

# TECHNICAL DATA SHEET

# **DYMONIC®** 100

High-Performance, High-Movement, Single-Component, Polyurethane Sealant

# PRODUCT DESCRIPTION

Dymonic® 100 is a single-component, medium-modulus, non-sag polyurethane sealant. Dymonic 100 offers a high-performance, high-movement, durable, flexible seal that performs excellently in moving joints and exhibits tenacious adhesion to substrates once fully cured.

#### **BASIC USES**

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. Dymonic 100 is suitable for water immersion applications and will not out gas.

# **FEATURES & BENEFITS**

Dymonic 100 has been formulated with an innovative polymer technology, similar to TREMproof® 250GC and Vulkem® 45SSL, that allows it to be highly versatile and grants its unique capability to adhere to damp or green concrete without outgassing. The skin time of Dymonic 100 is 2 hours and the tack-free time is 6 to 8 hours. This significantly reduces dirt attraction and improves the overall asthetic look.

Dymonic 100 has a movement capability of +100/-50% in typical field conditions with excellent performance in moving joints. The formula is low-VOC and UV-stable, meaning Dymonic 100 will not crack, craze, or yellow under extreme UV exposure. Additionally, Dymonic 100 is jet fuel-resistant and compatible with many common construction substrates.

- Compatible with and can be coated over with Tremco's Vulkem Deck Coatings, ExoAir® Air Barrier products and the cold, fluid-applied TREMproof® line of below-grade waterproofing products
- Accepted for use over Nudura Insulated Concrete Forms (ICF)

There are 21 standard color options available for Dymonic 100, with the option of painting over the sealant.

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 Specification TT-S-00230C, Class A, Type II
- CAN/CGSB-19,13-M87
- International Code Council (ICC) Section R703.8 Flashing
- AAMA 714-15 Specification for Liquid-Applied Flashing
- NFPA 285 Listed Component

Accepted fire rated systems: FF-D-1186, FW-D-1117, HW-D-1122, WW-D-1200, and BW-S-0006



#### **AVAILABILITY**

Immediately available from your local Tremco Sales Representative, Tremco Distributor, or Tremco Warehouse in 10.1 oz (300 mL) cartridges and 20 oz (600 mL) sausages.

### **COLORS**

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

**LIMITATIONS** 

Use with adequate ventilation. Always utilize the accompanying SDS 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 or Tremco Technical Services for more information.

WARRANTY

A repair or replacement warranty is available on all Tremco products. Visit https://www.tremcosealants.com/warranties/ for details.

