

# FIREPRO

## FIRE PROTECTIVE BUILDING PRODUCTS

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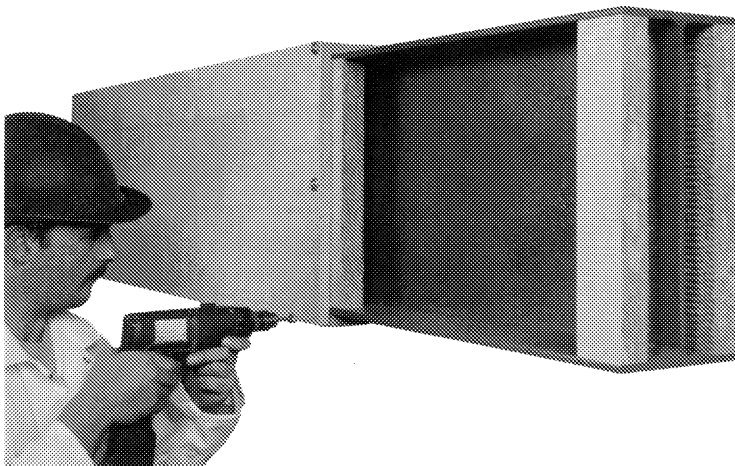
CI/SfB

B400 SPIRALITE DATASHEET - 10-12-09

Product specifications can change. Contact us to ensure you have our latest datasheet

## FIREPRO B400 SPIRALITE

### Fire Protection for Structural Steel



FIREPRO SPIRALITE is a comprehensive fire protection system for structural steel which uses a unique spiral screw fixing system method to give fast, clean and cost effective installation for up to 2 hours fire protection. This dry fixing system avoids all the associated mess and the additional labour time taken by the traditional glue method of fixing. The easy hand tool application also allows for quick visual quality control checks.

SPIRALITE is tough and durable and has excellent thermal qualities. The 200kg density board ensures a robust and resilient installation. Furthermore, SPIRALITE is vermin resistant and does not run the risk of deterioration after the area is closed off.

SPIRALITE repels moisture and does not degenerate when exposed to weather elements during construction.

SPIRALITE is lightweight, easy to handle and can be cut using a sharp knife or hand saw.

For fire rating requirements in excess of 2 hours SPIRALITE is installed using glue or stud welded techniques.

SPIRALITE is supplied with an attractive foil face covering or a tissue face.

SPIRALITE's excellent insulation qualities mean it can be used for cavity barriers and the upgrading of concrete soffits.

SPIRALITE does not require steel to be blast cleaned or primed.

- **Extremely cost effective**
- **Durable**
- **Lightweight**
- **Installation before building is watertight**
- **Installation without affecting other trades**
- **Licensed Applicators available**
- **Panels removable for inspection**
- **Steel priming not required**

*NOTE: The technical information and suggestions for use and application presented herein represent the best information available to us and are believed to be reliable. They should not however be construed as controlling suggestions and there is no warranty of performance of our materials either expressed or implied. We urge that users of our materials conduct confirmatory tests to determine final suitability for their specific end uses. All dimensions are nominal. We reserve the right to make changes or to withdraw designs and products without notice.*

# FIREPRO SPIRALITE

## Fire Protection for Structural Steel (continued)

### BOARD

**STANDARD SIZES:** 2200 x 1200mm for 20, 30 and 40mm thicknesses. All other thicknesses: 1800 x 1000.

**DENSITY:** Nominal 200kg/m<sup>3</sup>

**COMPOSITION:** Spiralite is a compressed mineral fibre produced from processing volcanic diabase ore, using a phenolic resin as a binder. A full chemical analysis can be made available.

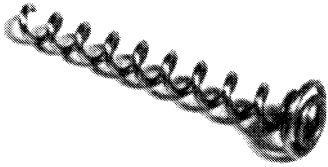
Spiralite is manufactured to BS3958 Part 5, 1986 Specification for bonded man-made mineral fibre slabs. It is supplied with either a glasswool scrim or aluminium foil facing.

### PERFORMANCE AND PROPERTIES

**FIRE RESISTANCE:** Assessment to AS1530.4 2005 BRE Global Ltd Assessment CC10786.  
Fire Tested to BS476.21

**FIXING METHODS:** Fixing methods include the following: (see separate datasheet for the appropriate steel sections and fire rating periods.)

Screw fix - for up to 2 hours fire protection. The boards secured using specially formed screws.



Adhesive fix - for up to 4 hours fire protection. The boards are glued with Rockbond WR adhesive and pinned with wire nails to facilitate retention whilst the adhesive cures.

Pin fix - for all fire resistance periods the boards may be impaled on 3mm diameter stud welded pins and retained with non-returned washers.

**SPREAD OF FLAME:** Class 1 in accordance with BS476 Part 7.

**FIRE PROPOGATION:** Index 1 less than 12, index 1 less than 6 in accordance with BS476 Part 6.

**CLASSIFICATION:** Class 0 in accordance with Building Regulations Document B.

**SMOKE EMISSION:** Ao (ON) less than 0.5. Ao (Off) less than 0.5 in accordance with BS6853 Appendix B.

**CHEMICAL:** Spiralite fibres are chemically inert. An aqueous extract of the slab is neutral or slightly alkaline. The board is compatible with all known materials.

**BIOLOGICAL:** Spiralite is vermin and rot proof and will not encourage the growth of fungi or bacteria.

**DURABILITY:** Moisture condensing from the air within Spiralite is less than 0.02% by volume at 95% relative humidity. It does not expand or contract with changing temperatures or humidity. Spiralite is not affected by adverse weather conditions and is therefore suitable for use in humid, wet or cold climates.

**COMPRESSIVE STRENGTH:** Less than 4% compression at 10kPa.

**THERMAL CONDUCTIVITY:** 0.0371 W/mK at 10°C.

**FIBRE LOSS:** Spiralite can be used in Air Plenums. Tested in accordance with ASTM E859-8 with air velocities up to 12 m/s.

**TOXICITY:** Toxicity index 2.17 in accordance with NES713. (For installation instructions and fire rating thickness schedules see separate technical datasheets which are available on request.)

### ADVANTAGES:

The success of the Spiralite System is due in part to its simplicity. It is a low cost, effective method for fire protection and insulation. Furthermore, it is fast and simple to erect and has a number of benefits which overcome some of the disadvantages of other proprietary products.

**NO WINTER DELAYS** - it can be fixed on open construction sites in wet or freezing conditions.

**NO MASKING OR MESS** - Spiralite is a dry fix system.

**NO COMPATABILITY PROBLEMS** - it is unaffected by the condition of the substrate for a sound fixing.

**NO CURING TIME** - installation is complete in one operation by a single tradesperson.

**NO PROGRAMME CONSTRAINT** - it can be scheduled as a concurrent activity with other trades.

**NO ADDITIONAL COSTS** - access to substrate for new attachments or penetrations or inspections can be achieved without sacrificing the original material. Likewise, in the event of damage, Spiralite can be easily replaced using the original screws.

**NO HIDDEN DETAIL** - Spiralite screws are identifiable after installation, so site inspection and quality control are made easier.

**EASY TO CUT** - Spiralite is easy to cut on site using a knife or handsaw. Lightweight to handle and install.

**SPIRALITE SCREW FIX SECTION FACTOR (Hp/a)  
TABLE - (see separate table for Glue Fix)**

