

**ADDENDUM TO 2011 EDITION OF YELLOW SHEETS**  
**Tempers For Aluminum And Aluminum Alloy Products**

May 6, 2016

New and Revised Registrations									
Registered			Product	Thickness in.	Tensile Strength, ksi			Elongation Percent in 2 in. or 4D	Remarks <sup>2</sup>
Alloy Temper	By	Date			Basis <sup>1</sup>	Ult.	Yield		
2013-T4511	Sumitomo	08/01/2012	Drawn Tube	0.120-0.400	*Min <sup>6</sup>	40.0	21.0	20	* Tentative
2013-T6511	Sumitomo	12/15/2011	Drawn Tube	0.120-0.400	*Min <sup>6</sup>	60.0	56.0	7	* Tentative
2624-T351	Alcoa	06/22/2011 Revised 10/22/2013	Plate	0.500-1.000	Min <sup>6</sup> Min <sup>9</sup>	63.0 65.0	48.0 44.0	16 15	Fracture Toughness <sup>14</sup> – Min K <sub>IC</sub> or K <sub>Q</sub> For thicknesses 0.750-1.500 inches L-T direction 42 ksiv in T-L direction 41 ksiv in
				1.001-1.500	Min <sup>6</sup> Min <sup>9</sup>	62.0 64.0	47.0 44.0	16 15	
2624-T39	Alcoa	01/28/2011	Plate	0.750-1.500	Min <sup>6</sup> Min <sup>9</sup>	68.0 71.0	62.0 58.0	11 9	Cold rolled ~10% and stretched ~1% after solution heat treating.  Fracture Toughness <sup>14</sup> – K <sub>IC</sub> or K <sub>Q</sub> For thicknesses 0.750-1.500 inches L-T direction 39 ksi vin. T-L direction 33 ksi vin.
2824-T3511	Universal Alloy	06/25/2014	Extrusion	0.250-0.499	*Min <sup>6</sup> *Min <sup>9</sup>	71.0 68.0	54.0 48.0	12 -	*Tentative  Cross-sectional area less than or equal to 25 in. <sup>2</sup>
				0.500-0.749	*Min <sup>6</sup> *Min <sup>9</sup>	73.0 68.0	55.0 47.0	11 8	
				0.750-0.999	*Min <sup>6</sup> *Min <sup>9</sup>	73.0 67.0	55.0 47.0	11 8	
				1.000-1.499	*Min <sup>6</sup> *Min <sup>9</sup>	74.0 66.0	56.0 47.0	11 8	
				1.500-1.999	*Min <sup>6</sup> *Min <sup>9</sup>	74.0 65.0	56.0 46.0	11 8	
				2.000-2.500	*Min <sup>6</sup> *Min <sup>9</sup>	74.0 64.0	56.0 46.0	10 8	

Unless specified below, for all referenced footnotes refer to the Yellow and/or Tan Sheets as applicable.

**ADDENDUM TO 2011 EDITION OF YELLOW SHEETS**  
**Tempers For Aluminum And Aluminum Alloy Products**

May 6, 2016

New and Revised Registrations									
Registered			Product	Thickness in.	Tensile Strength, ksi			Elongation Percent in 2 in. or 4D	Remarks <sup>2</sup>
Alloy Temper	By	Date			Basis <sup>1</sup>	Ult.	Yield		
Alclad 2029-T8	Alcoa	05/12/2015	Sheet & Plate	0.063-0.164	*Min <sup>6</sup>	61.0	55.0	8	*Tentative
					*Min <sup>9</sup>	61.0	54.0	9	
				0.165-0.249	*Min <sup>6</sup>	61.0	55.0	10	
					*Min <sup>9</sup>	61.0	54.0	10	
			0.250-0.499	*Min <sup>6</sup>	61.0	56.0	11		
				*Min <sup>9</sup>	61.0	54.0	10		
			0.500-0.600	*Min <sup>6</sup>	63.0	58.0	13		
				*Min <sup>9</sup>	64.0	56.0	11		
2139-T84	Alcan Global ATI	03/23/2011	Plate	1.000-1.500	*Min <sup>6</sup>	65.0	62.0	11	* Tentative Material is cold worked in the range of 3-6% after solution heat treatment <u>Stress Corrosion Resistance</u> For thicknesses 1.000 – 5.000 inches. C-rings and tensile specimens machined and tested in accordance with ASTM G47 shall show no evidence of stress corrosion failure when tested in the short transverse direction at 40 ksi and exposed for 30 days. <u>Fracture Toughness</u> <sup>14</sup> – *Min K <sub>IC</sub> For thicknesses 1.000-3.750 inches L-T direction 35 ksi/in T-L direction 32 ksi/in S-L direction 27 ksi/in (from 2.000 inch) For thicknesses 3.751 – 5.000 inches L-T direction 32 ksi/in T-L direction 30 ksi/in S-L direction 27 ksi/in
					*Min <sup>9</sup>	67.0	61.0	8	
					*Min <sup>10</sup>	63.0	55.0	5	
				1.501-3.750	*Min <sup>6</sup>	66.0	62.0	9	
					*Min <sup>9</sup>	68.0	61.0	7	
					*Min <sup>10</sup>	62.0	55.0	4	
			3.751-5.000	*Min <sup>6</sup>	65.0	59.0	8		
				*Min <sup>9</sup>	67.0	59.0	6		
				*Min <sup>10</sup>	61.0	53.0	4		
2050-T34	Constellium	01/25/2016	Plate	2.000-6.500	*Min <sup>9</sup>	52.0	34.0	17	*Tentative Solution heat treated and cold worked 3-4.5%

Unless specified below, for all referenced footnotes refer to the Yellow and/or Tan Sheets as applicable.

**ADDENDUM TO 2011 EDITION OF YELLOW SHEETS**  
**Temper For Aluminum And Aluminum Alloy Products**

May 6, 2016

New and Revised Registrations									
Registered			Product	Thickness in.	Tensile Strength, ksi			Elongation Percent in 2 in. or 4D	Remarks <sup>2</sup>
Alloy Temper	By	Date			Basis <sup>1</sup>	Ult.	Yield		
2050-T84	Constellium	01/20/2014	Extruded Bar	1.750-5.900	*Min <sup>6</sup>	85.0	82.0	9	*Tentative Solution heat treated, cold worked approximately 4% and artificially aged. <u>Stress Corrosion Resistance</u> For thicknesses 1.750-5.900 inches Tensile specimens machined and tested in accordance with ASTM G47 shall show no evidence of stress corrosion failure when tested in the short transverse direction at 58 ksi and exposed for 30 days.
					*Min <sup>9</sup>	71.0	64.0	4	
2050-T84	Alcan	03/23/2007 Revised	Plate	0.500 – 1.500	Min <sup>6</sup>	73.0	69.0	9	<u>Stress Corrosion Resistance</u> For thickness 0.750 – 6.500 inches  Direct C-rings and Tensile specimens machined and tested in accordance with ASTM G47 shall show no evidence of stress corrosion failure when tested in the short transverse direction at 45 ksi and exposed for 30 days.  <u>Fracture Toughness</u> <sup>14</sup> – Min K <sub>IC</sub> For thicknesses 0.500 – 1.500 inches L-T direction 33 ksi/in T-L direction 29 ksi/in S-L direction 25 ksi/in  For thicknesses 1.501 – 2.000 inches L-T direction 31 ksi/in T-L direction 27 ksi/in S-L direction 23 ksi/in  For thicknesses 2.001 – 3.000 inches L-T direction 28 ksi/in T-L direction 25 ksi/in S-L direction 23 ksi/in
					Min <sup>9</sup>	74.0	67.0	7	
	1.501 – 2.000	Min <sup>6</sup>		72.0	67.0	9			
		Min <sup>9</sup>		73.0	65.0	7			
		Min <sup>10</sup>		71.0	61.0	2			
	2.001 – 3.000	Min <sup>6</sup>		72.0	67.0	8			
		Min <sup>9</sup>		72.0	65.0	6			
		Min <sup>10</sup>		71.0	61.0	2			
	3.001 – 4.000	Min <sup>6</sup>		71.0	67.0	7			
		Min <sup>9</sup>		72.0	65.0	4			
		Min <sup>10</sup>		70.0	60.0	1.5			
	4.001 – 5.000	Min <sup>6</sup>		71.0	66.0	6			
Min <sup>9</sup>		71.0	64.0	3					
Min <sup>10</sup>		69.0	59.0	1.5					
5.001-6.500	Min <sup>6</sup>	71.0	66.0	5					
	Min <sup>9</sup>	71.0	64.0	3					
	Min <sup>10</sup>	69.0	59.0	1.5					
	Constellium	03/09/2012							

