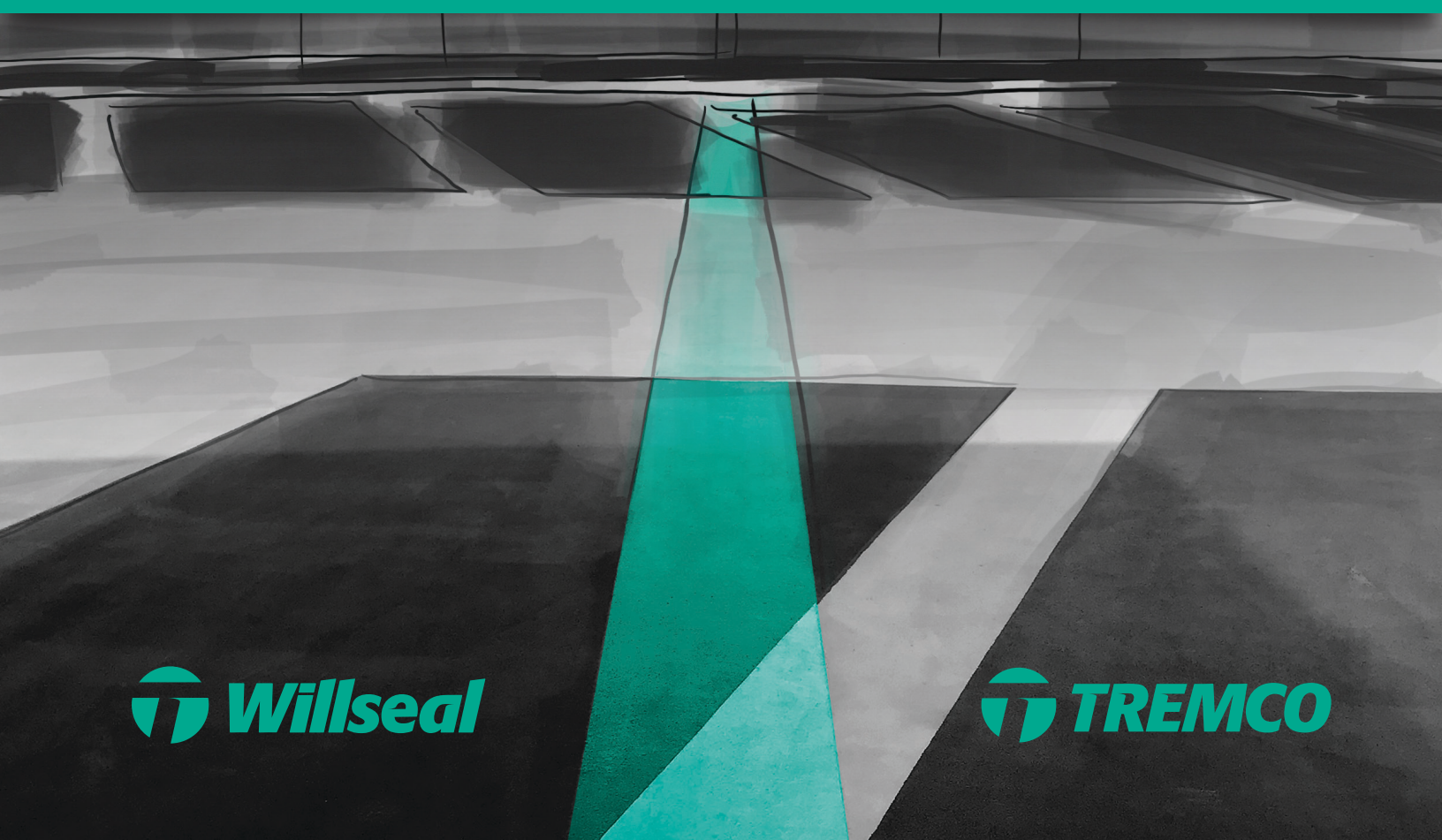




# EXPANSION JOINTS & TRANSITION SEALANTS

*Pre-Compressed, Acrylic-Impregnated Foams | Preformed Extrusions  
Closed-Cell Foams | Monolithic Polyurethane Methacrylate | Gun-Grade Foams*





# EXPANSION JOINT SYSTEMS

Willseal's best-in-class pre-compressed and acrylic-impregnated foam products for horizontal and vertical joint applications.

Tremco's industry-leading joint sealants, polyurethane-methacrylate technology, pre-formed extrusions and gun-grade foams.

For over 110 combined years, our products have been continuously specified and installed on thousands of new construction

and restoration projects worldwide, and have always stood for the highest quality sealants.

