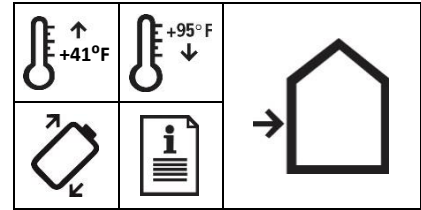


# Sto TurboStick® Mini

81586-740 Sto TurboStick® Mini



## Technical Data

| REPORT   | TEST METHOD   | TEST CRITERIA  | TEST RESULTS  |
|--|---|--|---|
| <b>Tensile Bond Strength</b>                   | ASTM C297   | Greater than 15 psi  | Adhesion to EPS and XPS greater than 20 psi (137 kPa) at 24 hours                                   |
| <b>Surface Burning</b>                         | ASTM E84  | Flame Spread: < 25<br>Smoke Developed: < 450                           | Flame Spread: 10<br>Smoke Developed: 55   |
| <b>Intermediate Scale Fire Test Evaluation</b> | ASTM E1354  | Compares favorably with other Sto NFPA 285 listed spray foam adhesives | Pass (qualifies for use on noncombustible construction in StoTherm ci and StoTherm ci XPS systems ) |
| <b>VOC (g/L)</b>                               | This product contains no VOC's. Complies with US EPA (40 CFR 59) VOC emission standards for architectural coatings. |  |   |

Results are based on lab testing under controlled conditions. Results can vary between labs or from field tests.

## Features

## Benefits

|                          |  |
|--------------------------|--|
| <b>1 Ready-to-apply</b>  | Go straight to the wall as there is no mixing (translation: no labor) required compared to traditional cementitious adhesives.                                 |
| <b>2 Cures in 1 hour</b> | Rasp, cut joints, and apply base coat and mesh the same day instead of waiting until the following day.  |
| <b>3 Small packaging</b> | Easier to handle the material on scaffolding. Requires less space on the ground for staging compared to bag material.  |
| <b>4 Lightweight</b>     | This product weighs significantly less than a bag of base coat. In addition its compact size makes it easier to carry and handle, for example, on scaffolding. |

## Surface Preparation

### Substrates:

- ASTM C1177 compliant glass mat faced gypsum sheathing protected with StoGuard air and moisture barrier
- Exterior or Exposure I wood-based sheathing in compliance with US DOC PS-1 or PS-2 protected with StoGuard air and moisture barrier
- Properly prepared concrete and masonry surfaces
- Concrete and masonry surfaces protected with StoGuard air and moisture barrier

Avoid application over irregular, out-of-plane surfaces to ensure good adhesive contact with the substrate.

### Sheathing:

Surface must be clean, dry and free of all bond-inhibiting materials. Sheathing must be installed and protected in accordance with building code and manufacturer's requirements. Remove and replace weather-damaged sheathing. Protect all sheathing surfaces with StoGuard® air and moisture barrier.

### Concrete and masonry surfaces:

Surfaces must be clean, dry, and free of frost, damage, and all bond-inhibiting materials, including dirt, efflorescence, form oil and other foreign matter. Loose or damaged material must be removed by water blasting, sandblasting or mechanical wire brushing and repaired.

*Sto TurboStick® Mini is a ready-to-use, single component polyurethane spray foam adhesive for securing Sto EPS Insulation Board and XPS insulation boards in StoTherm® ci exterior wall claddings.*

## Coverage

110-130 ft<sup>2</sup> (10-12 m<sup>2</sup>) per canister

Coverage will vary depending on substrate condition, application technique, waste, and final thickness

## Packaging

26.3 oz. (750 ml) pressurized canister

## Shelf Life

12 months, from manufacture date, if properly stored and sealed.

## Storage

Store upright in a clean, dry area at temperatures from 64 to 72°F (18 to 22°C). Protect from freezing and direct sunlight. Avoid contact with water. Keep away from sources of heat, sparks, flame, ignition and physical abuse. Prevent puncture or crushing during storage and transport. Avoid temperatures above 122°F (50°C).