Unless specified below, for all referenced footnotes refer to the Yellow and/or Tan Sheets as applicable.

**ADDENDUM TO 2011 EDITION OF YELLOW SHEETS  
Temper For Aluminum And Aluminum Alloy Products**

**May 6, 2016**

New and Revised Registrations									
Registered			Product	Thickness in.	Tensile Strength, ksi			Elongation Percent in 2 in. or 4D	Remarks <sup>2</sup>
Alloy Temper	By	Date			Basis <sup>1</sup>	Ult.	Yield		
									For thicknesses 3.001 – 4.000 inches L-T direction 26 ksi/in T-L direction 23 ksi/in S-L direction 21 ksi/in  For thicknesses 4.001 – 5.000 inches L-T direction 25 ksi/in T-L direction 21 ksi/in S-L direction 21 ksi/in  For thicknesses 5.001 – 6.000 inches L-T direction 22 ksi/in T-L direction 20 ksi/in S-L direction 18 ksi/in  For thicknesses 6.001 – 6.500 inches L-T direction 22 ksi/in. T-L direction 19 ksi/in S-L direction 16 ksi/in
2050-T852	Aubert & Duval	01/21/2014 Revised 10/01/2015	Die Forging	0.250 – 1.500	Min <sup>6</sup> Min <sup>9</sup>	75.0 76.0	69.0 70.0	9 8	Fracture Toughness <sup>14</sup> – K <sub>IC</sub> or K <sub>Q</sub> For thicknesses 0.250-1.500 inches L-T direction 32 ksi/in T-L direction 29 ksi/in  For thicknesses 1.501-2.000 inches L-T direction 32 ksi/in T-L direction 29 ksi/in  For thicknesses 2.001-3.000 inches L-T direction 29 ksi/in T-L direction 26 ksi/in S-L direction 20 ksi/in  For thicknesses 3.001-4.000 inches L-T direction 26 ksi/in T-L direction 23 ksi/in S-L direction 20 ksi/in  For thicknesses 4.001 – 5.000 inches L-T direction 26 ksi/in T-L direction 23 ksi/in S-L direction 20 ksi/in
				1.501 – 2.000	Min <sup>6</sup> Min <sup>9</sup> Min <sup>10</sup>	75.0 76.0 75.0	69.0 70.0 64.0	9 8 4	
				2.001 – 3.000	Min <sup>6</sup> Min <sup>9</sup> Min <sup>10</sup>	74.0 74.0 73.0	68.0 68.0 64.0	8 6 3	
				3.001 – 4.000	Min <sup>6</sup> Min <sup>9</sup> Min <sup>10</sup>	74.0 73.0 73.0	68.0 67.0 63.0	7 6 3	
				4.001 – 5.000	Min <sup>6</sup> Min <sup>9</sup> Min <sup>10</sup>	74.0 73.0 72.0	67.0 66.0 62.0	6 6 2	

Unless specified below, for all referenced footnotes refer to the Yellow and/or Tan Sheets as applicable.

**ADDENDUM TO 2011 EDITION OF YELLOW SHEETS**  
**Tempers For Aluminum And Aluminum Alloy Products**

May 6, 2016

New and Revised Registrations									
Registered			Product	Thickness in.	Tensile Strength, ksi			Elongation Percent in 2 in. or 4D	Remarks <sup>2</sup>
Alloy Temper	By	Date			Basis <sup>1</sup>	Ult.	Yield		
				5.001 – 6.000	Min <sup>6</sup> Min <sup>9</sup> Min <sup>10</sup>	73.0 72.0 71.0	67.0 65.0 61.0	6 6 2	For thicknesses 4.001-5.000 inches L-T direction 25 ksi Vin T-L direction 21 ksi Vin S-L direction 19 ksi Vin
				6.001 – 7.000	Min <sup>6</sup> Min <sup>9</sup> Min <sup>10</sup>	73.0 71.0 71.0	66.0 64.0 61.0	5 5 2	For thicknesses 5.001-6.000 inches L-T direction 23 ksi Vin T-L direction 20 ksi Vin S-L direction 19 ksi Vin
				7.001 – 8.000	Min <sup>6</sup> Min <sup>9</sup> Min <sup>10</sup>	72.0 71.0 70.0	66.0 63.0 60.0	5 5 2	For thicknesses 6.001-7.000 inches L-T direction 22 ksi Vin T-L direction 19 ksi Vin S-L direction 18 ksi Vin
				8.001 – 9.000	Min <sup>6</sup> Min <sup>9</sup> Min <sup>10</sup>	72.0 70.0 70.0	65.0 63.0 60.0	5 5 2	For thicknesses 7.001-8.000 inches L-T direction 21 ksi Vin T-L direction 18 ksi Vin S-L direction 17 ksi Vin
				9.001 – 10.000	Min <sup>6</sup> Min <sup>9</sup> Min <sup>10</sup>	71.0 69.0 69.0	64.0 62.0 59.0	4 4 1.5	For thicknesses 8.001-9.000 inches L-T direction 21 ksi Vin T-L direction 18 ksi Vin S-L direction 17 ksi Vin
									For thicknesses 9.001-10.000 inches L-T direction 20 ksi Vin T-L direction 18 ksi Vin S-L direction 16 ksi Vin
2055-T84	Alcoa	01/14/2014	Extrusion	0.040-0.125	*Min <sup>6</sup>	82.0	78.0	5	*Tentative
				0.126-0.249	*Min <sup>6</sup> *Min <sup>9</sup>	83.0 84.0	79.0 78.0	6 5	Solution heat treated and cold worked in the range 2-5% and artificially aged.
				0.250-0.499	*Min <sup>6</sup> *Min <sup>9</sup>	85.0 84.0	80.0 78.0	7 5	Cross Sectional Area less than or equal to 18.5 in. <sup>2</sup> and Circle Size less than or equal to 14.5 in.

Unless specified below, for all referenced footnotes refer to the Yellow and/or Tan Sheets as applicable.

