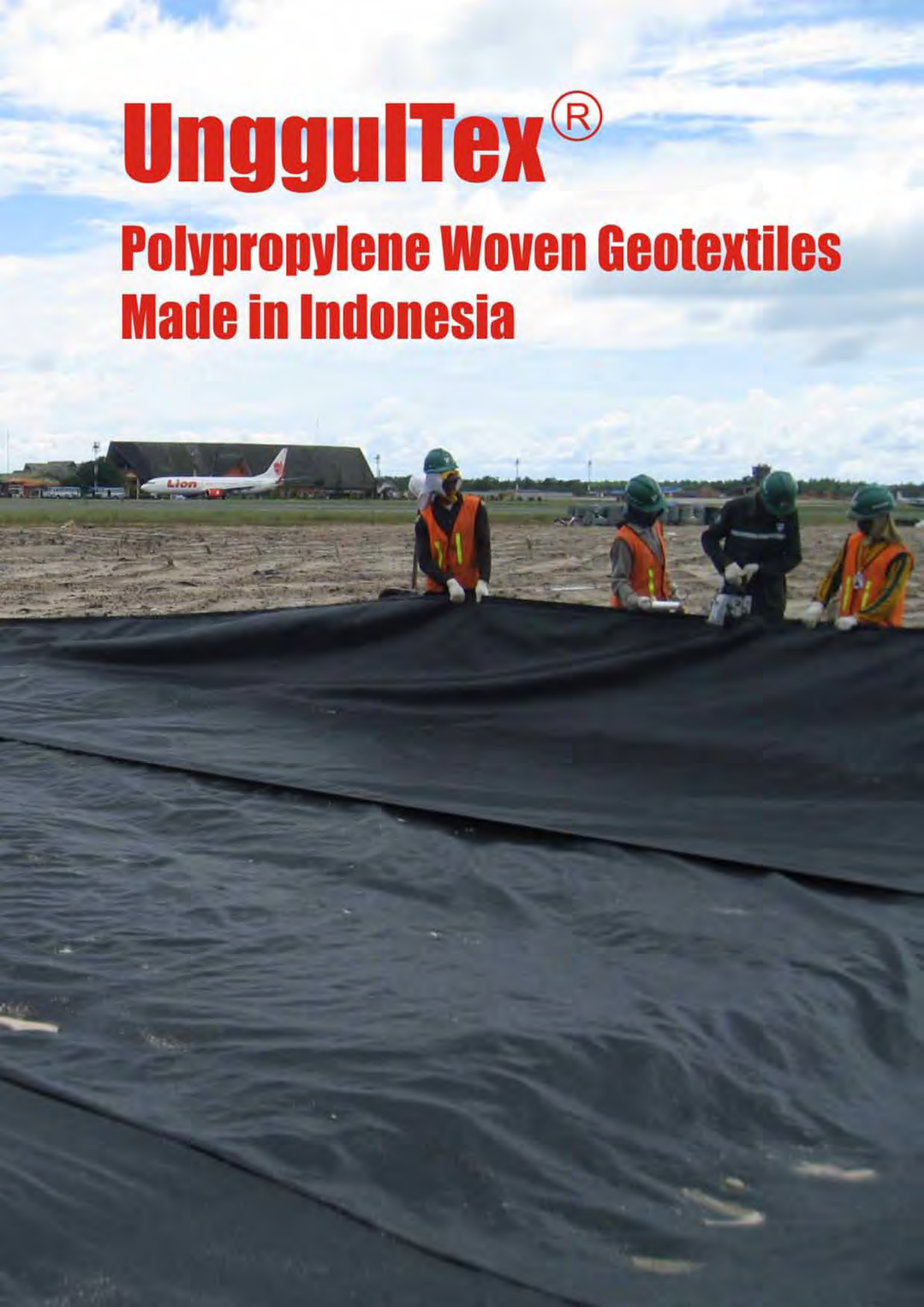
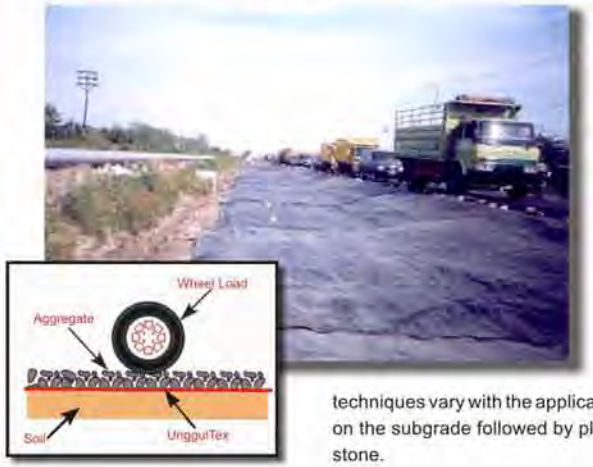
UnggulTex®

Polypropylene Woven Geotextiles Made in Indonesia



UnggulTex® Polypropylene Woven Geotextiles. The low cost alternative in stabilization, reinforcement and erosion control woven geotextiles for the civil engineering industry.

