

OMEGATEK®

DATASHEET

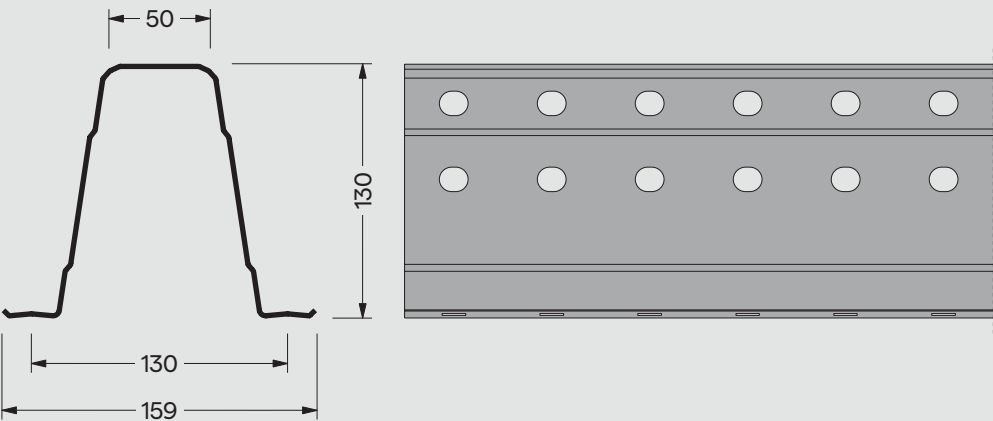


OMEGATEK® 130

361metal



SECTION GEOMETRY



Description

Range of high quality metal purlins, cold formed with certified structural galvanized sheet.

Application

Support structure for metal roofs and cladding or insulating panels in construction, support for solar installations and light structures. CE certified product in accordance with European Standard EN 1090, specific for metallic structures.

GROSS SECTION PROPERTIES

SECTION	WEIGHT	HEIGHT	WIDTH	THICKNESS		GROSS SECTION PROPERTIES									
				Nomi.	Efect.										
		h	b	t _{nom}	t _{eff}	A _{gross}	I _{y,gross}	I _{z,gross}	W _{y,gross}	W _{z,gross}	I _w	I _t	Y _{cg} = Y _{cc}	Z _{cg}	Z _{cc}
	Kg/m	mm	mm	mm	mm	mm ²	mm ⁴	mm ⁴	mm ³	mm ³	×10 ⁶ mm ⁶	mm ⁴	mm	mm	mm
Omegatek® 130×1,0	2,83	130	159	1,0	0,96	361	796340	671670	11797	8391	353,0	111	79	64	163
Omegatek® 130×1,5	4,31	130	159	1,5	1,46	549	1211200	1021500	17877	12733	536,9	390	79	64	163
Omegatek® 130×2,0	5,79	130	159	2,0	1,96	737	1626300	1371400	23915	17057	720,7	944	79	64	163

Note: the weights indicated in the tables are estimated theoretical weights based on the nominal dimensions of the cross-section, and variations may occur within the tolerances provided for in the EN 10051 standard.

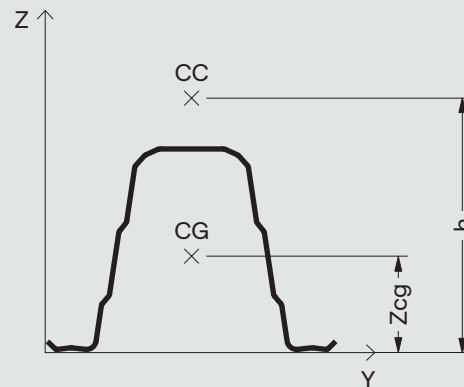
EFFECTIVE SECTION PROPERTIES

S280 GD																		
SECTION	Compression			Y-Axis Positive Flexion					Y-Axis Negative Flexion					Z-Axis Flexion				
	A _{eff}	Y _{cg,eff}	Z _{cg,eff}	A _{eff}	I _{y,eff}	W _{y,eff}	Y _{cg,eff}	Z _{cg,eff}	A _{eff}	I _{y,eff}	W _{y,eff}	Y _{cg,eff}	Z _{cg,eff}	A _{eff}	I _{z,eff}	W _{z,eff}	Y _{cg,eff}	Z _{cg,eff}
	mm ²	mm	mm	mm ²	mm ⁴	mm ³	mm	mm	mm ²	mm ⁴	mm ³	mm	mm	mm ²	mm ⁴	mm ³	mm	mm
Omegatek® 130×1,0	262	80	63	352	788140	11550	80	59	335	746450	11160	80	63	312	571440	6628	86	61
Omegatek® 130×1,5	457	80	61	546	1207800	17776	80	59	530	1179000	17764	80	61	505	941020	11302	83	60
Omegatek® 130×2,0	668	80	60	737	1625800	23908	80	59	718	1594900	23809	80	60	702	1309500	16020	82	60

