# 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

What is different about Domus Thermal?

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 ≤0.04

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.

conductivity of 0.03 W/(m.K), thus

providing better insulation and peace

compliant and save energy. This greatly

the wall thickness to be reduced to just

improved thermal conductivity allows

Domus Thermal exceeds these

regulations, having a thermal

of mind that the system will be

20mm in most profiles.

W/(m.K) to reduce the possibility of

The loss of heat through poorly insulated duct systems means that

condensation forming.

# **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.

without the need for gluing or taping.

### **Building Regulations demand:**

≤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:

≤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.

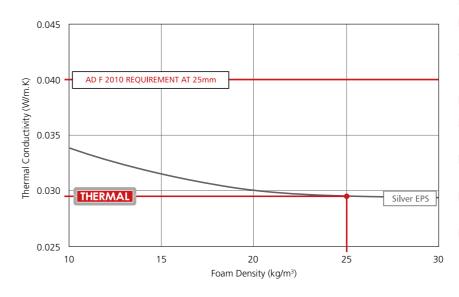
To support the system, PVC coated, perforated steel banding is also available for surface mounting or suspending the insulated system. The use of this soft-edged fixing system is strongly recommended to ensure that the insulated duct is held securely without damage.

### Unique aesthetic design

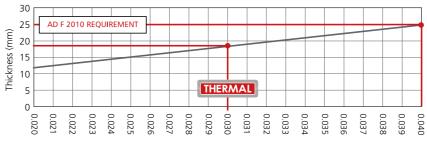
The interlocking feature and regular external profile provides homeowners with a neat, professional and continuous appearance.

# 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.



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.



Thermal Conductivity (W/m.K)

# Material

- Injection moulded, carbon impregnated Expanded Polystyrene (EPS)
- Density = 25kg/m<sup>3</sup>
- 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

# **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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Description

### Round

Product	Code	Description	Product	Code
	TS1100-4	Ø100mm Round Pipe Duct Insulation 1m		TS510
	TS1100-5	Ø125mm Round Pipe Duct Insulation 1m		TS910
	TS1100-6	Ø150mm Round Pipe Duct Insulation 1m		TS550
	TS490	Ø100mm Round 90° Bend Duct Insulation		TS950
	TS590	Ø125mm Round 90° Bend Duct Insulation	V	TS555
	TS690	Ø150mm Round 90° Bend Duct Insulation		TS955
V	TS491	Ø100mm Round 45° Bend Duct Insulation		TS582
	TS591	Ø125mm Round 45° Bend Duct Insulation		TS982
	TS691	Ø150mm Round 45° Bend Duct Insulation		TS575
	TS492	Ø100mm Round Equal T Piece Duct Insulation		TS975
	TS592	Ø125mm Round Equal T Piece Duct Insulation		TS540
	TS692	Ø150mm Round Equal T Piece Duct Insulation		TS961

# 204 X 60mm Channel Duct Insulation 1m 220 X 90mm Channel Duct Insulation 1m 204 X 60mm Horizontal 90° Duct Insulation 220 X 90mm Horizontal 90° Duct Insulation 204 X 60mm Horizontal 45° Duct Insulation 220 X 90mm Horizontal 45° Duct Insulation 204 X 60mm Horizontal T Piece Duct Insulation 220 X 90mm Horizontal T Piece Duct Insulation 204 X 60mm Vertical 45° Bend Duct Insulation 220 X 90mm Vertical 45° Bend Duct Insulation 204 X 60mm Fixed Spigot Ø125mm Plenum Duct Insulation 220 X 90mm Fixed Spigot Ø125mm Plenum Duct Insulation

Rectangular