

DuPont™ Insta Stik™ Quik Set Commercial Roofing Adhesive

Installation Recommendations

SYSTEM OVERVIEW

General Information

DuPont™ Insta Stik™ Quik Set Commercial Roofing Adhesive* is a single-component, moisture-cured polyurethane adhesive that is free from conventional solvents and dispensed from a portable, disposable, pre-pressurized container requiring no external power source. Insta Stik™ Quik Set is available in a 30 lb (13.6 kg) unit (23 lb [10.4 kg] net chemical weight).

Insta Stik™ Quik Set is used to attach compatible insulation and coverboards 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.

For a faster, labor-saving application in a correct and repeatable pattern, the **Multi-Bead Applicator** from DuPont holds three tanks of Insta Stik™ Quik Set and allows application of up to eight beads of adhesive.

Safety, Storage and Conditions of Use

- Read the label and (Material) Safety Data Sheet ((M)SDS) carefully before use.
- The ideal chemical temperature at the time of application should be 75°F (24°C). The minimum ambient and surface temperatures must be 33°F (1°C) and rising.
- Wear long sleeves, gloves, and goggles or safety glasses. Provide adequate ventilation or wear proper respiratory protection.

- Insta Stik™ Quik Set Commercial Roofing Adhesive 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.
- Insta Stik™ Quik Set is packaged in a single container that should be stored between 50°F and 75°F (10°C and 24°C). The shelf life is 15 months from the date of manufacture.
- **ONLY use outdoors. Indoor use increases likelihood of ignitable conditions.**
- **DO NOT smoke during use. Do not use near any open flame or electrical source.**
- The blowing agent contained within this product can exhibit vapor flame limits under the right conditions. If specific operating conditions are such that concentrations of the blowing agent above the lower flammable limit can accumulate in areas with high relative humidity and in the presence of high-energy electrical discharges or other ignition sources, additional measures such as increased ventilation or coded electrical equipment (class one, division two) may be warranted.
- The contents are under pressure.

INSTALLATION

Preparation

- **Surface Preparation** – All surfaces must be free of any debris, dirt, dust, grease, oil, diesel fuel and standing water before DuPont™ Insta Stik™ Quik Set is applied.
- **Re-Cover Over (BUR) Projects** – A certified Insta Stik™ Quik Set instructor, authorized to perform adhesion tests, must be on site prior to the commencement of the project to determine compatibility. Contact DuPont at 1-866-583-2583 at least 14 days in advance for further instructions.
- **Steel Deck Projects** – On new steel, the residual shop oil coating must be removed using TSP, acetone, naphtha or comparable cleanser.
- **Insulation Configuration** – Polyisocyanurate insulation boards cannot exceed 4' x 4' (1.2 m x 1.2 m). All other boards may be installed up to a 4' x 8' (1.2 m x 2.4 m) size. In multiple layers of insulation, the staggered joint method should be used to eliminate thermal breaks.

Product and Equipment Installation

The Insta Stik™ Quik Set Complete Kit includes a steel tank, a 4' (1.2 m) flexible dispensing hose, two PVC dispensing wands, a 1/4" (6.4 mm) coupler and 9/16" (14 mm) wrench. The tank can also be purchased separately.

1. Insta Stik™ Quik Set Commercial Roofing Adhesive should be shaken prior to use. Firmly hold the container on its side and agitate the contents using a side-to-side motion for at least 15 seconds.
2. Attach the swivel hose fitting on the end of the dispensing hose to the threaded port of the cylinder valve. Once it is seated properly, tighten securely using an open-end wrench (supplied). Verify that the on/off valve is attached to the dispensing hose and is in the off position.
3. Attach either end of the threaded wand to the dispensing hose on/off valve and tighten securely. Attach the coupler to the exposed end of the wand. Attach the second plastic wand to the coupler and tighten securely.
4. Slowly open the valve at the top of the cylinder 1/2 to 1 revolution. Open further if higher velocity is desired. Check for leaks. If there are no leaks, Insta Stik™ Quik Set is ready for use.

