DESCRIPTION
Willseal Color Coreseal V is a vertical dense, closed cell foam typically used for larger movement joints. It has a colorized silicone skin on the exposed face which provides a chemically resistant, puncture resistant and waterproof joint. Due to its strong closed cell structure, it has excellent compression, tension and shear capabilities. It is installed with a lubricating sealant that facilitates installation and when cured, permanently bonds the Willseal Color Coreseal V in place.

MATERIAL
Monolithic foam sealant that will not delaminate like multi-layer products that does not rely on silicone coating or the adhesion of a field applied bead of sealant to provide a watertight seal. Independent lab tested to ASTM 330, 331, 283 & 547 for water and air penetration.

Willseal Color Coreseal V is by its design inherently insulating and sound deadening. Its unique foam profile reduces tension at the bond line and allows for a much longer service life than competitive products. (See cyclical test results for proof of its resistance to compression set).

COLORS
- Dow Corning® 790 colors
- Pecora 890NST colors
- Pick resistant option available in Tru-White & Limestone
- Custom colors available upon request

DIMENSIONS
- Joint sizes from 1/2” to 12” in sticks
- Custom sizes available upon request

APPLICATIONS
- Primary vertical joints
- Seismic, large & retrofit joints
- Large expansion joints requiring an architectural finish

TYPICAL PHYSICAL PROPERTIES

<table>
<thead>
<tr>
<th>PROPERTY</th>
<th>TEST METHOD</th>
<th>VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Density</td>
<td>ASTM D3575</td>
<td>2.3 - 3lb/cu.ft.</td>
</tr>
<tr>
<td>Thermal Conductivity</td>
<td>ASTM C177</td>
<td>0.05 W/m.°C</td>
</tr>
<tr>
<td>Tensile Strength</td>
<td>ASTM D3575</td>
<td>21 psi min.</td>
</tr>
<tr>
<td>Tensile Elongation</td>
<td>ASTM D3575</td>
<td>125% ±20%</td>
</tr>
<tr>
<td>Tear Resistance</td>
<td>ASTM D624</td>
<td>Max 2.5%</td>
</tr>
<tr>
<td>Water Absorption</td>
<td>ASTM D3575</td>
<td>Min 8N/cm²</td>
</tr>
<tr>
<td>Weather Resistance</td>
<td>ASTM D1499</td>
<td>Excellent</td>
</tr>
<tr>
<td>Cyclical Testing</td>
<td>ASTM E1399</td>
<td>Class II &amp; III (+/-25%)</td>
</tr>
<tr>
<td>Primary Surface Weathering</td>
<td>Atlas Weatherometer</td>
<td>Passed/None</td>
</tr>
<tr>
<td>Durometer Hardness</td>
<td>ASTM D2240</td>
<td>Shore A 15pts.</td>
</tr>
</tbody>
</table>

* Willseal Color Coreseal V does not rely on the external fillet bead to provide a watertight seal.
ADVANTAGES

- Accommodates rapid rates of joint movement (ASTM E1399, Class II & III)
- Made from a monolithic foam that will not delaminate like multi-layer or compression bonded products
- Does not rely on the silicone coating or on the field applied bead of sealant to provide a watertight seal (ASTM 330, 331 & 547 tested and passed with and without the silicone face)
- Because it is installed & compressed from a size larger than the mean joint size, the material is not subject to adhesive & cohesive forces
- Consistent depth of product, can be supplied in custom depths
- Used for joints up to 12” wide
- Allows for up to 50% (±25%) movement
- Light weight

NOT INTENDED FOR

- Joints submerged in water
- Joints in contact with harsh chemicals unless polysulfide finish sealant is used
- Joints in roofing applications as primary seal
- Cross joints in copings and projecting stone work

LIMITATIONS/TECHNIQUES

- Joints must be sized by measuring every 5-7 feet to ensure gap opening is uniform and depth is sufficient for the supplied material
- Do not install when substrate or ambient temperatures are below 40°F (4.5°C) or above 95°F (35°C). Consult Willseal for extreme temperature installation information
- Will not adhere to surfaces contaminated by oil or grease. Concrete should be clean & sound
- If ambient storage temperatures are below 50°F store material at a minimum of 68°F for a minimum of 24 hours prior to installation, regardless of temperature at location of installation