Willseal and Tremco products are designed for maximum waterproofing, thermal, sound, and air-tightness to meet global passive housing standards — and feature superior durability, excellent +/- movement capabilities, and streamlined installation.

## MARKETS SERVED:

- Commercial construction
- Industrial / manufacturing
- Prefabricated / modular
- Educational and institutional
- Infrastructure and DOT
- Residential construction
- Stadiums and arenas
- Parking facilities
- Medical facilities
- Fire protection

## JOINT APPLICATIONS:

- Traffic-grade horizontal joints
- Primary vertical joints
- Curtain walls, windows and flashing
- Control, longitudinal and transverse joints
- Dryvit® and exterior panel system joints
- Pre-cast concrete and built-up walls
- Fire-rated joints
- Seismic, large and retrofit joints
- Below-grade applications



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# JOINT SELECTION GUIDE

## APPLICATIONS & PROPERTIES

| PRODUCT                     | Movement | Horizontal | Vertical | Transition-in-Plane | Fire-Rated | Primary Seal | Secondary Seal | Traffic-Rated |
|-----------------------------|----------|------------|----------|---------------------|------------|--------------|----------------|---------------|
|                             |          |            |          |                     |            |              |                |               |
| Willseal® 250               | +/- 50%  | •          |          | •                   |            | •            |                | •             |
| Willseal® 250R              | +/- 50%  | •          |          |                     |            | •            |                | •             |
| Willseal® 600               | +/- 50%  |            | •        |                     |            | •            | •              |               |
| Willseal® Backer Roll       | +/- 50%  |            | •        |                     |            |              | •              |               |
| Willseal® Coreseal          | +/- 25%  | •          | •        | •                   |            | •            | •              | •             |
| Willseal® Color Coreseal V  | +/- 25%  |            | •        | •                   |            | •            |                |               |
| Willseal® Color Coreseal H  | +/- 25%  | •          |          | •                   |            | •            |                | •             |
| Willseal® FR-V <sup>1</sup> | +/- 50%  |            | •        | •                   | •          | •            |                |               |
| Willseal® FR-H <sup>1</sup> | +/- 50%  | •          |          | •                   | •          | •            |                | •             |
| Willseal® Seismic           | +/- 50%  |            | •        | •                   |            | •            |                |               |
| Willseal® STC               | +/- 50%  |            | •        |                     |            |              |                |               |
| Willseal® PF100             | +/- 50%  |            | •        | •                   |            | •            | •              |               |
| Willseal® PF200             | +/- 50%  |            | •        | •                   |            | •            |                |               |

<sup>1</sup> FR-V and FR-H max throat openings are dependent on UL system listing. Please reach out to Tech Resources for additional information.

Reference the current product data sheets on our website at [www.tremcosealants.com](http://www.tremcosealants.com) for more specific product information.

For specific tie-in recommendations and instructions, please contact your local Tremco Sales or Technical Service Representative.

# JOINT SELECTION GUIDE

## APPLICATIONS & PROPERTIES

| PRODUCT                    | GreenGuard | UV Stable | Low VOC | Below-Grade Horizontal | Monolithic / Seamless | 1/2" to 6" Throat Opening | 1/2" to 4" Throat Opening | Thermal Resistance | Many Color Options |
|----------------------------|------------|-----------|---------|------------------------|-----------------------|---------------------------|---------------------------|--------------------|--------------------|
| Willseal® 250              |            | •         | •       |                        |                       | •                         | •                         |                    |                    |
| Willseal® 250R             | •          |           |         |                        |                       |                           |                           |                    |                    |
| Willseal® 600              | •          | •         | •       |                        |                       | •                         | •                         |                    |                    |
| Willseal® Backer Roll      |            | •         | •       |                        |                       | •                         | •                         |                    |                    |
| Willseal® Coreseal         |            | •         | •       |                        |                       | •                         | •                         |                    |                    |
| Willseal® Color Coreseal V | •          | •         | •       |                        |                       | •                         | •                         | •                  | •                  |
| Willseal® Color Coreseal H | •          | •         | •       | •                      |                       | •                         | •                         | •                  | •                  |
| Willseal® FR-V             |            | •         | •       |                        |                       |                           | •                         | •                  | •                  |
| Willseal® FR-H             |            | •         | •       |                        |                       |                           | •                         | •                  | •                  |
| Willseal® Seismic          | •          | •         | •       |                        |                       | •                         | •                         | •                  | •                  |
| Willseal® STC              | •          |           |         |                        |                       |                           |                           |                    |                    |
| Willseal® PF100            |            | •         | •       |                        |                       |                           | •                         |                    |                    |
| Willseal® PF200            |            |           |         |                        |                       |                           |                           |                    |                    |

<sup>1</sup> FR-V and FR-H max throat openings are dependent on UL system listing. Please reach out to Tech Resources for additional information.

