



DOWSIL™ 123 Silicone Seal Custom Designs H.C.

Features & Benefits

- High-performance
- Excellent aesthetics
- Choice of various durometers in two different tear-resistant formulations to provide customized performance for specific applications
- Compatibility with DOWSIL™ ALLGUARD Silicone Elastomeric Coating
- Available in standard and custom colors

Composition

- Preformed silicone elastomer

Applications

DOWSIL™ 123 Silicone Seal Custom Designs H.C. are specifically intended for use in repair of failed construction joints and glazing details due to design error, field failure or when the life span of sealants and gaskets has expired. They can be used in a variety of applications such as:

- Repair of failed weatherseals in conjunction with DOWSIL™ 123 Silicone Seal extrusions
- Corner and finish pieces
- Custom curtainwall applications such as splice joints
- Window mitered joints (boots)
- Structural zipper gasket repair
- Custom OEM gaskets and molded corners

Typical Properties

Specification Writers: These values are not intended for use in preparing specifications.

Test ¹	Property	Unit	Result	
			Formulation	
			GP (General Purpose)	HT (High Tear)
As Supplied – Cured Rubber Part				
ASTM 2240	Durometer Hardness, Shore A	points	30–70	30–75
ASTM D 412	Tensile Strength	psi	800–1400	1200–1450
		MPa	5.52–9.65	8.27–10.00
ASTM D 412	Elongation	percent	300–700	500–1000
ASTM D 624	Tear Strength, die B	ppi	90–130	150–225
		kN/m	15.8–22.8	26.3–39.4

1. ASTM: American Society for Testing and Materials.

Typical Properties (Cont.)

Test	Property	Unit	Result	
			Formulation	
			GP (General Purpose)	HT (High Tear)
ASTM D 412	Modulus at 50 percent	psi	60–350	70–300
		MPa	0.41–2.41	0.48–2.07
ASTM D 412	Modulus at 100 percent	psi	100–500	100–400
		MPa	0.69–3.45	0.69–2.76

Custom designs can be fabricated to your specifications. The typical properties listed here give an example of the range of performance possible in the general purpose and high tear formulations.

Description

DOWSIL™ 123 Silicone Seal Custom Designs H.C. are preformed two- and three-dimensional silicone shapes that are bonded to substrates using DOWSIL™ 795 Silicone Building Sealant or other recommended DOWSIL™ silicone sealants. DOWSIL™ 123 Silicone Seal Custom Designs H.C. can be used in both new and remedial construction applications. They are easy to install and provide:

- A high-performance component to use with DOWSIL™ 123 Silicone Seal low-modulus extrusions to provide a complete weatherproofing system as well as excellent aesthetics
- A choice of various durometers in two different tear-resistant formulations to provide customized performance for specific applications
- Compatibility with DOWSIL™ ALLGUARD Silicone Elastomeric Coating

DOWSIL™ 123 Silicone Seal Custom Designs H.C. is available in the following standard colors: white, gray, limestone, sandstone, bronze, black and translucent, and are also available in custom colors. The same color of DOWSIL™ 795 Silicone Building Sealant should be used to bond the component to the substrate.

The color or texture of DOWSIL™ 123 Silicone Seal Custom Designs H.C. can also be altered at the job site after application using DOWSIL™ ALLGUARD Silicone Elastomeric Coating.

How to Use

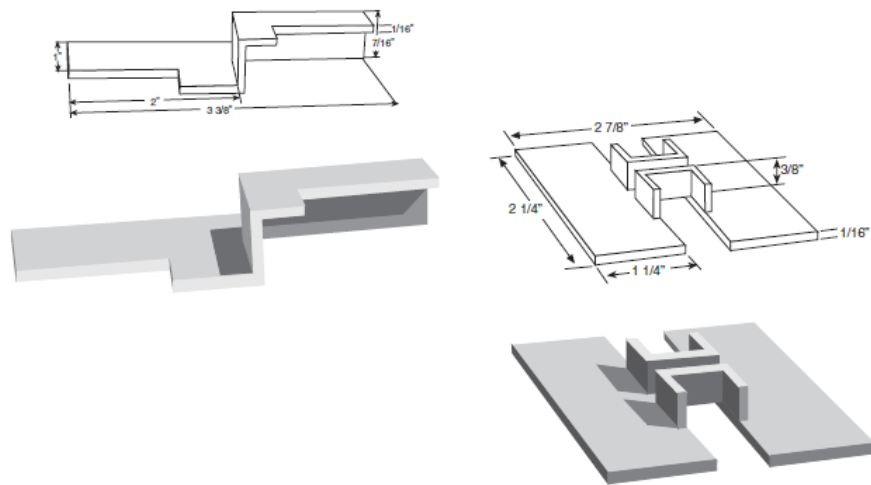
DOWSIL™ 123 Silicone Seal Custom Designs H.C. must be bonded to clean, dry, frost-free, dust-free, sound substrates using DOWSIL™ 795 Silicone Building Sealant. Field or laboratory adhesion testing should be done to determine if primer is required for proper adhesion of DOWSIL™ 795 Silicone Building Sealant to the substrate.

