



## CARBON STEEL — Not Resquared

**COMMERCIAL QUALITY** – Hot rolled mill edge sheets produced from coils and cut lengths including pickled.

Sheet Thickness	Inches Width	Width Tolerances	Inches Length	Length Tolerances
	12-14	-0 +9/16"	Up To 60"	-0 +1"
	15-17	-0 +5/8"	Over 60"-120"	-0 +1-1/2"
	18-19	-0 +11/16"	Over 120"	-0 +2"
	20-21	-0 +3/4"		
	22-24	-0 +13/16"		
	25-26	-0 +1-1/16"		
	27-30	-0 +1-3/16"		
	31-50	-0 +1-3/8"		
	51-78	-0 +1-3/4"		

**SUPERIOR QUALITY** – Hot rolled (mill cut edge), cold rolled and hot dipped galvanized sheets, coils and mill cut lengths including pickled sheets.

Sheet Thickness	Inches Width	Width Tolerance	Inches Length	Length Tolerance
	To 30"	-0 +1/4"	To 60"	-0 +1"
	Over 30"-48"	-0 +5/16"	Over 60"-120"	-0 +1-1/2"
	Over 48"-60"	-0 +3/8"	Over 120"	-0 +2"

**COMMERCIAL QUALITY** – Mill Edges and Mill Sheared Plates.

Specified Lgth. or Width Inches	Thickness Range		
	3/16" to 3/8"	Over 3/8" to 5/8"	Over 5/8" to 1"
	Lgth. or Width Tolerance	Lgth. or Width Tolerance	Lgth. or Width Tolerance
To 24"	-0 +7/16"	-0 +1/2"	-0 +9/16"
Over 24"- 36"	-0 +5/8"	-0 +11/16"	-0 +3/4"
Over 36"-48"	-0 +3/4"	-0 +13/16"	-0 +7/8"
Over 48"-60"	-0 +7/8"	-0 +15/16"	-0 +1"
Over 60"-84"	-0 +1-1/8"	-0 +1-3/16"	-0 +1-1/4"
Over 84"-120"	-0 +1-1/4"	-0 +1-5/16"	-0 +1-3/8"
Over 120"	-0 +1-1/2"	-0 +1-9/16"	-0 +1-5/8"

## STAINLESS STEEL — Not Resquared

**COMMERCIAL QUALITY** — Hot rolled and cold rolled sheets and cold rolled sheets produced from coils.

### Width Tolerance

Thickness	Up to 60" Wide
30GA-16GA	+3/8" -0"
Over 16GA-7GA	+1/2" -0"

### Length Tolerance

Thickness	Length	Tolerance
30GA-7GA	0"-120"	+2"
	Over 120"	+2-1/4"

**COMMERCIAL QUALITY** – Sheared Mill and Universal Mill Plates.

		Thickness		
		3/16"-3/8"	Over 3/8" -1/2"	Over 1/2" -1"
Width	Length	Width Tolerances		
0"-60" Over 60"-84"	-	-1/4" +1/2"	-1/4" +5/8"	-1/4" +3/4"
		-1/4" +11/16"	-1/4" +13/16"	-1/4" +15/16"
		Length Tolerances		
-	0"-144"	-1/4" +2-1/4"	-1/4" +2-1/4"	-1/4" +2-1/4"

## ALUMINUM — Not Resheared

**COMMERCIAL QUALITY** – Length and width tolerances for aluminum flat sheets and sheets from coil.

### Width Tolerance

Thickness	Up to 60" Wide
.006" to .060"	+3/8" -1/8"
Over .060" to .1875"	+1/2" -1/8"

### Length Tolerance

Thickness	Length	Tolerance
.006" to .1875"	0"-120"	+2"
	Over 120"	+2 -1/4"

**COMMERCIAL QUALITY** – Plate.

		Thickness		
		.1876"-.375"	.376"-.500"	.501"-1"
Width	Length	Width Tolerances		
0"-60"	–	-1/4" +1/2"	-1/4" +5/8"	-1/4" +3/4"
Over 60"-72"	–	-1/4" +11/16"	-1/4" +13/16"	-1/4" +15/16"
		Length Tolerances		
–	0"-144"	-1/4" +2-1/4"	-1/4" +2-1/4"	-1/4" +2-1/4"

**IPA standard overall length and width tolerances of resheared sheets and plates, of all metals, and plastics sheared after perforating.**

### Tolerances

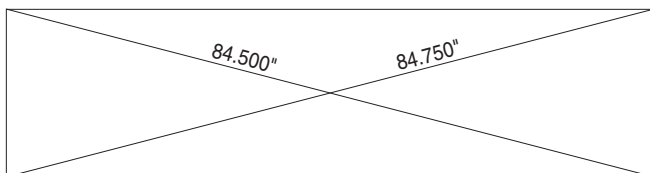
Thickness	Commercial Quality	Superior Quality	Special Quality*
30GA-10GA	± 1/8"	± 1/16"	
8GA -1/4"	± 1/4"	± 1/8"	
5/16"-1/2"	± 5/16"	± 5/32"	
9/16"-3/4"	± 3/8"	± 3/16"	
11/16"-1"	±1/2"	± 1/4"	

\*If other special resheared tolerances are required, check with your IPA member supplier.

When steel plates or aluminum sheets and plates are purchased from the mill or service center as a sheared product, the above tolerances may not be achievable.

### SQUARENESS OF SHEETS AND PLATES

**Definition:** "Out of square" is the greatest deviation of an end edge from a straight line at right angle to a side and touching one corner. It is also obtained by measuring the difference between the diagonals of the sheet. The out of square deviation is one-half of that difference. See example below:



$$\frac{84.750'' - 84.500''}{.250'' \div 2} = .125'' \text{ Out of Square}$$

### TOLERANCE OF RESQUARED SHEETS AND PLATE

Thickness Range	Up to 72"		Up to 120"		Over 120" *
	Max. Tol. Out of Sq.	Diff. of Diagonal Measure	Max. Tol. Out of Sq.	Diff. of Diagonal Measure	
30-20GA Shts.	1/32"	1/16"	1/16"	1/8"	
19-16GA Shts.	1/16"	1/8"	1/8"	1/4"	
15-12GA Shts	3/32"	3/16"	3/16"	3/8"	
11-7GA Shts	3/16"	3/8"	3/8"	3/4"	
3/16"-3/8" Plate	1/4"	1/2"	1/2"	1"	
3/8"-5/8" Plate	3/8"	3/4"	3/4"	1-1/2"	
5/8"-1" Plate	3/4"	1-1/2"	1-1/2"	3"	

\*Check with your member IPA supplier.