

## ThermaSmart® PRO Tube

Thermal Insulation by Thermaflex®

Fully recyclable thermal tube insulation product made of direct extruded, closed-cell high quality polyolefin foam

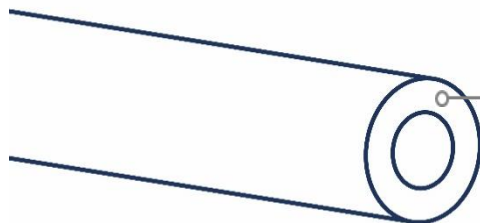


### Benefits

- Condensation free system for life-time installed by qualified insulator
- Low risk of corrosion under the insulation
- Consistent performance - Damage free, robust insulation material
- Safety - Excellent fire and smoke behavior
- Fast fabrication of fitting insulation - Welding technique up to ID42 mm
- Gain point for Green building program - Cradle to Cradle Certified™ Bronze, EPD, RoHS

### Applications

- All HVAC-R systems: Heating, Cooling, Air conditioning and Refrigeration



**Design**  
Polyolefin foam  
durable insulation material



V3.1 - 31.05.2022

**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 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
<b>Physical properties</b>			
Dimensional tolerances	-	Coherent	EN 14313
Density	kg/m <sup>3</sup>	18 - 40	-
Structure	-	Fine, closed-cells	-
Color	-	Anthracite	-
<b>Thermal properties</b>			
Service temperature range	°C	-80 to +95	-
Maximum service temperature	°C	+95	EN 14707
Thermal conductivity (λ)	W/m·K	0.035 @ 10°C 0.038 @ 40°C	EN ISO 8497
<b>Fire properties</b>			
SBI classification wall thickness 9mm - 25mm wall thickness 30mm	-	C <sub>L</sub> -s <sub>1</sub> ,d0 F <sub>L</sub>	EN 13501-1
British standard	-	Class 1	BS 476 Part 7
British standard	-	Class 0	BS 476 Part 6
Flammability standard	-	HF-1	UL94
<b>Water resistance properties</b>			
Water vapor diffusion	μ	≥ 10,000	EN 13469
Water absorption	kg/m <sup>2</sup>	0.02	EN 13472

## Availability

- Standard product length is 2 m (198-204 cm) in carton boxes (205x60x40 cm)
- Tubes without an incision

Tube Insulation				
Carrier Pipe Ø max. [mm]	Tube Insulation Ø [mm]	Insulation Wall thickness [mm]		
		6 (5.0-6.5)	9 (8.0-10.0)	13 (12.0-14.0)
6	7.0-8.5	3000-006006-000	3000-009006-000	
8	9.0-10.5	3000-006008-000	3000-009008-000	3000-013008-000
10	11.0-12.5	3000-006010-000	3000-009010-000	3000-013010-000
12	13.0-15.0	3000-006012-000	3000-009012-000	3000-013012-000
15	16.0-17.5	3000-006015-000	3000-009015-000	3000-013015-000
18	19.0-20.5	3000-006018-000	3000-009018-000	3000-013018-000
20	21.0-22.5	3000-006020-000	3000-009020-000	3000-013020-000
22	23.0-24.5	3000-006022-000	3000-009022-000	3000-013022-000
25	26.0-27.5	3000-006025-000	3000-009025-000	3000-013025-000
28	29.0-30.5	3000-006028-000	3000-009028-000	3000-013028-000
32	33.0-35.0		3000-009032-000	3000-013032-000
35	36.0-38.0	3000-006035-000	3000-009035-000	3000-013035-000
40	42.0-43.5		3000-009040-000	3000-013040-000
42	44.0-46.0		3000-009042-000	3000-013042-000
48	50.0-52.0		3000-009048-000	3000-013048-000
50	52.0-54.0		3000-009050-000	3000-013050-000
54	56.0-58.0		3000-009054-000	3000-013054-000



57	59.0-61.0	3000-009057-000	3000-013057-000
60	62.0-64.0	3000-009060-000	3000-013060-000
64	65.0-67.5	3000-009063-000	3000-013063-000
70	72.0-74.0	3000-009070-000	3000-013070-000
76	77.0-79.5	3000-009076-000	3000-013076-000
80	82.0-84.0		3000-013080-000
89	91.5-94.5		3000-013089-000
102	105.0-108.0		3000-013102-000
108	111.5-114.0		3000-013108-000
114	117.0-120.0		3000-013114-000
125	117.0-120.0		3000-013125-000

