

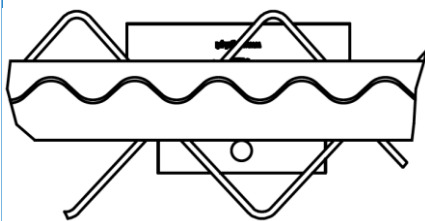
SINUSPROTECT JOINT MGSI®



CONSTRUCTION JOINT

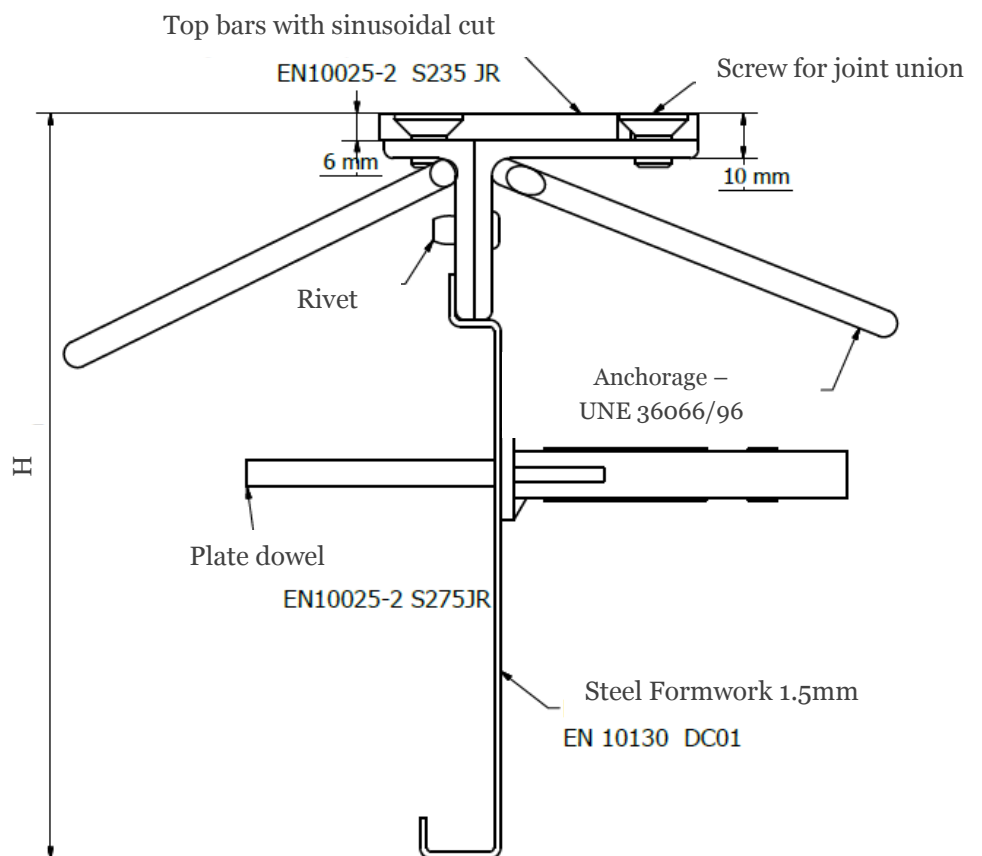
Complete system of construction / expansion joints with load transfer devices.

Provides a transition between floors free from noise and impacts.

