

Willseal 150

Table of Contents

Willseal 150 Data Sheet - EN

1

Willseal 150 Application Instructions - EN

3

Willseal 150 Safety Data Sheet - EN

4

DATA SHEET

Product Description

Willseal® 150 is a pre-compressed, self-expanding foam joint seal, engineered to perform as a highly flexible, weather-tight, primary seal in vertical exterior applications. The high-density polyurethane foam is impregnated with a modified flame retardant, hydrophobic, UV stable acrylic resin and treated with a pressure-sensitive adhesive (PSA) on one side for ease of installation. Willseal 150 self-expands to fill the joint creating a permanent, elastic, vapor-permeable, weathertight seal.

Basic Uses

Typically used as an external joint sealant, Willseal 150 can be used as a primary seal in vertical applications. The following are acceptable applications for Willseal 150:

- Primary expansion, control, isolation & retrofit joints
- Primary construction joints
- Joints in pre-cast concrete, masonry, brick and facades
- Roofing and insulated metal panels
- Exterior insulation finish systems (EIFS)
- Primary seal in starter track assemblies for window wall
- Interior vapor, dust, acoustical and air control
- Manufactured housing and log homes

Features & Benefits

When used within its application range, Willseal 150 is weathertight against driving rain up to 12 lb/ft² psf or 600 Pa. Remains permanently flexible.

- UV Stable
- Compatible with numerous Tremco Sealants
- Low volatility
- Embedded scrim in the PSA prevents stretching or pulling during installation
- Chemically compatible with many types of commercial construction substrates: will not corrode iron, zinc, steel, galvanized steel or copper, and will not chemically harm concrete, lightweight concrete, mortar, brick, natural stones, plexiglass or wood.
- Minimal surface preparation required
- No mixing, masking or priming required
- Can be applied in various weather and temperature conditions
- Depth of seal can be changed to increase R-value and sound properties

Availability

Willseal 150 is available from your authorized Tremco distributor, or any Tremco or Willseal Sales Representative. For more information contact Customer Service by phone at 800-274-2813 or email custserv@willseal.com.

Colors

- Black

Limitations

- Avoid contact of Willseal 150 with hydrocarbon solvents, solvent based paints, and corrosive chemicals.
- Willseal 150 cannot be used as a primary seal where standing or ponding water will occur.
- Do not over compress
- Not for use in below-grade applications (Contact your local Technical Sales Representative for product recommendations.)

Packaging

- Joint sizes from 1/8" to 1.5" in rolls
- Joint sizes from 1.75" to 8" in sticks (6.5 ft lengths)
- Custom sizes available upon request

Expansion Time

Material will self-expand to fill the joint. Expansion time will vary based on humidity, temperature and storage conditions for the prior 24 hours. Estimated expansion time at 50% R.H. @ 70°F (21°C) is approximately 30 minutes. Material will continue to expand and equalize in the joint.

Warranty

Willseal Products are warranted to be free of defects in materials, but no warranty is made as to appearance or color. No other warranty, expressed or implied, is made with respect to Willseal Products, including warranties of MERCHANTABILITY and FITNESS FOR A PARTICULAR PURPOSE. The sole and exclusive remedy under this warranty shall be to replace or refund the purchase price of the quantity of Willseal Products proven to be defective, and there is no liability whatsoever for other loss or damage.

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

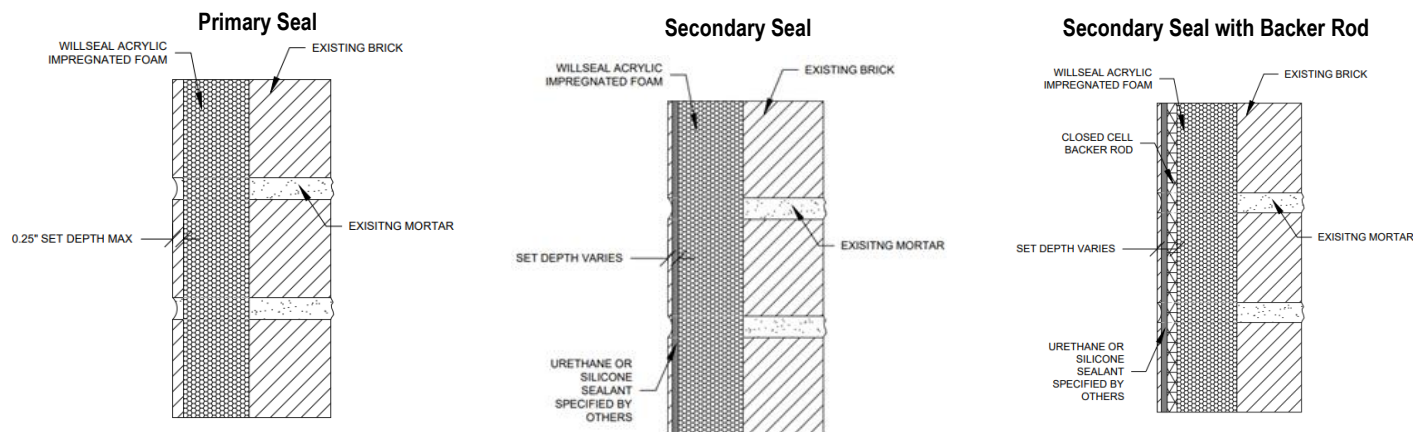
NOTE: All Willseal Safety Data Sheets (SDS) are in alignment with the Globally Harmonized System of Classification and Labelling of Chemicals (GHS) requirements.