CORE FOAM MATERIAL

<table>
<thead>
<tr>
<th>Material</th>
<th>Adhesion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Isopropyl Alcohol</td>
<td>Excellent</td>
</tr>
<tr>
<td>Linseed Oil</td>
<td>Excellent</td>
</tr>
<tr>
<td>Naphtha</td>
<td>Excellent</td>
</tr>
<tr>
<td>Motor Oil #30</td>
<td>Excellent</td>
</tr>
<tr>
<td>Clorox</td>
<td>Excellent</td>
</tr>
<tr>
<td>Acetic Acid 5%</td>
<td>Excellent</td>
</tr>
<tr>
<td>Ethylene Glycol</td>
<td>Excellent</td>
</tr>
<tr>
<td>Hydrochloric Acid Conc.</td>
<td>Excellent</td>
</tr>
<tr>
<td>Butyl/Ethyl Acetate</td>
<td>Excellent</td>
</tr>
<tr>
<td>Nitric Acid</td>
<td>Excellent</td>
</tr>
</tbody>
</table>

PREPARATION FOR INSTALLATION

- Verify that the joint is clean, sound, and will provide an appropriate surface for installation of the joint sealant
- Check material for the appropriate lengths, widths, and depths
- Prepare the material for seams and proper lengths

INSTALLATION

(see supplied installation data for complete procedures)

- Run a 1/4” bead of the supplied silicone adhesive along both sides of the joint approximately ½” – ¾” back from the substrate surface/edge
- Compress Willseal Color Coreseal V and insert the material into the joint until top is recessed at least 1/8”
- Tool the silicone over all seams and transitions to allow for a clean, aesthetic finish

CLEAN UP

- Remove any excess silicone left on the surface of the material or substrate
- Remove all waste materials from the job site
- Do not reuse waste material
- Leave site to the satisfaction of the owner/architect

WARRANTY

- Project specific warranty details and terms are available from Willseal
- Due to the superior nature of Willseal’s material design, warranties are typically longer than competitive products
Install Instructions

willseal® Color Coreseal V
CLOSED CELL FOAM WITH SILICONE FACE FOR VERTICAL APPLICATIONS

RECOMMENDED TOOLS
Tape Measure • Sharp Knife • Blue Painters Tape • Mineral Spirits
Clean Cloth • Blunt Putty Knife • Caulking Gun • Caulking Trowel

MATERIAL SIZING

• Joints must be sized every 5-7 ft (1.524-2.137 m) to ensure gap opening is uniform (1)
• Allow sufficient depth for the material to be recessed 1/8” into the joint (2)

MATERIAL PREPARATION

• 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
• Store materials in a dry, enclosed area, making sure materials are off the ground and out of direct sunlight
• Use a sharp knife to cut the material square. All starting and ending pieces must be square to termination point (1)
• Apply mineral spirits to the knife for a smoother cut
• Refer to the Seams section for further instruction on preparing the material

JOINT PREPARATION

• Verify that the joint is clean, sound, and will provide an appropriate surface for installation of the joint sealant
  • Use compressed air to clean any loose debris from the joint
  • Apply water or alcohol to a clean cloth and wipe the joint walls to the depth of the sealant material plus 1”
• Verify that the joint is uniform and repair any spalls prior to installation
• Apply blue painters tape to both edges of the joint surface to prevent the silicone from contacting the substrate surface
• Check the material for appropriate length, width, and depth
  • Supplied material should be approximately 25% larger but never less than 12% larger than the intended joint opening
  • Joint depth must allow for the installed material to be recessed 1/8” from the substrate surface
Install Instructions

willseal® Color Coreseal V
CLOSED CELL FOAM WITH SILICONE FACE FOR VERTICAL APPLICATIONS

