

DURO-GRIP™ INSTA STIK™ QUIK SET COMMERCIAL ROOFING ADHESIVE

1. PRODUCT NAME

INSTA STIK™ Quik Set
Commercial Roofing Adhesive

2. MANUFACTURER

The Dow Chemical Company Dow
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3. PRODUCT DESCRIPTION

INSTA STIK™ Quik Set
Commercial Roofing Adhesive is a
single component polyurethane
adhesive dispensed from a portable
disposable pre-pressurized
container requiring no external
power source.

Basic Use

INSTA STIK™ Quik Set is used to
attach compatible roof insulation
boards to roof decks and substrates
in new roof and roof replacement
applications, including insulation
board to insulation board, insulation
board to Class I graveled and non-
graveled (bald) built-up roofs for re-
cover applications, and insulation or
gypsum board to 22 gauge and
thicker steel decks and wood
decks.

Advantages

- No outside power source required
- No off-ratio concerns
- No overspray
- No fastener/steel deck corrosion
- No fastener back-out
- Resists effects of freeze/thaw cycles
- No reduction in thermal performance due to mechanical fasteners
- No compressed or melted insulation
- VOC-free
- No obnoxious odor
- No noise or vibration disruptions
- No building height restrictions
- No puncturing of vapor retarders
- Replaces hot asphalt

Roof Deck Applications

INSTA STIK™ Quik Set can be
used to attach multiple insulation
layers and roof boards to
compatible decks and substrates.

Compatible Roof Insulations:

- STYROFOAM™ Brand
DECKMATE Plus FA, Type IV
- Polyisocyanurate (min. 1.5 in
[3.8 cm] thickness)
- High density wood fiber
- Perlite
- Expanded polystyrene, 1.0 pcf
(16 kg/m³) minimum (min. 2 in
[5 cm] thickness)
- Oriented strand board (OSB)
- DensDeck gypsum roof board
(trademark of Georgia-Pacific)
- USG SECUROCK fiber-reinforced
roof board (trademark of USG
Corporation)

Compatible Roof Decks and Substrates:

- Poured-in-place concrete,
minimum 28-day cure
- Precast structural concrete
- Lightweight structural concrete,
poured or plank
- Cementitious wood fiber plank
(pull test required)
- Vapor barriers



- Non-graveled (bald) Class I built-up roofs (pull test required)
- Graveled built-up roofs (pull test required)
- Spudded built-up roofs (pull test required)
- Steel (primed or painted), 22 gauge
- Wood

Additional preparation procedures are necessary for graveled and spudded built-up roofs. Refer to insulation manufacturer's FM Approvals listing for minimum insulation thickness requirements.

The FM Approvals are for specific combinations of insulation materials and substrates. Please consult FM Approvals or Duro-Last Engineering Services to determine if the combination of roofing materials for a specific roofing project meets the desired approval required.

Steel Deck Applications

Compatible Steel Deck Types:

- Minimum 22 gauge steel; Types A, B, E, F, H and N
- INSTA STIK™ Quik Set can be used as a non-warranted, temporary attachment (for up to 30 days) with compatible insulation for standing seam metal roof applications

Compatible Roof Insulation and Gypsum Boards to Steel Decks:

- Perlite
- Polyisocyanurate
- Fire-rated gypsum board; 5/8 in (15.9 mm) minimum thickness
- DensDeck fiberglass-faced gypsum roof board (trademark of Georgia-Pacific); 1/4 in (6.4 mm) minimum thickness

Non-compatible Applications

Non-compatible Roof Insulation Boards:

- Fiberglass
- Foil-faced insulation

Non-compatible Substrates:

- Coal tar for pitch built-up roofs
- Lightweight insulating concrete
- Active asphalt*
- Unapproved base sheets

Composition & Materials

INSTA STIK™ Quik Set is a single component, moisture-cured polyurethane adhesive that is free of conventional solvents.

INSTA STIK™ Quik Set Complete is supplied in a 31 lb (13.6 kg) unit, 23 lb (10.4 kg) net chemical weight, with a flexible dispensing hose and wand assembly. An on/off ball valve at the end of the dispensing hose allows operational control for single-hand application.

INSTA STIK™ Quik Set Tank Only is supplied in a 30 lb (13.6 kg) unit, 23 lb (10.4 kg) net chemical weight, with no dispensing equipment.

