

# Steel Panels



Steel panels are made from standard low-carbon, cold-rolled steel complying with ASTM A1008, A-109 and QQS-698.

**Smooth Finish Steel Panels, Type QD** have a smooth, bright finish produced at the steel mill by rolling with smooth ground rolls. Because it is our smoothest panel, Type QD is recommended for testing gloss and color. Because Type QD is less expensive, it is also the best buy for many general applications. However, Type QD panels are not recommended for physical properties and corrosion tests.

**Matte Finish Steel Panels, Type R** are a dull matte mill finish produced by roughened rolls. This matte finish is representative of general purpose sheet metal applications. Because they are thicker, Type R panels are more rigid than Type QD.

**Ground (Polished) Finish Steel Panels, Type S** are the same steel as Type R, but one side is polished by grinding it with an abrasive until the mill surface is completely removed. This imparts a smooth surface that looks similar to a “brushed” finish. The ground (or polished) surface frequently gives better adhesion results than a mill finish. Although ground panels are not representative of any specific steel surface normally used for painting, they

are widely used because they provide a standardized surface for testing.

**Thin, Flexible (Smooth Finish) Steel Panels, Type D** are very thin, flexible panels with the same smooth surface as Type QD. This type is very inexpensive and is stocked in a limited number of sizes.

**Tinplate Steel Panels, Type DT** are the same steel as Type D except tinplated with bright reflow finish. This type is required by some government standards.

**Adhesion Panels (Ground Finish), Type RS** are stocked in a 1.6 x 25 x 101 mm size for testing adhesives. One side has a surface finish very similar to our Type S. These panels are thicker and harder than our regular steel, to resist the stress of lap shear testing of high strength adhesives.

**Taber® Abraser Panels, Type R44-T and Type S44-T** are specially designed for use with the Taber Abraser Tester. They are 0.8 x 101 x 101 mm, with a hole in the center. Their surface finish corresponds with our Type R and Type S panels, respectively.

*Steel panels, packed with vapor phase rust inhibitor, can have a shelf life of up to 10 years.*

**Stainless Steel, Type SS** panels are made from 304 stainless alloy and are available in two sizes. They do not have a hanging hole.

## Cleaning and Packaging

The production process thoroughly cleans the panels and removes any oil that might be on the surface. Steel panels are packed in plastic bags with vapor phase rust inhibitor and shipped in a sturdy cardboard carton. With this multilayer packaging, our steel panels may have a shelf life of up to 10 years. In most cases the panels can be used right out of the package. However, for critical applications it may sometimes be necessary to remove traces of the rust inhibitor with a distilled water or MEK wipe prior to coating the panel.



## CRS Panel Specifications (nominal) Cold Rolled Steel, Low Carbon, SAE 1008/1010

	Type QD	Type R	Type S	Type D	Type DT	Type RS
Thickness	0.020" (0.5mm)	0.032" (0.8mm)	0.032" (0.8mm)	0.010" (0.25mm)	0.010" (0.25mm)	0.063" (1.6mm)
Finish	Smooth	Dull Matte	Ground	Smooth	Tinplate	Ground
Roughness, Ra (micro-inches)	<20	25-65	20-45	<20	<20	20-45
ASTM Specs.	A1008 D609-Type 3	A1008 D609-Type 1	A1008 D609-Type 2	A1008 D609-Type 3	A624	A109
Fed. Steel Spec	QQ-S-698	QQ-S-698	QQ-S-698	QQ-S-698	QQ-S-698	QQ-S-698
ISO Specs.	1514-Type 3	1514-Type 1 3574 Type CR1	1514	1514-Type 3	1514, 11949	1514
Temper	1/4 hard	1/4 hard	1/4 hard	T4	T2	1/2 hard
Hardness (Rockwell)	B50-B65	B50-B65	B50-B65	B62-71	B50-65	B70-B85
Tensile (psi)	55,000	55,000	55,000	55,000	48,000	65,000

### Chemical Composition of SAE 1008/1010 Steel Panels (nominal %)

Element:	Manganese	Carbon	Phosphorus	Sulfur
Percentage:	0.60 max	0.15 max	0.030 max	0.035 max

## Specifications

Q-Panel and the Q-shaped hole are registered trademarks of Q-Lab Corporation.

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Panel Type	Description	Stock Number	Size (mm)	Box Quantity	Weight per 100 (kgs)
<b>Type QD</b>	Smooth Finish	QD-2-3.5	50 x 90	500	3.63
		QD-24	51 x 102	600	2
		QD-2.75-4	70 x 102	400	2.75
		QD-35	76 x 127	400	4.09
		QD-36	76 x 152	400	4.55
		QD-39	76 x 229	200	7
		QD-46	102 x 152	200	6.36
		QD-48	102 x 203	200	8.5
		QD-412	102 x 305	150	12.27
		QD-612	152 x 305	150	18.64
<b>Type R</b>	Dull Matte Finish	R-2-3.5	50 x 90	300	3.18
		R-35	76 x 127	250	6.36
		R-36	76 x 152	250	7.27
		R-39	76 x 229	125	12
		R-46	102 x 152	200	10
		R-48	102 x 203	125	13.6
		R-412	102 x 305	100	20
		R-612	152 x 305	100	29.55
	Taber® Abrasion	R-44-T	102 x 102	250	6.55
<b>Type S</b>	Ground Finish (one side)	S-35	76 x 127	250	6.36
		S-36	76 x 152	250	7.27
		S-39	76 x 229	125	12
		S-46	102 x 152	200	10
		S-48	102 x 203	125	30.4
		S-412	102 x 305	100	20
		S-612	152 x 305	100	29.55
	Taber® Abrasion	S-44-T	102 x 102	250	6.55
<b>Type D</b>	Smooth Finish	D-36	76 x 152	800	2.27
		D-46	102 x 152	400	3.18
<b>Type DT</b>	Tinplate	DT-36	76 x 152	800	2.27
<b>Type SS</b>	Stainless	SS-36	76 x 152	250	9
<b>Small Panels (no hole)</b>	Matte Finish	R-13	25 x 76	1400	1.37
	Ground Finish	RS-14	25 x 102	600	3.64
	Stainless	SS-13	25 x 76	1400	1.82

## QUANTITY DISCOUNTS

Total Amount of Order	\$500USD	\$1000	\$2500	\$5000
Discount Off List Price	5%	10%	15%	20%

### ORDERING:

Specify Stock Number and number of boxes.

### MINIMUMS:

Orders for less than a full box quantity will incur a \$15 Special Handling Charge to cover the costs of repackaging.

### HANDLING CHARGE:

There is a \$5 Handling Charge for orders under \$1000.

### TERMS:

Net 30 Days. All freight charges are the responsibility of the purchaser.

## SATISFACTION GUARANTEED

Due to shipping circumstances beyond our control, we are not able to offer warranties on exported panels outside of North America.



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