PROCTOR GROUP AUSTRALIA

the knowledge to produce solutions

DCT XPS GA 300

general application xps board

tried and tested to Australian standards

powered by dc tech

DCT XPS GA 300

technical data

extruded polystyrene insulation

Description

The specification of insulation for ground floors is more complex than that for walls or roofs. This is because the mechanisms for heat flow are affected by the ratio of surface area to perimeter.

DCT XPS GA 300 extruded polystyrene is ideal for insulating ground bearing concrete floors and suspended floors in by providing excellent long term thermal insulation and the ability to maintain this characteristic under extreme conditions of compression, humidity and temperature. The exceptional compressive strength enables **DCT XPS GA 300** to easily resist several tons/ m^2 downward pressure.

The **DCT XPS GA 300** boards are rot proof, stable and durable and will have a life equivalent to that of the structure in which they are incorporated.

The closed cell structure of **DCT XPS GA 300** foam makes water absorption almost non-existent and provides a high resistance to vapour transmission.

Exceptional Strength

- Proven long term performance
- High resistance to settlement and compaction
- Dimensional and edge profile stability

Excellent moisture performance (closed cell structure)

- Very high resistance to moisture penetration
- Low vapour permeability
- High resistance to freeze thaw cycles
- Durability provides long term retention of these properties

Superior thermal resistance

- Low thermal conductivity
- Thinner boards required compared to some traditional materials

Health and Safety

- CFC and HCFC free formulation
- Zero ozone depletion potential (ODP)
- Green Star Compliance
- Non-irritant, light and easy to handle
- Clean, easy cutting, robust and inherent weather resistant
- Specially designed tongue and grooved edge profiles to facilitate rapid and robust installation
- Manufactured in accordance with EN 13164 : 2001, Section 4.2 and the relevant parts of Section 4.3

Location: **DCT XPS GA 300** is laid directly onto level slab. In addition, **DCT XPS GA 300** can be placed vertically around the edge of the slab inside the form-work.

Preparation: Confirm with a structural engineer for the required compressive strength required.

Installation: Lay non-porous rigid board directly onto the levelled ground that will be under the slab, excluding footings and structural beams. Lay separating damp proof membrane (DPM) above the DCT GA XPS, lapping

Specification Clause

DCT XPS GA 300 extruded polystyrene general application board should be described in the specification as:-

The insulation shall be **DCT XPS GA 300** _____ mm non-porous cellular extruded polystyrene (XPS) foam panel with minimum compressive strength _____ kPa. Zero ODP, CFC and HCFC free.**DCT XPS GA 300** extruded polystyrene general application board is distributed by Dynamic Composite Technologies - T: 1800 051

Delivery, handling and storage

DCT XPS GA extruded polystyrene insulation boards are delivered shrink-wrapped. **DCT XPS GA** is light, rigid and clean and pleasant to handle and install. It is easily cut to size or trimmed using a knife or saw. **DCT XPS GA** should be stored flat in a ventilated area and protected from accidental damage, contact with volatile solvents, flames and extended exposure to UV and sunlight.

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Technical datasheet

Properties	Value		Unit	Standard	CE Code
Compressive strength @ 10% deformation (average)	350		kPa	AS 2498.3	
Modulus (typical values)	15 20	< 50mm > 50mm	MPa	EN 826	
Compressive Creep max after 50 years < 2% deformation under stress σC	110		kPa	EN 1606	CC(2/1.5/50)σ
Long term water absorption by total immersion	0.7		%	EN 12087	WL(T)
Water pick-up by diffusion	3 2 1	< 50mm 50 - 79 mm > 80 mm	% % %	EN 12088	WD(V) WD(V) WD(V)
Water pick up after Freeze Thaw	1		%	EN 12091	FTCD
Dimensional stability under specified temperature (70°C) and humidity conditions (90%rh)	< 5		%	EN 1604	DS(70,90)
Dimensional stability under specified compressive load (40kPa) and temperature (70°C) conditions	< 5			EN 1605	DLT(2)5
Coefficient of linear thermal expansion (typical value)	0.07		mm/(m.K)		
Temperature limits	-50/+75		°C		
Tolerances Thickness Thickness Thickness Width Length	 -2/+2 -2/+3 -2/+6 -3/+3 -6/+6	 < 50mm 50 - 120 > 120 mm	 mm mm mm mm mm	 EN 823 EN 823 EN 823 EN 822 EN 822	 T1
Tensile strength	600 kPa				
Shear strength	250 kPa				
Elastic modulus	< 50mm is 12 MPa, > 50mm is 20 MPa				
Fire resistance: Ignitability Index Spread of Flame Index Heat Evolved Index Smoke Developed Index	AS 1530.3 (AWTA Report # 20-001280) 9 0 3 6				

CE Code:

