

Fornit®

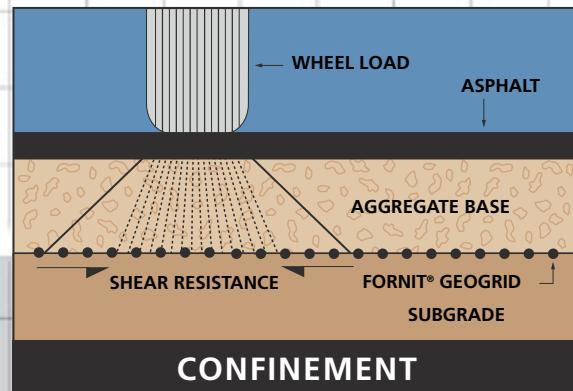
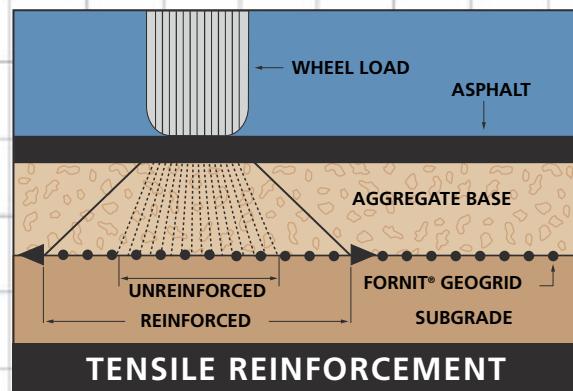
Biaxial Geogrid for Subbase Reinforcement



HUESKER
Engineering with Geosynthetics

Fornit® - biaxial geogrid for subbase reinforcement

Fornit®- an innovative and economical biaxial polypropylene geogrid. As a result of its engineered mesh sizes, **Fornit®** provides a unique boundary between subgrade and subbase. The aggregate is bound into a restrained bearing layer, protected from short term dynamic loading - particularly during the construction phase.



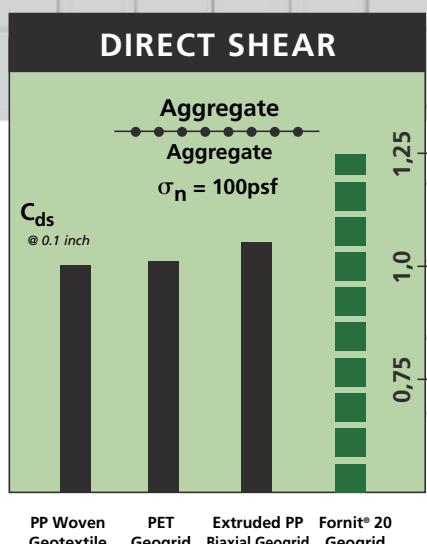
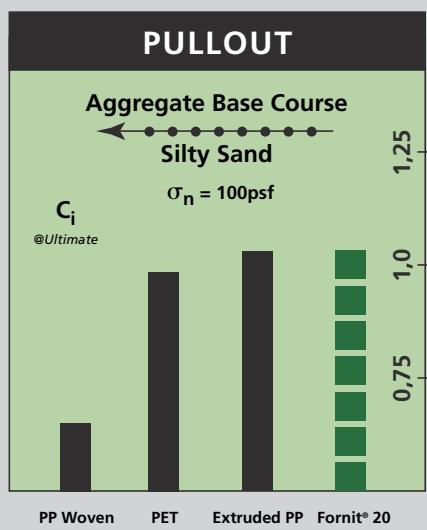
Reinforcement

Fornit® geogrids offer an excellent tensile reinforcement in an aggregate base layer for both paved and unpaved roads. With the tensile element distributing the applied loads over a larger area, **Fornit®** geogrids reduce the subgrade bearing capacity requirement.

Confinement

Without question **Fornit®** geogrids are ideally suited for maintaining the integrity of the road construction under repeated wheel loading. Lateral displacement of the aggregate is restricted by its interlocking with the grid, proved by interface shear strength testing.

The aggregate layer is supported by the geogrid mesh, which provides a bridging function as well as spreading any applied wheel loading over a much wider surface area, thereby increasing its bearing capacity.