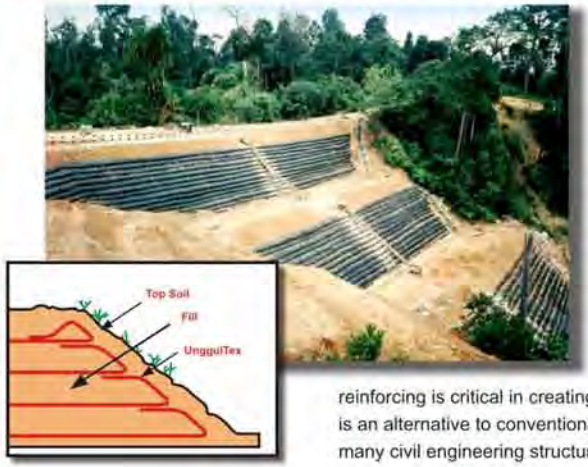
Subgrade Stabilization



UnggulTex can improve the load carrying capability and reduce rutting when constructing roads over weak soils. **UnggulTex** provides a separation barrier to prevent fill from punching into the subgrade under construction traffic. The subgrade can then develop its full bearing capacity and the fill can better distribute the loads from traffic. The properties of **UnggulTex** are dependent upon the subgrade support strength and load applied during construction.

UnggulTex may also provide filtration and drainage function if required. Installation techniques vary with the application, but **UnggulTex** are typically placed directly on the subgrade followed by placement and compaction of adequate depth of stone.

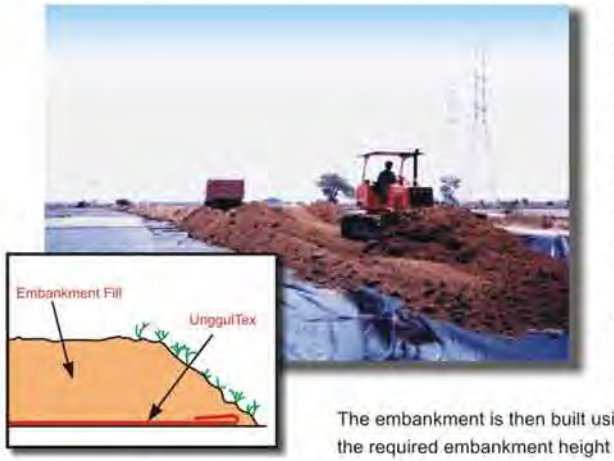
Steep Slope Reinforcement



UnggulTex can allow construction of slopes with far steeper face angles than are permitted by the soil's natural angle of repose. This allows for more efficient land use. In private developments, the amount of usable land within a given parcel is increased without the cost of a traditional retaining wall. In highway construction, roads may be widened without increasing necessary right-of-way by replacing a conventional flat slope with a steep reinforced one.

Vertical spacing and embedment length of reinforcing is critical in creating a stable reinforced soil mass. This application is an alternative to conventional gravity or cantilevered retaining walls used in many civil engineering structures.

Reinforced Embankments Over Soft Soils



UnggulTex can provide considerable savings over conventional construction methods including soil displacement and stabilizing berms. In this application, the existing foundation soils underlying the embankment are too weak to permit the construction of the embankment to the required height, and/or do not provide an adequate factor of safety againts failure without tensile reinforcement. Construction is straightforward.

UnggulTex is placed over the foundation soil, generally with minimal disturbance of the existing materials.

The embankment is then built using conventional construction equipment until the required embankment height is reached.

Erosion Control Under Rip-Rap (Armor)

UnggulTex are used between soil and rip-rap to prevent the erosion of soil through the armoring layer. **UnggulTex** is used in lieu of a conventional graded aggregate filter. In this application, large armor stone or rip-rap, or in some cases flexible concrete mattresses, are placed to protect the soil againts erosion and wave attack. Conventional filter criteria can be used for design, with some modifications required for **UnggulTex** properties.

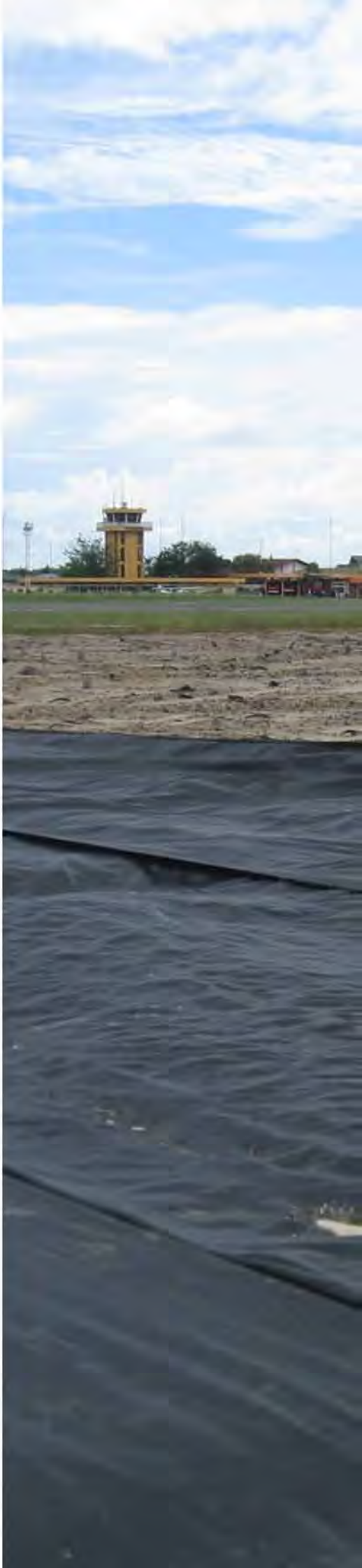
The used of **UnggulTex** in this application has been shown to provide substantial savings over conventional aggregate filter systems with far greater control during construction, particulary in underwater application.

UnggulTex®

Polypropylene Woven Geotextiles

Major Benefits :

- Manufactured in Indonesia
- No special preparation needed
- Easy three-persons installation
- More economical up to 4.0-meter width
- Permeable-prevents pore pressure build up
- Durable
- No need to strip subgrade of top soil layer
- Uneffected by soil chemicals, water, micro-organisms



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