ALCOA MILL PRODUCTS



TECHNICAL FACT SHEET 6061-T651 TYPE 200

WROUGHT TOOLING PLATE

SUPPLYING THE WORLD'S BEST



TOOLING PLATE IMPROVEMENTS PROVIDE GUARANTEED QUALITY

As an industry leader for more than 100 years, the Aluminum Company of America stands behind its commitment to quality processes, products, and performance for our customers. Type 200 6061-T651 wrought tooling plate is one of Alcoa's quality aluminum products. Type 200 is produced at Alcoa's state-of-the-art rolling mill in Davenport, lowa, by the same people, equipment, and technology that have set aerospace and mold industry standards for quality and product development. Our tooling plate is produced and certified in accordance with Federal Specification QQ-A 250/11, AMS 4027, ASTM B 209 and ASME SB209. Its excellent machinability, weldability, and high strength (40-42 ksi yield) sets the industry standard for versatility with a wide range of applications and end uses. Alcoa's continued research and development has resulted in several new breakthroughs, including a new tolerance guarantee. When combined, these improvements make Alcoa 6061-T651 tooling plate the highest quality tooling plate available.

Wide Plate Tolerances Guaranteed

Changes in our production process allow Alcoa to now guarantee flatness and thickness tolerances on all Alcoa tooling plate, including our 72.50" wide plate. The improved guarantee sets a new industry standard for tooling plate tolerances. The guarantee includes both "as received" and "after sawing" tooling plate, so distributors receive stable, consistently flat plate for sawing operations while their customers receive blanks with minimal variations. Consistent blanks allow fewer set-ups, changes and more cost effective processing.

Improved Stability and Consistency

As you know, stability and consistency are integral to the quality of 6061-T651 plate. Alcoa's proprietary chemistry, casting, and production techniques provide excellent piece-to-piece stability and consistency. High stability and consistency reduce warping and movement during sawing and machining. Also, the plate's through-thickness consistency creates fewer metal inconsistencies for easier and faster machining, allowing less rework and fewer scrap pieces. And our superior lot-to-lot consistency means you get the same result time and time again, so you can develop standard procedures for machining and finishing operations.

Expanded Satin Finish Range

Alcoa's *genuine* satin finish is now available on all stocked 6061-T651 tooling plate through 2.00" thick and 60.50" wide. The satin finish is twice as smooth as plate with coarse, mechanical finishes. This superior smoothness lets you reduce or eliminate costly surface clean-up operations.

Better Identification System

Alcoa has also recently updated its marking system. The new method places product identification on the top of each plate rather than the bottom. This new system lets you more easily and accurately identify and select the proper alloy, temper, size, and specification. It also helps avoid errors by improving the traceability of sawed blanks.

A Quality Commitment

For over a century, Alcoa has committed itself to quality processes, products, and performance. This commitment to quality — combined with a strong dedication to our customers — has made Alcoa the leader in the aluminum industry. As the largest aluminum company in the world, Alcoa continuously strives to improve products and processes to meet customer needs and expectations.

Guaranteed

The improvements in our wrought tooling plate are one more example of the Alcoa commitment to excellence. The flatness and thickness tolerance guarantee on *all* Alcoa tooling plate, its improved stability and consistency, the expanded *genuine* satin finish gauge range, and the updated marking system make Alcoa's tooling plate the highest quality plate available. Find out how using Alcoa's Type 200 6061-T651 wrought tooling plate can improve your results — call your local Alcoa distributor today!

