

# ▶ Thermal Duct Insulation

As an integral part of Domus rigid duct systems, Domus Thermal is a unique and patented duct insulation system, designed specifically to radically improve the thermal insulation of rigid ducting in domestic properties.



## What is Domus Thermal?

- ▶ A range of EPS insulation components specifically designed to insulate round or rectangular domestic ventilation ducting passing through cold areas.
- ▶ A method of significantly reducing heat loss and virtually eliminating the formation of condensation.
- ▶ The first engineered duct insulation system available to comply with recent improvements to Building Regulations.

- ▶ An installer-friendly solution which can be fitted quickly and reliably without the need for gluing or taping.

## Why use Domus Thermal?

- ▶ Approved Document F of Building Regulations 2010 states that all ducting installed in domestic properties, which passes through unheated areas or loft spaces, should be insulated with the equivalent of at least 25mm of a material having a thermal conductivity of  $\leq 0.04$  W/(m.K) to reduce the possibility of condensation forming.
- ▶ The loss of heat through poorly insulated duct systems means that modern homes are at risk of losing a valuable source of energy; for example, when using warm exhaust air to heat fresh incoming air through an MVHR system or exhaust air heat pump.
- ▶ Domus Thermal exceeds these regulations, having a thermal conductivity of  $0.03$  W/(m.K), thus providing better insulation and peace of mind that the system will be compliant and save energy. This greatly improved thermal conductivity allows the wall thickness to be reduced to just 20mm in most profiles.

## What is different about Domus Thermal?

### Complies with Building Regulations

The only engineered duct insulation solution which complies with 2010 Building Regulations. The thermal performance of the range, in relation to 2010 Building Regulations, has been independently ratified by one of the UK's leading thermodynamics experts.

#### Building Regulations demand:

$\leq 0.04$  W/(m.K) thermal conductivity at 25mm insulation thickness.  
Minimum thermal resistance or R-value =  $0.025/0.04 = 0.625$  K/W.

#### Domus Thermal provides:

$\leq 0.03$  W/(m.K) thermal conductivity at 20mm insulation thickness.  
Minimum thermal resistance or R-value =  $0.020/0.03 = 0.666$  K/W  
The increased thermal resistance of Domus Thermal therefore exceeds current Building Regulations.

### Installation

Currently, compliant solutions are more labour intensive and require higher skill levels to install. Domus Thermal's simple interlocking feature means that the system is quicker and easier to install. This revolutionary method can therefore significantly reduce installation costs.

### Breadth of range

Domus Thermal is available in a range of profiles and fittings to insulate the Domus EasiPipe (round) and Supertube (rectangular) duct systems.

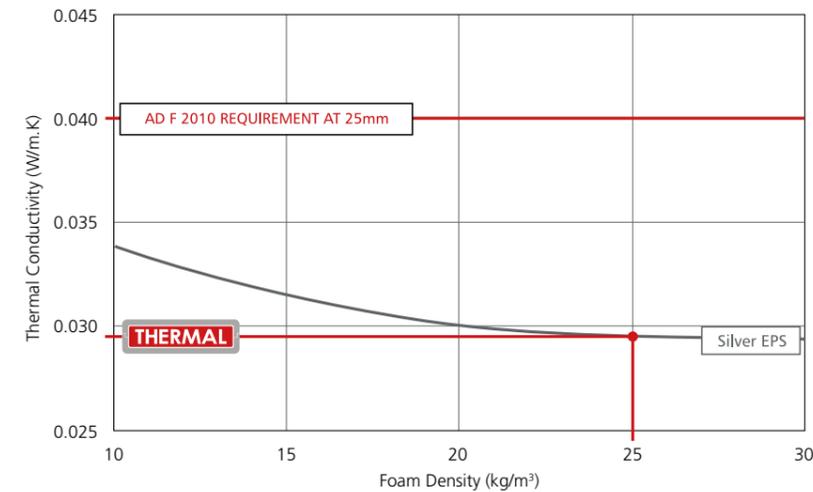
To support the system, PVC coated, perforated steel banding is also available for surface mounting or suspending the insulated system. The use of this soft-edged fixing system is strongly recommended to ensure that the insulated duct is held securely without damage.

### Unique aesthetic design

The interlocking feature and regular external profile provides homeowners with a neat, professional and continuous appearance.