SEALANT INSTALLATION

• Begin installation at the bottom of the joint and work upward (1)
• When a continuous joint cannot be finished, the silicone on the substrate should stop at the last stick installed and silicone should not be applied to the end of the installed material until the next piece of material is ready to be installed
• Run a 1/4” bead of the supplied silicone adhesive along both sides of the joint wall approximately 1/2” - 3/4” back from the substrate (2)
• The silicone will act as a lubricant during installation
• To ensure an aesthetic finish, verify that the silicone adhesive matches the color on the face of the joint sealant material
• Do not allow the silicone to dry before installing the material into the joint
• Verify that the material is cut square at both ends for proper seams. All pieces must be square to the termination point
• Install the material by inserting one side approximately 1” into the joint
• Do not excessively push or pull the material as this will cause it to stretch, resulting in possible damage
• Use a blunt putty knife or your hand to compress the opposite side of the material and slide it into the joint (3)
• Use of sharp tools could cause damage to the joint sealant material. Be careful not to tear the material in the process of compressing it into the joint
• Continue to compress and work the material into the joint until the sides are approximately 1/8” back from the substrate surface
  • Silicone coating should be flush with, but not protruding above, the substrate surface
• For joints greater than 10”:
  • Use the supplied Flexible Seal adhesive instead of the silicone for adhesion to the joint walls
  • Additionally, run two (2) beads of silicone along both joint walls, one near the surface and the other about 2” deeper. This will provide greater bond strength required for a wider joint
  • Follow normal procedures for the rest of the installation
Install Instructions

willseal® Color Coreseal V
CLOSED CELL FOAM WITH SILICONE FACE FOR VERTICAL APPLICATIONS

SEAMS

• Verify that the new piece of material is cut square and not at an angle to the previous material installed
• Apply silicone to the butt end of the new piece of material as well as a 1/4” bead on both joint walls, inset 1/8” as described in the Sealant Installation section (1)
• T” and “+” Intersections (2)
  • Butt the vertical material up to the overhead horizontal material following steps 1+2
• After installation, if there are any mitered joints with a hole or a void, use the supplied silicone to fill and seal the joint
• Tool the silicone over all seams and transitions using a small caulking tool

FINISH

• Use the supplied silicone to run a bead along each edge of the joint to fill any irregularities in the substrate (optional)
• To ensure an aesthetic finish, verify that the silicone adhesive matches the color on the face of the joint sealant material
• The material does not rely on the external fillet bead to provide a watertight seal
• Evenly spread the silicone on exposed seams to allow for a clean, aesthetic finish
• Remove any excess silicone left on the surface of the material or substrate. Do not allow the silicone to cure before removal
• Remove the blue painters tape from the joint surface
SECTION 1 – PRODUCT IDENTIFICATION

1.1 Product Identifier
Product Form: Article
Product Name: Willseal Color Coreseal V & Willseal Color Coreseal H

1.2 Intended Use of the Product
Use of the substance/mixture: Sealant. For professional use only

1.3 Name, Address, and Telephone of the Responsible Party
Company
Willseal LLC
34 Executive Drive
Hudson, NH 03051
T: 800.274.2813
custserv@willseal.com – www.willseal.com
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 Classification of the Substance or Mixture
Name: Willseal Color Coreseal V & Willseal Color Coreseal H
Product Identifier: (CAS No): N/A Article
%: 100%
Classification (GHS-US): Not Classified

3.2 Mixture
Full text of H-phrases: see section 16

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. If you feel unwell, seek medical advice.
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. Obtain medical attention if irritation develops or persists.
First-aid Measures After Ingestion: Rinse mouth. Do NOT induce vomiting. Call a poison...
center/doctor/physician if you feel unwell.

4.2 Most important symptoms and effects, both acute and delayed

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

**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. Ingestion may cause adverse effects.

**Chronic Symptoms:** None known.

4.3 Indication of Any Immediate Medical Attention and Special Treatment Needed

If medical advice is needed, have product SDS at hand.

**SECTION 5 – FIRE-FIGHTING MEASURES**

5.1 Extinguishing Media

**Suitable Extinguishing Media:** Use extinguishing media appropriate for surrounding fire. Carbon dioxide, dry chemical, foam, water spray, fog.

**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 Special Hazards Arising From the Substance or Mixture

**Precautionary Measures Fire:** Exercise caution when fighting any chemical fire.

**Firefighting Instructions:** Use water spray or fog for cooling exposed containers. Do not breathe fumes from fires or vapors from decomposition.

**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

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 Responders

**Protective Equipment:** Equip cleanup crew with proper protection.

**Emergency Procedures:** Ventilate area. Evacuate unnecessary personnel.

6.2 Environmental Precautions

None known.

6.3 Methods and Materials 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. Take up mechanically (sweeping, shoveling) and collect in suitable container for disposal.

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
Precautions for Safe Handling: Do not handle until all safety precautions have been read and understood.
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. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials.

