VI (6) or one ply of MB Base, SBS Base, SBS PolyBase or SBS Premium Base	Asphalt	Duro-Tech TPO Fleece	Millennium PG-1, 4-inch o.c. Ribbons	-360.0	A	2
C-136	Min. 2,500 psi concrete	ASTM D41	None	N/A	Duro-Tech TPO Fleece	Asphalt	-382.5	A	1
C-137	Min. 2,500 psi concrete	None	None	N/A	Duro-Tech TPO Fleece	Millennium PG-1, 4-inch o.c. Ribbons	-472.5	A	1/4
C-138	Min. 2,500 psi concrete	None	None	N/A	Duro-Tech TPO Fleece	Asphalt	-487.5	A	1
C-139	Min. 2,500 psi concrete	ASTM D41	None	N/A	Duro-Tech TPO Fleece	Asphalt	-495.0	A	1

**TABLE 4A: LIGHTWEIGHT CONCRETE DECKS - NEW CONSTRUCTION or REROOF (Tear-Off)
SYSTEM TYPE A-1A: BONDED INSULATION, BONDED ROOF COVER**

System No.	Deck (See Note 1)		Insulation/Coverboard Layer		Roof Cover		MDP (psf)	Fire Rating UL790/E108	
	Structural	LWC	Type	Attachment	Membrane	Adhesive		Class	Max Incline (in.)
LWC-1	Structural concrete	(Optional – SBS Glass Torch Base torch adhered for a vapor barrier) Min. 300 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Min. ½-inch DURO-GUARD ISO HD-E2	Millennium One Step	Duro-Tech TPO,	UP-BA, LVOC-BA, LVOC-BA-1168, WBBA-P, SA	-133.5	A	¼
LWC-2	Structural concrete	Min. 300 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Min. ¼-inch DensDeck	OlyBond 500	Duro-Tech TPO,	UP-BA, LVOC-BA, LVOC-BA-1168, WBBA-P, SA	-133.5	A	2-½
LWC-3	Structural concrete	Min. 350 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	(Optional) Min. ½-inch Tapered ISO 95+ GL or RESISTA followed by Min. 2.0-inch Duro-Guard ISO Composite-E2	Millennium One Step; Millennium PG-1; OlyBond 500	Duro-Tech TPO	WBBA-P	-135.0	A	¼
LWC-4	Structural concrete	Min. 350 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Min. 1.5-inch ISO 95+ GL or RESISTA followed by (Optional) Min. ½-inch Tapered ISO 95+ GL or RESISTA followed by Min. ½-inch DURO-GUARD ISO HD-E2	Millennium One Step; Millennium PG-1; OlyBond 500	Duro-Tech TPO	WBBA-P	-135.0	A	¼
LWC-5	Structural concrete	Min. 350 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Min. 1.5-inch ISO 95+ GL or RESISTA followed by (Optional) Min. ½-inch Tapered ISO 95+ GL or RESISTA followed by Min. ¼-inch DensDeck	Millennium One Step; Millennium PG-1; OlyBond 500	Duro-Tech TPO	WBBA-P	-135.0	A	2-½
LWC-6	Structural concrete	Min. 200 psi, min. 2-inch thick Celcore, Elastizell, Mearlcrete or Insulcel cellular LWIC. <i>Note: To qualify the LWIC under this assembly, a 1.7-inch LWC Base-Ply Fastener shall achieve a MCRF of 36.7 lbf when tested per TAS 105 or SPRI FX-1.</i>	Min. ½-inch DURO-GUARD ISO HD-E2	Millennium One Step	Duro-Tech TPO,	UP-BA, LVOC-BA, LVOC-BA-1168, WBBA-P, SA	-150.0	A	¼
LWC-7	Structural concrete	Min. 200 psi, min. 2-inch thick Celcore, Elastizell, Mearlcrete or Insulcel cellular LWIC. <i>Note: To qualify the LWIC under this assembly, a 1.7-inch LWC Base-Ply Fastener shall achieve a MCRF of 36.7 lbf when tested per TAS 105 or SPRI FX-1.</i>	Min. ¼-inch DensDeck	OlyBond 500	Duro-Tech TPO,	UP-BA, LVOC-BA, LVOC-BA-1168, WBBA-P, SA	-150.0	A	2-½
LWC-8	Structural concrete	Min. 300 psi, min. 2-inch thick Elastizell with Zell-Crete Fibers Lightweight Insulating Concrete with optional 1-inch thick, 1.0 pcf EPS holey board.	Min. ½-inch DURO-GUARD ISO HD-E2	Millennium One Step	Duro-Tech TPO,	UP-BA, LVOC-BA, LVOC-BA-1168, WBBA-P, SA	-157.5	A	¼
LWC-9	Structural concrete	Min. 300 psi, min. 2-inch thick Elastizell with Zell-Crete Fibers Lightweight Insulating Concrete with optional 1-inch thick, 1.0 pcf EPS holey board.	Min. ¼-inch DensDeck	OlyBond 500	Duro-Tech TPO,	UP-BA, LVOC-BA, LVOC-BA-1168, WBBA-P, SA	-157.5	A	2-½

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**TABLE 4A: LIGHTWEIGHT CONCRETE DECKS - NEW CONSTRUCTION or REROOF (Tear-Off)
SYSTEM TYPE A-1A: BONDED INSULATION, BONDED ROOF COVER**

System No.	Deck (See Note 1)		Insulation/Coverboard Layer		Roof Cover		MDP (psf)	Fire Rating UL790/E108	
	Structural	LWC	Type	Attachment	Membrane	Adhesive		Class	Max Incline (in.)
LWC-10	Structural concrete	Min. 350 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Min. 1.0-inch ISO 95+ GL followed by (Optional) Min. ½-inch Tapered ISO 95+ GL	OlyBond 500	Duro-Tech TPO,	UP-BA, LVOC-BA, LVOC-BA-1168, SA	-187.5	A	¼
LWC-11	Structural concrete	Min. 350 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Min. 1.5-inch RESISTA followed by (Optional) Min. ½-inch Tapered RESISTA	OlyBond 500	Duro-Tech TPO,	UP-BA, LVOC-BA, LVOC-BA-1168, WBBA-P, SA	-187.5	A	¼
LWC-12	Structural concrete	Min. 350 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	(Optional) Min. ½-inch Tapered ISO 95+ GL or RESISTA followed by Min. 2.0-inch Duro-Guard ISO Composite-E2	OlyBond 500	Duro-Tech TPO,	UP-BA, LVOC-BA, LVOC-BA-1168, SA	-187.5	A	¼
LWC-13	Structural concrete	Min. 350 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Min. 1.5-inch ISO 95+ GL or RESISTA followed by (Optional) Min. ½-inch Tapered ISO 95+ GL or RESISTA followed by Min. ½-inch DURO-GUARD ISO HD-E2	OlyBond 500	Duro-Tech TPO,	UP-BA, LVOC-BA, LVOC-BA-1168, SA	-187.5	A	¼
LWC-14	Structural concrete	Min. 350 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Min. 1.5-inch ISO 95+ GL or RESISTA followed by (Optional) Min. ½-inch Tapered ISO 95+ GL or RESISTA followed by Min. ¼-inch DensDeck	OlyBond 500	Duro-Tech TPO,	UP-BA, LVOC-BA, LVOC-BA-1168, SA	-187.5	A	2-½
LWC-15	Structural concrete	Min. 200 psi, min. 2-inch thick Celcore, Elastizell, Mearlcrete or Insulcel cellular LWIC.	Min. 1.5-inch ISO 95+ GL followed by Min. ¼-inch DensDeck	OlyBond 500	Duro-Tech TPO,	UP-BA, SA	-195.0	A	2-½
LWC-16	Structural concrete	Min. 350 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Min. 1.0-inch ISO 95+ GL followed by (Optional) Min. ½-inch Tapered ISO 95+ GL	Millennium One Step	Duro-Tech TPO,	UP-BA, LVOC-BA, LVOC-BA-1168, SA	-217.5	A	¼
LWC-17	Structural concrete	Min. 350 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	(Optional) Min. ½-inch Tapered ISO 95+ GL or RESISTA followed by Min. 2.0-inch Duro-Guard ISO Composite-E2	Millennium One Step	Duro-Tech TPO,	UP-BA, LVOC-BA, LVOC-BA-1168, SA	-217.5	A	¼
LWC-18	Structural concrete	Min. 350 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Min. 1.5-inch ISO 95+ GL or RESISTA followed by (Optional) Min. ½-inch Tapered ISO 95+ GL or RESISTA followed by Min. ½-inch DURO-GUARD ISO HD-E2	Millennium One Step	Duro-Tech TPO,	UP-BA, LVOC-BA, LVOC-BA-1168, SA	-217.5	A	¼

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**TABLE 4A: LIGHTWEIGHT CONCRETE DECKS - NEW CONSTRUCTION or REROOF (Tear-Off)
SYSTEM TYPE A-1A: BONDED INSULATION, BONDED ROOF COVER**

System No.	Deck (See Note 1)		Insulation/Coverboard Layer		Roof Cover		MDP (psf)	Fire Rating UL790/E108	
	Structural	LWC	Type	Attachment	Membrane	Adhesive		Class	Max Incline (in.)
LWC-19	Structural concrete	Min. 350 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Min. 1.5-inch ISO 95+ GL or RESISTA followed by (Optional) Min. ½-inch Tapered ISO 95+ GL or RESISTA followed by Min. ¼-inch DensDeck	Millennium One Step	Duro-Tech TPO,	UP-BA, LVOC-BA, LVOC-BA-1168, SA	-217.5	A	2-½
LWC-20	Structural concrete	Min. 200 psi, min. 2-inch thick Celcore, Elastizell, Mearlcrete or Insulcel cellular LWIC.	Min. 1.5-inch ISO 95+ GL followed by (Optional) Additional layers of base insulation	OlyBond 500	Duro-Tech TPO,	UP-BA, SA	-225.0	A	¼
LWC-21	Structural concrete	Min. 200 psi, min. 2-inch thick Celcore, Elastizell, Mearlcrete or Insulcel cellular LWIC.	Min. 1.5-inch ISO 95+ GL followed by Min. ¼-inch DensDeck Prime	OlyBond 500	Duro-Tech TPO,	UP-BA, SA	-225.0	A	2-½

**TABLE 4A: LIGHTWEIGHT CONCRETE DECKS - NEW CONSTRUCTION or REROOF (Tear-Off)
SYSTEM TYPE A-1A: BONDED INSULATION, BONDED ROOF COVER**

System No.	Deck (See Note 1)		Insulation/Coverboard Layer		Roof Cover		MDP (psf)	Fire Rating UL790/E108	
	Structural	LWC	Type	Attachment	Membrane	Adhesive		Class	Max Incline (in.)
DURO-TECH TPO FLEECE SYSTEMS:									
LWC-22	Structural concrete	Min. 350 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Min. 1.0-inch ISO 95+ GL followed by (Optional) Min. ½-inch Tapered ISO 95+ GL	Millennium One Step; Millennium PG-1; OlyBond 500	Duro-Tech TPO Fleece	XR-BA	-112.5	C	½
LWC-23	Structural concrete	(Optional - SBS Glass Torch Base torch adhered for a vapor barrier) Min. 300 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Min. ½-inch DURO-GUARD ISO HD-E2	Millennium One Step	Duro-Tech TPO Fleece	XR-Stick; Millennium PG-1, 12-inch o.c. Ribbons	-133.5	A B	½ 1
LWC-24	Structural concrete	Min. 300 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Min. ¼-inch DensDeck	OlyBond 500	Duro-Tech TPO Fleece	Asphalt	-133.5	A B	1 2
LWC-25	Structural concrete	Min. 300 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Min. ¼-inch DensDeck	OlyBond 500	Duro-Tech TPO Fleece	XR-BA	-133.5	A	4
LWC-26	Structural concrete	Min. 300 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Min. ¼-inch DensDeck	OlyBond 500	Duro-Tech TPO Fleece	XR Stick; Millennium PG-1, 12-inch o.c. Ribbons	-133.5	A	2

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**TABLE 4A: LIGHTWEIGHT CONCRETE DECKS - NEW CONSTRUCTION or REROOF (Tear-Off)
SYSTEM TYPE A-1A: BONDED INSULATION, BONDED ROOF COVER**

System No.	Deck (See Note 1)		Insulation/Coverboard Layer		Roof Cover		MDP (psf)	Fire Rating UL790/E108		
	Structural	LWC	Type	Attachment	Membrane	Adhesive		Class	Max Incline (in.)	
DURO-TECH TPO FLEECE SYSTEMS:										
LWC-27	Structural concrete	Min. 350 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Min. 1.0-inch RESISTA followed by (Optional) Min. ½-inch Tapered RESISTA	Millennium One Step	Duro-Tech TPO Fleece	XR-BA	-142.5	C	½	
LWC-28	Structural concrete	Min. 350 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Min. 1.5-inch RESISTA followed by (Optional) Min. ½-inch Tapered RESISTA	OlyBond 500	Duro-Tech TPO Fleece	XR-BA	-142.5	C	½	
LWC-29	Structural concrete	Min. 200 psi, min. 2-inch thick Celcore, Elastizell, Mearlcrete or Insulcel cellular LWIC. <i>Note: To qualify the LWIC under this assembly, a 1.7-inch LWC Base-Ply Fastener shall achieve a MCRF of 36.7 lbf when tested per TAS 105 or SPRI FX-1.</i>	Min. ½-inch DURO-GUARD ISO HD-E2	Millennium One Step	Duro-Tech TPO Fleece	XR-Stick; Millennium PG-1, 12-inch o.c. Ribbons	-150.0	A B	½ 1	
LWC-30	Structural concrete	Min. 200 psi, min. 2-inch thick Celcore, Elastizell, Mearlcrete or Insulcel cellular LWIC. <i>Note: To qualify the LWIC under this assembly, a 1.7-inch LWC Base-Ply Fastener shall achieve a MCRF of 36.7 lbf when tested per TAS 105 or SPRI FX-1.</i>	Min. ¼-inch DensDeck	OlyBond 500	Duro-Tech TPO Fleece	Asphalt	-150.0	A B	1 2	
LWC-31	Structural concrete	Min. 200 psi, min. 2-inch thick Celcore, Elastizell, Mearlcrete or Insulcel cellular LWIC. <i>Note: To qualify the LWIC under this assembly, a 1.7-inch LWC Base-Ply Fastener shall achieve a MCRF of 36.7 lbf when tested per TAS 105 or SPRI FX-1.</i>	Min. ¼-inch DensDeck	OlyBond 500	Duro-Tech TPO Fleece	XR-BA	-150.0	A	4	
LWC-32	Structural concrete	Min. 200 psi, min. 2-inch thick Celcore, Elastizell, Mearlcrete or Insulcel cellular LWIC. <i>Note: To qualify the LWIC under this assembly, a 1.7-inch LWC Base-Ply Fastener shall achieve a MCRF of 36.7 lbf when tested per TAS 105 or SPRI FX-1.</i>	Min. ¼-inch DensDeck	OlyBond 500	Duro-Tech TPO Fleece	XR Stick; Millennium PG-1, 12-inch o.c. Ribbons	-150.0	A	2	
LWC-33	Structural concrete	Min. 300 psi, min. 2-inch thick Elastizell with Zell-Crete Fibers Lightweight Insulating Concrete with optional 1-inch thick, 1.0 pcf EPS holey board.	Min. ½-inch DURO-GUARD ISO HD-E2	Millennium One Step	Duro-Tech TPO Fleece	XR-Stick; Millennium PG-1, 12-inch o.c. Ribbons	-157.5	A B	½ 1	
LWC-34	Structural concrete	Min. 300 psi, min. 2-inch thick Elastizell with Zell-Crete Fibers Lightweight Insulating Concrete with optional 1-inch thick, 1.0 pcf EPS holey board.	Min. ¼-inch DensDeck	OlyBond 500	Duro-Tech TPO Fleece	Asphalt	-157.5	A	1	
LWC-35	Structural concrete	Min. 300 psi, min. 2-inch thick Elastizell with Zell-Crete Fibers Lightweight Insulating Concrete with optional 1-inch thick, 1.0 pcf EPS holey board.	Min. ¼-inch DensDeck	OlyBond 500	Duro-Tech TPO Fleece	XR-BA	-157.5	A	4	
LWC-36	Structural concrete	Min. 300 psi, min. 2-inch thick Elastizell with Zell-Crete Fibers Lightweight Insulating Concrete with optional 1-inch thick, 1.0 pcf EPS holey board.	Min. ¼-inch DensDeck	OlyBond 500	Duro-Tech TPO Fleece	XR Stick; Millennium PG-1, 12-inch o.c. Ribbons	-157.5	A	2	