## Improved insulation properties

Domus Thermal is manufactured from flame retardant (EN 13163 class E) Silver EPS (expanded polystyrene), which provides its enhanced thermal insulation properties and enables the system to exceed the requirements of the current Building Regulations.



## Material

- ▶ Injection moulded, carbon impregnated Expanded Polystyrene (EPS)
- ▶ Density =  $25\text{kg/m}^3$
- ▶ Colour: Silver/Grey

## Size

- ▶ Wall thickness 20mm and 22.25mm\*
- ▶ Components to suit 100mm internal diameter Domus EasiPipe system
- ▶ Components to suit 125mm internal diameter Domus EasiPipe system
- ▶ Components to suit 150mm internal diameter Domus EasiPipe system
- ▶ Components to suit 204mm x 60mm Domus Supertube system

\*22.25mm wall thickness only applies to 1m lengths of 204mm x 60mm

The Silver EPS used to manufacture Domus Thermal provides a significantly improved thermal conductivity value due to the inclusion of carbon particles, which gives Domus Thermal its distinctive silver colour.

## Sustainability

Domus Thermal products are recyclable and when installed in accordance with Domus Ventilation's installation guidelines, Domus Thermal offers a life expectancy greater than or equal to that of the Domus duct system.

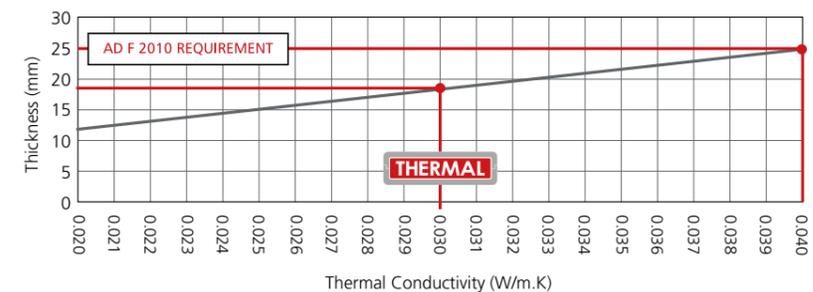
## Fire resistance

Flame retardant to Class E of EN13163

## Accessories

### TS22 (coated) and TS22G (not coated)

We offer a choice of coated or uncoated steel banding to support Domus Thermal. Suitable for surface mounting or suspending the insulated system



## The Domus Thermal range



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### Round

Product	Code	Description
	TS1100-4	Ø100mm Round Pipe Duct Insulation 1m
	TS1100-5	Ø125mm Round Pipe Duct Insulation 1m
	TS1100-6	Ø150mm Round Pipe Duct Insulation 1m
	TS490	Ø100mm Round 90° Bend Duct Insulation
	TS590	Ø125mm Round 90° Bend Duct Insulation
	TS690	Ø150mm Round 90° Bend Duct Insulation
	TS491	Ø100mm Round 45° Bend Duct Insulation
	TS591	Ø125mm Round 45° Bend Duct Insulation
	TS691	Ø150mm Round 45° Bend Duct Insulation
	TS492	Ø100mm Round Equal T Piece Duct Insulation
	TS592	Ø125mm Round Equal T Piece Duct Insulation
	TS692	Ø150mm Round Equal T Piece Duct Insulation

### Rectangular

Product	Code	Description
	TS510	204 X 60mm Channel Duct Insulation 1m
	TS910	220 X 90mm Channel Duct Insulation 1m
	TS550	204 X 60mm Horizontal 90° Duct Insulation
	TS950	220 X 90mm Horizontal 90° Duct Insulation
	TS555	204 X 60mm Horizontal 45° Duct Insulation
	TS955	220 X 90mm Horizontal 45° Duct Insulation
	TS582	204 X 60mm Horizontal T Piece Duct Insulation
	TS982	220 X 90mm Horizontal T Piece Duct Insulation
	TS575	204 X 60mm Vertical 45° Bend Duct Insulation
	TS975	220 X 90mm Vertical 45° Bend Duct Insulation
	TS540	204 X 60mm Fixed Spigot Ø125mm Plenum Duct Insulation
	TS961	220 X 90mm Fixed Spigot Ø125mm Plenum Duct Insulation