S350 GD																		
SECTION	Compression			Y-Axis Positive Flexion					Y-Axis Negative Flexion					Z-Axis Flexion				
	A _{eff}	Y _{cg,eff}	Z _{cg,eff}	A _{eff}	I _{y,eff}	W _{y,eff}	Y _{cg,eff}	Z _{cg,eff}	A _{eff}	I _{y,eff}	W _{y,eff}	Y _{cg,eff}	Z _{cg,eff}	A _{eff}	I _{z,eff}	W _{z,eff}	Y _{cg,eff}	Z _{cg,eff}
	mm ²	mm	mm	mm ²	mm ⁴	mm ³	mm	mm	mm ²	mm ⁴	mm ³	mm	mm	mm ²	mm ⁴	mm ³	mm	mm
Omegatek® 130×1,0	247	80	64	349	784580	11444	80	58	326	728250	10705	80	64	305	552250	6320	87	61
Omegatek® 130×1,5	430	80	62	541	1203700	17653	80	59	521	1159200	17524	80	62	491	909040	10749	85	60
Omegatek® 130×2,0	638	80	61	736	1624300	23862	80	59	718	1594900	23809	80	60	688	1282300	15517	83	60

Subtitle

A _{gross}	Gross cross-sectional area
I _{y,gross}	Inertia of the gross section yy-axis
I _{z,gross}	Inertia of the gross section zz-axis
I _w	Warp constant
I _t	Torsion inertia
CG	Centre of gravity coordinates
CC	Cutting centre coordinates
A _{eff}	Effective section area
I _{y,eff}	Inertia of the effective section yy-axis
W _{y,eff}	Flexural modulus of the effective section yy-axis
I _{z,eff}	Inertia of the effective section zz-axis
W _{z,eff}	Flexural modulus of the effective section zz-axis

