

DELTA[®]-TERRAXX

**A powerful foundation
for vertical and horizontal
substrates.**

Efficient protection and drainage
system for basements and flat roofs.
Certified under EN 13252, DIN 4095,
and DIN 18195.



■ Protection and
drainage system

■ For compression-
resistant
substrates

■ For horizontal
and vertical appli-
cations in build-
ing construction

The all-round solution for flat roofs and basement-walls? DELTA®-System, of course.



■ **DELTA®-TERRAXX**

A highly efficient protection and drainage system, DELTA®-TERRAXX is an all-round solution for horizontal and vertical applications on compression-resistant substrates. With its fused-on geotextile and integrated self-sealing edge, this dimpled sheet provides perfect surface drainage.

■ **Horizontal applications**

With DELTA®-TERRAXX, large flat roofs or ceilings of buildings and underground car parks may be utilised meaningfully and sustainably. Ideal as playgrounds, leisure facilities, or additional parking space, these areas may also be turned partially or entirely into garden roofs.

■ **Vertical applications**

DIN 4095 rules that all foundations fitted with drainage pipes must be equipped with a surface drainage system. DELTA®-TERRAXX ensures full compliance with the requirements of this standard. When applied to pressure-resistant substrates and waterproof coatings that transmit forces such as, for instance, perimeter insulation boards, rigid or flexible sealing slurries, waterproof concrete, or cold-setting self-adhesive waterproofing sheets, the DELTA®-TERRAXX protection and drainage system offers a maximum of safety for your basement-walls.

DELTA®-Quality branded products made by Dörken.

2-ply sheet offering certified safety:

DELTA®-TERRAXX

Safe foundation and reliable drainage

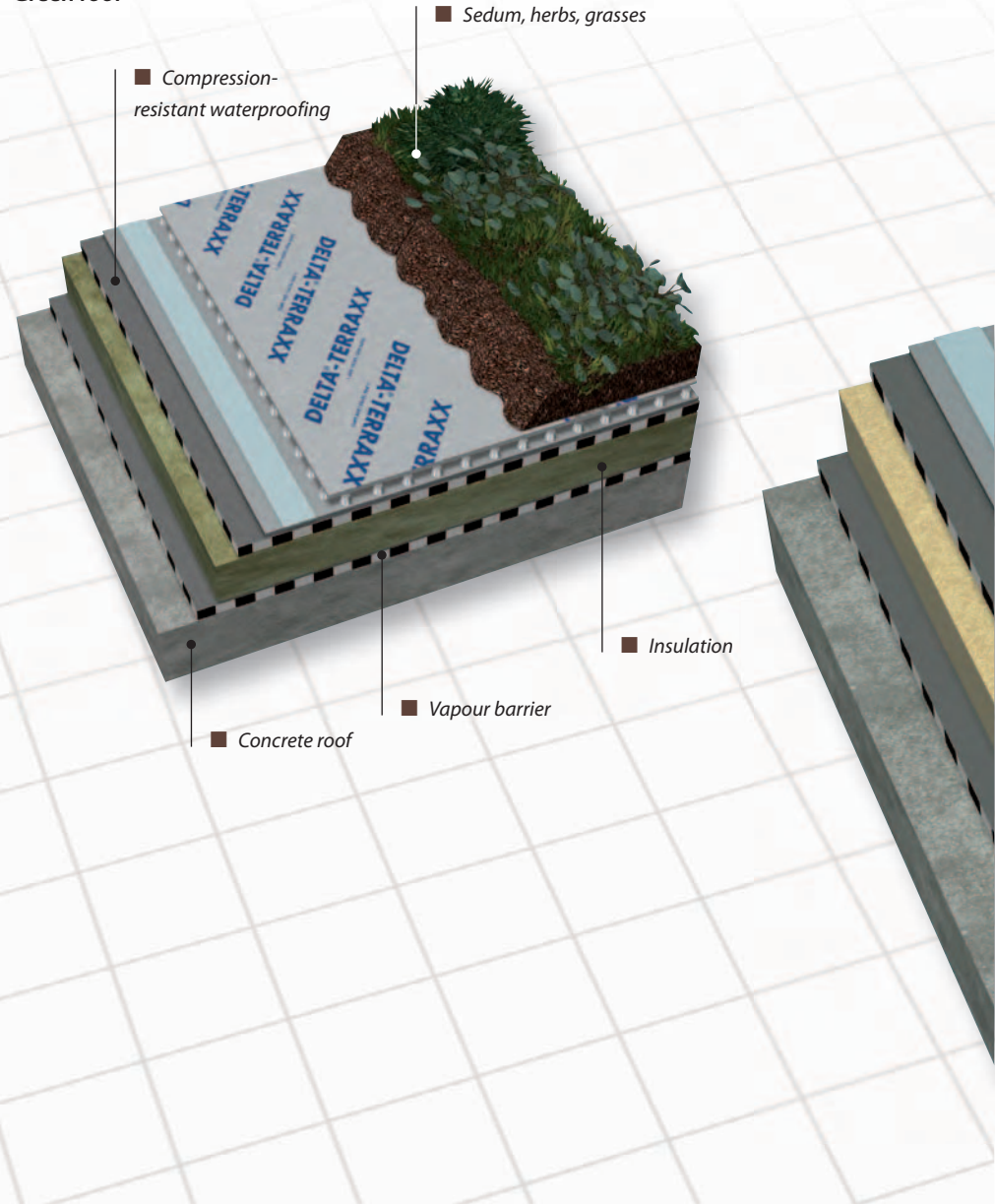
DELTA®-TERRAXX for herbaceous roofs

In extensively planted roofs, the 2-ply DELTA®-TERRAXX sheet assumes the functions of a protection, filtration, and seepage layer: forming an extremely robust protection and drainage layer, it effectively prevents water from accumulating. Its water drainage capacity is markedly greater than that of a gravel or chip bed. Its smooth back ensures that loads are distributed evenly across

the entire surface of the waterproofing. As it is compatible with all commercial waterproofing sheets, no additional protective layer is needed. With an add-on height of no more than 9 mm, the sheet keeps the total covering height to a minimum.

Moreover, DELTA®-TERRAXX is also for intensively planted roofs which, being thickly covered with soil, do not need an extra water reservoir but do need high drainage capacity.

Green roof



■ Sedum, herbs, grasses

■ Compression-resistant waterproofing

■ Insulation

■ Concrete roof

■ Vapour barrier

PREMIUM QUALITY



Planting soil may be applied directly.

High drainage capacity for intensive green roofs.

Sub-base being applied on top of DELTA-TERRAXX.

Drainage for flat roofs.

