



Erosion Protection and Load Distribution



ArmaWeb®

EXPANDABLE CELLULAR
CONFINEMENT SYSTEMS

Reinforced Steep Slope

ArmaWeb® is a 3-dimensional soil stabilization and erosion protection system. It is made of High Density Polyethylene (HDPE) and welded at junctions to form cellular confinement systems. ArmaWeb® offers higher performance and faster installation for various applications.

Applications

- **Erosion Protection:** Slope erosion protection for high embankments for highways, railways, earthen dykes, mine overburden dumps and alike.
- **Liner Protection:** For protection of slope liner (municipal solid wastes/ hazardous waste/mine tailing) system without puncturing the liner.
- **Load Support:** Spreads the load over a larger area for pavements, ground improvement below embankments, access roads and over poor subgrades and soft soils.
- **Retaining Walls Structures:** Used as either facing of MSE wall or forms gravity retaining wall by stacking the ArmaWeb® cells one above the other as per designed cross section.

Technical Parameters

Properties	Test Method	Unit	AW 330	AW 356	AW 445	AW 660	AW 712
			Minimum Average Roll Value (MARV) ⁱ				
Physical Properties							
Material			Compound of various Polyethylenes and additives				
Polymer Density	ASTM D 1505	g/cm ³	0.935 - 0.965				
Carbon Black Content ⁱⁱⁱ	ASTM D 1603	%	1.50%				
Nominal Sheet Thickness (Post Texturing) ⁱⁱⁱ	ASTM D 5199	mm	1.4				
Weld Spacing ⁱⁱⁱ		mm	330	356	445	660	712
Cell Depth ⁱⁱⁱ		mm	75, 100, 125, 150, 200, 250, 300				
Expanded Cell Dimensions Width ⁱⁱⁱ		mm	244	259	320	488	508
Expanded Cell Dimensions Length ⁱⁱⁱ		mm	210	224	287	436	475
Expanded Cell Area ⁱⁱⁱ		cm ²	250	289	460	1000	1206
Nominal Expanded Section Width ⁱⁱⁱ		m	2.44	2.59	2.56	2.44	2.56
Nominal Expanded Section Length ⁱⁱⁱ		m	6.10	6.50	8.35	12.63	13.72
Nominal Expanded Section Area ⁱⁱⁱ		m ²	14.9	16.8	21.4	30.8	35.1
Texture			Polyethylene strip consists of a multiple rhomboidal indentations, over the entire strip area on both sides of the strip. The indentations have a surface density of 22 to 32 per cm ⁱⁱ .				
Perforations			Polyethylene strip is perforated with horizontal rows of maximum 10 mm diameter holes. Cell perforations area is less than 12% of cell surface area.				
Mechanical Properties							
Cell Depth - Seam Peel Strength (US ACE Technical Report, GL-86-19) ^{iv, v}		N	75-1065, 100-1420, 125-1775, 150-2130, 200-2840, 250-3550, 300-4260 ^{iv, v}				
Environmental Stress Crack Resistance	ASTM D 1693	hrs	>5000				

ⁱ All the values mentioned are of minimum average roll values (MARV) except for apparent opening size (AOS) which is maximum average roll value (MaxARV)

ⁱⁱ These values are subject to ±1% variation

ⁱⁱⁱ These values are subject to ±3% variation

^{iv} These values are subject to ±5% variation

^v These values are applicable for all product variant

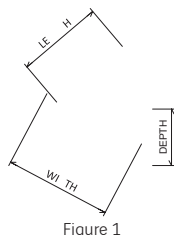


Figure 1

NOTES

- These properties may change at the time of handling, storage and shipping.
- The values can be customized.
- The above values are subject to change as per discretion of the company