Limitations

INSTA STIK™ Quik Set is not approved for use:

- for polyisocyanurate insulation boards exceeding 4 ft x 4 ft (1.2 m x 1.2 m); all other insulation and re-cover boards can be adhered up to a 4 ft x 8 ft (1.2 m x 2.4 m) size
- when surface or ambient temperatures are below 33° F (1° C) or above 110° F (43° C) (application)
- during inclement weather
- on wet surfaces or on decks with standing water
- on surfaces with frost, ice or snow
- on loose gravel or on excessively dirty or grease-laden surfaces
- if the product has expired
- in attaching base sheets and membranes
- on all active asphalt

INSTA STIK™ Quik Set is not recommended for use on roof decks greater than 2:12 slope. For higher slopes, contact Duro-Last Engineering Services for additional guidelines.

Duro-Last accepts no responsibility for judging the acceptability of the roof substrate or for the roof system's structural integrity.

Accessories

The dispensing of INSTA STIK™ Quik Set can be dramatically increased using the Multi-Bead Applicator. The use of the applicator is recommended on roof decks with few penetrations and obstructions. Please contact Duro-Last for availability.



4. TECHNICAL DATA

Applicable Standards

Underwriters Laboratories, Inc. (UL)
– UL 1897 Standard for Safety for Uplift Tests for Roof Covering Systems

Note: INSTA STIK™ Quik Set has been tested under UL 1897 wind uplift resistance tests for steel deck applications. If INSTA STIK™ Quik Set is used in a UL Class A rated roofing system, the roofing system will maintain its UL Class A rating.

Approvals

FM Approvals:

INSTA STIK™ Quik Set meets the requirements of the following fire and wind uplift resistance tests for roof deck applications approved by FM Approvals:

FLAT (Specific Roof Assembly):

- Class 1-60 • Class 1-195
- Class 1-90 • Class 1-210
- Class 1-135 • Class 1-225
- Class 1-150 • Class 1-240
- Class 1-165 • Class 1-270
- Class 1-180

TAPERED (Specific Roof Assembly):

- Class 1-135 • Class 1-195
- Class 1-150 • Class 1-240
- Class 1-165 • Class 1-315
- Class 1-180

Dade County (Florida):

INSTA STIK™ Quik Set meets the requirements of Miami Dade County, Florida, windstorm and fire classification for roof deck applications.

Miami Dade Notice of Acceptance Number – 12-0618.02, expires 10/10/2017. Florida product approval FL720-R3.

5. INSTALLATION

INSTA STIK™ Quik Set is easy to use. The ideal chemical temperature at the time of application must be between 50° F (10° C) and 75° F (23° C). The minimum ambient and surface temperatures must be between 33° F (1° C) and 110° F (43° C). INSTA STIK™ Quik Set is packaged in a single container that should be stored between 50° F and 75° F (10° C and 23° C). The shelf life is 15 months from the date of manufacture.

Safety And Conditions Of Use

- Read the label and Safety Data Sheet carefully before use.
- INSTA STIK™ Quik Set contains isocyanate and a blowing agent. Do not breathe vapor or mist. Use in well-ventilated areas or wear proper respiratory protection. Isocyanate is irritating to the eyes, skin and respiratory system, and may cause sensitization by inhalation or skin contact.
- INSTA STIK™ Quik Set is very sticky and will adhere to most surfaces and skin. Do not get foam on skin. Wear gloves, and goggles or safety glasses. Cured foam must be mechanically removed or allowed to wear off in time.
- The contents are under pressure.
- For outside use only.

Surface Preparation

All surfaces must be free of any debris, dirt, dust, grease, oil, diesel fuel and standing water before INSTA STIK™ Quik Set is applied.

Re-Cover Over Bituminous Asphalt (BUR):

A licensed INSTA STIK™ Quik Set instructor, authorized to perform adhesion tests, must be on site prior to the commencement of the project to determine compatibility. Please contact Duro-Last Engineering Services at least fourteen (14) days in advance for further instructions.

Steel Deck:

The upper flange of the steel deck must be free of any debris, dirt, dust, grease, oil, diesel fuel, standing water, ice, snow or frost. On new steel, the residual shop-oil coating must be removed using Red Devil TSP90 or equivalent,

acetone, naphtha, or comparable cleaner.

Insulation

Review the roofing insulation plan. The roof insulation boards to be attached must be no larger than 4 ft x 4 ft (1.2 m x 1.2 m). In multiple layers of insulation, the staggered joint method must be used to eliminate thermal breaks.

