

PF-200 & PF-600 2-Component Foam Systems, E-84 Class 1

ULTRA SEAL[®]
PU FOAMS
TECHNICAL DATA SHEET

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UltraSeal[®] PF-200 & PF-600, **E-84 Class 1** is a self contained, portable two-component polyurethane foam dispensing system that utilizes a non-flammable blowing agent and requires no outside power source. All UltraSeal[®] PF-200 & PF-600, **E-84** has been specifically formulated for flame retardancy and conforms to the requirements of ASTM E84 as a "Class 1" system. The foam helps to lower heating and cooling costs by drastically reducing energy consumption. The foam kits can assist in attaining an **ENERGY STAR**[®] rating and/or **LEED** Certification. **CCMC # 13520-L!** (CAN/ULC-S711.2-05, Standard for Thermal Insulation - Bead-Applied Two-Component Polyurethane Air Sealant Foam)

UltraSeal[®] PF-200 & PF-600 tanks are supplied complete with a gun hose assembly and standard spray nozzles.



FEATURES & TYPICAL USES:

UltraSeal[®] PF-200 & PF-600, **E-84 Class 1** is intended for use as foamed-in-place air barrier sealant for air leakage control. It can be sprayed onto any clean, dry surface in any direction to seal, fill and seal various size voids, deaden sound or reduce vibration. It is specifically designed to spray onto flat or irregular surfaces in the building envelope. UltraSeal[®] PF-200 & PF-600, **E-84 Class 1** can be used in either interior or exterior industrial, commercial institutional and residential settings, for both new and retrofit construction. If used in an exterior setting, a coating must be applied for UV protection. UltraSeal[®] PF-200 & PF-600 has been use in the following areas or industries: Construction, roofing, transportation, cold storage, marine / flotation, mining, pool / spa, HVAC, asbestos abatement, petro-chemical, aerospace, power utilities, telecommunications, radon mitigation, processing, plants, theatrical, and renovation.

SURFACE PREPARATION & APPLICATON:

Read all information and cautions before using UltraSeal[®] PF-200 & PF-600, **E-84 Class 1**. Every purchase of an Ultra Seal kit includes "operating instructions" which includes information on operation, troubleshooting, yield, application tips, quality control, curing, storage, disposal, first-aid and similar information. A Material Safety Data Sheet (MSDS) is available upon request. **Limitations:** Not intended for use in applications where temperatures exceed 116°C (240°F). Must be shielded from ultraviolet radiation. For best results, remove any loose debris, dirt, dust or other foreign material from surfaces and protect surfaces that will not be foamed.

INSTALLATION:

For best results are obtained when chemical temperatures, atmospheric and cavity temperatures are 24°C (75°F). Every Ultra Seal kit is self-contained and ready to use. Kits are factory pressurized and require no outside power source. With its convenient dispensing design, Ultra Seal simplifies set-up and use. Typically, an Ultra Seal kit consists of one "A" and one "B" cylinder in one carton plus hose assembly and accessories.

CAUTION:

Avoid contact with eyes and skin. **ALWAYS** wear protective eye wear, gloves and clothing when operating. Use only with adequate ventilation or NIOSH-certified respiratory protection. In non-ventilated areas, **DO NOT** fire, **DO NOT** puncture or incinerate. **DO NOT** expose cylinders to temperatures above 49°C (120°F). The foam produced with this product is combustible and may present a fire hazard if exposed to flame, spark or temperatures above 116°C (240°F). Store at temperatures between 16°C to 27°C (60°F and 80°F). **Note: Avoid over filling restricted spaces. Chemicals exert force during reaction and an uncontrolled expansion of foam may result by spraying you and the work area. Building Codes:** The use of this product may be restricted or prohibited in certain areas by local building codes covering the use of cellular plastics. **ALWAYS** check local code(s) before using product.

MANUFACTURED BY:

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FORM: PF-600-E84_TDS.DOC

REV.: 4 DATE: 10/13

FEATURES:

- **Class 1, E-84**
- **CCMC # 13520-L**
(CAN/ULC-S711.2-05, Standard for Thermal Insulation - Bead-Applied Two-Component Polyurethane Air Sealant Foam)
- High density polyurethane foam.
- Quick curing.
- Reusable
- All-in-one kits.
- Applies easily.
- Fills & seals various size voids in the building envelope.

AVAILABLE SIZES & COLOUR:

PF-200

- Includes a 7'6" gun hose assembly.
- Wrench & Vaseline packets.
- 8 spray nozzles.
- 26 kits per pallet

PF-600

- Includes a 15' gun hose assembly.
- Wrench & Vaseline packets.
- 8 spray nozzles.
- 9 kits per pallet.