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For specific tie-in recommendations and instructions, please contact your local Tremco Sales or Technical Service Representative.

# EXPANSION JOINT PRODUCTS

With a wide variety of pre-compressed, acrylic-impregnated foams, pre-formed extrusions, and gun-grade foams, Willseal and Tremco have the ideal solution for any expansion joint or transition sealant project.

Whether you require traffic-grade horizontal, color-matched vertical, 1, 2, or 3 hour fire-rated, seismic capabilities, waterproof, sound

attenuating, dust-proof or airtight seals, you'll find a variety of options in the following pages.

All products, however, feature unmatched quality and durability, excellent +/- movement capabilities, and innovative, streamlined installations designed to help create safer, greener, high-performance structures.

## COLOR OPTIONS

Many of our joint sealant solutions are available finished in any standard Spectrem® color — in addition to a broad range of industry standard colors. For even greater customization, we can custom-match most colors to blend in perfectly with your project.

*(Products with this icon indicate the availability of color options.)*



### SPECTREM® STANDARD COLORS



### TRAFFIC RATED SPECTREM COLORS



All colors shown are approximate and may not reflect sheen or shade precisely, as varying amounts of aggregate will alter light-reflecting properties. Tremco always recommends a test patch to gain final color approval. Different lighting conditions can influence color appearance: for truer color please view in daylight. Some colors may require a minimum quantity. Custom colors are available upon request. Contact Tremco Customer Service for more information.

# Willseal® 250

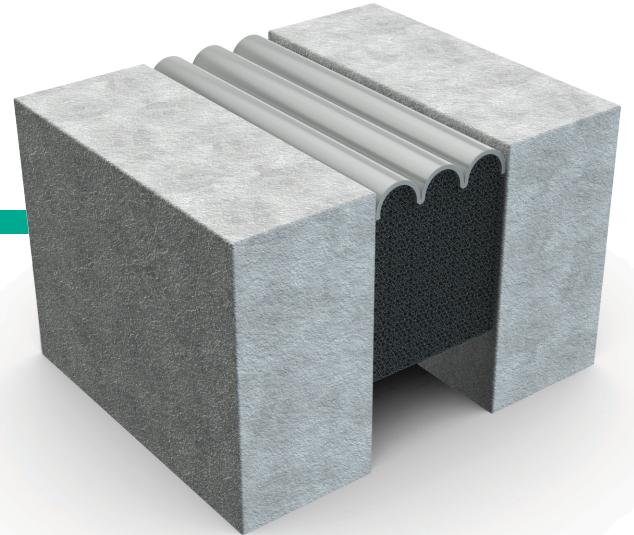
Willseal® 250 is a pre-compressed, self-expanding foam joint sealant with a traffic grade silicone coating engineered to perform in horizontal applications subject to solvents and fuels such as those found in parking garages, road and bridge joints, and airport runways. Willseal 250 is specifically designed to provide a maximum seal in structures with shear and rapid movement.

## FEATURES & BENEFITS:

- Allows for up to +/- 50% movement from mean joint size
- Designated as a dual expansion joint seal
- Advanced acrylic impregnation without heavy fillers
- True tensionless system

## COMMON APPLICATIONS:

- Primary horizontal expansion joints with vehicular traffic
- Parking garages
- Plaza decks on grade



# Willseal® 250-R

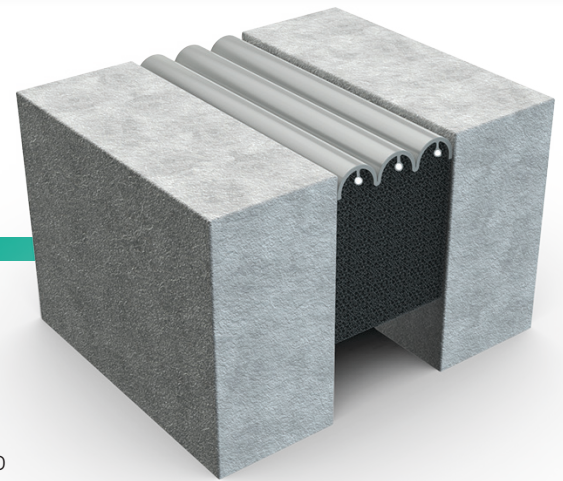
Willseal® 250 is a patent-protected expansion joint system which combines the performance and reliability of Willseal 250 with reinforcing members positioned beneath the sealant face to support higher point loads. It is typically used as a joint sealant for both interior and exterior high foot traffic areas, engineered to perform in horizontal applications. Current patents: No. 9739049, No. 9951515