**ADDENDUM TO 2011 EDITION OF YELLOW SHEETS**  
**Temper For Aluminum And Aluminum Alloy Products**

May 6, 2016

New and Revised Registrations									
Registered			Product	Thickness in.	Tensile Strength, ksi			Elongation Percent in 2 in. or 4D	Remarks <sup>2</sup>
Alloy Temper	By	Date			Basis <sup>1</sup>	Ult.	Yield		
				0.500-0.749	*Min <sup>6</sup> *Min <sup>9</sup>	87.0 84.0	82.0 78.0	8 5	Fracture Toughness <sup>14</sup> – Min. K <sub>IC</sub> or K <sub>Q</sub> For thicknesses 0.750-1.500 inches L-T direction 22 ksiv in T-L direction 19 ksiv in
				0.750-1.249	*Min <sup>6</sup> *Min <sup>9</sup>	88.0 84.0	84.0 78.0	8 5	
				1.250-1.500	*Min <sup>6</sup> *Min <sup>9</sup>	90.0 84.0	86.0 78.0	8 5	
2060-T86	Alcoa	06/03/2013	Plate	0.750-1.500	*Min <sup>6</sup> *Min <sup>9</sup>	73.0 73.0	68.0 63.0	9 6	*Tentative  Solution heat treated, cold worked approximately 6% and artificially aged.  Fracture Toughness <sup>14</sup> – Min K <sub>IC</sub> or K <sub>Q</sub> For thicknesses 0.750-1.500 inches L-T direction 38 ksiv in. T-L direction 33 ksiv in.
2065-T84	Constellium	04/16/2014	Extrusion	0.040-0.249 0.250-0.499	*Min <sup>6</sup> *Min <sup>6</sup>	87.0 87.0	83.0 84.0	6 6	*Tentative  Solution heat treated, cold worked approximately 3-4% and artificially aged.
2195-T8	Constellium	03/09/2012 Revised 01/20/2015	Sheet & Plate	0.125-0.499	Min <sup>6</sup> Min <sup>9</sup>	82.0 80.0	78.0 76.0	6 6	
2195-T841	Constellium	06/24/2011	Plate	0.500-2.250	*Min <sup>9</sup>	71.0	63.0	9	*Tentative  Developed to meet armor plate requirements of Mil-STD-32341.  Material is solution heat treated, cold worked in the range 3-5%, and underaged.
2395-T84	Universal Alloy	02/10/2016	Extrusion	0.040-0.125  0.126-0.249	*Min <sup>6</sup> *Min <sup>9</sup>  *Min <sup>6</sup> *Min <sup>9</sup>	84.0 85.0  85.0 85.0	78.0 78.0  78.0 78.0	6 5  6 5	*Tentative  Cross-sectional area less than or equal to 23 in <sup>2</sup> and circle size less than or equal to 16 in.  Solution heat treated and cold worked in the range 2-5% and artificially aged.

Unless specified below, for all referenced footnotes refer to the Yellow and/or Tan Sheets as applicable.

**ADDENDUM TO 2011 EDITION OF YELLOW SHEETS**  
**Tempers For Aluminum And Aluminum Alloy Products**

May 6, 2016

New and Revised Registrations									
Registered			Product	Thickness in.	Tensile Strength, ksi			Elongation Percent in 2 in. or 4D	Remarks <sup>2</sup>
Alloy Temper	By	Date			Basis <sup>1</sup>	Ult.	Yield		
				0.250-0.499	*Min <sup>6</sup> *Min <sup>9</sup>	85.0 85.0	79.0 78.0	6 5	
				0.500-1.500	*Min <sup>6</sup> *Min <sup>9</sup>	90.0 85.0	83.0 78.0	7 5	
2196-T8511	Alcan Constellium	10/04/2007 Revised 03/29/2012	Extrusion	0.063-0.125	*Min <sup>6</sup>	76.0	69.0	6	* Tentative
				0.129-0.249	*Min <sup>6</sup>	76.0	71.0	7	
				0.250-1.000	*Min <sup>6</sup>	78.0	71.0	5	
2099-T81	Alcoa	08/01/2011	Extrusion	0.375-1.300	Min <sup>6</sup> Min <sup>9</sup>	73.0 63.0	59.0 51.0	7 7	Stretched approximately 1-3 % and underaged. <u>Stress Corrosion Resistance</u> Material shall be capable of passing the stress corrosion cracking test described in ASTM G47 when tested in the LT direction at a stress of 38.4 ksi for 30 days. <u>Exfoliation Corrosion Resistance</u> Specimens shall not exhibit exfoliation corrosion at a T/2 plane greater than that illustrated by Photo 2 (EB) from Figure 2 of ASTM G34 when specimens are exposed for 2 weeks according to the procedures in ASTM G85 Annex A2, using the dry-bottom MASTMAASIS Test Method. <u>Fracture Toughness<sup>14</sup></u> – Min K <sub>IC</sub> or K <sub>Q</sub> For thicknesses 0.500-1.300 inch L-T direction 45 ksi√in
2199-T86	Alcoa	06/16/2011	Plate	0.750-1.250	*Min <sup>6</sup> *Min <sup>9</sup>	64.0 66.0	58.0 58.0	9 8	*Tentative  Solution heat treated, cold worked approximately 6% and artificially aged.

Unless specified below, for all referenced footnotes refer to the Yellow and/or Tan Sheets as applicable.

**ADDENDUM TO 2011 EDITION OF YELLOW SHEETS**  
**Tempers For Aluminum And Aluminum Alloy Products**

May 6, 2016

New and Revised Registrations									
Registered			Product	Thickness in.	Tensile Strength, ksi			Elongation Percent in 2 in. or 4D	Remarks <sup>2</sup>
Alloy Temper	By	Date			Basis <sup>1</sup>	Ult.	Yield		
									<u>Exfoliation Corrosion Resistance</u> Specimens shall not exhibit exfoliation corrosion at a T/10 plane greater than that illustrated by Photo 2 (EA) from Figure 2 of ASTM G34 when specimens are exposed for 2 weeks according to the procedures in ASTM B85 Annex A2, using the dry-bottom MASTMAASIS Test Method.  <u>Fracture Toughness</u> <sup>14</sup> – Min K <sub>IC</sub> or K <sub>Q</sub> For thicknesses 0.750-1.250 inches L-T direction 48 ksi√in L-T direction 43 ksi√in
3003-H22	Alcoa	04/12/2011	Sheet	0.045-0.063 0.064-0.249	Min <sup>6</sup> Min <sup>6</sup>	17.0 17.0	12.0 12.0	5 7	Used for tread plate applications.
5454-H114	Alcoa	11/24/2012	Sheet	0.115-0.200	Min <sup>6</sup> Max <sup>6</sup>	31.0 41.0	14.0 -	10 -	Used for tread plate applications
5456-H151	Alcoa	03/22/2012	Plate	0.250-0.499  0.500-2.000  2.001-3.000	*Min <sup>6</sup> *Max <sup>6</sup>  *Min <sup>6</sup> *Max <sup>6</sup>  *Min <sup>6</sup> *Max <sup>6</sup>	54.0 62.0  50.0 61.0  50.0 60.0	47.0 -  45.0 -  44.0 -	6 -  6 -  8 -	*Tentative  Developed to meet armor plate requirements of MIL-DTL-46027K
5083-H116	Alcan  Alcoa	08/18/05 Revised 12/09/14	Sheet & Plate	0.118-0.249  0.250-0.499	Min <sup>9</sup> Max <sup>9</sup>  Min <sup>9</sup> Max <sup>9</sup>	44.0 55.0  44.0 55.0	31.0 -  31.0 -	10 -  10 -	<u>Exfoliation Corrosion Resistance</u> This material shall be capable of exhibiting no evidence of exfoliation corrosion and a pitting rating of PB or better, when subjected to the test described in ASTM Test Method G 66 (ASSET).

