

## Application Instructions

### 1. Purpose

- 1.1 The purpose of this document is to establish typical guidelines for installation of Willseal® 600/600S. The techniques involved may require modifications to adjust to jobsite conditions. Consult your local Willseal or Tremco Sales Representative or Tremco Technical Services for specific design requirements.

### 2. Scope

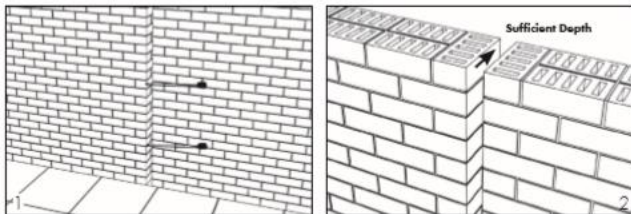
- 2.1 This document will provide the necessary instructions for installation of Willseal 600/600S to qualify for a manufacturer's warranty.

### 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.

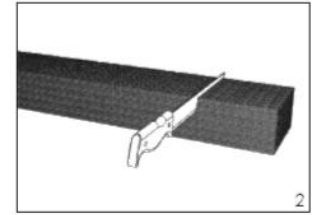
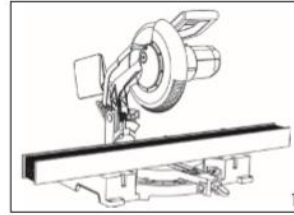
### 4. Material Sizing

- 4.1 Joints must be sized every 5-7 feet (1.5-2.1 m) to ensure gap opening is uniform. Ref 1.
- 4.2 Allow sufficient depth to recess the foam material 1/8" – 1/4" (3-6 mm) into the joint. Ref 2.



### 5. Material Preparation

- 5.1 Store material at a minimum of 68°F (20°C) for a minimum of 24 hours prior to installation, regardless of temperature at location of installation.
- 5.2 Cutting Details – Roll Material
- Do not make any cuts until ready to install the material.
  - Refer to the Installation (Rolls) section for further instructions on cutting the roll material.
- 5.3 Cutting Material – Stick Material
- Use a miter saw to make any cuts to the material before removing the clear shrink packaging. All starting and ending pieces must be square to the termination point. Ref 1
  - Use a sharp knife to make any cuts after the clear shrink packaging has been removed. Ref 2

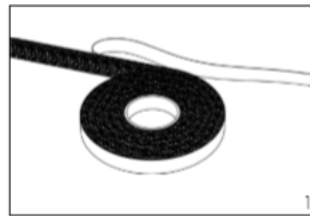


### 6. Substrate Preparation

- 6.1 Verify that the joint is clean, sound, and will provide an appropriate surface for installation of the joint sealant.
- 6.2 Use compressed air to clean any loose debris from the joint.
- 6.3 Apply alcohol to a clean cloth and wipe the joint walls to the depth of the sealant material plus 1"
- 6.4 Verify that the joint is uniform and repair any spalls prior to installation
- 6.5 Check the material for appropriate length, width, and depth
- 6.6 Supplied material should be pre-compressed to a size smaller than the intended joint opening.
- 6.7 Joint depth must allow for the installed material to be recessed 1/4" from the substrate surface

### 7. Application Procedure - Rolls

- 7.1 When fully prepared to install, remove the outer lining surrounding the joint material. Ref 1.
- Be prepared to install the material immediately once the packaging is removed to prevent the material from expanding past the joint width.
  - Material will expand faster when hot and slower when cold. In cold temperatures, store the material in a heated area 24 hours prior to installation. In hot temperatures, store the material out of direct sunlight and not in an enclosed storage container where temperatures may exceed 100°F (37.7°C).
- 7.2 Cut off the first and last 1"-2" of material using a sharp knife/utility knife. Ref 2.

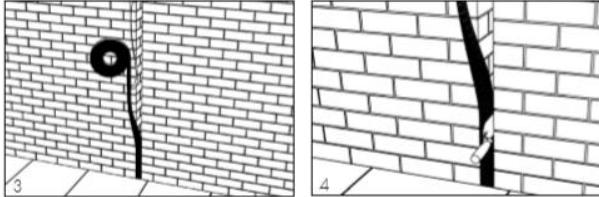


- 7.3 Verify that the material is cut square at both ends for proper seams (Refer to the Seams section for more details).
- All pieces must be square to the termination point.
- 7.4 If the joint runs horizontal, begin installing the material at one side of the joint (either side) and continue to install the material working towards

the opposite end. For vertical joints begin installation at the bottom of the joint and work upward. Ref 3.

- The installed rolls will assist in supporting the subsequent rolls until the material fully expands.

7.5 Place the material into the joint while gently pushing the pressure sensitive adhesive (PSA) up against the side of the substrate. Once the material is in place, use a margin trowel to firmly press the adhesive to the substrate and allow the material to expand to fill the joint. Ref 4.

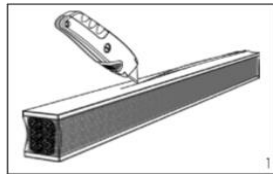


- 7.6 If the PSA is not sticking to the substrate, use wooden wedges to hold the material in place while the material expands. Once the material has expanded, the wedges can be removed.
- 7.7 Allow 72 hours for full expansion and material equalization.

