



TECHNICAL DATA SHEET

WILLSEAL® 1FR-V

Pre-Compressed, Fire-Rated,
Vertical Expansion Seal

PRODUCT DESCRIPTION

Willseal® 1FR-V is a fire-rated, pre-compressed, expansion seal with a pre-cured, factory-applied sealant coating on the face. Willseal 1FR-V is comprised of a UV stable, fire-retardant impregnated foam, that is designed to be used in vertical expansion joints by itself, but can also be used behind any other expansion joint cover, plate, or filler where joint depth allows.

BASIC USES

Willseal 1FR-V is designed for use in vertical expansion joints, including those in fire-rated systems to provide a 1-hour fire-rated seal. Willseal 1FR-V can either be coated on a single side or both sides based on the fire-rated system requirements. The following are acceptable applications for Willseal 1FR-V:

- Primary construction joints
- Vertical fire-rated expansion joint systems
- Expansion, control, and isolation joints
- Retrofit and seismic joints
- Joints requiring a resilient, waterproof seal
- Larger joints requiring an architectural finish

FEATURES & BENEFITS

Willseal 1FR-V has been tested and certified under UL 2079. Willseal 1FR-V is available uncoated or coated with a sealant facer. If coated, Willseal 1FR-V can be single-side coated or double-side coated. Willseal 1FR-V provides a watertight seal in dynamic joints.

- 1-hour fire rated seal when installed in accordance with a UL tested firestop system
- STC rating of 54, OITC rating of 48
- Allows for up to $\pm 50\%$ movement
- Accommodates for rapid rates of joint movement
- Has excellent compression recovery

Willseal 1FR-V meets or exceeds the following specifications:

- UL 2079 (ASTM E1966)
- CAN/ULC-S115
- TAS 202-94 and 203-94
- ASTM 283, 330, 331, and 547

Willseal 1FR-V is supplied in a pre-compressed state for ease of installation and utilizes non-invasive anchoring. Material will self-expand to fill the joint. Expansion time will vary based on humidity, temperature, and storage conditions for the prior 24 hours; may differ for wider, thicker material. Material will continue to expand and equalize in the joint.

As an optional feature, Willseal 1FR-V can be coated with a puncture-resistant sealant. The colorized hybrid polyurethane skin on the exposed face will ensure a pick-resistant waterproof joint as required in schools, detention facilities, hospitals, prisons, and other government facilities.

- Pick-resistant sealant facer hardens to 50 ± 10 Shore A durometer
- Meets UL94V0, Cal 117 for self-extinguishing

AVAILABILITY

Available in joint sizes from $\frac{1}{2}$ " to 6" in sticks (6.5 ft lengths) from your authorized Tremco distributor, or any Tremco or Willseal Sales Representative. Custom sizes are available upon request. For more information contact Customer Service by phone at 800-274-2813 or email custserv@willseal.com.

COLORS

Available factory coated with silicone sealant in Tremco standard Spectrem colors: White, Precast White, Ivory, Sandstone, Buff, Off-White, Limestone, Anodized Aluminum, Gray, Aluminum Stone, Light Bronze, Champagne, Dusty Rose, Adobe Tan, Rustic Brick, Charcoal, Bronze, Dark Bronze, and Black.

Available factory coated with pick-resistant polyurethane sealant in Tru White and Limestone.

Industry standard colors and custom colors available upon request. For more information contact Customer Service by phone at 800-274-2813 or email custserv@willseal.com.

LIMITATIONS

Not recommended for use with passive fire containment systems not listed or approved by Willseal. Depth of seal is typically 4". Refer to UL listings at www.UL.com. Contact Willseal Technical Services for additional information.

Do not subject to harsh chemicals. Will not adhere to surfaces contaminated by oil or grease. Concrete should be clean, dry, and sound before application.

WARRANTY

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

TYPICAL PHYSICAL PROPERTIES

PROPERTY	TEST METHOD	TYPICAL RESULTS
Foam Color		Black
Temperature Stability Range		-40 to 185 °F (-40 to 85 °C)
STC	ASTM E90-09	54
OITC	ASTM E90-09	48

Please refer to our website at www.tremcosealants.com for the most up-to-date Product Data Sheets.

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

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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.



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