TYTAN PROFESSIONAL Fire Block Extreme

TYTAN Fire Block Extreme PRO is a fire blocking foam sealant designed to work in the most extreme conditions, from -4°F to 100°F ambient temperatures. Though Fire Block Extreme is ideal for all high and low humidity applications, but Fire Block 113 is the recommended in desert climates. Though it is not approved as a fire stop, Fire Block Extreme is a certified draft stopping and fire blocking product. It is orange in color for easy inspection recognition. Fire Block Extreme uses a minimal shrinking technology to ensure an airtight seal, while providing industry-leading yield and is safe to be used around windows and doors. It offers minimal post-expansion for small gap filling while also being capable of filling gaps up to three inches. It offers premium adhesion to most construction materials including: wood, metal, masonry, glass, vinyl, and some plastics. With TYTAN Fire Block Extreme PRO Insulating Foam Sealant, you can Build with Confidence!

FEATURES

- Extreme temperature formula - cures even in freezing weather -4°F (-20°C).
- Low pressure, for windows & doors.
- Designed to cure in low humidity conditions, great for dry climates.
- Economically insulates, fills, seals, and bonds.
- Durable weather seal - stops cold air infiltration and heat loss.
- High insulating value - saves energy and money.
- Bonds and seals popular materials: wood, concrete, plaster, plumbing, etc.
- Type V Residential Fireblock.*

*Tested as an approved fireblocking material for use in “non-rated” single family construction only. Not for use as a commercial firestop. Check with local building code officials for acceptability.

APPLICATIONS

++ SEALING FOR WINDOW FITTING
++ SEALING FOR DOOR FITTING
+ FILLING FREE SPACES, CRACKS, GAPS, PIPE PENETRATIONS
+ SEALING ROOF, WALL AND FLOOR JOINTS
+ THERMAL INSULATION
+ ACOUSTIC INSULATION
+++ foam dedicated/recommended for this application; **++** foam suitable for this application; **+** foam meeting basic requirements; **-** not suitable for this application

BENEFITS

▲▲ FOAM YIELD
■ FOAM PRESSURE
■ FOAM VOLUME INCREASE (POSTEXPANSION)
▼▼▼ FOAM FLAMMABILITY
- FOAM MULTIPOSITIONING
■ FOAM ADHESION TO SURFACE
▲▲▲ high; ▲▲ increased; ■ normal; ▼▼ decreased; ▼▼▼ low; - no application

Selena USA, Inc.
486 Century Lane
Holland, MI 49423

APPLICATION CONDITIONS

Can/ applicator temperature [°C] (optimal +20°C)	41°F ÷ 86°F +5°C ÷ +30°C
Ambient/ surface temperature [°C]	-4°F ÷ 100°F -20°C ÷ +38°C

DIRECTIONS FOR USE

Prior to application, read safety instruction presented at the end of TDS and in MSDS.

1. SURFACE PREPARATION

The foam presents ideal adhesion to typical construction materials, such as: brick, concrete, plaster work, wood, metals, styrofoam, hard PVC and rigid PUR.

- Working surface should be cleaned and degreased.
- Secure surfaces exposed to accidental foam contamination.

2. PRODUCT PREPARATION

- Too cold can should be brought to room temperature, e.g. by immersion in warm water with temperature up to +30°C or leaving it in room temperature for at least 24 h.
- Applicator temperature cannot be lower than can temperature.

3. APPLICATION

- Put on protective gloves.
- Vigorously shake the can (10-20 seconds, the valve facing down) to thoroughly mix the components.
- Screw the can onto the applicator.
- Working position of the can is “valve facing down”.
- Vertical gaps should be filled with foam starting at the bottom and moving up.
- Do not fill the entire gap – the foam will increase in volume.
- In case of sealing the open woodwork, gaps >1,18 in (3 cm) are not recommended. Gaps >1,97 in (5cm) are unacceptable. Slots wider than 1,18 in (3 cm) from the bottom to fill up from one wall to the other alternately forming a zigzag pattern.
- Should application be interrupted for more than 5 minutes, the applicator nozzle with fresh foam should be cleaned with polyurethane foam cleaner and the can should be shaken prior to application.