Unless specified below, for all referenced footnotes refer to the Yellow and/or Tan Sheets as applicable.



**ADDENDUM TO 2011 EDITION OF YELLOW SHEETS**  
**Tempers For Aluminum And Aluminum Alloy Products**

May 6, 2016

New and Revised Registrations									
Registered			Product	Thickness in.	Tensile Strength, ksi			Elongation Percent in 2 in. or 4D	Remarks <sup>2</sup>
Alloy Temper	By	Date			Basis <sup>1</sup>	Ult.	Yield		
									<u>Intergranular Corrosion Resistance</u> This material shall be capable of exhibiting resistance to intergranular corrosion as required by ASTM B928 when subjected to the test described in ASTM Test Method ASTM G 67 (NAMLT).
5083-H128	Alcoa	11/15/2012 Revised 10/07/2013	Sheet & Plate	0.157-0.315	*Min <sup>6,9</sup> *Max <sup>6,9</sup>	44.0 56.0	31.0 -	10 -	*Tentative <u>Exfoliation Corrosion Resistance</u> After a post-production thermal treatment of 212°F (100°C) for 1 week, this material shall be capable of exhibiting no evidence of exfoliation corrosion and a pitting rating of PB or better, when subjected to the test described in ASTM Test Method G 66 (ASSET). <u>Intergranular Corrosion Resistance</u> After a post-production thermal treatment of 212°F (100°C) for 1 week, this material shall be capable of exhibiting mass-loss no greater than 100 mg/in. <sup>2</sup> [15 mg/cm <sup>2</sup> ] when tested in accordance with ASTM Test Method G67 (NAMLT).
				0.316-0.499	*Min <sup>6,9</sup> *Max <sup>6,9</sup>	44.0 56.0	31.0 -	10 -	
				0.500-1.500	*Min <sup>6,9</sup> *Max <sup>6,9</sup>	44.0 56.0	31.0 -	12 -	
				1.501-3.000	*Min <sup>6,9</sup> *Max <sup>6,9</sup>	41.0 56.0	29.0 -	12 -	
5383-H321	Constellium	02/10/2012	Sheet & Plate	0.118-0.500	Max <sup>6</sup>	58.0	-	-	<u>Exfoliation Corrosion Resistance</u> This material shall be capable of exhibiting no evidence of exfoliation corrosion and a pitting rating of PB or better, when subjected to the test described in ASTM Test Method G 66 (ASSET). <u>Intergranular Corrosion Resistance</u> This material shall be capable of exhibiting resistance to intergranular corrosion as required by ASTM B 928 when subjected to the test described in ASTM Test Method G 67 (NAMLT).
				0.501-2.000	Max <sup>6</sup>	58.0	-	-	

Unless specified below, for all referenced footnotes refer to the Yellow and/or Tan Sheets as applicable.

**ADDENDUM TO 2011 EDITION OF YELLOW SHEETS**  
**Tempers For Aluminum And Aluminum Alloy Products**

May 6, 2016

New and Revised Registrations									
Registered			Product	Thickness in.	Tensile Strength, ksi			Elongation Percent in 2 in. or 4D	Remarks <sup>2</sup>
Alloy Temper	By	Date			Basis <sup>1</sup>	Ult.	Yield		
6105-T6	Werner	01/23/2012	Extrusion	Up thru 0.500	Min <sup>6</sup>	38.0	35.0	8	The registered properties for this material are calculated in accordance with the procedure described under 3.c.1 of page ii of the Yellow Sheets.
6013-T6, & -T6511	Alcoa	03/11/2012	Extrusion, Rod and Seamless Tube	0.200-0.499	Min <sup>6</sup>	49.0	46.0	8	
				0.500-0.749	Min <sup>6</sup>	49.0	46.0	8	
				0.750-2.000	Min <sup>6</sup>	49.0	45.0	8	
6013-T62	Alcoa	08/17/2011	Sheet	0.020-0.125	Min <sup>9</sup>	52.0	46.0	8	
6026-T6	Eural GNUTTI S.p.A.	09/25/2015	Bar, Rod and Wire	0.200-3.000	Min <sup>6</sup>	54.0	44.0	6	Cold Finished
6026-T6, & -T6510 & -T6511	Eural GNUTTI S.p.A.	09/25/2015	Extruded Bar, Rod and Wire	1.300-5.500	Min <sup>6</sup>	54.0	44.0	6	
				5.501-8.000	Min <sup>6</sup>	49.0	36.0	6	
				8.001-10.000	Min <sup>6</sup>	44.0	29.0	6	
6026-T6 & -T6510 & -T6511	Eural GNUTTI S.p.A.	09/25/2015	Extruded Profiles	0.200 – 1.500	Min <sup>6</sup>	49.0	38.0	6	
6026-T6 & -T6510 & -T6511	Eural GNUTTI S.p.A.	09/25/2015	Extruded Tube	0.400 – 1.300	Min <sup>6</sup>	49.0	38.0	6	
6026-T8	Eural GNUTTI S.p.A.	09/25/2015	Bar, Rod and Wire	0.200-3.000	Min <sup>6</sup>	50.0	46.0	3	Cold Finished
6026-T9	Eural GNUTTI S.p.A.	09/25/2015	Bar, Rod and Wire	0.200-3.000	Min <sup>6</sup>	52.0	48.0	3	Cold Finished

Unless specified below, for all referenced footnotes refer to the Yellow and/or Tan Sheets as applicable.

**ADDENDUM TO 2011 EDITION OF YELLOW SHEETS**  
**Tempers For Aluminum And Aluminum Alloy Products**

**May 6, 2016**

New and Revised Registrations									
Registered			Product	Thickness in.	Tensile Strength, ksi			Elongation Percent in 2 in. or 4D	Remarks <sup>2</sup>
Alloy Temper	By	Date			Basis <sup>1</sup>	Ult.	Yield		
6063-T65	Rio Tinto Alcan	02/25/2011	Extrusion	Up thru 0.182	Min <sup>6</sup>	36.0	33.0	8	6063-T65 signifies higher mechanical properties than 6063-T6.  The registered properties for the material are calculated in accordance with the procedure described under 3.c.1. on page ii of this document.
6064-T6 & -T6511	Kaiser	12/21/2007 Revised 12/15/2011	Extruded Rod, Bar, and Profiles	0.180-3.250	Min <sup>6</sup>	42.0	38.0	10	The registered properties for this material are calculated in accordance with the procedure described under 3.c.1 on page ii of the Yellow Sheets.
6082-T5 & -T5511	Alcoa  SAPA	06/11/2005 Revised 12/05/2013	Extrusion	0.080-0.500	Min <sup>6</sup>	39.0	33.0	8	
7010-T7451	Constellium	07/07/2015	Plate	Up to 2.000	Min <sup>6</sup> Min <sup>9</sup>	71.0 72.0	62.0 62.0	9 6	<p>Solution heat-treated, stress relieved by stretching to produce a nominal permanent set of 2% but not less than 1-1/2% nor more than 3%, and precipitation heat treated to the T7451 temper.</p> <p><u>Stress Corrosion Resistance</u> Specimens from plate, 0.750 inch and over in nominal thickness, shall show no evidence of stress-corrosion cracking when tested in accordance with ASTM G47 and stressed in the short-transverse direction to 50% of the specified minimum long-transverse yield strength for plate 3 inches and under in nominal thickness and to 35.0 ksi for plate over 3 inches in nominal thickness.</p> <p><u>Exfoliation Corrosion Resistance</u> Plate shall achieve an exfoliation rating of EA or better, as illustrated in ASTM G34 at the T/10 plane.</p>
				2.001-2.500	Min <sup>6</sup> Min <sup>9</sup> Min <sup>10</sup>	71.0 72.0 67.0	62.0 62.0 57.0	9 6 2.5	
				2.501-4.000	Min <sup>6</sup> Min <sup>9</sup> Min <sup>10</sup>	70.0 71.0 66.0	61.0 61.0 56.0	9 6 2	
				4.001-5.000	Min <sup>6</sup> Min <sup>9</sup> Min <sup>10</sup>	68.0 69.0 65.0	59.0 59.0 54.0	9 5 2	
				5.001-6.000	Min <sup>6</sup> Min <sup>9</sup> Min <sup>10</sup>	66.0 67.0 63.0	57.0 57.0 53.0	8 5 2	