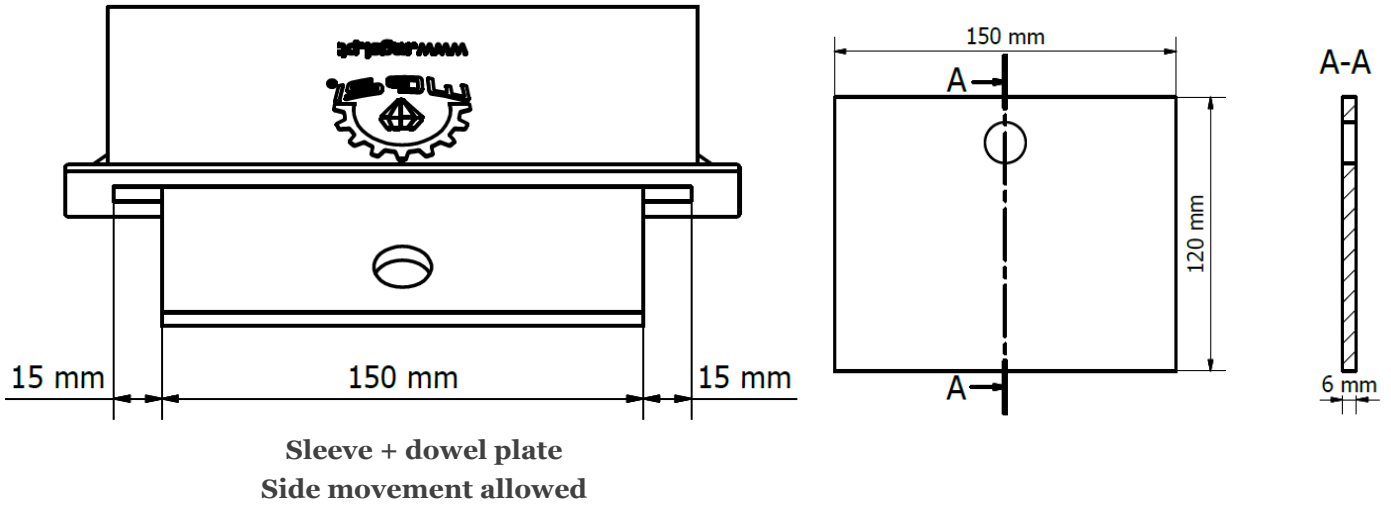


TOP VIEW DETAIL SINUSPROTECT JOINT

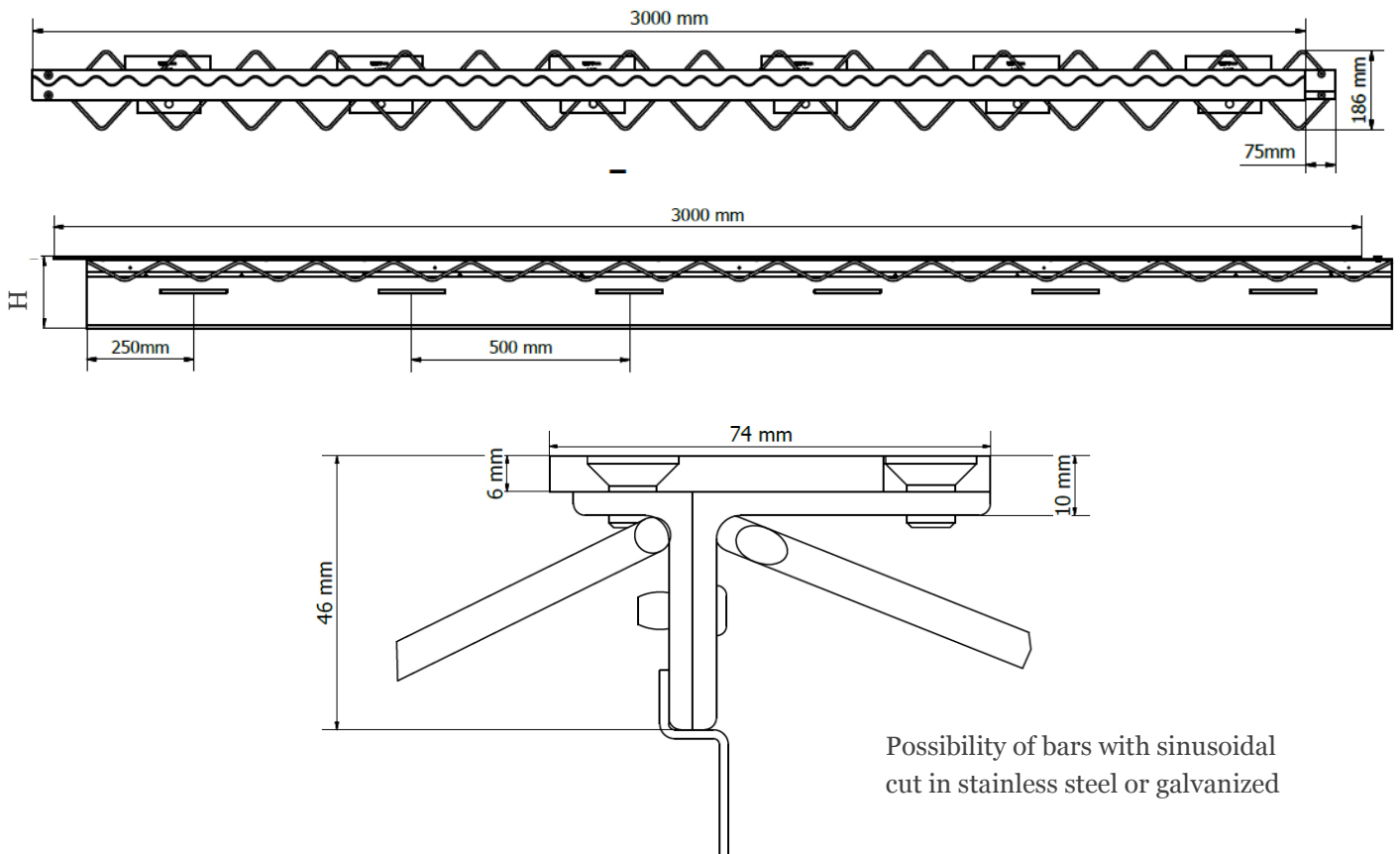
JOINT DETAIL



Load transmission device

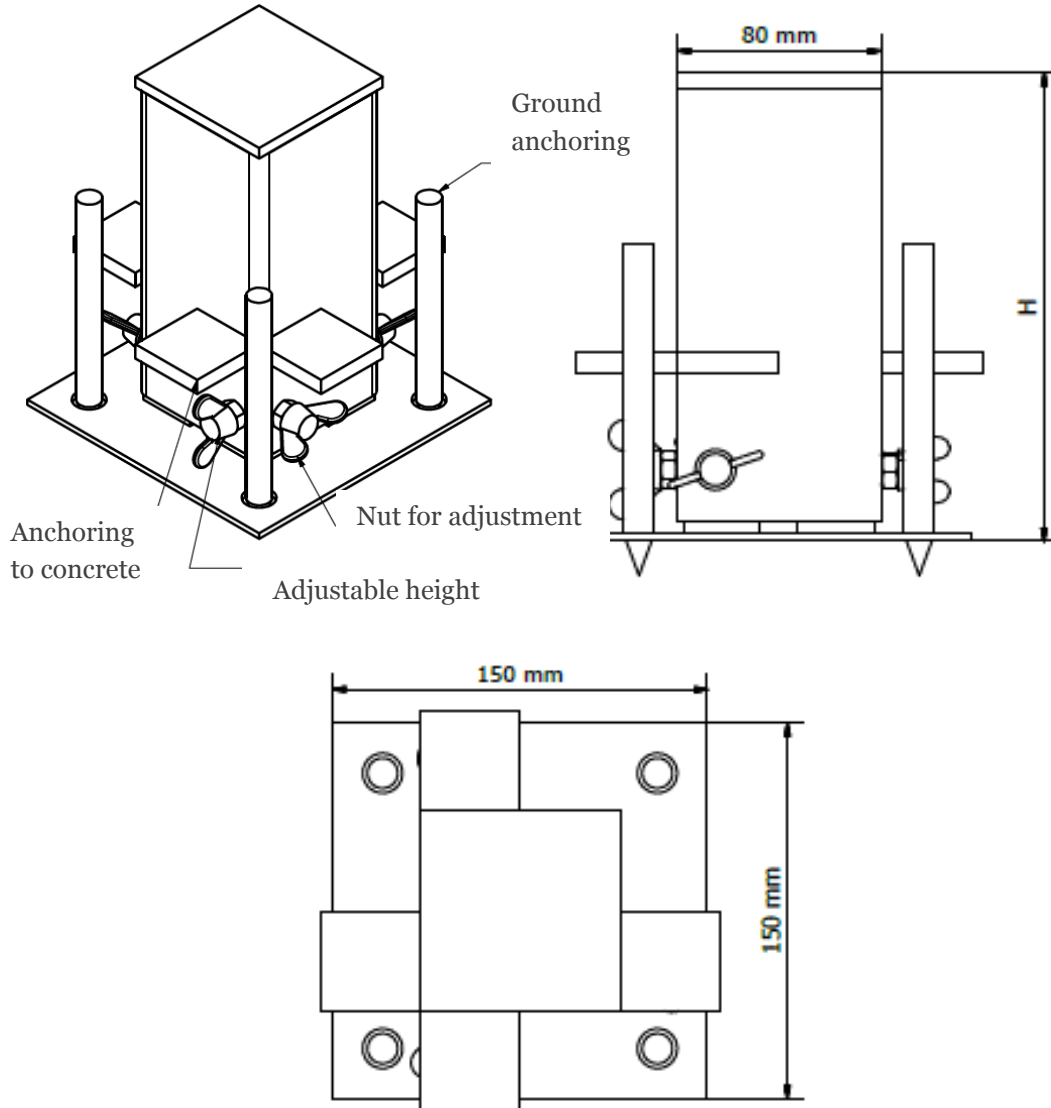


Joint dimensions



Top profile SINUSPROTECT

Joint intersections SINUSPROTECT MGSI®



Joint characteristics

ELEMENT	MATERIAL
Steel bars with sinusoidal cut	EN10025-2 S235JR
Steel angles	EN10025-2 S235JR
Anchorage	UNE 36066/96
Formwork profile	EN 10130 DC01
Dowel Sleeve	Polypropylene
Dowel plate	EN10025-2 S275JR

Joint dimensions			
Joint height	Slab	Dowel plate	Length
(mm)	(mm)	(mm)	(mm)
130	130 < h ≤ 150	150 x 120 x 6	3000 + 75 Lag for joint union
150	150 < h ≤ 160		
