

PRODUCT DESCRIPTION

Dymonic® 100 is a high-performance, high-movement, single-component, medium-modulus, low-VOC, UV-stable, non-sag polyurethane sealant.

BASIC USES

Dymonic® 100 is a durable, flexible sealant that offers excellent performance in moving joints and exhibits tenacious adhesion once fully cured. Typical applications for Dymonic® 100 include expansion and control joints, precast concrete panel joints, perimeter caulking (windows, doors, and panels), aluminum, masonry and vinyl siding. Dymonic® 100 is also an excellent choice as a fluid applied flashing material in rough opening perimeters for fenestration/window, door and curtain wall applications.

FEATURES AND BENEFITS

- Can adhere to damp or green concrete and has a skin time of 2 hr with a tack-free time of 6 to 8 hr to significantly reduce dirt attraction.
- Movement capability of +100/-50% in typical field conditions, is low VOC, paintable, jet fuel-resistant, and will not crack, craze or yellow under extreme UV exposure.
- Suitable for water immersion and will not out gas.
- Formulated with an innovative polymer technology, similar to TREMproof® 250GC and Vulkem® 45SSL.
- Compatible and can be coated over with Tremco's Vulkem® Deck Coatings, ExoAir® Air Barrier products and the cold, fluid-applied TREMproof® line of belowgrade waterproofing products.

AVAILABILITY

Please contact Tremco India Pvt. Ltd. for your project requirements.

PACKAGING

300-mL cartridge, 600-mL sausage

Colours: Gray, Black White. Ask us for other options

SHELF LIFE & STORAGE

Store Dymonic® 100 in original, undamaged packaging in a clean, dry, protected location with temperatures between 5 to 43° C. Shelf life is 12 months when stored properly in unopened packaging.

COVERAGE

~ 25 m / litre for a 6 x 6 mm joint. For specific coverage rates considering joint size & usage efficiencies, visit our website usage calculator at: www.tremcosealants.com

APPLICABLE STANDARDS

Dymonic® 100 meets or exceeds the requirements of the following specifications:

- ASTM C920 Type S, Grade NS, Class 50, Use NT, T, M, A, O, I
- U.S. Federal Spec. TT-S-00230C, Class A, Type II
- CAN/CGSB-19,13-M87
- International Code Council Section R703.8 Flashing
- AAMA 714-15 Specification for Liquid-Applied Flashing
- NFPA 285 Listed Component

FIRE RATED ASSEMBLIES

For Fire Rated Assembly Drawings, Please visit:

www.tremcosealants.com/technical-resources/fire-systems

LIMITATIONS

- Use with adequate ventilation.
- Always utilize the accompanying MSDS for information on Personal Protective Equipment (PPE) and Health Hazards.
- Not recommended for use in chlorinated, potable, heavy or waste water.
- Although Dymonic® 100 is paintable, this does not imply adhesion to and compatibility with all paints. Consult Tremco Technical Bulletin No. S-09-05 for information.



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 to refund the purchase price of the quantity of Tremco Product proven to be defective, and Tremco shall not be liable for any loss or damage.

BASIC APPLICATION INSTRUCTIONS

SUBSTRATE PREPARATION

- For good adhesion, the substrate must be sound, clean and dry. Any surface damage, dirt, dust, loose particles or other contaminants that may inhibit adhesion must be removed from the surfaces prior to application of the sealant. This can be accomplished with a thorough wire brushing, grinding, sand blasting or solvent washing/priming depending on the situation.
- Tremco recommends that surface temperatures be 5°C or above at the time the sealant is applied. If sealant must be applied in temperatures below 5°C, 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
- Dymonic^o 100 typically adheres to common construction substrates without primers; anodized aluminum may require the use of primer. However, Tremco always recommends that a mock-up 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 Vulkem^o Primer #191 Low-VOC on porous substrates and TREMPreme^o Non Porous Primer for metals or plastics.

JOINT DESCRIPTION

Dymonic^o 100 may be used in vertical or horizontal joints designed in accordance with accepted architectural / engineering practices. Joint width should be 4 times anticipated movement but not less than 6 mm. It can also be used to fill cracks, cut out to a min. size of 6 x 12mm.