## FEATURES & BENEFITS:

- Allows for up to +/- 50% movement
- Ideally suited to handle heavy pedestrian traffic
- Accommodates rapid rate of movement
- Surface load transfer

## COMMON APPLICATIONS:

- Primary horizontal expansion joints with vehicular traffic
- Parking garages
- Plaza decks on grade



# Willseal® 600

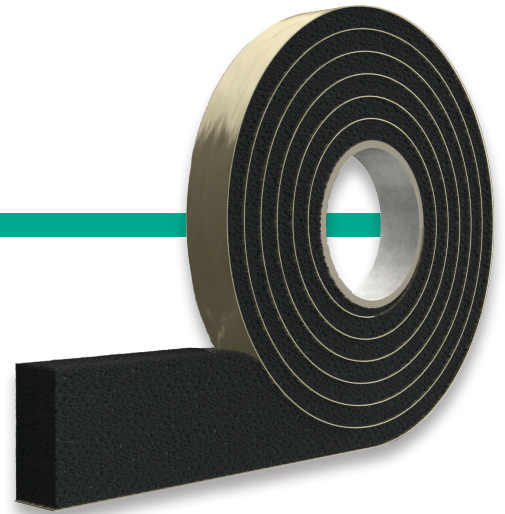
Willseal® 600 is a pre-compressed, self-expanding foam joint sealant, engineered to perform as a highly flexible, weathertight, primary seal in vertical exterior applications. Willseal 600 can also provide the ideal foundation for a large variety of wet sealants, such as silicone, polyurethane, polysulfide, and acrylic if desired. Allows for up to +/- 50% movement.

## FEATURES & BENEFITS:

- Never under tension or cohesion strain
- Minimal surface prep and no priming required
- Vapor-permeable, and seals gaps as small as 1/8"
- Thermal resistance (R-value)

## COMMON APPLICATIONS:

- Primary expansion, control, isolation and retrofit joints
- Exterior panel systems - metal, masonry, stone, EIFS (Dryvit), curtain walls
- Pre-cast concrete walls, tilt-up walls
- Window and flashing applications
- Interior vapor, dust, acoustical and air control



# Willseal® Backer Roll™

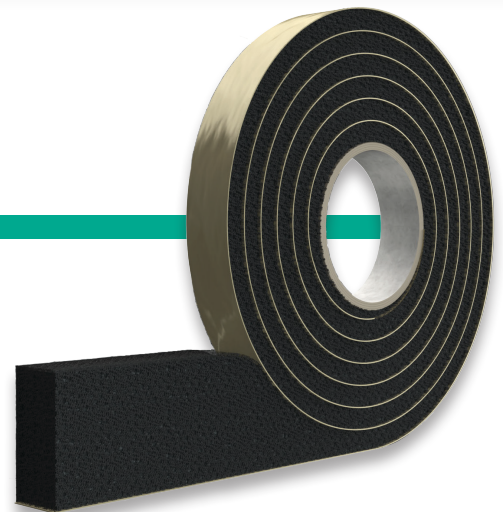
Willseal® Backer Roll™ is a pre-compressed, self-expanding foam joint sealant, engineered to perform as a highly flexible, weathertight, secondary seal in vertical exterior applications. Willseal Backer Roll can also provide the ideal foundation for a large variety of wet sealants, such as silicone, polyurethane, polysulfide, and acrylic.

## FEATURES & BENEFITS:

- Allows for up to +/- 50% movement
- Never under tension or cohesion strain
- Minimal surface prep and no priming required

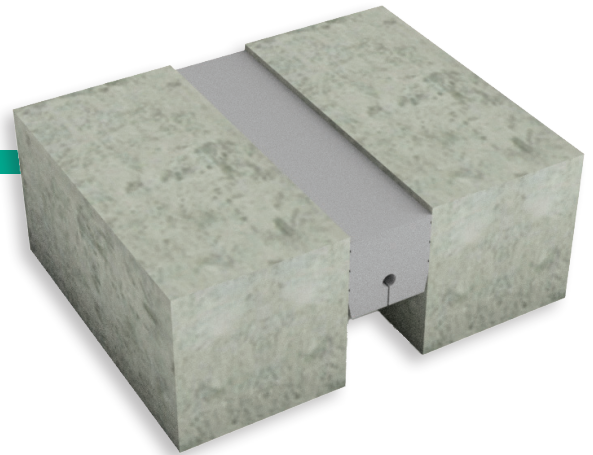
## COMMON APPLICATIONS:

- Secondary construction joints – for use behind wet-applied sealants
- Exterior panel systems - masonry, stone, EIFS (Dryvit), curtain walls
- Pre-cast concrete walls, tilt-up walls
- Window and flashing applications
- Interior vapor, dust, acoustical and air control





# Willseal® Coreseal



Willseal® Coreseal is a preformed, compressible system that is impermeable to water and provides a watertight seal. It meets all applicable standards for compressible sealants and performs under extreme conditions including bridge and parking structure expansion joints. It provides a watertight, dustproof, airtight, UV stable, chemically resistant, soundproof, and insulated seal.