TYPICAL PHYSICAL PROPERTIES

PROPERTY	DESCRIPTION	
COLOR	Black	
TEMPERATURE STABILITY RANGE	-40°C/-40°F to 100° C/212°F	
SHELF LIFE	1 Year*	
IDEAL STORAGE TEMPERATURE	68°F (34°C)	
PROPERTY	TEST METHOD	TYPICAL RESULTS
THERMAL CONDUCTIVITY	ASTM C518	0.05 W/m -°C
THERMAL RESISTANCE	ASTM C518	3.3 hr -°F-ft2/Btu
THERMAL STRENGTH	ASTM D3574	21 psi min. ¹
ELONGATION	ASTM D3574	120% +/- 20%
COMPRESSION SET	ASTM D3574	2.5% max
STAINING AND BLEEDING	DIN 18 542	Meets DIN requirements
RESISTANCE TO UV AND MOISTURE	DIN 18 542	Meets DIN requirements
STC	ASTM E90-9	56
OITC	ASTM E90-9	47
WATER PENETRATION		
Uniform Static	ASTM E331	12 psf
Cyclic Static	ASTM E547	12 psf
FIRE TESTING		
Flame Spread	ASTM E84-12B, Class A	5
Smoke Development	ASTM E84-12B, Class A	5
COMPATIBILITY WITH CONVENTIONAL CONSTRUCTION MATERIALS	DIN 52 423	No signs of corrosion were observed on zinc, steel, galvanized steel, aluminum and copper, no adverse effects with concrete, aerated concrete, brick, some natural stone, PVC, Plexiglass and wood; for other materials consult Willseal
COMPREHENSIVE PERFORMANCE TEST	DIN 18542	600 Pascal

*Must store at under recommended temperatures

¹ Attachment method of Willseal 150 was in a single joint compressed to 50% of original foam thickness. Joint material was constructed of calcium silicate board and is representative of field installation of the product.



0420/W150-DS

Please refer to our website at www.willseal.com for the most up-to-date Data Sheet.

Willseal, A Tremco Affiliate Brand

34 Executive Drive • Hudson NH 03051 • 800.274.2813 (US and Canada) or 603.273.0707 (International)



Willseal® 150

Pre-Compressed Impregnated Foam Seal for Expansion Joints

APPLICATION INSTRUCTIONS

1. Purpose

1.1 The purpose of this document is to establish typical guidelines for installation of Willseal 150. The techniques involved may require modifications to adjust to jobsite conditions. Consult your local Tremco Sales Representative or Tremco Technical Services for specific design requirements

2. Scope

2.1 This document will provide the necessary instructions for installation of Willseal 150 to qualify for a manufacturer's warranty.

3. Storage

3.1 Store materials in a dry, enclosed area, making sure materials are off the ground and out of direct sunlight
3.2 Material will expand faster when hot and slower when cold. In cold temperatures, store material in a heated area 24 hours prior to installation. In hot temperatures, store material out of direct sunlight and not in an enclosed storage container where temperatures may exceed 100°F.

4. Substrate Preparation

4.1 Verify that the joint is clean, sound, and will provide an appropriate surface for installation of the joint sealant
4.2 Use compressed air to clean any loose debris from the joint.
4.3 Apply water or alcohol to a clean cloth and wipe the joint walls to the depth of the sealant material plus 1"
4.4 Verify that the joint is uniform and repair any spalls prior to installation
4.5 Check the material for appropriate length, width, and depth
4.6 Supplied material should be pre-compressed to a size smaller than the intended joint opening
4.7 Joint depth must allow for the installed material to be recessed 1/4" from the substrate surface

5. Substrate Preparation

5.1 For joints supplied in a roll

5.1.1 Seal the vertical joints starting at the bottom and work up, butting each new piece into the previous.
5.1.2 If the self-adhesive backing is too sticky it can be temporarily neutralized by spraying the Willseal 150 with water.
5.1.3 Recess the seal 1/4" (6 mm) below the surface of the joint.