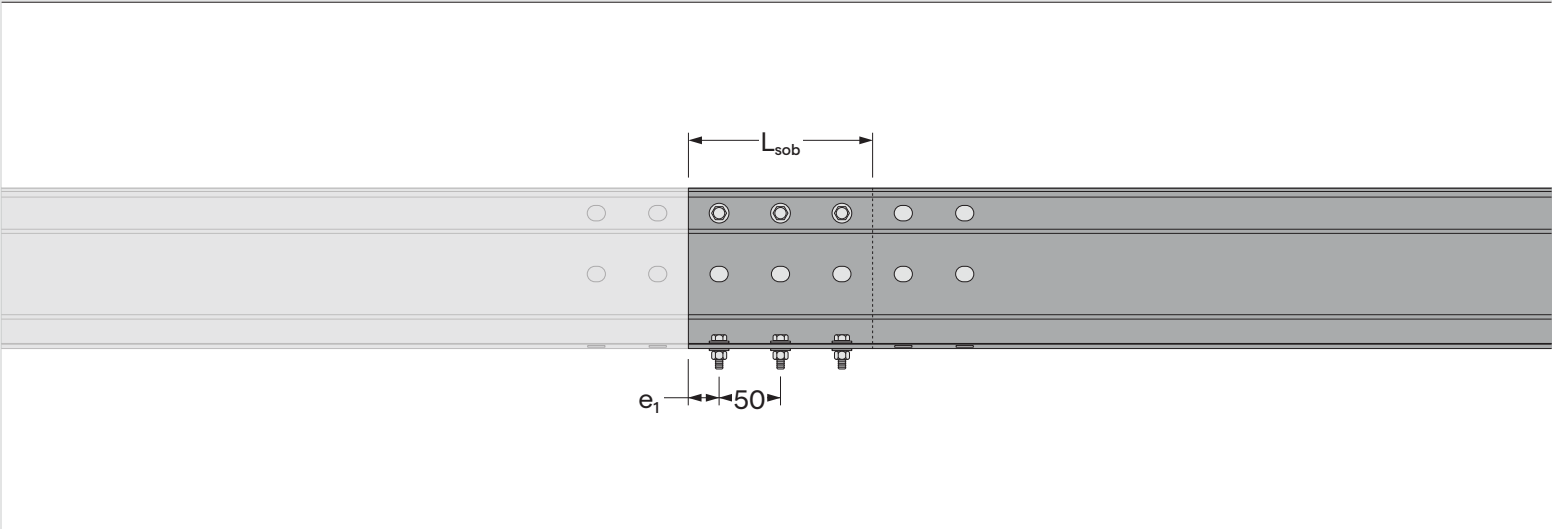


OMEGATEK® 130

CONNECTIONS AND CONSTRUCTION ARRANGEMENTS



01. Simple amendment between supports



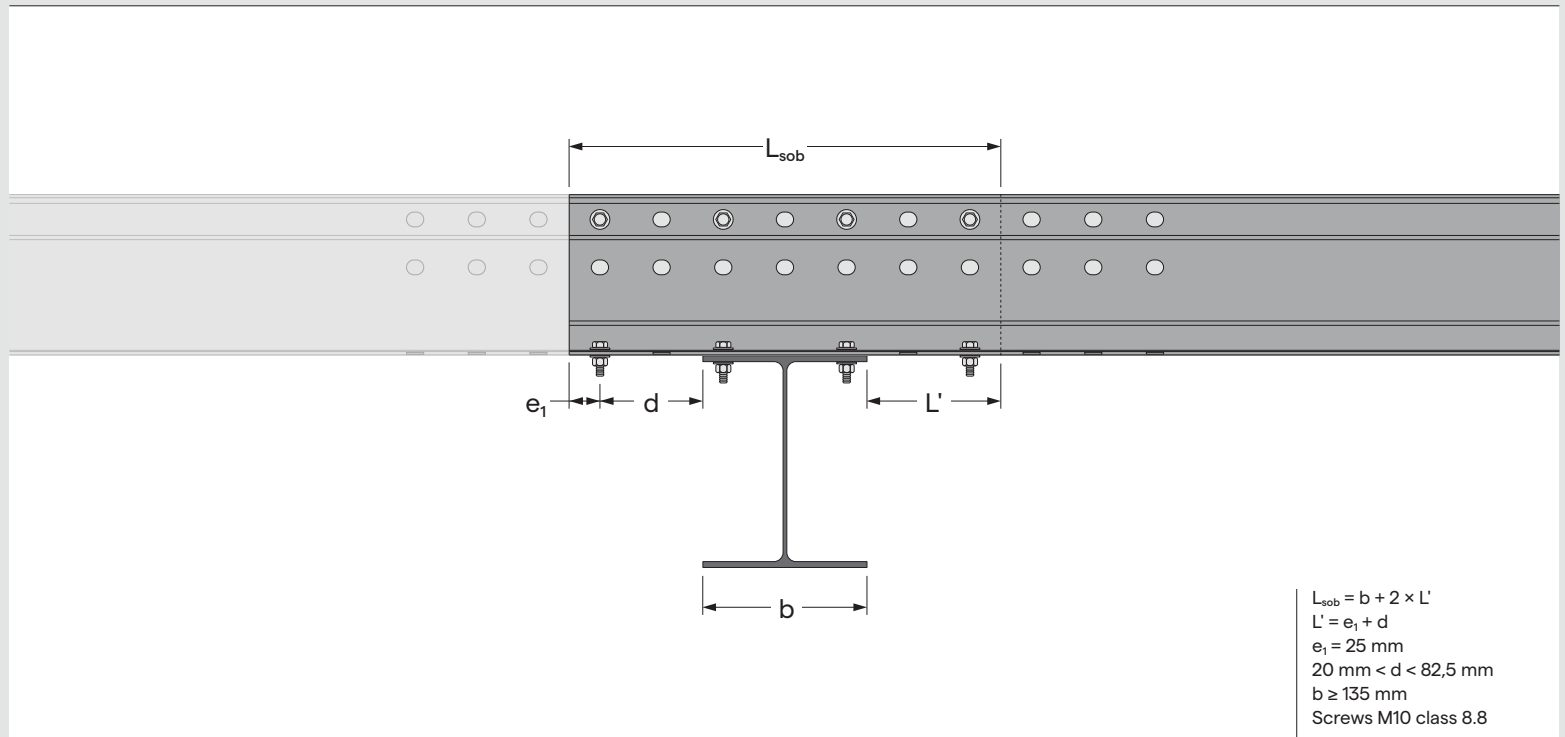
SECTION	e ₁	L _{sob}	NR. OF SCREWS	Ø SCREWS*
	mm	mm	units	mm
Omegatek® 130×1,0	25	150	3	10
Omegatek® 130×1,5	25	150	3	10
Omegatek® 130×2,0	25	150	3	10