Typical Field Application Rate

Use a parapet wall or gutter as a straight edge guide when dispensing the first bead of Insta Stik™ Quik Set. Dispense a minimum of 1 lineal foot (30 cm) of 3/4" - 1" (19 mm - 25 mm) diameter bead of Insta Stik™ Quik Set for every square foot (30 cm²) of insulation board to be attached. Place the first bead of Insta Stik™ Quik Set 6" (15 cm) inside the outside edge of the 4' (1.2 m) wide insulation board to be attached. Apply three additional parallel beads approximately 12" (30 cm) apart so that the fourth bead is 6" (15 cm) inside the opposite edge of the insulation board.

The application rate is dependent upon building height, building configuration and geographical wind zone. Contact DuPont to determine recommended application rates.

IMPORTANT: When applying Insta Stik™ Quik Set, the insulation boards must be placed onto the Insta Stik™ Quik Set beads before becoming tack-free (2 to 8 minutes depending on humidity). Walk on the boards to spread the beads for maximum contact. Continue to walk on the insulation boards every 3 to 4 minutes until the insulation is firmly attached, usually within 10 to 20 minutes. Low humidity conditions will require longer cure time.

Roof Penetrations/Drains

A 3/4" - 1" (19 mm - 25 mm) diameter bead of Insta Stik™ Quik Set is required around all roof penetrations and drains.

Steel Deck Applications

With the edge of the insulation board centered over an upper flange under standard application rate, apply a 3/4" - 1" (19 mm - 25 mm) diameter bead of Insta Stik™ Quik Set on the first upper flange nearest the edge of the insulation board. Continue to apply 3/4" - 1" (19 mm - 25 mm) beads on the upper flange as specified. Contact DuPont to determine recommended application rates.

Determining Application Rates

Application rates are determined by following FM 1-28 and FM 1-29 guidelines as described below. Use the following criteria as a guideline in determining application rates for Insta Stik™ Quik Set. For further assistance, consult *Factory Mutual 1-28* and *1-29* data sheets.

- Enclosed buildings – A building is considered enclosed if it does not comply with the requirements for partially enclosed buildings listed below.
- Partially enclosed buildings – A building with a windward wall where the total area of openings exceeds the sum of all other wall and roof openings by more than 10 percent; and the total area of openings exceeds 4 ft² (0.37 m²) or 1 percent of the area of that wall, whichever is smaller, and the sum of all other wall and roof openings does not exceed 20 percent
- Exposure "B," urban and suburban – Wooded terrain, numerous adjoining obstructions, large city centers
- Exposure "C," open terrain – Country, grasslands, airports, shorelines in hurricane zones (wind speeds of 120 mph [193 kph] or greater)
- Exposure "D," areas exposed to large bodies of water – Coastal areas greater than or equal to 1 mile (1.6 km) wide, areas extended inland from shore 1500' (472 m) or 10 times the height of the building (whichever is greater); hurricane coasts where the wind speed is less than 100 mph (160 kph)

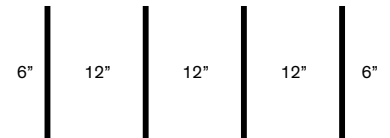
The contractor is required to complete an Insta Stik™ Quik Set Pre-Job Qualification Form and submit it to DuPont. A representative will complete the calculations based on FM 1-28 and FM 1-29.

The contractor will need to determine the building exposure and the proper height with regard to the slope of the roof deck, as well as identifying surrounding terrain. For Exposure "B" job sites only, consult Table 1 for application details. For all other exposures and wind design requirements, contact DuPont at 1-866-583-2583.

