

INTRODUCTION

Characteristics

SAF Panels are composed of Fiber Cement Board (FCB), Portland Cement (OPC), Expanded Polystyrene (EPS), and additives.

Applications

SAF Panels are engineered to be used in internal partitions- within the fire zones, as well as party walls and corridor walls, and as external walls.

Panel Finish

Fiber Cement Board (FCB) is considered one of the highest quality boards when it comes to finish as it provides a smooth even surface that doesn't require render prior to paint.

Panels Range

SAF Panels come in a standard size but with varying thicknesses as indicated in the table below:

Width (mm)	Length (mm)	Thickness* (mm)	Density* (Kg/m ³)
600	3000	75	667
600	3000	100	643
600	3000	150	619

*Thickness may vary with a variation of +/- 3mm

**Density may vary with a variation of +/- 20 Kg/m³

FINISHING

Jointing

The SAF Panel fiber cement board (FCB) facing come with a pre-chamfered edges to accommodate the thickness of jointing tape and jointing compound, allowing a flush finish across the wall.

Jointing Compound

SAF Panels recommend the use of jointing compounds which are flexible, crack resistant and applicable for both internal and external use. List of tested and approved products can be provided upon request.

Note: Decorations, fixings, fixtures, or any other required fixed components must not be fixed into damaged or repaired areas. In the likelihood of the above, please follow the procedure described in Extensive Damage.

Minor Damage

If minor damage is present on the face of the panel, apply repair grout in 10mm layers to ensure bonding to the core, followed by an application of jointing compound and sanding. Extensive instructions and damage cases be found in SAF Panel Installation Method Statement.

Extensive Damage

If the damage is more extensive, and the partition is fire rated or in a party wall or a corridor location, then it might be necessary to replace the panels.

Note: Repairs must be done like for like, hence if there is a skim coat finish on the panels, repair mortar must be done to account for the skim coat thickness.

STANDARDS

BS 5628-1: 1992 (Incorporating Amendments Nos. 1 and 2).

Code of practice for use of masonry (Part 1, Section 36)



PANEL PERFORMANCE

Reaction to fire testing

SAF Panels are tested to fire reaction tests as follows:

Standards	Result
BS 476 Part 21, BS 476 Part 22, BS 476 Part 23, EN 1364-1, EN 1365-2:2000, EN 1634-1, ASTM E119, NFPA 251, UL 263	75mm – NA
	100mm – 180mins
	150mm – 180mins

Thermal Conductivity

SAF Panels – 0.46 W/mK

Compressive Strength

100mm SAF Panel – 7.5 MPa
 150mm SAF Panel – 5.67 MPa

Fixing capabilities

SAF Panels have a substantial capacity for carrying fixtures both in pull-off and shear which can go up to 100kgs and 400kgs respectively dependent on the type of fixing used.

Effect of Temperature

SAF Panels are made from inert, hard wearing materials that are resistant to the effect of excessive heat and sun exposure.

Effect of Moisture and Condensation

SAF Panels are designed to be water resistance, hence they are non-absorbent.

INSTALLATION

General

General health and safety rules and regulations must be followed. Personal Protective Equipment and clothing must be used. This is a general guidance, project to project method statement can be issued upon request.

Handling

Offloading of panels can be done with the use of cranes and/or forklifts and should be done with care. For more information please refer to SAF Lifting Methodology.

Cutting

SAF Panels can be cut using a circular saw/grinder/ reciprocating saw/hand saw. Holes and penetrations can be made a hole saw/core cutting machine/hand saw. All power and hand-held tools should be operated with care and by trained and certified personal.

Base Channel Fixing

Location of the channels must be marked and properly identified. Channels can be cut to the required length and fixed to the slab via percussion fixing (nail gun or similar).

Leveling and Vertical Alignment

Throughout the installation of panels, the vertical alignment and level must be checked by means of a laser level and/or spirit level and/or plumb-bob.

Fixing and interlocking

Prior to interlocking the panels with SAF Adhesive, the tongue and groove must be cleaned properly with a brush or a cloth, and wet using clean water.

Finishing and repairs

SAF panels can be finished and repaired after final fixing and interlocking allowing for adequate curing of 7 days. Detailed description can be found in SAF Panel Installation Method Statements.