

CUSTOMER TECH MEMO # 315

Subject Fire Attenuation Screens

Date: 19/11/18

Author: Product Development Team

The R&D team have successfully conducted Fire Attenuation testing on the Invisi-Gard®, Alu-Gard® and Vision-Gard® Screen product range to provide an acceptable alternative solution for Fire Engineers or specifiers to prevent the spread of fire between buildings.

WHAT ARE FIRE ATTENUATION SCREENS?

Fire Attenuation Screens are an 'engineered solution' designed to protect window openings that are less than 3m from a property boundary or within 6m of another building in the same allotment.

Their purpose is to reduce any radiant heat transmitted from one area to another and help to prevent the spread of fire.

The effectiveness of such screens is measured by the Fire Attenuation figure, being the percentage of heat that is blocked by the screen.

WHAT WAS THE TEST?

The Screens were tested up to an irradiance heat of 40kW/m² in accordance with AS1530.4:2014 Appendix B7 for a period of 130 minutes. This result is applicable for a condition of up to 1m distance from the boundary.

THE RESULTS

PRODUCT	INSTALLATION	PERCENTAGE OF RADIANT HEAT BLOCKED (ATTENUATION)	TEST REPORT NUMBER
Invisi-Gard®	Fixed onto a 50 x 40 x 3mm Aluminium Angle into brickwork	55%	52577300a
Invisi-Gard®	Face fixed directly onto the outside brickwork	48%	52577300b
Vision-Gard®	Face fixed directly onto the outside brickwork	75%	53673500a
Alu-Gard®	Face fixed directly onto the outside brickwork	56%	53673500b

The Fire Attenuation figure we previously had for Invisi-Gard® was 43% and was exposed to heat for a shorter period of 30 minutes. Not only have we improved on this figure and tested for a longer period, but we also now have 2 installation types that fire engineers are more willing to accept. It is also highly favourable from a fabricators cost point that the angle used was aluminium rather than steel which is significantly higher in cost to quote.

We can also now provide the option for Alu-Gard® and Vision-Gard® screens. This makes these products the first in the market to offer perforated aluminium mesh as a Fire Attenuation Screen which is a significant cost saving opportunity.

WHEN CAN FIRE ATTENUATION SCREENS BE USED?

Fire Attenuation Screens can only be used as an alternative solution if specified in the Fire Engineers Report (FER) or after a Fire Engineer has deemed it suitable for use based on test reports we provide them.

In the latest round of testing, our test period was for a duration of 130 minutes and we tested both face fixed and angle fixed installation options.

Please contact your local Area Manager to request watermarked copies of the test report. Other documents available upon request include:

- An Alspec Fire Attenuation Screen Installation Manual illustrating the minimum installation requirements for Invisi-Gard®, Alu-Gard® and Vision-Gard® Screens to meet Fire Attenuation figures
- A one-page summary of the test and results for Invisi-Gard, Alu-Gard and Vision-Gard
- Certificate of Compliances for Invisi-Gard, Alu-Gard and Vision-Gard

Installation details for Invisi-Gard® Fire Attenuation Screens have also been updated in the Invisi-Gard® technical manuals.

The Alspec Website will be updated to reflect these new results.

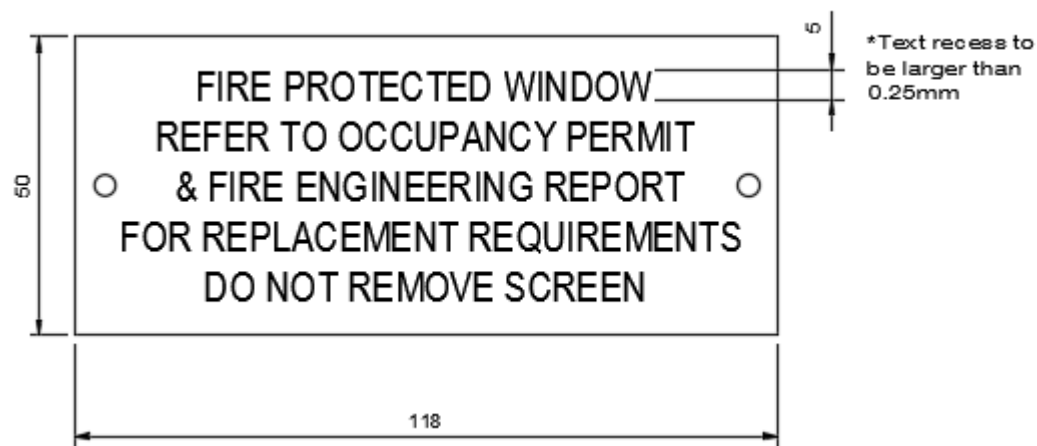
FIRE ATTENUATION METAL LABELS

Fire Engineer Reports often specify the requirement to fix Fire Attenuation Screens with a metal label for which we had our customers source these themselves.

We are pleased to announce that you can now request metal labels for Fire Attenuation screens. This is a metallic red label with white text.

Please contact your local Area Manager for more information.

