



**ArmaGrid** – UX<sub>PET</sub>  
COATED POLYESTER UNIAXIAL GEOGRIDS

# ArmaGrid – UX<sub>PET</sub>

ArmaGrid – UX<sub>PET</sub> is a knitted polyester Geogrid providing tensile reinforcement capacity in one direction. ArmaGrid – UX<sub>PET</sub> is best suited for demanding soil reinforcement applications.

## Applications

- **Steep Slopes:** Used as soil reinforcement for reinforced soil steep slopes and embankments.
- **Basal Reinforcement:** ArmaGrid – UX<sub>PET</sub> improves the stability of soft sub-soils by interacting with engineered fill and providing a strong mattress foundation for embankments and platforms.
- **Foundation Improvement:** ArmaGrid – UX<sub>PET</sub> is used to support shallow structural foundations, by improving stability, enhancing load distribution and reducing differential settlement.

## Technical Parameters

Properties	Test Method	Units	AG-UX <sub>PET</sub> 40	AG-UX <sub>PET</sub> 60	AG-UX <sub>PET</sub> 80	AG-UX <sub>PET</sub> 100	AG-UX <sub>PET</sub> 120	AG-UX <sub>PET</sub> 150	AG-UX <sub>PET</sub> 180	AG-UX <sub>PET</sub> 200	AG-UX <sub>PET</sub> 250	AG-UX <sub>PET</sub> 300
			Minimum Average Roll Value (MARV) <sup>i</sup>									
Physical Properties												
Material			Polyester									
Mechanical Properties												
Ultimate Tensile Strength in Machine Direction	ASTM D 6637B	kN/m	40	60	80	100	120	150	180	200	250	300
UltimateTensile Strength in Cross Machine Direction		kN/m	20	20	30	30	30	30	30	30	30	30
Elongation at Designated Strength (±2%)		%	10	10	10	10	10	10	10	11	11	11
Tensile Strength at 5% Strain (±5%)			20	30	40	50	60	75	81	90	100	120
Creep Reduction Factor (114 Years Design Life)	ASTM D 6637A	at 20°C	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39
		at 30°C	1.44	1.44	1.44	1.44	1.44	1.44	1.44	1.44	1.44	1.44
Partial Factor - Installation Damage	ASTM D 5818	Particle size < 10mm (Silty Sand)	1.10	1.10	1.02	1.02	1.02	1.06	1.06	1.06	1.06	1.06
		Particle size < 19mm (Gravely Sand)	1.12	1.12	1.06	1.06	1.04	1.10	1.10	1.10	1.10	1.10
		Particle size < 75mm (Sandy Gravel)	1.19	1.19	1.16	1.16	1.11	1.11	1.11	1.11	1.11	1.11
Partial Factor - Environmental Effects	GRI-GG7, GRI-GG8 Environment	4 < pH < 9	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Standard Packaging												
Roll Width <sup>ii</sup>		m	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8
Roll Length <sup>ii</sup>		m	100	100	100	100	100	100	100	100	100	100
Roll Area <sup>ii</sup>		m²	380	380	380	380	380	380	380	380	380	380
Weight Per Roll <sup>iii</sup>		kg	90.5	112.9	138.4	157.8	182.1	199.2	232.6	246.7	287	315

<sup>i</sup> All the values mentioned are of minimum average roll values (MARV).

<sup>ii</sup> These values are subject to ±1% variation

<sup>iii</sup> Other roll sizes available

### NOTES

- All prescribed values are minimum unless otherwise mentioned and tested in GAI-LAP accredited laboratories.
- These properties may change at the time of handling, storage and shipping.
- Roll weights are average values including shipping cores. Actual roll weight may vary.
- Customized rolls with varying lengths or master rolls can be manufactured.
- The above values are subject to change as per discretion of the company.