Unless specified below, for all referenced footnotes refer to the Yellow and/or Tan Sheets as applicable.

**ADDENDUM TO 2011 EDITION OF YELLOW SHEETS**  
**Tempers For Aluminum And Aluminum Alloy Products**

**May 6, 2016**

New and Revised Registrations									
Registered			Product	Thickness in.	Tensile Strength, ksi			Elongation Percent in 2 in. or 4D	Remarks <sup>2</sup>
Alloy Temper	By	Date			Basis <sup>1</sup>	Ult.	Yield		
									Fracture Toughness <sup>14</sup> – Min K <sub>IC</sub> For thicknesses 2.000 to 5.500 inches, incl L-T direction 24 ksi √in T-L direction 22 ksi √in For thicknesses over 2.000 to 5.500 inches, incl S-L direction 20 ksi √in
7136-T73511	Universal Alloys	02/10/2016	Extrusion	0.040-0.249	*Min <sup>6</sup> *Min <sup>9</sup>	80.0 79.0	73.0 71.0	7 4	*Tentative  Cross-sectional area less than or equal to 56 in <sup>2</sup> and circle size less than or equal to 20 in.  <u>Stress Corrosion Resistance</u> For products with thickness 0.75 inch and higher when tested in ST orientation see footnote 4e.  <u>Exfoliation Corrosion Resistance</u> See footnote 15b.
				0.250-0.499	*Min <sup>6</sup> *Min <sup>9</sup>	80.0 78.0	73.0 71.0	7 4	
				0.500-0.999	*Min <sup>6</sup> *Min <sup>9</sup>	80.0 77.0	73.0 69.0	7 4	
				1.000-1.499	*Min <sup>6</sup> *Min <sup>9</sup>	80.0 76.0	73.0 68.0	7 4	
				1.500-1.999	*Min <sup>6</sup> *Min <sup>9</sup> *Min <sup>10</sup>	80.0 75.0 74.0	73.0 67.0 65.0	7 4 3	
				2.000-2.999	*Min <sup>6</sup> *Min <sup>9</sup> *Min <sup>10</sup>	80.0 74.0 74.0	73.0 66.0 65.0	7 4 3	
				3.000-3.999	*Min <sup>6</sup> *Min <sup>9</sup> *Min <sup>10</sup>	80.0 74.0 74.0	73.0 66.0 65.0	7 4 3	
				4.000-4.500	*Min <sup>6</sup> *Min <sup>9</sup> *Min <sup>10</sup>	80.0 74.0 74.0	73.0 66.0 65.0	7 4 3	

Unless specified below, for all referenced footnotes refer to the Yellow and/or Tan Sheets as applicable.

**ADDENDUM TO 2011 EDITION OF YELLOW SHEETS**  
**Tempers For Aluminum And Aluminum Alloy Products**

May 6, 2016

New and Revised Registrations														
Registered			Product	Thickness in.	Tensile Strength, ksi			Elongation Percent in 2 in. or 4D	Remarks <sup>2</sup>					
Alloy Temper	By	Date			Basis <sup>1</sup>	Ult.	Yield							
7136-T74511	Universal Alloy	02/11/2016	Extrusion	0.040-0.249	*Min <sup>6</sup> *Min <sup>9</sup>	85.0 82.0	80.0 76.0	7 4	*Tentative Cross-sectional area less than or equal to 56 in <sup>2</sup> and circle size less than or equal to 24 in. <u>Stress Corrosion Resistance</u> For products with thickness 0.75 inch and higher when tested in ST orientation see footnote 4b. <u>Exfoliation Corrosion Resistance</u> See footnote 15b.					
				0.250-0.499	*Min <sup>6</sup> *Min <sup>9</sup>	85.0 82.0	80.0 75.0	7 4						
				0.500-0.999	*Min <sup>6</sup> *Min <sup>9</sup>	85.0 81.0	80.0 75.0	7 4						
				1.000-1.499	*Min <sup>6</sup> *Min <sup>9</sup>	85.0 81.0	80.0 74.0	7 4						
				1.500-1.999	*Min <sup>6</sup> *Min <sup>9</sup> *Min <sup>10</sup>	85.0 80.0 77.0	80.0 74.0 70.0	7 4 3						
				2.000-2.999	*Min <sup>6</sup> *Min <sup>9</sup> *Min <sup>10</sup>	85.0 79.0 77.0	80.0 72.0 70.0	7 4 3						
				3.000-3.999	*Min <sup>6</sup> *Min <sup>9</sup> *Min <sup>10</sup>	85.0 77.0 77.0	80.0 71.0 70.0	7 4 3						
				4.000-4.500	*Min <sup>6</sup> *Min <sup>9</sup> *Min <sup>10</sup>	85.0 77.0 77.0	80.0 70.0 70.0	7 4 3						
				7037-T7452	Otto-Fuchs	07/04/2011	Hand Forging	2.500-4.000		Min <sup>6</sup> Min <sup>9</sup> Min <sup>10</sup>	71.0 72.0 72.0	64.0 64.0 60.0	10 10 6	<u>Stress Corrosion Resistance</u> See footnote 4.b.
								4.001-6.000		Min <sup>6</sup> Min <sup>9</sup> Min <sup>10</sup>	71.0 71.0 71.0	64.0 64.0 58.0	10 6 6	<u>Fracture Toughness</u> <sup>14</sup> – Min K <sub>IC</sub> or K <sub>Q</sub> For thicknesses 2.500-4.000 inches L-T direction 30 ksi√in T-L direction 29 ksi√in S-L direction 21 ksi√in
								6.001-8.000		Min <sup>6</sup> Min <sup>9</sup> Min <sup>10</sup>	70.0 70.0 69.0	63.0 62.0 57.0	10 4 6	

Unless specified below, for all referenced footnotes refer to the Yellow and/or Tan Sheets as applicable.

