



PARKING DECK DRAINAGE & WATERPROOFING PROTECTION LAYER

NATURE OF INTERVENTION

Waterproofed flat rooftop surfaces are often covered to protect the waterproofing layer and improve its long-term durability. This becomes even more important when the covering is a paved parking area, traversed by day-to-day vehicular traffic.

These new engineered covers, whether part of the original design or retrofitted, often require additional layer works that, not only continue to offer protection and durability, but also address further requirements such as drainage and the successful removal of accumulated rainfall volumes.

Traditionally these additional layers have been formed by aggregate and topsoil layers which are heavy, expensive, cumbersome and expensive to place/install on the structure.

Through the introduction of various Geosynthetics products, to replace these conventional construction materials, the durability, cost and performance of the layer works can be greatly improved lowering lifecycle maintenance costs, contributing to much improved structural efficiencies over an extended design and operational lifespans.

Location:

Glenvista, Gauteng, South Africa

Products:

• HDD 10 85 12F

Quantity:

6 000 sqm

Application:

Parking Deck Drainage & Waterproofing protection layer

Date:

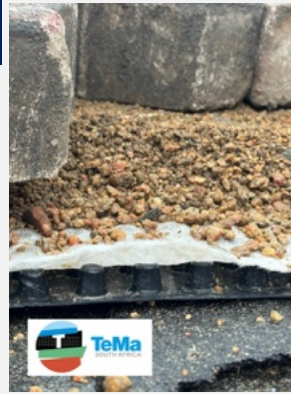
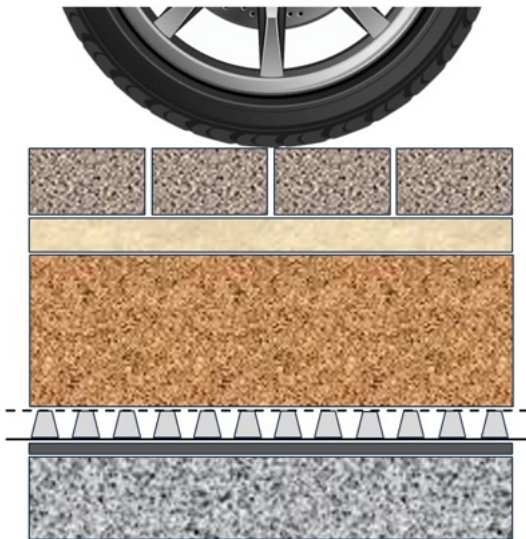
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SOLUTION

HDD 10 85 12F, TeMa SA's 11mm thick, HDPE cusped drainage medium with bonded nonwoven PP geotextile was placed over the entire footprint of the rooftop. This provided both a lightweight protection layer between the underlying bituminous waterproofing and overlying layer works and paving stones, whilst at the same time offering a reliable drainage layer to collect and remove excessive rainfall volumes.

The cusped sheets are easily over lapped, secured in place and adapted to existing exit mechanisms such as weepholes and full bores. The product easy to handle, quick to install and extremely durable to the placing of overlying material. In this case, HDD 10 85 12F also offered adequate compressive strength to remain operational when loaded with the vehicle traffic, especially during long-term and turning force loadings.

The use of the TeMa Geo products, provided significant benefits over other conventional natural materials to the project in terms of cost, ease of installation and a reduction in construction time.



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