Polyethylene backer rod is recommended as joint backing to control sealant depth and ensure intimate contact of sealant with joint substrate 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 the time of sealant application.

SEALANT DIMENSIONS

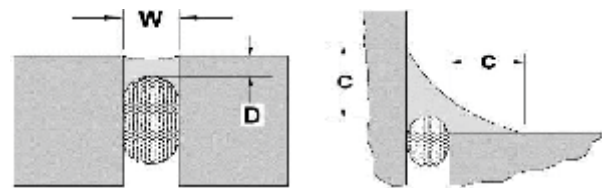
Expansion Joints- The minimum width and depth of any sealant application should be 6 mm x 6 mm. The depth (D) of sealant may be equal to width (W) of joints less than 12.5 mm wide. For joints from 13 mm to 25 mm wide, the sealant depth should be approximately one-half of the joint width. The maximum depth (D) of any sealant application should be 13 mm. For Joints that are wider than 25 mm contact us.

Window Perimeter- For fillet beads, or angle beads around windows and doors, the sealant should exhibit a minimum surface contact area [C] of 6 mm onto each substrate, with provisions for release at the heel of the angle using backer rod or bond breaker tape.

APPLICATION OF DYMONIC 100

Dymonic^o 100 is easy to apply with conventional caulking equipment. Ensure that the backer rod is fitted properly for friction and that any necessary 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 substrates. Dry tooling is always preferred, although compatible wetting agents can be used in limited amounts to slick the spatula if needed after an initial pass. For a cleaner finish, mask the sides of the joint with tape prior to filling.



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

BASIC APPLICATION INSTRUCTIONS (Continued)

CURE TIME

At 24°C, 50% RH, Dymonic^o 100 will skin in 2 hrs and be tack free in 6 to 8 hours and dries at a rate of about 2.5 mm per day. As the temperatures decrease, the dry time of Dymonic^o 100 will increase, generally one additional day for every 10 °C 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.

TYPICAL TECHNICAL PROPERTIES

Property	Test Method	Values
Type		Single Component Polyurethane Sealant
Solids		98%
Specific Gravity		1.33
Application		Gun -grade sealant, applied with typical caulking equipment
Rheological Properties	ASTM C639	Non -Sag NS, 0 mm sag in channel
Hardness Properties	ASTM C661	40 +/- 5
Weight Loss	ASTM C1246	Pass
Skin Time	ASTM 679	2 to 3 hours
Tack Free Time	23 °C, 50% RH	6 to 8 hours
Stain and Colour Change	ASTM C510	Pass
Adhesion to Concrete	ASTM C794	6.13 N/mm
Adhesion After Immersion	ASTM C794	5.25 N/mm
Adhesion to Green Concrete	ASTM C794	> 4.38 N/mm
Adhesion to Damp Concrete	ASTM C794	> 3.5 N/mm
Effects of Accelerated Aging	ASTM C793	Pass
Movement Capability	ASTM C719	+/- 50%
Movement Capability	ASTM C719* MODIFIED	+100 / -50 %
Tensile Strength	ASTM D412	2.4 to 3.1 N/mm ²
Percentage Elongation	ASTM D412	800 to 900%
Modulus at 100%	ASTM D412	0.51 to 0.58 N/mm ²
Tear Strength	ASTM D412	0.45 to 0.51 N/mm ²
Service Temperature		-40 to +80 °C
Application Temperature		+4 to 37 °C
Smoke Development	ASTM E84	5
Fire Spread	ASTM E84	5
Fire Resistance of Assembly	NFPA 285	Pass
Crack Bridging	ASTM C1305	Pass
Nail Sealability	ASTM D1970 (SECTION 7.9)	Pass

*For temperatures below 5°C, please refer to the Technical Bulletin, Cold Temperature Sealant Application Recommendations.

• Please contact us at india@tremcocpg.com to confirm 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 & Labelling of Chemicals (GHS) requirements.

