

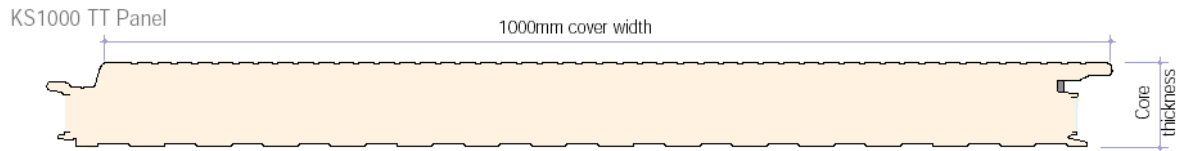
# Product Data Sheet



## Product: KS1000 TT Thermatile System

### APPLICATION

The KS1000 TT Thermatile is an insulated liner panel, which is used in conjunction with Kingspan/Agrob Buchtal terracotta rainscreen system.



### DIMENSIONS & WEIGHT

<b>Core Thickness (mm)</b>	70	80
<b>Weight kg/m<sup>2</sup> 0.63/0.4 steel</b>	12.5	12.9

### PRODUCT TOLERANCES

Length	-5mm	+5mm
Width	-2mm	+2mm
Thickness	-2mm	+2mm
End Squareness	-3mm	+3mm
Flatness (per metre)	-2mm	+2mm

### AVAILABLE LENGTHS

Standard lengths 1.8 to 12metres. Panels less than 1.8m long can be supplied and are subject to an extra charge.

These panels cannot be end lapped.

### MATERIALS - STEEL

#### **Substrate**

- Galvatite, hot-dipped zinc coated steel to BS EN 10147: 1992. Grade Fe E220G with a Z275 zinc coating.
- Standard external sheet thickness 0.63mm, standard internal sheet thickness 0.4mm.

#### **Coatings - External Sheet**

- Plastisol: 200 micron thick coating. Colour is Goosewing Grey.
- Reverse side of sheet coated with a light grey polyester coating.

#### **Coatings - Internal Food & Hygiene Safe Liner**

- Lining Enamel: 15 micron thick coating developed for use for the internal lining of insulated panels. Standard colour is "bright white" with an easily cleaned surface.
- Reverse side of sheet coated with a light grey polyester coating.

### INSULATION CORE

- Polyisocyanurate (PIR): with zero ozone depletion (Zero ODP). Available in LPCB insurer approved FIRCsafe certified product range, please contact **Kingspan Technical Design Bureau**.

### SEALS

#### **Factory Applied Side Joint Seal**

All side joints have a factory-applied seal fitted into the groove to automatically seal the joint between panels.

# Product Data Sheet



## Product: KS1000 TT Thermatile System

### PERFORMANCE

#### Thermal Insulation

Thermatile panels have a Thermal Transmittance (U value), calculated using the method required by the Building Regulations Part L2 (England & Wales) and Building Standards (Scotland), of:

<b>Core Thickness (mm)</b>	70	80
<b>U value (W/m<sup>2</sup>K)</b>	0.35	0.30

#### Fire

The steel outer and inner facings have Class 1 surface spread of flame to BS476: Part 7: 1987, and are Class 0, as defined by Building Regulations.

#### Acoustics

All Thermatile panels have a single figure weighted sound reduction  $R_w = 24$ dB.

#### Sound Reduction Index (SRI)

Frequency Hz	63	125	250	500	1k	2k	4k	8k
SRI dB	20	15	17	23	18	25	40	46

#### 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.

### 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 ISO 9001:2000 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

Kingspan wall panels are stacked horizontally (with Internal liner upward). Removable hot melt adhesive is laid between each panel. The top, bottom, sides and ends are protected with polystyrene and timber packing and the entire pack is wrapped in polythene.

The number of panels in each pack depends on panel length and weight. Typical pack height is 1100mm. Maximum pack weight 1500kg.

<b>Core Thickness (mm)</b>	70	80
<b>Panels per pack</b>	12	11

#### Sea Freight

Fully timber crated packs are available on projects requiring delivery by sea freight shipping, at additional cost. Alternatively, steel containers can be used. Special loading charges apply.

### DELIVERY

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

### SITE INSTALLATION PROCEDURE

Site assembly instructions are available from the Kingspan Field Service Department.

# Product Data Sheet



**Product: KS1000 TT Thermatile System**

## STRUCTURAL

Unfactored Load/Span Table (use calculated design windload values unfactored)

SPAN CONDITION	Core Thickness (mm)	Load Type	Uniformly Distributed Loads (kN/m <sup>2</sup> )										
			Span L in Metres										
			2.0	2.2	2.4	2.6	2.8	3.0	3.2	3.4	3.6	3.8	4.0
SINGLE SPAN	70	Pressure	4.83	4.12	3.58	3.03	2.66	2.28	2.01	1.74	1.55	1.35	1.21
		Suction	4.43	3.60	3.09	2.58	2.26	1.94	1.70	1.46	1.28	1.10	0.97
	80	Pressure	5.39	4.85	4.26	3.64	3.21	2.78	2.47	2.15	1.92	1.69	1.52
		Suction	4.98	4.03	3.46	2.88	2.53	2.17	1.93	1.69	1.52	1.35	1.23
DOUBLE SPAN	70	Pressure	5.05	4.54	4.19	3.84	3.30	2.75	2.36	1.97	1.73	1.48	1.32
		Suction	4.49	3.60	3.09	2.58	2.26	1.94	1.73	1.51	1.36	1.21	1.10
	80	Pressure	5.39	4.85	4.48	4.10	3.67	3.23	2.77	2.30	2.01	1.71	1.52
		Suction	4.98	4.03	3.46	2.88	2.53	2.17	1.93	1.69	1.52	1.35	1.23

### Notes:

- Values have been calculated using the limit state method described in the "European Recommendations for the Design of Sandwich Panels" (ECCS document No.115 2001), taking imposed loads, temperature and creep into account.
- For each value individual and combined load cases with appropriate load factors and temperatures have been Considered. These are detailed under "Structural Performance" in Building Design Section.
- The table is for dark coloured panels.
- The following deflection limits have been used:  
Pressure Loading L/100  
Suction Loading L/100
- For intermediate values linear interpolation may be used.
- The actual wind suction load resisted by the panel is dependant upon the number of fasteners used and the material of the rail.  
The fastener calculation should be carried out in Accordance with the appropriate standard, a minimum of two fasteners per support is required.  
For further advise please contact Kingspan Technical Design Bureau.
- The allowable steelwork tolerance between bearing Planes of adjacent supports is  $\pm 5\text{mm}$ .
- Load span tables for spans outside of those shown are available from the Kingspan Technical Design Bureau.