6061-T651 TYPE 200 WROUGHT TOOLING PLATE

GUARANTEED TOLERANCES

Stocked Sizes			Flatness			LBS/	LBS/	Plates
250 x 36.5 x 96.5 +.012/000 .100 .125 .060 3.61 88 46 .250 x 48.5 x 96.5 +.014/000 .100 .125 .060 3.63 118 34 .250 x 48.5 x 144.5 +.015/000 .100 .125 .060 3.63 127 22 250 x 72.5 x 144.5 +.015/000 .100 .125 .060 3.63 221 18 .250 x 72.5 x 144.5 +.015/000 .100 .125 .060 3.63 221 18 .375 x 36.5 x 96.5 +.015/000 .100 .125 .060 3.63 224 18 .375 x 48.5 x 144.5 +.017/000 .100 .125 .060 5.41 .32 30 .375 x 48.5 x 144.5 +.017/000 .100 .125 .060 5.41 .33 .12 .375 x 72.5 x 144.5 +.020/000 .100 .125 .060 5.44 .330 12 .375 x 72.5 x 144.5 +.027/000 .100 .125 .060 5.44 .395 10 .500 x 48.5 x 144.5 +	Stocked Sizes	Thickness	Longitudinal			Sq. FT	Plate	Per Skid
250 x 48.5 x 96.5					,		1	
250 x 48.5 x 144.5								
250 x 60.5 x 144.5			+					
250 x 72.5 x 144.5								
3.13 x 48.5 x 144.5								_
3.75 x 36.5 x 96.5 +.015/000 .100 .125 .060 5.41 132 30 .375 x 48.5 x 144.5 +.017/000 .100 .125 .060 5.41 263 15 .375 x 60.5 x 144.5 +.020/000 .100 .125 .060 5.44 330 12 .375 x 72.5 x 144.5 +.020/000 .100 .125 .060 5.44 330 12 .375 x 72.5 x 144.5 +.020/000 .100 .125 .060 5.44 395 10 .500 x 36.5 x 96.5 +.023/000 .100 .125 .060 7.21 .176 23 .500 x 48.5 x 144.5 +.023/000 .100 .125 .060 7.21 .351 .11 .500 x 60.5 x 144.5 +.027/000 .100 .125 .060 7.25 .440 9 .500 x 72.5 x 144.5 +.027/000 .100 .125 .060 7.25 .440 9 .625 x 48.5 x 144.5 +.027/000 .100 .125 .060 7.25 .527 7 .625 x 48.5 x 144.5 +.023/000 .100 .100 .060 8.98 437 9 .625 x 60.5 x 144.5 +.027/000 .100 .100 .060 9.02 .547 7 .750 x 36.5 x 96.5 +.031/000 .100 .100 .060 9.02 .547 7 .750 x 36.5 x 96.5 +.031/000 .100 .100 .060 10.79 .264 .15 .750 x 48.5 x 144.5 +.037/000 .100 .100 .060 10.84 .658 6 .750 x 72.5 x 144.5 +.037/000 .100 .100 .060 10.84 .658 6 .750 x 72.5 x 144.5 +.037/000 .100 .100 .060 10.84 .789 5 .875 x 48.5 x 144.5 +.039/000 .100 .100 .060 14.38 .352 .11 .000 x 48.5 x 144.5 +.039/000 .100 .100 .060 .14.38 .352 .11 .000 x 48.5 x 144.5 +.039/000 .100 .100 .060 .14.38 .352 .11 .000 x 48.5 x 144.5 +.047/000 .100 .100 .060 .14.38 .352 .15 .1250 x 48.5 x 144.5 +.047/000 .100 .100 .060 .14.38 .352 .15 .1250 x 48.5 x 144.5 +.039/000 .100 .100 .060 .14.44 .376 5 .1250 x 48.5 x 144.5 +.039/000 .100 .100 .060 .14.38 .352 .15 .1250 x 48.5 x 144.5 +.039/000 .100 .100 .060 .14.44 .376 5 .1250 x 60.5 x 144.5 +.039/000 .100 .100 .060 .14.44 .374 .304 .304 .304 .304 .304 .304 .304 .304 .304			+					
