



ECONSTEEL HR PLATE FLATNESS TOLERANCES - CARBON STEEL

Rectangular Sheared Plates, Circular and Sketch Plates

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 6 inclusive.

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

- 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 in flatness along the length and across the width should not exceed 1/4" in each direction. When the longer dimension is from 36" to 72" incl., the flatness variation should not exceed 75% of the tabular amount for the specified width, but in no case less than 1/4".
- Note 4 - The tolerances given in the above table apply to plates which have a minimum specified tensile strength not over 60,000 psi or compatible chemistry or hardness. For plates specified to a higher minimum tensile strength or compatible chemistry or hardness, the limits given in the table are increased to 1-1/2 times the amount in the above table.
- Note 5 - The above table and notes cover the flatness tolerances of circular and sketch plates, based on the maximum dimensions of those plates.
- Note 6 - Refer for tolerance.