Exposure B												
Class 1-90 Rated Systems												
Enclosed Building												
h: 60' h/w: 1 for 60' <h: <90' q: 10"												
Mean Roof Height	Basic Wind Speed, V (mph) Based on ASCE 7-98 (3-second gust)											
h (ft)	<85	90	100	110	120	130	140	145	150	160	170	185
Zone 1 (Field of Roof)												
15	15.0	17.0	21.0	25.0	30.0	35.0	41.0	43.0	47.0	53.0	60.0	71.0
30	15.0	17.0	21.0	25.0	30.0	35.0	41.0	43.0	47.0	53.0	60.0	71.0
60	18.0	20.0	25.0	31.0	36.0	43.0	49.0	53.0	57.0	65.0	73.0	86.0
89	20.0	23.0	28.0	34.0	41.0	48.0	55.0	60.0	64.0	72.0	82.0	97.0
Zone 2 (Perimeter of Roof)												
15	25.2	28.6	35.3	42.0	50.4	58.8	68.9	72.2	79.0	89.0	100.8	119.3
30	25.2	28.6	35.3	42.0	50.4	58.8	68.9	72.2	79.0	89.0	100.8	119.3
60	30.2	33.6	42.0	52.1	60.5	72.2	82.3	89.0	95.8	109.2	122.6	144.5
89	33.6	38.6	47.0	57.1	68.9	80.6	92.4	100.8	107.5	121.0	137.8	163.0
Zone 3 (Corner of Roof)												
15	38.0	43.0	53.1	63.3	75.9	88.5	103.7	108.8	118.9	134.1	151.8	179.6
30	38.0	43.0	53.1	63.3	75.9	88.5	103.7	108.8	118.9	134.1	151.8	179.6
60	45.5	50.6	63.3	78.4	91.1	108.8	124.0	134.1	144.2	164.4	184.7	217.6
89	50.6	58.2	70.8	86.0	103.7	121.4	139.1	151.8	161.9	182.2	207.5	245.4

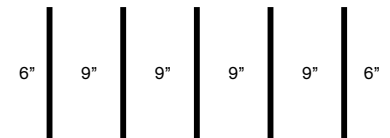
Light Gray Areas (<45 psf)

Standard application rate – Place the first bead of DuPont™ Insta Stik™ Quik Set 6" (15 cm) inside the outside edge of the 4' (1.2 m) wide insulation board to be attached. Apply three additional parallel beads approximately 12" (30 cm) apart so that the fourth bead is 6" (15 cm) inside the opposite edge of the insulation board.



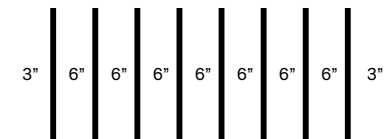
Dark Blue Areas (<67.5 psf)

Standard application rate – Place the first bead of Insta Stik™ Quik Set 6" (15 cm) inside the outside edge of the 4' (1.2 m) wide insulation board to be attached. Apply four additional parallel beads approximately 9" (23 cm) apart so that the fifth bead is 6" (15 cm) inside the opposite edge of the insulation board.



Light Blue Areas (<90 psf)

Standard application rate – Place the first bead of Insta Stik™ Quik Set 6" (15 cm) inside the outside edge of the 4' (1.2 m) wide insulation board to be attached. Apply four additional parallel beads approximately 9" (23 cm) apart so that the fifth bead is 6" (15 cm) inside the opposite edge of the insulation board.



Dark Gray Areas:

NOT APPLICABLE (>90 psf); will not meet Class 1-90. *Note: Please check with DuPont to verify if your roofing system configuration has been tested by Factory Mutual (FM).*



**For more information visit us at
instastik.com
or call 1-866-583-2583**

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CAUTION: When cured, these products are combustible and will burn if exposed to open flame or sparks from high-energy sources. Do not expose to temperatures above 240°F (116°C). For more information, consult (Material) Safety Data Sheet ((M)SDS), call DuPont at 1-866-583-BLUE (2583) or contact your local building inspector. In an emergency, call 1-989-636-4400 in the U.S. or 1-519-339-3711 in Canada. The blowing agent contained within this product can exhibit vapor flame limits under the right conditions. If specific operating conditions are such that concentrations of the blowing agent above the lower flammable limit can accumulate in areas with high relative humidity and in the presence of high-energy electrical discharges or other ignition sources, additional measures such as increased ventilation or coded electrical equipment (class one, division two) may be warranted. DO NOT SMOKE DURING USE. DO NOT USE NEAR ANY OPEN FLAME OR ELECTRICAL SOURCE. OUTDOOR USE ONLY. INDOOR USE INCREASES LIKELIHOOD OF IGNITABLE CONDITIONS. INSTASTIK™ Quik Set Commercial Roofing Adhesive contains isocyanate and a blowing agent. Read the label and (Material) Safety Data Sheet ((M)SDS) carefully before use. Wear gloves, and goggles or safety glasses. Provide adequate ventilation or wear proper respiratory protection. Contents under pressure. For outside use only.

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