Carrier Pipe Ø max. [mm]	Tube Insulation Ø [mm]	Insulation Wall thickness [mm]		
		19 (18.0-20.0)	25 (24.0-26.0)	30 (29.0-31.0)
6	7.0-8.5			
8	9.0-10.5			
10	11.0-12.5	3000-019010-000	3000-025010-000	
12	13.0-15.0	3000-019012-000	3000-025012-000	3000-030012-000
15	16.0-17.5	3000-019015-000	3000-025015-000	3000-030015-000
18	19.0-20.5	3000-019018-000	3000-025018-000	3000-030018-000
20	21.0-22.5	3000-019020-000	3000-025020-000	3000-030020-000
22	23.0-24.5	3000-019022-000	3000-025022-000	3000-030022-000
25	26.0-27.5	3000-019025-000	3000-025025-000	3000-030025-000
28	29.0-30.5	3000-019028-000	3000-025028-000	3000-030028-000
32	33.0-35.0	3000-019032-000	3000-025032-000	3000-030032-000
35	36.0-38.0	3000-019035-000	3000-025035-000	3000-030035-000
40	42.0-43.5	3000-019040-000	3000-025040-000	3000-030040-000
42	44.0-46.0	3000-019042-000	3000-025042-000	3000-030042-000
48	50.0-52.0	3000-019048-000	3000-025048-000	3000-030048-000
50	52.0-54.0	3000-019050-000	3000-025050-000	3000-030050-000
54	56.0-58.0	3000-019054-000	3000-025054-000	3000-030054-000
57	59.0-61.0	3000-019057-000	3000-025057-000	3000-030057-000
60	62.0-64.0	3000-019060-000	3000-025060-000	3000-030060-000
64	65.0-67.5	3000-019063-000	3000-025063-000	3000-030063-000
70	72.0-74.0	3000-019070-000	3000-025070-000	3000-030070-000
76	77.0-79.5	3000-019076-000	3000-025076-000	3000-030076-000
80	82.0-84.0	3000-019080-000	3000-025080-000	3000-030080-000
89	91.5-94.5	3000-019089-000	3000-025089-000	3000-030089-000
102	105.0-108.0	3000-019102-000	3000-025102-000	3000-030102-000
108	111.5-114.0	3000-019108-000	3000-025108-000	3000-030108-000
114	117.0-120.0	3000-019114-000	3000-025114-000	3000-030114-000
125	117.0-120.0	3000-019125-000		



- In coils up to Ø28 mm and wall thickness 6-13 mm, in carton boxes (61x61x25 cm)



Tube Insulation				
Carrier Pipe Ø max. [mm]	Tube Insulation Ø [mm]	Insulation Wall thickness [mm]		
		6 (5.0-6.5)	9 (8.0-10.0)	13 (12.0-14.0)
6	7.0-8.5	3100-006006-000		
8	9.0-10.5	3100-006008-000	3100-009008-000	3100-013008-000
10	11.0-12.5	3100-006010-000	3100-009010-000	3100-013010-000
12	13.0-15.0	3100-006012-000	3100-009012-000	3100-013012-000
15	16.0-17.5	3100-006015-000	3100-009015-000	3100-013015-000
18	19.0-20.5	3100-006018-000	3100-009018-000	3100-013018-000
22	23.0-24.5	3100-006022-000	3100-009022-000	3100-013022-000
28	29.0-30.5	3100-006028-000	3100-009028-000	3100-013028-000

- Pre-fabricated parts



2-elements elbow				
Carrier Pipe Ø max. [mm]	Tube Insulation Ø [mm]	Insulation Wall thickness [mm]		
		9 (8.0-10.0)	13 (12.0-14.0)	20 (18.0-20.0)
8	9.0-10.5		3500-013008-001	
10	11.0-12.5		3500-013010-001	
12	13.0-15.0		3500-013012-001	
15	16.0-17.5		3500-013015-001	
18	19.0-20.5	3500-009018-001	3500-013018-001	
20	21.0-22.5	3500-009020-001	3500-013020-001	
22	23.0-24.5	3500-009022-001	3500-013022-001	3500-020022-001
25	26.0-27.5	3500-009025-001	3500-013025-001	
28	29.0-30.5	3500-009028-001	3500-013028-001	3500-020028-001
32	33.0-35.0		3500-013032-001	
35	36.0-38.0	3500-009035-001	3500-013035-001	3500-020035-001
38	36.0-38.0		3500-013038-001	
42	44.0-46.0	3500-009042-001	3500-013042-001	3500-020042-001
48	50.0-52.0	3500-009048-001	3500-013048-001	3500-020048-001
54	56.0-58.0	3500-009054-001	3500-013054-001	3500-020054-001
60	62.0-64.0	3500-009060-001	3500-013060-001	3500-020060-001
64	65.0-67.5	3500-009063-001	3500-013063-001	3500-020063-001
76	77.0-79.5	3500-009076-001	3500-013076-001	
89	91.5-94.5		3500-013089-001	



