

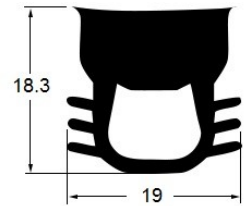
QuickJoint® Architectural Grade Pre-Cured Silicone Extrusion Technical Datasheet



Description

QuickJoint® is a high performance architectural grade, pre-cured silicone gasket for gap sealing of low and high movement expansion joints. It is non-staining and suitable for building and construction work including new façades or remedial applications for panels of virtually any material, including aluminium, stone, wood, steel, masonry, etc. The product is pre-cured to provide ease-of-use and is the exact amount of silicone necessary for gap sealing, ensuring close to zero waste.

The product is designed and manufactured specifically to each project to ensure the necessary joint movement range is covered, minimum stress on the adjacent panels' adhesion, and alignment with customers' manufacturing processes. QuickJoint® provides a high level of natural mould and bacteria resistance, weathering resistance, colour durability and is approved for use in food contact areas.



Sizes available: 10mm, 12mm, 14mm, 17mm, 19mm, 22mm, 25mm, 32mm. Custom sizes are also possible, POA.

Features

- No backing rod, tooling-off or cleanup necessary
- Eliminates installation constraints of wet seals, such as high wastage, messy installation process and dependence on weather conditions for successful gap sealing
- Provides flexibility on the type of adhesive for reliable, primerless adhesion to a variety of substrates
- Excellent elongation movement capabilities (+100% / -50%)
- Excellent resistance to UV and Weathering
- Non-slumping (pre-cured)
- Long life reliability
- Excellent ageing stability
- Maintains elastomeric properties permanently, even under harsh weathering conditions and extreme temperatures (up to 200°C)
- Does not support mould or bacterial growth
- Food grade compliant (FDA Chapter 21 CFR § 177.2600)
- Compliant with construction industry water penetration standards (AS/NZS 4284:2008)
- Excellent colour durability
- Custom colour matching also available

Recommended Uses

- All types of building façades
- Restoration and weatherproofing of expansion joints
- Curtain wall joints
- Marble and Granite Joints
- Precast Panels
- Concrete panels
- Timber panels
- Anodized aluminium
- Expansion joints on pavers
- Weather seals/weatherproofing of coated metal and aluminium composite panels

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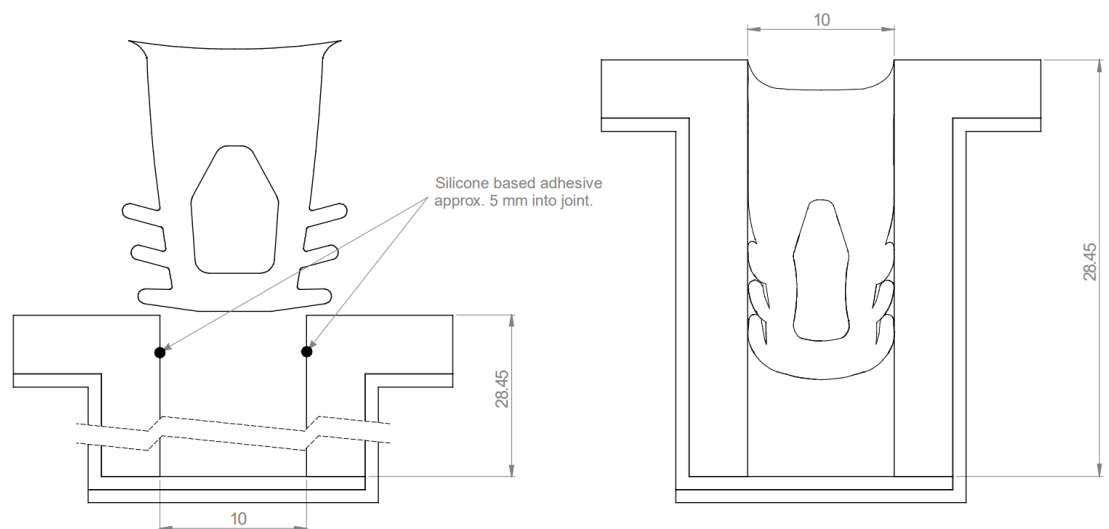
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Application Instructions

QuickJoint® is a pre-cured silicone product and whilst it is designed to have a strong grip in expansion joints, it is necessary to adhere it to joints using minimum amount of silicone adhesives.

