



Stabilizing an unstable world!

PRS-NEOWEB® - CATEGORY C GEOCELLS (Cellular Confinement System) Specifications

SYSTEM PHYSICAL PROPERTIES (±5%)			
PROPERTIES	DESCRIPTION		
Material	Neoloy® polymeric nano-composite alloy (Composite alloy of polyester/polyamide nano-fibers dispersed in a polyethylene matrix)		
Coefficient of Soil-Cell Friction Efficiency	0.95	ASTM D5321	
Cell Wall Surface Texture	Textured and perforated for internal friction efficiency		
Cell Wall Height	50, 75, 100, 120, 150, 200 mm		
Distance between Weld Seams	330, 356, 445, 660, 712 mm		
Required Installation Force (for deployment)	6.0 kg	Required force to open section 20 m ² x 200 mm height x 330 mm (distance between seams) at 23°C	
Traceability	Each section marked for full detailed traceability		
DIMENSIONAL STABILITY (±5%)			
DESCRIPTION	VALUE	UNITS	TEST METHOD
Cell Dimensional Stability by Coefficient of Thermal Expansion (CTE)	≤ 115	ppm/ each 1°C	ISO 11359-2 (TMA) ASTM E831
SEAM WELD PROPERTIES (±7%)			
Seam Weld Strength – Weld Splitting	31 (minimum value)	kN/m	ISO-13426-1 Part 1 Method C (1)
<i>(1) Adjusted to simulate optimum open cell size</i>			
TENSILE PROPERTIES (±7%)			
Material Strength at Yield	23	MPa	ASTM D638, ISO 527
Strength at Yield – non-perforated (Wide-width)	25	kN/m	ISO 10319 (2)
Strength at Yield – perforated (Wide-width)	19	kN/m	ISO 10319 (2)
<i>(2) Standard ISO 10319 test modified to achieve more accurate results by using more representative test sample size; strip is cut adjacent to 2 seams and clamped so distance between clamps is 1/2 of cell height; test direction is perpendicular to seams. Test sample measured at strain rate 100 mm/min at 23°C. Test of perforated tensile strength is conducted on the area of the sample with the densest perforations.</i>			
PHOTOCHEMICAL & OXIDATION DURABILITY			
Resistance to UV Degradation (UV and Oxidation Resistance) (3) <i>(3) Effective design life at least 60 years</i>	≥ 400	Minutes	ASTM D5885 (HPOIT @ 200°C) Testing as per GRI GM13
LONG-TERM PLASTIC DEFORMATION			
Measured Plastic Deformation by Accelerated Method Step 1 at 44°C Step 2 at 51°C Step 3 at 58°C Step 4 at 65°C <i>(4) At load of 6.6 kN/m</i>	≤ 0.6 ≤ 0.8 ≤ 1.2 ≤ 1.3	% Deformation	ASTM D-6992 (SIM) (4)
PERFORMANCE AT VARYING TEMPERATURES			
Flexural Storage Modulus at sample elevated temperature: +30°C +45°C +60°C	> 775 > 675 > 525	MPa	ISO 6721-1 ASTM E2254 (DMA)
Brittle Temperature:	≤ Minus 70	°C	



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Data Sheet

PRODUCT PART NO.

Example: **PRS- Neoweb-445- 106-76-P-T-C**

PRS-	Neoweb-	330-	50-	(1) up to 106-	(2) P- X-	(3) S-	C
		356-	75-				
		445-					
		660-					
		712-					
		Weld Spacing Distance (mm)	Cell Height (mm)	No. of Strips / Section	P-Perforated X-Non-perforated	Color T-Terra Cotta	Category

(1) No. of Strips – customized by project from 4 to 106 strips; different heights available upon special order

(2) Perforations – from ~6-22% of cell wall area of variable dimensions and shapes

(3) Colors – additional colors available upon request

CELL & SECTION NOMINAL DIMENSIONS

PROPERTIES	DESCRIPTION	DESCRIPTION	DESCRIPTION	DESCRIPTION	DESCRIPTION
Distance between Weld Seams	330 mm (±2.5%)	356 mm (±2.5%)	445 mm (±2.5%)	660 mm (±2.5%)	712 mm (±2.5%)
Cell Wall Heights	50, 75, 100, 120, 150, 200 mm (±5%)				
Cell Dimension (Optimal opening)	245 x 210 mm (±3%)	260 x 224 mm (±3%)	340 x 290 mm (±3%)	490 x 420 mm (±3%)	520 x 448 mm (±3%)
No. of Cells/m ²	39	35	22	10	8
Maximum Section Size ⁽⁴⁾ (Expanded)	2.5 x 11.80 m (±3% max.)	2.7 x 12.1 m (±3% max.)	2.8 x 15.6 m (±3% max.)	2.5 x 23.6 m (±3% max.)	2.8 x 24.2 m (±3% max.)
Maximum Section Area (Expanded)	29.5 m ² (±3%)	32.6 m ² (±3%)	43.6 m ² (±3%)	59.0 m ² (±3%)	67.7 m ² (±3%)

(4) Section Sizes – different size sections available upon special order

SHIPPING DATA

The following data will be made available per order:

Neoweb Series + Configuration: <ul style="list-style-type: none"> Height No. of strips per section 	Section – Weight (kg) <ul style="list-style-type: none"> Weight per section 	Pallet : <ul style="list-style-type: none"> No. of Sections Area per pallet (m²) Gross Weight (kg) 	Quantity (m²): <ul style="list-style-type: none"> Per 20' Container Per 40' Container
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CERTIFICATIONS and ACCREDITATIONS

DESCRIPTION	ISSUED BY	CERTIFICATE NUMBER
Quality Management System Certification – ISO-9001:2008 for R&D, Manufacturing and Marketing	Ronet (ANAB accredited)	Q3600
Environmental Management System Certification – ISO-14001:2004	Ronet (ANAB accredited)	E3600
Occupational Health and Safety Management System Certification – ISO-18000	Ronet (ANAB accredited)	O3600
CE Marking per EU Directive 89/106/EEC	ITB, Building Research Institute, EU	1488-CPD-0099
Accreditation of New Materials and Techniques	Indian Roads Congress	IRC-24(12)2009(ACC-30)
GOST R – Mark of Conformity - Russian Standards Institute	Federal Agency for Technical Regulation, Russia	POCC IL.AE83.HO7052