

# Expangeo\* HDPE

## HDPE waterproofing/protection membranes

### Uses

**Expangeo\* HDPE** is high density polyethylene pre-formed waterproofing and protection membrane design for the waterproofing or protection of concrete & soil.

### Advantages

- Excellent aging resistance.
- Welding or loose laid installation.
- Environment friendly no pollution.
- Good elongation.
- Permanent pressure resistant
- Excellent weldability
- Resistance to the effects of aggressive ground water
- Excellent elasticity and flexibility.
- Excellent puncture resistant
- Resistance to penetration by plant roots
- Reliable performance and long service life

### Description

Expangeo\* HDPE are extruded from a high grade high density polyethylene compound which has been formulated to give excellent flexibility and longevity characteristics.

The raw material is virgin polyethylene resin, mixed with plasticizer, filler, and ultraviolet absorbent with other auxiliaries.

The Expangeo\* HDPE is available in different thickness, easy to install, and can also be linked with Expangeo\* PVC waterproofing membrane or with Expanbar\* PVC waterstop.

### Technical support

Fospak provides a technical advisory service for on-site assistance and advice on selection of product, and its application.

### Installation

**All Surfaces** - It is essential to create a sound, solid and stable substrate to eliminate movement during the concrete pour. Substrates must be regular and smooth with no gaps or voids, grout around all penetrations such as utility conduits, pipes, etc. for stability.

**Horizontal Blinding** - Monolithic concrete blinding, sand or mud surface is preferred. The blinding must be free of loose aggregate and sharp protrusions. The surface does not need to be dry, but standing water must be removed.

Place the membrane on prepared substrate, all side lap and end lap joint can be thermal fusion welded, or loose laid, depend on usage.

### Properties

Appearance	: Black sheet
Thickness	: 0.50 mm (500 microns)
Tensile strength, N/mm	: LD – Min 10 TD – Min 8
Tear strength, N	: LD – Min 70 TD – Min 60
Elongation at break %	: LD – Min 750 TD – Min 700
Thickness	: 1.00 mm (1000 microns)
Tensile strength, N/mm	: LD – Min 22 TD – Min 20
Tear strength, N	: LD – Min 160 TD – Min 155
Elongation at break %	: LD – Min 800 TD – Min 750

LD = Longitudinal Direction

TD = Transverse Direction

## Protection of membrane

Once the membrane is installed on horizontal surface, it must be protected either by using protection board or lean concrete to protect the membrane, prior to the fixing of steel bars, if use on vertical surface place protection board prior to the back filling.

## Compatibility

Expangeo\* HDPE is compatible with Expangeo\* PVC, and Expanbar\* PVC waterstop, consult with Fospak technical department for the installation procedure.

## Estimating - packaging

Expangeo\* HDPE membrane is available in different thicknesses, normally it is available in 0.25, 0.50, 0.75 and 1.00 mm thickness, other than normal thickness, special sizes can also be produce on request (Depend on required quantity)

## Roll size

Thickness	Roll length
0.25 mm	50 or 100 mt.
0.50 mm	50 or 100 mt.
0.75 mm	50 or 100 mt.
1.00 mm	50 or 100 mt.
1.50 mm	50 or 100 mt.
2.00 mm	50 or 100 mt.

## Storage

Expangeo\* HDPE can be store under shade in original packing.

**Freezing point: Not applicable**

## Precautions

### Health and safety

Expangeo\* HDPE does not fall into the hazard classifications of current regulations. However, it should not be swallowed.

Suitable protective gloves and goggles should be worn while welding of sheet joint. In case of skin burning seek medical advice.

For further information consult the Material Safety Data Sheet available for this product.

## Fire

Expangeo\* HDPE non-flammable, avoid direct contact with fire.

## Cleaning and disposal

The disposal of waste pieces should be carried out in accordance with local legislation under the guidance of the local waste regulatory authority.

\* Denotes the trademark of Fospak (Pvt) Ltd.

## REGIONAL SALES OFFICES IN PAKISTAN:

### Fospak (Pvt) Ltd.

#### Head Office

702, Business Avenue,  
Block-6, PECHS.  
Shahra-e-Faisal,  
Karachi, Pakistan  
Tel # +92-21-34528477, 34529859  
Fax # +92-21-34522436  
Email [info.khi@fospak.com.pk](mailto:info.khi@fospak.com.pk)

#### Lahore Sales Office

2<sup>nd</sup> Floor, Building # 45C,  
Block – CCA, Phase # 5,  
DHA, Lahore Cantt.  
Lahore.  
Tel # +92-42-  
Cell # 0322-4412113, 0322-2813527  
Email [info.lhr@fospak.com.pk](mailto:info.lhr@fospak.com.pk)

#### Islamabad Sales Office

Office # 3, Building # 6,  
Jinnah Boulevard, West Sector – A,  
Near Gate # 1, DHA Phase II  
Islamabad.  
Cell # 0322-5001903 - 04  
Tel # 051-4720280  
Email [info.isb@fospak.com.pk](mailto:info.isb@fospak.com.pk)

## Important note

Fospak products are guaranteed against defective materials and manufacture and are sold subject to its standard terms and conditions of sale, copies of which may be obtained on request. Whilst Fospak endeavours to ensure that the technical information on this data sheet is correct at the time of printing, it is the customer's responsibility to satisfy himself, by checking with the company that this information is still current at the time of use, that the product is suitable for the intended application, and that the actual conditions of use are in accordance with those recommended. Because Fospak has no control over the conditions of use of its products, all recommendations or suggestions regarding the use of these products are made without guarantee.