The best adhesives to bond QuickJoint® are neutral cure silicone-based adhesives. Before installing the silicone gaskets, it is necessary to clean the application substrates with a clean fabric and IPA (isopropyl alcohol).

Insertion of QuickJoint® in a 10 mm cassette joint is illustrated below.



Compatibility and Durability

QuickJoint® is a 100% pre-cured silicone material which makes it inert to virtually any type of substrate. However, it is necessary to use neutral cure silicone adhesives for reliable installation of the products. Silicone adhesives are the most effective materials for adhesion to pre-cured silicone products, which is chemically similar to applying multiple layers of silicone substrate. Poor choice of adhesive may cause incompatibility issues such as degradation and discolouration of façade panels.

Please contact Network Building Supplies for advice on use of adhesives for QuickJoint® installation.

Joint Design

QuickJoint® is designed to accommodate the gap size variation of each application. Once the geometry of the gaps is known, Network Building Supplies provides the design that best fits the application requirements.

Coverage

QuickJoint® is supplied in the form of pre-cured extrusions and designed to provide the exact amount of material to seal the gaps and have almost no wastage. That is, the linear meterage covered by QuickJoint® is the same as the length purchased by the customer.

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Colour Durability

All active pigmenting compounds are extremely non-reactive and stable under a wide variety of conditions. To provide peace of mind, harsh accelerated aging tests (4-6x acceleration) have been performed on the final pigmented products in accordance with ASTM G90 and AS/NZS 1580.481.1.7:1998. Base materials tested included white, black and metallic pigments in their finished products. After accelerated aging (equivalent to 7-10 years exposure), no discernible fading of colour was observed.

Extreme Environments

Silicone products are naturally resistant to damaging weather occurrences such as extreme wind and rain. Silicone exhibits outstanding water resistance due to its hydrophobic characteristics, having a volume retention of less than 1% after prolonged immersion at depth.

Storage and Shelf Life

QuickJoint® shelf life is virtually unlimited even at prolonged exposure to weathering conditions.

Important Notice

Suggestions for use should not be taken as an inducement to infringe any particular patent. QuickJoint® is a registered trademark of Network Building Supplies.

UV and Ozone Resistance

Silicone elastomers are not sensitive to ultraviolet radiation. Unlike most organic rubber substances such as natural rubber or nitrile, ozone does not cause severe deterioration in silicone rubber. Silicone base materials have been tested in accordance with DIN 53509. At ozone concentrations of 200pphm, silicone rubber compounds achieve a cracking level of 0.

Pollution Resistance

Silicone can also withstand industrial environments where sulphur dioxide and mildly acidic rain may occur. Under an industrial climate test in accordance with DIN 50018 - SFW2.0S, silicone achieved over 1.5 million cycles without observing any changes in surface appearance. Silicone's excellent chemical resistance allows it to remain unaffected by dilute acids found in acid rain.

Health and Safety

A Material Safety Data Sheet (MSDS) is available on request.

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Product Data

Property	Typical Values		Inspection Method
Hardness	40	Shore A	DIN 53505
Density	1.12	g/cm ³	ISO 1183-1 A
Tensile Strength	9.8	N/mm ²	DIN 53504 S 1
Elongation at Break	800	%	DIN 53504 S 1
Compression Set (22 hrs @ 175°C)	20	%	DIN ISO 815B
Tear Strength	33	N/mm	ASTM D624B
Rebound Resilience	53	%	DIN 53512
Autoignition Temperature	>400	°C	DIN 51794
Service Temperature	-60 to +200	°C	ASTM D2000
Food Contact Approval (FDA)	Yes		FDA CFR 21 §177.2600
Drinking Water Contact Approval	Yes		WRAS
Restriction of Hazardous Substances	Compliant		RoHS

