

Common SIN Beam Sizes

2019-05-13

Web Thicknesses			
	ga	mm	in
WT0	16	1.519	0.060
WTA	14	1.897	0.075
WTB	12	2.657	0.105
WTC	11	3.038	0.120
WTF	8	4.176	0.164
WTH	6	4.935	0.194
WTK	3	6.073	0.239

Web Height	
mm	in
333	13.11
440	17.32
500	19.69
610	24.02
750	29.53
900	35.43
1000	39.37
1219	47.99
1500	59.06

Flange Size				
t (mm)	W (mm)	t (in)	W (in)	A (sq in)
6	127	1/4	5	1.25
6	152	1/4	6	1.50
8	152	5/16	6	1.88
10	152	3/8	6	2.25
10	178	3/8	7	2.63
13	152	1/2	6	3.00
13	178	1/2	7	3.50
13	203	1/2	8	4.00
16	203	5/8	8	5.00
19	152	3/4	6	4.50
19	203	3/4	8	6.00
19	254	3/4	10	7.50
25	203	1	8	8.00
25	254	1	10	10.00
25	279	1	11	11.00
25	305	1	12	12.00
25	330	1	13	13.00
25	356	1	14	14.00
25	406	1	16	16.00
32	254	1 1/4	10	12.50
32	305	1 1/4	12	15.00
32	356	1 1/4	14	17.50
32	406	1 1/4	16	20.00
32	450	1 1/4	17.71654	22.15

Designation is WebThickness WebHeight / FlangeW x FlangeT

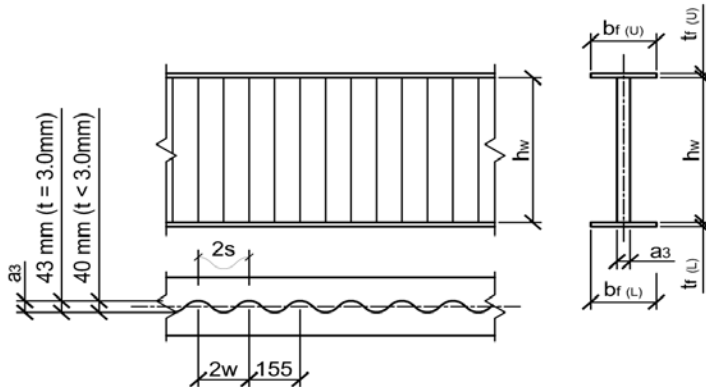
i.e. WTA610/178x10

- 1.89mm thick web
- 610mm tall web
- 178 x 10 mm flanges

Each SIN beam can be any combination of Web Thickness, WebHeight and FlangeSize

The length of the sin wave is constantly 155mm

The magnitude of the sin wave is 40mm for the WTA, and WTB but 43mm for the WTC and higher



Greyed out sizes are not as commonly used

Web Thicknesses (for weight calculation)			
	actual	mm	in
WT0	1.519	1.847	0.073
WTA	1.897	2.307	0.091
WTB	2.657	3.231	0.127
WTC	3.038	3.694	0.145
WTF	4.176	5.078	0.200
WTH	4.935	6.001	0.236
WTK	6.073	7.385	0.291

For Tekla Modeling with a flat web beam use an increased web thickness to achieve the proper beam weight