7.3 Specific End Use(s)
Sealant. For professional use only.

SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control Parameters
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. Provide adequate ventilation.
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: protective goggles.
Skin and Body Protection: Wear appropriate personal protective equipment.
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.
Consumer Exposure Controls: Do not eat, drink or smoke during use.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on Basic Physical and Chemical Properties
Physical State: Solid
Appearance: Gray Closed Cell Foam
Odor: Characteristic Odor, not objectionable
Odor Threshold: No data available
pH: No data available
Evaporation Rate: No data available
Melting Point: 300 °F (148.89 °C)
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
Safety Data Sheet

WILLSEAL COLOR CORESEAL V & WILLSEAL COLOR CORESEAL H

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations

Version 1. REVISION DATE: 08/11/2015 DATE OF ISSUE: 08/11/15

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. Incompatible materials.
10.6 Hazardous Decomposition Products: Under fire conditions this material may produce hazardous carbon dioxide (CO2), carbon monoxide (CO), various low molecular weight hydrocarbons, and smoke. Hydrogen chloride.

SECTION 11 – TOXOLOGICAL INFORMATION

11.1 Information On Toxological Effects: Hazardous reactions will not occur under normal conditions.
Acute Toxicity: 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. Ingestion may cause adverse effects.
Chronic Symptoms: None known.

SECTION 12 – ECOLOGICAL INFORMATION

12.1 Toxicity: No additional information available.
12.2 Persistence and Degradability: Not established.
12.3 Bioaccumulative Potential: Not established.
12.4 Mobility in Soil: Not additional information available.
12.5 Other Adverse Effects
Other information. Avoid release to the environment.

SECTION 13 – DISPOSAL CONSIDERATIONS

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


<table>
<thead>
<tr>
<th>SECTION 14 – TRANSPORT INFORMATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.1 In accordance with DOT: Not regulated for transport.</td>
</tr>
<tr>
<td>14.2 In accordance with IMDG: Not regulated for transport.</td>
</tr>
<tr>
<td>14.3 In accordance with IATA: Not regulated for transport.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SECTION 15 – REGULATORY INFORMATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>15.1 US Federal Regulations: Neither this product nor its chemical components appear on any US federal lists.</td>
</tr>
<tr>
<td>15.2 US State Regulations: Neither this product nor its chemical components appear on any US state lists.</td>
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</table>

<table>
<thead>
<tr>
<th>SECTION 16 – OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION DATE</th>
</tr>
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<tbody>
<tr>
<td>Revision Date: 08/11/2015</td>
</tr>
<tr>
<td>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.</td>
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</tbody>
</table>
EXISTING CONCRETE MASONRY UNIT TYP.

VARIES

WILLSEAL 600
PRE-COMPRESSED JOINT SEALANT

EXISTING BRICK FACADE TYP.

FIELD APPLIED ADHESIVE SILICONE BEAD

WILLSEAL CLOSED CELL FOAM WITH ENGINEERED PROFILE

FACTORY APPLIED AND CURED SILICONE TOPPING

FIELD APPLIED INJECTED SEALANT BAND BOTH SIDES (OPTIONAL), SILICONE SUPPLIED

NOTE: RECESS JOINT 1/8" FROM JOINT SURFACE
SPECIFICATION
Sections 07 90 00 / 07 95 00

Color Coreseal V by Willseal LLC

Preformed, Resilient Sealant System with Silicone Pre-Coated Surface
Watertight, Energy-Efficient, Exterior and Interior Above Grade Wall Joints

PART 1 – GENERAL

1.01 Work Included

A. The work shall consist of furnishing and installing waterproof expansion joints in accordance with the details shown on the plans and the requirements of the specifications. Preformed sealant shall be silicone pre-coated, preformed, pre-compressed, self-expanding, sealant system.

B. Related Work
   - Division 4 - Masonry
   - Division 7 - Thermal & Moisture Protection
   - Division 7 - Sealants, caulking and waterproofing

1.02 Submittals

A. General – Submit the following according to Division 1 Specification Section.

B. Standard Submittal Package – Submit typical expansion joint drawing(s) indicating pertinent dimensions, general construction, expansion joint opening dimensions and product information.

C. Certified by manufacturer to not rely on field applied “injected silicone bands” for waterproofing function.

D. Certified by manufacturer to have no vertical laminations proven not to delaminate.

E. Sample of material is required at time of submittal.

F. Quality control, manufacturer shall be ISO-9001:2008, certified and shall provide written confirmation that a formal Quality management System and Quality Processes have been adopted in the areas of, (but not limited to) Manufacturing, Quality Control and Customer Service for all processes, products and their components. Alternate manufacturers will be considered provided they submit written proof that they are ISO 9001:2008, certified prior to the project bid date.