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**TABLE 4A: LIGHTWEIGHT CONCRETE DECKS - NEW CONSTRUCTION or REROOF (Tear-Off)
SYSTEM TYPE A-1A: BONDED INSULATION, BONDED ROOF COVER**

System No.	Deck (See Note 1)		Insulation/Coverboard Layer		Roof Cover		MDP (psf)	Fire Rating UL790/E108	
	Structural	LWC	Type	Attachment	Membrane	Adhesive		Class	Max Incline (in.)
DURO-TECH TPO FLEECE SYSTEMS:									
LWC-37	Structural concrete	Min. 350 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	(Optional) Min. 1/2-inch Tapered ISO 95+ GL or RESISTA followed by Min. 2.0-inch Duro-Guard ISO Composite-E2	OlyBond 500	Duro-Tech TPO Fleece	XR-BA	-187.5	A B	1/2 1
LWC-38	Structural concrete	Min. 350 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Min. 1.5-inch ISO 95+ GL or RESISTA followed by (Optional) Min. 1/2-inch Tapered ISO 95+ GL or RESISTA followed by Min. 1/2-inch DURO-GUARD ISO HD-E2	OlyBond 500	Duro-Tech TPO Fleece	XR-BA	-187.5	A B	1/2 1
LWC-39	Structural concrete	Min. 350 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Min. 1.5-inch ISO 95+ GL or RESISTA followed by (Optional) Min. 1/2-inch Tapered ISO 95+ GL or RESISTA followed by Min. 1/4-inch DensDeck	OlyBond 500	Duro-Tech TPO Fleece	XR-BA	-187.5	A	4
LWC-40	Structural concrete	Min. 350 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	(Optional) Min. 1/2-inch Tapered ISO 95+ GL or RESISTA followed by Min. 2.0-inch Duro-Guard ISO Composite-E2	Millennium One Step	Duro-Tech TPO Fleece	XR-BA	-217.5	A B	1/2 1
LWC-41	Structural concrete	Min. 350 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Min. 1.5-inch ISO 95+ GL or RESISTA followed by (Optional) Min. 1/2-inch Tapered ISO 95+ GL or RESISTA followed by Min. 1/2-inch DURO-GUARD ISO HD-E2	Millennium One Step	Duro-Tech TPO Fleece	XR-BA	-217.5	A B	1/2 1
LWC-42	Structural concrete	Min. 350 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Min. 1.5-inch ISO 95+ GL or RESISTA followed by (Optional) Min. 1/2-inch Tapered ISO 95+ GL or RESISTA followed by Min. 1/4-inch DensDeck	Millennium One Step	Duro-Tech TPO Fleece	XR-BA	-217.5	A	4

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**TABLE 4B: LIGHTWEIGHT CONCRETE DECKS - NEW CONSTRUCTION, REROOF (Tear-Off), or RECOVER
SYSTEM TYPE B-1: MECHANICALLY ATTACHED ANCHOR SHEET, INSULATION, BONDED ROOF COVER**

System No.	Deck (See Note 1)		Base Sheet Layer		Coverboard Layer		Roof Cover		MDP (psf)	Fire Rating UL790/E108	
	Structural Deck	LWIC	Base Sheet	Attachment	Coverboard	Attachment	Membrane	Adhesive		Class	Max Incline (in.)
LWC-43	Min. 22 ga., type B, Grade 33 vented steel deck at max. 6 ft. spans, 5/8-inch puddle welds at each flute, side laps fastened 18-inch o.c. or min. 2,500 psi structural concrete	(Steel deck is treated with Celcore S-1 prior to placement of LWIC.) Min. 420 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Channel Venting Base or SBS Base	1.8-inch Two Piece Impact Nail attached 9-inch o.c. at the lap and 9-inch o.c. in two equally spaced, staggered rows in the field of the roll	Min. 1.0-inch ISO 95+ GL or RESISTA	Millennium PG-1	Duro-Tech TPO,	UP- BA, LVOC-BA-1168, LVOC-BA, WBBA-P, SA	-37.5	A	1/2
LWC-44	Min. 22 ga., type B, Grade 33 vented steel deck at max. 6 ft. spans, 5/8-inch puddle welds at each flute, side laps fastened 18-inch o.c. or min. 2,500 psi structural concrete	(Steel deck is treated with Celcore S-1 prior to placement of LWIC.) Min. 310 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	SBS Base	1.8-inch Two Piece Impact Nail attached 12-inch o.c. at the lap and 12-inch o.c. in two equally spaced, staggered rows in the field of the roll	Min. 1/2-inch ISO 95+ GL	Millennium PG-1	Duro-Tech TPO,	UP- BA, LVOC-BA-1168, LVOC-BA, WBBA-P, SA	-45.0	A	1/2
LWC-45	Min. 22 ga., type B, Grade 33 vented steel deck at max. 6 ft. spans, 5/8-inch puddle welds at each flute, side laps fastened 18-inch o.c. or min. 2,500 psi structural concrete	(Steel deck is treated with Celcore S-1 prior to placement of LWIC.) Min. 382 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	SBS Base	1.8-inch Two Piece Impact Nail attached 7-inch o.c. at the lap and 7-inch o.c. in two equally spaced, staggered rows in the field of the roll	Min. 1/4-inch SECUROCK Gypsum-Fiber Board	Millennium PG-1	Duro-Tech TPO,	UP- BA, LVOC-BA-1168, LVOC-BA, WBBA-P, SA	-67.5	A	2-1/2

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**TABLE 4B: LIGHTWEIGHT CONCRETE DECKS - NEW CONSTRUCTION, REROOF (Tear-Off), or RECOVER
SYSTEM TYPE B-1: MECHANICALLY ATTACHED ANCHOR SHEET, INSULATION, BONDED ROOF COVER**

System No.	Deck (See Note 1)		Base Sheet Layer		Insulation Layer		Roof Cover		MDP (psf)	Fire Rating UL790/E108	
	Structural Deck	LWIC	Base Sheet	Attachment	Insulation	Attachment	Membrane	Adhesive		Class	Max Incline (in.)
DURO-TECH TPO FLEECE SYSTEMS:											
LWC-46	Min. 22 ga., type B, Grade 33 vented steel deck at max. 6 ft. spans, 5/8-inch puddle welds at each flute, side laps fastened 18-inch o.c. or min. 2,500 psi structural concrete	(Steel deck is treated with Celcore S-1 prior to placement of LWIC.) Min. 420 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Channel Venting Base or SBS Base	1.8-inch Two Piece Impact Nail attached 9-inch o.c. at the lap and 9-inch o.c. in two equally spaced, staggered rows in the field of the roll	Min. 1.0-inch ISO 95+ GL or RESISTA	Millennium PG-1	Duro-Tech TPO Fleece	Millennium PG-1, 12-inch o.c. Ribbons	37.5	A	1/2
LWC-47	Min. 22 ga., type B, Grade 33 vented steel deck at max. 5 ft. spans, 5/8-inch puddle welds at each flute, side laps fastened 12-inch o.c. or min. 2,500 psi structural concrete	Min. 220 psi, min. 2-inch thick Elastizell with Zell-Crete Fibers Lightweight Insulating Concrete with optional 1-inch thick, 1.0 pcf EPS holey board.	SBS Base or SBS PolyBase	1.7-inch LWC Base Ply Fastener attached 9-inch o.c. at the lap and 9-inch o.c. in two equally spaced, staggered rows in the field of the roll	None	NA	Duro-Tech TPO Fleece	Asphalt	-45.0	A B	1 2
LWC-48	Min. 22 ga., type B, Grade 33 vented steel deck at max. 6 ft. spans, 5/8-inch puddle welds at each flute, side laps fastened 18-inch o.c. or min. 2,500 psi structural concrete	(Steel deck is treated with Celcore S-1 prior to placement of LWIC.) Min. 310 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	SBS Base	1.8-inch Two Piece Impact Nail attached 12-inch o.c. at the lap and 12-inch o.c. in two equally spaced, staggered rows in the field of the roll	Min. 1/2-inch ISO 95+ GL	Millennium PG-1	Duro-Tech TPO Fleece	Millennium PG-1, 12-inch o.c. Ribbons	-45.0	A	1/2
LWC-49	Min. 22 ga., type B, Grade 33 vented steel deck at max. 5 ft. spans, 5/8-inch puddle welds at each flute, side laps fastened 18-inch o.c. or min. 2,500 psi structural concrete	(Steel deck is treated with Celcore S-1 prior to placement of LWIC.) Min. 300 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	SBS Base	1.7-inch LWC Base Ply Fastener attached 9-inch o.c. at the lap and 9-inch o.c. in two equally spaced, staggered rows in the field of the roll	None	NA	Duro-Tech TPO Fleece	Millennium PG-1, 12-inch o.c. Ribbons	-52.5	A	1/2
LWC-50	Min. 22 ga., type B, Grade 33 vented steel deck at max. 6 ft. spans, 5/8-inch puddle welds at each flute, side laps fastened 18-inch o.c. or min. 2,500 psi structural concrete	(Steel deck is treated with Celcore S-1 prior to placement of LWIC.) Min. 420 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	MA Base (See Note 12)	1.7-inch LWC Base Ply Fastener attached 7-inch o.c. at the lap and 7-inch o.c. in two equally spaced, staggered rows in the field of the roll	None	N/A	Duro-Tech TPO Fleece	Millennium PG-1, 12-inch o.c. Ribbons	-52.5	A	1/2
LWC-51	Min. 22 ga., type B, Grade 33 vented steel deck at max. 6 ft. spans, 5/8-inch puddle welds at each flute, side laps fastened 18-inch o.c. or min. 2,500 psi structural concrete	(Steel deck is treated with Celcore S-1 prior to placement of LWIC.) Min. 420 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	MA Base (See Note 12)	1.7-inch LWC Base Ply Fastener attached 7-inch o.c. at the lap and 7-inch o.c. in two equally spaced, staggered rows in the field of the roll	None	N/A	Duro-Tech TPO Fleece	Asphalt	-52.5	A B	1 2

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**TABLE 4B: LIGHTWEIGHT CONCRETE DECKS - NEW CONSTRUCTION, REROOF (Tear-Off), or RECOVER
SYSTEM TYPE B-1: MECHANICALLY ATTACHED ANCHOR SHEET, INSULATION, BONDED ROOF COVER**

System No.	Deck (See Note 1)		Base Sheet Layer		Insulation Layer		Roof Cover		MDP (psf)	Fire Rating UL790/E108	
	Structural Deck	LWIC	Base Sheet	Attachment	Insulation	Attachment	Membrane	Adhesive		Class	Max Incline (in.)
DURO-TECH TPO FLEECE SYSTEMS:											
LWC-52	Min. 22 ga., type B, Grade 33 vented steel deck at max. 5 ft. spans, 5/8-inch puddle welds at each flute, side laps fastened 18-inch o.c. or min. 2,500 psi structural concrete	(Steel deck is treated with Celcore S-1 prior to placement of LWIC.) Min. 300 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	SBS PolyBase	1.8-inch Two Piece Impact Nail attached 9-inch o.c. at the lap and 9-inch o.c. in two equally spaced, staggered rows in the field of the roll	None	NA	Duro-Tech TPO Fleece	Millennium PG-1, 12-inch o.c. Ribbons	-60.0	A	1/2
LWC-53	Min. 22 ga., type B, Grade 33 vented steel deck at max. 6 ft. spans, 5/8-inch puddle welds at each flute, side laps fastened 18-inch o.c. or min. 2,500 psi structural concrete	(Steel deck is treated with Celcore S-1 prior to placement of LWIC.) Min. 382 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	SBS Base	1.8-inch Two Piece Impact Nail attached 7-inch o.c. at the lap and 7-inch o.c. in two equally spaced, staggered rows in the field of the roll	Min. 1/4-inch SECUROCK Gypsum-Fiber Board	Millennium PG-1	Duro-Tech TPO Fleece	Millennium PG-1, 12-inch o.c. Ribbons	-67.5	A	2
LWC-54	Min. 22 ga., type B, Grade 33 vented steel deck at max. 6 ft. spans, 5/8-inch puddle welds at each flute, side laps fastened 18-inch o.c. or min. 2,500 psi structural concrete	(Steel deck is treated with Celcore S-1 prior to placement of LWIC.) Min. 382 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	SBS Base	1.8-inch Two Piece Impact Nail attached 7-inch o.c. at the lap and 7-inch o.c. in two equally spaced, staggered rows in the field of the roll	Min. 1/4-inch SECUROCK Gypsum-Fiber Board	Millennium PG-1	Duro-Tech TPO Fleece	Asphalt	-67.5	A B	1 2
LWC-55	Min. 22 ga., type B, Grade 33 vented steel deck at max. 6 ft. spans, 5/8-inch puddle welds at each flute, side laps fastened 18-inch o.c. or min. 2,500 psi structural concrete	(Steel deck is treated with Celcore S-1 prior to placement of LWIC.) Min. 382 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	SBS Base	1.8-inch Two Piece Impact Nail attached 7-inch o.c. at the lap and 7-inch o.c. in two equally spaced, staggered rows in the field of the roll	Min. 1/4-inch SECUROCK Gypsum-Fiber Board	Millennium PG-1	Duro-Tech TPO Fleece	XR BA	-67.5	A	4
LWC-56	Min. 22 ga., type B, Grade 33 vented steel deck at max. 6 ft. spans, 5/8-inch puddle welds at each flute, side laps fastened 18-inch o.c. or min. 2,500 psi structural concrete	(Steel deck is treated with Celcore S-1 prior to placement of LWIC.) Min. 400 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	SBS Base	1.7-inch LWC Base Ply Fastener attached 7-inch o.c. at the lap and 7-inch o.c. in two equally spaced, staggered rows in the field of the roll	None	N/A	Duro-Tech TPO Fleece	Millennium PG-1, 12-inch o.c. Ribbons	-67.5	A	1/2