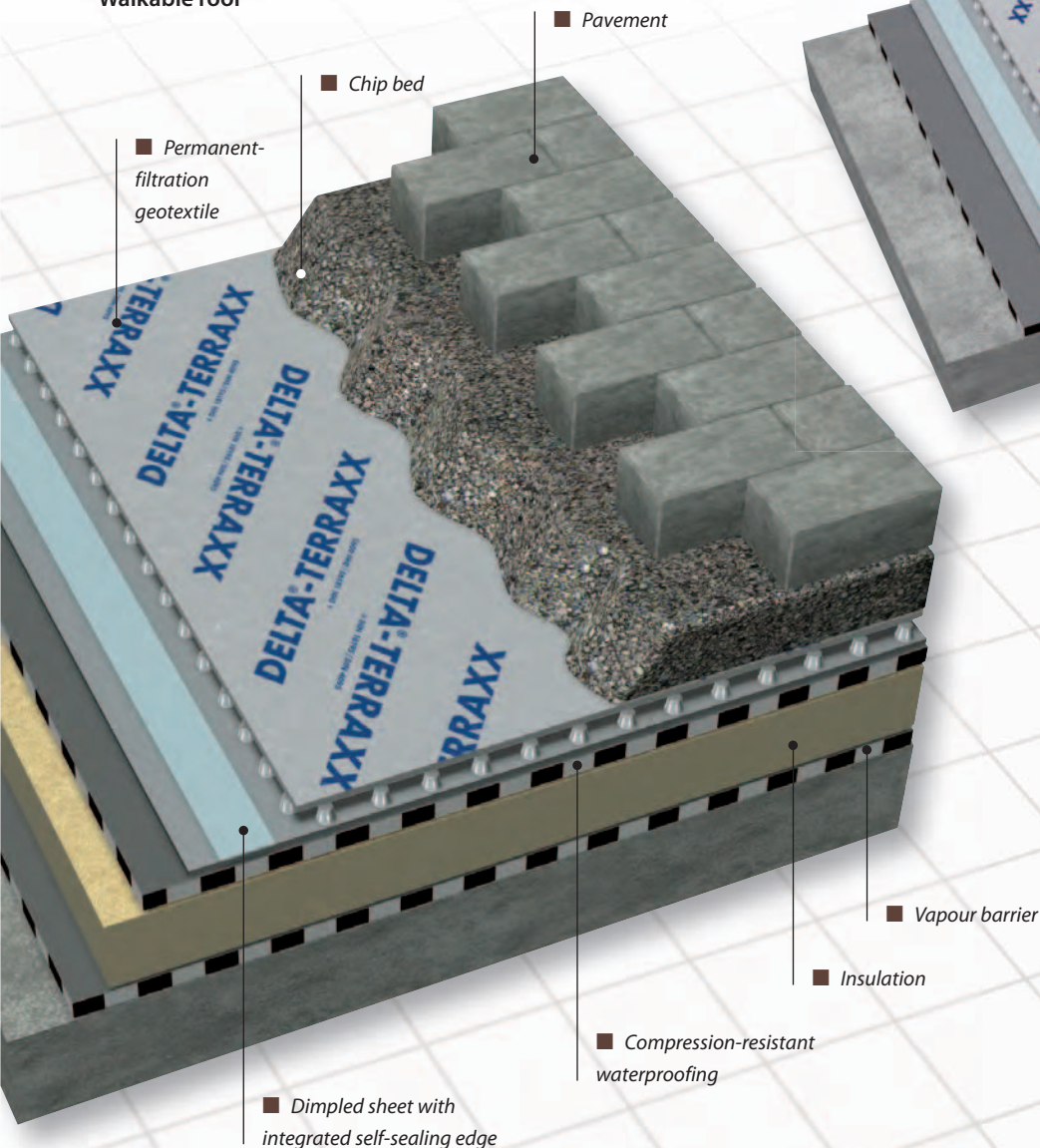
DELTA-TERRAXX

in roofs used for traffic

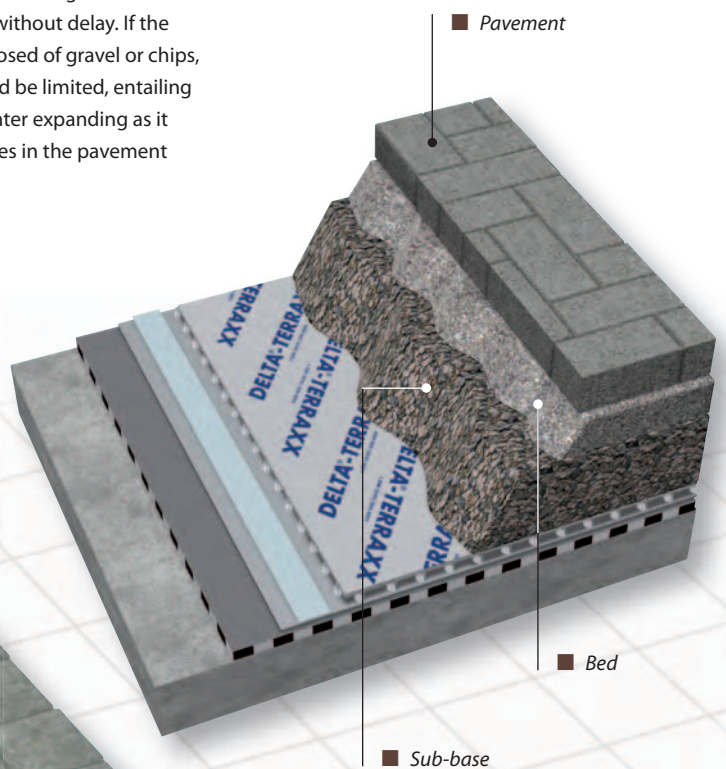
In roof areas that are used for traffic, DELTA-TERRAXX assumes the functions of a protection, filtration, and seepage layer. Laid out on top of the waterproofing, it forms an extremely robust protection and drainage layer. It may be directly covered with a layer of sand or chips which, in turn, may be topped with a walkable pavement of stones or flags.

Installed under a covering of paving stones or flags, this structural drainage layer ensures that any precipitation water percolating into the structure is drained away without delay. If the drainage layer were composed of gravel or chips, its drainage function would be limited, entailing the risk of accumulated water expanding as it freezes, causing frost heaves in the pavement above.

Walkable roof



Driveable roof





NOPPENBAHNEN-PROFIL fastened with DELTA®-GEO-DRAIN CLIP. Permanent-filtration drainage.

