

**PARAWEB™ MS**  
HIGH TENACITY POLYESTER STRIPS

ParaWeb™ strips are planar structure consisting of a core of high tenacity polyester yarn tendons encased in a polyethylene sheath. The strips are suitable for reinforcement applications in combination with concrete wall facing panels. ParaWeb™ MS strips are suggested for use in combination with coarse angular, relatively aggressive fills.

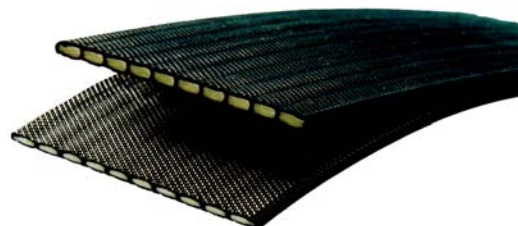
TENSILE PROPERTIES							
		Units	27	36	45	54	63
Ultimate tensile strength	UTS	kN	27,14	36,18	45,22	54,27	63,31
Long term tensile (64,5% of UTS)	T <sub>CR</sub>	kN	17,51	23,34	29,17	35,01	40,85
MECHANICAL PROPERTIES							
Strip width		mm	50 ±2	50 ±2	50 ±2	65 ±2	65 ±2
Strip weight		kg/100m	9,17	11,78	14,39	19,90	23,91
Partial Material factors for Ultimate Limit State							
Consistency of manufacturing	fm <sub>11</sub>		1,00	1,00	1,00	1,00	1,00
Assessment of available data	fm <sub>121</sub>		1,00	1,00	1,00	1,00	1,00
Extrapolation to 120 years of design life	fm <sub>122</sub>		1,05	1,05	1,05	1,05	1,05
Intermediate and long term effects of installation damage	see notes						
Soil type I	fm <sub>21</sub>		1,04	1,03	1,03	1,03	1,03
Soil type II	fm <sub>21</sub>		1,03	1,02	1,02	1,02	1,02
Soil type III	fm <sub>21</sub>		1,02	1,01	1,00	1,00	1,00
Environmental degradation (pH range 4,0 to 9,0)	fm <sub>22</sub>		1,05	1,05	1,05	1,05	1,05
Overall safety factor (fm <sub>11</sub> x fm <sub>121</sub> x fm <sub>122</sub> x fm <sub>21</sub> x fm <sub>22</sub> )	see notes						
Soil type I	fm		1,15	1,14	1,14	1,14	1,14
Soil type II	fm		1,14	1,13	1,13	1,13	1,13
Soil type III	fm		1,13	1,12	1,12	1,11	1,11
Soil interaction properties : interaction coefficient $\alpha$ where coefficient of friction $\mu = \alpha \tan \phi$							
Soil type I	$\alpha$					0,90	
Soil type II	$\alpha$					0,80	
Soil type III	$\alpha$					0,70	
Recommended design values for 120 years life design: $T_D = T_{CR} / f_m$ (soil type)							
Soil type I	T <sub>D(soil type 1)</sub>		15,27	20,56	25,69	30,83	35,97
Soil type II	T <sub>D(soil type 11)</sub>		15,42	20,68	25,84	31,01	36,18
Soil type III	T <sub>D(soil type 111)</sub>		15,51	20,88	26,10	31,63	36,90

**Notes:**

**Soil type I** : coarse crushed gravel GW (D<sub>max</sub> = 75,0mm D<sub>50</sub> ≈ 12,5mm, and less than 2% passing 0,075mm Sieve)

**Soil type II** : concrete sand SW (D<sub>max</sub> = 25,0mm D<sub>50</sub> ≈ 0,850mm, and less than 3,8% passing 0,075mm Sieve)

**Soil type III** : silty sand MS (D<sub>max</sub> = 25,0mm D<sub>50</sub> ≈ 0,150mm, and 2,9% gravel, 61% sand and 36,1% passing 0,075mm Sieve)



Maccaferri SA (Pty) Ltd reserves the right to amend product specifications without notice and specifiers are requested to check as to the validity of the specifications they are using.

**Maccaferri SA (Pty) Ltd**

**HEAD OFFICE - DURBAN, SOUTH AFRICA**

P O Box 15777, Westmead, 3608 Tel: +27-31-700 8456 Fax: +27-31-700 8469 e-mail: dbnsales@maccaferri.co.za

**JOHANNESBURG, SOUTH AFRICA**

P O Box 2285, North Riding, 2162 Tel: +27-11-704 0160 Fax: +27-11-704 0159 e-mail: jhbsales@maccaferri.co.za

**CAPE TOWN, SOUTH AFRICA**

P O Box 22150, Fish Hoek, 7974 Tel: +27-21-702 1416 Fax: +27-21-702 2977 e-mail: cptsales@maccaferri.co.za

**MADAGASCAR**

BP 168 Antananarivo 101, Madagascar Tel: +261-20-22-231 02 Fax: +261-20-22-553 90 e-mail: maccaferri@moov.mg

[www.maccaferri.co.za](http://www.maccaferri.co.za)