.375 x 48.5 x 144.5 +.017/000 .100 .125 .060 5.41 263 15 .375 x 60.5 x 144.5 +.020/000 .100 .125 .060 5.44 330 12 .375 x 72.5 x 144.5 +.020/000 .100 .125 .060 5.44 395 10 .500 x 36.5 x 96.5 +.023/000 .100 .125 .060 7.21 .176 23 .500 x 48.5 x 144.5 +.023/000 .100 .125 .060 7.21 .351 11 .500 x 60.5 x 144.5 +.027/000 .100 .125 .060 7.25 .440 9 .500 x 72.5 x 144.5 +.027/000 .100 .125 .060 7.25 .40 9 .625 x 48.5 x 144.5 +.027/000 .100 .100 .060 8.98 437 9 .625 x 60.5 x 144.5 +.031/000 .100 .100 .060 10.79 264 15 .750 x 48.5 x 144.5 +.031/000 .100 .060 10.79<								
.375 x 60.5 x 144.5 +.020/000 .100 .125 .060 5.44 330 12 .375 x 72.5 x 144.5 +.020/000 .100 .125 .060 5.44 395 10 .500 x 36.5 x 96.5 +.023/000 .100 .125 .060 7.21 .176 23 .500 x 48.5 x 144.5 +.023/000 .100 .125 .060 7.21 .351 11 .500 x 60.5 x 144.5 +.027/000 .100 .125 .060 7.25 .440 9 .500 x 72.5 x 144.5 +.027/000 .100 .125 .060 7.25 .440 9 .625 x 60.5 x 144.5 +.027/000 .100 .100 .060 8.98 .437 9 .625 x 60.5 x 144.5 +.021/000 .100 .100 .060 9.02 .547 7 .750 x 36.5 x 96.5 +.031/000 .100 .100 .060 10.79 .255 7 .750 x 60.5 x 144.5 +.037/000 .100 .100 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
.375 x 72.5 x 144.5 +.020/000 .100 .125 .060 5.44 395 10 .500 x 36.5 x 96.5 +.023/000 .100 .125 .060 7.21 176 23 .500 x 48.5 x 144.5 +.023/000 .100 .125 .060 7.21 351 11 .500 x 60.5 x 144.5 +.027/000 .100 .125 .060 7.25 440 9 .500 x 72.5 x 144.5 +.027/000 .100 .100 .060 7.25 527 7 .625 x 48.5 x 144.5 +.023/000 .100 .100 .060 8.98 437 9 .625 x 60.5 x 144.5 +.027/000 .100 .100 .060 9.02 547 7 .750 x 36.5 x 96.5 +.031/000 .100 .100 .060 10.79 264 15 .750 x 60.5 x 144.5 +.037/000 .100 .100 .060 10.84 658 6 .750 x 72.5 x 144.5 +.031/000 .100 .100					.060			
.500 x 36.5 x 96.5 +.023/000 .100 .125 .060 7.21 176 23 .500 x 48.5 x 144.5 +.023/000 .100 .125 .060 7.21 351 11 .500 x 60.5 x 144.5 +.027/000 .100 .125 .060 7.25 440 9 .500 x 72.5 x 144.5 +.027/000 .100 .102 .060 7.25 527 7 .625 x 48.5 x 144.5 +.027/000 .100 .100 .060 8.98 437 9 .625 x 60.5 x 144.5 +.027/000 .100 .100 .060 9.02 547 7 .750 x 36.5 x 96.5 +.031/000 .100 .100 .060 10.79 264 15 .750 x 60.5 x 144.5 +.037/000 .100 .100 .060 10.79 525 7 .750 x 72.5 x 144.5 +.037/000 .100 .100 .060 10.84 789 5 .875 x 48.5 x 144.5 +.039/000 .100 .100								
.500 x 48.5 x 144.5 +.023/000 .100 .125 .060 7.21 351 11 .500 x 60.5 x 144.5 +.027/000 .100 .125 .060 7.25 440 9 .500 x 72.5 x 144.5 +.027/000 .100 .125 .060 7.25 527 7 .625 x 48.5 x 144.5 +.023/000 .100 .100 .060 8.98 437 9 .625 x 60.5 x 144.5 +.027/000 .100 .100 .060 9.02 547 7 .750 x 36.5 x 96.5 +.031/000 .100 .100 .060 10.79 264 15 .750 x 48.5 x 144.5 +.037/000 .100 .100 .060 10.79 525 7 .750 x 60.5 x 144.5 +.037/000 .100 .100 .060 10.84 789 5 .750 x 72.5 x 144.5 +.037/000 .100 .100 .060 10.84 789 5 .875 x 48.5 x 144.5 +.039/000 .100 .100			.100					
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$.500 x 36.5 x 96.5	+.023/000	.100	.125	.060	7.21	176	23