**ADDENDUM TO 2011 EDITION OF YELLOW SHEETS**  
**Tempers For Aluminum And Aluminum Alloy Products**

**May 6, 2016**

New and Revised Registrations									
Registered			Product	Thickness in.	Tensile Strength, ksi			Elongation Percent in 2 in. or 4D	Remarks <sup>2</sup>
Alloy Temper	By	Date			Basis <sup>1</sup>	Ult.	Yield		
				8.001-11.000	Min <sup>6</sup> Min <sup>9</sup> Min <sup>10</sup>	67.0 67.0 66.0	59.0 58.0 54.0	8 4 6	For thicknesses 4.001-6.000 inches L-T direction 30 ksiV in T-L direction 24 ksiV in S-L direction 21 ksiV in  For thicknesses 6.001-8.000 inches L-T direction 30 ksiV in T-L direction 21 ksiV in S-L direction 21 ksiV in  For thicknesses 8.001-11.000 inches L-T direction 30 ksiV in T-L direction 19 ksiV in S-L direction 21 ksiV in
7155-T76	Alcoa	08/07/2015	Drawn Tube	0.045-0.125	*Min. <sup>6</sup>	85.0	82.0	7	*Tentative  Elongation values shown are for Full-section specimens.
7255-T7751	Alcoa	03/11/2011 Revised 05/13/2013	Plate	0.750-1.500	Min <sup>6</sup> Min <sup>9</sup>	91.0 91.0	88.0 86.0	9 7	<u>Exfoliation Corrosion Resistance</u> See footnote 15.b. <u>Fracture Toughness</u> <sup>14</sup> – Min K <sub>IC</sub> For thicknesses 0.750-1.500 inches L-T direction 22 Ksi V in T-L direction 21 Ksi V in Longitudinal Compressive Yield Strength for 0.750-1.500 inch : 88 ksi minimum

Unless specified below, for all referenced footnotes refer to the Yellow and/or Tan Sheets as applicable.

**ADDENDUM TO 2011 EDITION OF YELLOW SHEETS**  
**Tempers For Aluminum And Aluminum Alloy Products**

May 6, 2016

New and Revised Registrations									
Registered			Product	Thickness in.	Tensile Strength, ksi			Elongation Percent in 2 in. or 4D	Remarks <sup>2</sup>
Alloy Temper	By	Date			Basis <sup>1</sup>	Ult.	Yield		
7056-T721	Constellium	09/17/2015	Plate	1.000-3.000	*Min <sup>9</sup>	64.0	56.0	11	*Tentative  <u>Exfoliation Corrosion Resistance</u> See footnote 15.b.  Solution heat treated, stretched 1.5 to 3%, and overaged.  Developed to meet blast armor plate requirements of MIL-DTL-32375 (MR).
7056-T761	Constellium	09/17/2015	Plate	1.000-3.000	*Min <sup>9</sup>	80.0	77.0	7	*Tentative  <u>Stress Corrosion Cracking Resistance</u> See footnote 4a.  Solution heat treated, stretched 1.5 to 3%, and overaged.  Developed to meet ballistic armor plate requirements of MIL-DTL-32375 (MR).
7065-T7451	Alcoa	03/12/2014	Plate	1.000-1.500	*Min <sup>6</sup> *Min <sup>9</sup>	77.0 77.0	71.0 70.0	11 10	*Tentative  <u>Stress Corrosion Resistance</u>
				1.501 – 2.000	*Min <sup>6</sup> *Min <sup>9</sup> *Min <sup>10</sup>	76.0 77.0 75.0	70.0 69.0 64.0	11 9 6	See footnote 4b.  <u>Fracture Toughness<sup>14</sup> – Min K<sub>IC</sub> or K<sub>Q</sub></u>
				2.001-3.000	*Min <sup>6</sup> *Min <sup>9</sup> *Min <sup>10</sup>	76.0 76.0 74.0	70.0 68.0 64.0	10 8 5	For thicknesses 1.000-1.500 inches L-T direction 39 ksi/in T-L direction 30 ksi/in
				3.001-4.000	*Min <sup>6</sup> *Min <sup>9</sup> *Min <sup>10</sup>	75.0 75.0 73.0	69.0 68.0 63.0	9 7 4	For thicknesses 1.501-2.000 inches L-T direction 36 ksi/in T-L direction 29 ksi/in
				4.001-5.000	*Min <sup>6</sup> *Min <sup>9</sup> *Min <sup>10</sup>	75.0 75.0 73.0	69.0 68.0 63.0	9 6 3	For thicknesses 2.001-3.000 inches L-T direction 32 ksi/in T-L direction 27 ksi/in S-L direction 25 ksi/in

Unless specified below, for all referenced footnotes refer to the Yellow and/or Tan Sheets as applicable.

**ADDENDUM TO 2011 EDITION OF YELLOW SHEETS**  
**Tempers For Aluminum And Aluminum Alloy Products**

May 6, 2016

New and Revised Registrations									
Registered			Product	Thickness in.	Tensile Strength, ksi			Elongation Percent in 2 in. or 4D	Remarks <sup>2</sup>
Alloy Temper	By	Date			Basis <sup>1</sup>	Ult.	Yield		
				5.001-6.000	*Min <sup>6</sup> *Min <sup>9</sup> *Min <sup>10</sup>	74.0 75.0 73.0	69.0 67.0 63.0	8 5 3	For thicknesses 3.001-4.000 inches L-T direction 28 ksi/in T-L direction 24 ksi/in S-L direction 23 ksi/in  For thicknesses 4.001-5.000 inches L-T direction 26 ksi/in T-L direction 22 ksi/in S-L direction 21 ksi/in  For thicknesses 5.001-6.000 inches L-T direction 25 ksi/in T-L direction 21 ksi/in S-L direction 21 ksi/in
7065-T7651	Alcoa	03/12/2014	Plate	1.000-1.500	*Min <sup>6</sup> *Min <sup>9</sup>	80.0 80.0	76.0 73.0	10 9	*Tentative  <u>Stress Corrosion Resistance</u>
				1.501-2.000	*Min <sup>6</sup> *Min <sup>9</sup> *Min <sup>10</sup>	79.0 80.0 78.0	75.0 73.0 68.0	10 9 6	See footnote 4a.  <u>Fracture Toughness<sup>14</sup> – Min K<sub>IC</sub> or K<sub>Q</sub></u>
				2.001-3.000	*Min <sup>6</sup> *Min <sup>9</sup> *Min <sup>10</sup>	78.0 79.0 77.0	74.0 72.0 68.0	9 8 4	For thicknesses 1.000-1.500 inches L-T direction 35 ksi/in T-L direction 27 ksi/in
				3.001-4.000	*Min <sup>6</sup> *Min <sup>9</sup> *Min <sup>10</sup>	78.0 78.0 77.0	74.0 71.0 67.0	9 6 3	For thicknesses 1.501-2.000 inches L-T direction 32 ksi/in T-L direction 27 ksi/in
				4.001-5.000	*Min <sup>6</sup> *Min <sup>9</sup> *Min <sup>10</sup>	77.0 78.0 76.0	74.0 71.0 67.0	8 5 3	For thicknesses 2.001-3.000 inches L-T direction 29 ksi/in T-L direction 25 ksi/in
				5.001-6.000	*Min <sup>6</sup> *Min <sup>9</sup> *Min <sup>10</sup>	76.0 77.0 75.0	74.0 71.0 67.0	7 5 3	S-L direction 23 ksi/in

Unless specified below, for all referenced footnotes refer to the Yellow and/or Tan Sheets as applicable.