Additional kit components can be purchased separately. Please refer to your Distributor Price List.

Volume:

PF-200

- Approx. 200 board feet
- 17 ft³ (0.48 m³)

PF-600

- Approx. 600 board feet
- 50 ft³ (1.42 m³)

www.Ultra-SealFoams.com

PF-200 & PF-600 2-Component Foam Systems, E-84 Class 1

SPECIFICATIONS:

UltraSeal® PF-200 & PF-600 2 component polyurethane foam systems have been tested to a wide variety of ASTM standards. See Typical Properties below. When tested to ASTM E-84, the flame spread is 20 and the smoke development is 400 at 2" (50 mm) thickness with full coverage. These tests do not purport to address all the safety problems, if any associated with its use. ODP (ozone depletion potentials): contains HCFC 22 propellant; VOC Content: Contains no VOC's **Warning:** The foam produced by Nuco is organic and combustible and may constitute a fire hazard if improperly used.

SHELF-LIFE & STORAGE:

UltraSeal® PF Series are an aerosol material and must be kept below 49°C (120°F). **Notice to purchaser:** UltraSeal® PF Series are guaranteed to conform to product specifications, if used by the expiry date imprinted on each aerosol container (12 months after manufacture).

TYPICAL PROPERTIES:

These values are not intended for use in preparing specifications. Spec Writers; please contact NUCO Inc. before writing specifications if any further information is required.

Description	Specification
Density (ASTM D-1622):	1.75 lb/ft ³ (28 kg/m ³)
Density (ASTM D-1622, In place):	2.13 lb/ft ³ (34 kg/m ³)
R-VALUE (Metric RSI in parentheses):	6.0 per inch (RSI=1.05/inch)
Air Barrier Properties: (ASTM E-283)	
@1.57 psf (75 Pa):	<0.0125 cfm/ft ² (<0.0125 L/s/m ²)
@6.24 psf (300 Pa):	<0.01 cfm/ft ² (<0.05 L/s/m ²)
Perm Rating: (ASTM E-96):	
1", 2.54 cm:	1.67 (100 ng/(m ² ·Pa·s))
2", 5.04 cm:	1.44 (82 ng/(m ² ·Pa·s))
3", 7.62 cm:	1.00 (57 ng/(m ² ·Pa·s))
Air Permeance, (ASTM E2178):	0.02 l (m ² ·S)
Tensile Strength: (ASTM D-1623)	29 lbf/in ² (200 kPa)
Compressive Strength: (ASTM D-1621)	Parallel @ 10% = 23 psi (158 kPa) ; Perpendicular @ 10% = 16 psi (110 kPa)
Dimensional Stability: (ASTM D-2126)	HEAT AGE: +158°F (70°C) = -0.6% ; HUMID AGE: +158°F (70°C), 100% RH = +2.9% ; COLD AGE: -4°F (-20°C) = -0.3%
Closed Cell Content: (ASTM D-2856)	>90%
Tack-free / Expansion Time:	30 - 60 seconds
Cuttable:	2-5 minutes
Fully Cured:	1 hour
Fungi Resistance, ASTM G21:	No Growth

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APPROVALS & STANDARDS:

UltraSeal® 2-Component Foams conform to the requirements of:

- **ASTM E-84 "Class 1"**
Flame Spread: 20
Smoke Dev.: 400
*Tested at 2" thickness.

- **CAN/ULC S102**
Flame Spread: 9
Smoke Dev.: 43
*Tested at 2" thickness.

- ICC ES Report - Pending
- Contains a non-flammable propellant.

ASTM E84 Rating:

UltraSeal PF-600, E-84, Class 1 contains flame retardants in order to meet the testing requirements of ASTM E-84, with a flame spread of 25 or less and a smoke developed rating of 450 or less. This is a flame resistance rating (the foam IS NOT fire-proof) and is sometimes referred to as "Class 1".

WARRANTY INFORMATION:

NUCO Inc., warrants only that its product will meet its specifications. NUCO shall in no event be liable for incidental or consequential damage. NUCO's liability, expressed or implied is limited to the stated selling price of any goods found to be defective.

DISCLOSURE:

The information and data contained herein is BASED ON INFORMATION WE BELIEVE TO BE RELIABLE. Please read all statements, recommendations or suggestions herein in conjunction with our CONDITIONS of SALE which apply to all goods supplied by us. We assume no responsibility for the use of these statements, recommendations or suggestions, nor do we intend them as recommendation for any use which would infringe any patent or copyright.