

### Product Description

Dymonic® FC is a high-performance, fast-curing, single-component, low-modulus, hybrid sealant, formulated with proprietary silane end-capped polymer technology.

### Basic Uses

Dymonic FC is a durable, flexible, sealant that offers excellent performance in moving joints and exhibits tenacious adhesion once fully cured. Typical applications for Dymonic FC include expansion and control joints, precast concrete panel joints, perimeter caulking (windows, door, panels), EIFS, aluminum, masonry and vinyl siding.

### Features and Benefits

- Dymonic FC is fast curing with a skin time of 60 min and a tack-free time of 3 to 4 hr to significantly reduce dirt attraction.
- Dymonic FC will not green crack due to early movement and has an exceptional movement capability of  $\pm 35\%$ .
- Dymonic FC is also low-VOC, paintable and will not crack or craze under UV exposure.
- Dymonic FC is a high-performance hybrid that combines the best performance characteristics of polyurethane and silicone sealants.

### Coverage Rates

308' of joint per gallon for a 1/4" x 1/4" (6 mm x 6 mm) joint. For specific coverage rates that include joint size and usage efficiencies, visit our website usage calculator at [www.tremcosealants.com](http://www.tremcosealants.com).

### Packaging

10.1-oz (300-mL) cartridges; 20-oz (600-mL) sausages

### Colors

Almond, Anodized Aluminum, Aluminum Stone, Beige, Black, Bronze, Buff, Dark Bronze, Gray, Hartford Green, Ivory, Limestone, Natural Clay, Off White, Precast White, Redwood Tan, Stone and White.

### Availability

Immediately available from your local Tremco Field Representative, Tremco Distributor or Tremco Warehouse.

### Storage

Store Dymonic FC in original, undamaged packaging in a clean, dry, protected location with temperatures between 40 to 110 °F (5 to 43 °C).

### Applicable Standards

Dymonic FC meets or exceeds the requirements of the following specifications:

- ASTM C920 Type S, Grade NS, Class 35, Use NT, M, A and O
- ASTM C1248
- U.S. Federal Specification TT-S-00230C Class A, Type II
- CAN/CGSB 19.13-M87
- UL 2079 (ASTM E 1966), CAN-4-S115M

### Fire Rated Systems

FF-D-1063, FW-D-1059, HW-D-1054, WW-D-1054

### Limitations

- Do not apply over damp or contaminated surfaces.
- Do not use under polyurethane deck coatings.
- Use with adequate ventilation. Always utilize the sealant's MSDS found on our website at [www.tremcosealants.com](http://www.tremcosealants.com) for information on proper

ventilation, Personal Protective Equipment (PPE) and other health concerns.

- Do not use in chlorinated, potable, heavy or waste water.
- Although Dymonic FC is paintable, this does not imply adhesion to and compatibility with all paints. Please refer to Tremco Technical Bulletin No. S-09-05 for more information.

### Substrate Preparation

Surfaces must be sound and clean. All release agents, existing waterproofing, dust, loose mortar, paints, other finishes or field applied coating must be removed. This can be accomplished with a thorough wire brushing, grinding, sandblasting, or solvent washing, depending on the contamination.

Tremco recommends that surface temperatures be 40 °F (5 °C) or above at the time the sealant is applied. If sealant must be applied in temperatures below 40 °F, please refer to the Tremco Technical Bulletin for Applying Sealants in Cold Conditions (No. S-08-44 rev 1) that can be found on our website at [www.tremcosealants.com](http://www.tremcosealants.com)

### Priming

Dymonic FC typically adheres to common construction substrates without primers; however, due to the variability of substrate finishes such as Kynar and anodized aluminum, Tremco always recommends that a mockup or field adhesion test be performed on the actual materials being used on the job to verify the need for a primer, proper cleaning and prep requirements. A description of the field adhesion test can be found in appendix X1 of ASTM C1193, Standard Guide for Use of Joint Sealants.

Where deemed necessary, use TREMprime Silicone Porous Primer for porous surfaces and TREMprime Silicone Metal Primer for metals or plastics.

### Application

Dymonic FC is easy to apply with conventional caulking equipment. Ensure that the backer rod is friction fitted properly and any primers have been applied.

Fill the joint completely with a proper width-to-depth ratio and then tool to ensure intimate contact of sealant with joint walls.

Dry tooling is always preferred, although xylene can be used in limited amounts to slick the spatula if needed following the initial dry tooling.

For a cleaner finish, mask the sides of the joint with tape prior to filling.

### Joint Design

Dymonic FC may be used in any joint designed in accordance with accepted architectural/engineering practices. Joint width should be 4 times anticipated movement, but not less than 1/4" (6 mm).

