For decades Shisham Stanley Group has been the leading manufacturer and supplier of push-pull panel braces to the Australian market. Australian Standard AS3850-2015 (Prefabricated Concrete Elements) has introduced important changes to the brace test method and test result evaluation. Following the release of AS3850-2015 Shisham Stanley Group carried out an extensive testing of the entire push-pull brace range. The tests were conducted in compliance with the detailed test procedure and statistical test result evaluation specified by AS3850-2015. The WLL values presented in the table below fully comply with the AS3850-2015 test requirements.

SHISHAM BRACES - WLL TABLE

Tested and Rated to Australian Standard AS 3850 – 2015

Model	Closed Position		Intermediate Position		Middle Position		Intermediate Position		Full Extension		Test No.	Mass (kg)
	Length (mm)	WLL (kN)	Length (mm)	WLL (kN)	Length (mm)	WLL (kN)	Length (mm)	WLL (kN)	Length (mm)	WLL (kN)		
MP 1 1.95m – 3.15m	1950	**35**	2250	**35**	2550	**35**	2850	**30.5**	3150	**21.5**	M179	24.5
MP 2 2.45m – 4.0m	2450	**35**	2750	**35**	3100	**26.5**	3600	**16**	4000	**11**	M178	28.5
MICRO MINI 0.6m - 0.85m	600	**35**	-	**-**	-	**-**	-	**-**	850	**35**	M176	14
TRENCH MINI 1.0m – 1.7m	1000	**35**	-	**-**	1350	**35**	-	**-**	1700	**35**	M175	20
SUPA TRENCH 1.55m – 2.50m	1550	**35**	-	**-**	2050	**35**	-	**-**	2500	**35**	M174	26
MINI 2.40m – 4.10m	2400	**35**	2800	**35**	3200	**35**	3700	**31**	4100	**25**	M165	36
MINI 2 3.1m – 4.80m	3100	**35**	3600	**35**	4000	**35**	4400	**28.5**	4800	**21**	M172	41
SUPA MINI 3.10m – 4.50m	3100	**35**	3500	**35**	3800	**35**	4100	**35**	4500	**30**	M171	47
STANDARD 4.40m – 7.0m	4400	**35**	5200	**30**	5800	**20**	6400	**15.5**	7000	**11.4**	M170	61
SPECIAL 5.70m – 9.40m	5700	**25**	6600	**22**	7500	**11.5**	8400	**8.5**	9400	**5.5**	M173	70
JUMBO 6.40 – 11.30m	6400	**35**	7700	**22**	9000	**13**	10200	**7.5**	11300	**6**	M177	106
SUPER JUMBO 8.50m – 14.50m	8500	**25**	10000	**12**	11500	**6**	13000	**-**	14500	**-**	M180	137
KNEE BRACED - SPECIAL, JUMBO & SUPER JUMBO BRACES INSTALLED WITH KNEE BRACES												
SPECIAL	-	**-**	-	**-**	-	**-**	-	**-**	9400	**20**	M181	70
JUMBO	-	**-**	-	**-**	-	**-**	10200	**30**	11300	**24**	M182	106
SUPER JUMBO	-	**-**	-	**-**	11500	**24**	13000	**18.5**	14500	**12**	M183	137

For any designed brace angle the fixing anchor capacity at both ends should be verified. In case braces are loaded in tension the fixing anchor capacity is likely to be governing the overall bracing system capacity. For extra high tensile loads use Shisham dual foot which is designed to accommodate two fixing anchors.The maximum WLL value of 35 kN for the panel brace range is determined by the ply bearing capacity at shear pin connection. In case of tensile loading WLL=35kN applies to all the extension lengths. Micro Mini and Supa Mini braces can be rated to WLL of more than 35kN (up to 70kN) depending on the load case and type of foot/fixing used. Check the individual brace brochures or inquire with our team.

EXTRA HEAVY DUTY – HERCULES RANGE												
HERCULES 1 2.50m – 3.50m	2500	**100**	-	**-**	3000	**100**	-	**-**	3500	**100**	M169	110
HERCULES 2 4.60m – 7.50m	4600	**100**	5300	**100**	6000	**100**	6800	**100**	7500	**80**	M168	185
HERCULES 3 6.50m – 11.0m	6500	**100**	7800	**100**	9000	**75**	10000	**50**	11000	**35**	M167	260

Hercules brace range maximum WLL value of 100 kN is a capped-off value determined by capacity of the brace connection bolts.

MASONRY BRACES												
MASONRY 3-5 3.0m – 5.0m	3000	**13**	-	**-**	4000	**6**	-	**-**	5000	**3**	M164	21
MODELS COMING SOON – AT R&D STAGE												
SAMSON 1, 2 & 3	-	**-**	-	**-**	-	**-**	-	**-**	-	**-**	-	-
TB 1, 2 & 3	-	**-**	-	**-**	-	**-**	-	**-**	-	**-**	-	-
VERTICAL PROP MODELS												
OP 1, 2, 3, & 4	-	**-**	-	**-**	-	**-**	-	**-**	-	**-**	-	-