## Set-up and In-use Storage

Shake canister vigorously for at least 30 seconds. Remove plastic cap from canister and screw the canister by hand firmly to the dispensing pistol. Do not use excessive force or use tools to tighten. Turn the knob on the back of the pistol to adjust flow and ribbon size. Spray initially into an open container until steady flow and uniform consistency are achieved. As soon as the canister is empty, remove and connect the pistol to a new one and continue to use. Delay in transfer can cause pistol to clog.

Once a canister is attached to the pistol, do not disassemble until the canister is empty. Attach a full canister, only, to pistol. The flow control valve on the back of the pistol may be left open during periods of regular use. Protect the canister from puncture or crushing during storage and transport. If necessary the pistol can be cleaned with acetone before transferring to a new canister to prevent hardening of material in the pistol or to remove clogs. Dried material can only be removed mechanically.

## Health And Safety

### DANGER!

### Health Precautions

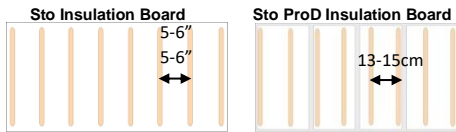
Extremely flammable aerosol. Harmful if swallowed. Harmful in contact with skin Harmful if inhaled. Causes skin irritation Causes serious eye irritation. May cause allergic or asthmatic symptoms or breathing difficulties if inhaled. May cause allergic skin reaction. Suspected cause allergic skin reaction. Suspected of causing cancer. May cause respiratory irritation. May cause drowsiness or dizziness. May cause damage to organs through prolonged or repeated exposure (respiratory tract). Obtain special

# Sto TurboStick® Mini

## Application

Minimum ambient and surface temperature for use is 41°F (5°C). Maximum application temperature is 95°F (35°C).

- Apply Sto TurboStick Mini to the back of the insulation board using the dispensing pistol. Place a ribbon of adhesive approximately  $\frac{3}{4}$ " (2 cm) from each end of the board along the short dimension. Between these two ribbons, apply 6 additional ribbons spaced evenly (nominally 5-6" [13-15 cm] apart), and extending to, nominally,  $\frac{1}{2}$ " (1 cm) from the edges of the insulation board at its long dimension. Form uniform ribbons of adhesive parallel to the short dimension of the board so the ribbons are oriented vertically when the insulation is placed on the wall. Sto ProD insulation boards require two adhesive ribbons between each drainage channel. See illustration below:



- Position and install insulation board immediately after application of Sto TurboStick Mini, before the adhesive ribbons skin over. The adhesive will generally remain tacky for up to 5 minutes. Tack time will vary with temperature and humidity conditions. Install the board using LIGHT pressure in a running bond pattern and stagger board joints from sheathing joints (refer to StoTherm ci installation instructions)
- Be precise with initial board placement. Sto TurboStick Mini will not provide opportunity to "slide" the insulation board into position after placement.

## Limitations

- Protect installed materials from rain and freezing until fully cured.
- In cold weather make sure canister is at proper storage temperature (64-72°F [18-22°C]) prior to use and keep canister within specified storage range.
- Use caution when applying in windy conditions to protect adjacent property from contact with uncured windblown adhesive

- For partial boards, use the same procedure for the vertical ends, and apply additional ribbons of vertically oriented adhesive spaced nominally 5-6" (13-15 cm) apart.
- Starter Courses: Note that Sto TurboStick Mini provides less initial "grab" compared to other Sto adhesives. For this reason, temporary support is recommended to hold the starter course in place, especially as subsequent courses of insulation board are added above.
- Shortly after the boards are placed, adjust the boards, using light pressure to create and maintain the plane of the insulation boards and flush board joints. A long level or other straight edge is helpful for this step.