### Joint Backing

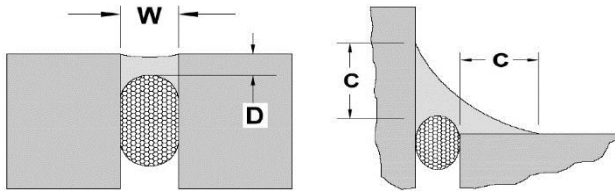
Closed cell or reticulated polyethylene backer rod is recommended as joint backing to control sealant depth and to ensure intimate contact of sealant with joint walls when tooling. Where depth of joint will prevent the use of backer rod, an adhesive backed polyethylene tape (bond breaker tape) should be used to prevent three-sided adhesion. All backing should be dry at time of sealant application.

## Dymonic® FC

High-Performance, Fast-Curing, Single-Component, Hybrid Sealant

### Sealant Dimensions

W = Sealant width, D = Sealant depth, C = Contact area.



**EXPANSION JOINTS** - The minimum width and depth of any sealant application should be 1/4" x 1/4" (6 mm by 6 mm). The depth (D) of sealant may be equal to the width (W) of joints that are less than 1/2" (13 mm) wide.

For joints ranging from 1/2" to 1" (13 mm to 25 mm) wide, the sealant depth should be approximately one-half of the joint width. The maximum depth (D) of any sealant application should be 1/2" (13 mm). For joints that are wider than 1" (25 mm) contact Tremco Technical Services or your local Tremco Sales Representative.

**WINDOWS PERIMETERS**- For fillet beads, or angle beads around windows and doors, the sealant should exhibit a minimum surface contact area [C] of 1/4" (6 mm) onto each substrate. Proper joint backing or bond breaking should be provided to allow for anticipated movement.

### Cure Time

Dymonic FC generally cures at a rate of 3/32" per day at 75 °F (24 °C) and 50% RH. Dymonic FC will skin in 1 hr and be tack-free in 3 to 4 hr. The cure

time will increase as temperatures and/or humidity decrease. A good rule of thumb is one additional day for every 10 °F decrease in temperature

### Clean Up

Excess sealant and smears adjacent to the joint interface can be carefully removed with xylene or mineral spirits before the sealant cures. Any utensils used for tooling can also be cleaned with xylene or mineral spirits.

### Warranty

Tremco warrants its Products to be free of defects in materials, but makes no warranty as to appearance or color. Since methods of application and on-site conditions are beyond our control and can affect performance, Tremco makes no other warranty, expressed or implied including warranties of MERCHANTABILITY and FITNESS FOR A PARTICULAR PURPOSE with respect to Tremco Products. Tremco's sole obligation shall be, at its option, to replace or refund the purchase price of the quantity of Tremco Products proven to be defective, and Tremco shall not be liable for any loss or damage.

Please refer to our website at [www.tremcosealants.com](http://www.tremcosealants.com) for the most up-to-date Product Data Sheets.

NOTE: All Tremco Safety Data Sheets (SDS) are in alignment with the Globally Harmonized System of Classification and Labelling of Chemicals (GHS) requirements.

## TYPICAL PHYSICAL PROPERTIES

| PROPERTY                     | TEST METHOD          | TYPICAL VALUES  |
|------------------------------|----------------------|---|
| Type                         |                      | Single Component Hybrid Urethane Sealant  |
| Color                        |                      | Almond, Beige, Black, Anodized Aluminum, Aluminum Stone, Bronze, Buff, Dark Bronze, Gray, Hartford Green, Ivory, Limestone, Natural Clay, Off White, Precast White, Redwood Tan, Stone and White. |
| Solids                       |                      | 100   |
| Specific Gravity             |                      | 1.454   |
| Application                  |                      | Gun-grade sealant, applied with typical caulking equipment  |
| Service Temperature          |                      | -40°F (-40°C) to 185°F (85°C)   |
| Rheological Properties       | ASTM C639            | Non-sag (NS), 0" of sag in channel  |
| Extrusion Rate               | ASTM C1183           | 93.1 mL/min   |
| Hardness Properties          | ASTM C661            | 25  |
| Weight Loss                  | ASTM C1246           | Pass  |
| Skin Time                    | ASTM C679            | 1 hr  |
| Tack Free Time               | 73.4°F (23°C) 50% RH | 3 to 4 hr   |
| Stain and Color Change       | ASTM C510            | No visible color change/No stain  |
| Adhesion to Concrete         | ASTM C794            | 18 to 22 pli (80 to 98 N)   |
| Adhesion to Aluminum         | ASTM C794            | 20 to 25 pli (89 to 112 N)  |
| Effects of Accelerated Aging | ASTM C793            | Pass  |
| Movement Capability          | ASTM C719            | ± 35%   |

1017/DFCDS-ST

### Tremco Commercial Sealants & Waterproofing

3735 Green Rd  
Beachwood OH 44122  
216.292.5000 / 800.321.7906

1451 Jacobson Ave  
Ashland OH 44805  
419.289.2050 / 800.321.6357

220 Wicksteed Ave  
Toronto ON M4H1G7  
416.421.3300 / 800.363.3213

1445 Rue de Coulomb  
Boucherville QC J4B 7L8  
514.521.9555

