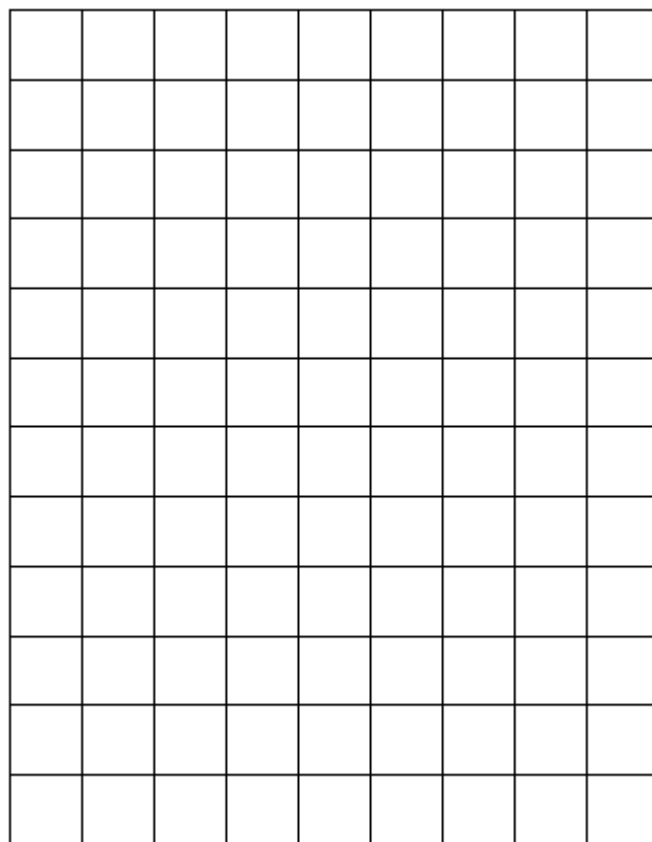
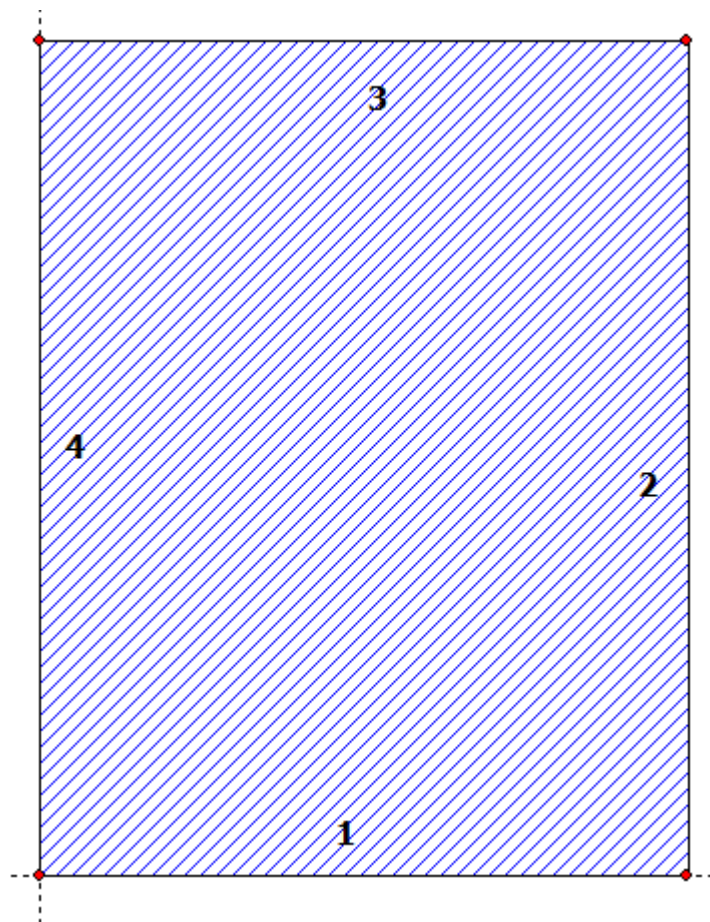