Rheological Properties         ASTM C639         Non-sag (NS), 0" of sag in channel           Hardness Properties         ASTM C661         40 ± 5           Weight Loss         ASTM C1246         Pass           Skin Time         ASTM C679         2 to 3 hr           Tack Free Time         73.4" (23°C) 50% RH         6 to 8 hr           Stain and Color Change         ASTM C510         Pass           Adhesion to Concrete         ASTM C794         35 pli           Adhesion to Concrete After Immersion         ASTM C794         30 pli           Adhesion to Green Concrete         ASTM C794         >25 pli           Adhesion to Damp Concrete         ASTM C794         >20 pli           Effects of Accelerated Aging         ASTM C793         Pass           Movement Capability         ASTM C719         ± 50%           Movement Capability         ASTM C719 (Modified)         +100/-50%           Tensile Strength         ASTM D412         350 to 450 psi           Modulus at 100%         ASTM D412         800 to 900%           Modulus at 100%         ASTM D412         75 to 85 psi           Tear Strength         ASTM D412         65 to 75 psi           Fungal Resistance         AN G21-15         Fungal Resistance = 0, No Growth	TYPICAL PHYSICAL PROPE	RTIES	
Hardness Properties         ASTM C661         40 ± 5           Weight Loss         ASTM C1246         Pass           Skin Time         ASTM C679         2 to 3 hr           Tack Free Time         73.4°F (23°C) 50% RH         6 to 8 hr           Stain and Color Change         ASTM C510         Pass           Adhesion to Concrete         ASTM C794         35 pli           Adhesion to Concrete After Immersion         ASTM C794         >25 pli           Adhesion to Green Concrete         ASTM C794         >20 pli           Effects of Accelerated Aging         ASTM C793         Pass           Movement Capability         ASTM C719         ± 50%           Movement Capability         ASTM C719         ± 50%           Movement Capability         ASTM C719 (Modified)         ± 100/-50%           Tensile Strength         ASTM D412         350 to 450 psi           % Elongation         ASTM D412         800 to 900%           Modulus at 100%         ASTM D412         65 to 75 psi           Teurs Strength         ASTM D412         65 to 75 psi           Fungal Resistance         ASTM G21-15         Fungal Resistance = 0, No Growth           Service Temperature         40 to 100 °F (4 to 37 °C) *           Smoke Development, Fire Spread	PROPERTY	TEST METHOD	TYPICAL RESULTS
Weight Loss         ASTM C1246         Pass           Skin Time         ASTM C679         2 to 3 hr           Tack Free Time         73.4°F (23°C) 50% RH         6 to 8 hr           Stain and Color Change         ASTM C510         Pass           Adhesion to Concrete         ASTM C794         35 pli           Adhesion to Concrete After Immersion         ASTM C794         >25 pli           Adhesion to Green Concrete         ASTM C794         >20 pli           Effects of Accelerated Aging         ASTM C794         >20 pli           Movement Capability         ASTM C793         Pass           Movement Capability         ASTM C719         ± 50%           Movement Capability         ASTM C719 (Modified)         +100/-50%           Tensile Strength         ASTM D412         350 to 450 psi           % Elongation         ASTM D412         800 to 900%           Modulus at 100%         ASTM D412         800 to 900%           Modulus at 100%         ASTM D412         75 to 85 psi           Tear Strength         ASTM G21-15         Fungal Resistance = 0, No Growth           Service Temperature         -40 to 180 °F (-40 to 82 °C)           Service Temperature         -40 to 100 °F (4 to 37 °C) *           Smoke Development, Fire Spread	Rheological Properties	ASTM C639	Non-sag (NS), 0" of sag in channel
Skin Time         ASTM C679         2 to 3 hr           Tack Free Time         73.4°F (23°C) 50% RH         6 to 8 hr           Stain and Color Change         ASTM C510         Pass           Adhesion to Concrete         ASTM C794         35 pli           Adhesion to Concrete After Immersion         ASTM C794         30 pli           Adhesion to Green Concrete         ASTM C794         >25 pli           Adhesion to Damp Concrete         ASTM C794         >20 pli           Effects of Accelerated Aging         ASTM C793         Pass           Movement Capability         ASTM C719         ± 50%           Movement Capability         ASTM C719 (Modified)         +100/-50%           Tensile Strength         ASTM D412         350 to 450 psi           % Elongation         ASTM D412         800 to 900%           Modulus at 100%         ASTM D412         75 to 85 psi           Tear Strength         ASTM D412         65 to 75 psi           Fungal Resistance         ASTM G21-15         Fungal Resistance = 0, No Growth           Service Temperature         -40 to 180 °F (-40 to 82 °C)           Application Temperature         -40 to 100 °F (4 to 37 °C) *           Smoke Development, Fire Spread         ASTM E84         5, 5           Smoke De	Hardness Properties	ASTM C661	40 ± 5
