# TECHNICAL DATA SHEET



# Handi-Foam® 40 Series Cylinder Foam



Handi-Foam® 40 Series Cylinder Foam is a one-component polyurethane foam (OCF) sealant designed for contractors using large amounts of foam sealants to insulate and air seal penetrations. The product is for professional use only.

Handi-Foam<sup>®</sup> 40 Series Cylinder Foam is available as a 10lb or 16lb cylinder foam. The cylinder foam version is designed to be dispensed through a flexible hose with a valve controlled 6 inch or 10 inch brass nozzle. For added control, the cylinder foam may be used with a reusable one component dispensing unit.

#### **Application Areas**

Apply Handi-Foam® 40 Series Cylinder Foam onto any clean surface to fill and seal around gaps, beneath base plates, mud sills, top plate penetrations, corner joints, T-joints, exterior cracks, around utility panels, pipes, duct penetrations, etc. It is specifically designed to be dispensed as a bead for filling cracks, crevices, and to fill smaller cavities.

# **Properties**

The pre-pressurized, portable OCF system, applied in a bead form, expands and cures slowly to a semi-rigid, closed cell foam upon reaction with moisture, such as ambient humidity.

Handi-Foam® 40 Series Cylinder Foam dries tack-free in approximately 5 minutes or less depending on moisture and temperature conditions. The foam fully cures within 24 hours. Expansion of 2-3 times the dispensed bead within the first hour should be expected. It is recommended to fill the cavity only 1/3 of the way full to allow for expansion. Handi-Foam® 40 Series Cylinder Foam will adhere to itself if more foam need be applied.

Handi-Foam<sup>®</sup> 40 Series Cylinder Foam adheres to almost all building materials with the exception of surfaces such as polyethylene, Teflon<sup>®</sup>, silicone, oils, greases, mold release agents, and similar materials.

Optimum chemical temperature is  $65^{\circ}F$  to  $80^{\circ}F$  ( $18^{\circ}C-27^{\circ}C$ ), but may be applied in cold or hot ambient conditions, as long as the optimal chemical temperature range is maintained. Cured foam is dimensionally stable and known to be resistant to temperatures ranging between  $-200^{\circ}F$  to  $+240^{\circ}F$  ( $-129^{\circ}C$  to  $+115^{\circ}C$ ).

Handi-Foam® 40 Series Cylinder Foam is water resistant and will not harm electrical wire insulations, Romex, rubber, PVC, polyethylene or other plastic (i.e. PEX, CPVC). It is approved for use around wires, plumbing penetrations, etc., and contains no formaldehyde. When cured, polyurethane foam is permanent, chemically inert, non-reactive and stable for an indefinite period of time. Cured foam should be protected against UV rays (i.e. sunlight) by painting or staining to prevent long term discoloration or degradation.

#### Application/Use

After following instructions for set-up, the cylinder is ready to use. Open top of box and remove accessories\* and tank. Tighten all connections with a wrench (use thread sealing tape or liquid on all connections). Thread hose to tank and tighten with wrench. Shake kit first, then with tank upright, open tank valve completely.

Handi-Foam<sup>®</sup> 40 Series Cylinder Foam Sealant is especially useful for irregular voids and on non-linear cracks and crevices. Filling excessively large cavities can result in a prolonged curing process. Also, insufficient air or substrate moisture during cure may cause delayed expansion.

Remove fresh foam over spray with Handi-Cleaner® (P10083) or solvents such as acetone. Cured foam can only be removed mechanically.

Always refer to local building codes before use of product.

### Personal Protective Equipment (PPE)

Use only in well ventilated areas. Wear protective glasses with side shields or goggles, nitrile gloves, and clothing that protects against dermal exposure when using. Read all instructions and safety information prior to use of any product. Consult the product's MSDS (available at www.fomo.com).

#### **Important Note:**

The product contains no formaldehyde. Cured foam is non-toxic.