108	111.5-114.0	3500-013108-001
114	117.0-120.0	3500-013114-001

#### 4-elements elbow

Carrier Pipe Ø max. [mm]	Tube Insulation Ø [mm]	Insulation Wall thickness [mm]		
		9 (8.0-10.0)	13 (12.0-14.0)	20 (18.0-20.0)
8	9.0-10.5		3500-013008-041	
10	11.0-12.5		3500-013010-041	
12	13.0-15.0		3500-013012-041	
15	16.0-17.5	3500-009015-041	3500-013015-041	3500-020015-041
18	19.0-20.5	3500-009018-041	3500-013018-041	3500-020018-041
20	21.0-22.5	3500-009020-041	3500-013020-041	
22	23.0-24.5	3500-009022-041	3500-013022-041	3500-020022-041
25	26.0-27.5	3500-009025-041	3500-013025-041	
28	29.0-30.5	3500-009028-041	3500-013028-041	3500-020028-041
32	33.0-35.0		3500-013032-041	
35	36.0-38.0	3500-009035-041	3500-013035-041	3500-020035-041
38	36.0-38.0		3500-013038-041	
42	44.0-46.0	3500-009042-041	3500-013042-041	3500-020042-041
48	50.0-52.0	3500-009048-041	3500-013048-041	3500-020048-041
54	56.0-58.0	3500-009054-041	3500-013054-041	3500-020054-041
60	62.0-64.0	3500-009060-041	3500-013060-041	3500-020060-041
64	65.0-67.5	3500-009063-041	3500-013063-041	3500-020063-041
70				3500-020070-041
76	77.0-79.5	3500-009076-041	3500-013076-041	
89	91.5-94.5		3500-013089-041	3500-020089-041
108	111.5-114.0		3500-013108-041	
114	117.0-120.0		3500-013114-041	

Carrier Pipe Ø max. [mm]	Tube Insulation Ø [mm]	Insulation Wall thickness [mm]	
		25 (24.0-26.0)	30 (29.0-31.0)
28	29.0-30.5		3500-030028-041
35	36.0-38.0		3500-030035-041
54	56.0-58.0	3500-025054-041	
60	62.0-64.0	3500-025060-041	
76	77.0-79.5	3500-025076-041	
108	111.5-114.0	3500-025108-041	
114	117.0-120.0		3500-030114-041

#### T-pieces

Carrier Pipe Ø max. [mm]	Tube Insulation Ø [mm]	Insulation Wall thickness [mm]		
		9 (8.0-10.0)	13 (12.0-14.0)	20 (18.0-20.0)
8	9.0-10.5		3500-013008-301	
10	11.0-12.5		3500-013010-301	



12	13.0-15.0		3500-013012-301	
15	16.0-17.5	3500-009015-301	3500-013015-301	3500-020015-301
18	19.0-20.5	3500-009018-301	3500-013018-301	3500-020018-301
20	21.0-22.5	3500-009020-301	3500-013020-301	
22	23.0-24.5	3500-009022-301	3500-013022-301	3500-020022-301
25	26.0-27.5	3500-009025-301	3500-013025-301	
28	29.0-30.5	3500-009028-301	3500-013028-301	3500-020028-301
32	33.0-35.0		3500-013032-301	
35	36.0-38.0	3500-009035-301	3500-013035-301	3500-020035-301
38	36.0-38.0		3500-013038-301	
42	44.0-46.0	3500-009042-301	3500-013042-301	3500-020042-301
48	50.0-52.0	3500-009048-301	3500-013048-301	3500-020048-301
54	56.0-58.0	3500-009054-301	3500-013054-301	3500-020054-301
60	62.0-64.0	3500-009060-301	3500-013060-301	3500-020060-301
64	65.0-67.5	3500-009063-301	3500-013063-301	3500-020063-301
70				3500-020070-301
76	77.0-79.5	3500-009076-301	3500-013076-301	
89	91.5-94.5		3500-013089-301	3500-020089-301
108	111.5-114.0		3500-013108-301	
114	117.0-120.0		3500-013114-301	

Carrier Pipe $\varnothing$ max. [mm]	Tube Insulation $\varnothing$ [mm]	Insulation Wall thickness [mm]	
		25 (24.0-26.0)	30 (29.0-31.0)
28	29.0-30.5		3500-030028-301
35	36.0-38.0		3500-030035-301
54	56.0-58.0	3500-025054-301	
60	62.0-64.0	3500-025060-301	
76	77.0-79.5	3500-025076-301	
89	91.5-94.5	3500-025089-301	
108	111.5-114.0	3500-025108-301	
114	117.0-120.0	3500-025114-301	3000-030114-301