

ThermaSmart® Marine 2.0 Black Sheet

Thermal Insulation by Thermaflex®

Thermal halogen free sheet insulation product made of direct extruded, closed-cell high quality Polyolefin Elastomer foam with aluminum black foil

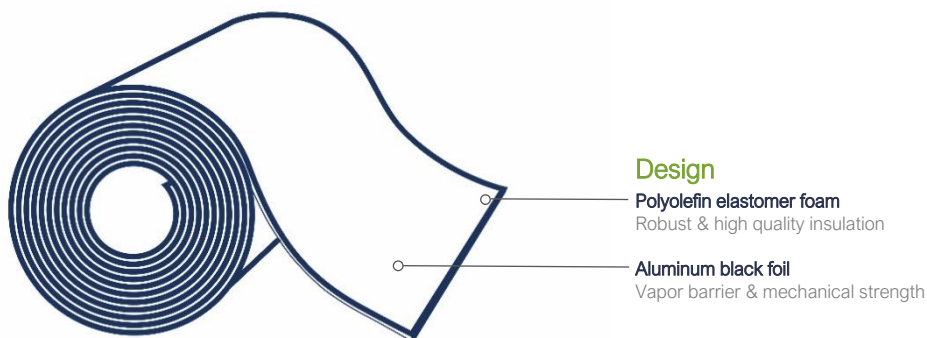


Benefits

- Consistent performance with aluminum vapor barrier
- Excellent fire rating
- High emission factor
- Halogen Free product

Applications

- Airconditioning, cooling and refrigeration
- Indoor and outdoor installation – UV protective layer
- Pipe systems, chillers, fan & coils, air handlers and tanks



Disclaimer

All recommendations and information provided on this data sheet are based on our knowledge and experience. Product specifications are intended as guidelines. Since conditions of service are beyond our control, users must satisfy themselves that products are suitable for the intended use. No guarantee or warranty is given or implied or that any use of the products will not infringe rights belonging to other parties. We reserve the right to change product design and properties without notification.



Technical Properties

Properties	Units SI	Values	Testing method
Physical properties			
Dimensional tolerances	-	Coherent	EN 14313
Density (foam)	kg/m ³	≤ 45	-
Foam structure	-	Fine, closed-cells	-
Color	-	Foam: dark grey Aluminum layer: black	-
Thermal properties			
Service temperature range	°C	-80 to +95	EN 14706
Maximum service temperature	°C	+95	EN 14707
Thermal conductivity (λ)	W/m.K	0.038 @ 40°C	EN 12667
Fire properties			
Fire rating IMO	-	Pass Pass	IMO 2010 FTP Code Annex 1 Part 5 Part 2 not required
Approvals	-	-	Lloyds Register, Bureau Veritas, DNV-GL, Rina
Water resistance properties			
Water vapor diffusion (foam)	μ	5,300	
Water vapor diffusion (assembly)	μ	>22,000 (10mm) >18,000 (13mm) >14,000 (19mm) >12,000 (25mm)	
Water absorption	kg/m ²	WS 005	EN 1609



Availability

- Standard Rolls, width 1000 mm (990 – 1010 mm)

Item Code	Wall thickness [mm]	Content [m ²]	Dimensions
Long rolls, Width = 1000 mm			
3205-010100-070	10 (8.5-11.5)	104	1m x 104m roll*
3205-013100-070	13 (11.5-13.5)	78	1m x 78m roll*
3205-019100-070	19 (16.0-20.0)	52	1m x 52m roll*
3205-025100-070	25 (22.0-26.0)	39	1m x 39m roll*
Medium rolls, Width = 1000 mm			
3205-010100-970	10 (8.5-11.5)	54	1m x 54m roll*
3205-013100-970	13 (11.5-13.5)	40	1m x 40m roll*
3205-019100-970	19 (16.0-20.0)	30	1m x 30m roll*
3205-025100-970	25 (22.0-26.0)	20	1m x 20m roll*
Short rolls, Width = 1000 mm			
3205-010100-270	10 (8.5-11.5)	10	1m x 10m roll*
3205-013100-270	13 (11.5-13.5)	8	1m x 8m roll*
3205-019100-270	19 (16.0-20.0)	6	1m x 6m roll*
3205-025100-270	25 (22.0-26.0)	4	1m x 4m roll*
Long rolls **ThermaSmart Pro LS. Width = 1000 mm			
3203-010100-004	10 (8.5-11.5)	104	1m x 104m roll*
3203-013100-004	13 (11.0-15.0)	78	1m x 78m roll*
3203-019100-004	19 (17.0-21.0)	52	1m x 52m roll*
3203-025100-004	25 (23.0-27.0)	39	1m x 39m roll*
Medium Rolls **ThermaSmart Pro LS. Width = 1000 mm			
3203-010100-904	10 (8.5-11.5)	54	1m x 54m roll*
3203-013100-904	13 (11.0-15.0)	40	1m x 40m roll*
3203-019100-904	19 (17.0-21.0)	30	1m x 30m roll*
3203-025100-904	25 (23.0-27.0)	20	1m x 20m roll*
Short rolls **ThermaSmart Pro LS. Width = 1000 mm			
3203-010100-204	10 (8.5-11.5)	10	1m x 10m roll*
3203-013100-204	13 (11.0-15.0)	8	1m x 8m roll*
3203-019100-204	19 (17.0-21.0)	6	1m x 6m roll*
3203-025100-204	25 (23.0-27.0)	4	1m x 4m roll*

Above 25 mm till 150 mm multi-layer application

* Roll may consist of 2 pieces with the total roll length as declared in the table with 1 extra meter as compensation.

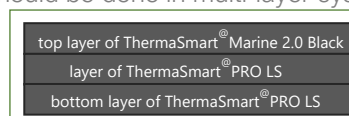
**For certification purposes ThermaSmart Pro Sheet LS can only be applied in a multilayer system. The layer on top should always be ThermaSmart Marine 2.0 black. All seams need to be covered with the ThermaSmart Marine 2.0 black ALU tape.

Please see the Thermaflex Installation manual for further instructions.*

Application thickness above 25 mm and up to 150 mm

- Applications may require larger thickness which can and should be done in multi-layer system, i.e.:

bottom layers ThermaSmart® PRO LS version
final top layer ThermaSmart® Marine 2.0 Black



- Combinations of all thicknesses from the range can be used for this with the remark that the total thickness doesn't exceed the maximum allowed 150 mm
- After installing the top layer of ThermaSmart® Marine 2.0 Black, all seams longitudinally as well as front side connections must be covered with self-adhesive ThermaSmart® Marine 2.0 Black Tape with a minimum width of 50 mm