SJ MEPLA Calculation protocol:



Geometry:

Edge	Borderpoint		Arccenter		Direction of rotation
	mm	mm	mm	mm	+/-
1	0.00	0.00			
2	750.00	0.00			
3	750.00	967.00			
4	0.00	967.00			

Supports:

Edge supports:

Edge	Type of supports
1	w : fixed - u,v,φ,θ : free (simply supported)
2	w : fixed - u,v,φ,θ : free (simply supported)
3	w : fixed - u,v,φ,θ : free (simply supported)
4	w : fixed - u,v,φ,θ : free (simply supported)

Spring supports:

Package	Layer	x	y	z	C _x	C _y	C _z	C _φ
C _θ								

		mm	mm	mm	N/mm	N/mm	N/mm	Nmm
1	1	0.0	0.0	0.0	1.000e+000	1.000e+000	0.000e+000	0.00e+000
0.00e+000								
1	1	750.0	0.0	0.0	0.000e+000	1.000e+000	0.000e+000	0.00e+000
0.00e+000								

Layers:

Layer order:

Package	Layer	Description
1	1	Glass, heat toughened

Mechanical properties:

Package	Layer	E-mod.	ν	Thickness	Density	α_t	ΔT
		N/mm ²		mm	kg/m ³	1/K	K
1	1	70000.00	0.23	8.00	2550.00	1.0000e-005	0.00

Loads:

Concentrated loads:

Package	x	y	Fx	Fy	Fz	lx	ly
	mm	mm	N	N	N	mm	mm
1	375.00	483.00	0.00	0.00	-1500.00	100.00	100.00

Constant and linear increasing faceloads: see loadcase

Dead weight:

Inclination of pane: 0.00° degree

Direction vector of gravity acceleration [9.81 m/s²]:

Vx	Vy	Vz
0.00000	0.00000	-1.00000

Calculation approaches:

large deflections, non-linear, (transversal to the plane surface)
static calculation

Characteristics of the finite element mesh:

Element size	: 80.0 mm
Number of elements	: 108
Number of nodes	: 475 (per package)
Number of unknown	: 2291

Loadcase: 1 ()

=====

Coefficients / safety factors:

-- Climate --

Dead weight	Wind	Snow	Line	Point	$\Delta p, \Delta T$	ΔH	Shear
1.00	0.00	0.00	0.00	1.00	0.00	0.00	1.00

Loadcase combination:

	Wind	Snow	Climate
	N/mm ²	N/mm ²	
outside	0.00000	0.00000	without climate loads
inside	0.00000		

Resulting face load from wind and snow:

	N/mm ²	
outside	0.00000 N/mm ²	= 0.00000 * 0.00 + 0.00000 * 0.00
inside	0.00000 N/mm ²	= 0.00000 * 0.00

Additional partial faceloads (linear distributed, outside) - here not selected

Calculation results:

Minimum and maximum displacements w:

	- Position-	Displacement
Package	x y	w
	mm mm	mm
1	375.00 483.50	-3.68 (min)
	0.00 0.00	0.00 (max)

Maximum principal stress:

Package	Layer	x	y	σ
		mm	mm	N/mm ²
1	1	375.00	474.42	36.68

Springs:

Package	Layer	u	v	w	ϕ	θ	Fx	Fy	Fz
M _φ	M _θ								
(x /									
y)		mm	mm	mm	rad	rad	N	N	Nmm
(0.00 /	0.00)						
1	1	-0.00	0.00	0.00	0.0000	0.0000	-0.00	0.00	0.00
0.00	0.00								
(750.00 /	0.00)						
1	1	-0.00	0.00	0.00	-0.0000	0.0000	-0.00	0.00	0.00
0.00	0.00								-

Loadcase result:**Maximum principal stress:**

Package	Layer	σ	Loadcase
N/mm ²			
1	1	36.68	1

Minimum and maximum displacements w:

Package	Displacement	Loadcase
mm		
1	0.00 (max)	1
1	-3.68 (min)	1