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MADA FIRE GUARD ACRYLIC SEALANT

Technical Data Sheet

TDS-ACC-R02-Rev1 Fire Guard Acrylic Sealant - June 2022

Advantage

- Fire Resistant
- Prevents Sound Flanking Low VOC
- Non-Cracking & Paintable
- Anti-Fungal, Anti-Bacterial & Algal Resistant

Product Description

Mada Gypsum Fire Guard Acrylic Sealant is a single component, high-performance sealant designed for internal perimeter. It is developed for use as a joint seal in fire resistant and sound insulation Mada drywall systems. As an acrylic based caulk with a tenacious bond regardless of porosity, it is easy to use on virtually any job.

It has good adhesion to a wide variety of substrates without the use of a primer.

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Field of Application

- Fire blocking applications in the annular space around wires, pipes, ducts, vents, cable lines and other penetrations to the building envelope.
- Sealing joints, voids and irregular holes in firewalls, partitions and other structures also for maintaining the integrity of pipes and cables that penetrate them.
- For internal perimeter pointing of fire rated door and window frames.

Technical Specification

Properties	Applicable standard	Unit	Specifications
Chemical Base	-	-	1-C Acrylic
Cure Mechanism	-	-	Air Drying
As Supplied @ 25°C, 50% RH			
Color	-	-	White, Grey
Consistency	-	-	Homogeneous paste
Density	ASTM D 1475	g/cm^3	1.65 ± 0.02
Flow Properties	ASTM C 639	mm	0 (Non-sag)
Tack Free Time	ASTM C 679	minutes	5 – 10
As Cured* – 21 Days @ 25°C, 50% RH			
Hardness (Shore A)	ASTM D 2240	Points	55 – 75
Full Cure Time	Lab Test	Weeks	2 – 3
Service Temp.	-	°C	+5 to +85
Application Temp.	-	°C	10 to 45

* Curing time (Skin Over Time & Tack Free Time) may vary depending on climatic condition during application.

Product Characteristics

- Mada Gypsum Fire Guard Acrylic Sealant has been developed for small penetration seal applications where it should be used in conjunction with specified backing materials like Mada Backing Rod. Mada Gypsum Fire Guard Acrylic Sealant is available in White and Grey color. Special color orders may require longer lead time and minimum order quantities.
- Mada Gypsum Fire Guard Acrylic Sealant is available in standard caulking cartridges, buckets and drums.
- Fire Rated Drywall Partitions :
  Mada Fire Guard Acrylic sealant is an Integral component in Mada Plus Fire Rated System. Tested in accordance to ASTM E119 - 45 Minutes to 3 Hours.
- Acoustic Rated Drywall Partitions :
  Mada Fire Guard Acrylic sealant is an Integral component in Mada Plus Acoustic Rated System. Tested in accordance to ASTM E90 & ASTM 413 - STC-40 to STC-79.
- Mada Fire Guard Acrylic sealant is suitable for application in medical environment due to anti–microbial properties to inhibit the growth of mold & mildew. Tested in accordance to BS ISO 22196 : 2007. Fungal & Algal Resistance tested In accordance to TISI 2321.
- The product should not be used for purposes other than those shown on the Mada Technical Proposal.

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Applications

Surface Preparation

The substrate areas that will be in contact with sealant must be clean, dry and free of all loose materials, dust, dirt, rust, oil and other contaminants. Non - porous substrates should be cleaned with a solvent and a clean, lint - free, cotton cloth. Wipe dry immediately with clean cloth before the solvent evaporates from the surface.

Application Instructions

Cut nozzle to desired bead size. Insert cartridge into standard caulking gun. For a smooth seal, hold at 45° angle and apply by pushing sealant ahead of nozzle. Apply at temperatures between 5°C to 45°C to ensure good adhesion. Ensure that Mada Gypsum Fire Guard Acrylic Sealant makes complete contact with the entire surface of the opening and also the surface of the penetrating items. Always follow cartridge directions. For large openings, mineral wool fibers can be used as a backer to help hold the product in place until cured. Steel screen wire can be stapled in place over the material when a large opening is overhead or configured such that the material will not support its own weight during cure.

Install backing material, spacer or joint filler to ensure correct depth to width ratio is achieved according to design. Apply masking tapes to areas adjacent to joints to ensure neat sealant lines.

Tooling and Finishing

Mada Gypsum Fire Guard Acrylic Sealant should only be used where slight joint movement is anticipated. For extremely deep joints, use backing material to fill. Tool sealant after application and before tack-free skin formation. Tooling of sealant should be done in one continuous stroke. Use masking tape adjacent to joint to obtain a cleaner joint. Remove masking tape immediately after tooling.

Temperature Range

Mada Gypsum Fire Guard Acrylic Sealant freezes in the cartridges at temperature below 0°C. The product can be warmed and applied at any temperature but will not cure below 5°C. Freeze-thaw cycles do not alter the cured product. Cure time may exceed 72 hours at non-freezing temperature.

Cleanup and Removal

Excess caulk should be cleaned off tools and non-porous surfaces while it is in the uncured state using a wet cloth. Cured sealant can only be removed mechanically.

Paintability

A minimum of 2 hours dry time is required before painting with latex or oil- based paint. Allow extra dry time during periods of high humidity.

Handling and Storage

- When stored in original unopened container at or below 25°C in dry warehouse conditions, Mada Gypsum Fire Guard Acrylic Sealant has a shelf life of 24 months from manufacturing date. Containers should always be kept sealed when not in use.
- Use in well-ventilated area. Direct contact of uncured sealant may irritate eyes and skin. Over exposure to vapor may irritate eyes, nose and throat. Do not handle contact lenses with sealant on hands. In case of eye contact, flush eyes with water for 15 minutes. Obtain medical attention. In case of skin contact, remove from skin and flush with water.