High Performance Building

Dow Performance Silicones

DOWSIL™ 2400 Silicone Assembly Sealant

Hot Melt Cartridge Application Guide

DOWSIL™





Step-by-Step Instructions for Application

DOWSIL™ 2400 Silicone Assembly Sealant has been specifically designed for crystal clear glass-to-glass and glass-to-metal connections.

Application of DOWSIL™ 2400 Silicone Assembly Sealant in cartridges requires the use of a heated applicator gun. Dow recommends a pneumatic flow gun with electrical heater for processing aluminium cartridges, such as for example, the TS 215 G from Beyer & Otto or any equivalent.



Example of Heated Applicator Gun

1. Preparation

Read the user manual of instructions for the heated applicator gun as provided by the manufacturer. Connect the heated applicator gun to a 220V power supply and set the air pressure to approximately 6 bars. The setting point for the temperature should be 120°C-125°C and can be adjusted by turning the yellow screw, which is located under the gun cylinder and close to the trigger.

Should more than one cartridge be required for your application, several cartridges may be heated in a cartridge oven or pre-heater, which simultaneously heats the cartridges to the correct temperature (120°C-125°C), thereby minimizing the waiting time between each cartridge application. Cartridges typically take 40 minutes to heat in an oven.



Example of Cartridge Oven

2. Application

Before placing the (heated) cartridge in the applicator gun, pierce the foil membrane at the top of the cartridge. It is important to attach the nozzle at this step to ensure it will be heated at the same time as the cartridge of DOWSIL™ 2400 Silicone Assembly Sealant.







Insert the cartridge inside the heated applicator gun. The metal plunger at the base of the cartridge will be automatically pierced by the system of air pressure which is activated when the covering cap is placed onto the base of the cartridge.

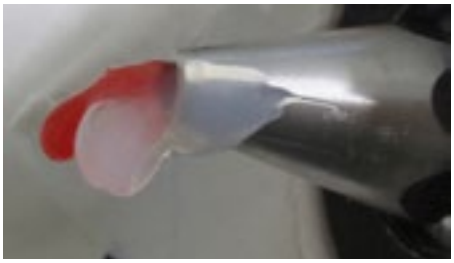
NB: As recommended by the heated applicator gun manufacturer, please ensure that the heated applicator gun is positioned correctly prior to inserting the cartridge to avoid damage to the gun. **The correct position is nozzle down, as shown in the middle picture on the right.**



When the cartridge reaches the correct temperature (120-125°C) after about 20 minutes, the DOWSIL™ 2400 Silicone Assembly Sealant will start to flow and product application may begin.



3. After application: cleaning of the nozzle



There are two options available for nozzle cleaning:

- The use of a wax, such as one supplied by Bühnen GmbH or any equivalent
- DOWSIL™ R-40 Universal Cleaner or a similar solvent will soften the material for ease of removal

Wax solution:

Remove the nozzle from the DOWSIL™ 2400 Silicone Assembly Sealant cartridge following application and when cooled, screw it on to a pre-opened Bühnen cartridge. Then place the Bühnen cartridge into the heated applicator gun. When a temperature of 125°C has been reached, the wax solution should be allowed to flow through the nozzle.



When the extruded wax is completely red, the nozzle is clean. Unplug the electricity supply and air pressure cap. Do not remove the cartridge from the heated applicator gun until it is cold. The nozzle can remain on the Bühnen cartridge if desired until the next DOWSIL™ 2400 Silicone Assembly Sealant application. This Bühnen cartridge can be used several times, until empty.

DOWSIL™ R-40 Universal Cleaner/Solvent solution:

Decant a small quantity of solvent into a suitable container. Once cold, place the nozzle into the solvent for 24 hours. This will allow the DOWSIL™ 2400 Silicone Assembly Sealant to soften for easy removal.

NB: Once a cartridge has been inserted and secured in a heated applicator gun, a hole will appear in the metal plunger at the base of the cartridge. Should you reuse either a DOWSIL™ 2400 Silicone Assembly Sealant cartridge or a Bühnen cartridge, it is imperative that this hole is re-positioned in the same location to receive the air input. If two holes are made in the metal plunger, the air pressure exerted into one of the holes will exit through the second hole, causing air and sealant to escape.

4. Curing and Handling



- During application of DOWSIL™ 2400 Silicone Assembly Sealant, bubbles can appear. This is caused by replacement of cartridges in the heated applicator gun, when air can become entrapped. These bubbles typically disappear during the curing process.
- We recommend that substrates are not moved until the sealant is fully cured, to avoid putting any stress on the material.
- Curing time depends on the size of the joint used for each application.



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Dow has sales offices, manufacturing sites and science and technology laboratories around the globe. Find local contact information at **consumer.dow.com/ContactUs**.

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