



SECTION:

**DATA SHEET:**

**ONE-SIDED CUSPATED HDPE MEMBRANE FOR  
VERTICAL & HORIZONTAL DRAINAGE**

Rev.:  
2-251001  
D.S.:  
PDR010

## 1. PRODUCT NAME:

PLY-DRAIN & PLY-DRAIN/GTX.

## 2. DESCRIPTION:

**PLY-DRAIN** is a high strength one-sided cusped HDPE membrane; **PLY-DRAIN** is light and flexible, strong and resilient.

**PLY-DRAIN** provides, according to the application requested, ventilation, thermal and acustical insulation, waterproofing and drainage. (fig. 1).

**PLY-DRAIN/GTX:** for special drainage application, where the drainage performance is essential.

**PLY-DRAIN** can be glue laminated with one geotextile (either Polypropylene or Polyester). The geotextile main function is water filtration and HDPE cusps protection. Standard geotextile is > 120 g/sq.m. non-woven PP, having suitable tensile strength and high permeability. Other type of geotextiles can be laminated on request.

## 3. APPLICATIONS:

**PLY-DRAIN & PLY-DRAIN/GTX** are used for:

**A** - protection, insulation & drainage on waterproofig membrane for:

- foundations;
- flat roof;
- tunnels;
- trenches
- underground works;
- dams.

**B** – instead of stones, coarse gravels and granular material in the sub-base foundations;

**C** – vertical drainage on:

- retaining walls;
- tunnels;
- dams;
- roads.

**D** - horizontal drainage of:

- roof decks;
- sportfields;
- embankments;
- parking area.

**E** – Thermal and acustical insulation of:

- floorings.

**F** – antirroot and drainage layer of:

- roof deck gardens.

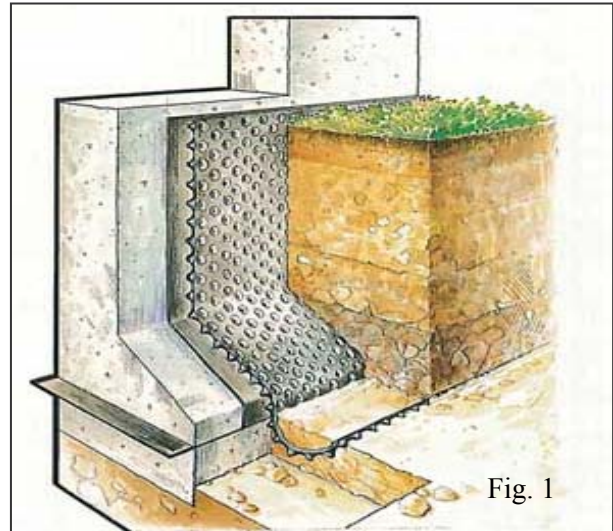


Fig. 1

**G** – insulation and sub-base of:

- patios & balconies;
- flat roof decks.

**H** – reinfall drainage

primary drainage for conveying leachate to collection basin.

**I** - biogas drainage in landfill wastage projects.

## 4. ADVANTAGES:

**PLY-DRAIN, PLY-DRAIN/GTX** are:

- light
- high impact resistant;
- resilient;
- easy to transport;
- non-rotting,
- easy to install.

Compare to the traditional drainage systems,

**PLY-DRAIN, & PLY-DRAIN/GTX** have the following technical and economical advantages:

- no use of coarse aggregates, which are, if available, very heavy, voluminous and expensive in handling and transportation
- high drainage efficiency due to the particular cusps section;
- hydrostatic control at the foundation base ;
- high adaptability to the construction/soil contour
- dramatic reduction of the excavation drainage works.

## 5. INSTALLATION:

Installation may vary depending on job requirements. The following are general installation procedures.

### A. Preparatory work:

All excavation should be completed before the installation of **PLY-DRAIN**

### B. Alignment:

Unroll and align the **PLY-DRAIN** rolls. Make 10cm minimum overlaps and clamp cusps.

### C. Fixation:

Fix **PLY-DRAIN** mechanically on the concrete structure above ground line, if requested.

### D. Backfilling:

At the end of **PLY-DRAIN** installation, bury it evenly.

### E. Precaution:

On horizontal applications, avoid unnecessary traffic on the membrane.



Fig.2

Plydex Technical Service is available to solve any specific problem at the design stage and at the application stage as well.

## 6. SIZE & PACKAGE:

**PLY-DRAIN**, **PLY-DRAIN/GTX** are in rolls having the following dimensions:

Height: 1,5 – 2 – 2,5m (standard)– 3 – 4 – 5 m (special)

Length: 20 m

Other length available on request..

## 7. TECHNICAL SPECS:

See PDR020 Data Sheet.

## 8. AVAILABILITY AND COSTS:

**PLY-DRAIN**, **PLY-DRAIN/GTX** are available throughout our Distributors network.

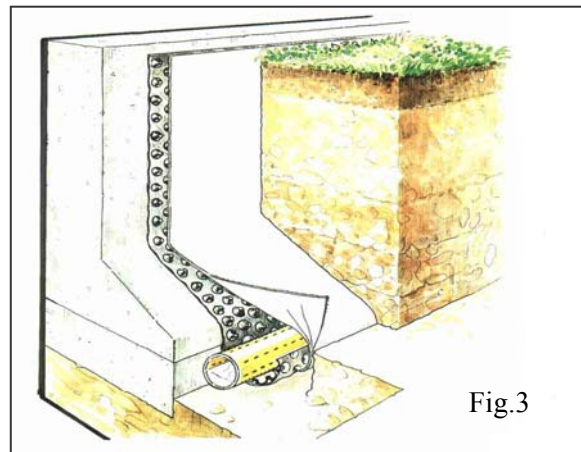


Fig.3

All data mentioned are for reference purpose only and are not intended as a warranty or guarantee.

# PLYDEX

PLYDEX srl  
Via della Tecnica, 17  
36031 Dueville (Povolaro) VI – Italy

Tel. (+39) 0444 594343 Fax 594358  
e-mail: plydex@tin.it www.plydex.com  
UNI EN ISO 9002 Cert. N° 50 100 1273



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