

# TECHNICAL DATA SHEET



## Polystyrene Construction Polyurethane Foam Adhesive

**Handi-Stick® Polystyrene Construction Polyurethane Foam Adhesive** is a multiple purpose UL classified one-component polyurethane adhesive designed within the international guidelines for protection of the ozone layer, and with respect to the Montreal Protocol, 1987, and other environmental guidelines, utilizing a non-flammable blowing agent to assist the safety of the end user. It is designed to be dispensed through any of the professional one-component dispensing units specifically designed for dispensing Handi-Stick Adhesives. Alternately, the product may also be obtained in a "straw foam" version, which is dispensed through the straw adapter supplied with each can.

### Application Areas

Handi-Stick Polystyrene Construction Polyurethane Foam Adhesive is suited for many construction adhesive applications where a faster cure and shorter open time are desired. It contains no VOC's or solvents to harm polystyrene board, and may also be used as a void filler and gap sealant. As a drywall adhesive, Handi-Stick Polystyrene Construction Adhesive is tested according to ASTM E-72, and also meets or exceeds the adhesive, tensile and shear strength requirements of ASTM C-557, as well as CGSB 71.25 and CA 25-4.

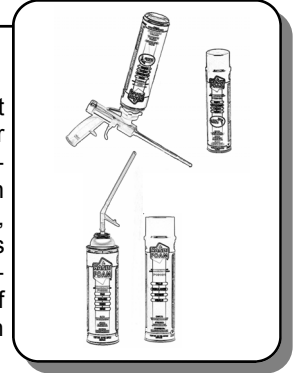
### Properties

Handi-Stick Polystyrene Construction Polyurethane Foam Adhesive dries tack-free in approximately five minutes depending on moisture and temperature conditions and has a rated 'open time' of 3 minutes (see Application/Use section). Cuttable within one hour.

Handi-Stick Adhesive adheres to almost all building materials with the exception of surfaces such as polyethylene, Teflon®, silicone, oils and greases, mold release agents, and similar materials.

Optimum application temperature is between 65°F (18°C) and 80°F (27°C) and may be used between 40°F (4°C) and 115°F (46°C). Cured adhesive is resistant to heat and cold, -200°F

to +200°F (-129°C to +93°C), and to aging, but not UV rays (i.e. sunlight) unless painted, covered or coated. Cured PU foam is chemically inert and non-reactive in approved applications, and will not harm electrical wire insulations, Romex®, rubber, PVC, polyethylene (i.e. PEX, CPVC) or other plastic. It is approved for use around wires, plumbing penetrations, etc., and contains no formaldehyde. Studies of polyurethane foam applied below grade have shown no significant change in foam performance.



Handi-Stick Polystyrene Construction Polyurethane Foam Adhesive requires no outside mechanical or electrical power source and is disposable. When applied, the product will bond, seal and protect against dust, air infiltration, pests, etc. Handi-Stick Polystyrene Construction Adhesive contains no VOCs and has no solvents to harm polystyrene board.

### Preparation For Use

Read all applicable instructions for the dispensing gun and systems, which are included with each product, prior to any use.

Substrate must be clean, firm, free of loose particles and free of dust, grease and mold release agents. Protect surfaces not to be adhered.

### Application / Use

**Note:** For proper adhesion, do not allow more than 3 minutes to elapse between dispensing adhesive and attaching substrate. Longer than three minutes 'open time' will adversely affect adhesion.

After following instructions for set-up, the dispensing gun is ready to use. The adhesive flow can be metered by adjusting the metering screw located in the back of the dispensing unit, and by pulling the gun trigger for the desired extrusion rate. Application can be interrupted when needed as outlined in the instructions and the gun will be ready for immediate use, as long as it remains attached to a pressurized container. Empty container must be replaced immediately with new pre-shaken container.

Remove fresh adhesive overspray with Handi-Cleaner Polyurethane Cleaner (P10083), or solvents such as acetone. Cured adhesive can only be removed mechanically. The multi-purpose Handi-Cleaner Polyurethane Cleaner product is also designed to be used for cleaning the dispensing gun internally for long-term storage and application interruption.

**Important Note:** Use only in well ventilated areas. Wear impervious gloves, eye protection, and protective clothing when using. Read all

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## Technical Data

(METRIC SHOWN IN PARENTHESES)

<b>CORE DENSITY</b>	1.2 lbs/ft <sup>3</sup> (19.2 kg/m <sup>3</sup> )
<b>R-VALUE</b>	4-5 per inch, typically
<b>RSI (METRIC R-VALUE)</b>	(0.7-0.8/inch, 0.005-0.006/mm)
<b>AIR BARRIER PROPERTIES</b> ASTM E-283	
@6.24 psf (300 Pa)	<0.01 cfm/ft <sup>2</sup> (0.05 L/s/m <sup>2</sup> )
@1.57 psf (75 Pa), extrapolated	<0.0025 cfm/ft <sup>2</sup> (0.0125 L/s/m <sup>2</sup> )
<b>Closed Cell Content</b> ASTM D-2856	>70%
<b>TACK-FREE TIME</b> 70°F (21°C), 60% RH	Approx. 5 min.
<b>CURE TIME</b>	12 - 24 hours
<b>CUTTABLE</b> (1" Bead)	<1 hour

## Approvals / Standards

Handi-Stick Polystyrene Construction Polyurethane Foam Adhesive is approved by the following Classifications, Codes and Standards:

UL Classified - File # R13919 Caulking and Sealants  
ASTM E-84 (15.5%)  
Flame Spread 15  
Smoke Developed 50

CA 25-4

ASTM E-72

Meets or exceeds the adhesive, tensile and shear strength requirements of ASTM C-557, CGSB 71.25

ODP (Ozone Depletion Potential): Contains HCFC 22 propellant.  
Consult MSDS for reporting requirements.