Preparation Work

Porous surfaces should be cleaned with abrasion cleaning followed by blasts of oil-free compressed air. If high-pressure water cleaning is necessary, use caution to prevent water from entering the structure through the existing failed joint. Exterior surfaces must be dry before installing DOWSIL™ 123 Silicone Seal Custom Designs H.C.

Nonporous surfaces should be cleaned using the two-cloth solvent wipe as outlined in the sealant application guidelines.

How to Use (Cont.)



DOWSIL™ 123 Silicone Seal Custom Designs H.C. is designed to meet aesthetic and weathersealing needs with a single product. Designs are custom-made to the customer's specification.

Figure 1: Sample Designs Using DOWSIL™ 123 Silicone Seal Custom Designs H.C.

Masking

Apply masking tape in areas of high visibility to ensure good aesthetics (see Figure 1).

Application

Apply a bead of DOWSIL™ 795 Silicone Building Sealant to each side of the joint according to Table 1.

Note: Rough surfaces will require larger beads of DOWSIL™ 795 Silicone Building Sealant to seal the valleys of the substrate. The sealant should be applied approximately 1/4" (6 mm) inside the masking tape on both sides of the joint. Minimum bonded area must be at least 3/8" (9 mm).

Within 10 minutes of sealant application, press the extrusion into the sealant to wet the extrusion, substrate and sealant. A roller can be used to apply consistent pressure to ensure uniform contact.

Horizontal joints must be completed before application of vertical joints. Vertical joints should be lapped over the horizontal joints.

At the end of the joint, cut the extrusion with a razor knife.

Clean-Up

Remove masking tape and excess sealant.

Maintenance

No maintenance should be needed. The surface can be cleaned with soap and water.

If the product becomes damaged, replace the damaged portion. DOWSIL™ 795 Silicone Building Sealant will adhere to the existing DOWSIL™ 123 Silicone Seal Custom Designs H.C. with only a preparatory light solvent wipe to remove accumulated dirt.

Table 1: Coverage Rates of DOWSIL™ 795 Silicone Building Sealant

Substrate	Coverage Linear ft/tube (Linear m/tube)	Bead Size
Rough	20–40 (6.1–12.2)	1/4" (6 mm)
Smooth	70–120 (21.3–36.6)	1/8" (3 mm)

**Handling
Precautions**

This product is considered an Article as outlined in OSHA's Hazardous Communication Standard (29 CFR 1910.1200), and thus is not required to have a Safety Data Sheet (SDS). This product does not pose any health, physical, or environmental hazards as outlined under 29 CFR 1910.1200 (Hazard Communication).

This product is not regulated under the Canadian Controlled Products Regulations.

**Packaging
Information**

DOWSIL™ 123 Silicone Seal Custom Designs H.C. are made to custom design specifications and packaged appropriately. Sheet goods are available in 12–36" (305–914 mm) widths in various thicknesses and durometers.

Limitations

This product is neither tested nor represented as suitable for medical or pharmaceutical uses.

DOWSIL™ 123 Silicone Seal Custom Designs H.C. are not intended for use:

- With DOWSIL™ 790 Silicone Building Sealant as an adhesive
- With non-DOWSIL™ sealants or acetoxycure silicone sealants as the bonding sealant
- In below-grade applications
- In structural sealing applications

**Shipping
Limitations**

None.

**Health and
Environmental
Information**

To support customers in their product safety needs, Dow has an extensive Product Stewardship organization and a team of product safety and regulatory compliance specialists available in each area.

For further information, please see our website, dow.com or consult your local Dow representative.

**Project-Specific
Warranty**

Upon request, Dow offers a limited project-specific warranty for DOWSIL™ 123 Silicone Seal Custom Designs H.C. See your representative for details.

**Disposal
Considerations**

Dispose in accordance with all local, state (provincial) and federal regulations. Empty containers may contain hazardous residues. This material and its container must be disposed in a safe and legal manner.

It is the user's responsibility to verify that treatment and disposal procedures comply with local, state (provincial) and federal regulations. Contact your Dow Technical Representative for more information.

Product Stewardship

Dow has a fundamental concern for all who make, distribute, and use its products, and for the environment in which we live. This concern is the basis for our product stewardship philosophy by which we assess the safety, health, and environmental information on our products and then take appropriate steps to protect employee and public health and our environment. The success of our product stewardship program rests with each and every individual involved with Dow products - from the initial concept and research, to manufacture, use, sale, disposal, and recycle of each product.

Customer Notice

Dow strongly encourages its customers to review both their manufacturing processes and their applications of Dow products from the standpoint of human health and environmental quality to ensure that Dow products are not used in ways for which they are not intended or tested. Dow personnel are available to answer your questions and to provide reasonable technical support. Dow product literature, including safety data sheets, should be consulted prior to use of Dow products. Current safety data sheets are available from Dow unless noted otherwise in the Handling Precautions section of the technical datasheet.

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