## Curing/Drying

Sto TurboStick Mini is a moisture-cure adhesive. It cures quicker in high humidity and slower in low humidity conditions. It will also cure quicker with high temperature and slower in low temperature conditions. Full curing occurs in approximately 1 hour under normal conditions [70°F (21°C), 50% RH]. Do not attempt to rasp insulation boards until Sto TurboStick Mini is fully cured, and insulation boards are well adhered.

## Clean Up

All foam adhesive and pressure must be released from the canister before disposal by holding the trigger until material is no longer dispensed from the canister. Do not dispose of the canister in fire. Remove and discard the empty canister in accordance with applicable federal, state/provincial, and local environmental regulations.

instructions before use. Do not handle until all safety precautions have been read and understood.

Elevated temperatures can cause hazardous polymerization. Toxic fumes may be released in fire situations. Contents are under high pressure. Avoid temperature above 122°F (50°C).

### Safety Precautions

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust, fume, gas, mist vapors, or spray. Use only outdoors or in well-ventilated area. Use of a NIOSH approved respirator, safety goggles and protective gloves, head, neck protection, protective clothing, and protective goggles are recommended. Remove contaminated clothing immediately. Wash skin thoroughly after handling.

### First Aid

**SKIN CONTACT:** Wash thoroughly with soap and water. Use of a polyglycol-based skin cleanser or corn oil may be more effective than soap and water. Contact a physician if irritation persists. **INGESTION:** Rinse mouth with water. Immediately after ingesting give lots of water to drink. Do not induce vomiting. Contact a physician.

**HYGIENE:** Avoid contact. Do not eat, drink or smoke during work. Wash hands immediately after use. Wash clothing before re-use.

### Spills

Allow product to solidify, dam up the solid spill, and remove by mechanical means. Carefully collect the spill in suitable and properly labeled open containers, such as metal or plastic drums or polylined fiber pacs to avoid environmental contamination. Clean (treat) contaminated surfaces with acetone. Take the collected spill to a competent authority. Wash clothing and equipment after handling.

### Disposal

Dispose of in accordance with local, state or federal regulations. Release contents and pressure from the cylinder before disposal. Do not discard pressurized cylinder. Do not discharge contents onto the ground, into drains, into any bodies of water or into any sewers or the environment. Do not mix with hazardous waste.

### Warning

**KEEP CONTAINER CLOSED WHEN NOT IN USE. KEEP OUT OF THE REACH OF CHILDREN. NOT FOR INTERNAL CONSUMPTION. FOR INDUSTRIAL USE ONLY.** Consult the Safety Data Sheet (SDS) at [www.stocorp.com](http://www.stocorp.com) for further health and safety information.

**LIMITED WARRANTY:** This product is subject to a written limited warranty which can be obtained free of charge from Sto Corp. Refer to Sto Specifications for more complete information on proper use and handling of this product.

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### Attention

This product is intended for use by qualified professional contractors, not consumers, as a component of a larger construction assembly as specified by a qualified design professional, general contractor or builder. It should be installed in accordance with those specifications and Sto's instructions. Sto Corp. disclaims all, and assumes no, liability for on-site inspections, for its products applied improperly, or by unqualified persons or entities, or as part of an improperly designed or constructed building, for the nonperformance of adjacent building components or assemblies, or for other construction activities beyond Sto's control. Improper use of this product or use as part of an improperly designed or constructed larger assembly or building may result in serious damage to this product, and to the structure of the building or its components. **STO CORP. DISCLAIMS ALL WARRANTIES EXPRESSED OR IMPLIED EXCEPT FOR EXPLICIT LIMITED WRITTEN WARRANTIES ISSUED TO AND ACCEPTED BY BUILDING OWNERS IN ACCORDANCE WITH STO'S WARRANTY PROGRAMS WHICH ARE SUBJECT TO CHANGE FROM TIME TO TIME.** For the fullest, most current information on proper application, clean-up, mixing and other specifications and warranties, cautions and disclaimers, please refer to the Sto Corp. website, [www.stocorp.com](http://www.stocorp.com).