



QUICSEAL 210

One Part Hybrid Sealant

Description

QUICSEAL 210 is a low modulus elastomeric, non-sag, sealant. It is easily gun able and reacts with moisture in atmosphere to form a flexible rubber seal.

Areas of Application

QUICSEAL 210 is recommended as a construction sealant for cementitious building materials, ceramics, glass, metal, anodized aluminum, wood and etc

Uses

Expansion and construction joints in internal and external applications:

- Claddings (Aluminum, granite)
- Window and door frame surrounds
- Precast concrete panels / movement joints in concrete and granite
- Civil Defence Shelter Conduits
- Panel Roofing
- Tile Movement Joints
- At locations where movement, expansion and high vibrations (including earthquakes) is present
- For industrial usages at areas where there may be a need for flexibility, such as areas with high tendencies for earth movement, or situations of high degree of vibrations or movements such as oil rigs and platforms or machinery and vehicles.

Advantages

- Excellent long term durability
- Excellent adhesion to many substrates, especially with primer
- Can be painted over with most types of paints
- Good workability - Stable extrudability in a wide temperature range
- Single component - ease of application with no mixing required
- Non-slump on vertical surfaces
- Fast cure
- Excellent aging, waterproofing and weathering properties
- Excellent adhesion even without primer
- Non-staining to most substrates such as aluminum, steel, stiles, mortar and concrete
- Low VOC and odorless

Technical Data

Product Type	Silyl-terminated polyether
Colors	Grey, white & black. Special colors available upon request with min. order quantity
Shelf Life	12 months in foil sachets
Hardness Shore A	20
UV Resistance	Excellent
Movement Accomodation Factor	+ 25%
The product complies to ASTM C920 : 2008	

Test Results

Test	Test Method	QUICSEAL 210 One Part Hybrid Sealant	ASTM C920 : 2008 Standard Specification for Elastomeric Joint Sealants
Staining and Colour Change	ASTM C510 : 2005	No staining and no colour change	The sealant shall not cause any visible staining on the top surface of a white cement mortar base
Extrudability	ASTM C1183 : 2008	>10 ml/min	Type S (single component), grade NS (non-sag or gunnable sealant) shall have an extrusion rate time of not < 10 ml/min
Rheological (Flow) Properties	ASTM C639 : 2007	Vertical displacement: 0 mm sag Horizontal displacement: No deformation	Grade NS (non-sag) or gunnable sealant shall have flow characteristics such that it does not sag>4.8mm in vertical displacement and shall show no deformation in horizontal displacement (refers to Types II and IV sealants)

Indentation Hardness Test piece 1, average Test piece 2, average	ASTM C661: 2006	25 25	T (traffic) sealant shall have a hardness reading of not <25 or >50 after being properly cured NT (non-traffic) sealant shall have a hardness reading of not <15 or >50 after being properly cured
Tack-Free Time	ASTM C679 : 2003	No transfer of test specimens to the polyethylene film	There shall be no transfer of the sealant to the polyethylene film when tested at 72 hours
Adhesion & Cohesion Under Cyclic Movement	ASTM C719 : 2005	No bond failure	The total loss in bond and cohesion areas among the three specimens tested for each surface shall not be > 9cm ² with mortar substrates
Effects Of Heat Ageing On Weight Loss, Cracking And Chalking, average	ASTM C1246 : 2006	0.8% No cracking and chalking	The sealant shall not lose > 7% of its original weight or show any cracking and chalking
Effects Of Accelerated Weathering	Adopted ASTM C739 : 2005	No cracks after UV exposure and bend test	The sealant shall show no cracks after the specified UV exposure and shall show no cracks after exposure at cold temperature and the bend test
Adhesion-In-Peel, average	ASTM C794 : 2006	109.1 N (24.6 lbf) cohesive failure within the sealant and no adhesive bond loss between sealant and substrate for each test piece	The peel strength for each individual test shall not be <22.2 N (5 lbf) and the sealant shall show no >25% adhesive bond loss for each individual test
Material Identification/Verification By FTIR	Conditioning Unless otherwise specified, all test specimens were tested at 23 ± 2 °C and 65 ± 5% relative humidity	Modified silicone-based material	-

Surface Preparation

Clean, dry and remove any oil, grease and loose particles from the substrates. All weak parts of the joint should be grinded and blown out with compressed air.

QUICSEAL 404 BACKER ROD (approximately 30% oversize) should be placed into the joint to the required depth. (Optimum performance is achieved when width: depth is 2:1) QUICSEAL BACKER ROD is normally used as a bond-breaker, ensuring that the sealant bonds only to the sides of the joint. Alternatively, a debonding tape may be placed at the base of the sealing slot prior to the application of QUICSEAL 210.

It is also recommended that masking tape be placed over the sides of the joints and removed immediately after tooling.

Application

Apply QUICSEAL 210 with a barrel gun into the prepared joint and tool immediately to achieve a leveled surface. To achieve optimum adhesion on porous substrate, QUICSEAL 210 Primer is recommended.

Packing

600ml per sausage

Coverage

QUICSEAL 210 $\frac{D \text{ (mm)} \times W \text{ (mm)} \times L \text{ (m)}}{1000}$ = No. of Litres needed

Sealant Depth

The sealant depth is dependent on the joint width and is calculated using the formula:

$$\text{Sealant depth} = \frac{\text{Joint width}}{3} + 6\text{mm}$$

Storage

The shelf life for QUICSEAL 210 in unopened and undamaged packaging is 12 months. The product must be kept unopened and store under cool condition to prevent surface evaporation and should be protected from direct sunlight.

Safety Precautions

QUICSEAL 210 is non-hazardous and non-toxic but avoid any prolonged skin and eye contact by wearing suitable protective clothing. In case of skin contact, clean with thinner and wash thoroughly with soap.

Important Notes

The information set forth herein is furnished in good faith and is based on technical data that QUICSEAL considers to be reliable. This information is intended for used by persons having technical skill and at their own discretion and risk. Information contained in this product sheet conforms to the standard detail recommendations and specifications for the installation of QUICSEAL products as of the date of publication of this document. QUICSEAL makes no other warranties and assumes no liability, expressed or implied, as to the architecture, engineering or workmanship of any project. To ensure that you are using the latest, most complete information, contact QUICSEAL

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