160	160 < h ≤ 180		
180	180 < h ≤ 200		
200	200 < h ≤ 230		
230	230 < h ≤ 250		
250	250 < h ≤ 280		
280	280 < h ≤ 300		
300	300 < h ≤ 330		

S275 JR	Capacity of load transmission devices in Ultimate Limit State (ULS) kN				
	Joint opening (mm)				
	5	10	15	20	30
F _{ck}					
C25/30	58,2	46,0	37,2	30,8	22,5
C32/40	63,8	49,1	39,0	31,8	22,9
C40/50	69,0	51,8	40,4	32,7	23,2

Ultimate joint Resistance (kN/m)

S= 500mm	F _{ck}	Joint opening (mm)				
		5	10	15	20	30
150	25 MPa	34,2	33,6	33,0	32,5	31,4
	32 MPa	38,6	38,0	37,4	36,8	35,5
	40 MPa	43,2	42,5	41,8	41,1	39,7
175	25 MPa	43,7	43,0	42,4	41,7	40,4
	32 MPa	49,4	48,7	47,9	47,2	45,7
	40 MPa	55,2	54,4	53,6	52,8	46,5
200	25 MPa	54,3	53,5	52,8	52,1	45,0
	32 MPa	61,4	60,6	59,7	58,9	45,9
	40 MPa	68,7	67,7	66,8	65,4	46,5
250	25 MPa	57,2	56,9	56,6	56,3	45,0
	32 MPa	64,7	64,4	64,0	63,7	45,9
	40 MPa	72,4	72,0	71,6	65,4	46,5
300	25 MPa	73,0	72,6	72,3	61,6	45,0
	32 MPa	82,6	82,2	77,9	63,7	45,9
	40 MPa	92,4	91,9	80,8	65,4	46,5

Theoretical calculations according to TR34 4th Edition and EN1992-1-1:2010 considering plate dowels at slab mid height - The use of steel fibres in the concrete should not be considered when calculating load transfer resistance. For others situations not mentioned, please contact MGSi® TECHNICAL DEPARTMENT.

Production tolerances			
Width	Height	Length	Straightness
± 2mm	± 1mm	± 2mm	± 2mm /3000mm