

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 |

Wind Tunnel Test Results



The max. wind speed limits as per our separate sheet apply only if the sunshade canopy is in a horizontal position and if there is a fix ground anchorage.

| Sunshade | Nominal size | km/h | wind force |
|----------------------------|--------------|-------------|------------|
| ALEXO® | | | |
| | round | ∅ 200 | 20 (4) |
| | round | ∅ 220 | 20 (4) |
| PIAZZINO | | | |
| | round | ∅ 300 | 30 (5) |
| | round | ∅ 350 | 30 (5) |
| | square | 300 x 300 | 30 (5) |
| TEAKWOOD | | | |
| | round | ∅ 300 | 30 (5) |
| | round | ∅ 350 | 30 (5) |
| | | 330 x 330 | 30 (5) |
| ALU-SMART | | | |
| | 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) |
| ALU-TWIST AND TWIST | | | |
| | 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) |
| FORTINO® RIVIERA | | | |
| | 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 |
|----------------------------------|--------------|-----------|------|------------|
| FORTERO® | | | | |
| | round | Ø 350 | 55 | (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) |
| FORTELLO® / FORTELLO® LED | | | | |
| | round | Ø 400 | 85 | (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) |
| SUNWING® CASA | | | | |
| | round | Ø 265 | 30 | (5) |
| | round | Ø 300 | 30 | (5) |
| | round | Ø 330 | 30 | (5) |
| | square | 260 x 260 | 30 | (5) |
| SOMBRANO® S+ | | | | |
| | round | Ø 350 | 45 | (6) |
| | round | Ø 400 | 35 | (5) |
| | rectangular | 400 x 300 | 35 | (5) |
| | square | 300 x 300 | 45 | (6) |
| | square | 350 x 350 | 35 | (5) |
| AURA | | | | |
| | square | 350 x 350 | 45 | (6) |
| | square | 400 x 400 | 40 | (6) |
| PENDALEX® P+ | | | | |
| | round | Ø 300 | 20 | (4) |
| | round | Ø 325 | 20 | (4) |
| | round | Ø 350 | 20 | (4) |
| | rectangular | 285 x 230 | 20 | (4) |

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| Sunshade | Nominal size | | km/h | wind force |
|---|--------------|------------|------|------------|
| AMBIENTE NOVA | | | | |
| | 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) |
| FORTANO | | | | |
| | square | 300x300 | 55 | (7) |
| | rectangular | 400x300 | 45 | (6) |
| CASTELLO® Pro *verstärkte Dachstreben | | | | |
| | 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) |
| PALAZZO® STYLE | | | | |
| 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) |
| 8 part | rectangular | 350 x 250 | 100 | (10) |
| 8 part | rectangular | 350 x 300 | 95 | (10) |
| 8 part | rectangular | 400 x 200 | 95 | (10) |
| 8 part | rectangular | 400 x 300 | 80 | (9) |
| 8 part | rectangular | 450 x 350 | 75 | (9) |

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| Sunshade | Nominal size | | km/h | wind force |
|--------------------------|--------------|------------|------|------------|
| PALAZZO® STYLE | | | | |
| 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) |
| PALAZZO® NOBLESSE | | | | |
| | round | Ø 450 | 85 | (9) |
| | round | Ø 500 | 75 | (9) |
| | round | Ø 600 | 80 | (9) |
| | round | Ø 700 | 70 | (8) |
| | rectangular | 450 x 350 | 85 | (9) |
| | rectangular | 500 x 250 | 90 | (10) |
| | rectangular | 500 x 400 | 70 | (8) |
| | rectangular | 550 x 450 | 75 | (9) |
| | rectangular | 600 x 300 | 80 | (9) |
| | 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) |
| PALAZZO® ROYAL | | | | |
| | round | Ø 700 | 80 | (9) |
| | round | Ø 800 | 70 | (8) |
| | rectangular | 600 x 500 | 80 | (9) |
| | rectangular | 700 x 500 | 75 | (9) |
| | rectangular | 700 x 600 | 75 | (9) |
| | rectangular | 800 x 400 | 75 | (9) |
| | 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) |

*12 parts