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**TABLE 4B: LIGHTWEIGHT CONCRETE DECKS - NEW CONSTRUCTION, REROOF (Tear-Off), or RECOVER
SYSTEM TYPE B-1: MECHANICALLY ATTACHED ANCHOR SHEET, INSULATION, BONDED ROOF COVER**

System No.	Deck (See Note 1)		Base Sheet Layer		Insulation Layer		Roof Cover		MDP (psf)	Fire Rating UL790/E108	
	Structural Deck	LWIC	Base Sheet	Attachment	Insulation	Attachment	Membrane	Adhesive		Class	Max Incline (in.)
DURO-TECH TPO FLEECE SYSTEMS:											
LWC-57	Min. 22 ga., type B, Grade 33 vented steel deck at max. 6 ft. spans, 5/8-inch puddle welds at each flute, side laps fastened 18-inch o.c. or min. 2,500 psi structural concrete	(Steel deck is treated with Celcore S-1 prior to placement of LWIC.) Min. 400 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	SBS Base	1.7-inch LWC Base Ply Fastener attached 7-inch o.c. at the lap and 7-inch o.c. in two equally spaced, staggered rows in the field of the roll	None	N/A	Duro-Tech TPO Fleece	Asphalt	-67.5	A B	1 2
LWC-58	Min. 22 ga., type B, Grade 33 vented steel deck at max. 6 ft. spans, 5/8-inch puddle welds at each flute, side laps fastened 18-inch o.c. or min. 2,500 psi structural concrete	(Steel deck is treated with Celcore S-1 prior to placement of LWIC.) Min. 400 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Channel Venting Base	1.8-inch LWC Base Ply Fastener attached 7-inch o.c. at the lap and 7-inch o.c. in two equally spaced, staggered rows in the field of the roll	None	N/A	Duro-Tech TPO Fleece	Millennium PG-1, 12-inch o.c. Ribbons	-75.0	A	1/2

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**TABLE 4C: LIGHTWEIGHT CONCRETE DECKS - NEW CONSTRUCTION, REROOF (Tear-Off), or RECOVER
SYSTEM TYPE C-2: PLATE BONDED ROOF COVER**

System No.	Deck (See Note 1)		Attachment			MDP (psf)	Fire Rating UL790/E108	
	Structural Deck	LWIC	Fasteners	Density/Pattern	Roof Cover		Class	Max Incline (in.)
LWC-59	Min. 22 ga., type B, Grade 33 vented steel deck at max. 6 ft. spans, Hilti Inc. X-EDN 19 THQ12, X-EDNK 22 THQ12, or X-ENP-19L15 fastener at each flute, side laps fastened with Hilti Inc. S-SLC 01 M HWH fasteners at 12-inch o.c.	Min. 200 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Duro-Last Heavy Duty Fasteners	Plates fastened 18-inch o.c. in rows spaced 60-inch o.c.	See Note 10A	-30.0	A	1
LWC-60	Min. 22 ga., type B, Grade 33 vented steel deck at max. 6 ft. spans, Hilti Inc. X-EDN 19 THQ12, X-EDNK 22 THQ12, or X-ENP-19L15 fastener at each flute, side laps fastened with Hilti Inc. S-SLC 01 M HWH fasteners at 12-inch o.c.	Min. 200 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Duro-Last Heavy Duty Fasteners	Plates fastened at a rate of 1 fastener per 5.33 ft. ² (6 per 4-ft. x 8-ft. area)	See Note 10A	-45.0	A	1
LWC-61	Min. 22 ga., type B, Grade 33 vented steel deck at max. 6 ft. spans, Hilti Inc. X-EDN 19 THQ12, X-EDNK 22 THQ12, or X-ENP-19L15 fastener at each flute, side laps fastened with Hilti Inc. S-SLC 01 M HWH fasteners at 12-inch o.c.	Min. 200 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Duro-Last Heavy Duty Fasteners	Plates fastened at a rate of 1 fastener per 4.0 ft. ² (8 per 4-ft. x 8-ft. area)	See Note 10A	-60.0	A	1
LWC-62	Min. 22 ga., type B, Grade 33 vented steel deck at max. 6 ft. spans, Hilti Inc. X-EDN 19 THQ12, X-EDNK 22 THQ12, or X-ENP-19L15 fastener at each flute, side laps fastened with Hilti Inc. S-SLC 01 M HWH fasteners at 12-inch o.c.	Min. 200 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Duro-Last Heavy Duty Fasteners	Plates fastened at a rate of 1 fastener per 2.67 ft. ² (12 per 4-ft. x 8-ft. area)	See Note 10A	-75.0	A	1
LWC-63	Min. 22 ga., type B, Grade 33 vented steel deck at max. 6 ft. spans, Hilti Inc. X-EDN 19 THQ12, X-EDNK 22 THQ12, or X-ENP-19L15 fastener at each flute, side laps fastened with Hilti Inc. S-SLC 01 M HWH fasteners at 12-inch o.c.	Min. 200 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Duro-Last Heavy Duty Fasteners	Plates fastened 18-inch o.c. in rows spaced 60-inch o.c.	See Note 10A	-75.0	A	1

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**TABLE 4D-1: STEEL or CONCRETE DECKS - NEW CONSTRUCTION or REROOF (Tear-Off) or RECOVER
SYSTEM TYPE D-1A: INSULATED, MECHANICALLY ATTACHED ROOF COVER (STRESS PLATES)**

System No.	Deck (See Note 1)		Roof Cover			MDP (psf)	Fire Rating UL790/E108	
	Structural Deck	LWIC	Membrane	Fasteners	Attachment		Class	Max Incline (in.)
LWC-64	Min. 22 ga., type B, Grade 33 vented steel deck at max. 6 ft. spans, Hilti Inc. X-EDN 19 THQ12, X-EDNK 22 THQ12, or X-ENP-19L15 fastener at each flute, side laps fastened with Hilti Inc. S-SLC 01 M HWH fasteners at 12-inch o.c.	Min. 200 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Duro-Tech TPO Fleece	Duro-Last Heavy Duty Fasteners with Duro-Last HD Seam Plates	Fastened 12-inch o.c. within 6-inch wide laps spaced 114-inch o.c. Laps sealed with 1.5-inch heat weld.	-30.0	A	1
LWC-65	Min. 22 ga., type B, Grade 33 vented steel deck at max. 6 ft. spans, Hilti Inc. X-EDN 19 THQ12, X-EDNK 22 THQ12, or X-ENP-19L15 fastener at each flute, side laps fastened with Hilti Inc. S-SLC 01 M HWH fasteners at 12-inch o.c.	Min. 200 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Duro-Tech TPO Fleece	Duro-Last Heavy Duty Fasteners with Duro-Last HD Seam Plates	Fastened 6-inch o.c. within 6-inch wide laps spaced 114-inch o.c. Laps sealed with 1.5-inch heat weld.	-45.0	A	1
LWC-66	Min. 22 ga., type B, Grade 33 vented steel deck at max. 6 ft. spans, 5/8-inch puddle welds at each flute, side laps fastened 18-inch o.c. or min. 2,500 psi structural concrete	(Steel deck is treated with Celcore S-1 prior to placement of LWIC.) Min. 380 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Min. 60 mil Duro-Tech TPO	Duro-Last Heavy Duty Fasteners or Concrete Drive (concrete only) with Duro-Last HD Seam Plates	Fastened 12-inch o.c. within 6-inch wide laps spaced 90-inch o.c. Laps sealed with 1.5-inch heat weld.	-45.0	A	1
LWC-67	Min. 22 ga., type B, Grade 33 vented steel deck at max. 6 ft. spans, 5/8-inch puddle welds at each flute, side laps fastened 18-inch o.c. or min. 2,500 psi structural concrete	(Steel deck is treated with Celcore S-1 prior to placement of LWIC.) Min. 380 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Min. 60 mil Duro-Tech TPO	Duro-Last Heavy Duty Fasteners or Concrete Drive (concrete only) with Duro-Last HD Seam Plates	Fastened 12-inch o.c. within 6-inch wide laps spaced 114-inch o.c. Laps sealed with 1.5-inch heat weld.	-45.0	A	1
LWC-68	Min. 22 ga., type B, Grade 33 vented steel deck at max. 5 ft. spans attached with one fastener at each flute and 12-o.c. at side laps or min. 2,500 psi structural concrete	Min. 300 psi, min. 2-inch thick Approved cellular LWIC with optional 1-inch thick, 1.0 pcf EPS holey board.	Duro-Tech TPO	Duro-Last Heavy Duty Fasteners or Concrete Drive (concrete only) with Duro-Last HD Seam Plates	Fastened 6-inch o.c. within 6-inch wide laps spaced 114-inch o.c. Laps sealed with 1.5-inch heat weld	-52.5	A	1
LWC-69	Min. 22 ga., type B, Grade 33 vented steel deck at max. 6 ft. spans, 5/8-inch puddle welds at each flute, side laps fastened 18-inch o.c. or min. 2,500 psi structural concrete	(Steel deck is treated with Celcore S-1 prior to placement of LWIC.) Min. 380 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Min. 60 mil Duro-Tech TPO	Duro-Last Heavy Duty Fasteners or Concrete Drive (concrete only) with Duro-Last HD Seam Plates	Fastened 6-inch o.c. within 6-inch wide laps spaced 90-inch o.c. Laps sealed with 1.5-inch heat weld.	-52.5	A	1

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**TABLE 4D-1: STEEL or CONCRETE DECKS - NEW CONSTRUCTION or REROOF (Tear-Off) or RECOVER
SYSTEM TYPE D-1A: INSULATED, MECHANICALLY ATTACHED ROOF COVER (STRESS PLATES)**

System No.	Deck (See Note 1)		Roof Cover			MDP (psf)	Fire Rating UL790/E108	
	Structural Deck	LWIC	Membrane	Fasteners	Attachment		Class	Max Incline (in.)
LWC-70	Min. 22 ga., type B, Grade 33 vented steel deck at max. 6 ft. spans, 5/8-inch puddle welds at each flute, side laps fastened 18-inch o.c. or min. 2,500 psi structural concrete	(Steel deck is treated with Celcore S-1 prior to placement of LWIC.) Min. 380 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Min. 60 mil Duro-Tech TPO	Duro-Last Heavy Duty Fasteners or Concrete Drive (concrete only) with Duro-Last HD Seam Plates	Fastened 6-inch o.c. within 6-inch wide laps spaced 142-inch o.c. Laps sealed with 1.5-inch heat weld.	-52.5	A	1
LWC-71	Min. 22 ga., type B, Grade 33 vented steel deck at max. 6 ft. spans, 5/8-inch puddle welds at each flute, side laps fastened 18-inch o.c. or min. 2,500 psi structural concrete	(Steel deck is treated with Celcore S-1 prior to placement of LWIC.) Min. 380 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Min. 60 mil Duro-Tech TPO	Duro-Last Heavy Duty Fasteners or Concrete Drive (concrete only) with Duro-Last HD Seam Plates	Fastened 6-inch o.c. within 6-inch wide laps spaced 114-inch o.c. Laps sealed with 1.5-inch heat weld.	-67.5	A	1
LWC-72	Min. 22 ga., type B, Grade 33 vented steel deck at max. 6 ft. spans, Hilti Inc. X-EDN 19 THQ12, X-EDNK 22 THQ12, or X-ENP-19L15 fastener at each flute, side laps fastened with Hilti Inc. S-SLC 01 M HWH fasteners at 12-inch o.c.	Min. 200 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Duro-Tech TPO Fleece	Duro-Last Heavy Duty Plus Fasteners with Duro-Last HD Plus Seam Plates	Fastened 6-inch o.c. within 6-inch wide laps spaced 114-inch o.c. Laps sealed with 1.5-inch heat weld.	-67.5	A	1

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**TABLE 4D-2: STEEL or CONCRETE DECKS - NEW CONSTRUCTION or REROOF (Tear-Off) or RECOVER
SYSTEM TYPE D-1B: INSULATED, MECHANICALLY ATTACHED ROOF COVER (BATTENS)**

System No.	Deck (See Note 1)		Roof Cover			MDP (psf)	Fire Rating UL790/E108	
	Structural Deck	LWIC	Membrane	Fasteners	Attachment		Class	Max Incline (in.)
LWC-73	Min. 22 ga., type B, Grade 33 vented steel deck at max. 6 ft. spans, Hilti Inc. X-EDN 19 THQ12, X-EDNK 22 THQ12, or X-ENP-19L15 fastener at each flute, side laps fastened with Hilti Inc. S-SLC 01 M HWH fasteners at 12-inch o.c.	Min. 200 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Duro-Tech TPO	Duro-Last Heavy Duty Fasteners with Duro-Last 3/4-inch Polymer Batten Strips	Fastened 6-inch o.c. through batten strip within 6-inch wide laps spaced 90-inch o.c. Laps sealed with 5-inch heat weld that encapsulates batten.	-67.5	A	1
LWC-74	Min. 22 ga., type B, Grade 33 vented steel deck at max. 6 ft. spans, 5/8-inch puddle welds at each flute, side laps fastened 18-inch o.c. or min. 2,500 psi structural concrete	(Steel deck is treated with Celcore S-1 prior to placement of LWIC.) Min. 380 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Duro-Tech TPO	Duro-Last Heavy Duty Fasteners with Duro-Last Coiled Metal Batten Strips	Fastened 6-inch o.c. through batten strip within 6-inch wide laps spaced 142-inch o.c. Laps sealed with 5.5-inch heat weld that encapsulates batten.	-67.5	A	1
LWC-75	Min. 22 ga., type B, Grade 33 vented steel deck at max. 6 ft. spans, Hilti Inc. X-EDN 19 THQ12, X-EDNK 22 THQ12, or X-ENP-19L15 fastener at each flute, side laps fastened with Hilti Inc. S-SLC 01 M HWH fasteners at 12-inch o.c.	Min. 200 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Duro-Tech TPO	Duro-Last Heavy Duty Plus Fasteners with Duro-Last 1.0-inch Metal Batten Bar	Fastened 6-inch o.c. through batten strip within 6-inch wide laps spaced 90-inch o.c. Laps sealed with 5-inch heat weld that encapsulates batten.	-82.5	A	1
LWC-76	Min. 22 ga., type B, Grade 33 vented steel deck at max. 6 ft. spans attached with one fastener at each flute and 12-o.c., fastener with 0.75-inch O.D. flat washer at side laps or min. 2,500 psi structural concrete	Min. 200 psi, min. 2-inch thick Approved cellular LWIC with optional 1-inch thick, 1.0 pcf EPS holey board.	Duro-Tech TPO	Duro-Last Heavy Duty Fasteners or Concrete Drive (concrete only) with Duro-Last 3/4-inch Polymer Batten Strips	Fastened 6-inch o.c. through batten strip within 6-inch wide laps spaced 48-inch o.c. Batten Strips covered with 6.0-inch Duro-Tech TPO Cover Strip sealed on both sides with 1.5-inch heat weld.	-97.5	A	1
LWC-77	Min. 22 ga., type B, Grade 33 vented steel deck at max. 6 ft. spans attached with one fastener at each flute and 12-o.c., fastener with 0.75-inch O.D. flat washer at side laps or min. 2,500 psi structural concrete	Min. 200 psi, min. 2-inch thick Approved cellular LWIC with optional 1-inch thick, 1.0 pcf EPS holey board.	Duro-Tech TPO Fleece	Duro-Last Heavy Duty Fasteners or Concrete Drive (concrete only) with Duro-Last 3/4-inch Polymer Batten Strips	Fastened 6-inch o.c. through batten strip within 6-inch wide laps spaced 48-inch o.c. Batten Strips covered with 6.0-inch Duro-Tech TPO Cover Strip sealed on both sides with 1.5-inch heat weld.	-112.5	A	1