*Screws class 8.8

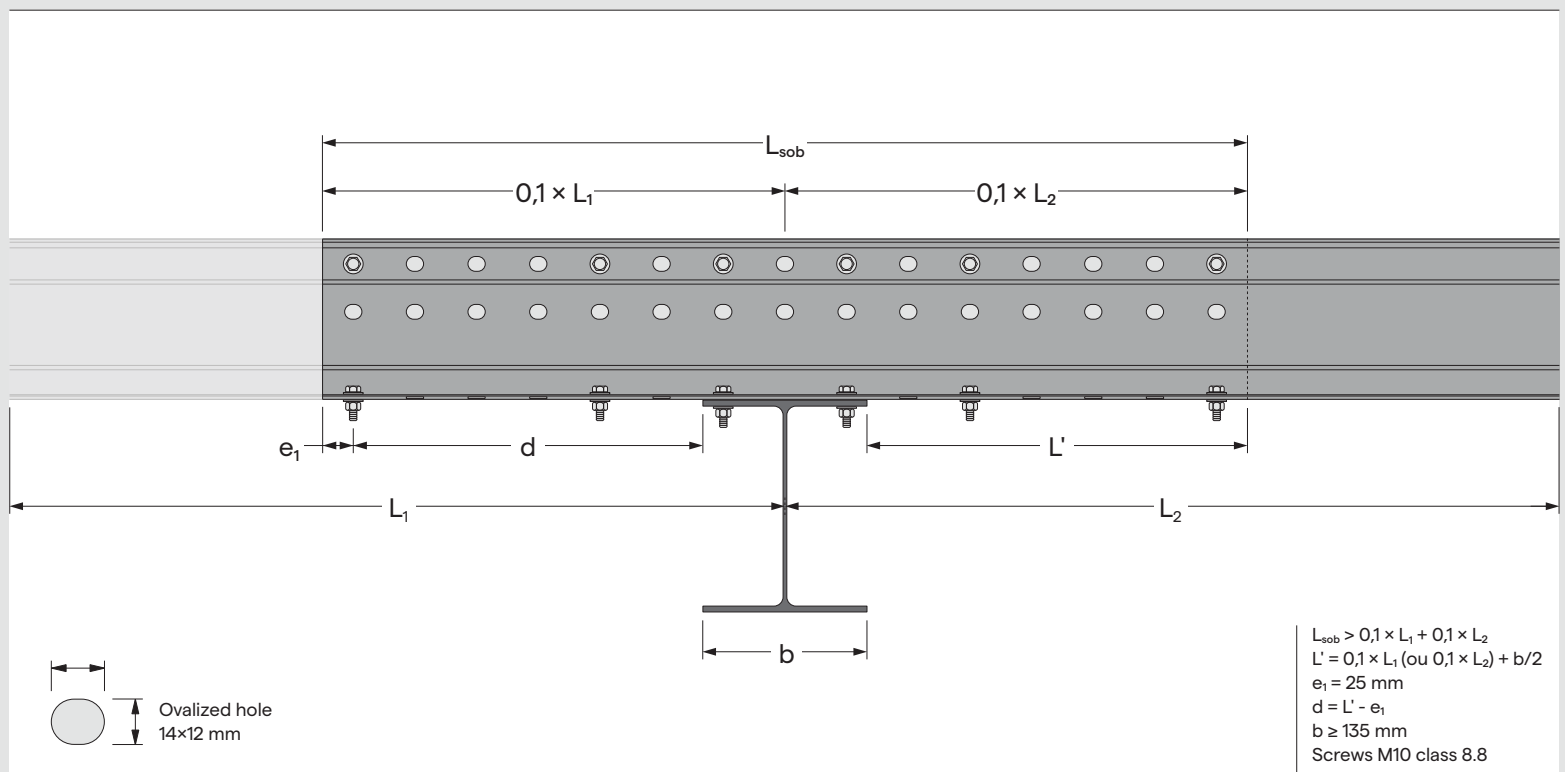
Subtitle

- L_{sob}Overlap length
- e₁Distance between the center of the screw and the end of the profile
- ØScrews diameter

02. Simple amendment on intermediate support



03. Amendment with reinforcement on intermediate support



Subtitle

L_{sob}	Overlap length
L'	Distance between the end of the support beam flange and the end of the profile
e_1	Distance between the center of the screw and the end of the profile
d	Distance between the end of the support beam flange and the center of the end screw
b	Length of the upper flange of the support beam
$\emptyset$	Screws diameter

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