## 8. Application Procedure – Sticks

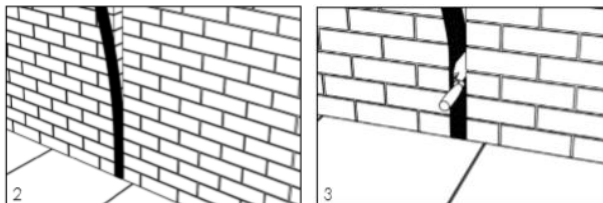
### For all size joints

- 8.1 When fully prepared to install, cut the shrink packaging along the edge of the masonite strapping". Ref 1.
- 8.2 Be prepared to install material immediately once the packaging is removed to prevent the material from expanding past the joint width.
- 8.3 Material will expand faster when hot and slower when cold. In cold temperatures, store the material in a heated area 24 hours prior to installation. In hot temperatures, store the material out of direct sunlight and not in an enclosed storage container where temperatures may exceed 100°F (37.7°C).
- 8.4 Verify that the material is cut square at both ends for proper seams; all pieces must be square to the termination point
- 8.5 Remove the release liner on both sides of the stick.



### For Joints under 4" (10.1 cm)

- 8.6 For joints that run horizontal, begin installing the material at one side of the joint (either side) and continue to install the material working towards the opposite end. For vertical joints, begin installation at the bottom of the joint and work upward. Ref 2.
- The installed sticks will assist in supporting the subsequent sticks until the material fully expands.
- 8.7 Use a putty knife to press the material against the joint wall. This will activate the pressure sensitive adhesive (PSA) and further help to support the material during expansion Ref 3.



- 8.7 If the PSA is not sticking to the substrate, use wooden wedges to hold the material in place while the material expands. Once the material has expanded, the wedges can be removed.
- 8.8 Pay attention to the direction of insertion marked on the packaging
- 8.9 Recess joint 1/4" from the substrate surface
- 8.10 Allow 72 hours for full expansion and material equalization. Expansion and equalization rates are affected by temperature. Material will expand faster when hot and slower when cold.

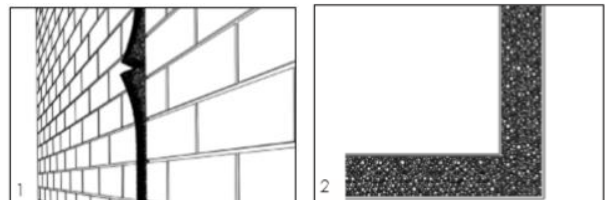
### For Joints 4" (10.1 cm) and Over

See instructions 8.1 – 8.5

- 8.11 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.
- 8.12 The epoxy must still be wet upon installation of Willseal 600; The working time for epoxy is approximately 30 minutes depending on the temperature.
- 8.13 If the epoxy hardens on the surface of the substrate before installation, another coat of epoxy can be applied within 2 hours. After 2 hours, the substrate surface must be abraded to eliminate the amine blush that occurs during the final cure.
- 8.14 Pay attention to the direction of insertion marked on the packaging
- 8.15 Recess joint 1/4" from the substrate surface

## 9. Joints, Sidewall and Finishing Work

- 9.1 Verify that the new piece of material is cut square and not at an angle to the previous piece installed.
- 9.2 Apply supplied joint splice adhesive to the butt end of the new piece of material.
- 9.3 Do not apply joint splice adhesive to the faces of the product that are in contact with the sidewall adhesive.
- 9.4 Overlap extra material (approximately 1/2" - 1") at seams and splices to ensure that the seam is in compression after installation. Ref 1.
- 9.5 Make sure seams are flush against each other and then push the pieces together.
- 9.6 For Joint Corners, seam the material as shown. Ref 2.



- 9.7 Butt seam all "T" and "+" intersections.
- Install horizontal material first
  - Butt the vertical material to the horizontal material following Steps 1+2.
- 9.8 Remove any excess adhesive material left on the surface of the material substrate; do not allow the excess adhesives to cure.

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## 10. Approved Sealants

10.1 Recommended materials for use over Willseal 600S (Secondary Seal) whereas the sealant becomes the Primary Seal.

- When using a sealant as the primary seal, the foam and sealant should be recessed a recommended to be 1/4". Follow recommended sealant dimension guidelines on sealant manufacturers Data Sheet.
  - Dymonic® 100
  - Spectrem® 1
  - Spectrem® 2

10.2 For more information on the following materials, please contact your local Willseal or Tremco Technical Sales Representative.

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## 11. Maintenance

11.1 Follow Recommended Maintenance Procedures document for vertical applications on Willseal.Com.

### 1120/W600/600S-AI

Please refer to our website at [www.willseal.com](http://www.willseal.com) for the most up-to-date Application Instructions.

**Willseal, A Tremco Affiliate Brand**

34 Executive Drive • Hudson NH 03051 • 603-273-0707 • 800-274-2813