

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 debris-free. 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.

The AGNI-Seal[®] Application Range.

Only AS1530.4 tested FR solutions.

SUBSTRATE	SERVICE (s)	FRL	AGNI-SYSTEM #	COMPLIANCE REFERENCE	
<ul style="list-style-type: none"> 2 x layers of 13mm FR plasterboard & 64mm steel stud Min. 116mm solid or hollow concrete walls 	Cable & cable bundles				
	9.6mm Optic cable	-/120/120	AE-189	PF25005	
	Up to 13 x Data cables	-/120/120	AE-028	PF24016	
	Up to 8 x TPS cables	-/120/120	AE-027	PF24016	
	Metal pipes				
	DN10mm copper pipe	-/120/120	AP-144	PF24124	
	DN10mm steel pipe	-/120/120	AP-144	PF24124	
	Linear Gaps				
	10mm x 20mm vertical	-/120/120	AJ-056	PF24008	
	20mm x 20mm vertical	-/120/120	AJ-056	PF24008	
	30mm x 20mm vertical	-/120/120	AJ-056	PF24008	
	40mm x 26mm horizontal	-/120/120	AJ-056	PF24008	
	<ul style="list-style-type: none"> Min. 1 x layer of 13mm plasterboard on each side Min 90mm solid or hollow masonry/concrete wall 	Metal pipes			
		DN32mm copper pipe	-/60/-	AP-066	PF24026
DN100mm copper pipe		-/60/-	AP-066	PF24026	
DN150mm copper pipe		-/60/-	AP-066	PF24026	

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SUBSTRATE	SERVICE (s)	FRL	AGNI-SYSTEM #	COMPLIANCE REFERENCE
<ul style="list-style-type: none"> • Min. 1 x layer of 13mm plasterboard on each side • Min 90mm solid or hollow masonry/concrete wall 	DN32mm steel pipe	-/60/-	AP-066	PF24026
	DN100mm steel pipe	-/60/-	AP-066	PF24026
	DN150mm steel pipe	-/60/-	AP-066	PF24026
	Brass wing back	-/60/60	AP-072	PF24068
<ul style="list-style-type: none"> • 1 x layer of 13mm FR plasterboard & 64mm steel stud • Min. 90mm solid or hollow concrete walls 	Cable and cable bundles			
	25mm Aluminium cable	-/60/60	AE-132	PF24102
	30mm Aluminium cable	-/60/60	AE-132	PF24102
	52mm Aluminium cable	-/60/30	AE-132	PF24102
	21mm Copper cable	-/60/60	AE-105	PF24082
	Up to 5 x TPS cables	-/60/60	AE-071	PF24068
	Up to 5 x data cables	-/60/60	AE-070	PF24068
	1x data cable + 1x TPS cable + 1x coax cable	-/60/60	AE-069	PF24068
<ul style="list-style-type: none"> • 1 x layer of 13mm FR plasterboard & 64mm steel stud • Min. 90mm solid or hollow concrete walls 	Linear gaps			
	10mm x 20mm vertical	-/60/60	AJ-053	PF24007
	20mm x 10mm vertical	-/60/45	AJ-053	PF24007
	30mm x 13mm vertical	-/60/60	AJ-053	PF24007

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<ul style="list-style-type: none"> 1 x layer of 13mm FR plasterboard & 64mm steel stud Min. 90mm solid or hollow concrete walls 	40mm x 20mm vertical	-/60/60	AJ-053	PF24007
	40mm x 13mm horizontal	-/60/60	AJ-053	PF24007
<ul style="list-style-type: none"> Min. 25mm Shaftliner & min. 1 x layer of 16mm FR plasterboard 	Metal pipes			
	DN60mm steel pipe & 1 x alarm cable	-/60/60	AE-209	PF25006
	DN100mm copper pipe	-/60/-	AE-204	PF25006
	DN100mm steel pipe	-/60/-	AE-204	PF25006
	Cables & cable bundles			
	4.8mm optic cable	-/60/60	AE-206	PF25006
	20mm copper cable	-/60/15	AE-181	PF24146
	25mm aluminium cable	-/60/60	AE-184	PF24146
	2 x alarm cables + 1 x data cable + 1 x TPS cable	-/60/60	AE-208	PF25006
	<ul style="list-style-type: none"> Min 75mm Hebel wall 	Cable & cable bundles		
20mm copper cable		-/120/60	AE-169	PF24145
25mm aluminium cable		-/120/60	AE-172	PF24145
Up to 8 x TPS cables		-/120/60	AE-171	PF24145
Cables				

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SUBSTRATE	SERVICE (s)	FRL	AGNI-SYSTEM #	COMPLIANCE REFERENCE
<ul style="list-style-type: none"> Min 100mm CLTT wall 	Up to 8 x TPS cables	-/60/60	AE-093	PF24086
<ul style="list-style-type: none"> 1 x layer of 13mm FR plasterboard & 1 x layer of 16mm FR plasterboard ceiling 	Metal pipes			
	DN32mm copper pipe	-/60/60	AP-083	PF24079
	DN100mm copper pipe	-/60/60	AP-083	PF24079
	DN32mm steel pipe	-/60/60	AP-083	PF24079
	DN100mm steel pipe	-/60/60	AP-083	PF24079
	50mm steel pipe	-/60/60	AP-085	PF24079
	Sprinkler head + steel pipe	-/60/60	AP-086	PF24079
	Cable & cable bundles			
	1 x data cable + 1 x TPS cable + 1 x COAX cable	-/60/60	AE-084	PF24079
	<ul style="list-style-type: none"> Min. 120mm concrete floor / ceiling 	Linear gaps		
10mm x 10mm vertical		-/180/120	AJ-047	PF24011
15mm x 10mm vertical		-/180/150	AJ-047	PF24011
20mm x 10mm vertical		-/180/120	AJ-047	PF24011
40mm x 20mm vertical		-/180/120	AJ-047	PF24011
30mm x 15mm horizontal		-/180/150	AJ-047	PF24011