ISOPARTNER

Siderise® Firefloor Systems

A simple and cost effective method of increasing the fire resistance of a compartment timber floor for both newly constructed and existing constructions.

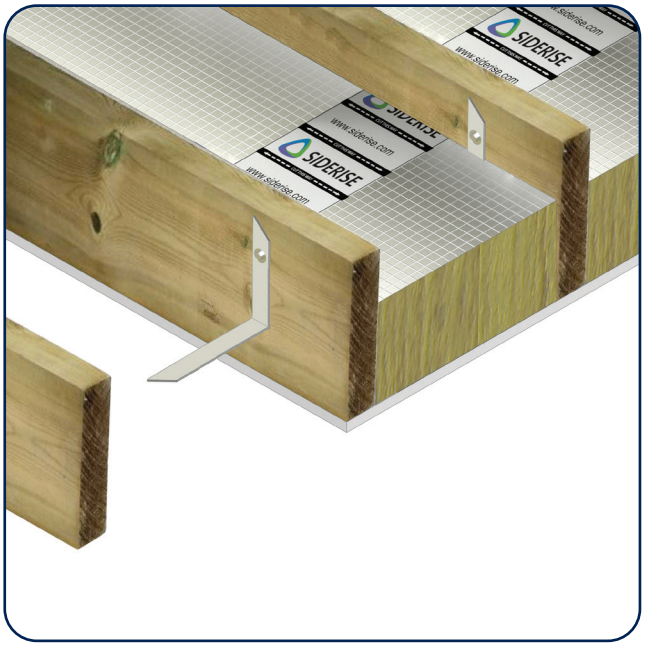
Application

Siderise firefloor systems provide a simple and cost effective method of increasing the fire resistance of a compartment timber floor for both newly constructed and existing constructions.

Throughout the range, the materials comprise a one-piece product with a pre-compressed non-combustible stonewool core. The products also have integral aluminium foil facings to provide an overall Class A1 rating (to EN 13501-1) and excellent resistance to smoke.

The slabs that are supplied for the firefloor system come in sheet form and are easy to cut on site before installing between the floors' timber joists. They are fixed in place using brackets which are simply screwed to the joists to provide all necessary support.

Three system options are available. The system selected will depend on the nature of the underlying ceiling which is fitted to the floor, the centres of the joists and the required period of fire resistance.



Benefits

- Can offer up to REI 60
- Simple to cut and install
- Forms a permanent seal
- Suitable for use with lath and plaster ceilings

- **No. 1 in Ireland for 25 years**
- **Third-Party Certified**
- **Contractors preferred choice for refurbishment projects**

SIDERISE®
integrity in all we do

Product Description

Siderise firefloor systems insulation slabs are supplied in a standard 1200mm x 1200mm sheet size for cutting on site to suit joist centres. Siderise firefloor systems should be cut oversize to allow for a minimum 20mm compression. Different material options are available to suit the type of ceiling finish and the required period of fire resistance, as detailed below. The cut strips are installed with dedicated fixing brackets which are supplied separately. The joints between adjacent strips are sealed with foil tape applied to the top surface only.

FF-NPC60

Is designed for use in constructions where there is no fire resistance contribution from the ceiling layer. This system is, therefore, particularly suited to upgrade constructions with sacrificial ceilings e.g. lath and plaster.

The material is supplied at 90mm thickness and provides REI 60 for joist centres up to 450mm, as detailed in Warringtonfire Assessment WF532698.

FF-NPC60WJ

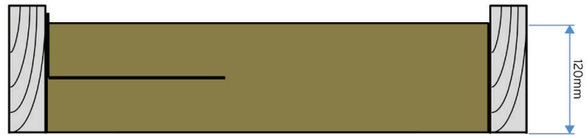
As above but designed to accommodate wider joist centres. The material is supplied at 120mm thick and the arrangement provides REI 60 for joist centres up to 600mm as detailed in UL-EU Certificate Number UL-EU-01247-CPR.

FF-PC60WJ

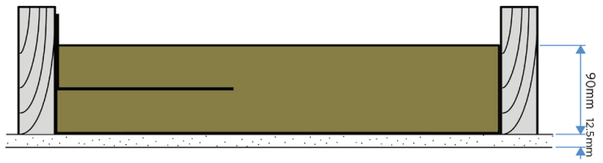
Used in constructions with one layer of min. 12.5mm Type A plasterboard (EN520) fixed to the bottom of the floor joists using min 38mm long screws at 230mm centres. The material is supplied at 90mm thick and the arrangement provides REI 60 for joist centres up to 600mm as detailed in UL-EU Certificate Number UL-EU-01247-CPR.

1

2



3



1 FF-NPC60

2 FF-NPC60WJ

3 FF-PC60WJ

Fire performance

Siderise firefloor has a reaction to fire of A1 to EN 13501-1.

Siderise firefloor systems are suitable for installations where a fire resistance classification of up to REI 60 is required.

Siderise firefloor systems have been tested to EN 1365-2 and classified against EN 13501-2. The tested configurations featured joists that were 45mm x 195mm. The floor assembly to which the system is fitted must be in good condition and comply with the requirements of I.S. EN 1995-1-2:2004.

Details of the tested and assessed assemblies are contained within UL-EU Certificate No UL-EU-01247-CPR and Warringtonfire Assessment WF532968 and are summarised in the table below.

