

# TECHNICAL DATA SHEET



## Two-Component Polyurethane Foam II-12, II-22

**Handi-Foam® Two-Component Polyurethane Foam** is a multiple purpose 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 blowing agent to assist in the safety of the end user. The pre-pressurized, portable two-component foam systems are specifically designed for smaller on-site applications where a completely self-contained and reliable dispensing system is desired.

### Application Areas

Spray foam onto any clean, dry surface in any direction to insulate, fill and seal various size voids, dampen sound or reduce vibration. (Note: Cans must be inverted during use.) It is specifically designed to spray onto flat or irregular surfaces, and to fill large cavities.

### Properties

Two-component foam systems expand and cure with approximately an 8-to-1 ratio and cure to a semi-rigid closed cell foam upon the chemical reaction of component A (polymeric isocyanate) with component B (a polyol blend containing certain additives).

Handi-Foam fully expands and dries tack-free within seconds. It fully cures within several hours.

Handi-Foam 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

Optimal application temperature is 75°F (24°C) but may be sprayed onto colder or warmer substrates, with slight effects on the foam characteristics. Cured foam 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 foam is also chemically inert and non-reactive in

approved applications. Handi-Foam systems require no outside mechanical or electrical power source, and are disposable. Handi-Foam is available in various system sizes to meet specific job application requirements. When sprayed, the foam will create a seamless, continuous seal to insulate and protect against air infiltration, dust, pests, etc.

### Preparation For use

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

Shake kits *before* using.

### Application/Use

After following instructions for set-up, systems are ready to use. Materials are dispensed through the hoses and mixed in the disposable nozzle. Cans must be inverted during use (valves down). The flexible tubing allows the dispenser to be sprayed in any direction.

The foam spray can be metered by rolling the dispensing trigger back for spray intensity, forward for low or complete stop. Activating the roller dispensing trigger carefully allows for efficient mixing and dispensing of components. Fresh foam may be applied in several stages to reduce overfilling of void or damage to non-rigid, confined cavities. Cured foam can only be removed mechanically.

**Important Note:** Use only in well ventilated areas or with certified respiratory protection. Wear impervious gloves, eye protection, and protective 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.**

### 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. Handi-Foam is reusable by following product instructions.



**Fomo Products, Inc.**  
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## Technical Data

### DENSITY

ASTM D-1622 1.75 lbs/ft<sup>3</sup> ( 28 kg/m<sup>3</sup>)

### K-FACTOR (PER INCH)

ASTM C-518	$\frac{BTU}{(ft)(h)(^{\circ}F)}$	$\frac{W}{mk}$
(initial)	0.12	.017
(aged)	0.15	.022

R-VALUE (aged) 6-7

### TENSILE STRENGTH

ASTM D-1623  
Parallel 46 psi (317 k Pa)

### COMPRESSIVE STRENGTH

ASTM D-1621  
Parallel @ 10% 23 psi (158 k Pa)  
Perpendicular @ 10% 16 psi (128 k Pa)

### DIMENSIONAL STABILITY

ASTM D-2126  
HEAT AGE (+200F/93°C) -0.6%  
HUMID AGE (+158°F/ 70°C, 100% RH) +2.9%  
COLD AGE (-20°F/-29°C) -0.3%

### CLOSED CELL CONTENT

ASTM D-2856 90%

TACK-FREE / EXPANSION TIME .5-1 min

CUTTABLE 2-5 minutes

### FIRE RATING

UL 94 HF—1

DIN4102-1 B2

## Approvals / Standards

Handi-Foam Standard Systems (1.75) are recognized by Underwriters Laboratories as meeting the requirements for a "UL-94 HF-1" classification and meet the requirements of DIN4102-1 for a B2 building material.

ODP (Ozone Depletion Potential): Contains non-ozone depleting, non-flammable HFC propellant.

## Theoretical Yield\*

### Product

II-12 1 ft<sup>3</sup> (.03m<sup>3</sup>)  
P10600 (12 board feet)

II-22 1.8 ft<sup>3</sup> (.05m<sup>3</sup>)  
P10650 (22 board feet)

\*Yields are based on theoretical calculations, for comparison purposes, and will vary depending on ambient conditions and particular application. Model number generally reflects board feet volume in each kit.

**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. at (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. 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 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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