

# GSE CoalDrain 7.6 mm Geocomposite (Double-Sided)

METRIC

GSE CoalDrain geocomposite consists of a 7.6 mm thick GSE HyperNet geonet heat-laminated with a non-woven geotextile on the bottom side and an innovative composite fabric on the top side. The top geotextile serves as filter against fine materials like coal ash and FGD gypsum while the core serves the drainage function. The innovative geocomposite has been tested extensively in the laboratory and the field and has been proven to meet the performance requirements of an effective filter against coal combustion residuals.



**AT THE CORE:**  
A high flow geocomposite that effectively filters coal combustion residuals.

## Product Specifications

Tested Property	Test Method	Frequency	Minimum Average Roll Value <sup>(1)</sup>
<b>Geocomposite</b>			
Transmissivity <sup>(2)</sup> , m <sup>2</sup> /sec	ASTM D 4716	1/50,000 m <sup>2</sup>	9 X 10 <sup>-4</sup>
Ply Adhesion, g/cm	ASTM D 7005	1/4,600 m <sup>2</sup>	89
<b>Geonet Core<sup>(1,3)</sup> - GSE HyperNet 7.6</b>			
Geonet Core Thickness, mm	ASTM D 5199	1/4,600 m <sup>2</sup>	7.6
Density, g/cm <sup>3</sup>	ASTM D 1505	1/4,600 m <sup>2</sup>	0.94
Tensile Strength (MD), N/mm	ASTM D 7179	1/4,600 m <sup>2</sup>	13.3
Carbon Black Content, %	ASTM D 4218	1/4,600 m <sup>2</sup>	2.0
Compressive Strength kPa	ASTM D 6364	1/50,000 m <sup>2</sup>	1200
<b>Top Composite Geotextile<sup>(1,3)</sup></b>			
Structure	Hybrid monolithic woven-nonwoven needlepunched		
Mass per Unit Area, g/m <sup>2</sup>	ASTM D 5261	1/8365 m <sup>2</sup>	480
Grab Tensile Strength, N	ASTM D 4632	1/8365 m <sup>2</sup>	890
CBR Puncture Strength, N	ASTM D 6241	1/8365 m <sup>2</sup>	3,447
Trapezoidal Tear Strength, N	ASTM D 4533	1/8365 m <sup>2</sup>	378
AOS, US Sieve (mm)	ASTM D 4751	1/50,000 m <sup>2</sup>	170 (0.09)
Permittivity, (sec <sup>-1</sup> )	ASTM D 4491	1/50,000 m <sup>2</sup>	0.3
Water Flow Rate, lpm/m <sup>2</sup>	ASTM D 4491	1/50,000 m <sup>2</sup>	814
UV Resistance, % retained	ASTM D 4355	per formulation	70
Field Basin Tests		per formulation	see note <sup>(5)</sup>

[Product specifications continued on back]



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A high flow  
geocomposite that  
effectively filters coal  
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## Product Specifications [continued]

Tested Property	Test Method	Frequency	Minimum Average Roll Value <sup>(1)</sup>
<b>Bottom Geotextile</b>			
Mass per Unit Area, g/m <sup>2</sup>	ASTM D 5261	1/8,300 m <sup>2</sup>	200
Grab Tensile Strength, N	ASTM D 4632	1/8,300 m <sup>2</sup>	710
Grab Elongation	ASTM D 4632	1/8,300 m <sup>2</sup>	50%
CBR Puncture Strength, N	ASTM D 6241	1/50,000 m <sup>2</sup>	1,936
Trapezoidal Tear Strength, N	ASTM D 4533	1/8,300 m <sup>2</sup>	290
AOS, US Sieve (mm)	ASTM D 4751	1/50,000 m <sup>2</sup>	70 (0.212)
Permittivity, (sec <sup>-1</sup> )	ASTM D 4491	1/50,000 m <sup>2</sup>	1.5
Water Flow Rate, lpm/m <sup>2</sup>	ASTM D 4491	1/50,000 m <sup>2</sup>	4,480
UV Resistance, % retained	ASTM D 4355 (after 500 hours)	per formulation	70
<b>TYPICAL ROLL DIMENSIONS<sup>(4)</sup></b>			
Roll Width, m			4.57
Roll Length, m			39.62
Roll Area, m <sup>2</sup>			181

### NOTES:

- <sup>(1)</sup>All geotextile are minimum average roll values except AOS which is maximum average roll value and UV resistance is typical value. Geonet core thickness is nominal value.
- <sup>(2)</sup>Gradient of 0.1, normal load of 480 kPa water at 20°C between steel plates for 15 minutes. Contact GSE for performance transmissivity value for use in design.
- <sup>(3)</sup>Component properties prior to lamination.
- <sup>(4)</sup>Roll widths and lengths have a tolerance of ±1%.
- <sup>(5)</sup>Filter compatibility with a minimum of three types of CCP materials (fly ash, stabilized FGD, and FGD gypsum) under simulated field conditions.

GSE is a leading manufacturer and marketer of geosynthetic lining products and services. We've built a reputation of reliability through our dedication to providing consistency of product, price and protection to our global customers.

Our commitment to innovation, our focus on quality and our industry expertise allow us the flexibility to collaborate with our clients to develop a custom, purpose-fit solution.



**[ DURABILITY RUNS DEEP ]** For more information on this product and others, please visit us at [GSEworld.com](http://GSEworld.com), call 800.435.2008 or contact your local sales office.