< 50 mm :	XPS EN 13164 - T1 - CS(10\Y)300 - CC(2/1.5/50)130 - DS(70,90) - DLT(2)5 - WD(V)3 - WL(T)0.7 - FTCD1
50 - 79 mm :	XPS EN 13164 - T1 - CS(10\Y)300 - CC(2/1.5/50)130 - DS(70,90) - DLT(2)5 - WD(V)2 - WL(T)0.7 - FTCD1
≥ 80 mm :	XPS EN 13164 - T1 - CS(10\Y)300 - CC(2/1.5/50)130 - DS(70,90) - DLT(2)5 - WD(V)1 - WL(T)0.7 - FTCD1

00-143-0420

Recycled content

Dynamic Composite Technologies are committed towards products that are manufactured with sustainability practices and environmental impacts in consideration. DCT XPS GA 300 is manufactured by taking rework, regrind and scrap material capable of being reclaimed within the same process that generated the original material. DCT XPS GA 300 contains up to 30% recycled styrene content

CE

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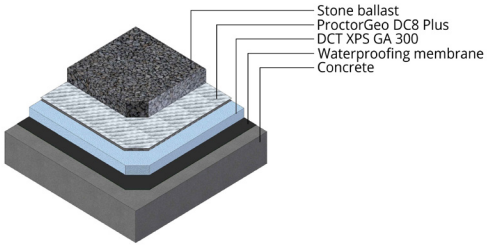
DCT XPS GA does not contain any HBCD fire retardant which is banned in many countries

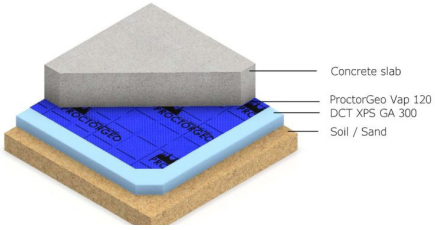
Nominal thickness to R-Value DCT GA XPS Insulation @ 23°C		
Nominal Thickness (mm)	**DCT GA300** R-Value (m^2K/W)	**DCT GA300** R-Value (m^2K/W)
Thermal Conductivity	NCC 2016 0.025 W/mK	NCC 2019 0.033 W/mK
30	1.2	0.90
40	1.6	1.20
50	2.0	1.50
60	2.4	1.80
75	3.0	2.25
80	3.2	2.40
90	3.6	2.70
100	4.0	3.00
120	4.8	3.60

Note: The information and data contained in this technical data sheet do not represent exact sales specifications. The features of the products mentioned may vary. The information contained in this document has been provided in good faith, however it does not imply any liability, guarantee or assurance of product performance. It is the purchaser's responsibility to determine whether these products are suitable for the application desired and to ensure that the site of work and method of application conform with current legislation. No license is hereby granted for the use of patents or other industrial or intellectual property rights. If products are purchased, we advise following the most up-to-date suggestions and recommendations.



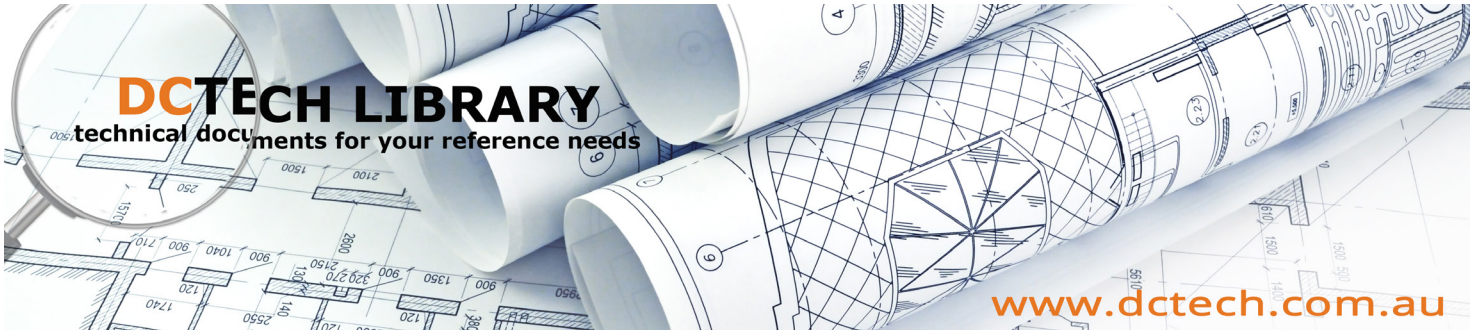
DCT-R05-1 FLAT CONCRETE IRMA ROOF

Inverted Roof Membrane Assembly (IRMA) concrete roof, insulated externally with a moisture resistant high compressive strength **XPS insulation that serves to protect the membrane from UV**



DCT-F05-1 INSULATION BELOW SLAB ON GROUND OR RAFT

A highly moisture resistant, high compressive strength XPS insulation is laid directly on the ground. For moisture management, a vapour barrier is placed over the insulation prior to pouring the floor slab.



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the knowledge to produce solutions