

Polyurethane Sealants Formulated For Long-Life Durability



*"Specialty Fasteners and Services for the
Commercial Construction Industry"*
(800) 486-1832 / www.trianglefastener.com

TFC High Performance Polyurethane Sealants

TFC 100™ AND TFC 116™ are one component polyurethane sealants formulated to become tack free and cure rapidly. They are UV resistant and have excellent weathering, providing long-life performance.



Why TFC 100™ AND TFC 116™ Sealants?

- Aesthetically pleasing
- Bonds to most substrates without priming
- Excellent adhesion
- Excellent flexibility for dynamic joint movement
- High abrasion and tear strength
- Nonstaining
- Paintable and sandable tack free surface
- Speed and ease of application
- Sticks to Kynar finish
- Superior gunning and tooling
- 6 TFC standard colors, others available



Produces a shiny appearance that reflects light.



Textured finish blends better next to painted metal and other colored surfaces.

Colors

Choose from six of the most popular colors to match your specific need.



Almond



Black



Bronze



Grey



Limestone



White

Custom colors available upon request.

Applications

Interior



Windows



Doors



Metal Building and Roofing



- Above and below grade
- Concrete, masonry, brick, aluminum, wood, steel, painted metals and natural stones
- Curtain wall interior joints
- Expansion joints
- Fascia
- Horizontal and vertical

- Interior and exterior
- Metal Panel
- Parapets / flashing
- Perimeter sealing of windows, doors and skylights
- Precast / tilt-up
- Siding

TFC High Performance Polyurethane Sealants



Packaging

10.1fl. oz. (300ml) disposable cartridges.
Special packaging available upon request. Please ask your local representative for more information.

Storage & Shelf Life

When stored in the original, unopened containers at or below 75°F (24°C), shelf life is one year. A product skin may form in pails and drums, remove prior to use.

Tooling

We offer a wide selection of manual and battery powered caulking guns!



Material Properties

TFC 100™ AND TFC 116™ polyurethane sealant works well in a variety of weather conditions!



HEAT



COLD



MOISTURE



DRYNESS

Cured - 7 days @ 75°F (24°C) and 50% RH

Property	Result	Specifications
Movement Capability, %	+ - 25	ASTM C-719
100% Modulus, psi (Mpa)	125 (0.86)	ASTM D-412
Hardness, Shore A	30+-5	ASTM C-661
Tensile Strength, psi (MPA)	150+-(1.03)	ASTM D-412
Elongation at Break, %	500	ASTM D-412
Peel Strength,	pli25	ASTM C-794
Bond Durability on glass, aluminum and concrete	+ -25%	ASTM C-719
Accelerated Weathering	Passes	ASTM C-793
Staining	Passes	ASTM C-510

Uncured

Property	Result	Specifications
Skin-Over Time	1.5 hrs.	MNA
Tack-Free Time	4 hrs.	ASTM C-679
Cure Rate	1/8in. / 24hrs.	MNA
Extrusion Rate, g/min. 1/8" orifice @ 90 psi	325	ASTM C-1183 Modified
Slump of Sealant Rheological, Vertical 120°F (49°C)	Nil	ASTM D-2202
Volatile Organic Content	Non-sag	ASTM C-639
44g/L 0.37lbs/gal	3.64% by wt.	
Service Temperature	-40°F to 180°F	

Installation Information

PRIMING

TFC 100™ and TFC 116™ are formulated to obtain adhesion without the use of a primer; however, certain substitutes may require a primer.

Test by applying the sealant and/or primer sealant combination to confirm results and proposed application methods. Contact TFC Technical Services for additional information.

CLEAN UP

Remove excess sealant from substrate while uncured with commercial solvent, such as xylene. Cured sealant may be removed by mechanical means.

LIMITATIONS

Do not allow sealant to come in contact with alcohol or solvent during cure.

Do not allow sealant to come in contact with neutral curing silicones during cure.

Immersed joint should be primed and cured (one week) before exposure.

Sealant may be applied below freezing temperatures if substrates are completely dry, frost free and clean. Contact Technical Service for more information.

Maximum depth of sealant must not exceed 1/2 in. (13mm); minimum depth 1/4in. (6mm).

