

# DOW CORNING® 791T Weatherproofing Sealant Transparent

## FEATURES

- Will accommodate up to 50 % joint movement
- Excellent adhesion to a wide variety of construction materials such as concrete, stone, masonry, brick, wood, steel, glass, glazed surfaces, painted or varnished wood and ceramics
- Ideal sealant for expansion, connection and other movement joints as its low modulus allows high movement but generates relatively low stress at the adhesion interface
- Conforms to ISO 11600-F&G-25LM

## BENEFITS

- Compatible with typical PVB foils. Project-specific testing available upon request
- Easy, conventional tooling
- Excellent resistance to weathering
- Good recovery after extension and compression
- High resistance to ozone, ultra violet radiation and temperature extremes

## One-part silicone sealant

### APPLICATIONS

- DOW CORNING 791T Weatherproofing Sealant is specifically formulated for the sealing of expansion joints in curtain walling facades, building facades and other structures. It is also suitable for the sealing of connection joints between floors and walls, stairs and other building connections.

### TYPICAL PROPERTIES

Specification Writers: These values are not intended for use in preparing specifications. Please contact your local Dow Corning sales office or your Global Dow Corning Connection before writing specifications on this product.

| CTM* | Parameter  | Unit     | Value       |
|------|--|----------|-------------|
|      | Cure system                                      |          | Oxime       |
|      | Application temperature                          | °C       | +5 to +40   |
|      |  | °F       | +41 to +104 |
| 097B | Specific gravity                                 | g/ml     | 1.03        |
| 364C | Extrusion  | g/minute | 210         |
| 155A | Penetration                                      | 1/10mm   | 125         |
| 098  | Skin-over time (23°C or 73°F, 50% R.H.)          | minutes  | 5-10        |
| 095A | Tack-free time (23°C or 73°F, 50% R.H.)          | minutes  | 15-50       |
| 663A | Cure rate (23°C or 73°F, 50% R.H.)               |          |             |
|      | 1 day  | mm       | 3.0         |
|      | 3 days   | mm       | 4.0         |
|      | 2mm thickness S2 dumb-bells (ASTM D412)          |          |             |
| 137A | E-Modulus 100%                                   |          | 0.30        |
| 137A | Tensile strength                                 |          | 1.84        |
| 137A | Elongation at break                              |          | 500         |
|      | 12x12x50mm size T.A. joint (ISO 8339/DIN52455-2) |          |             |
| 677  | E-Modulus 100%                                   | MPa      | 0.32        |
| 677  | Tensile strength                                 |          | 0.43        |
| 677  | Elongation at break                              |          | 300         |
| 677  | Failure mode                                     | %        | 100         |
|      |  | Cohesive |             |
|      |  | Failure  |             |
| 99E  | Hardness   | Shore A  | 23          |
| 0677 | Elastic recovery (ISO 7389)                      | %        | >90         |

The data presented have been obtained with unpigmented product.

ASTM: American Society for Testing and Materials.

ISO: International Standardization Organization.

DIN: Deutsche Industrie Norm.

\* CTM: Corporate Test Method, copies of CTMs are available on request.

## DESCRIPTION

DOW CORNING 791T Silicone Sealant is a premium, one-part, easy to use, neutral curing transparent silicone sealant. It has excellent weatherability and flexibility. This low modulus silicone sealant has outstanding primerless adhesion to a wide variety of non-porous & porous substrates. Performance related to mildew and fungus resistance has been tested in accordance with the ISO-norm 846.

## TECHNICAL SPECIFICATIONS AND STANDARDS

ISO 1160-F+G-25LM  
ISO 846

## HOW TO USE

Please refer to Dow Corning Building Envelope Weatherproofing manual available on [www.dowcorning.com](http://www.dowcorning.com) for detailed information on application guidelines and joint design.

### Surface preparation

Surfaces must be clean, dry and free from grease, dust and frost. Non-porous surfaces such as aluminum, glass, etc., should be cleaned with a suitable solvent for the substrate such as DOW CORNING® R40, isopropanol, etc. Porous surfaces such as concrete, brick, mortar, etc., should be mechanically cleaned using a steel brush, sanding disk, etc.

When using any solvent, always provide adequate ventilation. Avoid heat, sparks and open flames. Always observe and follow all precautions listed on solvent container labels.

DOW CORNING 791T Sealant should not be applied to surfaces below 5°C (41°F) or above 40°C (104°F) as the adhesion of the sealant to the surface may be affected.

### Masking

It is recommended that the areas adjacent to the sealant joint are masked with an appropriate tape to prevent contamination of the substrate and to ensure a neat sealant line. Masking tape should be removed immediately after tooling and before the sealant starts to form a skin.

### Priming

Dow Corning Primer P is required for porous substrates. Consult Dow Corning Technical Services and / or Dow Corning Primer Guide.

