ULTIMA

Aluminium Spandrel Panels

TECHNICAL DATA SHEET

ULTIMA Aluminium Spandrel Panels with PPC finish

Fire Performance

Reaction to fire: A2-s1,d0 to EN13501-1

Field of Application:

Component	Covered within A2-s1,d0 classification
Outer Skin	Coating – PPC (any colour) Material – Aluminium Thickness – 2mm to 4mm
Insulation	Fabrock mineral wool insulation Thickness 16mm to 100mm
Inner Skin	Coating - PPC (any colour) OR mill finish Material - Aluminium Thickness - 1 to 2mm (mill finish) 2 to 4mm (PPC finish) -OR- Material - Galvanised Steel Thickness - 1mm to 2mm
Perimeter Edge	With or without perimeter edge 1. With – Ultima A1 Hard Edge 2. Without – Fabrock extending to edges of panel
Total Panel Thickness	As tested +/- 15% Minimum (Aluminium out and in) = 17mm Maximum (Aluminium out and in) = 124mm
Panel Construction	Adhesive - Vacuum bonded

Impact Resistance

Metalline's ULTIMA spandrel panels have been impact tested in accordance with CWCT TN75/76 (soft body and hard body impacts) achieving the highest classification.

Panels Tested:

1. ULT 1 - 28mm overall thickness 3000mm wide x 1500mm high
2. ULT 2 - 100mm overall thickness (28mm thick glazing boarder) 3000mm wide x 1500mm high

Tested at the Vinci Technology Centre (November 2023)

Soft Body Impacts

120 J Serviceability	350 J Safety	500 J Safety
Class 1	Negligible risk	Negligible risk

Hard Body Impacts

3 J Serviceability / Safety	6 J Serviceability	10 J Serviceability / Safety
Class 1 / Negligible risk	Class 1	Class 1 / Negligible risk

Wind Resistance

Metalline's ULTIMA spandrel panels have been tested in accordance with CWCT standards for wind resistance.

1. Resistance to wind load – deflection
2. Wind resistance – safety

Serviceability = 2400 Pascals (positive and negative)

Safety = 3600 Pascals (positive and negative)

Ultimate = Wind resistance to failure (or up to 4500 Pascals)

Panels Tested

1. ULT1 - 28mm overall thickness 3000mm wide x 600mm high (3mm outer / 2mm inner)
2. ULT1 - 28mm overall thickness 3000mm wide x 1000mm high (3mm outer / 2mm inner)
3. ULT1 - 28mm overall thickness 3000mm wide x 600mm high (2mm outer / 2mm inner)
4. ULT1 - 28mm overall thickness 3000mm wide x 1000mm high (2mm outer / 2mm inner)
5. ULT1 - 28mm overall thickness 3000mm wide x 2000mm high (2mm outer / 2mm inner)
6. ULT1 - 28mm overall thickness 3000mm wide x 2000mm high (3mm outer / 2mm inner)
7. ULT1 - 28mm overall thickness 3000mm wide x 1500mm high (2mm outer / 2mm inner)
8. ULT1 - 28mm overall thickness 3000mm wide x 1500mm high (3mm outer / 2mm inner)

Serviceability & Safety

All panels successfully passed serviceability and safety testing in line with CWCT standards.

Wind resistance to failure (or up to 4500 Pascals)

Panels 1, 2, 3, 4, 6, 7 & 8 reached 4500 Pascals. Panel 5 reached 4200 Pascals.