5.2 For joints supplied in a stick

5.2.1 When fully prepared to install, apply a 1/16" - 1/8" coating of the supplied adhesive accessory to the joint wall that will not have the pressure-sensitive adhesive up against it using a 1" margin trowel to a depth of the sealant material plus 1/2". Do not apply the supplied adhesive accessory to the joint wall that will be adhered to the joint with the pressure-sensitive adhesive as it will interrupt the bond.
5.2.2 The supplied adhesive accessory must still be wet upon installation of Willseal 150; The working time for the supplied silicone accessory is approximately 30 minutes depending on the temperature
5.2.3 Recess the seal 1/4" (6 mm) below the surface of the joint.

6. Joints, Sidewall and Finishing Work

6.1 Willseal 150 will self-expand to fill the joint; its expansion time is relative to the temperature of the joint seal. After Willseal 150 has filled the joint, it will continue to expand until it has reached equilibrium. This process requires additional time depending on temperatures.
6.2 Recommended materials and their use are as follows. For more information on the following materials, please contact your local Tremco Sales Representative or visit our website for product specific data sheet and application instructions at www.tremcosealants.com.

Detail Sealant:

- Dymonic® 100
- Spectrem® 1
- Spectrem® 2

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Please refer to our website at www.tremcosealants.com for the most up-to-date Application Instructions.

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

WILLSEAL 150

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations
Version 1. REVISION DATE: 07/10/2015 DATE OF ISSUE: 06/23/15

SECTION 1 – PRODUCT IDENTIFICATION**1.1 Product Identifier**

Product Form: Article

Product Name: Willseal 150

1.2 Intended Use of the Product

Use of the substance/mixture: Sealant

1.3 Name, Address, and Telephone of the Responsible Party**Company**

Willseal

34 Executive Drive

Hudson, NH 03051

T: 800.274.2813

custserv@willseal.com – www.willseal.com

1.4 Emergency Telephone Number: 800.274.2813**SECTION 2 – HAZARDOUS IDENTIFICATION****2.1 Classification of the Substance or Mixture****Classification (GHS-US)**

Not Classified

2.2 Label Elements**GHS-US Labeling**

No labeling applicable

2.3 Other Hazards

This product is exempt from OSHA hazardous communications regulations. It is defined as an “article” under 29CFR 1910.1200 (c). The data presented is intended to guide the user in the safe handling and use of the product. Within the meaning of the OSHA Hazard Communication Standard [29 CFR 1910.1200]: this product is considered a manufactured article and is not considered a hazard when used in a manner which is consistent with the labeled directions.

2.4 Unknown Acute Toxicity (GHS-US)

No data available

SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substance: Not applicable

3.2 Mixture: Not applicable

SECTION 4 – FIRST AID MEASURES**4.1 Description of First Aid Measures**

First-aid Measures General: Never give anything by mouth to an unconscious person. Get medical advice/attention if you feel unwell.

First-aid Measures After Inhalation: When symptoms occur: go into open air and ventilate suspected area.

First-aid Measures After Skin Contact: Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.

First-aid Measures After Eye Contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

First-aid Measures After Ingestion: Rinse mouth. Do NOT induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms/Injuries: None expected under normal conditions of use.

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

WILLSEAL 150

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Symptoms/Injuries After Inhalation: Not expected to present a significant inhalation hazard under anticipated conditions of normal use.

Symptoms/Injuries After Skin Contact: None under normal conditions. Dust may cause irritation in skin folds or by contact in combination with tight clothing.

Symptoms/Injuries After Eye Contact: For particulates and dust: May cause slight irritation.

SECTION 5 – FIRE FIGHTING MEASURES**5.1 Extinguishing Media**

Suitable Extinguishing Media: Use extinguishing media appropriate for surrounding fire.

Unsuitable Extinguishing Media: Do not use water jet. Use of heavy stream of water may spread fire.

5.2 Special Hazards Arising From the Substance or Mixture

Fire Hazard: Not considered flammable but may burn at high temperatures.

Explosion Hazard: Product is not explosive.

Reactivity: Hazardous reactions will not occur under normal conditions.

5.3 Advice for Firefighters

Firefighting Instructions: Exercise caution when fighting any chemical fire.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6 – ACCIDENTAL RELEASE MEASURES**6.1 Personal Precautions, Protective Equipment and Emergency Procedures**

Suitable Extinguishing Media: Use extinguishing media appropriate for surrounding fire.

Unsuitable Extinguishing Media: Do not use water jet. Use of heavy stream of water may spread fire.

6.1.1 For Non-Emergency Personnel

Protective Equipment: Use appropriate personal protection equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel.

6.1.2 For Emergency Personnel

Protective Equipment: Use appropriate personal protection equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel.