Product & Equipment Installation

INSTA STIK™ Quik Set should be mixed prior to use by firmly holding the container on its side and agitating the contents using a side-to-side motion for at least 15 seconds. Attach the dispensing hose swivel end to the cylinder valve. Tighten the connection using an open-end wrench being careful not to over-tighten. Verify that the on/off valve on the dispensing hose is closed. The handle should be perpendicular to the valve. Attach the dispensing wand kit to the brass valve by screwing it in until it is hand tight. The dispensing wand kit is recommended for roof decks with many penetrations or confined areas.

IMPORTANT: When applying INSTA STIK™ Quik Set, the insulation boards must be placed onto the INSTA STIK™ Quik Set beads within 5 minutes. Walk on the boards to spread the beads for maximum contact. Continue to walk on the insulation boards every 5 – 7 minutes until the insulation is firmly attached, usually 15 – 45 minutes.

HANDLING CHARACTERISTICS	
Temperature, Humidity	Tack Free Time
40° F (4° C), 50% relative humidity	45 min.
75° F (24° C), 50% relative humidity	15 min.
110° F (43° C), 25% relative humidity	13 min.



Roof Penetrations/Drains

Additional adhesive is required around all roof penetrations and drains.

Roof Deck Applications

Use a parapet wall or gutter as a straight edge guide when dispensing the first bead of INSTA STIK™ Quik Set. Under the normal application rate, place the first bead 3 in (76.2 mm) within the outside edge of the insulation board to be attached.

Apply 3 additional parallel beads approximately 12 in (304.8 mm) apart so that the fourth bead is 3 in (76.2 mm) within the opposite edge of the insulation board. The result is 4 equidistant parallel beads (16 lineal feet (5 m) for each 4 ft (1.2 m) square (4 ft x 4 ft [1.2 m x 1.2 m]) insulation board.

Steel Deck Applications

With the edge of the insulation board centered over an upper flange for normal application rate, apply a 3/4 in – 1 in (19.05 mm – 25.4 mm) bead of INSTA STIK™ Quik Set on the first full upper flange nearest the edge of the insulation board. Continue to apply 3/4 in – 1 in (19.05 mm – 25.4 mm) beads on upper flanges as specified. Place the insulation board onto the beads within 5 minutes and walk on the boards to spread the INSTA STIK™ Quik Set for maximum contact.

Additional walkings are required every 5 – 7 minutes until the insulation boards are firmly attached, usually 15 – 45 minutes.

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APPLICATION RATE ¹ – BASED ON 3/4 IN – 1 IN (19 MM – 25 MM) DIAMETER BEAD				
Building Height ft (m)	Parapet Wall Height in (mm)	Perimeter Area Width ft (m)	Spacing Between Beads	
			Perimeter Area in (mm) o.c.	Field Area in (mm) o.c.
0 – 20 (6)	0 – 24 (0 – 610)	4 (1.3)	6 (152)	12 (305)
	25+ (635+)	4 (1.3)	12 (305)	12 (305)
21 – 40 (6 – 12)	0 – 24 (0 – 610)	8 (2.4)	6 (152)	12 (305)
	25 – 48 (635 – 1219)	4 (1.3)	6 (152)	12 (305)
	49+ (1245+)	4 (1.3)	12 (305)	12 (305)
41 – 70 (13 – 21)	0 – 24 (0 – 610)	12 (3.7)	6 (152)	12 (305)
	25 – 48 (635 – 1219)	8 (2.4)	6 (152)	12 (305)
	49+ (1245+)	4 (1.3)	6 (152)	12 (305)
71 – 100 (22 – 31)	0 – 24 (0 – 610)	12 (3.7)	6 (152)	9 (228)
	25 – 48 (635 – 1219)	12 (3.7)	6 (152)	12 (305)
	49+ (1245+)	12 (3.7)	6 (152)	12 (305)
101 – 200 (31 – 61)	0 – 24 (0 – 610)	12 (3.7)	6 (152)	9 (228)
	25 – 48 (635 – 1219)	12 (3.7)	6 (152)	9 (228)
	49+ (1245+)	12 (3.7)	6 (152)	12 (305)
201 – 300 (61 – 91.5)	Any Height	16 (4.9)	6 (152)	9 (228)
Greater than 300 (91.5)	Any Height	NA	6 (152)	6 (152)
¹ – Coverage is approximately 500 – 800 lineal feet at 3/4 in – 1 in (19.1 mm – 25.4 mm) bead of adhesive per 23 lb (10 kg) tank of INSTA-STIK™ Quik Set – Chemical temperature below 50° F (10° C) could result in reduced coverage rates – Agitating the cylinder of INSTA-STIK™ Quik Set for at least 15 seconds is required for proper yield and performance				