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$.500 x 48.5 x 144.5	+.023/000	.100	.125	.060	7.21	351	11
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$.500 x 60.5 x 144.5	+.027/000	.100	.125	.060		440	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$.500 x 72.5 x 144.5	+.027/.000	.100	.125	.060	7.25	527	7
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$.625 x 48.5 x 144.5	+.023/000	.100	.100	.060	8.98	437	9
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$.625 x 60.5 x 144.5	+.027/000	.100	.100	.060	9.02	547	7
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$.750 x 36.5 x 96.5	+.031/000	.100	.100	.060	10.79	264	15
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$.750 x 48.5 x 144.5	+.031/000	.100	.100	.060	10.79	525	7
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$.750 x 60.5 x 144.5	+.037/000	.100	.100	.060	10.84	658	6
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$.750 x 72.5 x 144.5	+.037/000	.100	.100	.060	10.84	789	5
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$.875 x 48.5 x 144.5	+.031/000	.100	.100	.060	12.55	611	6
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1.000 x 36.5 x 96.5	+.039/000	.100	.100	.060	14.38	352	11
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1.000 x 48.5 x 144.5	+.039/000	.100	.100	.060	14.38	700	5
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	1.000 x 60.5 x 144.5	+.047/000	.100	.100	.060	14.44	876	5
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	1.125 x 48.5 x 144.5	+.047/000	.100	.100	.060	16.21	789	5
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	1.250 x 48.5 x 144.5	+.039/000	.100	.100	.060	17.91	871	5
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1.250 x 60.5 x 144.5	+.047/000	.100	.100	.060	17.96	1090	4
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1.500 x 48.5 x 144.5	+.039/000	.100	.100	.060	21.44	1043	4
2.000 x 48.5 x 144.5 +.055/000 .100 .100 .060 28.61 1392 3 2.000 x 60.5 x 144.5 +.055/000 .100 .100 .060 28.61 1737 2 2.250 x 48.5 x 144.5 +.055/000 .100 .100 .060 32.13 1564 2 2.500 x 48.5 x 144.5 +.075/000 .100 .100 .060 35.80 1742 2 2.500 x 60.5 x 144.5 +.075/000 .100 .100 .060 35.80 2171 2 2.750 x 48.5 x 144.5 +.075/000 .100 .100 .060 41.01 1914 2 3.000 x 48.5 x 144.5 +.075/000 .100 .100 .060 42.65 2084 2 3.500 x 48.5 x 144.5 +.100/000 .100 .100 .060 50.09 2438 1	1.500 x 60.5 x 144.5	+.047/000	.100	.100	.060	21.49	1304	3
2.000 x 60.5 x 144.5 +.055/000 .100 .100 .060 28.61 1737 2 2.250 x 48.5 x 144.5 +.055/000 .100 .100 .060 32.13 1564 2 2.500 x 48.5 x 144.5 +.075/000 .100 .100 .060 35.80 1742 2 2.500 x 60.5 x 144.5 +.075/000 .100 .100 .060 35.80 2171 2 2.750 x 48.5 x 144.5 +.075/000 .100 .100 .060 41.01 1914 2 3.000 x 48.5 x 144.5 +.075/000 .100 .100 .060 42.65 2084 2 3.500 x 48.5 x 144.5 +.100/000 .100 .100 .060 50.09 2438 1	1.750 x 48.5 x 144.5	+.055/000	.100	.100	.060	25.07	1220	3