G. Product must be certified by independent laboratory test report to exceed the requirements of curtain wall performance tests ASTM E330, E283-04, and E331. Product must meet or exceed hurricane-force wind loading with no deflection at both positive and negative pressures up to 4954 Pascals - equal to 200 mph winds (TAS 202/203).

1.03 Product Delivery, Storage and Handling

A. Deliver products to site in Manufacturer’s original, intact, labeled containers. Handle and protect as necessary to prevent damage or deterioration during shipment, handling and storage. Store in accordance with manufacturer’s installation instructions.
1.04 Basis-of-Design

A. All joints shall be designed to meet the specified performance criteria of the project as manufactured by: Willseal LLC, 34 Executive Drive, Hudson, NH 03051, 800-274-2813. Willseal.com, custserv@willseal.com.

B. Alternate manufacturers must demonstrate that their products meet or exceed the design criteria and must submit certified performance test reports performed by recognized independent laboratories as called for in section 1.02 Submittals. Submittal of alternates must be made three weeks prior to bid opening to allow proper evaluation time.

1.05 Quality Assurance

A. The General Contractor will conduct a pre-construction meeting with all parties and trades involved in the treatment of work at and around expansion joints including, but not limited to, concrete, mechanical, electrical, HVAC, landscaping, masonry, curtain wall, waterproofing, fire-stopping, caulking, flooring and other finish trade subcontractors. All superintendents and foremen with responsibility for oversight and setting of the joint gap must attend this meeting. The General Contractor is responsible to coordinate and schedule all trades and ensure that all subcontractors understand their responsibilities in relation to expansion joints and that their work cannot impede anticipated structural movement at the expansion joints, or compromise the achievement of watertightness or life safety at expansion joints in any way.

B. Warranty – Manufacturer’s standard warranty shall apply.

C. LEED Building Performance Requirements:

1) The VOC of the silicone must not exceed 40 grams/liter
2) Products must be proved by independent test report to exceed the requirements of curtain wall performance tests ASTM E330, E283-04, and E331. Product must meet or exceed hurricane-force wind loading with no deflection at both positive and negative pressures up to 4954 Pascals - equal to 200 mph winds (TAS 202/203).
3) Products must be proved by independent test report to have an R-Value per 1-inch (25mm) of depth of not less than 1.8 at as-installed nominal joint size compression when tested according to ASTM C518-04.
4) Product must be proved by independent test report to have air permeability not to exceed 0.02 L/(s.m2) at 75 Pascals as required by the Air Barrier Association of America (ABAA) in accordance with ASTM E283-04.

PART 2 – PRODUCT

2.01 General

A. Provide watertight, energy-efficient exterior and interior joints in vertical-plane walls (above-grade). Typical locations include, but are not limited to the following: applications in window perimeters, other façade penetrations such as doors, store fronts, vents, HVAC units, panel to panel joints, curtain walls, control joints, between dissimilar materials, structural expansion joints, acoustic partition barriers, and new-to-existing connections.

B. Provide Color Coreseal V as manufactured by Willseal LLC and as indicated on drawings for vertical expansion joint locations.

C. Preformed sealant shall be silicone pre-coated, preformed, sealant system. Compressible foam to be a closed cell EVA cellular foam that is impermeable to water. Seal shall combine factory-applied, low-modulus silicone and the closed cell foam into a unified hybrid sealant system.
D. Material shall be capable of movements of +25%, -25% (50% total) of nominal material size

E. Silicone external color facing to be factory-applied to the foam while it is uncompressed and cured at a width greater than the maximum expected joint opening. When compressed to final supplied dimension, a bellow(s) to handle movement must be created in the silicone coating. Silicone coating to be available in a range of not less than 26 standard colors for coordination with typical building materials.

F. Select the sealant system model appropriate to the movement and design requirements at each joint location that meet the project specification or as defined by the structural engineer of record.

G. Manufacturer’s Checklist must be completed by expansion joint subcontractor and returned to manufacturer at time of ordering material.

2.02 Fabrication

A. Color Coreseal V by Willseal LLC must be supplied 25% larger than the joint size, packaged in 6’ lengths (sticks) with the factory supplied adhesive.