## KEEP OUT OF REACH OF CHILDREN.

## **Special Handling**

Contents are under pressure. Do not puncture, incinerate or store above 120°F (49°C). Do not place in hot water or near radiators, stoves, motor vehicles or other sources of heat. Cured urethane foam produced from these ingredients will support combustion and may present a fire hazard if exposed to a fire or excessive heat 240°F.

#### **Product Storage**

Store in dry area. Do not expose the product to open flame or temperatures above 120°F (49°C). Excessive heat can cause premature aging of components resulting in a shorter shelf life. Handi-Foam® 40 Series Cylinder Foam is reusable by following product instructions.

Handi-Foam® 40 Series Cylinder Foam has a twelve month shelf-life when stored properly.

\*Where applicable

Fomo Products, Inc.

A Member of the FLM Group of Companies management system registered to ISO 9001

# **Technical Data**

**CORE DENSITY- CYLINDER** 1.50 lbs/ft<sup>3</sup> ( 24 kg/m<sup>3</sup>)

**ASTM D1622** 

K-FACTOR 0.200 BTU-inch / ft2-h-°F ASTM C518-INITIAL

4-5 per inch R-VALUE

AIR BARRIER PROPERTIES

**ASTM F283** 

<.01 cfm/ft2 (0.05 L/s/m2) @6.24 psf (300 Pa) <.00025 cfm/ft2 (0.0125 L/s/m2) @1.57 psf(75 Pa),

extrapolated

**TACK-FREE TIME** Approx. 5 minutes

**FULLY CURES** 12-24 hours

1" bead (at 70°F 50% rh)

CUTTABLE <1 hour (1" Bead)

**COMPRESSION STRENGTH** 5.2 psi (36 kPa) ASTM D1621- PARALLEL

**Closed Cell Content** 60% Closed Cell **Open Cell Content** 40% Open Cell

ASTM D6226/ASTM D2856

FIRE RATING
ASTM E84 Caulking & Sealant
Tested at 3/4" bead thickness Flame Spread Index = 25 Smoke Developed =50

Passed

FIRE RATING Seal openings and cracks in walls without a thermal barrier.

(see approvals for limitations)

# Approvals / Standards

Handi-Foam® 40 Series Cylinder Foam conforms to the following Classifications, Codes and Standards:

NFPA 286 testing allows for the use of Cylinder Foam without a thermal barrier when the maximum width must not exceed 1 7/16 inches and the nominal foam thickness must not exceed 1 1/2 Inches. The maximum area of exposed sealants must not exceed 18 square inches per square foot.

UL Classified - File # R13919 Caulking and Sealants ASTM E-84 (12.5%) Flame Spread 25 Smoke Developed 50

**GREENGUARD Certification** 

Made in Akron, Ohio

Theoretical Yield				
	1/4"	3/8"	1/2"	
	(6.3 mm)	(9.5 mm)	(12.7 mm)	VOLUME
I-160 P40340 & P40341	19572 ft (5965 m)	8688 ft (2648 m)	4887 ft (1489 m)	6.66 ft³ ( 189 L)
<b>I-260</b> P40540 & P40541	31347 ft (9554 m)	13914 ft (4241 m)	7827 ft (2386 m)	10.66 ft <sup>3</sup> ( 302 L)

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

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. 1 330.753.4585 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) at www.fomo.com for specific information. Use only in a well ventilated area or with certified respiratory protection. NIOSH approved positive pressure supplied air respirator is recommended if exposure guidelines may be exceeded. Contents may be very sticky and irritating to skin and eyes, therefore wear safety glasses with side shields or goggles, nitrile gloves, and clothing that protects against dermal exposure 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, EX-PRESSED 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.



# Handi-Foam 40 Series Cylinder Foam

Fomo Products, Inc. p: 1 330.753.4585, 1 800.321.5585 f: 1 330.753.5199 e: info@fomo.com w: www.fomo.com

