

## Uniaxial Polyethylene Geogrid

### Description

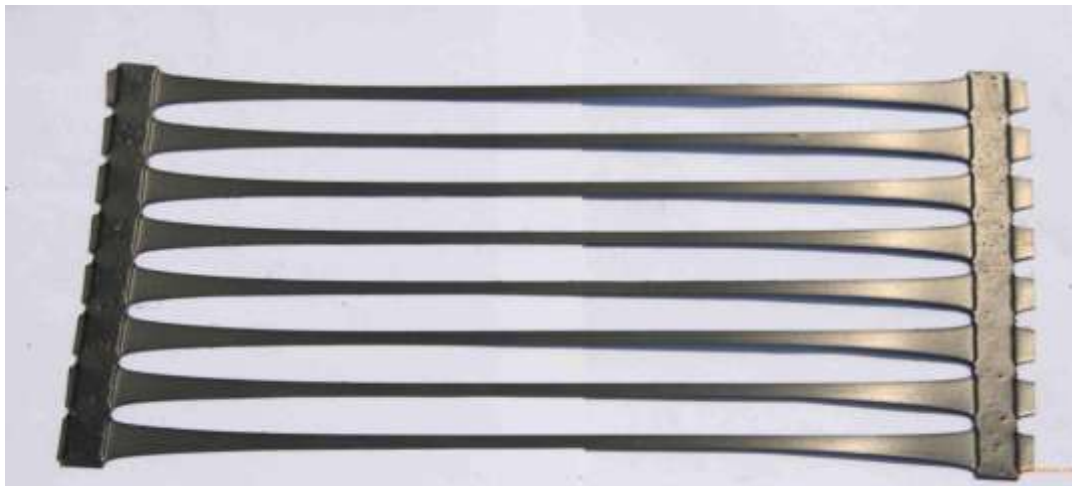
Uniaxial polyethylene geogrid uses high density polyethylene (HDPE) as raw materials and are produced by a process of extruding, punching, heating and longitudinal stretching. In this process polymer molecule is distributed a linear state from chain shaped and long oval network structure, which fully improve tensile strength and rigidity of the grid. The geogrid can carry high tensile loads applied in one direction (along the roll). Their open aperture structure interlocks with fill material to provide superior load transfer from soil to geogrid, an efficient stress transfer can be spread the load to a larger area of the soil quickly and effectively.

### Features

- ♦ Resistance to biological degradation and chemicals, long service life
- ♦ Weathering resistance from UV degradation
- ♦ Resistance to environmental stress cracking
- ♦ Enlarge road loadings; lasting the life of road
- ♦ Excellent loading change and prevent roads from cracks and deformation
- ♦ Convenient construction, low costs

### Uses

For highway and roads construction, railways and rivers, lakes and along the coast of the reinforced retaining walls, dam, bridge, steep slopes, landfill projects



### Type and Specification

Item	ASTM	TGDG50	TGDG60	TGDG80	TGDG90	TGDG100	TGDG120	TGDG130	TGDG160	TGDG170	TGDG180	TGDG200
Resin		HDPE										
Minimum carbon black, %≥	D4218	2										
Ultimate tensile strength, KN/m	D6637	50	60	80	90	100	120	130	160	170	180	200
Elongation at maximum load, %		≤10										
Tensile strength 2% strain, KN/m		14	16	23	27	29	35	38	47	50	52	58
Tensile strength at 5% strain, KN/m		47	31	44	51	55	65	72	85	88	104	116
Creep limit strength, KN/m		21	24	31	37	39	46	49	60	65		
Yield elongation, %≤		12										
Durability												
UV resistance, %	D4355	98										
Oxidation resistance, % (EN ISO13438)		100										
Brittleness, Wash DOT T926		Pass										
Length, m		50, 100		50								
Width, m		1, 2										