B. Directional changes and terminations into horizontal plane surfaces can be provided by factory supplied 90-degree angles containing minimum 12-inch long leg and 6-inch long leg, or custom leg on each side of the direction change, or through field fabrication in strict accordance with published installation instructions. In most cases field conditions are such that the restrictive nature of the factory supplied corners do not conform to as built conditions and may outweigh the benefits. Consult manufacturer for proven field transition methods.

PART 3 – EXECUTION

3.01 Installation

A. Preparation of the Work Area

1. The contractor shall provide properly formed and prepared expansion joint openings constructed to the exact dimensions and elevations shown on manufacturer’s standard system drawings or as shown on the contract drawings. Deviations from these dimensions will not be allowed without the written consent of the engineer of record.

2. The contractor shall clean the joint opening of all contaminants immediately prior to installation of expansion joint system. Repair spalled, irregular or unsound joint surfaces using accepted industry practices for repair of the substrates in question. Remove protruding roughness to ensure joint sides are smooth. Ensure that there is sufficient depth to receive the full depth of the size of the Color Coreseal V being installed plus at least 1/8-inch (3mm) for the application of corner beads. Refer to Manufacturers Installation Guide for detailed step-by-step instructions.

3. No drilling, or screwing, or fasteners of any type are permitted to anchor the sealant system into the substrate.

3.02 Clean and Protect

A. Protect the system and its components during construction. Subsequent damage to the expansion joint system will be repaired at the general contractor’s expense. After work is
complete, clean exposed surfaces with a suitable cleaner that will not harm or attack the finish.

END OF SECTION
**CHECKLIST FOR VERTICAL JOINTS**

**LOCATION OF JOINT**
- [ ] INTERIOR
- [ ] EXTERIOR
- [ ] WALL
- [ ] DECK
- [ ] ABOVE GRADE
- [ ] SUBMERGED
- [ ] BELOW GRADE

**CONSTRUCTION**
- [ ] NEW
- [ ] RETROFIT
- [ ] TOTAL REPLACEMENT

**FIRE RATING**
- [ ] NO FIRE RATING
- [ ] 1 HOUR
- [ ] 2 HOUR
- [ ] 3 HOUR

**JOINT PURPOSE**
- [ ] PRIMARY SEAL
- [ ] SECONDARY SEAL & TO SEAL OUT
- [ ] WEATHER (RAIN/WATER)
- [ ] INSULATE (COLD/HEAT)
- [ ] SOUND
- [ ] AIR
- [ ] INSECTS/RODENTS
- [ ] OTHER

**JOINT WIDTH(S)________________**

**JOINT DEPTH __________**

**JOINT LENGTH __________**

**NOTE:** FOR BEST RESULTS,PLEASE MEASURE JOINT LENGTH EVERY 6 FEET

**NOTE:** PLEASE PROVIDE ANY PERTINENT DETAILS TO WILLSEAL

**HAVE THE JOINT DIMENSIONS BEEN PHYSICALLY MEASURED?**
- [ ] YES
- [ ] NO

**SUBSTRATE SURFACE TEMP:**

**AMBIENT TEMP:**

**SUBSTRATE COMPOSITION**
- [ ] BRICK
- [ ] CONCRETE
- [ ] METAL
- [ ] GYPSUM
- [ ] OTHER

**MOVEMENT OF JOINT (E.G. +/- 2"):_____________**

**NOTE:** IF JOINT WIDTH IS GREATER THAN 3' DETAILS MUST BE PROVIDED

**SUBSTRATE COMPOSITION**
- [ ] BRICK
- [ ] CONCRETE
- [ ] METAL
- [ ] GYPSUM
- [ ] OTHER

**GENERAL INFORMATION**
- NAME______________________________
- COMPANY__________________________
- PHONE____________________________
- FAX______________________________
- EMAIL____________________________
- JOB NAME__________________________
- JOB LOCATION______________________
- DATE______________________________
- EMAIL____________________________

**PROJECT FIRMS**
- ARCHITECT________________________
- CONTRACTOR_______________________
- ENGINEER__________________________
- OWNER/BUILDER_____________________

PLEASE EMAIL CHECKLIST TO CUSTSERV@WILLSEAL.COM OR FAX TO 800-416-0550

[Diagram of a joint with dimensions and annotations]