

# Roofspan

# **Product Data Sheet**

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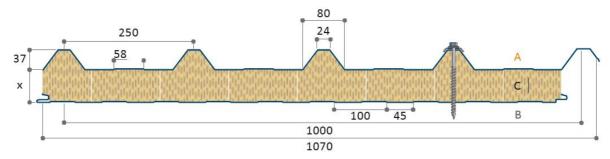












# **Application**

Roofspan is a stone wool composite roof panel with trapezoidal metal outer sheet and metal liner. The panels are a 37.250.1000 profile, and can be applied to structure with a minimum 5° pitch (post deflection).

## **Panel Technical Properties**

Roofspan												
Thickness	mm	50	80	100	120	150	175	200				
Weight	kg/m²	16	19	21	23	26	28.5	31				
Thermal	W/m²K	0.76	0.50	0.40	0.34	0.28	0.24	0.18				
Acoustic	dB	29	31	33	34	35	37	38				
Fire	mins REI		60	120	120							

Fire Resistance is limited to purlin centres of 2095mm and below.

# **Standard Specification**

- 1000mm module width
- Lengths available from 2,500mm to 14,000mm
- Trapezoidal metal outer sheet **37.250.1000** profile
- S280GD steel sheet, outside: 0.70mm / inside: 0.50 mm
- Available in TATA Prisma and TATA HPS200 Ultra finishes offering up to 40 years Confidex guarantee
- End lap available in 80mm-280mm. MCRMA recommends 150mm.
- Non-Combustible high density mineral wool core 100kg/m³
- Stone wool core offers 0.044 W/mK thermal conductivity
- CE-marked to EN 14509
- Reaction to Fire, Euroclass A2,s1-d0 according to EN 13501-1















## **Panel Performance**



### **Spans to Pressures Loads**

Thickness	50 mm		80 mm		100 mm		120 mm		150 mm		175 mm		200 mm	
kN/m2	single	multi												
0.50	3,75	2,55	5,00	3,95	5,00	4,55	4,80	4,10	5,00	4,85	5,00	5,00	5,00	5,00
0.75	2,75	1,80	3,55	2,70	4,20	3,35	3,35	2,80	4,03	3,50	4,59	4,00	5,00	4,50
1.00	2,20	1,50	2,80	2,10	3,25	2,55	2,60	2,05	3,13	2,65	3,53	3,11	3,95	3,50
1.25	1,90	-	2,35	1,70	2,70	2,05	2,20	1,65	2,58	2,05	2,89	2,46	3,20	2,85
1.50	1,65	-	2,05	1,50	2,30	1,75	1,90	1,50	2,20	1,73	2,45	2,04	2,75	2,35
1.75	1,50	-	1,80	-	2,05	1,50	1,70	-	1,95	-	2,16	1,75	2,40	2,00
2.00	-	-	1,65	-	1,85	-	1,55	-	1,75	-	1,91	-	2,15	1,75
2.25	-	-	1,55	-	1,70	-	-	-	1,60	-	1,76	-	1,95	1,55
2.50	-	-	-	-	1,55	-	-	-	1,45	-	1,61	-	1,75	1,40



## **Spans to Suction Loads**

Thickness	50 mm		80 mm		100 mm		120 mm		150 mm		175 mm		200 mm	
kN/m2	single	multi												
0.50	5,00	5,00	5,00	5,00	5,00	5,00	5,00	5,00	5,00	5,00	5,00	5,00	5,00	5,00
0.75	5,00	3,70	5,00	4,70	5,00	5,00	5,00	5,00	5,00	5,00	5,00	5,00	5,00	5,00
1.00	3,70	2,75	5,00	3,80	5,00	4,25	5,00	4,65	5,00	5,00	5,00	5,00	5,00	5,00
1.25	3,00	2,25	4,45	3,25	5,00	3,70	4,30	3,75	5,00	4,55	5,00	4,93	5,00	5,00
1.50	2,50	1,80	3,70	3,00	4,45	3,30	3,55	3,10	4,48	3,85	4,94	4,44	5,00	4,55
1.75	2,20	1,65	3,20	2,45	3,80	3,00	3,05	2,60	3,80	3,25	4,46	3,86	5,00	4,00
2.00	2,00	-	2,80	2,15	3,35	2,65	2,70	2,25	3,30	2,83	3,88	3,34	4,40	3,45
2.25	1,85	-	2,55	1,90	3,00	2,35	2,40	2,00	2,95	2,50	3,40	2,91	3,85	3,05
2.50	1,70	-	2,30	1,70	2,70	2,10	2,20	1,75	2,65	2,23	3,06	2,61	3,45	2,70

As shown above, the maximum span considered is 5000mm, and minimum purlin centres considered were 1500m.