Tack Free Time 73.4°F (23°C) 50% RH 6 to 8 hr  Stain and Color Change ASTM C510 Pass  Adhesion to Concrete ASTM C794 35 pli  Adhesion to Concrete After ASTM C794 30 pli  Immersion Adhesion to Green Concrete ASTM C794 >25 pli  Adhesion to Green Concrete ASTM C794 >25 pli  Adhesion to Damp Concrete ASTM C794 >20 pli  Effects of Accelerated Aging ASTM C793 Pass  Movement Capability ASTM C719 ±50%  Movement Capability ASTM C719 ±50%  Movement Capability ASTM C719 (Modified) +100/-50%  Tensile Strength ASTM D412 350 to 450 psi  % Elongation ASTM D412 800 to 900%  Modulus at 100% ASTM D412 75 to 85 psi  Tear Strength ASTM D412 65 to 75 psi  Fungal Resistance ASTM G21-15 Fungal Resistance = 0, No Growth  Service Temperature -40 to 180 °F (-40 to 82 °C)  Application Temperature -40 to 100 °F (4 to 37 °C) *  Smoke Development, Fire Spread ASTM E84 5, 5  Smoke Development, Fire Spread CAN S102 10, 10  Fire Resistance of Assembly NFPA 285 Pass  Crack Bridging ASTM C1305 Pass	Weight Loss	ASTM C1246	Pass
Stain and Color Change ASTM C510 Pass Adhesion to Concrete ASTM C794 35 pli Adhesion to Concrete After Immersion ASTM C794 30 pli Immersion ASTM C794 >25 pli Adhesion to Green Concrete ASTM C794 >20 pli Effects of Accelerated Aging ASTM C793 Pass Movement Capability ASTM C719 ±50% Movement Capability ASTM C719 (Modified) +100/-50% Tensile Strength ASTM D412 350 to 450 psi Wellongation ASTM D412 800 to 900% Modulus at 100% ASTM D412 75 to 85 psi Tear Strength ASTM D412 65 to 75 psi Fungal Resistance ASTM G21-15 Fungal Resistance = 0, No Growth Service Temperature -40 to 180 °F (-40 to 82 °C) Application Temperature 40 to 100 °F (4 to 37 °C) * Smoke Development, Fire Spread ASTM E84 5, 5 Smoke Development, Fire Spread CAN S102 10, 10 Fire Resistance of Assembly NFPA 285 Pass Crack Bridging ASTM C1305 Pass	Skin Time	ASTM C679	2 to 3 hr
Adhesion to Concrete ASTM C794 Adhesion to Concrete After Immersion Adhesion to Green Concrete ASTM C794 Adhesion to Green Concrete ASTM C794 ASTM C793 ASTM C793 ASTM C799 ASTM C719 ASTM D412 ASTM D412 ASTM D412 BOD to 900% ASTM D412 BOD to 900% ASTM D412	Tack Free Time	73.4°F (23°C) 50% RH	6 to 8 hr
Adhesion to Concrete After Immersion  ASTM C794  ASTM C793  Pass  Movement Capability  ASTM C719  ASTM C719  ASTM C719  ASTM C719  ASTM C719 (Modified)  Tensile Strength  ASTM D412  ASTM	Stain and Color Change	ASTM C510	Pass
ASTM C794 Adhesion to Green Concrete ASTM C794 Adhesion to Damp Concrete ASTM C794 Adhesion to Damp Concrete ASTM C794 ASTM C794 ASTM C793 Pass Movement Capability ASTM C719 ASTM C719 ASTM C719 ASTM C719 ASTM C719 ASTM D412 Boo to 450 psi ASTM D412 Boo to 450 psi ASTM D412 AS	Adhesion to Concrete	ASTM C794	35 pli
Adhesion to Damp Concrete  ASTM C794  >20 pli  Effects of Accelerated Aging  ASTM C793  Pass  Movement Capability  ASTM C719  ASTM C719  # 100/-50%  Tensile Strength  ASTM D412  # 100/-50%  # 100/-5	Adhesion to Concrete After Immersion	ASTM C794	30 pli
Effects of Accelerated Aging  ASTM C719  # 50%  Movement Capability  ASTM C719 (Modified)  Tensile Strength  ASTM D412  South D412  Modulus at 100%  ASTM D412  ASTM G21-15  Fungal Resistance = 0, No Growth  ASTM C100 °F (-40 to 82 °C)  Application Temperature  ASTM D410  ASTM E84  ASTM E84  ASTM E84  ASTM E84  ASTM E84  ASTM E84  ASTM E85  ASTM E85  ASTM C1305  Pass  Crack Bridging  ASTM C1305	Adhesion to Green Concrete	ASTM C794	>25 pli
Movement Capability ASTM C719  # 50%  Movement Capability ASTM C719 (Modified) # 100/-50%  Tensile Strength ASTM D412 B00 to 900%  Modulus at 100% ASTM D412 Fungal Resistance ASTM D412 ASTM D412 ASTM D412 ASTM D412 B00 to 900%  Modulus at 100% Fungal Resistance Fungal Resistance ASTM D412 Fungal Resistance ASTM G21-15 Fungal Resistance = 0, No Growth  Service Temperature A90 to 180 °F (-40 to 82 °C)  Application Temperature ASTM E84 S, 5  Smoke Development, Fire Spread ASTM E84 S, 5  Smoke Development, Fire Spread CAN S102 10, 10  Fire Resistance of Assembly NFPA 285 Pass  Crack Bridging ASTM C1305 Pass	Adhesion to Damp Concrete	ASTM C794	>20 pli