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**TABLE 4F: LIGHTWEIGHT CONCRETE DECKS - NEW CONSTRUCTION or REROOF (Tear-Off)
SYSTEM TYPE F: NON-INSULATED, BONDED ROOF COVER**

System No.	Deck (See Note 1)		Roof Cover	Adhesive	MDP (psf)	Fire Rating UL790/E108	
	Structural Deck	LWC				Class	Max Incline (in.)
LWC-78	Min. 22 ga., type B, Grade 33 vented steel deck at max. 5 ft. spans or min. 2,500 psi structural concrete	Min. 200 psi, min. 2-inch thick Approved cellular LWIC with optional 1-inch thick, 1.0 pcf EPS holey board.	Duro-Tech TPO	UP-BA	-67.5	A	2-1/2
LWC-79	Min. 22 ga., type B, Grade 33 vented steel deck at max. 6 ft. spans.	Steel deck is treated with Celcore S-1 prior to placement of LWIC. Min. 350 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Duro-Tech TPO	UP-BA	-67.5	A	2-1/2
LWC-80	Min. 22 ga., type B, Grade 33 vented steel deck at max. 6 ft. spans.	Steel deck is treated with Celcore S-1 prior to placement of LWIC. Min. 360 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Duro-Tech TPO	UP-BA	-82.5	A	2-1/2
LWC-81	Min. 2,500 psi structural concrete	Min. 200 psi, min. 2-inch thick Approved cellular LWIC with optional 1-inch thick, 1.0 pcf EPS holey board. <i>Note: To qualify the LWIC under this assembly, a 1.7-inch LWC Base-Ply Fastener shall achieve a MCRF of 36.7 lbf when tested per TAS 105 or SPRI FX-1.</i>	Duro-Tech TPO	UP-BA	-106.5	A	2-1/2
LWC-82	Min. 2,500 psi structural concrete	Min. 200 psi, min. 2-inch thick Elastizell with Zell-Crete Fibers Lightweight Insulating Concrete with optional 1-inch thick, 1.0 pcf EPS holey board.	Duro-Tech TPO	UP-BA	-115.0	A	2-1/2
LWC-83	Min. 2,500 psi structural concrete	(Optional – SBS Glass Torch Base torch adhered for a vapor barrier) Min. 300 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Duro-Tech TPO	UP-BA	-133.5	A	2-1/2
LWC-84	Min. 22 ga., type B, Grade 33 vented steel deck at max. 5 ft. spans or min. 2,500 psi structural concrete	Min. 200 psi, min. 2-inch thick Approved cellular LWIC with optional 1-inch thick, 1.0 pcf EPS holey board. When walkable, LWC is mechanically attached with Duro-Last Insulation Fastening Plates with Duro-Last HD Fasteners at a density of 1 per 2 ft. ² .	Duro-Tech TPO	UP-BA	-135.0	A	2-1/2
LWC-85	Min. 22 ga., type B, Grade 33 vented steel deck at max. 5 ft. spans	Steel deck is treated with Celcore S-1 prior to placement of LWIC. Min. 390 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Duro-Tech TPO	UP-BA	-140.0	A	2-1/2
LWC-86	Tectum	Min. 300 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Duro-Tech TPO	UP-BA	-155	A	2-1/2

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TABLE 4F: LIGHTWEIGHT CONCRETE DECKS - NEW CONSTRUCTION or REROOF (Tear-Off)
SYSTEM TYPE F: NON-INSULATED, BONDED ROOF COVER

System No.	Deck (See Note 1)		Roof Cover	Adhesive	MDP (psf)	Fire Rating UL790/E108	
	Structural Deck	LWC				Class	Max Incline (in.)
LWC-87	Min. 2,500 psi structural concrete	Min. 200 psi, min. 2-inch thick Elastizell with Zell-Crete Fibers Lightweight Insulating Concrete with optional 1-inch thick, 1.0 pcf EPS holey board.	Duro-Tech TPO	LVOC-BA	-157.5	A	2-1/2
LWC-88	Min. 2,500 psi structural concrete	Min. 350 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Duro-Tech TPO	UP-BA	-247.5	A	2-1/2
LWC-89	Min. 2,500 psi structural concrete	Min. 360 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Duro-Tech TPO	UP-BA	-385.0	A	2-1/2
LWC-90	Min. 2,500 psi structural concrete	(SBS Glass Torch Base torch adhered for a vapor barrier) Min. 300 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Duro-Tech TPO	UP-BA	-455.0	A	2-1/2

TABLE 4F: LIGHTWEIGHT CONCRETE DECKS - NEW CONSTRUCTION or REROOF (Tear-Off)
SYSTEM TYPE F: NON-INSULATED, BONDED ROOF COVER

System No.	Deck (See Note 1)		Roof Cover	Adhesive	MDP (psf)	Fire Rating UL790/E108	
	Structural Deck	LWIC				Class	Max Incline (in.)
DURO-TECH TPO FLEECE SYSTEMS:							
LWC-91	Min. 22 ga., type B, Grade 33 vented steel deck at max. 6 ft. spans welded 6-inch o.c. with 3/8-inch welding washers and two Traxx/1 screws at side lap even between spans	Min. 250 psi, min. 2-inch thick Elastizell Range II Lightweight Insulating Concrete with optional 1-inch thick, 1.0 pcf EPS holey board.	Duro-Tech TPO Fleece	XR-BA	-37.5	A	1
LWC-92	Min. 22 ga., type B, Grade 33 vented steel deck at max. 6 ft. spans or min. 2,500 psi structural concrete	Min. 200 psi, min. 2-inch thick Celcore cellular LWIC with optional 1-inch thick, 1.0 pcf EPS holey board.	Duro-Tech TPO Fleece	XR-BA	-45.0	A	1
LWC-93	Min. 22 ga., type B, Grade 33 vented steel deck at max. 6 ft. spans	Deck is treated with Celcore S-1 prior to placement of LWIC. Min. 310 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Duro-Tech TPO Fleece	XR Stick; Millennium PG-1, 12-inch o.c. Ribbons	-45.0	A	1/2
LWC-94	Min. 22 ga., type B, Grade 33 vented steel deck at max. 6 ft. spans	Deck is treated with Celcore S-1 prior to placement of LWIC. Min. 310 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Duro-Tech TPO Fleece	XR-BA	-45.0	A	1
LWC-95	Min. 22 ga., type B, Grade 33 vented steel deck at max. 6 ft. spans welded 6-inch o.c. with 3/8-inch welding washers and two Traxx/1 screws at side lap even between spans	Min. 350 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Duro-Tech TPO Fleece	XR-BA	-52.5	A	1

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TABLE 4F: LIGHTWEIGHT CONCRETE DECKS - NEW CONSTRUCTION or REROOF (Tear-Off)								
SYSTEM TYPE F: NON-INSULATED, BONDED ROOF COVER								
System No.	Deck (See Note 1)		Roof Cover	Adhesive	MDP (psf)	Fire Rating UL790/E108		
	Structural Deck	LWIC				Class	Max Incline (in.)	
DURO-TECH TPO FLEECE SYSTEMS:								
LWC-96	Min. 22 ga., type B, Grade 33 vented steel deck at max. 6 ft. spans attached 6-inch o.c. with Traxx/5 screws and one Traxx/1 screw at side lap midspan	Min. 350 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Duro-Tech TPO Fleece	XR-BA	-60.0	A	1	
LWC-97	Min. 22 ga., type B, Grade 33 vented steel deck at max. 6 ft. spans	Min. 360 psi, min. 2-inch thick Approved cellular LWIC with optional 1-inch thick, 1.0 pcf EPS holey board. <i>Note: To qualify the LWIC under this assembly, a 1.7-inch LWC Base-Ply Fastener shall achieve a MCRF of 176 lbf when tested per TAS 105 or SPRI FX-1.</i> Polymer batten strips spaced 18-inch o.c. fastened through LWIC to B-deck with Duro-Last HD fasteners, 12-inch o.c.	Duro-Tech TPO Fleece	XR-BA	-60.0	A	1	
LWC-98	Min. 22 ga., type B, Grade 33 vented steel deck at max. 6 ft. spans	Min. 300 psi, min. 2-inch thick Elastizell with Zell-Crete Fibers Lightweight Insulating Concrete with optional 1-inch thick, 1.0 pcf EPS holey board.	Duro-Tech TPO Fleece	XR Stick; Millennium PG-1, 12-inch o.c. Ribbons	-60.0	A	1/2	
LWC-99	Min. 22 ga., type B, Grade 33 vented steel deck at max. 6 ft. spans	Min. 300 psi, min. 2-inch thick Elastizell with Zell-Crete Fibers Lightweight Insulating Concrete with optional 1-inch thick, 1.0 pcf EPS holey board.	Duro-Tech TPO Fleece	Asphalt; XR-BA	-60.0	A	1	
LWC-100	Min. 22 ga., type B, Grade 33 vented steel deck at max. 6 ft. spans.	Steel deck is treated with Celcore S-1 prior to placement of LWIC. Min. 300 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound. LWIC coated with Celcore SBS.	Duro-Tech TPO Fleece	Millennium PG-1, 12-inch o.c. Ribbons	-67.5	A	1/2	
LWC-101	Min. 22 ga., type B, Grade 33 vented steel deck at max. 6 ft. spans or min. 2,500 psi structural concrete	Min. 250 psi, min. 2-inch thick Approved cellular LWIC with optional 1-inch thick, 1.0 pcf EPS holey board. When walkable, LWC is mechanically attached with Duro-Last Insulation Fastening Plates with Duro-Last HD Fasteners at a density of 1 per 2 ft. ² . <i>Note: To qualify the LWIC under this assembly, an ES Products FM-90 Fastener shall achieve a MCRF of 100 lbf when tested per TAS 105 or SPRI FX-1.</i>	Duro-Tech TPO Fleece	XR-BA	-75.0	A	1	
LWC-102	Min. 22 ga., type B, Grade 33 vented steel deck at max. 6 ft. spans	Min. 300 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound. Polymer batten strips spaced 18-inch o.c. fastened through LWIC to B-deck with Duro-Last HD fasteners, 12-inch o.c.	Duro-Tech TPO Fleece	XR-BA	-75.0	A	1	
LWC-103	Min. 2,500 psi structural concrete	Min. 350 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Duro-Tech TPO Fleece	XR-BA	-75.0	A	1	
LWC-104	Min. 22 ga., type B, Grade 33 vented steel deck at max. 6 ft. spans welded 6-inch o.c. with 3/8-inch welding washers and two Traxx/1 screws at side lap even between spans	Min. 250 psi, min. 2-inch thick Elastizell Range II Lightweight Insulating Concrete with optional 1-inch thick, 1.0 pcf EPS holey board. When walkable, LWC is mechanically attached with Duro-Last Insulation Fastening Plates with Duro-Last HD Fasteners at a density of 1 per 2 ft. ²	Duro-Tech TPO Fleece	XR-BA	-82.5	A	1	

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**TABLE 4F: LIGHTWEIGHT CONCRETE DECKS - NEW CONSTRUCTION or REROOF (Tear-Off)
SYSTEM TYPE F: NON-INSULATED, BONDED ROOF COVER**

System No.	Deck (See Note 1)		Roof Cover	Adhesive	MDP (psf)	Fire Rating UL790/E108	
	Structural Deck	LWIC				Class	Max Incline (in.)
DURO-TECH TPO FLEECE SYSTEMS:							
LWC-105	Min. 22 ga., type B, Grade 33 vented steel deck at max. 5 ft. spans attached 6-inch o.c. with Traxx/5 screws and one Traxx/1 screw at side lap midspan	Min. 350 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Duro-Tech TPO Fleece	XR-BA	-82.5	A	1
LWC-106	Min. 22 ga., type B, Grade 33 vented steel deck at max. 6 ft. spans or min. 2,500 psi structural concrete	Min. 200 psi, min. 2-inch thick Celcore cellular LWIC with optional 1-inch thick, 1.0 pcf EPS holey board. When walkable, LWC is mechanically attached with Duro-Last Insulation Fastening Plates with Duro-Last HD Fasteners at a density of 1 per 2 ft. ² .	Duro-Tech TPO Fleece	XR-BA	-90.0	A	1
LWC-107	Min. 2,500 psi structural concrete	Min. 250 psi, min. 2-inch thick Elastizell Range II Lightweight Insulating Concrete with 1-inch thick, 1.0 pcf EPS holey board.	Duro-Tech TPO Fleece	XR-BA	-90.0	A	1
LWC-108	Min. 2,500 psi structural concrete	Min. 350 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Duro-Tech TPO Fleece	XR-BA	-90.0	A	1
LWC-109	Min. 22 ga., type B, Grade 33 vented steel deck at max. 4 ft. spans attached 6-inch o.c. with Traxx/5 screws and one Traxx/1 screw at side lap midspan	Min. 350 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Duro-Tech TPO Fleece	XR-BA	-90.0	A	1
LWC-110	Min. 22 ga., type B, Grade 33 vented steel deck at max. 6 ft. spans welded 6- inch o.c. with 3/8-inch welding washers and two Traxx/1 screws at side lap even between spans	Min. 350 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound. When walkable, LWC is mechanically attached with Duro-Last Insulation Fastening Plates with Duro-Last HD Fasteners at a density of 1 per 2 ft. ² .	Duro-Tech TPO Fleece	XR-BA	-90.0	A	1
LWC-111	Min. 22 ga., type B, Grade 33 vented steel deck at max. 6 ft. spans.	Deck is treated with Celcore S-1 prior to placement of LWIC. Min. 380 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound. LWIC coated with Celcore SBS.	Duro-Tech TPO Fleece	Millennium PG-1; 4-inch o.c. Ribbons	-90.0	A	1/2
LWC-112	Min. 2,500 psi structural concrete	Min. 200 psi, min. 2-inch thick Elastizell with Zell-Crete Fibers Lightweight Insulating Concrete with optional 1-inch thick, 1.0 pcf EPS holey board.	Duro-Tech TPO Fleece	XR Stick; Millennium PG-1, 12-inch o.c. Ribbons	-122.5	A	1/2
LWC-113	Min. 2,500 psi structural concrete	Min. 200 psi, min. 2-inch thick Elastizell with Zell-Crete Fibers Lightweight Insulating Concrete with optional 1-inch thick, 1.0 pcf EPS holey board.	Duro-Tech TPO Fleece	Asphalt; XR-BA	-122.5	A	1
LWC-114	Min. 22 ga., type B, Grade 33 vented steel deck at max. 5 ft. spans	Steel deck is treated with Celcore S-1 prior to placement of LWIC. Min. 390 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Duro-Tech TPO Fleece	XR Stick; Millennium PG-1, 12-inch o.c. Ribbons	-135.0	A	1/2
LWC-115	Min. 22 ga., type B, Grade 33 vented steel deck at max. 5 ft. spans	Steel deck is treated with Celcore S-1 prior to placement of LWIC. Min. 390 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Duro-Tech TPO Fleece	XR-BA	-135.0	A	1