## FEATURES & BENEFITS:

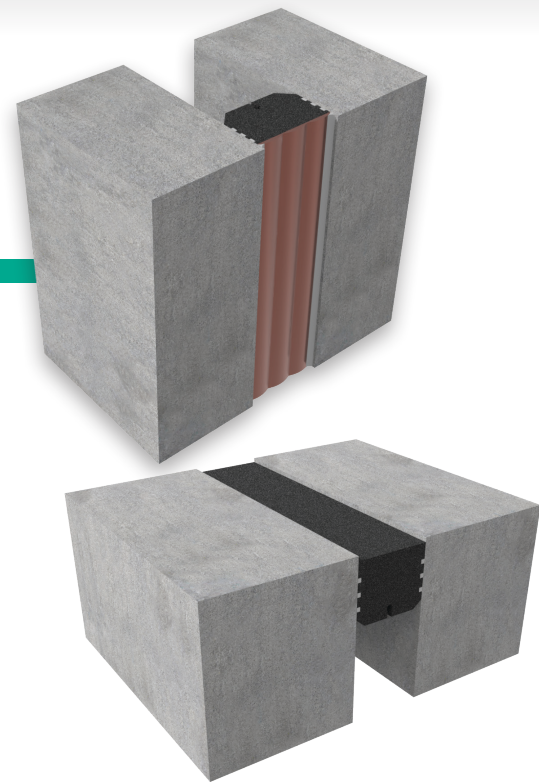
- Unique profile for easier install and less tension
- Watertight, dust-proof and soundproof
- Able to be heat spliced
- Customizable to suit unique application needs

## COMMON APPLICATIONS:

- Primary horizontal and vertical joints
- Highway longitudinal and transverse joints
- Parking structure expansion joints



# Willseal® Color Coreseal V & H



Willseal® Color Coreseal V & H are dense, closed cell foams for larger movement joints. They have a colorized silicone skin on the exposed face for chemical and puncture resistance in a waterproof joint. Due to its strong closed cell structure, it has excellent compression, tension and shear capabilities.

## FEATURES & BENEFITS:

- Accommodates rapid rates of joint movement
- Monolithic foam will not delaminate like multi-layer products

## COMMON APPLICATIONS:

- Pedestrian applications
- Seismic, large and retrofit joints
- Parking expansion joints (with traffic grade silicone)



# Willseal® FR-V

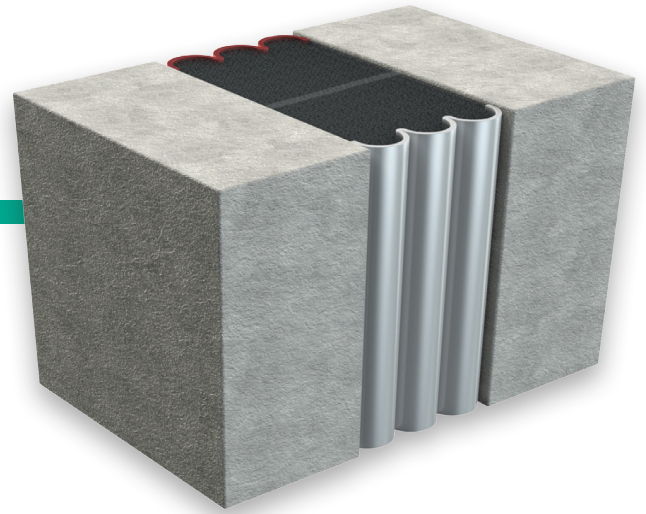
Willseal® FR-V is a factory controlled, watertight, clean handling, UV stable, sound attenuating, energy efficient and fire rated joint seal with a single, unified installation process. Willseal FR-V provides a 1, 2, and 3-hour fire rated vertical seal.

