

# TECHNICAL DATA SHEET

## One-Component Polyurethane Cylinder Foam - *DURA116*

**DuraFoam** is a multiple purpose, UL classified, one-component polyurethane foam 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, non-ozone depleting blowing agent to assist in the safety of the end user. It is designed for the professional user, and dispensed through a flexible hose with a valve controlled dispensing nozzle. For added control, it may be used with a reusable one-component dispensing unit.

### Application Areas

Apply DuraFoam onto any clean surface to fill and seal 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 on flat or irregular surfaces.

### Properties

DuraFoam pre-pressurized, portable foam system, applied in a bead form, cures slowly to a semi-rigid, closed cell foam upon reaction with moisture, such as ambient humidity. Expansion is minimal, but a desirable bead growth of 50-100% during the first hour of cure should be expected.

DuraFoam dries tack-free within 10 minutes or less depending on moisture and temperature conditions, is cuttable within 1 hour and fully cures in 12-24 hours.

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

Optimal application temperature is between 65-80°F (18-27°C), and may be used between 40-115°F (5-46°C). Cured foam is resistant to heat and cold, -200 - +200°F (-129 - +93°C), and to aging, but not UV rays (i.e. sunlight) unless painted, covered or coated. Cured foam is dimensionally stable and is also chemically inert and non-reactive in approved applications. DuraFoam requires no outside mechanical or electrical power source and is disposable. DuraFoam Systems are available in various sizes to meet specific job application requirements. When applied, the foam will seal, bond and protect against dust, air infiltration, pests, etc.

### Preparation for Use

Read all applicable instructions for the dispensing

unit and foam systems, which are included with each product, prior to any use. Substrate must be clean, firm, free of loose particles, dust, grease, mold release agents and similar material. Protect surfaces not to be foamed.

Shake kits well *before* using.

For best results in cavities larger than 3 inches in diameter, dampen substrate to supplement atmospheric humidity in affecting consistent cure throughout applied foam.

### Application/Use

After following instructions for set-up, DuraFoam kits are ready to use. The system is available complete with hose, on/off control valve (ball valve), and nozzle. Attach the hose to the tank valve. After opening the tank valve with the valve upright, apply the foam sealant through the nozzle by opening the on/off valve slowly. Bead size and flow rate can be controlled by on/off valve. Tank valve must be in the upright position during foam application. Foam application can be interrupted when needed, as outlined in the instructions. Filling excessively large cavities can result in a prolonged curing process and insufficient air or substrate moisture during cure may cause delayed expansion.

DuraFoam can also be used with a reusable one-component dispensing unit for added control.

Remove fresh foam over spray with solvents such as acetone. Cured foam can only be removed mechanically.

### Important Note:

Use only in well-ventilated areas. Wear impervious gloves, protective eyewear and suitable clothing when using. Read all 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.**

### Special Handling

Contents are under pressure. Do not puncture or incinerate. Do not place in hot water or near radiators, stoves or other sources of heat.

### 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 components resulting in a shorter shelf life. DuraFoam is reusable by following product instructions.

## Technical Data

<b>Core Density</b>	1.5 lbs/ft <sup>3</sup> ( 24.0 kg/m <sup>3</sup> )
<b>R-Factor</b>	4-5 per inch (.03 w./m.k.) typically
<b>Air Barrier Properties</b>	
ASTM E-283	
@1.57 psf (75 Pa)	<0.01 cfm/ft. <sup>2</sup> (0.05 L/s/m <sup>2</sup> )
@6.24 psf (300 Pa)	<0.01 cfm/ft. <sup>2</sup> (0.05 L/s/m. <sup>2</sup> )
<b>Tensile Strength</b>	
ASTM D-1623	46 psi (317 k. Pa)
Parallel	
<b>Closed Cell Content</b>	
ASTM D-2856	>60%
<b>Tack-free time</b>	Approx. 10 minutes
<b>Cutttable</b>	1 hour
<b>Fully Cures</b>	12-24 hours
1" bead at room conditions	

## Theoretical Yield\*

Product	Bead Size			
	1/4"	3/8"	1/2"	VOLUME
	(6.3mm)	(9.5mm)	(12.7mm)	
<b>Dura 116</b>	31347 ft. (9554 m)	13914ft. (4241 m)	7827 ft. (2386 m)	10.66 ft. <sup>3</sup> (302 liters)

## Approvals / Standards

ASTM E-84 (12.5%)  
 Flame Spread <25  
 Smoke Developed <50  
 ODP (Ozone Depletion Potential): Contains non-ozone depleting, non-flammable HFC propellant.  
 VOC Content: Contains no VOC's.

**Always read all operating, application and safety instructions before using any products.** Use in conformance with all local, provincial and federal regulations and safety requirements. Failure to strictly adhere to any recommended procedures and reasonable safety precautions shall release the manufacture of all liability with respect to the materials or the use thereof.

**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. Use only with adequate ventilation or 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 protective eyewear, impervious gloves, and suitable work 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.



Canadian Industrial Distributors\*175 Sunpac Blvd., Unit 2A\* Brampton, Ontario L6T 3S1  
 Tel: (905)-595-0411\* Fax: (905)-595-0426