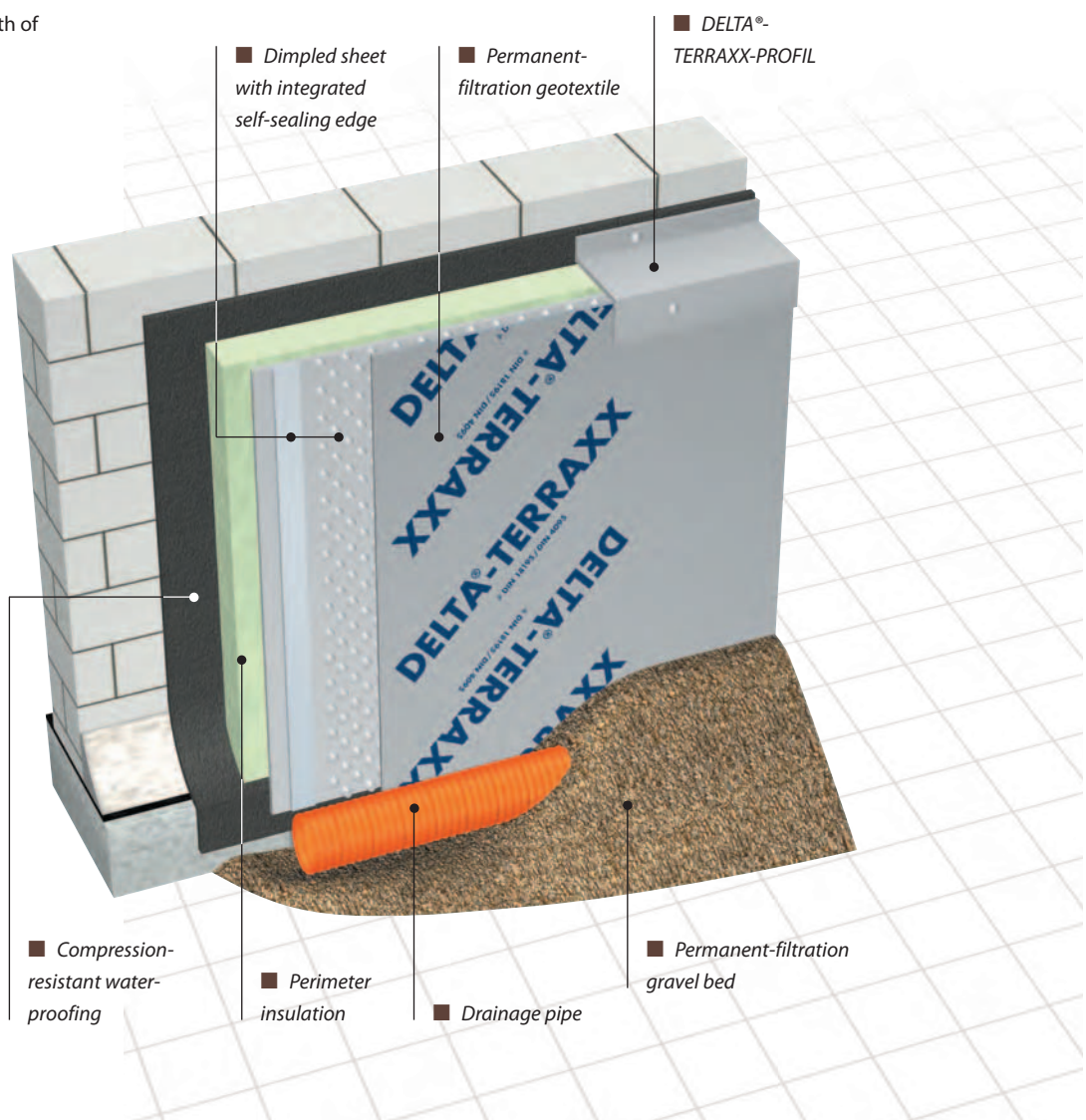
Dimpled sheet and geotextile as a compact unit.

DELTA®-TERRAXX

Reliable protection for basement-walls.

DELTA®-TERRAXX on vertical waterproofing

For basement-walls, DELTA®-TERRAXX guarantees maximum safety from impounded, seepage, and fissure water. Facing the soil, its dimples form a structural drainage layer; the sheet exceeds the requirements of DIN 4095. The fused-on geotextile keeps the dimple structure from silting up. DELTA®-TERRAXX features the outstanding drainage capacity of 3.1 l/s · m under a load of 20 kN/m² plus emergency reserves. Thanks to its width of 2.40 m, it may be wound around most basements. Applied to perimeter boards, the sheet acts as a buffer between the insulation and the soil. It may be installed at depths of up to 10 m because of its outstanding compressive strength of approx. 400 kN/m².





An ideal foundation for walkable roofs.



Gives a boost to basements.

DELTA®-TERRAXX

Universal solutions for buildings.

