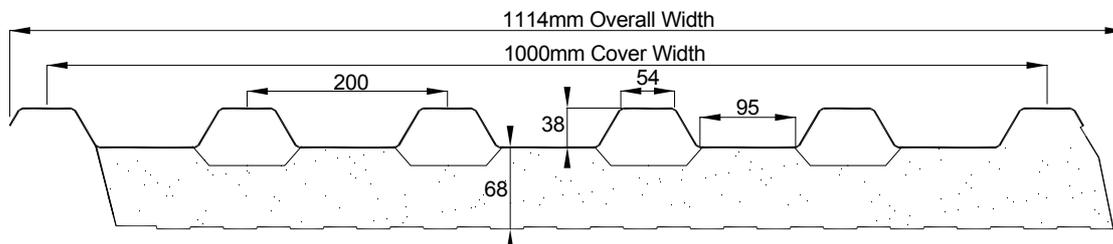


Product Data Sheet

Product: KS1000SA - Sol-Air Integrated insulated passive solar heating wall panel system.

APPLICATION

The KS1000SA insulated wall system can be laid vertically and is suitable for all building applications.



Weight

Insulation core thickness (mm)	68
Overall dimension (mm)	106
Weight kg/m ² 0.5/0.4 steel	11.5

PRODUCT TOLERANCES

Cut to Length	-5mm	+5mm
Liner Sheet Length	-5mm	+5mm
Cover Width	-2mm	+2mm
Thickness	-2mm	+2mm
End Square	-3mm	+3mm

AVAILABLE LENGTHS

Standard lengths 1.8 to 12 metres. 12 to 15 metres can be supplied but may be subject to a transport surcharge.

Panels less than 1.8m long, which require a cut back can be provided, but will be charged at full 1.8m price, plus cutting cost.

PANEL END CUT BACK

All panels are normally produced with a minimum cut back of 25mm. Cut backs up to 175mm can also be manufactured. If flush ended panels (no cut back) are required they can be manufactured with one end flush and a 25mm cut back on the opposite end, based on panels exceeding 1.8m in length. The recommended cut back for panel end lapping is 100mm for vertically laid applications. Panels less than 1.8m long, which require a cut back can be provided, but will be charged at full 1.8m price, plus cutting cost.

MATERIALS - STEEL

Substrate

- S220GD+ZA hot-dip zinc alloy coated steel to BS EN10214: 1992.
- Standard external sheet thickness 0.5mm. Standard internal sheet thickness 0.4mm.

Coatings - External Weather Sheet

- Kingspan XL Forte pre-painted colour coated system applied to the weather side of the panel. Designed to achieve high levels of durability and colour stability, is highly resistant to damage in transit and on-site.
- Available standard colour is Anthracite RAL 7016, others available.
- Reverse side of sheet coated with a light grey polyester coating.

Coatings - Internal Liner Sheet

- ▽ Polyester: 15 micron thick coating developed for use for the internal lining of insulated panels. Standard colour is "bright white" with an easily cleaned surface.

Product Data Sheet



INSULATION CORE

Polyisocyanurate (PIR): with zero ozone depletion (Zero ODP).

PERFORMANCE

Thermal Insulation

Insulation core thickness (mm)	68
Thermal transmittance (W/m ² K)	0.35

Passive Solar Heating

The KS1000SA Sol-Air Integrated has a capacity to provide passive solar heating to a building upon which it is installed. This is essentially made possible, due to the provision of evacuated hex profiles, formed adjacent to the insulated panels' solar absorbent, external steel skin. Air flow is induced to flow through these evacuated channels harvesting solar energy collected by the panels' external surface. This heated air can be delivered into the building providing an effective supplementary renewable energy heating system.

Biological

Kingspan panels are normally immune to attack from mould, fungi, mildew and vermin. No urea formaldehyde is used in the construction, and the panels are not considered deleterious.

Fire

The external and internal faces of the panel to be Class 0 in accordance with the Building Regulations when tested to BS476: Parts 6: 1989 and Part 7: 1987.
The panel must be rated SAA when tested to BS476: Part 3: 1975.

Acoustic

The panels have a single figure weighted sound reduction $R_w = 25\text{dB}$.

Air Leakage

Overall air leakage for complete envelope less than $10\text{m}^3/\text{m}^2/\text{hr}$ at 50Pa.

QUALITY & DURABILITY

Kingspan Insulated Panels are manufactured from the highest quality materials, using state of the art production equipment to rigorous quality control standards, complying with ISO9000 standard, ensuring long term reliability and service life.

GUARANTEES & WARRANTIES

Kingspan will provide external coating and product warranties and guarantees on an individual project basis.

PACKING

Standard Packing

KS1000SA panels are stacked weather sheet to weather sheet (to minimise pack height). The top, bottom, sides and ends are protected with foam and timber packing and the entire pack is wrapped in plastic.

The number of panels in each pack are:

Insulation core thickness (mm)	68
	10

Typical pack height is 1100mm.

DELIVERY

All deliveries (unless indicated otherwise) are by road transport to project site.
Off loading is the responsibility of the client.