For example, a 100mm thick panel with purlin centres at 1500mm would withstand a wind load of  $1.75 \, \text{kN/m}^2$  of pressure and over  $2.50 \, \text{kN/m}^2$  of suction pressure.



















## **Installation Method Statement**

- Scrape out the insulation from the end lap of the sheets and remove the plastic strip from the underside of the top sheet.
- Remove the protective film from the liner side of the panel.
- Flip the panel using the Rotaboy to ensure that the panel top sheet is facing up.
- Install scalloped flashing into end of panel and fix to the underside of the panel.
- Remove the protective film from the top sheet of the panel.
- Attach the Rotaboy to the panel and lift panel to attach safety strops.
- Ensure all air seals have been applied to the roof structure where applicable.
- Ensure that side lap seal and end lap seals if applicable have been applied to existing panel on roof.
- Lift the panel onto the roof, remove the safety strops and position the hollow corrugation so that it sits over the corrugation of the existing panel.
- Once correctly positioned lower the panel onto the purlins which will cause the panel to rotate and engage the male/female joint on the liner side.
- Fix the panels in every crown using the specified fixing complete with storm washer (except on the leading edge filled corrugation).
- · Remove the vacuum lifter.
- Stitch the side laps at 450mm centres.
- Stitch the end laps where applicable.
- Apply a continuous 6x5mm butyl tape along the filled corrugation on the edge of the sheet to form the air and weather seal.
- Apply 2 continuous runs of 6x5mm butyl tape following the top sheet profile across the panel module at 20mm and 70mm from the position of the cut edge of the sheet that will end lap onto the installed sheet.
- Apply a continuous run of 6x5mm butyl tape following the top sheet profile across the panel module at 30mm from the cut edge of the installed sheet.
- Repeat process as necessary ensuring that the installation sequence is followed.





















## **Typical Specification – NBS Style**

H43 Metal composite panel cladding/ covering To be read with Preliminaries/ General conditions.

TYPES OF CLADDING/ COVERING SYSTEM

- 120 METAL COMPOSITE PANEL Euroclad Group Limited Roofspan
  - Support structure: Purlin and support centres to be advised or approved by Eurobond.
    - Bearing width: 60mm.
    - Pitch: No pitch lower than 5 degrees post deflection.
  - · Panels:
    - Manufacturer: Eurobond Laminates Limited. Product reference: Roofspan.
    - External facing material: 37mm Trapezoidal profile Colorcoat HPS200 Ultra, or Colorcoat Prisma. Substrate must be ZA275 Galvalloy hot-dip zinc coated steel to BS EN 10326. Metal thickness to be a nominal 0.7mm (including zinc).

Finish: TATA Steel Prisma or HPS200 Ultra

Colour: External sheet colour, from the TATA Steel Prisma or HPS200 Ultra range.

- Internal facing material: 0.5mm or 0.7mm TATA Steel Colorcoat. Finish: Various profiles available.

Colour: RAL 9010.

- · Core insulation: Stone wool core.
- Panel thickness: Ranging from 50mm to 200mm not including 37mm trapezoidal profile.
- Accessories: As required to complete installation.
- Primary fasteners: Stainless steel self drilling, self tapping, high thread tek screw with 19mm washer.
  - Number and location of fasteners: Minimum of one fastener per crown, per fixing location, dependent upon wind loading.
- End laps size (minimum): Available from 80mm to 280mm, but typically 150mm as set out by MCRMA.
- · Sealing laps.
  - End laps: Two rows of partially cross linked 6x5mm butyl rubber sealant.
  - Side laps: One row of partially cross linked 6x5mm butyl rubber sealant.
- · Stitching laps:
  - End laps: One per crown, 30mm up from edge.
  - Side laps: 450mm centres as per MCRMA guidelines.
- Special features: Profiled closure flashings required at cut edge above gutter.

#### FIXING CLADDING/ COVERING

- 215 PAINTING STRUCTURE
  - Sequence: Paint outer surface of supporting structure before fixing cladding/ covering.
- 219 FASTENERS
  - Unspecified fasteners: Recommended for the purpose by the cladding/ covering manufacturer.
- 221 FITTINGS AND ACCESSORIES
  - Unspecified fittings and accessories: Recommended for the purpose by the cladding/ covering manufacturer.
- 223 PREVENTION OF ELECTROLYTIC ACTION
  - Isolating tape: Type recommended by cladding/ covering manufacturer.
    - Location: To contact surfaces of supports and sheets of dissimilar metals.

















#### 275 CONTINUITY THERMAL INSULATION

- Material: Stone wool minimum density 23kg/m3.
  - Manufacturer: N/A.
     Product reference: N/A.
- · Recycled content: Contractor's choice.
- Installation: Secure and continuous with cladding/ covering insulation.

#### 410 FIXING PANELS AND SHEETS GENERALLY

- Cut edges: Clean true.
- Penetrations: Openings to minimum size necessary.
  - Edge reinforcement: Dependent on penetration Contact Eurobond.
- Orientation: Exposed joints of side laps away from prevailing wind unless shown otherwise on drawings.
- Panel and sheet ends, laps and raking cut edges: Fully supported and with fixings at top of lap.
- Fasteners: Drill holes. Position at regular intervals in straight lines, centred on support bearings.
  - Position of fasteners in oversized drilled holes: Central.
  - Fasteners torque: Sufficient to correctly compress washers.
- Debris: Remove dust and other foreign matter before finally fixing panel and sheets.
- Completion: Check fixings to ensure weathertightness and that panels and sheets are secure.
- · Cut edges: Paint to match face finish.

#### 419 FIXING PLASTICS CLADDING/ COVERING

- Crown fixing: For panels/ sheets with a profile depth greater than 20 mm, support crowns at primary fasteners with profile fillers.
- Fastener holes: Sized in accordance with sheet manufacturer's recommendations.
- End laps between plastics sheets: Use two strips of sealant tape, one along each edge of lap.

#### 480 FLASHINGS/ TRIMS GENERALLY

- Lap joint treatment:
  - Vertical and sloping flashings/ trims: End laps to be same as for adjacent panels.
  - Horizontal flashings/ trims: End laps to be 150 mm, sealed and where possible arranged with laps away from prevailing wind.
- Method of fixing: To structure in conjunction with adjacent panels. Otherwise to panels.
  - Fasteners: Eurobond to advise recommended suppliers.

#### 550 SEALING EXTERNAL LAPS

- Sealant tape: Types recommended by panel/ sheet manufacturer.
- Position of tape: Below fixing positions in straight unbroken lines, parallel to and slightly back from edge of panel/ sheet.
- Seal quality: Effective, continuous and not over compressed.
- End laps: Sealant tape positions:
  - Single line tape: Immediately below line of fasteners.
  - Second line tape (where specified): Slightly set back from the edge of external sheet.
- Side laps: Sealant tape positions:
  - Single line tape: Outside line of fasteners.









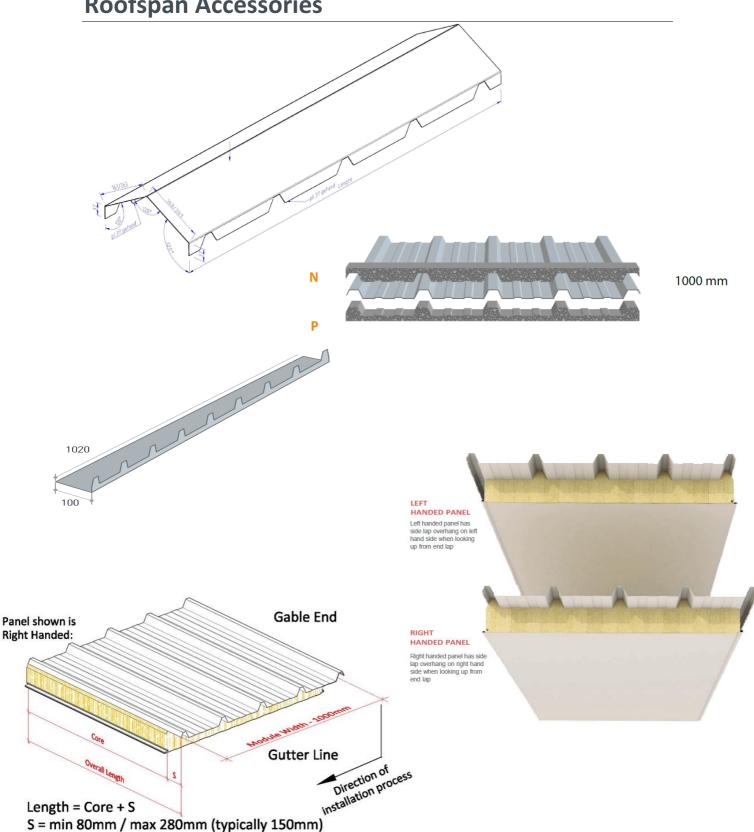






- Second line tape (where specified): On other side of fasteners.

# **Roofspan Accessories**



#### **Euroclad Group Ltd**



