



PRODUCT SPECIFICATION

MicroLouvre Attenuation Screen

1 GENERAL

1.1 Scope

MicroLouvre Attenuation Screens ("Fire Screens") are to be designed, fabricated, delivered, installed and maintained as outlined in this specification.

1.2 Submittals

Shop drawings

Detailing the location, size and requirements 'by others' of the Fire Screens shall be submitted to the General Contractor and the drawings approved prior to the commencement of the manufacture process.

Completion certificate

Issue a completion certificate at the completion of the works confirming that the installation has been completed in accordance with this specification, the fire engineering report and the tested prototypes for the Fire Screens.

1.3 Warranty

Greene Fire Pty Limited warrants that its MicroLouvre Attenuation Screen is free from manufacturing defects for a period of not less than 12 months from installation when installed, maintained and used in accordance with this specifications and operational manuals.

2 Product

2.1 Manufacturer

Smartlouvre Technology Ltd, 18 The Tanneries, Brockhampton Lane, Havant, Hants PO9 1JB, UK
Tel: +44 2392456333. Email: Info@smartlouvre.com.

2.2 Product Description

MicroLouvre Attenuation Screen

MicroLouvre Attenuation Screen is a bronze woven mesh that is installed to openings on buildings that are near the property boundary. The Fire Screen will limit the radiant heat from a fire, protecting the building and adjacent properties from fire spread.

2.3 System Components

Frame

Screen frames are 6063-T6 extruded aluminium exclusively designed for framing MicroLouvre mesh. The corners of the frames have concealed internal reinforcing members inserted in such a manner as to secure all corners neatly and firmly together. Top and bottom frame are pre-bowed as required to reduce to a minimum the deflection due to screen tension. The frames are designed to receive continuous EPDM strip in each side frame and a continuous 316 stainless steel lacer wire in each horizontal frame, all correctly assembled to ensure screen tautness and to maintain the angle of the louvres.

The aluminium frame is mill finish. This can be powder coated to any standard Dulux Duralloy colour.

Mesh

MicroLouvre mesh is made from miniature woven bronze louvres that are paper thin. The weft (louvre) is made from C220 commercial bronze alloy and the Warp is C655 high silicone bronze alloy. The overall thickness of the mesh is 1.4mm and the distance between each louvre is 1.49mm. The mesh is powder coated black.

The paper thin louvres are only 0.32mm thick which provides an overall open area of 80%.

Screen dimensions

Two frame profile sizes are available; standard 38mm and 51mm for larger size screens. The overall thickness of the frame is 12.7mm. The maximum screen dimensions are 1,800mm wide x 3,000mm high.

2.4 Product Performance:

The complete MicroLouvre Fire Screen is tested to AS1530.4 Appendix B.7 and AS1530.8.1 to achieve heat attenuation of at least 43%. Testing must demonstrate performance of the fixing of the frame to a lightweight wall construction.

2.5 Labelling

The MicroLouvre Fire Screen must be labelled with a metal tag riveted to the frame clearing showing the Fire Screen details, manufacturer and installation date. The metal tag must also state "DO NOT REMOVE".

3 EXECUTION

3.1 Installation

MicroLouvre Attenuation Screens must be fixed with suitable metal anchors to masonry, brick, steel or lightweight fire rated wall. Fixings must be installed within 200mm of the corner of the screen and at maximum 350mm pitching.

Any gaps larger than 1.5mm between the frame and the substrate must be sealed with fire rated sealant.

All Fire Screens shall be carefully located in the positions indicated on the approved Shop Drawings.

3.2 Maintenance

The Fire Screens should be inspected annually to ensure that they are still correctly secured in place and have not been removed.

The mesh should be cleaned annually to remove any dirt and debris. Cleaning is suitable with water only and can be applied with a high pressure hose.