6.2 Environmental Precautions

None known.

6.3 Methods and Material for Containment and Cleaning Up

For Containment: Contain and collect as any solid.

Methods for Cleaning Up: Clean up spills immediately and dispose of waste safely.

6.4 Reference to Other Sections

See heading 8, Exposure Controls and Personal Protection. Concerning disposal elimination after cleaning, see item 13.

SECTION 7 – HANDLING AND STORAGE**7.1 Precautions for Safe Handling**

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and again when leaving work.

7.2 Conditions for Safe Storage, Including Any Incompatibilities:

Storage Conditions: Store in a dry, cool and well-ventilated place.

Incompatible Products: Strong acids, strong bases, strong oxidizers.

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7.3 Specific End Use(s): Sealant**SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION****8.1 Information on Basic Physical and Chemical Properties**

For substances listed in section 3 that are not listed here, there are no established exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), NIOSH (REL), or OSHA (PEL).

8.2 Exposure Controls

Appropriate Engineering Controls: Ensure all national/local regulations are observed. Avoid dust production.

Personal Protective Equipment: Not generally required. The use of personal protective equipment may be necessary as conditions warrant.

Hand Protection: Chemically resistant gloves are recommended, but not required.

Eye Protection: In case of dust production: Chemical safety goggles.

Respiratory Protection: The following applies to the product if it is cut, sanded or altered in such a way that excessive and/or significant particulates and/or dusts may be generated: If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES**9.1 Control Parameters**

Physical State: Solid

Odor: Characteristic Odor

Odor Threshold: No data available

pH: No data available

Evaporation Rate: No data available

Melting Point: 148.9 °C (300.02 °F)

Freezing Point: No data available

Boiling Point: No data available

Flash Point: No data available

Auto-ignition Temperature: No data available

Decomposition Temperature: No data available

Flammability (solid, gas): No data available

Vapor Pressure: No data available

Relative Vapor Density at 20 °C: No data available

Relative Density: No data available

Specific Gravity: 0.91

Solubility: Water: Not soluble

Partition Coefficient: N-Octanol/Water: No data available

Viscosity: No data available

9.2 Other Information: No additional information available

SECTION 10 – STABILITY AND REACTIVITY

10.1 Reactivity: Hazardous reactions will not occur under normal conditions.

10.2 Chemical Stability: Stable at standard temperature and pressure.

10.3 Possibility of Hazardous Reactions: Hazardous polymerization will not occur.

10.4 Conditions to Avoid: Sparks, heat, open flame and other sources of ignition.

10.5 Incompatible Materials: Strong acids. Strong bases. Strong oxidizers.

10.6 Hazardous Decomposition Products: Hydrogen chloride gas.

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SECTION 11 – TOXICOLOGICAL INFORMATION**11.1 Information on Toxicological Effects**

Acute Toxicity: Not classified

Skin Corrosion/Irritation: Not classified

Serious Eye Damage/Irritation: Not classified

Respiratory or Skin Sensitization: Not classified

Germ Cell Mutagenicity: Not classified

Carcinogenicity: Not classified

Reproductive Toxicity: Not classified

Specific Target Organ Toxicity (Single Exposure): Not classified

Specific Target Organ Toxicity (Repeated Exposure): Not classified

Aspiration Hazard: Not classified

Symptoms/Injuries After Inhalation: Not expected to present a significant inhalation hazard under anticipated conditions of normal use.

Symptoms/Injuries After Skin Contact: None under normal conditions. Dust may cause irritation in skin folds or by contact in combination with tight clothing.

Symptoms/Injuries After Eye Contact: For particulates and dust: May cause slight irritation.

Symptoms/Injuries After Ingestion: Not expected to be a primary route of exposure.

Chronic Symptoms: None known.

SECTION 12 – ECOLOGICAL INFORMATION

12.1 Toxicity: Not established

12.2 Persistence and Degradability: Not established

12.3 Bioaccumulative Potential: Not established

12.4 Mobility In Soil: No additional available

12.5 Other Adverse Effects

Other Information: Avoid release to the environment

SECTION 13 – DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods: Not established

Waste Disposal Recommendations: Dispose of waste material in accordance with all local, regional, national, and international regulations.

SECTION 14 – TRANSPORT INFORMATION

14.1 In accordance with DOT: Not regulated for transport

14.2 In accordance with IMDG: Not regulated for transport

14.3 In accordance with IATA: Not regulated for transport

SECTION 15 – REGULATORY INFORMATION

15.1 US Federal Regulations: Neither this product nor its chemical components appear on any US federal lists

15.2 US State Regulations: Neither this product nor its chemical components appear on any US state lists

SECTION 16 – OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Revision Date: 07/10/2015

Other Information: This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200. This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

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