4. WORKS AFTER COMPLETION OF APPLICATION

- Immediately after full foam hardening, it should be secured against exposure to UV rays by using e.g. plaster or paints, acrylic, silicon.
- After completion of work, the applicator should be thoroughly cleaned. To this end, a can with the cleaner should be screwed on the applicator and its trigger should be pushed until the moment, when clean fluid starts flowing out.

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5. REMARKS / RESTRICTIONS

DOOR AND WINDOWS FITTING WITHOUT USING MECHANICAL COUPLING IS FORBIDDEN. LACK OF MECHANICAL COUPLINGS MAY CAUSE DEFORMATION OF THE MOUNTED ELEMENT.

- The curing process is dependent on temperature and humidity. The decrease in ambient temperature within 24 h after the application below the minimum application temperature can affect the quality and / or correctness of the seal.
- Hurried attempts at preliminary treatment may cause irreversible changes in foam structure and its stability and may affect deterioration of foam utility parameters.
- Open foam package should be used within 1 week.
- The foam displays lack of adhesion to polyethylene, polypropylene, polyamide, silicone and Teflon.
- Fresh foam should be removed with polyurethane foam cleaner.
- Hardened foam may only be removed mechanically (e.g. with a knife).
- Quality and technical condition of used applicator affect the parameters of final product.
- The foam should not be used in spaces without access of fresh air and poorly ventilated or in places exposed to direct sunlight.

TECHNICAL DATA

Color	
orange	+

Parameter (+23°C/50% RH) [1)]	Value
Nominal value [oz]	24
Capacity (free foaming) [l] (RB024)	40 - 45
Capacity (free foaming) cu [ft]	1,41 - 1,59
Capacity (free foaming) 1/2" [ft]	1036
Capacity (free foaming) 3/8" [ft]	1842
Capacity (free foaming) 1/4" [ft]	4144
Capacity in gap [l] (RB024) 2)	24 - 28
Capacity in gap cu [ft]	0,85 - 0,99
Secondary increase in volume (post-expansion) (TM1010-2012**)	80 - 110
Tack-free time [min] (TM 1014-2013**)	≤ 10
Cutting time [min] (TM 1005-2013**) [3)]	≤ 40
Full cure time [h] (RB024)	24
Heat conductivity coefficient (λ) [W/m*K] (RB024)	≤ 0,036
Dimensional stability [%] (TM 1004-2013**)	≤ 5
Flammability class (DIN 4102)	B3
Flammability class (EN 13501-1:2008)	F
R Value (per inch)	4 - 5

1) All given parameters are based on laboratory tests compliant with internal manufacturer's standards and strongly depend on foam hardening conditions (ca, ambient, surface temperature, quality of used equipment and skills of person applying the foam).
2) The value given for a gap with dimensions 30*100*35 (width *length *depth [mm]).
3) The manufacturer recommends to commence finishing works after full hardening is completed, i.e. after 24 h. The result given for a foam strip of 3 cm diameter.

**Producer uses test methods approved by FEICA designed to deliver transparent and reproducible test results, ensuring customers have an accurate representation of product performance. FEICA OCF test methods are available at:

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http://www.feica.com/our-industry/pu-foam-technology-ocf. FEICA is a multinational association representing the European adhesive and sealant industry, including one-component foam manufacturers. Further information at: www.feica.eu

TRANSPORT / STORAGE

Transport temperature	Foam transport period [days]
< -20°C	4
-19°C ÷ -10°C	7
-9°C ÷ 0°C	10

The foam maintains its usability within 12 months from manufacturing date, provided that it is stored in original packaging in vertical position (valve facing up) in a dry place in temperature +5°C do +30°C. Storage in temperature exceeding +30°C shortens the shelf life of the product, adversely affecting its parameters. The product may be stored in temperature -5°C, no longer however than for 7 days (excluding transport). Storage of foam cans in temperature exceeding +50°C or in vicinity of open flame is not allowed. Storage of the product in a position other than recommended may result in jamming the valve. The can cannot be squeezed or pierced even when it is empty. Do not store the foam in the passenger compartment. Transported only in the trunk.
Detailed transport information is included in the Material Safety Data Sheet (MSDS).

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