

## UFH Pipes



### PE-RT/AL/PE-RT Alpert Multilayer MLCP UFH barrier pipe for underfloor heating only

- Five layer composite pipe using PE-RT inner and outer layers with a 0.25mm thick aluminum core
- Can be formed by hand and maintains its shape – perfect for underfloor heating pipework
- Suitable for general use in underfloor and low temperature heating applications, maximum temperature 70°C and 10 bar maximum pressure
- White outer layer looks good even in exposed runs
- Available in 16mm x 2mm size, 100m, 200m and 500m coils. 20mm x 2mm size, 100m & 240m coils
- A wide range of complementary accessories to ensure trouble-free fitting, including Monoblocco pipe connectors, floor insulation, mounting rail, pipe staples, tacker guns and bend supports by Emmeti.



## Emmeti Product Focus

**PE-RT/AL/PE-RT Alpert Multilayer MLCP UFH barrier pipe for underfloor heating only****Five layer MLCP UFH Barrier Pipe**

Multi-layer pipe for heating systems only, made from a 5 layer composite material using PE-RT as the inner and outer layers coupled with a 0.25mm thick aluminium core. The two further layers are adhesive, to band the aluminium to the inner and outer PE-RT layer. Maximum operating pressure 10 bar; maximum operating temperature 70°C. The 5 layers are as follows:

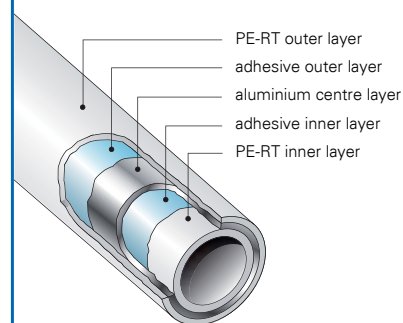
**PE-RT Outer Layer:** PE-RT (Polyethylene of Raised Temperature resistance), protects the aluminium core from expansion as it can withstand high temperatures whilst maintaining its strength

**Adhesive layer:** This special high adhesion layer, is extensively tested. Permanently bonds the PE-RT layer with the aluminium core.

**Aluminum layer:** thin layer of aluminum which prevents oxygen leaking in to the pipe, therefore significantly reducing corrosion of metal components.

**Adhesive layer:** This special high adhesion layer, is extensively tested. Permanently bonds the PE-RT layer with the aluminum core.

**Inner layer:** inner layer of clear, smooth PE-RT. Preventing pressure drops from water flow, and preventing deposit accumulation and corrosion.

**PE-RT/AL/PE-RT  
Emmeti Alpert MLCP Pipe****Technical Data****Five layer MLCP UFH Barrier Pipe**

<b>General</b>	
Pipe range nominal dimensions	16mm OD x 12mm ID x 2.0mm wall thickness 20mm OD x 16mm ID x 2.0mm wall thickness
Colour	Opaque white
Coil sizes	16mm x 2mm -100m, 200m & 500m 20mm x 2mm - 100m & 240m
Operating temperature	70°C
Maximum temporary peak temperature	95°C
Maximum operating pressure	10.0 bar
Construction	5 layer: PE-RT - adhesive – aluminium – adhesive – PE-RT
<b>Mechanical properties</b>	
Composition	Inner pipe PE-RT External pipe PE-RT
Pipe roughness	0.007 mm/m
Minimum bending radius	5 x OD
Water capacity	16mm – 0.113 l/m, 20mm – 0.201 l/m
<b>Thermal properties</b>	
Thermal conductivity	0.45 W/m K
Thermal expansion coefficient	0.026 mm/m K
<b>Standards</b>	
Manufacturing	EN ISO 21003 (application class 4)
Quality Assurance	ISO 9001

If the ambient temperature is below 10°C this pipe can be less flexible. When laying at or below 0°C the pipe is difficult to bend.

**Advantages of PE-RT/AL/PE-RT Alpert Multilayer**

PE-RT/AL/PE-RT Alpert Multilayer can run straight from a distribution point to an outlet point without the need to cut the pipe. Reducing the requirement for joints thus reducing the possibility of leaks.

Installing PE-RT/AL/PE-RT Alpert Multilayer pipe is less labour intensive than copper pipes and PVC pipe as there is no requirement to solder copper pipes, or to use glue to attach PVC pipes to fittings.

Reduces corrosion - PE-RT inner and outer layers keeps water at bay, preventing accumulation of corrosion.

Available in a wide range of accessories to ensure trouble-free fitting, including Monoblocco pipe connectors, floor insulation, mounting rail, pipe staples, tacker guns and bend supports.



## PE-RT/AL/PE-RT Alpert Multilayer Composite MLCP UFH Barrier Pipe



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**Alpert MLCP multilayer barrier pipe for underfloor heating only**

Size mm	Mts/Pack	Code
16 x 2	100	28107002
16 x 2	200	28107000
16 x 2	500	28107004
20 x 2	100	28107016
20 x 2	240	28107018

Multilayer composite pipe for underfloor heating systems only. Made from a 5 layer composite material, using PE-RT as the inner and outer layers coupled with a 0.25mm thick aluminium core. Maximum operating pressure 10bar; maximum operating temperature 70°C.