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TABLE 4F: LIGHTWEIGHT CONCRETE DECKS - NEW CONSTRUCTION or REROOF (Tear-Off)							
SYSTEM TYPE F: NON-INSULATED, BONDED ROOF COVER							
System No.	Deck (See Note 1)		Roof Cover	Adhesive	MDP (psf)	Fire Rating UL790/E108	
	Structural Deck	LWIC				Class	Max Incline (in.)
DURO-TECH TPO FLEECE SYSTEMS:							
LWC-116	Min. 2,500 psi structural concrete	Min. 300 psi, min. 2-inch thick Elastizell with Zell-Crete Fibers Lightweight Insulating Concrete with optional 1-inch thick, 1.0 pcf EPS holey board.	Duro-Tech TPO Fleece	Asphalt; XR-BA	-136.0	A	1
LWC-117	Min. 2,500 psi structural concrete	Min. 300 psi, min. 2-inch thick Elastizell with Zell-Crete Fibers Lightweight Insulating Concrete with optional 1-inch thick, 1.0 pcf EPS holey board.	Duro-Tech TPO Fleece	XR Stick; Millennium PG-1, 12-inch o.c. Ribbons	-136.0	A	1/2
LWC-118	Min. 2,500 psi structural concrete	Min. 300 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Duro-Tech TPO Fleece	Asphalt; XR-BA	-144.5	A	1
LWC-119	Min. 2,500 psi structural concrete	Min. 300 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Duro-Tech TPO Fleece	XR Stick; Millennium PG-1, 12-inch o.c. Ribbons	-144.5	A	1/2
LWC-120	Tectum	Min. 300 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Duro-Tech TPO Fleece	XR Stick; Millennium PG-1, 12-inch o.c. Ribbons	-160.0	A	1/2
LWC-121	Tectum	Min. 300 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Duro-Tech TPO Fleece	Asphalt; XR-BA	-160.0	A	1
LWC-122	Min. 2,500 psi structural concrete	Min. 250 psi, min. 2-inch thick Elastizell Range II Lightweight Insulating Concrete. No EPS holey board.	Duro-Tech TPO Fleece	XR-BA	-210.0	A	1
LWC-123	Min. 2,500 psi structural concrete	(SBS Glass Torch Base torch adhered for a vapor barrier) Min. 300 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Duro-Tech TPO Fleece	Asphalt; XR-BA	-350.0	A	1
LWC-124	Min. 2,500 psi structural concrete	(SBS Glass Torch Base torch adhered for a vapor barrier) Min. 300 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Duro-Tech TPO Fleece	XR Stick; Millennium PG-1, 12-inch o.c. Ribbons	-350.0	A	1/2
LWC-125	Min. 2,500 psi structural concrete	Deck is treated with Celcore S-1. Min. 350 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Duro-Tech TPO Fleece	XR Stick; Millennium PG-1, 12-inch o.c. Ribbons	-397.5	A	1/2
LWC-126	Min. 2,500 psi structural concrete	Deck is treated with Celcore S-1. Min. 350 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Duro-Tech TPO Fleece	Asphalt; XR-BA	-397.5	A	1

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TABLE 4F: LIGHTWEIGHT CONCRETE DECKS - NEW CONSTRUCTION or REROOF (Tear-Off)							
SYSTEM TYPE F: NON-INSULATED, BONDED ROOF COVER							
System No.	Deck (See Note 1)		Roof Cover	Adhesive	MDP (psf)	Fire Rating UL790/E108	
	Structural Deck	LWIC				Class	Max Incline (in.)
DURO-TECH TPO FLEECE SYSTEMS:							
LWC-127	Min. 2,500 psi structural concrete	Min. 250 psi, min. 2-inch thick Approved cellular LWIC. <i>Note: To qualify the LWIC under this assembly, an ES Products FM-90 Fastener shall achieve a MCRF of 95 lbf when tested per TAS 105 or SPRI FX-1.</i>	Duro-Tech TPO Fleece	XR-BA	-467.5	A	1

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**TABLE 5A: CEMENTITIOUS WOOD FIBER DECKS - NEW CONSTRUCTION or REROOF (Tear-Off)
SYSTEM TYPE A-1A: BONDED INSULATION, BONDED ROOF COVER**

System No.	Deck (See Note 1)	Base Insulation Layer		Top Insulation Layer		Roof Cover	Adhesive	MDP (psf)	Fire Rating UL790/E108	
		Type	Attach	Type	Attach				Class	Max Incline (in.)
CWF-1	Tectum	Min. 1.5-inch ISO 95+ GL	OlyBond 500	(Optional) Min. ¼-inch DensDeck or DensDeck Prime	OlyBond 500	Duro-Tech TPO,	UP-BA, SA	-45.0	A	2-½
CWF-2	Tectum	Min. 1.5-inch ISO 95+ GL	OlyBond 500	(Optional) Min. ¼-inch DensDeck Prime	OlyBond 500	Duro-Tech TPO	LVOC-BA- 1168	-45.0	A	¼
CWF-3	Tectum	Min. 1.0-inch ISO 95+ GL	Millennium One Step; Millennium PG-1	None	None	Duro-Tech TPO,	UP-BA, LVOC-BA-1168, WBBA-P, SA	-75.0	A	¼
CWF-4	Tectum	Min. ½-inch ISO 95+ GL	Millennium One Step; Millennium PG-1	Min. ½-inch ISO 95+ GL	Millennium One Step; Millennium PG-1	Duro-Tech TPO,	UP-BA, LVOC-BA, LVOC-BA-1168, WBBA-P, SA	-92.5	A	¼
CWF-5	Tectum	Min. ½-inch ISO 95+ GL	INSTA STIK Quik Set; 6-inch o.c. Ribbons	None	None	Duro-Tech TPO,	UP-BA, LVOC-BA, LVOC-BA-1168, WBBA-P, SA	-142.5	A	¼
CWF-6	Tectum	Min. ½-inch ISO 95+ GL	INSTA STIK Quik Set; 6-inch o.c. Ribbons	Min. ¼-inch DensDeck Prime	INSTA STIK Quik Set; 6-inch o.c. Ribbons	Duro-Tech TPO,	UP-BA, LVOC-BA, LVOC-BA-1168, WBBA-P, SA	-160.0	A	2-½
DURO-TECH TPO FLEECE SYSTEMS:										
CWF-7	Tectum	Min. 1.0-inch ISO 95+ GL	Millennium One Step; Millennium PG-1	None	None	Duro-Tech TPO Fleece	Asphalt; XR-BA; XR Stick, Millennium PG-1 12-inch o.c. Ribbons	-75.0	A	¼
CWF-8	Tectum	Min. ½-inch ISO 95+ GL	Millennium One Step; Millennium PG-1	Min. ½-inch ISO 95+ GL	Millennium One Step; Millennium PG-1	Duro-Tech TPO Fleece	Asphalt; XR-BA; XR Stick, Millennium PG-1 12-inch o.c. Ribbons	-92.5	A	¼
CWF-9	Tectum	Min. ½-inch ISO 95+ GL	INSTA STIK Quik Set; 6-inch o.c. Ribbons	None	None	Duro-Tech TPO Fleece	XR Stick; Millennium PG-1 12-inch o.c. Ribbons	-142.5	A	¼
CWF-10	Tectum	Min. ½-inch ISO 95+ GL	INSTA STIK Quik Set; 6-inch o.c. Ribbons	Min. ¼-inch DensDeck Prime	INSTA STIK Quik Set; 6-inch o.c. Ribbons	Duro-Tech TPO Fleece	Asphalt; XR-BA; XR Stick, Millennium PG-1 12-inch o.c. Ribbons	-160.0	A	2

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**Table 5B: CEMENTITIOUS WOOD FIBER DECKS - NEW CONSTRUCTION or REROOF (Tear-Off)
SYSTEM TYPE A-2: MECHANICALLY ATTACHED ANCHOR SHEET, BONDED INSULATION, BONDED ROOF COVER**

System No.	Deck (See Note 1)	Anchor Sheet			Base Insulation		Top Insulation		Roof Cover	Adhesive	MDP (psf)	Fire Rating UL790/E108	
		Type	Fasteners	Attach	Type	Attach	Type	Attach				Class	Max Incline (in.)
CWF-11	Tectum	SBS Base, SBS Premium Base, MB Base or APP 160	Two Piece Impact Nail	9-inch o.c. in the min. 2-inch lap and 18-inch o.c. in two, equally spaced center rows	Min. 1.5-inch ISO 95+ GL	OlyBond 500	(Optional) Min. ¼-inch DensDeck or DensDeck Prime	OlyBond 500	Duro-Tech TPO,	UP-BA, SA	-45.0	A	¼
CWF-12	Tectum	SBS Base, SBS Premium Base, MB Base or APP 160	Two Piece Impact Nail	9-inch o.c. in the min. 2-inch lap and 18-inch o.c. in two, equally spaced center rows	Min. 1.5-inch ISO 95+ GL	OlyBond 500	(Optional) Min. ¼-inch DensDeck Prime	OlyBond 500	Duro-Tech TPO	LVOC-BA-1168	-45.0	A	¼
DURO-TECH TPO FLEECE SYSTEMS:													
CWF-13	Tectum	SBS PolyBase	Two Piece Impact Nail	12-inch o.c. in the min. 3.4-inch lap and 12-inch o.c. in two, equally spaced staggered rows in the field of the roll	NONE	N/A	NONE	N/A	Duro-Tech TPO Fleece	Millennium PG-1, 12-inch o.c. Ribbons	-52.5	A	½
CWF-14	Tectum	SBS PolyBase	Two Piece Impact Nail	9-inch o.c. in the min. 3.4-inch lap and 9-inch o.c. in two, equally spaced staggered rows in the field of the roll	NONE	N/A	NONE	N/A	Duro-Tech TPO Fleece	Millennium PG-1, 12-inch o.c. Ribbons	-67.5	A	½
CWF-15	Tectum	SBS PolyBase	Two Piece Impact Nail	7-inch o.c. in the min. 3.4-inch lap and 7-inch o.c. in two, equally spaced staggered rows in the field of the roll	NONE	N/A	NONE	N/A	Duro-Tech TPO Fleece	Millennium PG-1, 12-inch o.c. Ribbons	-90.0	A	½

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TABLE 6A: GYPSUM DECKS - REROOF (Tear-Off)
SYSTEM TYPE A-1A: BONDED INSULATION, BONDED ROOF COVER

System No.	Deck (See Note 1)	Base Insulation Layer		Top Insulation Layer		Roof Cover	Adhesive	MDP (psf)	Fire Rating UL790/E108	
		Type	Attach	Type	Attach				Class	Max Incline (in.)
G-1	Existing poured gypsum or gypsum plank	Min. 1.5-inch ISO 95+ GL	OlyBond 500	None	N/A	Duro-Tech TPO,	UP-BA, LVOC-BA-1168, SA	-112.5	A	1/4
G-2	Existing poured gypsum or gypsum plank	Min. 1.5-inch ISO 95+ GL	OlyBond 500	Min. 1/4-inch DensDeck Prime	OlyBond 500	Duro-Tech TPO,	UP-BA, LVOC-BA-1168, SA	-112.5	A	2-1/2
G-3	Existing poured gypsum or gypsum plank	Min. 1.5-inch ISO 95+ GL	Millennium One Step	Min. 1/4-inch DensDeck Prime	Millennium One Step	Duro-Tech TPO,	UP-BA, LVOC-BA-1168, SA	-127.5	A	2-1/2
G-4	Existing poured gypsum or gypsum plank	Min. 1.0-inch ISO 95+ GL	Millennium PG-1	None	N/A	Duro-Tech TPO,	UP-BA, LVOC-BA-1168, SA	-135.0	A	1/4
G-5	Existing poured gypsum or gypsum plank	Min. 1.5-inch ISO 95+ GL	Millennium One Step	Min. 1/4-inch DensDeck	Millennium One Step	Duro-Tech TPO,	UP-BA, SA	-157.5	A	2-1/2
G-6	Existing poured gypsum or gypsum plank	Min. 1.5-inch ISO 95+ GL	Millennium One Step	(Optional) Additional layers of base insulation	Millennium One Step	Duro-Tech TPO,	UP-BA, LVOC-BA-1168, SA	-165.0	A	1/4
G-7	Existing poured gypsum or gypsum plank	Min. 1/2-inch DURO-GUARD ISO HD-E2	Millennium PG-1	None	N/A	Duro-Tech TPO,	UP-BA, SA	-230.0	A	1/4
DURO-TECH TPO FLEECE SYSTEMS:										
G-8	Existing poured gypsum or gypsum plank	Min. 1.0-inch ISO 95+ GL	Millennium PG-1	None	N/A	Duro-Tech TPO Fleece	Millennium PG-1, 12-inch. o.c. Ribbons	-135.0	A B	1/4 4
G-9	Existing poured gypsum or gypsum plank	Min. 1/2-inch DURO-GUARD ISO HD-E2	Millennium PG-1	None	N/A	Duro-Tech TPO Fleece	XR Stick, Millennium PG-1, 6.0-o.c. Ribbons	-230.0	A	1/4

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**Table 6B: GYPSUM DECKS - NEW CONSTRUCTION or REROOF (Tear-Off)
SYSTEM TYPE A-2: MECHANICALLY ATTACHED ANCHOR SHEET, BONDED INSULATION, BONDED ROOF COVER**