Horizontal applications

- Perfect drainage for green roofs, parking decks, walkways, flag pavements, gravelled flat roofs, and foundations slabs.
- Permanent-filtration geotextile keeps the dimple structure from silting up.
- Water drainage capacity greater than that of a gravel/chip bed.
- High compressive strength of 400 kN/m².
- Safe for drinking water and proof against mechanical damage.
- Integrated sealing edge for easier laying.

Vertical applications

- Offers universal protection in conformance with DIN 18195 as a water-impermeable jacket for basement waterproofings in all load cases involving impounded, fissure, or seepage water.
- Protects basement-wall waterproofings and perimeter insulation boards from moisture, thus safeguarding their insulation performance.
- Reliably drains off methane gas and radon.
- May be installed at depths of up to 10 m, even in extremely wet environments.
- Absolutely rot-proof and free from recycled material.
- May be installed swiftly and cost-efficiently without any additional excavation work.



Laying is easy and cost-efficient.



Perfectly protects basement-walls.

Why not profit from the DELTA®-System?

In horizontal applications: DELTA®-DRAINAGEVLIES ...

... serves as a separation and filtration cloth in the construction of pathways and terraces. DELTA®-DRAINAGEVLIES safeguards the filtration function of structural drainage systems. May also be used to stop weeds.

In vertical applications: DELTA®-THENE ...

... may be used for damp-proofing both outdoors and indoors. Imprinted with a unique grid pattern, DELTA®-THENE can be cut to size easily and precisely. When DELTA®-THENE-KÄLTEGRUNDANSTRICH is used, it may be installed at temperatures as low as - 5 °C.

Needless to say, we have a range of perfect accessories, of which you find additional information on the next page.

DELTA®-TERRAXX

Technical data overview:

Dimpled sheet material	High-density polyethylene
Geotextile material	Polypropylene
Dimple height	approx. 9 mm
Compressive strength	approx. 400 kN/m ²
Air gap	approx. 7.9 l/m ²
Service temperature range	- 30 °C to + 8 °C
Tensile strength	MD 6 kN/m/CMD 6 kN/m (EN 10319)
Dynamic perforation resistance	40 mm (EN 918)
Characteristic opening size	150 µm (EN ISO 12956)
Water permeability	8 · 10 ⁻² m/s (EN ISO 11058)
Drainage capacity, water flow capacity in the plane	3.1 · 10 ⁻³ m ² /s (EN ISO 12958) at 20kN/m ²
Roll size	12.5 m x 2.5 m
Durability	To be covered within two weeks after installation. Will endure for 25 years in natural soil having a pH value between 4 and 9 and a soil temperature < 25 °C.

DELTA®-Accessories for DELTA®-TERRAXX.

Dörken makes your life easier – systematically.

This is why you are sure to appreciate these handy DELTA®-Accessories:



DELTA®-TERRAXX-SCHRAUBE
For securely fastening DELTA®-TERRAXX to perimeter insulation boards. Patent-protected.



DELTA®-NOPPENBAHNEN-PROFIL
Edge-sealing strip.



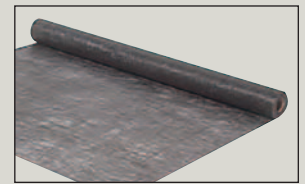
DELTA®-TERRAXX-PROFIL
Moulding cap for use with perimeter insulation boards. Patent pending.



DELTA®-MULTI FIXX
All-round fastener for all dimpled and drainage DELTA® sheets for use on either face.



DELTA®-MS DÜBEL
Plastic nail plug for fastening DELTA® drainage sheets.



DELTA®-DRÄNAGEVLIES
Separation and filtration cloth. Serves to safeguard the filtration function of surface drainage systems.

DELTA®

DELTA®-System ...

... for owners:

"... What I get is a mature problem solution provided at a fair price by the top specialist in quality branded products!"

... for workers:

"... What I get is a complete system made by a single manufacturer that enables me to do anything to the owner's entire satisfaction. There is no safer way!"

... for planners:

"... I can be certain that both innovative and standard products will be used in implementing my roof and basement plans in a systematic and forward-looking way."



Dörken GmbH & Co. KG
Wetterstraße 58
D-58313 Herdecke
Tel.: +49 (0) 23 30/63-0
Fax: +49 (0) 23 30/63-355
bvf@doerken.de
www.doerken.de

A company of the Dörken Group.

Delta Membrane Systems Ltd.
Delta House, Merlin Way
North Weald, Epping,
Essex CM16 6HR
Tel.: +44 (0)1992 523 523
Fax: +44 (0)1992 523 250
info@deltamembranes.com
www.deltamembranes.com

