

| Property | Standard / Reference | Results | |
|--|---|---|--|
| Density | | 750kg /m3 | |
| Porosity / Void Ratio | ASTM C642 | Avg. 45% | |
| Long Term Load Fatigue Testing | Independent UKAS Lab | Specimen: Diameter 114.32 mm Height 100 mm Area m² 0.0102 506,010 cycles -0.2 kN to -2 kN Deformation no greater than 5% | |
| Compression | BS EN 604 Data Analysis Independent UKAS Certified Test Report | Specimen Height: 100mm At Avg. Compressive Stress 0.1 MPa, Strain = 3.3% | |
| Predicted Design Life | Design Life Analysis | 60+ Years: In Standard Conditions for Drainage Parts. Sufficiently durable in standard conditions and backfill when designed and installed as drainage parts. 60 Years: In Active Loading. Under active loading of 50 to 95 kPa, based on exerted forces within the active loading zone and or Cess / 10ft / 6ft / 4ft drainage. | |
| Resistance to Temperature, Water | ASTM D4065 | Pass | |
| Carbon Reporting | Life Cycle Assessment | Minimum of 90% waste materials in production of the overall composite | |
| Resistance to Chemicals (Petrol, Diesel, De-icer, Salt) | DEF STAN 00-035 Part 3 | No visual surface change or deterioration was observed | |
| Toxicology and Environmental | NF P 90-112:2016 | Heavy Metals Pass. PAH: Pass. Environmental Safety Confirmed. | |
| Water Permeability | BS EN ISO 11058 Data Analysis Independent UKAS Certified Test Report | Constant Head Specimen Area Litres/metre-sq/sec Flow Rate Qy Vertical Hydraulic Conductivity (Ky) | 50 mm 0.0039 m² 49 l/m²/s 0.049 m/s 176.40 m/hr |
| In Plane Water Flow Soft/Soft Platens | BS EN ISO 12958 Data Analysis Independent UKAS Certified Test Report | Hydraulic Gradient Flow Rate Qx Horizontal Hydraulic Conductivity (Kx) Drainage Stacker (235 mm width x 220 mm height) Drainage Stacker (235 mm width x 100 mm height) Drainage Mat / Slab (1m ² x 75 mm thickness) Drainage Mat / Slab (1m ² x 100 mm thickness) | 0.1 (1 in 10 slope) 0.52 l/s/m 0.104 m/s 5.37 l/s 2.44 l/s 7.80 l/s 10.40 l/s |
| | | Hydraulic Gradient Flow Rate Qx Horizontal Hydraulic Conductivity (Kx) Drainage Stacker (235 mm width x 220 mm height) Drainage Stacker (235 mm width x 100 mm height) Drainage Mat / Slab (1m ² x 75 mm thickness) Drainage Mat / Slab (1m ² x 100 mm thickness) | 0.01 (1 in 100 slope) 0.063 l/s/m 0.126 m/s 6.51 l/s 2.96 l/s 9.45 l/s 12.6 l/s |
| <ul style="list-style-type: none"> • Recycled Material Composition: Recycled rubber tyres, supporting environmental sustainability. • High Performance Modular Units: Engineered to optimise hydraulic performance and drainage efficacy. • Modular Design: Delivers improved safety by design and drainage asset construction efficiencies. • Durability: Rubber material ensures long-term durability and resilience. • Chemical Resistance: Offers resistance to common chemicals such as petrol, diesel, de-icer, and salt. • Environmental Compliance: Free from harmful PAHs, complying with environmental safety standards. • Temperature Resistance: Maintains performance in both hot and cold environments. • Flexibility: Accommodates minor ground movements, reducing the risk of system failure. • Load-Bearing Capacity: Designed to handle standard loading conditions in drainage applications. • UV Resistant: Treated to resist UV degradation, prolonging the system's lifespan. | | | |