

## Technical Specifications for GRP Sandwich Boards

### General Description

Re-Core Composite Sandwich panels are manufactured by press bonding GRP onto a range of core materials to produce an attractive, yet functional, cladding / infill solution for a wide variety of new build and refurbishment applications.

### Weight of Panel

Thickness [mm]	Weight [kg/m <sup>2</sup> ]
24 (ply)	18.11
24 (foam)	9.00
48 (foam)	11.00
57 (foam)	13.00

### Fire Resistance

Products can be manufactured to different degree of fire resistance:

1. General Purpose (GP grade – all products)
2. BS 476 Part 7 Class 1 (surface spread of flame, all products)
3. BS 476 Part 6 Class 'O' (heat release, all products)
4. BS 476 Part 7 Class 2 (surface spread of flame, all products)
5. Phenolic

### Surface Finishes

Standard surface finishes include:

1. Smooth / Crinkle
2. Smooth / Smooth
3. Smooth / Leatherette
4. Crinkle / Crinkle
5. Smooth / Resotex
6. Leatherette / Leatherette

### Thermal Co-Efficient of Expansion

$30 \times 10^{-6} / \text{Deg C}$

*Note: Compared with many other plastics GRP has minimal expansion and contraction characteristics and will not bow and warp in extremes of temperature.*

## Colour Range

Black, grey and yellow colour as a standard. Although panels can be manufactured to the following:

1. B.S. 4800 Colour Range
2. B.S. 5252 Colour Range
3. RAL Colour Range

A colour match service is also available.

## Flexural Strength

193 MPa

*Note: Flexural strength can be enhanced by the addition of woven reinforcement if required.*

## Thermal Conductivity

**Relinea's GRP:** 0.2 w/mK

**Re-Core:** The thermal conductivity is entirely dependent on the chosen substrate, but better than 0.35 "U" value is achievable.

## Tensile Strength

123MPa

## Tensile Modulus

7.1 GPa

*Note: GRP sheet is up to seven times stronger than mild steel on a weight for weight basis.*

## Size & Thickness

Panels can be manufactured to a length of 3,300mm and a width of 1,525mm. Standard product range can be manufactured with either a plywood or Styrofoam filling – or even a mixture of both, and sometimes also includes a sheet of diamond mesh reinforcement. Thicknesses vary from 9mm to 100mm.

