

# ThermaSmart<sup>®</sup> PRO Prefabs

Thermal Insulation by Thermaflex<sup>®</sup>

Fully recyclable prefabricated insulation parts made of direct extruded, closed-cell high quality polyolefin foam

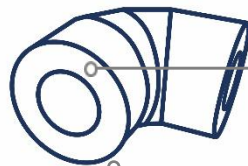
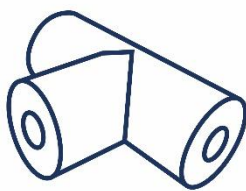


## Benefits

- Fast professional results on pipe bends, branches and other places where insulation is difficult to install
- Condensation free system for life-time installed by qualified insulator
- Consistent performance - Damage free, robust insulation material
- Safety - Excellent fire and smoke behavior
- 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

### Durable fittings

produced by using welding technique for homogenous connections



# 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<br>0.038 @ 40°C | EN ISO 8497    |
| <b>Fire properties</b>             |                   |                              |                |
| SBI classification                 | -                 | B <sub>L</sub> , s1, d0      | 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> | 0.01                         | EN 13472       |

## Availability

- Prefabricated elbow with 2, 3 or 4 segments, packed in a plastic bag
- Prefabricated T-piece, packed in a plastic bag

| Carrier Pipe Ø<br>max. [mm] | Tube Insulation Ø<br>[mm] | Carrier Pipe Ø<br>max. [mm] | Tube Insulation Ø<br>[mm] |
|-----------------------------|---------------------------|-----------------------------|---------------------------|
| 15                          | 16.0-17.5                 | 42                          | 44.0-46.0                 |
| 18                          | 19.0-20.5                 | 48                          | 50.0-52.0                 |
| 22                          | 23.0-24.5                 | 54                          | 56.0-58.0                 |
| 28                          | 29.0-30.5                 | 60                          | 62.0-64.0                 |
| 35                          | 36.0-38.0                 | 63                          | 65.0-67.5                 |

| Insulation Wall<br>Thickness [mm] |
|-----------------------------------|
| 9 (8-10)                          |
| 13 (12-14)                        |
| 20 (19-21)                        |