



TimbPlas®

INTRODUCTION

TimbPlas is a vinyl based cellular thermoplastic extrusion developed by Rocal Extrusion as a direct replacement for timber in a range of applications. It offers most of the advantages of timber whilst removing many of the disadvantages.

FEATURES

- Lightweight - can be manufactured to SG of between 0.3 and 0.7
- Unaffected by moisture
- Resistant to changes in temperature
- Available in any length
- Perfectly square and uniform
- Will not rot
- Offers good screw fixing
- Good adhesion to a wide range of surfaces

MANUFACTURING

Customised rebated profiles available. In house dies manufactured to bespoke profiles. Can be manufactured to specific weight requirements. Available wrapped in decorative vinyl and paper finishes. Manufactured to a tolerance of +/- 0.25 mm

PROPERTIES

THERMAL

Vicat Softening point (unblown surface)
ISO 306 5kg 73 °C

Congo Red HS
180°C 90mins

Service temperature
-10 to 55 °C

Coefficient of Linear Thermal Expansion
ASTM D-1525 6.4x10⁻⁵ cm/cm°C

Thermal Conductivity
ASTM D-696 0.07 W/mK

MECHANICAL

Flexural Modulus
ISO 178 25-1000* N/mm²

Tensile Strength @ Yield (10mm/min)
ASTM D-638 5-12* MPa

Elongation @ Break (10mm/min)
ASTM D-638 5-20* %

Impact (Charpy)
ASTM D-256 5-20* J/m

Direct Nail Withdrawal
ASTM D1761 100-280* N

Direct Screw Withdrawal
ASTM D1761 500-1400* N

ELECTRICAL

Surface Resistance
ASTM D-257 5x10¹⁵ Ohm

Volume Resistivity
ASTM D-257 2x10¹⁶ Ohm-cm

*Range given as products tested are both "skinned" (via Celluka process) and "unskinned", with a density range of 0.35 to 0.6 g/cm³.