





Sto TurboStick™

Installation and Operation Instructions



TOOLS REQUIRED

			
14 mm open wrench	17 mm open wrench	19 mm open wrench	Disposable container

Cylinder, Hose, and Pistol Assembly



1 Hold cylinder horizontally and shake vigorously side-to-side for 10 to 15 seconds to mix contents.



4 Hand-tighten hose fitting onto application pistol inlet fitting. **AVOID CROSS-THREADING.** Use properly sized open end wrench to tighten fitting. **DO NOT OVERTIGHTEN.**



2 Hand-tighten hose fitting onto TurboStick cylinder. Avoid cross-threading the fittings which will result in leaks at the connection. Use properly sized open end wrench to tighten fitting. **DO NOT OVERTIGHTEN.**



5 Open cylinder and hose valve. Observe for leaks. **DO NOT USE TOOLS TO OPEN OR CLOSE THE CYLINDER VALVE. CONTENTS OF CYLINDER ARE UNDER PRESSURE AND COULD CAUSE IN INJURY IF CYLINDER VALVE IS DAMAGED.**



3 Verify the valve on the hose and the flow-control valve on the pistol are fully **CLOSED.** Secure hose to cylinder handle with plastic tie to protect hose and connection from incidental damage during use.



6 Open flow control valve on the back of pistol and dispense TurboStick material into an open container until steady flow and uniform consistency is achieved.

Safety Instructions

The cylinder is under pressure. Improper handling and damage to the cylinder and/or valve can result in the uncontrolled escape of foam, which could damage objects or injure persons in its vicinity. For this reason, it is especially important to observe the following handling instructions:

1. Do not pull or jerk on the hose or lift/carry the cylinder by the hose. Do not exert force on the cylinder/hose connection area. Always position the cylinder securely and use cable ties (see Point 2).
2. Only open and close the cylinder shut-off valve by hand. Do not use excessive force or use tools. The valve remains open once the hose and pistol assembly is connected and is only closed to allow removal or change-over of the hose.
3. Always use safety glasses and gloves when applying Sto TurboStick. Further safety instructions can be found in the Sto-TurboStick safety data sheet available at www.stocorp.com.

Installation of Adhesive

- 1 Apply TurboStick to a sample insulation board using the application pistol and adjust flow rate and speed of application to produce properly sized adhesive ribbons.
- 2 Apply a ribbon to each end of the insulation board, parallel to the short dimension of the board. Position the end ribbons approximately $\frac{3}{4}$ inch (2 cm) from the end of the insulation board.
- 3 Apply six (6) more ribbons to each 2' x 4' (0.6-1.2 m) insulation board, evenly spaced (nominally 5" to 6" [13-15 mm] apart) between the end ribbons.
- 4 Start and stop adhesive ribbons approximately $\frac{1}{2}$ inch (13 mm) from the edge of the board.
- 5 Adhesive ribbons shall be oriented parallel to the short dimension on the board such that they will be vertical when the insulation is in-place.
- 6 Where used, Sto ProD insulation boards shall have two adhesive ribbons between each drainage channel (see illustration below):



Note: Turbostick application pattern is the same for both standard (flat) Sto insulation board and Sto ProD insulation board.

- 7 Apply insulation board to prepared substrate when adhesive ribbons have tack and before the surface of ribbons begin to form a skin. Tack time will vary with temperature and humidity conditions. The time for TurboStick to begin to skin over is generally 1 to 5 minutes, depending on ambient conditions. Check the open time of the ribbons periodically during the day and whenever ambient conditions noticeably change.
- 8 Be precise with the initial placement. Sto TurboStick sets rapidly and will not provide opportunity to slide boards into position after placement.
- 9 Install insulation boards in a running bond pattern with joints tightly abutted and lightly press boards into place. Slight post-expansion of the adhesive will occur which can cause unevenness at board joints. Use a straight edge to lightly press boards so joints between boards are kept flush.
- 10 For partial boards use the same procedure as full boards with ribbons of adhesive, spaced not more than 5" to 6" (13-15 cm) apart.
- 11 Starter Courses: Note that Sto TurboStick provides less initial "grab" compared to other Sto adhesives. For this reason, temporary support under the starter course is recommended to hold the starter course in place, especially as subsequent courses of insulation board are added above.

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Curing/Drying

- 1 Sto TurboStick is moisture-cured adhesive. As a result it will cure marginally quicker in higher humidity conditions.
- 2 Full curing occurs in approximately 1 hr under normal conditions [70°F (21°C) and 50% R.H.].
- 3 Do not attempt to rasp insulation boards until TurboStick is fully cured and insulation boards are well adhered.

Storage In-use

- 1 Sto Turbostick may be used up to 60 days once opened and can be stored for this period of time without removing the hose and pistol assembly.
- 2 Once the top valve on the cylinder and valve to the hose are opened, DO NOT CLOSE THEM. Clean the pistol tip and only close the valve at the back of the pistol before storage.
- 3 During storage ensure hose and pistol are protected to avoid abrasion or damage.
- 4 During periods of extended storage it is recommended to cycle material through the hose and pistol every 10 – 21 days to minimize risk of material hardening in the hose and pistol. To cycle material, shake TurboStick per instructions, open flow control knob on pistol by turning it counterclockwise $1\frac{1}{4}$ to 2 turns. Dispense TurboStick into open receptacle for 10 to 20 seconds to flush hose and pistol. Store again per storage instructions.
- 5 When one cylinder is emptied, the hose and pistol should be immediately connected to another cylinder with the valves on the tank and hose turned on, so that wet material remains "pressurized" in the hose and pistol.
- 6 Ensure empty containers are completely depressurized before disposal. Open cylinder valve fully and allow all remaining TurboStick and air to escape. Dispose of containers in accordance with local laws and requirements.

SAFETY INSTRUCTIONS

Generally, the assembled cylinder, hose, and pistol system should always be pressurized whenever possible. This means that the yellow tap (valve) on the top of the Sto-TurboStick cylinder should remain open after assembly. However, during transport the tap on top of the cylinder must be closed. The foam pistol should be secured and the adjusting knob on the rear of the foam pistol fully screwed back for this.