System No.	Deck (See Note 1)	Anchor Sheet			Base Insulation		Top Insulation		Roof Cover	Adhesive	MDP (psf)	Fire Rating UL790/E108	
		Type	Fasteners	Attach	Type	Attach	Type	Attach				Class	Max Incline (in.)
G-10	Existing gypsum deck	SBS Base	Two Piece Impact Nail	9-inch o.c. in the min. 3.4-inch lap and 12-inch o.c. in two, equally spaced staggered rows in the field of the roll	Min. 1.0-inch ISO 95+ GL	Millennium PG-1	None	N/A	Duro-Tech TPO,	UP-BA, LVOC-BA-1168, WBBA-P, SA	-37.5	A	1/4
G-11	Existing gypsum deck	SBS Base, SBS Premium Base, MB Base or APP 160	Two Piece Impact Nail	9-inch o.c. in the min. 2-inch lap and 18-inch o.c. in two, equally spaced center rows	Min. 1.5-inch ISO 95+ GL	I.S.O. Stick	NONE	N/A	Duro-Tech TPO,	UP-BA, LVOC-BA-1168, SA	-45.0	A	1/4
G-12	Existing gypsum deck	SBS Base, SBS Premium Base, MB Base or APP 160	Two Piece Impact Nail	9-inch o.c. in the min. 2-inch lap and 18-inch o.c. in two, equally spaced center rows	Min. 1.5-inch ISO 95+ GL	I.S.O. Stick	Min. 1/4-inch DensDeck Prime	I.S.O. Stick	Duro-Tech TPO,	UP-BA, LVOC-BA-1168, SA	-45.0	A	2-1/2
DURO-TECH TPO FLEECE SYSTEMS:													
G-13	Existing gypsum deck	SBS PolyTorch Base; 6-inch wide torch adhered side laps	1.8-inch TruFast Twin Loc-Nail Batten Fastener and TruFast Twin Loc Coiled Metal Batten Bar	6.0-inch o.c. along the batten bar within the 33.4-inch o.c. spaced, torched side laps	None	N/A	None	N/A	Duro-Tech TPO Fleece	Millennium PG-1; applied to 33.4-inch o.c. spaced torched laps	-30.0	A	1/2
G-14	Existing gypsum deck	SBS Base	Two Piece Impact Nail	9-inch o.c. in the min. 3.4-inch lap and 12-inch o.c. in two, equally spaced staggered rows in the field of the roll	Min. 1.0-inch ISO 95+ GL	Millennium PG-1	None	N/A	Duro-Tech TPO Fleece	Millennium PG-1, 12-inch o.c. Ribbons	-37.5	A B	1/4 3/4

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TABLE 7A: RECOVER APPLICATIONS

SYSTEM TYPE A-1A: BONDED INSULATION, BONDED ROOF COVER

System No.	Substrate	Base Insulation Layer		Top Insulation Layer		Roof Cover	Adhesive	MDP (psf)	Fire Rating UL790/E108	
		Type	Attachment	Type	Attachment				Class	Max Incline (in.)
R-1	Existing granule surface modified bitumen	Min. 1-inch ISO 95+ GL	Millennium One Step; INSTA STIK QUIK SET	(Optional) Additional layers of base insulation and/or min. ½-inch Tapered ISO 95+ GL	Millennium One Step; INSTA STIK QUIK SET	Duro-Tech TPO	WBBA-P	-45.0	A	¼
R-2	Existing asphaltic BUR or granule surface modified bitumen	Min. 1.5-inch ISO 95+ GL or RESISTA	OlyBond 500	(Optional) Additional layers of base insulation and/or min. ½-inch Tapered ISO 95+ GL or RESISTA	OlyBond 500	Duro-Tech TPO	WBBA-P	-45.0	A	¼
R-3	Existing asphaltic BUR or granule surface modified bitumen	One or more layers, Min. ½-inch ISO 95+ GL or Min. 1.0-inch RESISTA	Millennium One Step; INSTA STIK QUIK SET; OlyBond 500; Millennium PG-1	Min. ¼-inch DensDeck	Millennium One Step; INSTA STIK QUIK SET; OlyBond 500; Millennium PG-1	Duro-Tech TPO	WBBA-P	-45.0	A	2-½
R-4	Existing asphaltic BUR or granule surface modified bitumen	Min. 1.5-inch ISO 95+ GL or RESISTA	OlyBond 500	(Optional) Additional layers of base insulation and/or min. ½-inch Tapered ISO 95+ GL or RESISTA	OlyBond 500	Duro-Tech TPO	WBBA-P	-60.0	A	¼
R-5	Existing asphaltic BUR	Min. 1.5-inch ISO 95+ GL or RESISTA	OlyBond 500	(Optional) Additional layers of base insulation and/or min. ½-inch Tapered ISO 95+ GL or RESISTA	OlyBond 500	Duro-Tech TPO,	UP-BA, LVOC-BA-1168, LVOC-BA, SA	-60.0	A	¼
R-6	Existing asphaltic BUR or granule surface modified bitumen	One or more layers, Min. 1.5-inch ISO 95+ GL or RESISTA; (Optional) additional layers of min. ½-inch Tapered ISO 95+ GL or RESISTA	OlyBond 500	Min. ½-inch DURO-GUARD ISO HD-E2	OlyBond 500	Duro-Tech TPO,	UP-BA, LVOC-BA-1168, LVOC-BA, WBBA-P, SA	-60.0	A C	¼ ¾
R-7	Existing asphaltic BUR	One or more layers, Min. 1.5-inch ISO 95+ GL or RESISTA; (Optional) additional layers of min. ½-inch Tapered ISO 95+ GL or RESISTA	OlyBond 500	Min. ¼-inch DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	OlyBond 500	Duro-Tech TPO,	UP-BA, LVOC-BA-1168, LVOC-BA, WBBA-P, SA	-60.0	A	2-½
R-8	Existing asphaltic BUR or granule surface modified bitumen	One or more layers, Min. ½-inch ISO 95+ GL or Min. 1.0-inch RESISTA	Millennium One Step; INSTA STIK QUIK SET; OlyBond 500; Millennium PG-1	Min. ¼-inch DensDeck	Millennium One Step; INSTA STIK QUIK SET; OlyBond 500; Millennium PG-1	Duro-Tech TPO	LVOC-BA	-112.5	A	2-½
R-9	Existing asphaltic BUR or granule surface modified bitumen	One or more layers, Min. ½-inch ISO 95+ GL or Min. 1.0-inch RESISTA	Millennium One Step; INSTA STIK QUIK SET; OlyBond 500; Millennium PG-1	Min. ¼-inch SECUROCK Gypsum-Fiber Roof Board	Millennium One Step; INSTA STIK QUIK SET; OlyBond 500; Millennium PG-1	Duro-Tech TPO,	UP-BA, LVOC-BA-1168, LVOC-BA, WBBA-P, SA	-112.5	A	2-½

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TABLE 7A: RECOVER APPLICATIONS
SYSTEM TYPE A-1A: BONDED INSULATION, BONDED ROOF COVER

System No.	Substrate	Base Insulation Layer		Top Insulation Layer		Roof Cover	Adhesive	MDP (psf)	Fire Rating UL790/E108	
		Type	Attachment	Type	Attachment				Class	Max Incline (in.)
R-10	Existing granule surface modified bitumen	Min. 1.5-inch ISO 95+ GL or RESISTA	OlyBond 500	(Optional) Additional layers of base insulation	OlyBond 500	Duro-Tech TPO, Duro-Tech TPO	UP-BA, LVOC-BA-1168, WBBA-P, SA	-120.0	A	1/4
R-11	Existing granule surface modified bitumen	Min. 1.5-inch ISO 95+ GL or RESISTA	OlyBond 500	Min. 1/4-inch DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	OlyBond 500	Duro-Tech TPO,	UP-BA, LVOC-BA-1168, WBBA-P, SA	-120.0	A	2-1/2
R-12	Existing granule surface modified bitumen	One or more layers, Min. 1/2-inch ISO 95+ GL or Min. 1.0-inch RESISTA	Millennium One Step; INSTA STIK QUIK SET; OlyBond 500; Millennium PG-1	Min. 1/2-inch DURO-GUARD ISO HD-E2	Millennium One Step; INSTA STIK QUIK SET; OlyBond 500; Millennium PG-1	Duro-Tech TPO	WBBA-P	-135.0	A C	1/4 3/4
R-13	Existing asphaltic BUR	One or more layers, Min. 1/2-inch ISO 95+ GL or Min. 1.0-inch RESISTA	Millennium One Step; OlyBond 500; Millennium PG-1	Min. 1/2-inch DURO-GUARD ISO HD-E2	Millennium One Step; OlyBond 500; Millennium PG-1	Duro-Tech TPO	WBBA-P	-135.0	A C	1/4 3/4
R-14	Existing asphaltic BUR or granule surface modified bitumen	One or more layers, Min. 1/2-inch ISO 95+ GL or Min. 1.0-inch RESISTA	Millennium One Step; INSTA STIK QUIK SET; OlyBond 500; Millennium PG-1	Min. 1/4-inch DensDeck Prime	Millennium One Step; INSTA STIK QUIK SET; OlyBond 500; Millennium PG-1	Duro-Tech TPO	WBBA-P	-135.0	A	2-1/2
R-15	Existing asphaltic BUR or granule surface modified bitumen	Min. 1.5-inch ISO 95+ GL	Millennium One Step	(Optional) Additional layers of base insulation	Millennium One Step	Duro-Tech TPO,	UP-BA, LVOC-BA 1168, SA	-157.5	A	1/4
R-16	Existing asphaltic BUR or granule surface modified bitumen	Min. 1.5-inch ISO 95+ GL	Millennium One Step	Min. 1/4-inch DensDeck or DensDeck Prime	Millennium One Step	Duro-Tech TPO,	UP-BA, SA	-157.5	A	2-1/2
R-17	Existing asphaltic BUR or granule surface modified bitumen	Min. 1.5-inch ISO 95+ GL	Millennium One Step	Min. 1/4-inch DensDeck Prime	Millennium One Step	Duro-Tech TPO	LVOC- BA-1168	-157.5	A	2-1/2
R-18	Existing asphaltic BUR or granule surface modified bitumen	(Optional) Min. 1.5-inch ISO 95+ GL	Millennium One Step	Min. 1/2-inch DURO-GUARD ISO HD-E2	Millennium One Step	Duro-Tech TPO,	UP-BA, SA	-157.5	A C	1/4 3/4
R-19	Existing asphaltic BUR or granule surface modified bitumen	Min. 1.5-inch ISO 95+ GL	Asphalt	(Optional) Tapered ISO 95+ GL	Asphalt	Duro-Tech TPO,	UP-BA, LVOC-BA-1168	-180.0	A	1/4
R-20	Existing asphaltic BUR or granule surface modified bitumen	Min. 1.5-inch ISO 95+ GL with optional Tapered ISO 95+ GL	Asphalt	Min. 1/4-inch DensDeck or DensDeck Prime	Asphalt	Duro-Tech TPO,	UP-BA, SA	-195.0	A	2-1/2
R-21	Existing asphaltic BUR or granule surface modified bitumen	Min. 1.5-inch ISO 95+ GL with optional Tapered ISO 95+ GL	Asphalt	Min. 1/4-inch DensDeck Prime	Asphalt	Duro-Tech TPO	LVOC- BA-1168	-195.0	A	2-1/2

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TABLE 7A: RECOVER APPLICATIONS

SYSTEM TYPE A-1A: BONDED INSULATION, BONDED ROOF COVER

System No.	Substrate	Base Insulation Layer		Top Insulation Layer		Roof Cover	Adhesive	MDP (psf)	Fire Rating UL790/E108	
		Type	Attachment	Type	Attachment				Class	Max Incline (in.)
R-22	Existing granule surface modified bitumen	Min. ½-inch ISO 95+ GL or Min. 1.0-inch RESISTA	INSTA STIK QUIK SET	(Optional) Additional layers of base insulation	INSTA STIK QUIK SET	Duro-Tech TPO	UP-BA, LVOC-BA-1168, LVOC- BA, WBBA-P, SA	-195.0	A	¼
R-23	Existing granule surface modified bitumen	One or more layers, Min. ½-inch ISO 95+ GL or Min. 1.0-inch RESISTA	INSTA STIK QUIK SET	Min. ½-inch DURO-GUARD ISO HD-E2	INSTA STIK QUIK SET	Duro-Tech TPO,	UP-BA, LVOC-BA-1168, LVOC- BA, SA	-195.0	A C	¼ ¾
R-24	Existing granule surface modified bitumen	One or more layers, Min. ½-inch ISO 95+ GL or Min. 1.0-inch RESISTA	INSTA STIK QUIK SET	Min. ¼-inch DensDeck	INSTA STIK QUIK SET	Duro-Tech TPO	UP-BA	-195.0	A	2-½
R-25	Existing granule surface modified bitumen	One or more layers, Min. ½-inch ISO 95+ GL or Min. 1.0-inch RESISTA	INSTA STIK QUIK SET	Min. 7/16-inch OSB	INSTA STIK QUIK SET	Duro-Tech TPO,	UP-BA, LVOC-BA-1168, LVOC- BA, WBBA-P, SA	-195.0	A	1-¼
R-26	Existing granule surface modified bitumen	One or more layers, Min. ½-inch ISO 95+ GL or Min. 1.0-inch RESISTA	INSTA STIK QUIK SET	Min. ¼-inch DensDeck Prime	INSTA STIK QUIK SET	Duro-Tech TPO,	UP-BA, LVOC-BA-1168, LVOC- BA, SA	-195.0	A	2-½
R-27	Existing asphaltic BUR	One or more layers, Min. ½-inch ISO 95+ GL or Min. 1.0-inch RESISTA	Millennium One Step; Millennium PG-1	(Optional) Additional layers of base insulation	Millennium One Step; Millennium PG-1	Duro-Tech TPO,	UP-BA, LVOC-BA-1168, LVOC- BA, WBBA-P, SA	-202.5	A	¼
R-28	Existing asphaltic BUR	One or more layers, Min. ½-inch ISO 95+ GL or Min. 1.0-inch RESISTA	Millennium One Step; Millennium PG-1	Min. ½-inch DURO-GUARD ISO HD-E2	Millennium One Step; Millennium PG-1	Duro-Tech TPO,	UP-BA, LVOC-BA-1168, LVOC- BA, SA	-202.5	A C	¼ ¾
R-29	Existing asphaltic BUR	One or more layers, Min. ½-inch ISO 95+ GL or Min. 1.0-inch RESISTA	Millennium One Step; Millennium PG-1	Min. ¼-inch DensDeck	Millennium One Step; Millennium PG-1	Duro-Tech TPO	UP-BA	-202.5	A	2-½
R-30	Existing asphaltic BUR	One or more layers, Min. ½-inch ISO 95+ GL or Min. 1.0-inch RESISTA	Millennium One Step; Millennium PG-1	Min. 7/16-inch OSB	Millennium One Step; Millennium PG-1	Duro-Tech TPO,	UP-BA, LVOC-BA-1168, LVOC- BA, WBBA-P, SA	-202.5	A	1-¼
R-31	Existing asphaltic BUR	One or more layers, Min. ½-inch ISO 95+ GL or Min. 1.0-inch RESISTA	Millennium One Step; Millennium PG-1	Min. ¼-inch DensDeck Prime	Millennium One Step; Millennium PG-1	Duro-Tech TPO,	UP-BA, LVOC-BA-1168, LVOC- BA, SA	-202.5	A	2-½

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TABLE 7A: RECOVER APPLICATIONS