## FEATURES & BENEFITS:

- Innovative internal smoke barrier prevents fumes from penetrating the joint system
- Waterproof silicone faces on fire-retardant impregnated foam
- No need for additional intumescent bellows
- Non-invasive anchoring means no drilling or modification to the substrates
- UL 2079 tested and certified

## COMMON APPLICATIONS:

- Vertical wall installations
- Behind other expansion joint covers, plates or fillers



# Willseal® FR-H

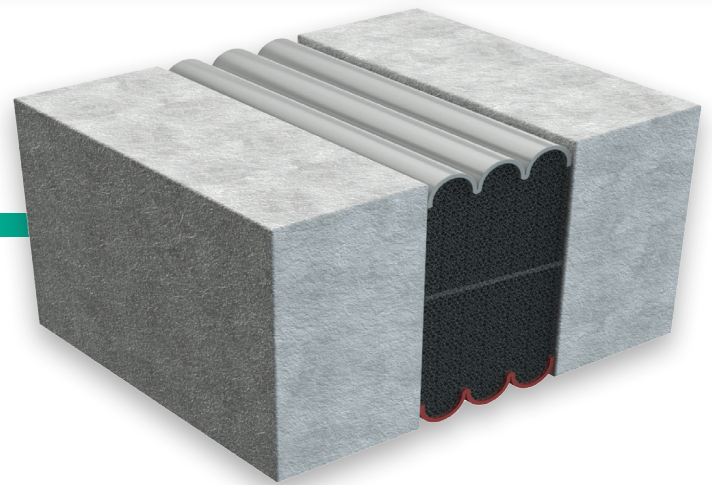
Willseal® FR-H is a factory controlled, watertight, clean handling, UV stable, sound attenuating, energy efficient and fire rated joint seal with a single, unified installation process. Willseal FR-H provides a 1, 2, and 3-hour fire rated seal. Available in a reinforced version for up to and including 3" joints.

## FEATURES & BENEFITS:

- Innovative internal smoke barrier prevents fumes from penetrating the joint system
- Waterproof silicone faces on fire-retardant impregnated foam
- No need for additional intumescent bellows
- Non-invasive anchoring means no drilling or modification to the substrates
- UL 2079 tested and certified

## COMMON APPLICATIONS:

- Horizontal expansion joints
- Behind other expansion joint covers, plates or fillers



# Willseal® Seismic

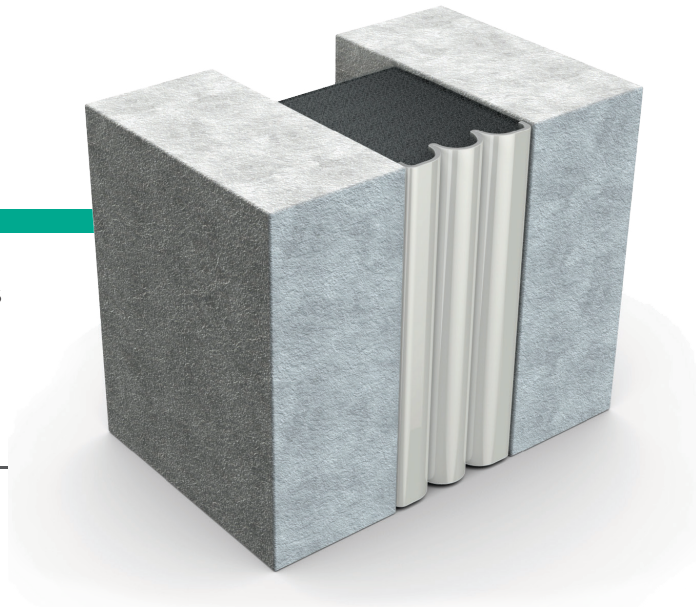
Willseal® Seismic is a one-step primary sealant for exposed areas where color matching is important. It has an elastomeric coating on the exterior surface, which can be factory colored to match most construction substrates or sealants. The joint is watertight and color matched.

## FEATURES & BENEFITS:

- Accommodates rapid rates of joint movement
- Excellent compression recovery
- Permanently elastic and weathertight
- Allows for up to +/- 50% movement

## COMMON APPLICATIONS:

- Primary vertical construction joints
- Expansion, control and isolation joints
- Retrofit and seismic joints
- Pre-cast concrete walls, tilt-up walls
- Exterior panel systems - masonry, granite, metal, EIFS (Dryvit), curtain walls



# Willseal® STC

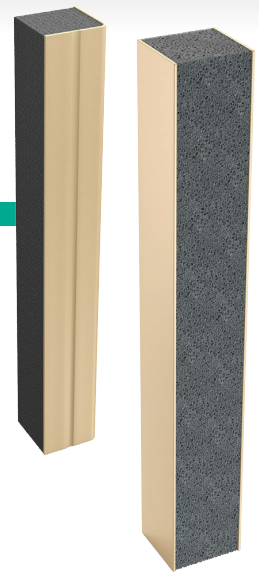
Willseal® STC is a compressible type expansion joint system for both vertical and horizontal joints on a vertical plane where interior sound control is needed. Willseal STC is also excellent at blocking and controlling dust, draft, heat, cold and sound in interior offices, quiet rooms, lobbies, conference and lecture rooms.