2.250 x 48.5 x 144.5 +.055/000 .100 .100 .060 32.13 1564 2 2.500 x 48.5 x 144.5 +.075/000 .100 .100 .060 35.80 1742 2 2.500 x 60.5 x 144.5 +.075/000 .100 .100 .060 35.80 2171 2 2.750 x 48.5 x 144.5 +.075/000 .100 .100 .060 41.01 1914 2 3.000 x 48.5 x 144.5 +.075/000 .100 .100 .060 42.65 2084 2 3.500 x 48.5 x 144.5 +.100/000 .100 .100 .060 50.09 2438 1	2.000 x 48.5 x 144.5	+.055/000	.100	.100	.060	28.61	1392	3
2.250 x 48.5 x 144.5 +.055/000 .100 .100 .060 32.13 1564 2 2.500 x 48.5 x 144.5 +.075/000 .100 .100 .060 35.80 1742 2 2.500 x 60.5 x 144.5 +.075/000 .100 .100 .060 35.80 2171 2 2.750 x 48.5 x 144.5 +.075/000 .100 .100 .060 41.01 1914 2 3.000 x 48.5 x 144.5 +.075/000 .100 .100 .060 42.65 2084 2 3.500 x 48.5 x 144.5 +.100/000 .100 .100 .060 50.09 2438 1	2.000 x 60.5 x 144.5	+.055/000	.100	.100	.060	28.61	1737	2
2.500 x 48.5 x 144.5 +.075/000 .100 .100 .060 35.80 1742 2 2.500 x 60.5 x 144.5 +.075/000 .100 .100 .060 35.80 2171 2 2.750 x 48.5 x 144.5 +.075/000 .100 .100 .060 41.01 1914 2 3.000 x 48.5 x 144.5 +.075/000 .100 .100 .060 42.65 2084 2 3.500 x 48.5 x 144.5 +.100/000 .100 .100 .060 50.09 2438 1					.060			2
2.500 x 60.5 x 144.5 +.075/000 .100 .100 .060 35.80 2171 2 2.750 x 48.5 x 144.5 +.075/000 .100 .100 .060 41.01 1914 2 3.000 x 48.5 x 144.5 +.075/000 .100 .100 .060 42.65 2084 2 3.500 x 48.5 x 144.5 +.100/000 .100 .100 .060 50.09 2438 1	2.500 x 48.5 x 144.5							2
2.750 x 48.5 x 144.5 +.075/000 .100 .100 .060 41.01 1914 2 3.000 x 48.5 x 144.5 +.075/000 .100 .100 .060 42.65 2084 2 3.500 x 48.5 x 144.5 +.100/000 .100 .100 .060 50.09 2438 1								
3.000 x 48.5 x 144.5 +.075/000 .100 .100 .060 42.65 2084 2 3.500 x 48.5 x 144.5 +.100/000 .100 .100 .060 50.09 2438 1								
3.500 x 48.5 x 144.5 +.100/000 .100 .100 .060 50.09 2438 1								
	4.000 x 48.5 x 144.5	+.130/000	.100	.100	.060	57.36	2791	1
4.500 x 48.5 x 144.5 +.130/000 .100 .100 .060 64.42 3135 1								
5.000 x 48.5 x 144.5 +.130/000 .100 .100 .060 71.47 3478 1								
6.000 x 48.5 x 144.5 +.130/000 .100 .100 .060 85.58 4165 1								

[☐] Genuine Satin Finish

[■] Mill Finish

<sup>Alcoa thickness tolerances are produced to ½ the Aluminum Association Standards on the plus side.
All tolerances guaranteed before and after sawing.
Non-stocked sizes available upon request.</sup>

6061-T651 TYPE 200 WROUGHT TOOLING PLATE

Available through Alcoa's exclusive network of appointed distributors



PRODUCT SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE