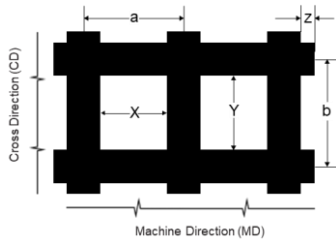




ISO 9001, 14001, 45001



IS 17373:2020



The high strength geogrid solution to reinforce weak soils with long-term structural integrity and performance.

ArmaLynk is a high strength uniaxial geogrid made from high-tenacity polyester yarns, coated for durability. Utilizing a unique non-invasive welding process, these strips are orthogonally welded to create a resilient geogrid structure. It is designed for embankments over weak soils, voids, or rigid inclusions, offering tensile strengths up to 1800 kN/m.

Applications include bridge approaches, landfill extensions, access roads, and more, replacing costly traditional methods. Its installation is simple: surface preparation, geogrid placement (single or multiple layers), and backfilling.

Geoquest provides full project support, from design to on-site assistance, ensuring sustainable and efficient solutions.

### Technical properties

Properties \ Reference	Units	300	400	500	600	700	800
<b>Mechanical properties</b>							
Nominal tensile strength	kN/m	300	400	500	600	700	800
Elongation at nominal strength	%	≤12					
Partial reduction factor – creep <sup>i</sup>	@20°C	1.37					
Partial reduction factor – installation damage	D <sub>50</sub> 0.9 mm	1.01	1.01	1.00	1.00	1.00	1.00
	D <sub>50</sub> 5.0 mm	1.02	1.02	1.00	1.00	1.00	1.00
	D <sub>50</sub> 21.0 mm	1.01	1.01	1.00	1.00	1.00	1.00
Partial reduction factor - environmental effects <sup>ii</sup>	-	1.10					
<b>Physical properties</b>							
Polymer	-	High Tensile Polyester (HT-PET)					
Sheathing	-	Linear Low-Density Polyethylene (LLDPE)					
MD and CD strap distance (a/b)	mm/mm	235/1000	201/1000	245/1000	201/1000	171/1000	152/1000
Aperture (X/Y)	mm/mm	165/955	131/955	175/955	131/955	101/955	82/955
MD strap width	mm	70					
Nominal roll length <sup>iii</sup>	m	150	135	100	100	100	100
Nominal roll width	m	≤5.7					
Selvedge (z)	mm	≤50					
Weight of roll <sup>iiii</sup>	kg	680	798	730	820	935	1050

<sup>i</sup> Reduction Factors are at 20°C and for 114 years design life. Reduction factors for higher temperatures up to 40°C can be furnished on request.

<sup>ii</sup> Partial Reduction factors - environmental effects are valid for pH range of 3 to 9.

<sup>iii</sup> The provided roll weight is an estimate and includes the steel core. Actual weight may vary based on the roll's final length and width. Roll length may be adjusted during manufacturing to meet logistical requirements. The final weight and length will be confirmed at time of delivery.

<sup>iv</sup> Intermediate strength products of ArmaLynk can be manufactured on request.

<sup>v</sup> Our internal laboratory is certified by the National Accreditation Board for Testing and Calibration Laboratories (NABL).

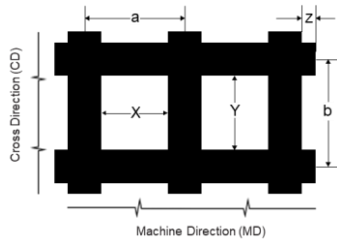
Global Warming Potential A1-A3 (GWP) = 3 kg CO<sub>2</sub>e/kg

Environmental Product Declaration is available in accordance with ISO 14025 and EN 15804 (Certificate No.: EPD HUB, HUB-0978)

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### Technical properties

Properties \ Reference	Units	900	1000	1100	1200	1300
<b>Mechanical properties</b>						
Nominal tensile strength	kN/m	900	1000	1100	1200	1300
Elongation at nominal strength	%	≤12				
Partial reduction factor – creep <sup>i</sup>	@20°C	1.37				
Partial reduction factor – installation damage	D <sub>50</sub> 00.9 mm	1.00	1.00	1.00	1.02	1.02
	D <sub>50</sub> 05.0 mm	1.00	1.00	1.00	1.02	1.02
	D <sub>50</sub> 21.0 mm	1.00	1.00	1.00	1.02	1.02
Partial reduction factor - environmental effects <sup>ii</sup>	-	1.10				
<b>Physical properties</b>						
Polymer on the tensile element	-	High Tensile Polyester (HT-PET)				
Polymer sheathing on the tensile element	-	Linear Low-Density Polyethylene (LLDPE)				
MD and CD strap distance (a/b)	mm/mm	134/1000	120/1000	108/1000	101/1000	104/1000
Aperture (X/Y)	mm/mm	64/955	50/955	38/955	31/955	34/955
MD strap width	mm	70				
Nominal roll length <sup>iii</sup>	m	60	60	60	60	55
Nominal roll width	m	≤5.7				
Selvedge (z)	mm	≤50				
Weight of roll <sup>iv</sup>	kg	745	800	875	935	920

<sup>i</sup> Reduction Factors are at 20°C and for 114 years design life. Reduction factors for higher temperatures up to 40°C can be furnished on request.

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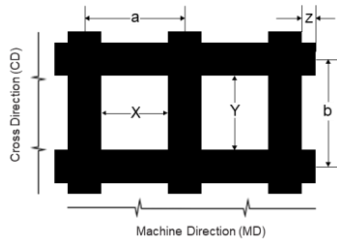
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### Technical properties

Properties \ Reference	Units	1400	1500	1600	1700	1800
<b>Mechanical properties</b>						
Nominal tensile strength	kN/m	1400	1500	1600	1700	1800
Elongation at nominal strength	%	≤12				
Partial reduction factor – creep <sup>i</sup>	@20°C	1.37				
Partial reduction factor – installation damage	D <sub>50</sub> 00.9 mm	1.02	1.02	1.00	1.00	1.00
	D <sub>50</sub> 05.0 mm	1.02	1.02	1.00	1.00	1.00
	D <sub>50</sub> 21.0 mm	1.02	1.02	1.03	1.03	1.03
Partial reduction factor - environmental effects <sup>ii</sup>	-	1.10				
<b>Physical properties</b>						
Polymer on the tensile element	-	High Tensile Polyester (HT-PET)				
Polymer sheathing on the tensile element	-	Linear Low-Density Polyethylene (LLDPE)				
MD and CD strap distance (a/b)	mm/mm	95/1000	101/1000	94/1000	102/1000	97/1000
Aperture (X/Y)	mm/mm	25/955	31/955	24/955	32/955	27/955
MD strap width	mm	70				
Nominal roll length <sup>iii</sup>	m	55	40	40	40	40
Nominal roll width	m	≤5.7				
Selvedge (z)	mm	≤50				
Weight of roll <sup>iv</sup>	kg	985	785	835	905	950

<sup>i</sup> Reduction Factors are at 20°C and for 114 years design life. Reduction factors for higher temperatures up to 40°C can be furnished on request.

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