

## DUFAYLITE®

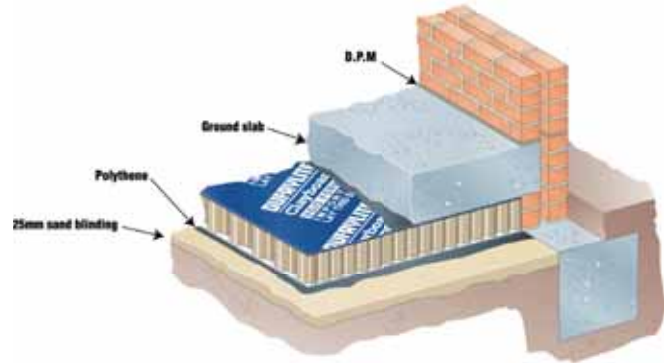
### How Clayboard® Works

#### Clayboard® void formation system



Clayboard® is a unique, environmentally friendly void former and foundation stabiliser developed by Dufaylite. Clayboard® is a biodegradable honeycomb core set between lightweight polypropylene facings.

When dry, Clayboard® is strong enough to support the weight of wet concrete and steel reinforcement. Water is introduced to the Clayboard® core once the concrete is set, degrading the Clayboard® honeycomb centre which will ultimately lead to the creation of a void. This space will accommodate clay expansion without exerting undue pressure on the structure above. The resulting void continues to accommodate natural soil shrinkage and expansion.



#### Clayboard® Benefits

- Helps prevent structural damage from clay heave.
- Suitable for all types of structure including residential, industrial and commercial buildings.
- Up to 50% slimmer than other systems saving on soil excavation and removal.
- Exerts virtually no pressure on ground slabs
- Strong enough to support poured concrete.
- Unique honeycomb core creates calculable void without compression.
- Kind to the environment.
- Slimness of product is ideal for retrofit underpinning.
- Easy to cut and install.
- Cost effective.

#### Sizes:

Clayboard® is supplied in panels 2440mm long by 1000mm wide, by the specified thickness. Clayboard® is delivered to site on lightweight pads for easy unloading, and is polythene wrapped for protection.

#### Compressive strength:

Clayboard® is available in two standard strengths, KN30 and KN90. KN30 has a nominal compressive strength of 30kN/m<sup>2</sup> when dry and is designed to support the weight of wet concrete up to 1m thick. KN90 has a nominal compressive strength of 90kN/m<sup>2</sup> when dry and is recommended for concrete slabs thicker than 1m.

#### Ancillary Products - Voidpak System

We can also supply the Voidpak System which comprises:

**Pipes:** 32mm diameter pre-shaped with fixed flange length to suit slab thickness.

**Caps:** End caps for each pipe.

**Polythene bags:** Nominal 500g to suit cut Clayboard® of length 2.44m.

**Waterproof tape:** 50mm wide in 66m rolls.

#### Technical Data

Clayboard Size	Void
160mm	150mm (high shrinkage)
110mm	100mm (med shrinkage)
85mm	75mm (med shrinkage)
60mm	50mm (low shrinkage)



### Polystyrene Void Formers

Polystyrene Void formers utilise the low weight/high strength characteristics of expanded polystyrene to provide the designer and contractor with a cost effective method of reducing the deadweight of a variety of structures:

Motorway Bridges, Basement Slabs, Pre-cast beams and Water Treatment Works

The voidformers are either cylindrical and generally moulded, or profiled and cut from expanded polystyrene block. The moulded cylinders are available in diameters ranging from 250 to 1050mm and the standard length is 2.4m. By glueing and cutting the profiles can be manufactured to suit engineers' requirements.

### Polystyrene Sheets

Expanded Polystyrene sheets for thermal insulation of wall and ground floor slabs. Easily cut with fine tooth saw to the required size. Conforms to BS 3837: Part 1; and is BBA approved. Standard grade SD supplied from stock. Other grades readily available.

Sheet Size	Thickness
2.44 x 1.22m	25mm
2.44 x 1.22m	50mm
2.44 x 1.22m	75mm
2.44 x 1.22m	100mm
2.44 x 1.22m	150mm
Polystyrene Adhesive	310ml / 5 Litre

## Bluebay Ground Heave & Polystyrene Products

### Clayshield EPS Polystyrene Sheets

Clayshield is the proven solution to protecting foundations against the effects of clay heave and soil movement on the side of deep trench foundations or the side and underside of ground beams.

Clayshield boards are manufactured from expanded polystyrene (EPS), a lightweight, closed cell system with excellent compressibility. The cells in the board contain air, which compress under the pressure of expanding, wet clay soils, acting as a buffer between the ground and the foundation.



Application	Position	Clayshield Product
Deep trench foundations	Side	Clayshield
Ground beams	Side / Underside	Clayshield
Ground beams	Underside	Castellated Clayshield / Clayshield
Piles	Encasement	Pile Collars

Property	Clayshield
Board size (mm)	2400 x 1200
Thickness (mm)	50, 75, 100, 200, 300
Effective Depth	Deep trenches up to 3m, ground beams up to 600mm
Colour	Light blue

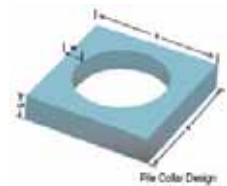
### Castellated Clayshield

Castellated Clayshield is used to protect the underside of ground beams; Pile Collars and the innovative Clayshield Fixing Tool, which enables groundworkers to secure the protective boards in place while remaining outside the trench.

Property	Castellated Clayshield
Board size (mm)	1200 lengths, in widths to suit the trench
Thickness (mm)	100, 150, 200, 250
Colour	Light blue



Pile Collars		
Diameter (mm)	W (mm)	A (mm)
300	50-150	400-600
400	50-150	500-700
500	50-150	600-800



### Proofex Total

#### High performance, totally gas-impervious, reinforced membrane

Reinforced gas membrane designed to protect buildings and their occupants from the effects of methane, radon, carbon dioxide and other harmful gases. Like conventional ground membranes, Proofex Total also acts as a damp proof membrane to help protect the building against the ingress of moisture from the ground.



#### Advantages

- Independently certified performance, BBA certificate no.01/3850.
- 6-layer product design for maximum gas protection.
- Polyester reinforcing grid for puncture resistance during application.
- Loose-laid system for ease of application.
- Can be used on ground-bearing concrete floors and beam/block floors.
- Can be used to form a cavity tray, no need for a separate product.



Technical Data	
Product	Size
Roll Width (m)	2.0
Roll Length (m)	25
Roll Weight (kg)	22



### Proofex Radon Barrier

#### High performance, gas-impervious, reinforced membrane

Gas membrane designed to protect buildings and their occupants from the effects of radon, carbon dioxide and other harmful gases. Like conventional ground membranes, Proofex Radon Barrier also acts as a damp-proof membrane to help protect the building against the ingress of moisture from the ground.

#### Applications

- Virgin co-polymer product design for maximum gas protection.
- Loose-laid system for ease of application.
- Can be used on ground-bearing concrete floors and beam/block floors.



Technical Data	
Product	Size
Roll Width (m)	4.0
Roll Length (m)	20
Roll Weight (kg)	28.48