

ECONSTEEL HR PLATE FLATNESS TOLERANCES - HIGH STRENGTH STEEL

Rectangular Sheared Plates, Circular and Sketch Plates, Hot Rolled or Thermally Treated

Flatness denotes the deviation of the top or bottom surface from a horizontal line when the plate is resting on a flat surface. This table shows flatness tolerances when flatness is measured in the length direction and also when the flatness is measured in the width direction, as explained in Notes 1 to 5 inclusive.

	Flatness Tolerance for Specified Widths, Inches											
Specified		To 36	36 to 48	48 to 60	60 to 72	72 to 84	84 to 96	96 to 108	108 to 120	120 to 144	144 to 168	168
Thickness, Inches	Pattern Length	excl.	excl.	excl.	excl.	excl.	excl.	excl.	excl.	excl.	excl.	and over
To 1/4 excl.		13/16	1-1/8	1-3/8	1-7/8	2	2-1/4	2-3/8	2-5/8	2-3/4	-	-
1/4 to 3/8 excl.		3/4	15/16	1-1/8	1-3/8	1-3/4	1-7/8	2	2-1/4	2-3/8	-	-
3/8 to 1/2 excl.		3/4	7/8	15/16	15/16	1-1/8	1-5/16	1-1/2	1-5/8	1-7/8	2-3/4	3-1/8
1/2 to 3/4 excl.		5/8	3/4	13/16	7/8	1	1-1/8	1-1/4	1-3/8	1-5/8	2-1/4	3
3/4 to 1 excl.		5/8	3/4	7/8	7/8	15/16	1	1-1/8	1-5/16	1-1/2	2	2-5/8
1 to 2 excl.		9/16	5/8	3/4	13/16	7/8	15/16	1	1	1	1-5/8	2-1/4
2 to 4 excl.		1/2	9/16	11/16	3/4	3/4	3/4	3/4	7/8	1	1-1/4	1-5/8
4 to 6 excl.		9/16	11/16	3/4	3/4	7/8	7/8	15/16	1-1/8	1-1/4	1-1/4	1-1/2
6 to 8 excl.		5/8	3/4	3/4	15/16	1	1-1/8	1-1/4	1-5/16	1-1/2	1-1/2	1-1/2
8 to 10 excl.		3/4	13/16	15/16	1	1-1/8	1-1/4	1-5/16	1-3/8	1-1/2	1-1/2	1-1/2
10 to 12 excl.		3/4	15/16	1-1/8	1-1/4	1-5/16	1-3/8	1-1/2	1-1/2	1-1/2	1-1/2	1-1/2
12 to 15 excl. (5)	To 155 long (5)	7/8	1	1-3/16	1-5/16	1-3/8	1-1/2	1-1/2	1-1/2	1-1/2	1-1/2	1-1/2

- Note 1 Flatness Tolerance for Length. The longer dimension specified is considered the length, and variation in flatness along the length should not exceed the tabular amount for the specified width in plates up to 12' in length, or in any 12' of longer plates.
- Note 2 Flatness Tolerance for Width. The flatness variation across the width should not exceed the tabular amount for the specified width.
- Note 3 When the longer dimension is under 36", the variation should not exceed 3/8". When the longer dimension is from 36" to 72" incl., the variation should not exceed 75% of the tabular amount for the specified width.
- Note 4 The above table and notes cover the flatness tolerances of circular and sketch plates, based on the maximum dimensions of those plates.
- Note 5 Plate lengths over 155" and/or over 15" in thickness should be referred for flatness tolerances.