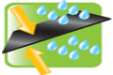
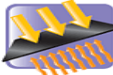


THRACE NWS&GEOs S.A. **WG technical fabrics** are polypropylene, UV stabilized, high strength, black woven geotextiles, used in many civil engineering and building applications. They are manufactured at THRACE NWS&GEOs S.A. facilities that have achieved **ISO 9001:2008** certification for their systematic approach to quality. They are also resistant to chemicals and biological agents. **WG geotextiles** conform to the property values listed below. All technical data are based on statistical analysis from internal and external laboratory results.


PROPERTY	METHOD	UNIT	WG14	WG16	WG19	WG22	WG25	WG30	WG35	WG40	WG40L	WG45	WG50	WG55	WG60	WG60L	WG65	WG80	WG85	WG85L	WG105	WG150	
MECHANICAL																							
Tensile Strength (MD/CMD)	EN 10319	kN/m	14/14	16/16	19/19	24/19	25/25	30/30	35/35	40/40	40/40	45/45	50/50	55/55	60/60	60/60	65/65	80/80	85/85	85/85	105/105	150/150	
Elongation (MD/CMD)	EN 10319	%	14/10	15/13	15/15	14/9	15/11	16/14	15/13	17/15	15/12	15/12	15/11	15/11	15/10	15/10	15/11	15/11	15/11	15/11	15/11	15/10	
Tensile Strength at 2% strain (MD/CMD)	EN 10319	kN/m	-	-	-	-	-	-	6/7	-	-	-	-	5/12	-	-	-	-	8/16	8/16	-	-	
Tensile Strength at 5% strain (MD/CMD)	EN 10319	kN/m	-	-	-	-	-	-	15/16	-	-	-	-	18/28	-	-	-	-	28/40	28/40	-	-	
Resistance to static puncture	EN 12236	N	1800	2300	2500	2300	3000	3300	3500	4500	4500	5000	6000	6500	7500	7500	8000	10000	10500	10500	12000	20000	
Dynamic Perforation resistance	EN 13433	mm	21	19	17	22	12	14	12	10	10	10	8	8	12	12	10	5	4	4	4	3	4
Loop Tensile Strength*	ISO 2062	N	-	-	-	-	-	-	-	-	2000	-	-	-	-	2000	-	-	-	2000	-	-	
HYDRAULIC																							
Characteristic Opening Size (O ₉₀)	EN 12956	µm	300	250	250	600	250	230	230	200	200	200	200	190	180	180	225	225	180	180	175	-	
Water Permeability normal to the plane (V _{H50})	EN 11058	m/s*10 ⁻³	5	12	7	40	7	7	7	7	12	7	18	21	18	18	15	10	9	9	9	10	
Water Flow Rate (dh =50mm)	EN 11058	l/m ² *s	5	12	7	40	7	7	7	7	12	7	18	21	18	18	15	10	9	9	9	10	
PHYSICAL																							
Mass/Unit Area	EN 9864	gr/m ²	75	90	100	110	125	140	160	190	200	210	235	255	280	280	310	370	400	400	480	800	
Thickness	EN 9863-1	mm	0.3	0.4	0.4	0.55	0.6	0.7	0.8	0.8	1.0	1.1	1.1	1.1	0.9	0.9	0.9	1.1	1.2	1.2	1.4	2.4	
ENDURANCE																							
UV Resistance	EN 12224	%retained strength	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	
STANDARD PACKAGING⁵																							
Roll Width / Length	Measured	m	5.3/100	5.3/100	5.3/100	5.04/1000	5.3/100	5.3/100	5.3/100	5.3/100	5.3/100	5.3/100	5.3/100	5.3/100	5.2/100	5.2/100	5.2/100	5.2/100	5.2/100	5.2/100	5.2/100	5.2/100	




F=Filtration




S=Separation




D=Drainage




R=Reinforcement



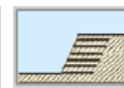
Erosion Control



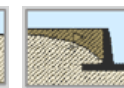
EN 13249
F
R
F+S
R+S
F+R
F+R+S



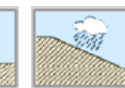
EN 13250
F
R
F+S
R+S
F+R
F+R+S



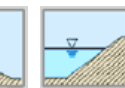
EN 13251
F
R
F+S
R+S
F+R
F+R+S



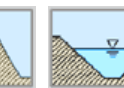
EN 13252
F
D
F+S
F+S+D



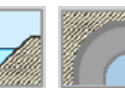
EN 13253
F
R
F+S
R+S
F+R+S



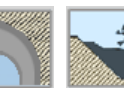
EN 13254
F
R
F+S
R+S
F+R
F+R+S



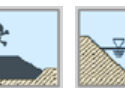
EN 13255
F
R
F+S
R+S
F+R
F+R+S



EN 13256



EN 13257
F
R
F+S
R+S
F+R
F+R+S



EN 13265
F
R
F+R



NOTES:

- All the above figures are average values obtained from testing to current EN standard in our laboratory and at external institutes.
- THRACE NWS&GEOs S.A. Technical Fabrics reserve the right to alter product specifications at any time without prior notice. It is the responsibility of all users to satisfy themselves that the above data are current.
- Polypropylene is the constituent polymer used in the production of the WG geotextiles series.
- To be covered within one month after installation. All the above geotextiles are predicted to be durable for more than 50 years in soil temperatures >25°C and are resistant to highly acid and alkaline environments on the basis of a durability assessment. All of them have been satisfactorily assessed for resistance to oxidation (ENV ISO 13438), microbiological degradation (ENV 12225) and chemical ageing (EN 14030-Method A: inorganic acid and Method B: organic base).
- Roll size may vary depending on type and customer request.

* Distance from center to center of the loop: 50cm. If requested it can be different. All the above properties conform to the area except from the loop reinforcement. The mechanical, hydraulic and physical properties of the loop area are different of the above properties.

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