

FEATURES

VT-218 Glass & Metal Sealant is a 100% silicone sealant of ultra-premium grade, neutral cure, one-component, flexible, low-odor, and highly resistant to weather conditions, UV rays, joint movements, and extreme temperature variations. It is also resistant to solvents and cleaning agents. Suitable for sealing metal joints, roofing, gutters, building façades, or general construction materials such as aluminum, galvanized steel, zinc-coated steel, glass, brick, concrete, and painted surfaces. Can be used for both interior and exterior applications.

- 100% neutral cure silicone sealant
- High flexibility, accommodating joint movement of $\pm 25\%$ (ASTM C920 class 25)
- Highly flexible with superior adhesion
- Low VOC, safe for users, and environmentally friendly
- Excellent resistance to weather conditions and UV

PRODUCT INFORMATION

Product type	Silicone polymer
Physical state	Before cure –Non-sagging paste After cure –Elastic Rubber
Colours	VT-218T – Translucent VT-218C – White, Grey, and Matte Black
Odor	No strong odor
Application areas	• Metal lap joints in roofing, guttering and cladding applications. • Most common building materials such as aluminium, galvanized and zinc-coated steel, painted surfaces, glass, brick, and concrete for both exterior and interior
Packaging	270 mL/cartridge (24 cartridges/carton)

TECHNICAL INFORMATION

Curing system	Oxime				
Application temperature	-20°C - 50°C				
Service temperature	Up to 150°C				
	<u>VT-218T</u>		<u>VT-218C</u>		
Specific gravity	0.99	g/mL	1.34	g/mL	
Tack-free/Skin-form time	10-30	mins	10-30	mins	(at 25 °C & 50% R.H.)
Maximum tensile strength	1.3	N/mm ²	1.3	N/mm ²	ASTM D412
Elongation at break	380	%	320	%	ASTM D412
Movement Capability	± 25	%	± 25	%	ASTM C719
Slump	≤ 1	mm	≤ 1	mm	ASTM D2202
Shore A Hardness	23		37		ASTM C661
VOC content	108.95	g/L	88.10	g/L	USEPA Method 24

REFERENCE STANDARD

- ASTM C920, Type S, Grade NS, Class 25
- Low VOC - USEPA Method 24

APPLICATION

Surface preparation	Substrate surface must be dry and clean; free of dirt, grease, oil, or standing water.
Application Direction	<u>Cartridge</u> 1. Cut the tip of the cartridge, then load it into a caulking gun. 2. Position the nozzle against the joint at an angle of approximately 45° to 60°, then cut the nozzle to the desired diameter for application. 3. For a neat finish, apply masking tape along the edges of the joint before starting work.

Joint Design

4. If the joint is large, with a depth greater than 10 mm, insert a high-quality round or flat backing rod before applying the sealant.
 5. Apply the sealant into the joint using a caulking gun, filling the joint completely or slightly overfilling.
 6. Tool the sealant immediately with a soapy-finger method or a spatula, then remove the masking tape before the sealant skins over.
- Minimum joint depth should not be less than 6 mm to accommodate movement.
 - Sealant design joint width-to-depth ratio should be 2:1.

Coverage

Width, W	Depth, D	Coverage (300 ml)*
6 mm	6 mm	7.58 meter
10 mm	10 mm	2.73 meter
20 mm	10 mm	1.36 meter
25 mm	12 mm	0.91 meter

* * The coverage figures shown above are approximate linear meter run based on 10% wastage assumption. Actual coverage may vary.

- Calculation formula:

$$\text{Coverage (cm)} = \text{volume of cartridge (or sausage) in ml} / [(\text{joint width(cm)} \times \text{joint depth(cm)}) \times 1.1]$$

Clean Up

Wet sealants can be cleaned up with acetone or mineral spirits.

Cured sealants can only be removed mechanically

Limitations

Not recommended for following applications:

- Structural glazing applications.
- Below waterline or permanent water immersion.
- Applications that requires the sealant to be painted.
- Traffic areas subject to abrasion.
- Polycarbonate, Polyacrylate, Neoprene Rubber

HANDLING AND STORAGE

Storage condition

Store the product in a dry, well-ventilated area. Keep the container tightly sealed at all times. It is not recommended to place the product outdoors or expose it to direct sunlight. If the product must be stored temporarily for transportation or relocation, it should be kept separately from other materials at an appropriate distance. Additionally, flammable materials such as oil-based paints and thinners should be stored separately from other types of substances.

Shelf life

1 year at 30-35 °C (If the product is not used completely, please ensure the tube is sealed tightly.)

SAFETY PRECAUTIONS

Precautionary notices are displayed on the container. Use product under well-ventilated area. Avoiding skin contact or inhale product. In case of contact with the eye, rinse with plenty of water immediately and seek medical advice. Remove splashes from the skin by using soap or water. For others information in terms of health and safety hazards for use of this product, please observe the Safety Data Sheet.

DISCLAIMER

The above information is given to the best of our knowledge based on laboratory tests and practical experience. However, since we cannot anticipate or control the many conditions under which our products may be used, we can only guarantee the quality of the product itself.

We reserve the right to alter the given without prior notice.

NOTE

The data are average values for reference only. However, the actual value depends on environmental conditions.