Separation

Fornit® can be produced with different mesh sizes to meet the grading requirement of a broad range of aggregate types, allowing for optimal interlocking of, and interaction with the aggregate fill. Fornit® can be combined with a nonwoven (Duogrid®), thus also providing the separation function. Both the loss of fines from the granular layer downwards is prevented, and the pumping of fines from the subsoil into the granular layer. The strength of the granular layer is not decreased.

Robustness

It is recognised that geogrids are subjected to high mechanical loading during subbase and foundation preparation. This demand has been checked out by controlled field trials. Fornit® performs extremely well. The abrasion-resistant polypropylene with its polymer coating accounts for the low incidence of damage, even under the most trying conditions.

Fornit® range

Fornit® 20/20 - adequate for most projects due to its strength and robustness

Fornit® 30/30 - for higher loading and

Fornit® 40/40 extreme conditions

For large projects mesh sizes between 15mm - 100mm can be made available, subject to order.

Roll edges (300mm each side) have a larger mesh size to ensure the subbase interlocking effect is unaffected.

Installation

Contractors appreciate Fornit® on account of its ease of installation. Although it provides the tensile stiffness required for its function, it is flexible, easy to handle and cut without special tools. It does not have a memory as stiff or extruded grids and will easily follow the soil profile. The advantageous wide width of 5,20m and the 200m length rolls reduce overlapping cost and handling time.



Photo 1 + 2: Base reinforcement with Fornit® geogrids.



Tested and proven

HUESKER geosynthetics have been used for many years world-wide as tensile reinforcement in ground engineering.

With the arrival of **Fornit®** HUESKER has demonstrated once again its leading position in this field. The development of a high-performance biaxial geogrid demands a precise assessment of the tensile modulus.

Fornit® has been thoroughly tested in our state-of-the-art approved laboratory.

In addition HUESKER has conducted numerous geogrid/soil interaction tests. These tests, carried out by independent authorities, clearly prove the effectiveness of **Fornit®** in road construction applications.

Comparative tests on competitive products, including stiff grids, confirm the superiority of biaxial **Fornit®** geogrid.

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HUESKER offers...

.... a wide product portfolio of geosynthetics such as wovens, knitteds, geogrids, nonwovens and composites.

Project specific materials made to order expand the standard production programme and provide the most economical solutions.

Main products are....

- **Fortrac®** - a flexible geogrid
- **HaTelit®** - a flexible grid for asphalt reinforcement
- **Stabilenka®** - a high modulus polyester woven
- **Comtrac®** - a knitted product with extremely low extension at break
- **NaBento®** - a geosynthetic clay liner

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Stabilenka® is a registered trademark of Colbond B.V.
NaBento® is a registered trademark of HUESKER Synthetic GmbH



HUESKER Synthetic GmbH is certified by:



HUESKER offers a wide range of technically demanding solutions relying on our many years' experience. Our solutions are economical, reliable and up-to-date and used in:

Earthworks and foundation engineering, landfill construction, hydraulic engineering, road construction

Technical assistance, planning, support - worldwide

Reliable and advanced techniques characterise our products in many applications:

Fortrac® - a flexible, high modulus and low creep geogrid for soil reinforcement

HaTelit® – a flexible, high-modulus and temperature-resistant grid for asphalt reinforcement

Stabilenka® – a high-modulus polyester woven for reinforcement and separation of soils

Robutec® – a very high-modulus and alkali-resistant woven for reinforcement and separation of soils.

Fornit® – a biaxial geogrid for subbase reinforcement

Comtrac® – a geocomposite for reinforcement and filtration of soils

Duogrid® – a geocomposite made of biaxial high-modulus flexible geogrid and a nonwoven

NaBento® – geosynthetic clay liner for sealing

Incomat® – a concrete- or sand-mat for sealing and erosion control

Ringtrac® – geotextile tube for reinforcement

HaTe® – wovens and nonwovens for separation
filtering and insulation applications

SoilTain® – systems for hydraulic engineering and
drainage

Geosynthetics made by HUESKER
- reliability by experience!

HUESKER

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