

GLASGLOBAL® EN 16612

GLASGLOBAL® EN 16612 is the expert software for calculating glazing according to the European standard.

With just a few entries, you can obtain the static verification of your glazing in accordance with EN 16612.

Geometry					
Installation	90,0°	Width b	390 mm	Support	Four-sided
Shape	Rectangle	Height h	780 mm		
Construction					
Glass thickness for proof: Minimum thickness					
Nr.	manufacturer	Description	Gas/ Composite layer	Thick ness	
1	Glass outside	Sommer Informatik GmbH	ANG	4,00	
2	GD1	Aluminium (EN ISO 10077-2)	90% Argon	16,00	
3	Glass inside	Sommer Informatik GmbH	ANG	4,00	
Dead load					
Total weight		6,08 kg		cos(90,0°) = 0,00	
top / external		Middle	Bottom / Internal		
0,10 kN/m²		-	0,10 kN/m²	ASTM E1300, Table X4.1:	
0,00 kN/m²		-	0,00 kN/m²	> 1 year -> 3 s	
0,00 kN/m²		-	0,00 kN/m²	Factor = 1/0,31 = 3,23	
0,00 kN/m²		-	0,00 kN/m²	Load Duration 3 s	
0,00 kN/m²		-	0,00 kN/m²	Temperature 50°C	
Wind load					
1,00 kN/m²				Load Duration 3 s	
1,00 kN/m²		Manual input		Temperature 50°C	
Line load					
1,00 kN/m		Location above FFL779 mm		ASTM E1300, Table X4.1:	
1,56 kN/m		Load on outer pane (Pressure)		60 min -> 3 s	
1,56 kN/m				Factor = 1/0,64 = 1,56	
1,56 kN/m				Load Duration 3 s	
1,56 kN/m				Temperature 50°C	
Point load					
0,00 kN		x = 195 y = 390		ASTM E1300, Table X4.1:	
0,00 kN		contact area 50 x 50 mm		60 min -> 3 s	
0,00 kN				Factor = 1/0,64 = 1,56	
0,00 kN				Load Duration 3 s	
0,00 kN				Temperature 50°C	
Proof OK (2,33 N/mm² < 23,30 N/mm²)					
max. Load case Stress: outside, Nr. 2: Weight (1,00), Wind pressure (0,80)					
max. Deflection = 0,31 mm (Load case Nr. 5) -> max. chord shortening 0,00 mm					
Stress: 2,33 N/mm² (calculated); 23,30 N/mm² (permissible)					

Acknowledged Results
Automated calculation
Intuitive operation
Quality assured
Customizable
User-Friendly

Software for Experts

Features/Functions:

- ▶ Horizontal and vertical glazing
- ▶ Symmetrical and asymmetrical LSG
- ▶ Membrane stress effect for non-linear load-bearing behaviour
- ▶ Consideration of the shear bond (EN 16612, Annex. D; -values)
- ▶ Optimisation of glass thicknesses (suggestion module and size matrix)
- ▶ Maximum edge load in the edge seal of insulating glazing
- ▶ Loads from climate and local heights
- ▶ Calculation of all relevant load cases
- ▶ Maximum tendon shortening
- ▶ Adjustable specifications for values that may differ in European countries, such as partial safety or combination coefficients
- ▶ Sound database for determining the Rw value for specific superstructures
- ▶ Validation by the University of Munich