White sealant may discolor when exposed to UV light, this does not affect performance.

Maximum application temperature 120°F (49°C).

Do not apply to damp or wet substrates.

Do not apply when vapor transmission may cause sealant bubbling.

Lower temperature and humidity will extend tack free and cure rates.

Allow treated wood to age six months before application.

FIRST AID

In case of eye contact, flush thoroughly with water for at least 15 minutes. SEEK IMMEDIATE ATTENTION. In case of skin contact, wash affected areas with soap and water. If irritation causes physical discomfort, move to fresh air. If discomfort persists or any breathing difficulty occurs or if swallowed, SEEK IMMEDIATE MEDICAL ATTENTION. Refer to Material Safety Data Sheet (MSDS) for further information.

PRECAUTIONS

KEEP OUT OF REACH OF CHILDREN. Use only with adequate ventilation. Keep container closed. Prevent contact with skin, eyes, and clothing. Wash thoroughly after handling. DO NOT take internally. Use impervious gloves, eye protection and if the TLV is exceeded or used in a poorly ventilated area, use NIOSH/MSHA approve respiratory protection in accordance with applicable federal, state and local regulations.



SURFACE PREPARATION

The substrate must be clean, dry, frost free, sound and free of any oils, greases or incompatible sealers, paints or coatings that may interfere with adhesion.

POROUS SUBSTRATE - Clean by mechanical methods to expose a sound surface free of contamination and laitance.

NON-POROUS SUBSTRATE - For cleaning non-porous substrates, use two rags wipe method xylene or an approved commercial solvent. Allow solvent to evaporate prior to sealant application.

APPLICATION

Expansion Joint

1. Ready to use, apply using professional caulking gun. Do not open product container until preparation work has been completed.
2. Apply sealant using consistent, positive pressure to force sealant into the joint.
3. Tool sealant to create a concave joint shape and maximum adhesion. Dry tooling is recommended. DO NOT use soapy water or other liquids when tooling.
4. For cold or hot weather application, condition material to 65 - 75° F (18.3 - 24°C) prior to use.

EXPANSION JOINT DESIGN

1. The number of joints and the joint width should be designed for a maximum of +-25% movement at time of installation.
2. The depth of the sealant should be 1/2 the width of the joint. The maximum depth is 1/2in. (13mm) and the minimum is 1/4in. (6mm).
3. To control joint depth, use closed cell polyethylene or non-gassing polyolefin backer rod, use polyethylene bond breaker tape to prevent three-sided adhesion.
4. Closed cell backer rod should be 25% larger than joint width; do not compress more than 40%.

WARRANTY

TRIANGLE FASTENER CORPORATION (TFC) PRODUCTS ARE WARRANTED TO BE FREE OF MANUFACTURING DEFECTS AND TO MEET TFC'S PUBLISHED TYPICAL PHYSICAL PROPERTIES WHEN APPLIED IN ACCORDANCE WITH TFC'S DIRECTIONS OF ANY KIND. THE EXCLUSIVE REMEDY OF THE USER WILL BE TO RETURN ALL MATERIALS ALLEGED TO BE DEFECTIVE, FREIGHT PREPAID, TO TFC FOR REPLACEMENT. THERE IS NO OTHER WARRANTY, EITHER EXPRESSED OR IMPLIED, RELATING TO THE GOODS BEING SOLD, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR WARRANTY OF FITNESS FOR ANY PARTICULAR PURPOSE IN CONNECTION WITH THIS PRODUCT. TFC'S LIABILITY IS LIMITED TO REPLACEMENT OF DEFECTIVE MATERIAL AND TFC SHALL NOT BE LIABLE FOR DAMAGES OF ANY SORT, INCLUDING PUNITIVE, ACTUAL, CONSEQUENTIAL, INCIDENTAL OR REMOTE DAMAGES, RESULTING FROM ANY CLAIMS OF BREACH OF CONTRACT, BREACH OF WARRANTY, WHETHER EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR FROM ANY OTHER CAUSE WHATSOEVER, REGARDLESS OF LEGAL THEORY.

We stock a wide selection of fasteners, tools, and accessories for the commercial construction industry.

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