

# DELTA<sup>®</sup>-NP DRAIN

## Installation Instructions

### Vertical Application

- 1. If the waterproof coating is 1.9 m high, apply the sheet horizontally straight from the roll and trim it to size as required. On higher walls, apply the sheet vertically from top to bottom. Use a carpet knife to cut the sheet to the requisite length across the roll.
- 2. The permanent-filtration geotextile should always face the soil. If the exact level of the ground surface is not known, attach the sheets above the upper edge of the waterproof layer, making sure that they reach about 10 cm higher than the waterproofing itself. After backfilling, trim the sheets in parallel with the surface of the soil. At the bottom, sheets end atop the drainpipe, which should be surrounded on all sides with a layer of permanent-filtration material at least 15 cm thick.

- 3. For easy overlapping, each sheet features an undimpled strip approx. 14 cm wide along one edge. Lift up the geotextile and push the next sheet underneath it. To lengthen a vertically-installed sheet, push the next sheet underneath for a minimum length of 20 cm. Connect the two with no less than 4 DELTA<sup>®</sup>-HAFTNAGEL adhesive pins. Fix the separating foil to the glue of the DELTA<sup>®</sup>-HAFTNAGEL pins.
- 4. Before attaching a sheet to an outside corner, crease it along the line of the edge. Place plastic light wells directly on top of the sheet. Window openings can be cut out later. When light wells have already been installed, cut the sheet precisely along their lower edge and make one vertical cut in the middle.

### Horizontal Application

- 1. Clean surfaces thoroughly to avoid damage to the waterproofing or drainage system after the drainage sheet has been laid.
- 2. Lay the sheet straight from the roll on top of the substrate or the waterproofing, with the geotextile pointing upwards. Cut sheets to length with a carpet knife.
- 3. For easy overlapping, each sheet features an undimpled strip approx. 14 cm wide along one edge. Lift up the geotextile and push the next sheet underneath it. To lengthen a horizontally-installed sheet, push the next sheet underneath for a minimum length of 20 cm. Connect the two with no less than 4 DELTA<sup>®</sup>-HAFTNAGEL adhesive pins.
- 4. When integrated in an earth-covered ceiling, installed drainage sheets will easily bear the weight of a wheelbarrow. Wheeled loaders are safe if the surfacing is no less than 40 cm thick.

■ Protection and drainage system

■ For building, underground, and civil-engineering construction

■ For vertical and horizontal installation

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## Request for Tender DELTA<sup>®</sup>-NP DRAIN

Item No.	Qty.	Specifications	Price/Unit	Price Total
	..... m <sup>2</sup>	<b>DELTA<sup>®</sup>-NP DRAIN for application to vertical waterproofing</b> (Dörken GmbH & Co. KG, D-58311 Herdecke), two-layer drainage and waterproofing system to be delivered and expertly installed on vertical masonry waterproofing. Sheets to be installed and mechanically attached in conformance with the manufacturer's instructions (e.g. with flat-head nails or nail plugs). Sheet overlaps must be adequate. Overlaps must be covered by a double layer of geotextile. The cloth must face the soil.		
	..... m <sup>2</sup>	<b>DELTA<sup>®</sup>-NP DRAIN for application to horizontal waterproofing systems</b> (Dörken GmbH & Co. KG, D-58311 Herdecke) two-layer drainage and waterproofing system to be delivered and expertly installed on a horizontal waterproofing layer. Building height: ... m above ground. Sheets to be installed in conformance with the manufacturer's instructions. Sheet overlaps must be adequate. Overlaps must be covered by a double layer of geotextile. The cloth must face the soil.		
	..... l.m.	100-mm drainage pipe to be delivered and installed in conformance with DIN 4095, Sect. 5.2.2.		
	..... l.m.	B 32 grain-size gravel to be delivered and filled in as a drain rock bed.		
	..... l.m.	DELTA <sup>®</sup> -NOPPENBAHNEN-PROFIL sealing strips to be delivered and installed after backfilling to protect the upper edge.		