SYSTEM TYPE A-1A: BONDED INSULATION, BONDED ROOF COVER

System No.	Substrate	Base Insulation Layer		Top Insulation Layer		Roof Cover	Adhesive	MDP (psf)	Fire Rating UL790/E108	
		Type	Attachment	Type	Attachment				Class	Max Incline (in.)
R-32	Existing asphaltic BUR	Min. ½-inch ISO 95+ GL or Min. 1.0-inch RESISTA	INSTA STIK QUIK SET	(Optional) Additional layers of base insulation	INSTA STIK QUIK SET	Duro-Tech TPO,	UP-BA, LVOC-BA-1168, LVOC- BA, WBBA-P, SA	-210.0	A	¼
R-33	Existing asphaltic BUR	One or more layers, Min. ½-inch ISO 95+ GL or Min. 1.0-inch RESISTA	INSTA STIK QUIK SET	Min. ½-inch DURO-GUARD ISO HD-E2	INSTA STIK QUIK SET	Duro-Tech TPO,	UP-BA, LVOC-BA-1168, LVOC- BA, SA	-210.0	A C	¼ ¾
R-34	Existing asphaltic BUR	One or more layers, Min. ½-inch ISO 95+ GL or Min. 1.0-inch RESISTA	INSTA STIK QUIK SET	Min. ¼-inch DensDeck	INSTA STIK QUIK SET	Duro-Tech TPO	UP-BA	-210.0	A	2-½
R-35	Existing asphaltic BUR	One or more layers, Min. ½-inch ISO 95+ GL or Min. 1.0-inch RESISTA	INSTA STIK QUIK SET	Min. 7/16-inch OSB	INSTA STIK QUIK SET	Duro-Tech TPO,	UP-BA, LVOC-BA-1168, LVOC- BA, WBBA-P, SA	-210.0	A	1-¼
R-36	Existing asphaltic BUR	One or more layers, Min. ½-inch ISO 95+ GL or Min. 1.0-inch RESISTA	INSTA STIK QUIK SET	Min. ¼-inch DensDeck Prime	INSTA STIK QUIK SET	Duro-Tech TPO,	UP-BA, LVOC-BA-1168, LVOC- BA, SA	-210.0	A	2-½
R-37	Existing granule surface modified bitumen	One or more layers, Min. ½-inch ISO 95+ GL or Min. 1.0-inch RESISTA	Millennium One Step; OlyBond 500; Millennium PG-1	Min. ½-inch DURO-GUARD ISO HD-E2	Millennium One Step; OlyBond 500; Millennium PG-1	Duro-Tech TPO	LVOC-BA-1168	-225.0	A C	¼ ¾
R-38	Existing asphaltic BUR	One or more layers, Min. ½-inch ISO 95+ GL or Min. 1.0-inch RESISTA	OlyBond 500	Min. ½-inch DURO-GUARD ISO HD-E2	OlyBond 500	Duro-Tech TPO	LVOC-BA-1168	-225.0	A C	¼ ¾
R-39	Existing granule surface modified bitumen	One or more layers, Min. ½-inch ISO 95+ GL or Min. 1.0-inch RESISTA	Millennium One Step; OlyBond 500	(Optional) Additional layers of base insulation	Millennium One Step; OlyBond 500	Duro-Tech TPO	WBBA-P	-247.5	A	¼
R-40	Existing granule surface modified bitumen	One or more layers, Min. ½-inch ISO 95+ GL or Min. 1.0-inch RESISTA	Millennium One Step; OlyBond 500	Min. ¼-inch DensDeck	Millennium One Step; OlyBond 500	Duro-Tech TPO	UP-BA	-247.5	A	2-½
R-41	Existing asphaltic BUR	One or more layers, Min. ½-inch ISO 95+ GL or Min. 1.0-inch RESISTA	OlyBond 500	Min. ¼-inch DensDeck	OlyBond 500	Duro-Tech TPO	UP-BA	-247.5	A	2-½
R-42	Existing asphaltic BUR	One or more layers, Min. ½-inch ISO 95+ GL or Min. 1.0-inch RESISTA	OlyBond 500	Min. ¼-inch DensDeck	OlyBond 500	Duro-Tech TPO,	UP-BA, LVOC-BA-1168, LVOC- BA, SA	-247.5	A	2-½

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TABLE 7A: RECOVER APPLICATIONS
SYSTEM TYPE A-1A: BONDED INSULATION, BONDED ROOF COVER

System No.	Substrate	Base Insulation Layer		Top Insulation Layer		Roof Cover	Adhesive	MDP (psf)	Fire Rating UL790/E108	
		Type	Attachment	Type	Attachment				Class	Max Incline (in.)
R-43	Existing granule surface modified bitumen	One or more layers, Min. ½-inch ISO 95+ GL or Min. 1.0-inch RESISTA	Millennium One Step; OlyBond 500	Min. 7/16-inch OSB	Millennium One Step; OlyBond 500	Duro-Tech TPO,	UP-BA, LVOC-BA-1168, LVOC- BA, WBBA-P, SA	-247.5	A	1-¼
R-44	Existing asphaltic BUR	One or more layers, Min. ½-inch ISO 95+ GL or Min. 1.0-inch RESISTA	OlyBond 500	(Optional) Additional layers of base insulation	OlyBond 500	Duro-Tech TPO,	UP-BA, LVOC-BA-1168, LVOC- BA, WBBA-P, SA	-247.5	A	¼
R-45	Existing asphaltic BUR	One or more layers, Min. ½-inch ISO 95+ GL or Min. 1.0-inch RESISTA	OlyBond 500	Min. 7/16-inch OSB	OlyBond 500	Duro-Tech TPO,	UP-BA, LVOC-BA-1168, LVOC- BA, WBBA-P, SA	-247.5	A	1-¼
R-46	Existing granule surface modified bitumen	One or more layers, Min. ½-inch ISO 95+ GL or Min. 1.0-inch RESISTA	Millennium One Step; OlyBond 500	Min. ¼-inch DensDeck Prime	Millennium One Step; OlyBond 500	Duro-Tech TPO,	UP-BA, LVOC-BA, SA	-247.5	A	2-½
R-47	Existing asphaltic BUR	One or more layers, Min. ½-inch ISO 95+ GL or Min. 1.0-inch RESISTA	OlyBond 500	Min. ½-inch DURO-GUARD ISO HD-E2	OlyBond 500	Duro-Tech TPO,	UP-BA, LVOC-BA, SA	-247.5	A C	¼ ¾
R-48	Existing granule surface modified bitumen	Min. 1.0-inch RESISTA	Millennium One Step; OlyBond 500	(Optional) Additional layers of base insulation	Millennium One Step; OlyBond 500	Duro-Tech TPO	LVOC-BA 1168	-255.0	A	¼
R-49	Existing granule surface modified bitumen	Min. ½-inch ISO 95+ GL	Millennium One Step; OlyBond 500	(Optional) Additional layers of base insulation	Millennium One Step; OlyBond 500	Duro-Tech TPO	UP-BA, LVOC-BA, LVOC-BA 1168	-255.0	A	¼
R-50	Existing granule surface modified bitumen	Min. ½-inch ISO 95+ GL	Millennium One Step	(Optional) Additional layers of base insulation	Millennium One Step		SA	-262.5	A	¼
R-51	Existing granule surface modified bitumen	Min. 1.0-inch RESISTA	Millennium One Step	(Optional) Additional layers of base insulation	Millennium One Step	Duro-Tech TPO,	UP-BA, LVOC- BA, SA	-262.5	A	¼
R-52	Existing granule surface modified bitumen	One or more layers, Min. ½-inch ISO 95+ GL or Min. 1.0-inch RESISTA	Millennium One Step	Min. ½-inch DURO-GUARD ISO HD-E2	Millennium One Step	Duro-Tech TPO,	UP-BA, LVOC-BA-1168, LVOC- BA, SA	-262.5	A C	¼ ¾
R-53	Existing granule surface modified bitumen	One or more layers, Min. ½-inch ISO 95+ GL or Min. 1.0-inch RESISTA	Millennium One Step; OlyBond 500	Min. ¼-inch DensDeck Prime	Millennium One Step; OlyBond 500	Duro-Tech TPO,	LVOC-BA-1168	-262.5	A	2-½
R-54	Existing granule surface modified bitumen	One or more layers, Min. ½-inch ISO 95+ GL or Min. 1.0-inch RESISTA	OlyBond 500	Min. ½-inch DURO-GUARD ISO HD-E2	OlyBond 500	Duro-Tech TPO,	UP-BA, SA	-300.0	A C	¼ ¾

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TABLE 7A: RECOVER APPLICATIONS										
SYSTEM TYPE A-1A: BONDED INSULATION, BONDED ROOF COVER										
System No.	Substrate	Base Insulation Layer		Top Insulation Layer		Roof Cover	Adhesive	MDP (psf)	Fire Rating UL790/E108	
		Type	Attachment	Type	Attachment				Class	Max Incline (in.)
R-55	Existing granule surface modified bitumen	Min. ½-inch ISO 95+ GL	OlyBond 500	(Optional) Additional layers of base insulation	OlyBond 500		SA	-337.5	A	¼
R-56	Existing granule surface modified bitumen	Min. 1.0-inch RESISTA	OlyBond 500	(Optional) Additional layers of base insulation	OlyBond 500	Duro-Tech TPO,	UP-BA, LVOC-BA, SA	-352.5	A	¼
R-57	Existing granule surface modified bitumen	One or more layers, Min. ½-inch ISO 95+ GL or Min. 1.0-inch RESISTA	OlyBond 500	Min. ½-inch DURO-GUARD ISO HD-E2	OlyBond 500	Duro-Tech TPO	LVOC-BA	-352.5	A C	¼ ¾

TABLE 7A: RECOVER APPLICATIONS										
SYSTEM TYPE A-1A: BONDED INSULATION, BONDED ROOF COVER										
System No.	Substrate	Base Insulation Layer		Top Insulation Layer		Roof Cover	Adhesive	MDP (psf)	Fire Rating UL790/E108	
		Type	Attachment	Type	Attachment				Class	Max Incline (in.)
DURO-TECH TPO FLEECE SYSTEMS										
R-58	Existing granule surface modified bitumen or asphaltic BUR	One or more layers, Min. ½-inch ISO 95+ GL or Min. 1.0-inch RESISTA	INSTA STIK QUIK SET; Millennium PG-1; OlyBond 500; Millennium One Step	Min. ½-inch DURO-GUARD ISO HD-E2	INSTA STIK QUIK SET; Millennium PG-1; OlyBond 500; Millennium One Step	Duro-Tech TPO Fleece	Millennium PG-1; XR Stick, 12-inch o.c. Ribbons	-45.0	A B	½ 1
R-59	Existing granule surface modified bitumen or asphaltic BUR	One or more layers, Min. ½-inch ISO 95+ GL or Min. 1.0-inch RESISTA	INSTA STIK QUIK SET; Millennium PG-1; OlyBond 500; Millennium One Step	Min. 7/16-inch OSB	INSTA STIK QUIK SET; Millennium PG-1; OlyBond 500; Millennium One Step	Duro-Tech TPO Fleece	Millennium PG-1; XR Stick, 12-inch o.c. Ribbons	-45.0	A	½
R-60	Existing granule surface modified bitumen or asphaltic BUR	One or more layers, Min. ½-inch ISO 95+ GL or Min. 1.0-inch RESISTA	INSTA STIK QUIK SET; Millennium PG-1; OlyBond 500; Millennium One Step	Min. ¼-inch DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	INSTA STIK QUIK SET; Millennium PG-1; OlyBond 500; Millennium One Step	Duro-Tech TPO Fleece	Millennium PG-1; XR Stick, 12-inch o.c. Ribbons	-45.0	A	2
R-61	Existing asphaltic BUR	Min. ½-inch ISO 95+ GL or Min. 1.0-inch RESISTA	OlyBond 500	(Optional) Additional layers of base insulation	OlyBond 500	Duro-Tech TPO Fleece	I.S.O Spray S; XR Stick, 12-inch o.c. Ribbons; Asphalt	-60.0	A	½
R-62	Existing asphaltic BUR	Min. ½-inch ISO 95+ GL or Min. 1.0-inch RESISTA	OlyBond 500	(Optional) Additional layers of base insulation	OlyBond 500	Duro-Tech TPO Fleece	XR- BA	-60.0	C	½

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TABLE 7A: RECOVER APPLICATIONS										
SYSTEM TYPE A-1A: BONDED INSULATION, BONDED ROOF COVER										
System No.	Substrate	Base Insulation Layer		Top Insulation Layer		Roof Cover	Adhesive	MDP (psf)	Fire Rating UL790/E108	
		Type	Attachment	Type	Attachment				Class	Max Incline (in.)
DURO-TECH TPO FLEECE SYSTEMS										
R-63	Existing asphaltic BUR	One or more layers, Min. ½-inch ISO 95+ GL or Min. 1.0-inch RESISTA	OlyBond 500	Min. ½-inch DURO-GUARD ISO HD-E2	OlyBond 500	Duro-Tech TPO Fleece	Asphalt	-60.0	A C	¾ 2
R-64	Existing asphaltic BUR	One or more layers, Min. ½-inch ISO 95+ GL or Min. 1.0-inch RESISTA	OlyBond 500	Min. ½-inch DURO-GUARD ISO HD-E2	OlyBond 500	Duro-Tech TPO Fleece	XR- BA	-60.0	A B	½ 1
R-65	Existing granule surface modified bitumen or asphaltic BUR	One or more layers, Min. ½-inch ISO 95+ GL or Min. 1.0-inch RESISTA	INSTA STIK QUIK SET; Millennium PG-1; Millennium One Step	Min. ¼-inch DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	INSTA STIK QUIK SET; Millennium PG-1; Millennium One Step	Duro-Tech TPO Fleece	Millennium PG-1, XR Stick, 6-inch o.c. ribbons	-60.0	A	2
R-66	Existing granule surface modified bitumen	One or more layers, Min. ½-inch ISO 95+ GL or Min. 1.0-inch RESISTA	OlyBond 500	Min. ¼-inch DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	OlyBond 500	Duro-Tech TPO Fleece	Millennium PG-1, XR Stick, 6-inch o.c. Ribbons	-60.0	A	2
R-67	Existing asphaltic BUR	One or more layers, Min. ½-inch ISO 95+ GL or Min. 1.0-inch RESISTA	OlyBond 500; 6-inch o.c. Ribbons	Min. ¼-inch DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	OlyBond 500; 6-inch o.c. Ribbons	Duro-Tech TPO Fleece	Millennium PG-1, XR Stick, 6-inch o.c. Ribbons	-60.0	A	2
R-68	Existing asphaltic BUR	Min. 1.0-inch ISO 95+ GL	INSTA STIK QUIK SET; Millennium PG-1; OlyBond 500; Millennium One Step	Min. ½-inch DURO-GUARD ISO HD-E2	INSTA STIK QUIK SET; Millennium PG-1; OlyBond 500; Millennium One Step	Duro-Tech TPO Fleece	I.S.O Spray R, XR Stick, 4-inch o.c. Ribbons	-172.5	A B	½ 1
R-69	Existing asphaltic BUR	Min. 1.0-inch ISO 95+ GL	INSTA STIK QUIK SET; Millennium PG-1; OlyBond 500; Millennium One Step	Min. ¼-inch DensDeck Prime	INSTA STIK QUIK SET; Millennium PG-1; OlyBond 500; Millennium One Step	Duro-Tech TPO Fleece	I.S.O Spray R, XR Stick, 4-inch o.c. Ribbons	-172.5	A	2
R-70	Existing asphaltic BUR	Min. ½-inch DURO-GUARD ISO HD-E2 or min. ¼-inch DensDeck Prime	INSTA STIK QUIK SET; Millennium PG-1; OlyBond 500; Millennium One Step	None	N/A	Duro-Tech TPO Fleece	I.S.O Spray R, XR Stick, 4-inch o.c. Ribbons	-172.5	A	¾
R-71	Existing granule surface modified bitumen	One or more layers, Min. 1.0-inch ISO 95+ GL or RESISTA; (Optional) additional layer min. ½-inch Tapered ISO 95+ GL or RESISTA	INSTA STIK QUIK SET	Min. ¼-inch DensDeck Prime	INSTA STIK QUIK SET	Duro-Tech TPO Fleece	XR- BA	-195.0	A	1

