DUTHERM
XPS EXTRUDED POLYSTYRENE

CTRT

DESCRIPTION

DUTHERM is the most common insulation material produced from polystyrene granules; the product is environmentally friendly as all residual matter from the manufacturing process is recycled with the original raw materials, resulting in zero waste. The product has densities ranging from 30 to 50kg/m3, and thickness varying from 25mm to 100mm.

FEATURES AND BENEFITS

- Closed and uniform cell structure
- Uniform density distribution
- High resistance to heat flow i.e. conductivity
- Low moisture absorption
- Good dimensional stability
- High ageing resistance
- Long term performance

SPECIFICATION AND COMPLIANCE

DUTHERM conforms to the requirement of ASTM C 578 and other relevant international standards.
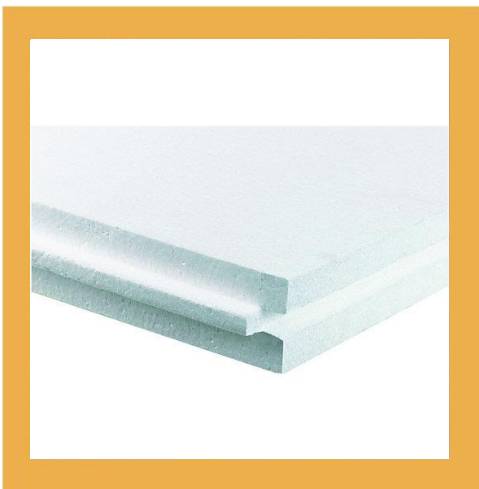
MAIN USES

DUTHERM is used for:

- Industrial – residential – commercial single ply roofing systems
- Insulation under roads/ railways/ airport runways and suspended Concrete slabs
- Inverted roofing system insulation.
- Sandwich panels insulation.
- Cold storage floor and wall insulation.

QUALITY ASSURANCE AND WARRANTY

Duproof is an ISO 9001 Quality Assured company and DUTHERM carry a material warranty against any manufacturing defects.

CTRT by Duproof

Duproof

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METHOD OF APPLICATION

The membrane should be applied over a clean and smooth deck surface. Each **DUTHERM** is loosely laid over the waterproofing membrane. With tight staggered joints. Gravel or pavers should be applied loose laid over the **DUTHERM** panels to protect it from wind uplift and UV radiation. The membrane should not include solvents which could attack the **DUTHERM** extruded polystyrene foam.

PACKING AND STORAGE

DUTHERM is available in 1250 mm x 600 mm. **DUTHERM** insulation board is not affected by the weather and can be stored outside. Prolonged exposure to UV radiation in sunlight may cause the surface to become pale and dusty. This will have no significant effect on insulating value unless the surface is eroded, thickness is reduced. A protected covering with a bright color should be used for extended outdoor exposure periods.

HEALTH AND SAFETY

There are no direct health hazards associated with **DUTHERM** extruded polystyrene foam.

TECHNICAL DATA

PROPERTY	UNIT	TEST METHOD	VALUE
Thickness	mm	ASTM D 1622	50 mm
Dimensions	mm	ASTM D 1622	L 1250 x W 600
Density	Kg/m³	ASTM D 1622	32-35
Color	-	ASTM C 578	Apple green
Structure	Rigid Extruded	ASTM C 578	Closed Cell
Appearance	-	ASTM C 578	Uniform texture with skin
Thermal Conductivity Max @ 35º C & 60 % of RH	W/m.k Btu-In/ h.ft²ºF.	ASTM C 518 DIN 2612/52616	0.0301 0.2087
Thermal Resistance of 25.4 mm thickness @ mean temp of 24 ± 1 ◦C	(k.m2)/W	ASTM C 518 DIN 2612/52616	1.661
U Values	W/(m2.k)	ASTM E 84	0.602
Compressive Strength @ yield or 10% Deformation, min kPa	KPa Psi	ASTM D1621 DIN 53421	300 44
Flexural Strength min kPa	Kn/m2 Psi	ASTM C 203	414 60
Dimensional Stability Change in dimension, max %	% change	ASTM D 2126	2
Water Absorption By total immersion, max	% vol	DIN 53428 ASTM C 272	0.3
Water Vapour Permeance of 25.4 mm thick max	Perms/Inch	ASTM E 96	1.1
Oxygen Index min volume %	%	ASTM C 2863	24
Linear coefficient of thermal expansion & contraction	ºC ºF	DIN 52328	70 x 10 39 x 10
Capillarity			NONE
Fire Classification	Building Material Class	DIN 4102	B1 (difficult to ignite)