# DOW CORNING

# **Product Information**

# Silicone Sealants

# **Dow Corning®** 123 Silicone Seal Custom Designs H.C.

## **FEATURES**

- · High-performance
- · Excellent aesthetics
- Choice of various durometers in two different tear-resistant formulations to provide customized performance for specific applications
- Compatibility with *Dow Corning*® AllGuard Silicone Elastomeric Coating
- Available in standard and custom colors

# **COMPOSITION**

· Preformed silicone elastomer

#### Preformed two- and three-dimensional silicone elastomers

#### **APPLICATIONS**

Dow Corning<sup>®</sup> 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 *Dow Corning*® 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: Please contact your local Dow Corning sales office or your Global Dow Corning Connection before writing specifications on this product. Each custom design will be subject to agreed-upon specifications.

Method	Test	Unit	Result		
			<u>Formulation</u>		
			GP	HT	
			(General Purpose)	(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	
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**

Dow Corning 123 Silicone Seal Custom Designs H.C. are preformed two- and three-dimensional silicone shapes that are bonded to substrates using Dow Corning® 795 Silicone Building Sealant or other recommended Dow Corning® brand silicone sealants. Dow Corning 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 Dow Corning<sup>®</sup> 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 Dow Corning<sup>®</sup>
   AllGuard Silicone Elastomeric
   Coating

Dow Corning 123 Silicone Seal Custom Designs H.C. are 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 *Dow Corning* 795 Silicone Building Sealant should be used to bond the component to the substrate.

The color or texture of *Dow Corning* 123 Silicone Seal Custom Designs H.C. can also be altered at the job site after application using *Dow Corning* AllGuard Elastomeric Coating.

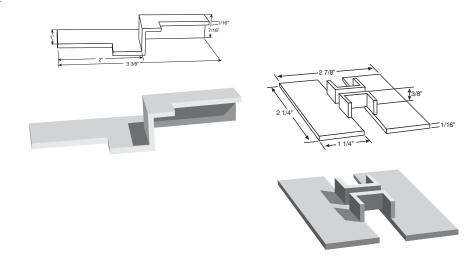
## **HOW TO USE**

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

Figure 1: Sample Designs Using *Dow Corning* 123 Silicone Seal Custom Designs H.C.



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

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

# **Masking**

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

## Application

Apply a bead of *Dow Corning* 795 Silicone Building Sealant to each side of the joint according to Table I.

*Note:* Rough surfaces will require larger beads of *Dow Corning* 795 Silicone Building Sealant to seal the valleys of the substrate. The sealant should be applied approximately <sup>1</sup>/<sub>4</sub>" (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.

Table I: Coverage Rates of Dow Corning 795 Silicone Building Sealant

	Coverage,	
<u>Substrate</u>	<u>linear ft/tube (linear m/tube)</u>	<u>Bead Size</u>
Rough	20-40 (6.1-12.2)	<sup>1</sup> /4" (6-mm)
Smooth	70-120 (21.3-36.6)	<sup>1</sup> / <sub>8</sub> " (3-mm)

# Maintenance

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

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

#### HANDLING PRECAUTIONS

PRODUCT SAFETY INFORMATION REQUIRED FOR SAFE USE IS NOT INCLUDED IN THIS DOCUMENT. BEFORE HANDLING, READ PRODUCT AND MATERIAL SAFETY DATA SHEETS AND CONTAINER LABELS FOR SAFE USE, PHYSICAL AND HEALTH HAZARD INFORMATION. THE MATERIAL SAFETY DATA SHEET IS AVAILABLE FROM YOUR DOW CORNING REPRESENTATIVE, OR DISTRIBUTOR, OR BY CALLING YOUR GLOBAL DOW CORNING CONNECTION.

#### **PACKAGING**

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

#### **LIMITATIONS**

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

*Dow Corning* 123 Silicone Seal Custom Designs H.C. are not intended for use:

- With *Dow Corning*® 790 Silicone Building Sealant as an adhesive
- With non-Dow Corning® sealants or acetoxy cure 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 Corning has an extensive Product Stewardship organization and a team of Product Safety and Regulatory Compliance (PS&RC) specialists available in each area.

For further information, please see our website, <u>www.dowcorning.com</u>, or consult your local Dow Corning representative.

# PROJECT-SPECIFIC WARRANTY

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

# LIMITED WARRANTY INFORMATION – PLEASE READ CAREFULLY

The information contained herein is offered in good faith and is believed to be accurate. However, because conditions and methods of use of our products are beyond our control, this information should not be used in substitution for customer's tests to ensure that Dow Corning's products are safe, effective, and fully satisfactory for the intended end use. Suggestions of use shall not be taken as inducements to infringe any patent.

Dow Corning's sole warranty is that the product will meet the Dow Corning sales specifications in effect at the time of shipment.

Your exclusive remedy for breach of such warranty is limited to refund of purchase price or replacement of any product shown to be other than as warranted.

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