Movement Capability  ASTM C719 (Modified)  +100/-50%  Tensile Strength  ASTM D412  S00 to 900%  Modulus at 100%  ASTM D412  ASTM D412  Tear Strength  ASTM D412  ASTM D412  ASTM D412  ASTM D412  Tear Strength  ASTM D412  ASTM D412  ASTM D412  ASTM D412  ASTM D412  ASTM D412  ASTM G21-15  Fungal Resistance = 0, No Growth  -40 to 180 °F (-40 to 82 °C)  Application Temperature  ASTM E84  ASTM E84  Tear Strength  ASTM E84  ASTM	Effects of Accelerated Aging	ASTM C793	Pass
Tensile Strength ASTM D412 350 to 450 psi % Elongation ASTM D412 800 to 900%  Modulus at 100% ASTM D412 75 to 85 psi Tear Strength ASTM D412 65 to 75 psi Fungal Resistance ASTM G21-15 Fungal Resistance = 0, No Growth Service Temperature -40 to 180 °F (-40 to 82 °C) Application Temperature 40 to 100 °F (4 to 37 °C) *  Smoke Development, Fire Spread ASTM E84 5, 5 Smoke Development, Fire Spread CAN S102 10, 10  Fire Resistance of Assembly NFPA 285 Pass  Crack Bridging ASTM C1305 Pass	Movement Capability	ASTM C719	± 50%
% Elongation ASTM D412 800 to 900%  Modulus at 100% ASTM D412 75 to 85 psi  Tear Strength ASTM D412 65 to 75 psi  Fungal Resistance ASTM G21-15 Fungal Resistance = 0, No Growth  Service Temperature -40 to 180 °F (-40 to 82 °C)  Application Temperature 40 to 100 °F (4 to 37 °C) *  Smoke Development, Fire Spread ASTM E84 5, 5  Smoke Development, Fire Spread CAN S102 10, 10  Fire Resistance of Assembly NFPA 285 Pass  Crack Bridging ASTM C1305 Pass	Movement Capability	ASTM C719 (Modified)	+100/-50%
Modulus at 100%  ASTM D412  75 to 85 psi  Tear Strength  ASTM D412  65 to 75 psi  Fungal Resistance  ASTM G21-15  Fungal Resistance = 0, No Growth  -40 to 180 °F (-40 to 82 °C)  Application Temperature  ASTM E84  Smoke Development, Fire Spread  ASTM E84  ASTM E84  Smoke Development, Fire Spread  CAN S102  10, 10  Fire Resistance of Assembly  NFPA 285  Pass  Crack Bridging  ASTM C1305  Pass	Tensile Strength	ASTM D412	350 to 450 psi
Tear Strength ASTM D412 65 to 75 psi Fungal Resistance ASTM G21-15 Fungal Resistance = 0, No Growth  Service Temperature -40 to 180 °F (-40 to 82 °C)  Application Temperature 40 to 100 °F (4 to 37 °C) *  Smoke Development, Fire Spread ASTM E84 5, 5  Smoke Development, Fire Spread CAN S102 10, 10  Fire Resistance of Assembly NFPA 285 Pass  Crack Bridging ASTM C1305 Pass	% Elongation	ASTM D412	800 to 900%
Fungal Resistance ASTM G21-15 Fungal Resistance = 0, No Growth  Service Temperature -40 to 180 °F (-40 to 82 °C)  Application Temperature 40 to 100 °F (4 to 37 °C) *  Smoke Development, Fire Spread ASTM E84 5, 5  Smoke Development, Fire Spread CAN S102 10, 10  Fire Resistance of Assembly NFPA 285 Pass  Crack Bridging ASTM C1305 Pass	Modulus at 100%	ASTM D412	75 to 85 psi
Service Temperature -40 to 180 °F (-40 to 82 °C)  Application Temperature 40 to 100 °F (4 to 37 °C) *  Smoke Development, Fire Spread ASTM E84 5, 5  Smoke Development, Fire Spread CAN S102 10, 10  Fire Resistance of Assembly NFPA 285 Pass  Crack Bridging ASTM C1305 Pass	Tear Strength	ASTM D412	65 to 75 psi
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Smoke Development, Fire Spread ASTM E84 5, 5 Smoke Development, Fire Spread CAN S102 10, 10 Fire Resistance of Assembly NFPA 285 Pass Crack Bridging ASTM C1305 Pass	Service Temperature		-40 to 180 °F (-40 to 82 °C)
Smoke Development, Fire Spread CAN S102 10, 10  Fire Resistance of Assembly NFPA 285 Pass  Crack Bridging ASTM C1305 Pass	Application Temperature		40 to 100 °F (4 to 37 °C) *
Fire Resistance of Assembly NFPA 285 Pass Crack Bridging ASTM C1305 Pass	Smoke Development, Fire Spread	ASTM E84	5, 5
Crack Bridging ASTM C1305 Pass	Smoke Development, Fire Spread	CAN S102	10, 10
* *	Fire Resistance of Assembly	NFPA 285	Pass
Nail Seal Ability ASTM D1970 Section 7.9 Pass	Crack Bridging	ASTM C1305	Pass
Additionary Aprily D1570 Section 7.5 1 d55	Nail Seal Ability	ASTM D1970 Section 7.9	Pass

<sup>\*</sup>For temperatures below 40 °F, please refer to the Technical Bulletin, Cold Temperature Sealant Application Recommendations.

Please refer to our website at 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.



D100-DS/0224

Tremco Construction Products Group (CPG) brings together Tremco CPG Inc. and its Dryvit and Nudura brands; Willseal; Prebuck LLC; Tremco Barrier Solutions, Inc.; Weatherproofing Technologies, Inc. and its Pure Air Control Services and Canam Building Envelope Specialists offerings; and Weatherproofing Technologies Canada, Inc.