**ADDENDUM TO 2011 EDITION OF YELLOW SHEETS**  
**Tempers For Aluminum And Aluminum Alloy Products**

**May 6, 2016**

New and Revised Registrations									
Registered			Product	Thickness in.	Tensile Strength, ksi			Elongation Percent in 2 in. or 4D	Remarks <sup>2</sup>
Alloy Temper	By	Date			Basis <sup>1</sup>	Ult.	Yield		
									For thicknesses 3.001-4.000 inches L-T direction 25 ksi/in T-L direction 23 ksi/in S-L direction 22 ksi/in  For thicknesses 4.001-5.000 inches L-T direction 24 ksi/in T-L direction 21 ksi/in S-L direction 21 ksi/in  For thicknesses 5.001-6.000 inches L-T direction 23 ksi/in T-L direction 20 ksi/in S-L direction 20 ksi/in
7085-T711	Alcoa	10/25/2011	Plate	0.500-1.500	*Min <sup>9</sup>	80.0	74.0	11	*Tentative
				1.501-2.000	*Min <sup>9</sup>	78.0	73.0	11	Solution heat treated, stretched 1.5 to 3%, and overaged for ballistic performance.
				2.001-3.000	*Min <sup>9</sup>	77.0	72.0	10	Developed to meet armor plate requirements of MIL-DTL-32375 (MR).
				3.001-4.000	*Min <sup>9</sup>	76.0	70.0	7	<u>Exfoliation Corrosion Resistance</u> See footnote 15.b
7085-T721	Alcoa	10/27/2011	Plate	0.500-1.500	*Min <sup>9</sup>	68.0	60.0	12	*Tentative
				1.501-2.000	*Min <sup>9</sup>	67.0	59.0	12	Solution heat treated, stretched 1.5 to 3%, and overaged for blast performance.
				2.001-3.000	*Min <sup>9</sup>	67.0	58.0	11	Developed to meet armor plate requirements of MIL-DTL-32375 (MR).
				3.001-4.000	*Min <sup>9</sup>	66.0	57.0	10	<u>Exfoliation Corrosion Resistance</u> See footnote 15.b

Unless specified below, for all referenced footnotes refer to the Yellow and/or Tan Sheets as applicable.

**ADDENDUM TO 2011 EDITION OF YELLOW SHEETS**  
**Tempers For Aluminum And Aluminum Alloy Products**

May 6, 2016

New and Revised Registrations									
Registered			Product	Thickness in.	Tensile Strength, ksi			Elongation Percent in 2 in. or 4D	Remarks <sup>2</sup>
Alloy Temper	By	Date			Basis <sup>1</sup>	Ult.	Yield		
7085-T7451	Alcoa	02/03/2009 Revised 07/09/2012	Plate	3.000-4.000	Min <sup>6</sup>	73.0	68.0	11	<u>Stress Corrosion Resistance</u> See footnotes 4.b  <u>Fracture Toughness</u> <sup>14</sup> — Min K <sub>IC</sub> or K <sub>Q</sub> For thickness 3.000-4.000 inches L-T direction 36 ksi Vin. T-L direction 27 ksi Vin. S-L direction 27 ksi Vin.  For thickness 4.001-5.000 inches L-T direction 32 ksi Vin. T-L direction 25 ksi Vin. S-L direction 26 ksi Vin.  For thickness 5.001-6.000 inches L-T direction 29 ksi Vin. T-L direction 23 ksi Vin. S-L direction 24 ksi Vin.  For thickness 6.001-7.000 inches L-T direction 29 ksi Vin. T-L direction 22 ksi Vin. S-L direction 23 ksi Vin.
					Min <sup>9</sup>	73.0	66.0	8	
					Min <sup>10</sup>	72.0	61.0	4	
				4.001-5.000	Min <sup>6</sup>	73.0	68.0	10	
					Min <sup>9</sup>	73.0	66.0	7	
					Min <sup>10</sup>	71.0	61.0	4	
				5.001-6.000	Min <sup>6</sup>	72.0	68.0	9	
					Min <sup>9</sup>	73.0	65.0	6	
					Min <sup>10</sup>	70.0	61.0	4	
				6.001-7.000	Min <sup>6</sup>	72.0	67.0	8	
					Min <sup>9</sup>	72.0	64.0	5	
					Min <sup>10</sup>	69.0	60.0	4	
7097-T7651	Kaiser	12/30/2015	Plate	3.000-4.000	*Min <sup>6</sup>	74.0	71.0	12	*Tentative  <u>Exfoliation Corrosion Resistance</u> See Footnote 15.b.
					*Min <sup>9</sup>	77.0	71.0	7	
					*Min <sup>10</sup>	75.0	66.0	4	
				4.001-5.000	*Min <sup>6</sup>	74.0	71.0	11	
					*Min <sup>9</sup>	76.0	70.0	6	
					*Min <sup>10</sup>	74.0	65.0	3	
				5.001-6.000	*Min <sup>6</sup>	74.0	71.0	9	
					*Min <sup>9</sup>	76.0	69.0	4	
					*Min <sup>10</sup>	73.0	65.0	3	

Unless specified below, for all referenced footnotes refer to the Yellow and/or Tan Sheets as applicable.

**ADDENDUM TO 2011 EDITION OF YELLOW SHEETS**  
**Tempers For Aluminum And Aluminum Alloy Products**

May 6, 2016

New and Revised Registrations									
Registered			Product	Thickness in.	Tensile Strength, ksi			Elongation Percent in 2 in. or 4D	Remarks <sup>2</sup>
Alloy Temper	By	Date			Basis <sup>1</sup>	Ult.	Yield		
				6.001-7.000	*Min <sup>6</sup>	74.0	70.0	8	
					*Min <sup>9</sup>	75.0	68.0	3	
					*Min <sup>10</sup>	72.0	64.0	3	
				7.001-8.000	*Min <sup>6</sup>	73.0	69.0	6	
					*Min <sup>9</sup>	74.0	67.0	3	
					*Min <sup>10</sup>	71.0	63.0	3	
7099-T7451	Kaiser	01/22/2013 Revised 04/07/2015	Plate	1.000-1.500	Min <sup>6</sup>	77.0	71.0	11	<u>Stress Corrosion Cracking Resistance</u> See Footnote 4.b.
					Min <sup>9</sup>	77.0	70.0	10	
				1.501-2.000	Min <sup>6</sup>	76.0	71.0	11	
					Min <sup>9</sup>	77.0	69.0	9	
					Min <sup>10</sup>	76.0	65.0	6	
				2.001-3.000	Min <sup>6</sup>	76.0	70.0	10	
					Min <sup>9</sup>	76.0	68.0	8	
					Min <sup>10</sup>	74.0	64.0	5	
				3.001-4.000	Min <sup>6</sup>	75.0	69.0	9	
					Min <sup>9</sup>	76.0	68.0	7	
					Min <sup>10</sup>	74.0	63.0	4	
				4.001-5.000	Min <sup>6</sup>	75.0	69.0	9	
					Min <sup>9</sup>	75.0	68.0	6	
					Min <sup>10</sup>	74.0	63.0	3	
				5.001-6.000	Min <sup>6</sup>	74.0	68.0	8	
					Min <sup>9</sup>	75.0	67.0	5	
					Min <sup>10</sup>	73.0	62.0	3	
7099-T7651	Kaiser	01/22/2013 Revised 04/07/2015	Plate	1.000-1.500	Min <sup>6</sup>	79.0	75.0	10	<u>Stress Corrosion Cracking Resistance</u> See Footnote 4.a.
					Min <sup>9</sup>	80.0	74.0	9	
				1.501-2.000	Min <sup>6</sup>	79.0	75.0	10	
					Min <sup>9</sup>	80.0	74.0	9	
					Min <sup>10</sup>	77.0	68.0	5	

Unless specified below, for all referenced footnotes refer to the Yellow and/or Tan Sheets as applicable.