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TABLE 7A: RECOVER APPLICATIONS										
SYSTEM TYPE A-1A: BONDED INSULATION, BONDED ROOF COVER										
System No.	Substrate	Base Insulation Layer		Top Insulation Layer		Roof Cover	Adhesive	MDP (psf)	Fire Rating UL790/E108	
		Type	Attachment	Type	Attachment				Class	Max Incline (in.)
DURO-TECH TPO FLEECE SYSTEMS										
R-72	Existing granule surface modified bitumen	One or more layers, Min. 1.0-inch ISO 95+ GL or RESISTA; (Optional) additional layer min. 1/2-inch Tapered ISO 95+ GL or RESISTA	Millennium One Step	Min. 1/4-inch DensDeck Prime	Millennium One Step	Duro-Tech TPO Fleece	XR- BA	-262.5	A	1
R-73	Existing granule-surfaced modified bitumen	Min. 1/4-inch DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	Asphalt	None	N/A	Duro-Tech TPO Fleece	XR- BA	-300.0	A	1
R-74	Existing granule surface modified bitumen	Min. 1/4-inch DensDeck Prime SECUROCK Gypsum-Fiber Roof Board	Asphalt	None	N/A	Duro-Tech TPO Fleece	Asphalt	-457.5	A B	1 2

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TABLE 7B: STEEL - RECOVER								
SYSTEM TYPE C-2: PLATE-BONDED ROOF COVER								
System No.	Substrate (See Note 1)	Insulation Layer	Attachment		Roof Cover / Adhesive	MDP (psf)	Fire Rating UL790/E108	
			Fasteners	Spacing			Class	Max Incline (in.)
R-75	Existing standing seam or lap seam metal roof covers having min. 3/16-inch to max. ¼-inch thick steel purlins spaced max. 60-inch o.c.	One or more layers, ISO 95+ GL and/or DURO-GUARD ISO HD-E2	Duro-Last Purlin Fasteners and UltraPly TPO DuroBond Plates are fastened through to purlins	18-inch o.c. along purlins	Duro-Tech TPO bonded to Duro-Tech TPO DuroBond Plates with RhinoBond Portable Plate Bonding Tool and weighted RhinoBond Cooling Clamps. (All areas where the existing metal panels do not lay flush on the underlying purlin shall have a ¼-inch diameter pilot hole pre-drilled into the panel prior to driving the Purlin Fastener into the purlin.)	-30.0	A	¾
R-76	Existing standing seam or lap seam metal roof covers having min. 3/16-inch to max. ¼-inch thick steel purlins spaced max. 60-inch o.c.	One or more layers, ISO 95+ GL and/or DURO-GUARD ISO HD-E2	Duro-Last Purlin Fasteners and Duro-Tech TPO DuroBond Plates are fastened through to purlins	12-inch o.c. along purlins	Duro-Tech TPO bonded to Duro-Tech TPO DuroBond Plates with RhinoBond Portable Plate Bonding Tool and weighted RhinoBond Cooling Clamps. (All areas where the existing metal panels do not lay flush on the underlying purlin shall have a ¼-inch diameter pilot hole pre-drilled into the panel prior to driving the Purlin Fastener into the purlin.)	-45.0	A	¾
R-77	Existing standing seam or lap seam metal roof covers having min. ¼-inch thick steel purlins spaced max. 120-inch o.c.	One or more layers, ISO 95+ GL and/or DURO-GUARD ISO HD-E2	Duro-Last Purlin Fasteners and Duro-Tech TPO DuroBond Plates are fastened through to purlins	6-inch o.c. along purlins	Duro-Tech TPO bonded to Duro-Tech TPO DuroBond Plates with RhinoBond Portable Plate Bonding Tool and weighted RhinoBond Cooling Clamps. (All areas where the existing metal panels do not lay flush on the underlying purlin shall have a ¼-inch diameter pilot hole pre-drilled into the panel prior to driving the Purlin Fastener into the purlin.)	-52.5	A	¾
R-78	Existing standing seam or lap seam metal roof covers having min. 3/16-inch to max. ¼-inch thick steel purlins spaced max. 60-inch o.c.	One or more layers, ISO 95+ GL and/or DURO-GUARD ISO HD-E2	Duro-Last Purlin Fasteners and Duro-Tech TPO DuroBond Plates are fastened through to purlins	6-inch o.c. along purlins	Duro-Tech TPO bonded to Duro-Tech TPO DuroBond Plates with RhinoBond Portable Plate Bonding Tool and weighted RhinoBond Cooling Clamps. (All areas where the existing metal panels do not lay flush on the underlying purlin shall have a ¼-inch diameter pilot hole pre-drilled into the panel prior to driving the Purlin Fastener into the purlin.)	-82.5	A	¾

TABLE 7C: STEEL - RECOVER									
SYSTEM TYPE D-1: INSULATED, MECHANICALLY ATTACHED ROOF COVER									
System No.	Deck	Insulation		Roof Cover			MDP (psf)	Fire Rating UL790/E108	
		Type	Attach	Membrane	Fasteners	Attachment		Class	Max Incline (in.)
R-79	Existing standing seam or lap seam metal roof covers having min. 3/16-inch to max. ¼-inch thick steel purlins spaced max. 72-inch o.c.	One or more layers, ISO 95+ GL and/or DURO-GUARD ISO HD-E2	Prelim. attached	Duro-Tech TPO	Duro-Last Purlin Fasteners and Duro-Last HD Seam Plates	18-inch o.c. within 6-inch wide laps spaced max. 72-inch o.c. to engage steel purlin. Laps sealed with 1.5-inch heat weld. (All areas where the existing metal panels do not lay flush on the underlying purlin shall have a ¼-inch diameter pilot hole pre-drilled into the panel prior to driving the Purlin Fastener into the purlin.)	-30.0	A	1/2
R-80	Existing standing seam or lap seam metal roof covers having min. 3/16-inch to max. ¼-inch thick steel purlins spaced max. 114-inch o.c.	One or more layers, ISO 95+ GL and/or DURO-GUARD ISO HD-E2	Prelim. attached	Duro-Tech TPO	Duro-Last Purlin Fasteners and Duro-Last HD Seam Plates	12-inch o.c. within 6-inch wide laps spaced max. 114-inch o.c. to engage steel purlin. Laps sealed with 1.5-inch heat weld. (All areas where the existing metal panels do not lay flush on the underlying purlin shall have a ¼-inch diameter pilot hole pre-drilled into the panel prior to driving the Purlin Fastener into the purlin.)	-30.0	A	1/2
R-81	Existing standing seam or lap seam metal roof covers having min. 3/16-inch to max. ¼-inch thick steel purlins spaced max. 142-inch o.c.	One or more layers, ISO 95+ GL and/or DURO-GUARD ISO HD-E2	Prelim. attached	Duro-Tech TPO	Duro-Last Purlin Fasteners and Duro-Last HD Seam Plates	12-inch o.c. within 6-inch wide laps spaced max. 142-inch o.c. to engage steel purlin. Laps sealed with 5-inch heat weld that encapsulates the batten and fasteners or are primed with Duro-Tech TPO QuickPrime and sealed with Duro-Tech TPO QuickSeam Flashing. (All areas where the existing metal panels do not lay flush on the underlying purlin shall have a ¼-inch diameter pilot hole pre-drilled into the panel prior to driving the Purlin Fastener into the purlin.)	-30.0	A	1/2
R-82	Existing standing seam or lap seam metal roof covers having min. 3/16-inch to max. ¼-inch thick steel purlins spaced max. 90-inch o.c.	One or more layers, ISO 95+ GL and/or DURO-GUARD ISO HD-E2	Prelim. attached	Duro-Tech TPO	Duro-Last Purlin Fasteners and Duro-Last HD Seam Plates	12-inch o.c. within 6-inch wide laps spaced max. 90-inch o.c. to engage steel purlin. Laps sealed with 1.5-inch heat weld. (All areas where the existing metal panels do not lay flush on the underlying purlin shall have a ¼-inch diameter pilot hole pre-drilled into the panel prior to driving the Purlin Fastener into the purlin.)	-45.0	A	1/2

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TABLE 7C: STEEL - RECOVER									
SYSTEM TYPE D-1: INSULATED, MECHANICALLY ATTACHED ROOF COVER									
System No.	Deck	Insulation		Roof Cover			MDP (psf)	Fire Rating UL790/E108	
		Type	Attach	Membrane	Fasteners	Attachment		Class	Max Incline (in.)
R-83	Existing standing seam or lap seam metal roof covers having min. 3/16-inch to max. ¼-inch thick steel purlins spaced max. 10-inch o.c.	One or more layers, ISO 95+ GL and/or DURO-GUARD ISO HD-E2	Prelim. attached	Duro-Tech TPO	Duro-Last Purlin Fasteners and Duro-Last Coiled Metal Batten Strip	Duro-Last UltraPly QuickSeam R.M.A. Strips are applied over the insulation spaced 120-inch o.c. positioned over each steel purlin location. The batten is centered over each strip and fastened into the purlins 6-inch o.c. (All areas where the existing metal panels do not lay flush on the underlying purlin shall have a ¼-inch diameter pilot hole pre-drilled into the panel prior to driving the Purlin Fastener into the purlin.) Roof cover adhered to each strip by first priming the membrane underside with Duro-Last Duro-Tech TPO QuickPrime at the strip location, then rolling into place with a hand roller. The min. 2-inch side laps are sealed with a min. 1.5-inch outside heat weld	-45.0	A	1/2
R-84	Existing standing seam or lap seam metal roof covers having min. 3/16-inch to max. ¼-inch thick steel purlins spaced max. 142-inch o.c.	One or more layers, ISO 95+ GL and/or DURO-GUARD ISO HD-E2	Prelim. attached	Duro-Tech TPO	Duro-Last Purlin Fasteners and Duro-Last HD Seam Plates	6-inch o.c. within 6-inch wide laps spaced max. 142-inch o.c. to engage steel purlin. Laps sealed with 1.5-inch heat weld. (All areas where the existing metal panels do not lay flush on the underlying purlin shall have a ¼-inch diameter pilot hole pre-drilled into the panel prior to driving the Purlin Fastener into the purlin.)	-52.5	A	1/2

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TABLE 7D: RECOVER APPLICATIONS							
SYSTEM TYPE E: NON-INSULATED, MECHANICALLY ATTACHED ROOF COVER							
System No.	Deck (See Note 1)	Roof Cover			MDP (psf)	Fire Rating UL790/E108	
						Class	Max Incline (in.)
R-85	Min. 22 ga., type B, Grade 33 steel or structural concrete	Duro-Tech TPO Fleece	Duro-Last HD Fasteners with Duro-Last HD Seam Plates	12-inch o.c. within 6-inch wide laps spaced 114- inch o.c. Laps sealed with 1.5-inch heat weld.	-30.0	B	1
R-86	Min. 22 ga., type B, Grade 80 steel	Duro-Tech TPO Fleece	Duro-Last HD Plus Fasteners with Duro-Last HD Plus Seam Plates	12-inch o.c. within 6-inch wide laps spaced 114- inch o.c. Laps sealed with 1.5-inch heat weld.	-45.0	B	1
R-87	Min. 22 ga., type B, Grade 33 steel or structural concrete	Duro-Tech TPO Fleece	Duro-Last HD Fasteners with Duro-Last HD Seam Plates	6-inch o.c. within 6-inch wide laps spaced 114- inch o.c. Laps sealed with 1.5-inch heat weld.	-45.0	B	1
R-88	Min. 22 ga., type B, Grade 80 steel	Duro-Tech TPO Fleece	Duro-Last HD Plus Fasteners with Duro-Last HD Plus Seam Plates	6-inch o.c. within 6-inch wide laps spaced 114- inch o.c. Laps sealed with 1.5-inch heat weld.	-67.5	B	1

TABLE 7E: RECOVER APPLICATIONS							
SYSTEM TYPE F: NON-INSULATED, BONDED ROOF COVER							
System No.	Deck (See Note 1)	Primer	Roof Cover		MDP (psf)	Fire Rating UL790/E108	
			Type	Application		Class	Max Incline (in.)
R-89	Existing asphaltic BUR	None	Duro-Tech TPO Fleece	I.S.O. Spray S, XR Stick, 12-inch o.c. Ribbons	-45.0	Maintain A, B or C	1
R-90	Existing smooth surfaced BUR	None	Duro-Tech TPO Fleece 115 or XR 135	XR Stick, 12-inch o.c. Ribbons	-112.5	Maintain A, B or C	1
R-91	Existing granule surface SBS modified bitumen	None	Duro-Tech TPO Fleece	XR Stick, 12-inch o.c. Ribbons	-125.5	Maintain A, B or C	1
R-92	Existing granule-surfaced, asphaltic modified bitumen roof cover	None	Duro-Tech TPO Fleece	I.S.O. Spray S, XR Stick, 6-inch o.c. Ribbons	-142.5	Maintain A, B or C	1
R-93	Existing asphaltic BUR over structural concrete deck	None	Duro-Tech TPO Fleece	I.S.O. Spray S, 4-inch o.c. Ribbons	-240.0	Maintain A, B or C	1
R-94	Existing asphaltic BUR over structural concrete deck	None	Duro-Tech TPO Fleece	XR Stick, 4-inch o.c. Ribbons	-315.0	Maintain A, B or C	1
R-95	Existing asphaltic BUR over structural concrete deck	None	Duro-Tech TPO Fleece	Millennium PG-1, 4-inch o.c. Ribbons	-360.0	Maintain A, B or C	2
R-96	Existing granule surface modified bitumen over structural concrete	None	Duro-Tech TPO Fleece	Millennium PG-1, 4-inch o.c. Ribbons	-360.0	Maintain A, B or C	1
R-97	Existing granule surface SBS modified bitumen	None	Duro-Tech TPO Fleece 115 or XR 135	XR Stick, 12-inch o.c. Ribbons	-392.5	Maintain A, B or C	1
R-98	Existing granule surface APP modified bitumen	None	Duro-Tech TPO Fleece 115 or XR 135	XR Stick, 12-inch o.c. Ribbons	-422.5	Maintain A, B or C	1
R-99	Existing asphaltic BUR or granule surface modified bitumen over structural concrete or steel deck	None	Duro-Tech TPO Fleece	Asphalt	-495.0	Maintain A, B or C	1

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