

## Wind Tunnel Test Results



All of the GLATZ sunshades are tested for their wind resistance in a wind tunnel system. The wind speeds that are recorded only apply to sunshades with fix ground anchorage.

### PLEASE NOTE:

GLATZ tests all of its sunshades in a wind tunnel with the stated speed in kilometers per hour (km/h). Since an exact conversion into Beauforts (Bft) isn't possible, in the tables, these values are stated in brackets.

Wind speed		
km/h	Designation	Beaufort (Bft)
0 bis 1	Calm	0
1 bis 5	Light gust	1
6 bis 11	Light breeze	2
12 bis 19	Gentle breeze	3
20 bis 28	Moderate breeze	4
29 bis 38	Fresh breeze	5
39 bis 49	Strong wind	6
50 bis 61	Stiff wind	7
62 bis 74	Stormy wind	8
75 bis 88	Storm	9
89 bis 102	Heavy storm	10
103 bis 117	Violent storm	11
über 117	Hurricane	12

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Sunshade	Nominal size	km/h	wind force
<b>ALEXO®</b>			
	round	∅ 200	20 (4)
	round	∅ 220	20 (4)
<b>PIAZZINO</b>			
	round	∅ 300	30 (5)
	round	∅ 350	30 (5)
	square	300 x 300	30 (5)
<b>TEAKWOOD</b>			
	round	∅ 300	30 (5)
	round	∅ 350	30 (5)
		330 x 330	30 (5)
<b>ALU-SMART</b>			
	round	∅ 200	75 (9)
	round	∅ 220	65 (8)
	round	∅ 250	50 (7)
	round	∅ 300	35 (5)
	rectangular	210 x 150	55 (7)
	rectangular	250 x 200	40 (6)
	square	200 x 200	50 (7)
	square	240 x 240	40 (6)
<b>ALU-TWIST</b>			
	round	∅ 270	55 (7)
	round	∅ 300	50 (7)
	round	∅ 330	45 (6)
	rectangular	210 x 150	55 (7)
	rectangular	250 x 200	45 (6)
	square	240 x 240	45 (6)
<b>FORTINO®</b>			
	round	∅ 250	80 (9)
	round	∅ 300	60 (7)
	square	∅ 200 x 200	70 (8)
	square	∅ 240 x 240	60 (7)

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Sunshade	Nominal size	km/h	wind force	
<b>FORTERO®</b>				
	round	∅ 350	55	(7)
	round	∅ 400	50	(7)
	rectangular	300 x 200	60	(7)
	rectangular	350 x 250	55	(7)
	square	250 x 250	70	(8)
	square	300 x 300	60	(7)
	square	350 x 350	50	(7)
<b>FORTELLO® / FORTELLO® LED</b>				
	round	∅ 450	80	(9)
	rectangular	350 x 250	100	(10)
	rectangular	400 x 300	85	(9)
	square	300 x 300	100	(10)
	square	350 x 350	85	(9)
	square	400 x 400	75	(9)
<b>SUNWING® C+</b>				
	round	∅ 265	30	(5)
	round	∅ 300	30	(5)
	round	∅ 330	30	(5)
	square	260 x 260	30	(5)
<b>SOMBRANO® S+</b>				
	round	∅ 350	45	(6)
	round	∅ 400	35	(5)
	rectangular	400 x 300	35	(5)
	square	300 x 300	45	(6)
	square	350 x 350	35	(5)
<b>AURA</b>				
	square	350 x 350	45	(6)
	square	400 x 400	40	(6)
<b>PENDALEX® P+</b>				
	round	∅ 300	20	(4)
	round	∅ 325	20	(4)
	round	∅ 350	20	(4)
	rectangular	285 x 230	20	(4)

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Sunshade	Nominal size		km/h	wind force
<b>AMBIENTE</b>				
	round	Ø 400	40	(6)
	round	Ø 450	35	(5)
	round	Ø 500	30	(5)
	rectangular	400 x 300	40	(6)
	rectangular	450 x 350	35	(5)
	square	350 x 350	40	(6)
	square	400 x 400	35	(5)
<b>CASTELLO® M4</b> <span style="float: right;">*reinforced top rods</span>				
	round	Ø 350	100	(10)
	round	Ø 400	80	(9)
	round	Ø 450	65	(8)
	round	Ø 500	55	(7)
	round	Ø 500*	65	(8)
	round	Ø 550*	60	(7)
	round	Ø 600*	50	(7)
	rectangular	400 x 300	65	(8)
	rectangular	450 x 350*	55	(7)
	rectangular	500 x 400*	50	(7)
	square	300 x 300	100	(10)
	square	350 x 350	85	(9)
	square	400 x 400	50	(7)
	square	400 x 400*	65	(8)
	square	450 x 450*	55	(7)
	square	500 x 500*	50	(7)
<b>PALAZZO® STYLE</b>				
8 part	round	Ø 350	115	(11)
8 part	round	Ø 400	90	(10)
8 part	round	Ø 450	75	(9)
8 part	round	Ø 500	65	(8)
8 part	round	Ø 600	55	(7)
6 part	rectangular	350 x 300	85	(9)
8 part	rectangular	350 x 300	95	(10)
6 part	rectangular	400 x 300	70	(8)
8 part	rectangular	400 x 300	80	(9)
8 part	rectangular	450 x 350	75	(9)
8 part	rectangular	500 x 400	60	(7)
8 part	rectangular	550 x 450	55	(7)

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Sunshade	Nominal size		km/h	wind force
<b>PALAZZO® STYLE</b>				
4 part	square	300 x 300	85	(9)
8 part	square	300 x 300	110	(11)
8 part	square	350 x 350	95	(10)
8 part	square	400 x 400	80	(9)
8 part	square	450 x 450	70	(8)
8 part	square	500 x 500	60	(7)
<b>PALAZZO® NOBLESSE</b>				
	round	∅ 450	85	(9)
	round	∅ 500	75	(9)
	round	∅ 600	80	(9)
	round	∅ 700	70	(8)
	rectangular	450 x 350	85	(9)
	rectangular	500 x 400	70	(8)
	rectangular	600 x 400	75	(9)
	rectangular	600 x 500	70	(8)
	square	400 x 400	95	(10)
	square	450 x 450	80	(9)
	square	500 x 500	70	(8)
	square	500 x 500*	85	(9)
	square	550 x 550*	75	(9)
	square	600 x 600*	65	(8)
<b>PALAZZO® ROYAL</b>				
	round	∅ 700	80	(9)
	round	∅ 800	70	(8)
	rectangular	600 x 500	80	(9)
	rectangular	700 x 500	75	(9)
	rectangular	700 x 600	70	(8)
	rectangular	800 x 600	60	(7)
	square	500 x 500	110	(11)
	square	550 x 550	100	(10)
	square	600 x 600	90	(10)
	square	650 x 650	85	(9)
	square	700 x 700	75	(9)