

EGS PP Non Woven Geotextile Range

EGS PP non woven geotextile are of a type of nonwoven geotextile composed of polypropylene fibres which are formed into a stable network such that the fibres retain their relative position. They are inert to biological degradation and resists naturally encountered chemicals, acids and alkalis.

(T: Typical values M: Minimum average roll values)

| Properties (Standard) | Unit | PPNW 140 | PPNW 150 | PPNW 180 | PPNW 200 | PPNW 250 | PPNW 300 | PPNW 340 | PPNW 350 | PPNW 400 | PPNW 500 | PPNW 600 | PPNW 750 | PPNW 900 |
|-----------------------|------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
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Mechanical Properties

| | | | | | | | | | | | | | | | |
|-----------------------------------|-----|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| Tensile Strength [ASTM D 4595] | T/w | KN/m | 9.3 | 10.0 | 13.5 | 14.0 | 18.0 | 20.0 | 22.0 | 25.5 | 31.3 | 38.1 | 36.8 | 54.4 | 61.0 |
| | M/w | | 6.8 | 7.1 | 10.0 | 10.5 | 13.0 | 16.0 | 17.0 | 23.8 | 25.2 | 31.2 | 30.3 | 47.4 | 52.5 |
| Tensile Elongation [ASTM D 4595] | T | % | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 |
| Grab Strength [ASTM D 4632] | T/w | N | 495 | 520 | 685 | 700 | 900 | 990 | 1150 | 1321 | 1532 | 1912 | 2150 | 2650 | 2990 |
| | M/w | | 380 | 330 | 540 | 580 | 660 | 750 | 940 | 1210 | 1420 | 1710 | 1890 | 2320 | 2400 |
| Grab Elongation [ASTM D 4632] | T | % | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 |
| Trapezoidal Tear [ASTM D 4533] | T/w | N | 170 | 220 | 260 | 260 | 380 | 460 | 480 | 525 | 631 | 777 | 820 | 1140 | 1420 |
| | M/w | | 140 | 190 | 210 | 220 | 290 | 390 | 410 | 448 | 470 | 650 | 690 | 790 | 1220 |
| CBR Burst Strength [ASTM D 6241] | T/w | N | 1,580 | 1,640 | 1,940 | 2,270 | 2,900 | 2,900 | 3,600 | 4,060 | 4,960 | 6,140 | 6,860 | 9,710 | 10,400 |
| | M/w | | 1,220 | 1,160 | 1,680 | 1,650 | 2,400 | 2,436 | 3,240 | 3,677 | 4,597 | 4,950 | 6,174 | 6,900 | 8,400 |
| Puncture Resistance [ASTM D 4833] | T/w | N | 280 | 325 | 390 | 410 | 576 | 450 | 700 | 856 | 1,066 | 1,338 | 1,140 | 1,290 | 1,700 |
| | M/w | | 230 | 272 | 341 | 350 | 471 | 390 | 520 | 770 | 917 | 1,210 | 1,026 | 1,110 | 1,300 |

Hydraulic Properties

| | | | | | | | | | | | | | | | |
|---|---|----------------------|-----|-------|-----|-------|-------|-----|-----|-------|-------|-------|-------|-----|-----|
| Flow Rate @50mm head [ASTM D 4491] | T | l/min/m ² | N/A | 4800 | N/A | 2790 | 2440 | N/A | N/A | 1700 | 2270 | 800 | 3100 | N/A | N/A |
| Flow Rate @100mm head [ASTM D 4491] | | l/sec/m ² | N/A | 158 | N/A | 91 | 80 | N/A | N/A | 56 | 75 | 26 | 102 | N/A | N/A |
| Permeability [ASTM D 4491] | T | cm/s | N/A | 0.21 | N/A | 0.15 | 0.13 | N/A | N/A | 0.12 | 0.23 | 0.08 | 0.46 | N/A | N/A |
| Permittivity [ASTM D 4491] | T | Sec ⁻¹ | N/A | 1.58 | N/A | 0.91 | 0.8 | N/A | N/A | 0.56 | 0.75 | 0.26 | 1.02 | N/A | N/A |
| Apparent Opening Size O ₉₀ [ASTM D 4751] | T | mm | N/A | 0.089 | N/A | 0.062 | 0.061 | N/A | N/A | 0.062 | 0.074 | 0.061 | 0.085 | N/A | N/A |
| Apparent Opening Size O ₉₅ [ASTM D 4751] | T | mm | N/A | 0.097 | N/A | 0.069 | 0.069 | N/A | N/A | 0.069 | 0.078 | 0.069 | 0.092 | N/A | N/A |

Endurance Properties

UV Resistance [ASTM D 4355] T Wide width tensile strength retained by not less than 70% after 500h exposure

Physical Identification Properties

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|-----------------------------|---|------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Thickness (2KP) [ASTMD5199] | T | mm | 1.10 | 1.21 | N/A | 1.49 | 1.58 | 1.7 | N/A | 2.12 | 2.2 | 2.85 | 4.52 | N/A | N/A |
| | M | | 1.00 | 1.0 | N/A | 1.1 | 1.3 | 1.4 | N/A | 1.8 | 1.8 | 2.4 | 3.8 | N/A | N/A |
| Mass per Unit [ASTM D5261] | T | g/m ² | 140 | 150 | 180 | 200 | 250 | 300 | 340 | 350 | 400 | 500 | 600 | 750 | 900 |
| Roll Width | T | m | 4/6 | | | | | | | | | | | | |
| Roll Length | T | m | 300 | 275 | 230 | 210 | 180 | 140 | 125 | 120 | 105 | 85 | 70 | 55 | 45 |
| Approx Load Q' ty / 40' HQ | T | Rolls | 60/40 | | | | | | | | | | | | |
| | T | Sq. m | 72000 | 66000 | 55200 | 50400 | 43200 | 33600 | 30000 | 28800 | 25200 | 20400 | 16800 | 13200 | 10800 |

*Above values are on an average basis, the data was obtained from in-house test laboratory, National test institutes and international test institutes. EGS Laboratory is improving continuously with the purpose of assuring reliable quality. EGS Geosolutions reserves the right to change the product specifications at any time. Liability Exclusion: This publication should not be construed as engineering advice.