

TECHNICAL DATA SHEET

AGNI-Seal®

PRODUCT DESCRIPTION

AGNI-Seal is a fire-rated, water-based acrylic sealant designed for indoor and outdoor use, particularly in areas that need a fire-resistant seal. AGNI-Seal slightly expands to create a solid plug when exposed to fire, effectively blocking fire spread through openings or gaps in a fire-separating element.

PRODUCT CHARACTERISTICS

- Tested to AS1530.4-2014
- · Compliant with AS4072.1-2005
- Up to 4 hours FRL. Refer to the information about specific system performance.
- · Suitable for indoor and outdoor applications
- · Handles up to 20% joint movement, ensuring durability and adaptability
- Provides bonding with various construction materials like steel, timber, concrete, glass, and plasterboard
- · Easily applied, smoothed, and finished
- · Hardens quickly
- · Has low VOC content (8g/L), aligning with Green Star project standards
- · Exhibits resilience against UV rays and weather conditions
- Water-based, non-flammable, and non-hazardous composition
- · Can be painted over with water-based paints, allowing for aesthetic versatility
- · Proudly manufactured in Australia.

TECHNICAL DATA

Condition	Ready for use, acrylic-based filler
Expansion in fire	2-3 times
Film-forming	2-3 hours
Completely hardened	Up to 7 days, dependent on thickness and weather conditions
Thermal conductivity	0.845 W/mK(+/- 3%) with 20mm depth
Storage	Store in a place shielded from direct sunlight in the original sealed containers
Ideal storage temperature	In between 5°C and 25°C
Working life	30 years
Shelf life	Min 12 months (under correct conditions)
Application temperature	In between 0°C and 45°C
Curing temperature	Above 10 C
Standard colour	Grey, white
Packaging	Box containing 20 foils, each 600ml

APPLICATION

AGNI-Seal is used for:

 Fire-stopping of single cables, cable bundles and pipe penetrations. Used as a sole system or in conjunction with other AGNI materials. Refer to the information about specific system performance.



- Smoke sealing around service penetrations.
- Sealing joints and voids in fire-rated walls. Refer to the information about specific system performance.

INSTALLATION GUIDELINES

Preparing the Surface:

Ensure that the surface where AGNI-Seal will be applied is clean, dry, and debrisfree. It's essential that AGNI-Seal adheres to both surfaces of the void. The use of a backing rod is recommended but optional.

Preparing the Sealant Gun:

For foils: Cut the end of the foil and attach the foil barrel gun nozzle over this cut end. Insert the foil into the barrel gun's housing and attach the nozzle head securely

Application Process: Position the tip of the gun towards the joint and apply AGNI-Seal steadily, ensuring the joint is filled. This will prevent voids, which can compromise the strength and integrity of the sealed joint.

Aim to tool the joint within 15 minutes of application for a smooth finish. Any excess material should be promptly cleaned up with a damp cloth.

Post-Application Care: Protect the freshly applied AGNI-Seal from water exposure until it has had sufficient time to cure properly.

Clean up: Clean tools and sealant gun. Dispose of used foils.

CURING TIME

Factors Influencing Cure Time:

 The curing process for AGNI-Seal varies depending on several environmental factors. Key influences include the ambient temperature and humidity, the porosity of the substrate where it is applied, and the size of the sealed joint.

Typical Cure Time Expectations:

- Generally, a joint sealed with AGNI-Seal will develop firm skin within 2-3 hours.
 Complete curing, however, can take up to seven days. This duration is subject to change based on the thickness of the joint and prevailing weather conditions.
- For joints with a thickness or depth exceeding 10-15mm, expect the cure time to extend beyond seven days. Conservative estimation maybe 1mm/day at a temperature above 10°C and less than 75% RH.
- In lower temperatures or high humidity conditions, such as in cold or very humid climates, the curing process may take longer.