Details below:



CODE	DESCRIPTION	FINISH
1300039	FIRE ATTENUATION LABEL 118 x 50 x 1mm	Red (0LS)

Kind Regards


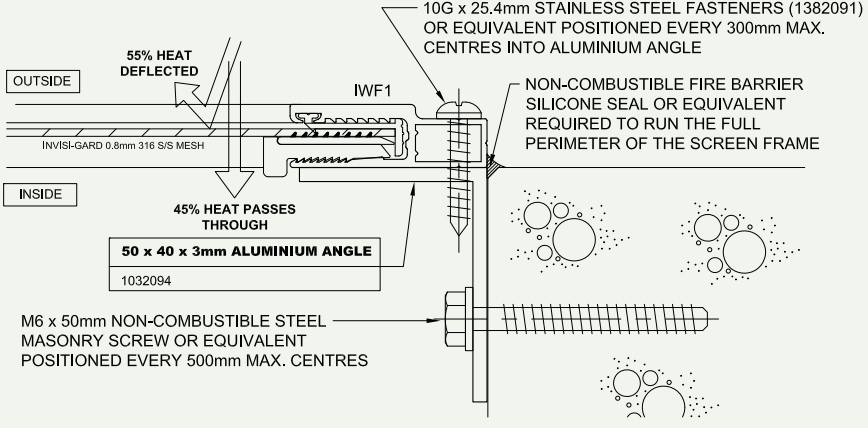

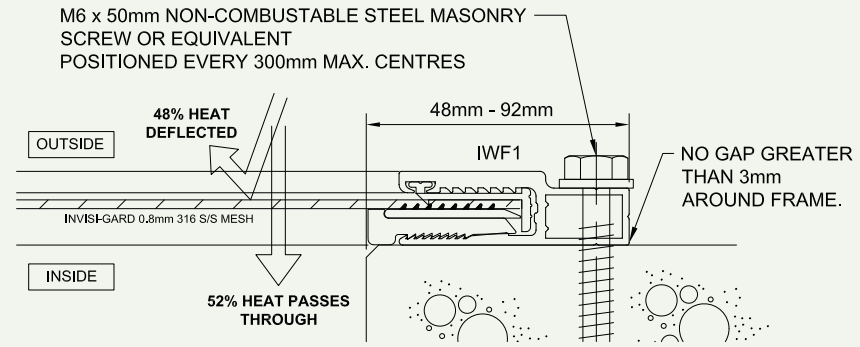
Product Development Team

Alspec Fire Attenuation Screens Comparison

November 2018

Alspec Fire Attenuation Screens

The following security screen products have been tested up to an irradiance heat of 40kW/m² in accordance with AS1530.4:2014 Appendix B7 for a period of 130 minutes.

Product	Installation
<p>Invisi-Gard®</p> <p>Attenuation 55% Test Report 52577300a</p> 	 <p>10G x 25.4mm STAINLESS STEEL FASTENERS (1382091) OR EQUIVALENT POSITIONED EVERY 300mm MAX. CENTRES INTO ALUMINIUM ANGLE</p> <p>NON-COMBUSTIBLE FIRE BARRIER SILICONE SEAL OR EQUIVALENT REQUIRED TO RUN THE FULL PERIMETER OF THE SCREEN FRAME</p> <p>55% HEAT DEFLECTED</p> <p>45% HEAT PASSES THROUGH</p> <p>50 x 40 x 3mm ALUMINIUM ANGLE 1032094</p> <p>M6 x 50mm NON-COMBUSTIBLE STEEL MASONRY SCREW OR EQUIVALENT POSITIONED EVERY 500mm MAX. CENTRES</p> <p>OUTSIDE</p> <p>INSIDE</p> <p>IWF1</p> <p>INVISI-GARD 0.8mm 316 S/S MESH</p>
<p>Invisi-Gard®</p> <p>Attenuation 48% Test Report 52577300b</p> 	 <p>M6 x 50mm NON-COMBUSTIBLE STEEL MASONRY SCREW OR EQUIVALENT POSITIONED EVERY 300mm MAX. CENTRES</p> <p>48mm - 92mm</p> <p>48% HEAT DEFLECTED</p> <p>52% HEAT PASSES THROUGH</p> <p>NO GAP GREATER THAN 3mm AROUND FRAME.</p> <p>OUTSIDE</p> <p>INSIDE</p> <p>IWF1</p> <p>INVISI-GARD 0.8mm 316 S/S MESH</p>

Alspec Fire Attenuation Screens Comparison

November 2018

Alspec Fire Attenuation Screens

The following security screen products have been tested up to an irradiance heat of 40kW/m^2 in accordance with AS1530.4:2014 Appendix B7 for a period of 130 minutes.

Product	Installation
<p>Vision-Gard®</p> <p>Attenuation 75% Test Report 53673500a</p> <p>VISION-GARD ALUMINIUM SECURITY SCREENS</p>	<p>M6 x 50mm NON-COMBUSTIBLE STEEL MASONRY SCREW OR EQUIVALENT POSITIONED EVERY 300mm MAX. CENTRES</p> <p>40mm - 110mm</p> <p>75% HEAT DEFLECTED</p> <p>25% HEAT PASSES THROUGH</p> <p>VISION-GARD 3mm ALUMINIUM PRIVACY SCREEN</p> <p>NO GAP GREATER THAN 3mm AROUND FRAME.</p>
<p>Alu-Gard®</p> <p>Attenuation 56% Test Report 53673500b</p> <p>ALU-GARD ALUMINIUM SECURITY SCREENS</p>	<p>M6 x 50mm NON-COMBUSTIBLE STEEL MASONRY SCREW OR EQUIVALENT POSITIONED EVERY 300mm MAX. CENTRES</p> <p>40mm - 110mm</p> <p>56% HEAT DEFLECTED</p> <p>44% HEAT PASSES THROUGH</p> <p>ALU-GARD 1.6mm ALUMINIUM PERFORATED SCREEN</p> <p>NO GAP GREATER THAN 3mm AROUND FRAME.</p>