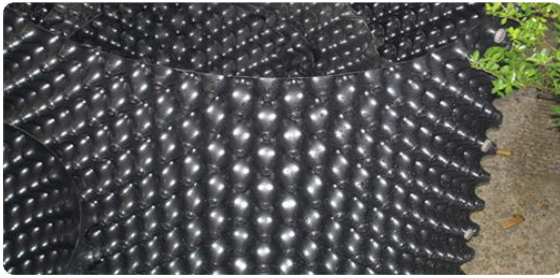


Dimpled Wall Drains



Yuan Da **Dimpled Wall Drains** are made from a cusped core, bonded to a high quality nonwoven geotextile. The core's high compressive strength resists high loads from in-fill and formwork. Its stud-shaped dimples provide an air chamber between the sheet and wall to rapidly channel water from grade to the footer drainage system. It is resistant to saline solutions, alkalis and acids.

The dimple height can vary from 10mm to 30mm depending on the requirements. The material is supplied as rolls, either 1200m x 20m or 2400mm x 20m. For larger applications the dimples along the edges of the sheets can be pressed together on site, to form a wider sheet. The high quality abrasion resistant, non-woven geotextile covering the dimples prevents soil particles blocking the drainage sheet, creates an air gap for reliable ventilation and provides hydrostatic relief by allowing high volumes of filtered water to pass into the drainage core. Each roll comes with a 150mm geofabric overlap along one edge.



Applications: The lightweight and flexible drainage mats provide effective drainage on foundation walls and other underground structures. Available in a range of sizes, they are a cost effective option for:

- Shotcreting applications;
- Leak detection at the base of lined channels;
- Vertical drainage on very steep slopes or vertical walls in place of traditional aggregate drains;
- Above ground gardens.

Typical Values - Dimpled Wall Drains

Size	Weight (g/m ²)	Thickness (mm)	Compressive Strength (kPa)	Horizontal Flow Rate (0.1) (l.m.s)	Geotextile 140g/m ²
1200mm x 10mm x 20m roll (Single Dimple HIPS)	760	10	400	75	Polyester or Polypropylene
1200mm x 25mm x 20m roll (Single Dimple HIPS)	1200	25	100	1240	Polyester or Polypropylene

Installation

Prior to installation avoid damaging the wall drain by: not walking or placing heavy objects on it; nor exposing it to sunlight for more than 1 week; and avoiding excessive heat during storage and installation.

If waterproofing materials have already been applied, the rolls of wall drain can be fixed with hot melt or contact adhesives or butyl-mastic tape strips. Masonry nails with 50x50mm plywood pads can be used for other applications. The rolls are usually fixed at one metre centres. The geotextile must face the soil surface.

The edges must be sealed to prevent soil entering the drainage system. The geotextile overlap at the top of the wall mat must be turned over the top of the core or attached firmly to the wall. 100mm of core should be cut away from the ends and the geotextile turned inside or attached firmly to the wall to prevent soil from clogging the dimples. If a section of geotextile is damaged it must be taped or a new section of geotextile placed over the top of it to ensure that no soil can enter the drain.

When rolls are to be joined in the horizontal direction, the top layer must overlap the lower one by 75-100mm. The top geotextile wrap is then lapped over the lower-geotextile wrap and taped down.

Depending on the application, water can be drained from the wall drain by weep holes or using collection pipes.

A free draining material should be used as backfill. In most instances the excavated material will be satisfactory. Avoid large angular stone material which can damage the geotextile or backfilling with clays which will impair the drainage efficiency.

Care must be taken to prevent damage during backfilling. The base of the drain should be backfilled by hand. Compaction equipment should be kept at least 100mm from the face of the wall drain to prevent damage.