**ADDENDUM TO 2011 EDITION OF YELLOW SHEETS**  
**Tempers For Aluminum And Aluminum Alloy Products**

May 6, 2016

New and Revised Registrations									
Registered			Product	Thickness in.	Tensile Strength, ksi			Elongation Percent in 2 in. or 4D	Remarks <sup>2</sup>
Alloy Temper	By	Date			Basis <sup>1</sup>	Ult.	Yield		
				2.001-3.000	Min <sup>6</sup>	78.0	73.0	9	
					Min <sup>9</sup>	79.0	72.0	8	
					Min <sup>10</sup>	77.0	67.0	4	
				3.001-4.000	Min <sup>6</sup>	77.0	72.0	9	
					Min <sup>9</sup>	79.0	71.0	6	
					Min <sup>10</sup>	77.0	67.0	3	
				4.001-5.000	Min <sup>6</sup>	76.0	71.0	8	
					Min <sup>9</sup>	78.0	70.0	5	
					Min <sup>10</sup>	76.0	66.0	3	
				5.001-6.000	Min <sup>6</sup>	76.0	70.0	7	
					Min <sup>9</sup>	77.0	70.0	5	
					Min <sup>10</sup>	74.0	65.0	3	

Unless specified below, for all referenced footnotes refer to the Yellow and/or Tan Sheets as applicable.

**ADDENDUM TO 2011 EDITION OF YELLOW SHEETS**  
**Tempers For Aluminum And Aluminum Alloy Products**

**May 6, 2016**

<b>Tentative Removed</b>			
<b>Alloy Temper</b>	<b>Product</b>	<b>By</b>	<b>Revised Date</b>
6064-T6 & -T6511	Extruded Rod, Bar and Profiles	Kaiser	12/15/2011
7140-T7651	Plate	Constellium	03/27/2014
7150-T7751	Plate	Alcoa	07/27/2011
7055-O	Sheet	Alcoa	01/19/2011
7099-T7451	Plate	Kaiser	04/07/2015
7099-T7651	Plate	Kaiser	04/07/2015
2050-T852	Die Forging	Aubert & Duval	10/02/2015

Unless specified below, for all referenced footnotes refer to the Yellow and/or Tan Sheets as applicable.

**ADDENDUM TO 2011 EDITION OF YELLOW SHEETS**  
**Tempers For Aluminum And Aluminum Alloy Products**

May 6, 2016

Reactivated Tempers											
Registered			Reactivated		Product	Thickness In.	Tensile Strength, ksi			Elongation Percent in 2 in. or 4D	Remarks <sup>2</sup>
Alloy Temper	By	Date	By	Date			Basis <sup>1</sup>	Ult.	Yield		
2090-T86	Alcoa	08/11/88 Revised 07/30/90	Alcoa	07/18/2012	Extrusion	Up thru 0.124	Min <sup>6</sup>	78.0	71.0	4	
						0.125-0.249	Min <sup>6</sup>	78.0	71.0	5	
						0.250-0.499	Min <sup>6</sup>	80.0	73.0	5	
							Min <sup>9</sup>	76.0	68.0	-	

Unless specified below, for all referenced footnotes refer to the Yellow and/or Tan Sheets as applicable.

**ADDENDUM TO 2011 EDITION OF YELLOW SHEETS**  
**Tempers For Aluminum And Aluminum Alloy Products**

May 6, 2016

Deactivated Tempers		
Alloy /Temper	Product	Date Deactivated
2090-T86	Extrusion	03/07/2011
6111-T6	Sheet	12/21/2011
7055-T762	Sheet	05/04/2011
Alclad 2014-O <sup>++</sup>	Plate	06/28/2012
Alclad 2014-T42 <sup>++</sup>	Plate	06/28/2012
Alclad 2014-T451 <sup>++</sup>	Plate	06/28/2012
Alclad 2014-T62 <sup>++</sup>	Plate	06/28/2012
Alclad 2014-T651 <sup>++</sup>	Plate	06/28/2012
Alclad 2219-O <sup>++</sup>	Plate	06/28/2012
Alclad 2219-T62 <sup>++</sup>	Plate	06/28/2012
Alclad 6061-O <sup>++</sup>	Plate	06/28/2012
Alclad 6061-T42 <sup>++</sup>	Plate	06/28/2012
Alclad 6061-T451 <sup>++</sup>	Plate	06/28/2012
Alclad 6061-T62 <sup>++</sup>	Plate	06/28/2012
Alclad 6061-T651 <sup>++</sup>	Plate	06/28/2012
Alclad 7075-O <sup>++</sup>	Plate	06/28/2012
Alclad 7075-T62 <sup>++</sup>	Plate	06/28/2012
Alclad 7075-T651 <sup>++</sup>	Plate	06/28/2012
Alclad 7075-T7351 <sup>++</sup>	Plate	06/28/2012
Alclad 7075-T7651 <sup>++</sup>	Plate	06/28/2012
2 ½% Alclad 7075-O <sup>++</sup>	Plate	06/28/2012
2 ½% Alclad 7075-T62 <sup>++</sup>	Plate	06/28/2012
2 ½% Alclad 7075-T651 <sup>++</sup>	Plate	06/28/2012
2 ½% Alclad 7075-T7351 <sup>++</sup>	Plate	06/28/2012
2 ½% Alclad 7075-T7651 <sup>++</sup>	Plate	06/28/2012
Alclad One Side 7075-O <sup>++</sup>	Plate	06/28/2012
Alclad One Side 7075-T62 <sup>++</sup>	Plate	06/28/2012

<sup>++</sup> Deactivation is limited to specific gauge range(s) for the product indicated

Unless specified below, for all referenced footnotes refer to the Yellow and/or Tan Sheets as applicable.

**ADDENDUM TO 2011 EDITION OF YELLOW SHEETS**  
**Tempers For Aluminum And Aluminum Alloy Products**

May 6, 2016

Deactivated Tempers		
Alloy /Temper	Product	Date Deactivated
Alclad One Side 7075-T651 <sup>++</sup>	Plate	06/28/2012
2 ½% Alclad One Side 7075-O <sup>++</sup>	Plate	06/28/2012
2 ½% Alclad One Side 7075-T62 <sup>++</sup>	Plate	06/28/2012
2 ½% Alclad One Side 7075-T651 <sup>++</sup>	Plate	06/28/2012
7250-T7451	Plate	05/29/2014
6082-T5 & -T5511 <sup>++</sup>	Extrusion	07/09/2014
2024-T72	Sheet	11/25/2014
Alclad 2024-T72	Sheet	11/25/2014
1½% Alclad 2024-T72	Sheet	11/25/2014
Alclad One Side 2024-T72	Sheet	11/25/2014
1½% Alclad One Side 2024-T72	Sheet	11/25/2014
<b>7033-T6</b>	<b>Die Forging</b>	<b>12/02/2015</b>

<sup>++</sup> Deactivation is limited to specific gauge range(s) for the product indicated

Unless specified below, for all referenced footnotes refer to the Yellow and/or Tan Sheets as applicable.