

LiteSpan

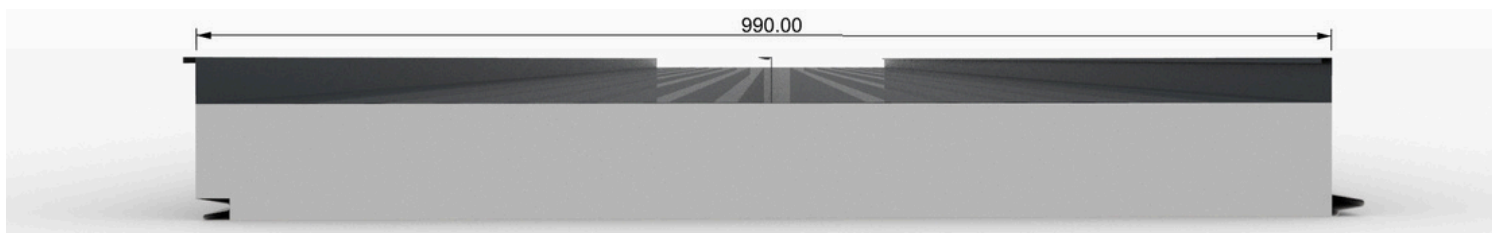
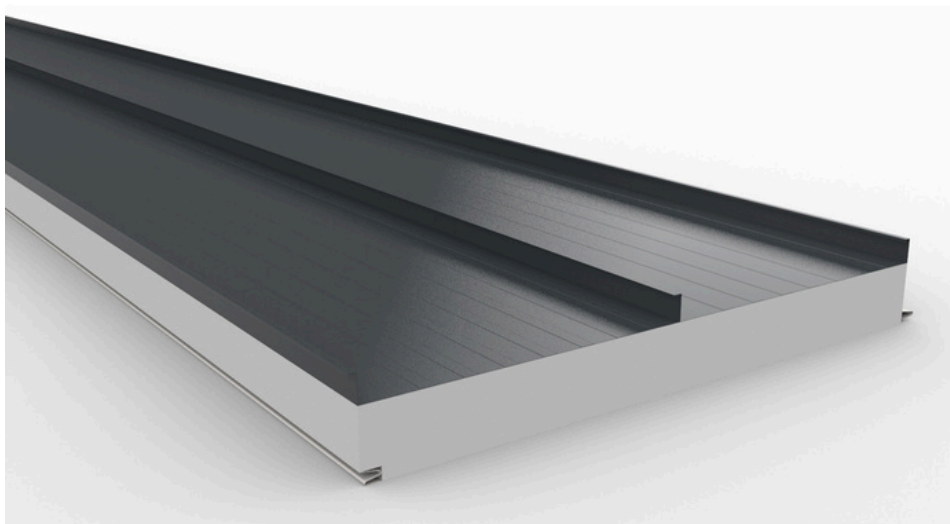
990 Standing Seam (SS) Roof Panel

Product details:

LiteSpan® is a 990mm wide composite roof panel comprising top and bottom coated galvanized coated steel sheets, with a sandwiched insulation and rigid polystyrene core. The insulation core consists of Fire Retardant Expanded Polystyrene. The bottom side of the roof panel utilizes a tongue-and-groove system to ensure an airtight solution. The 990SS roof panel has a 990mm (2 x 495mm) standing seam profile with intermediate pleats on the topside and a flat or micro pleated ceiling at the bottom side.

990SS roof panel characteristics:

- Panel width or coverage: 990mm
- Steel sheet thickness: 0.3-0.58mm
- Panel length: Function of polystyrene core depth
- FRCel® Fire Retardant Expanded Polystyrene with a B1 fire rating: SANS 10177-11
- R-value: (see R-value table)
- Loading: (see span lengths table)
- Fixing: Hidden with clips to roof structure; Seaming required on site



Thermal performance/Structural Performance

Panel core depth (mm)	Installed R-value (W.m ² /K)	*Max unsupported length (m)
75mm	2.3	5.0
100mm	3.0	6.5
125mm	3.7	7.5
150mm	4.4	8.0

Thermal performance of the product is measured by its R-value. The R-value is a function of the depth of the panel. A deeper section with the same thermal conductance will yield a higher R-value.

Structural performance of the product is a function of the depth of the roof panel. A deeper section has decreased deflection and therefore an increase in unsupported length. *This value is based on a "+" live and dead load combination loadcase of 1.8kPa. Depending on the site conditions and building layout, a "-" wind load loadcase may possibly be the critical loadcase and should therefore be investigated by a competent engineer and designed accordingly.