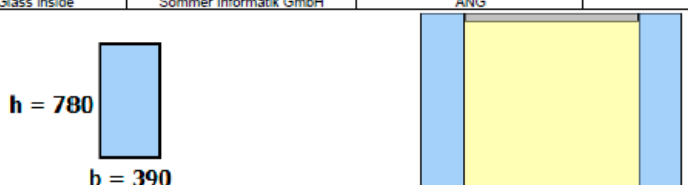


## GLASGLOBAL® ASTM

GLASGLOBAL® ASTM is the expert software for the calculation of glazing according to the US-American standard.

With just a few entries, you can obtain the structural verification of your glazing in accordance with ASTM E1300-16.

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		
Dead load	0,10 kN/m²	-	0,10 kN/m²	ASTM E1300, Table X4.1:	Load Duration 3 s
effective	0,00 kN/m²	-	0,00 kN/m²	> 1 year -> 3 s	Temperature 50°C
Factorized	0,00 kN/m²	-	0,00 kN/m²	Factor = 1/0,31 = 3,23	
Wind load					
	1,00 kN/m²			Load Duration	3 s
Factorized	1,00 kN/m²	Manual input		Temperature	50°C
Line load					
	1,00 kN/m	Location above FFL779 mm	ASTM E1300, Table X4.1:	Load Duration	3 s
Factorized	1,56 kN/m	Load on outer pane (Pressure)	60 min -> 3 s	Temperature	50°C
			Factor = 1/0,64 = 1,56		
Point load					
	0,00 kN	x = 195 y = 390	ASTM E1300, Table X4.1:	Load Duration	3 s
Factorized	0,00 kN	contact area 50 x 50 mm	60 min -> 3 s	Temperature	50°C
			Factor = 1/0,64 = 1,56		
<b>Proof OK (2,33 N/mm² &lt; 23,30 N/mm²)</b>					
<small>max. Load case Stress: outside, Nr. 2: Weight (1,00), Wind pressure (0,80)  max. Deflection = 0,31 mm (Load case Nr. 5) -&gt; max. chord shortening 0,00 mm  Stress: 2,33 N/mm² (calculated); 23,30 N/mm² (permissible)</small>					

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

Software for Experts

### Features/Functions:

- ▶ Glazing with any installation angle
- ▶ Symmetrical and asymmetrical VSG
- ▶ Membrane stress effect for non-linear load-bearing behaviour
- ▶ Consideration of the shear bond for VSG
- ▶ Load factorisation based on load duration and temperature
- ▶ Expression with imperial units
- ▶ Maximum tendon shortening
- ▶ Sound database for determining the Rw value for specific superstructures
- ▶ Interface to ERP systems
- ▶ Validation by the University of Munich