## FEATURES & BENEFITS:

- Side can be coated to match wall coverings and substrates
- Ease of installation allows for high production
- No mechanical hardware needed for installation
- Variety of color options available

## COMMON APPLICATIONS:

- Moveable partitions
- Head of wall applications



# Willseal® PF100

Willseal® PF100 is a pre-compressed, self-expanding foam joint seal, engineered to perform as a weathertight primary seal designed for use in various prefabricated applications. Single step application reduces labor, time, and material (no backer rod or tooling required).



## FEATURES & BENEFITS:

- Incorporated into NFPA 285 assemblies
- Comprised of Low-Emitting Materials - Adhesives and Sealants (LEED Credit 4.1)
- Meets or exceeds the requirements of IBC testing for air barriers, 2 hours at 300pa (ASTM E283). Also meets or exceeds the requirements for ASTM E331, up to 1200pa.
- Thermal resistance (R-value) and UV stable

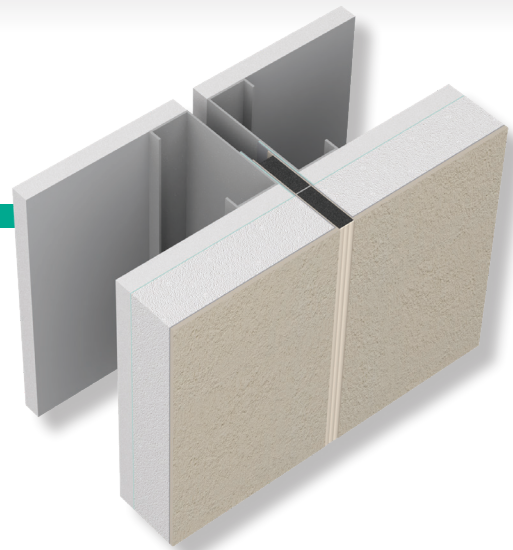
## COMMON APPLICATIONS:

- Modular
- Panelization
- Tilt up and other off-site construction methods



# Willseal® PF200

Willseal® PF200 is a pre-compressed, self-expanding foam joint seal, engineered to perform as a weathertight primary seal designed for use in various prefabricated applications. The product self-expands to fill the joint and is capable of +/- 50% movement from the mean joint size.



## FEATURES & BENEFITS:

- Available in a wide variety of colors
- No side wall adhesive or finishes are needed
- Ease of use with minimal surface preparation
- Thermal resistance (R-value) and UV stable
- Meets or exceeds the requirements of IBC testing for air barriers

## COMMON APPLICATIONS:

- Modular
- Panelization
- Tilt up and other off-site construction methods



# Branded Cover Plates

## Straight

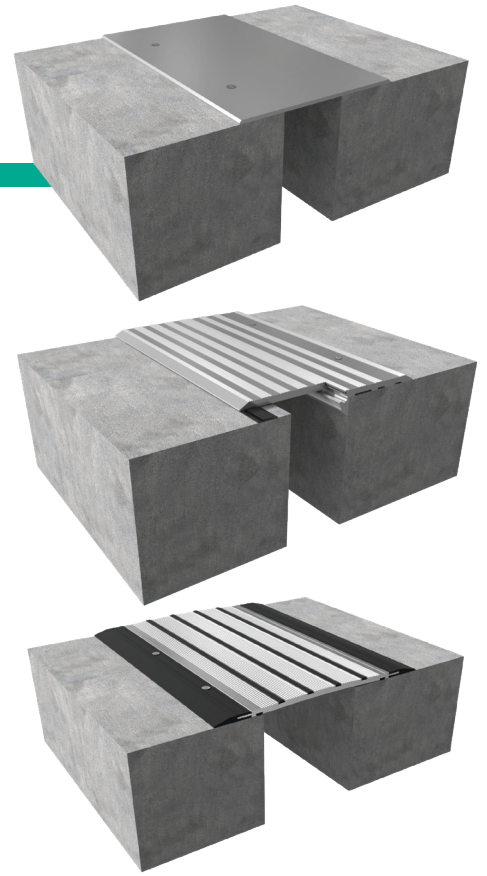
An aluminum cover plate designed for covering expansion joint openings in floors where an aesthetically pleasing appearance is needed.

## Hinged

Designed for expansion joint openings without conventional block-outs. This series can accommodate vertical offsets in opposing concrete decks and multi-directional seismic movement. Available for slab-to-slab and slab-to-wall connections.