### Back-up materials

Closed cell polyethylene backer rods are recommended as a joint back up material.

### Tooling

The applied sealant should be tooled within 5 to 10 minutes of application to ensure good contact between the sealant and the substrate. Tooling of the sealant also gives a smooth professional finish.

## TECHNICAL SERVICES

Consult Dow Corning's Technical Services departments for further advice on specific applications:

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## HANDLING PRECAUTIONS

Product safety information required for safe use is not included. Before handling, read product and safety data sheets and container labels for safe use, physical and health hazard information. The material safety data sheet is available on the Dow Corning website at [www.dowcorning.com](http://www.dowcorning.com). You can also obtain a copy from your local Dow Corning sales representative or Distributor or by calling your local Dow Corning Global Connection.

## USABLE LIFE AND STORAGE

When stored in cool, dry conditions below 30°C (86°F) in the original unopened containers, DOW CORNING 791T Silicone Sealant has a usable life of 18 months from the date of production.

## PACKAGING

DOW CORNING 791T Silicone Sealant is available in 310ml cartridges (12 per box).

## LIMITATIONS

DOW CORNING 791T Sealant should not be used against substrates that bleed oils, plasticizers or solvents. It is not recommended for use against certain plastics, generally of the flexible, plasticized type.

In situations where bleeding or staining is a risk, it is recommended that you use DOW CORNING® 756 SMS Building Sealant.

Dow Corning 791T Sealant has been generally tested for compatibility with some typical PVB foils. However, project-specific testing is strongly recommended with contact materials before any use.

For specific advice consult your local Dow Corning Technical Services Department.

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

## **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, [www.dowcorning.com](http://www.dowcorning.com) or consult your local Dow Corning representative.

## **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.

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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.

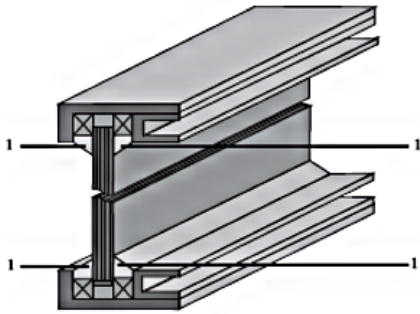
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## **DOW CORNING DISCLAIMS LIABILITY FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES.**

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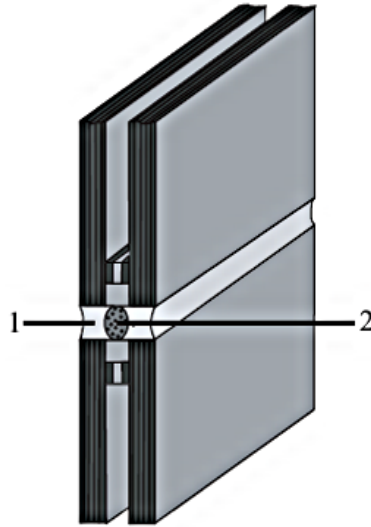
**Application Examples for  
DOW CORNING 791T  
Weatherproofing Sealant**

**Figure 1: Sloped roof glazing with butt joint, mechanically held on 2 sides.**

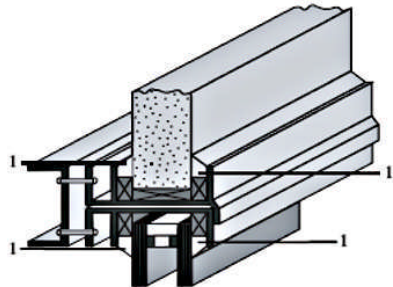


Designs possible with single or insulated units as shown, in sloped or vertical configurations. (Unit dimensions and glass thickness should be designed to limit deflections to comply with prevailing standards or design limits).

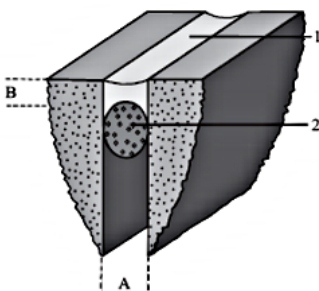
**Figure 2**



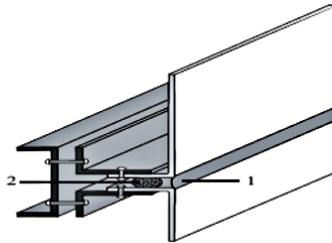
**Figure 3: Design incorporating granite or reconstituted stone panels.**



**Figure 5: Recommended design for moving joints. Ratio of A:B should be 2:1.**



**Figure 4: Design incorporating metallic panels**



**Legend**

- 1. DOW CORNING 791T Silicone Sealant
- 2. Backer rod
- A. Joint sealant width
- B. Joint sealant depth