TABLE 1 : Firefloor fire performance

Fire resistance, joist centres and bracket types

Product type	Barrier size	Load	Fire Resistance	Joist centres	Bracket requirements	Ceiling type
	Thickness (mm)	kN/m²	Loadbearing, Integrity & Insulation	(mm)	Per 1200mm	
FF-NPC60	90	1.06	REI 60	Up to 450	3 no B355	Ceiling provides no fire resistance (e.g. lath, plaster)
FF-NPC60WJ	120	1.18	REI 60	Up to 600	3 no B355	
FF-PC60WJ	90	1.06	REI 60	Up to 600	3 no B355	One layer of min. 12.5mm Type A plasterboard (EN520) fixed to the bottom of the floor joists using min 38mm long screws at 230mm centres.

Construction: Siderise Firefloor Systems

Installation

Siderise firefloor systems are prepared and installed as follows:

- Cut the sheet into strips to provide a +20mm compression between joists. Cut in the direction as indicated on the firefloor insulation slab (Fig 1). Cut through the foil facings on both sides of the slab with a sharp knife. Carefully cut the mineral fibre with the serrated blade. Avoid a violent jagged sawing action as this will rip the foil facing, as opposed to cleanly cutting it. A bandsaw may be preferred for a quicker and cleaner cut.
- Fixing brackets are supplied in a flat form for suitable folding on site. Impale the galvanised steel B355 fixing brackets into the edge of the material at mid thickness. 3No. brackets are required per 1200mm strip (Fig.2). For FF-NPC60 & FF-PC60WJ the brackets are to be positioned with 1 No. at 150mm from each end and 1 No. centrally on the opposite face. For FF-NPC60WJ the brackets are to be positioned with 1 No. at 300mm from each end and 1 No. centrally on the opposite face.
- Compress the assembly between the joists ensuring that the bottom surface of the material is fitted flush with the soffit of the joists.
- Screw the fixing brackets to the sides of the timber joists. All joints between strips must be tightly abutted. Joints between adjacent strips must be sealed with foil tape to maintain the continuity of the smoke barrier.
- Where herringbone cross braces are fitted to the timber floor, sections of **Siderise firefloor** are cut to fit in place above and below the struts. These are held in place with the application of **Siderise Fire & Acoustic Sealant** to the mineral fibre surfaces.

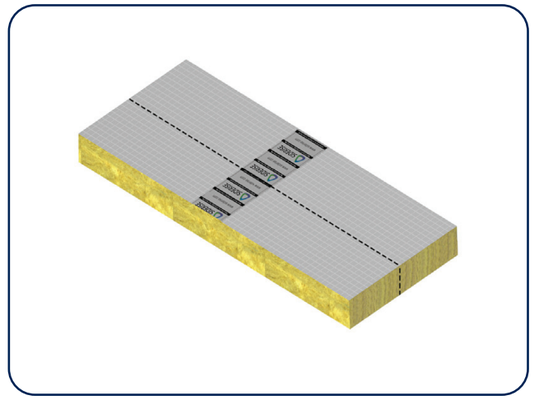


Fig 1. The cutting direction is indicated on the firefloor slab.

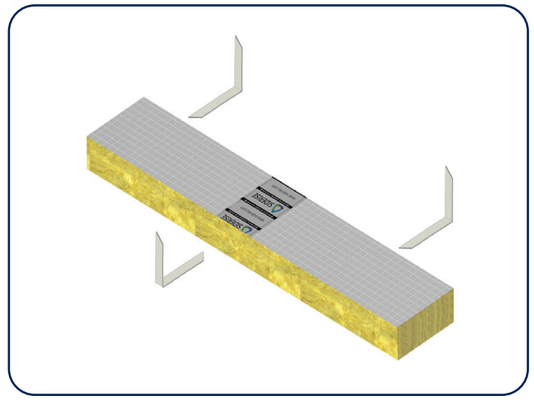


Fig 2. 3No. fixing brackets are required per 1200mm strips.

Technical specification

Form supplied	Sheets 1200 x 1200mm
Colour	Silver*
Finish	Aluminium foil
Thickness	90mm - 120mm
Fire resistance	See Table 1
Reaction to fire	A1 to EN 13501-1

NOTE: *Other options available according to ceiling finish and for joist centres up to 600mm – contact ISOPARTNER.

SIDERISE SIDERISE

Notes

Construction: Siderise Firefloor Systems

Notes

Further Information

Products available

The following products are available:

- Siderise firefloor systems:
  - FF-NPC60
  - FF-NPC60WJ
  - FF-PC60WJ
- Siderise Brackets type B355
- Foil tape T303 (45m rolls)
- Siderise Fire & Acoustic Sealant

Ordering

When ordering the following information should be provided:

- The type of floor construction.
- The width of joist spacings.
- The period of fire resistance required.
- The number of lengths or linear metres required.
- The number of fixing brackets supplied. (As standard 3No. fixing brackets are required per 1200mm strip length.)
- The number of rolls of foil tape required.

ISOPARTNER technical & sales support

Contact us by Phone **+353 (1) 8829990** or via our dedicated Fire Protection Email Address, **fire@isopartner.ie**

ISOPARTNER
Units 1-4 Keypoint
Rosemount Business Park
Ballycoolin, Dublin 11, D11 XP70
T: +353 (1) 8829990
E: fire@isopartner.ie
W: **www.isopartner.ie**

Siderise Group
Forge Industrial Estate,
Maesteg, UK, CF34 0AY
T: +44 (0)1656 730833
F: +44 (0)1656 812509
E: construction@siderise.com
W: **www.siderise.com**