## Flex

Designed for covering expansion joint openings in high volume pedestrian and vehicular traffic areas. This series can accommodate vertical offsets in opposing concrete decks and multi-directional seismic movement. Available for slab-to-slab and slab-to-wall connections.



# Factory Transitions

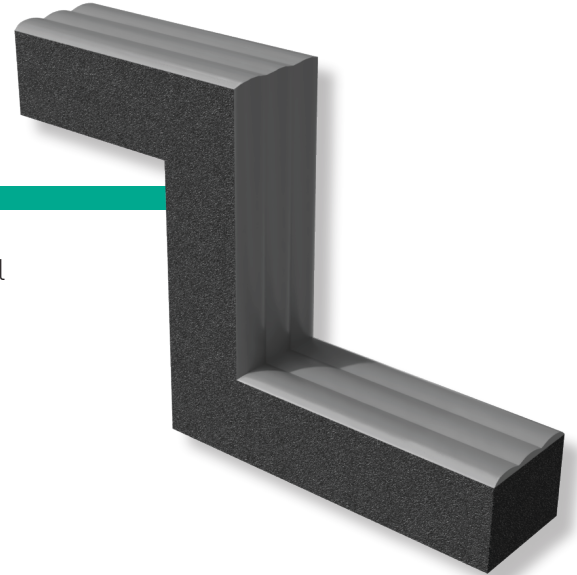
Willseal Patented-Protected Factory Transitions provide a watertight seal that accomadtes directional changes that occur in construction. Factory Transitions are offered in Willseal Seismic, 250, Coreseal and Fire-rated products.

## FEATURES & BENEFITS:

- Factory cut and welded
- Watertight seal
- Reduce labor and waste
- Custom sizes and configurations are available

## COMMON APPLICATIONS:

- Floor to floor
- Floor to wall
- Treads and risers



# Proglaze® ETA

Proglaze® ETA is a pre-engineered translucent silicone transition assembly for junctions between assemblies throughout the building envelope. It is comprised of a flat, ribbed silicone extrusion which is adhered with Spectrem® 1 Silicone Sealant to ensure a durable connection and positive seal.

## FEATURES & BENEFITS:

- Can span and seal across irregular geometries
- Translucent silicone allows installers to verify a complete seal
- Variety of sizes available
- Durable, flexible connection between components

## COMMON APPLICATIONS:

- Roof-to-wall, window-to-wall and foundation-to-wall connections
- Expansion, drift and control joints
- Floor deflection joints
- Corner connections
- Penetrations



# Spectrem® Simple Seal

Spectrem® Simple Seal high-performance silicone extrusions are designed to seal joints and gaps ranging from low to high-movement conditions. Spectrem Simple Seal provides flexible, tear-resistant properties that will help to protect your building from air and moisture penetration.

## FEATURES & BENEFITS:

- Easy installation reduces time and labor costs
- Superior flexibility and +/- movement capabilities
- High strength provides durability and excellent tear resistance

## COMMON APPLICATIONS:

- Window/door perimeters
- Dryvit / EIFS joints
- Parapet walls
- Skylights
- Aluminum window seals
- Transition seals
- Curtain wall joints
- Sheet metal roof joints and other lap joints



*(Accessory)*

## ExoAir® Flex Foam

ExoAir® Flex Foam is a single-component, high performance, gun-grade polyurethane foam that performs as a flexible thermal barrier. With an industry leading movement range of +/-15%, ExoAir Flex is CFC-free and can be applied over a wide temperature range, making it a reliable, four-season solution.

### FEATURES & BENEFITS:

- Cures to a very fine, highly-elastic foam structure
- Thermal insulation in demanding, high-movement areas
- Absorbs up to 3 times more movement than competing expandable foams
- The industry's only true flexible foam
- Adheres to most common building materials

### COMMON APPLICATIONS:

- Thermal and sound barrier around window/door perimeters
- Window-to-air barrier connection points



*(Accessory)*

## ExoAir® LEF

ExoAir® LEF is single-component, CFC-free, all-season, high performance, gun-grade polyurethane foam that performs as a thermal barrier. It is an effective joint filler in hidden applications, and is highly-effective around window and door frame joints.

### FEATURES & BENEFITS:

- Effective as a thermal and sound barrier
- Low pressure build
- Low water absorption
- Tack-free in 10 minutes and resistant to decay and heat

### COMMON APPLICATIONS:

- Gaps around penetrations and in cavity walls
- Joint filler in hidden applications
- Around window and door frame joints





and



*are part of the Tremco Construction Products Group:*



*Construction Products Group*

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.

Our products and services empower teams to develop, design, engineer and operate structures that are more efficient to build and maintain, are virtually impervious to the elements and can provide any look desired.