VOC Content: Contains no VOC's.

## Theoretical Yield\*

Product	Bead Size			VOLUME
	1/4" (6.3 mm)	3/8" (9.5 mm)	1/2" (12.7 mm)	
<b>24 oz. Straw Foam</b>				
<b>(680 g)</b>				
P10169	3500 ft. (1067 m)	1560 ft. (476 m)	880 ft. (268m)	1.25 ft <sup>3</sup> (35.4 liters)
<b>24 oz. Gun Foam</b>				
<b>(680 g)</b>				
P10132	3500 ft. (1067 m)	1560 ft. (476 m)	880 ft. (268 m)	1.25 ft <sup>3</sup> (35.4 liters)
<b>31 oz. Gun Foam</b>				
<b>(880 g)</b>				
P10162	4550 ft. (1387m)	2020 ft. (616m)	1140 ft. (347m)	1.61 ft <sup>3</sup> (45.7 liters)

\*Yields are based on theoretical calculations, for comparison purposes, and will vary depending on ambient conditions and particular application.

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instructions and safety information (MSDS) prior to use of any product. The product contains no formaldehyde. Cured foam is non-toxic. **KEEP OUT OF REACH OF CHILDREN.**

### Product Storage

Store in cool, dry area. Do not expose to open flame or temperatures above 120°F (49°C). Excessive heat can cause premature aging of component resulting in a shorter

shelf life. Handi-Stick is reusable by following product instructions. Always store dispensing gun with a pressurized container attached to assure correct functioning.

**Always read all operating, application and safety instructions before using any products from Fomo Products, Inc.** Use in conformance with all local, state and federal regulations and safety requirements. Failure to strictly adhere to any recommended procedures and reasonable safety precautions shall release Fomo Products of all liability with respect to the materials or the use thereof. For additional information and location of your nearest distributor, call Fomo Products, Inc. (330) 753-4585 or 1 800 321-5585.

**NOTE:** Physical properties shown are typical and are to serve only as a guide for engineering design. Results are obtained from specimens under ideal laboratory conditions and may vary upon use, temperature and ambient conditions. Right to change physical properties as a result of technical progress is reserved. This information supersedes all previously published data. Yields shown are based on theoretical calculations and will vary depending on ambient conditions and particular application. Read all product directions and safety information before use. Consult local building codes for specific requirements regarding the use of cellular plastics or urethane products in construction.

**WARNINGS:** Follow safety precautions and wear protective equipment as recommended. Consult Material Safety Data Sheet (MSDS) for specific information. Prolonged inhalation exposure may cause respiratory irritation/sensitization and/or reduced pulmonary function in susceptible individuals. Onset may be delayed. Pre-existing respiratory conditions may be aggravated. Use only with adequate ventilation or certified respiratory protection. NIOSH approved positive pressure supplied air respirator or a negative pressure half mask with organic vapor cartridge and dust/mist prefilter is recommended if exposure guidelines may be exceeded. Contents may be very sticky and irritating to skin and eyes, therefore wear safety glasses, impervious gloves, and adequate clothing when operating. If liquid chemical comes in contact with skin, first wipe thoroughly with dry cloth, then rinse affected area with water. Wash with soap and water afterwards, and apply hand lotion if desired. If liquid comes in contact with eyes, immediately flush with large volume of clean water for at least 15 minutes and get medical help at once. If liquid is swallowed, get immediate medical attention. Products manufactured or produced from these chemicals are organic and, therefore, combustible. Each user of any product should carefully determine whether there is a potential fire hazard associated with such product in a specific usage. **KEEP OUT OF REACH OF CHILDREN.**

**LIMITED WARRANTY:** The Manufacturer warrants only that the product shall meet its specifications: THIS WARRANTY IS IN LIEU OF ALL WRITTEN OR UNWRITTEN, EXPRESSED OR IMPLIED WARRANTIES AND THE MANUFACTURER EXPRESSLY DISCLAIMS ANY WARRANTY OF MERCHANTABILITY, OR FITNESS FOR A PARTICULAR PURPOSE. The buyer assumes all risks whatsoever as to the use of the material. Buyer's exclusive remedy as to any breach of warranty, negligence or other claim shall be limited to the replacement of the material. Failure to strictly adhere to any recommended procedures shall release The Manufacturer of all liability with respect to the materials or the use thereof. User of this product must determine suitability for any particular purpose, including, but not limited to, structural requirements, performance specifications and application requirements prior to installation and after product is applied.



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