

NOTICE OF  
VALIDATION

VALIDATION NOTICE 2  
10 October 1991 for  
AMS 2252C-83(R90)  
1 January 1983

AMS 2252C-83(R90), adopted on 26 July 1984, has been reviewed and determined to be current.

Custodians:  
Army - MR  
Navy - AS  
Air Force - 11

Military Coordinating Activity:  
Army - MR

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**AEROSPACE  
MATERIAL  
SPECIFICATION**

**AMS 2252C**  
Superseding AMS 2252B

Issued 7-1-45  
Revised 1-1-83

**TOLERANCES**

**Low-Alloy Steel Sheet, Strip, and Plate**

1. **SCOPE:** This specification covers established inch/pound manufacturing tolerances applicable to low-alloy steel sheet, strip, and plate ordered to inch/pound dimensions. These tolerances apply to all conditions unless otherwise noted. The term "excl" is used to apply only to the higher figure of the specified range.
  2. **THICKNESS:** Tolerances apply to measurements made at any point on widths less than 1 in., at any point not less than 3/8 in. from a cut edge or not less than 3/4 in. from a mill edge on widths 1 in. and over, and at a point 3/8 - 3/4 in. from the longitudinal edge of rectangular sheared plates. Regardless of whether thickness tolerances for sheet and strip are specified equally or unequally, plus and minus, the total tolerance shall be equal to the arithmetic sum of the tabular plus and minus tolerances (twice the tabular tolerances when specified equally plus and minus).
- 2.1 **Hot Rolled Sheets, Coils and Cut Lengths:**

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## AMS 2252C

TABLE I

Specified Thickness Inch	Tolerance, Inch, Plus and Minus For Width Ranges, Inches								
	Over 12 to 15, incl	Over 15 to 20, incl	Over 20 to 32, incl	Over 32 to 40, incl	Over 40 to 48, incl	Over 48 to 60, incl	Over 60 to 72, incl	Over 72 to 80, incl	Over 80
0.0710 to 0.0821, incl	0.006	0.007	0.007	0.007	0.007	0.007	0.008	0.008	--
Over 0.0821 to 0.0971, incl	0.006	0.007	0.007	0.008	0.008	0.008	0.009	0.009	0.010
Over 0.0971 to 0.1799, incl	0.007	0.008	0.008	0.009	0.010	0.010	0.011	0.012	0.012
Over 0.1799 to 0.2299, incl	0.007	0.008	0.009	0.009	0.010	--	--	--	--

## 2.2 Cold Rolled Sheets; Coils and Cut Lengths

TABLE II

Specified Thickness Inch	Tolerance, Inch, Plus and Minus For Width Ranges, Inches			
	2 to 12, incl	Over 12 to 15, incl	Over 15 to 72, incl	Over 72
0.0142 to 0.0194, incl	0.002	0.002	0.002	--
Over 0.0194 to 0.0388, incl	0.003	0.003	0.003	0.003
Over 0.0388 to 0.0567, incl	0.004	0.004	0.004	0.004
Over 0.0567 to 0.0709, incl	0.005	0.005	0.005	0.005
Over 0.0709 to 0.0821, incl	0.005	0.005	0.005	0.006
Over 0.0821 to 0.0971, incl	--	0.005	0.005	0.006
Over 0.0971 to 0.1419, incl	--	0.005	0.006	0.007

## 2.3 Hot Rolled Strip; Coils and Cut Lengths, Including Crown:

TABLE III

Specified Thickness Inch	Tolerance, Inch, Plus and Minus For Width Ranges, Inches				
	Up to 6, incl	Over 6 to 12, incl	Over 12 to 15, incl	Over 15 to 20, incl	Over 20 to 24, excl
0.0568 to 0.0709, incl	0.005	0.005	0.006	0.006	0.006
Over 0.0709 to 0.0971, incl	0.005	0.005	0.006	0.007	0.007
Over 0.0971 to 0.1120, incl	0.005	0.005	0.007	0.008	0.008
Over 0.1120 to 0.1718, incl	0.005	0.006	0.006	0.008	0.009
Over 0.1718 to 0.1874, incl	0.006	0.006	0.007	0.009	0.009
Over 0.1874 to 0.2030, incl	--	0.007	0.008	0.009	0.009

**AMS 2252C**

**2.4 Cold Rolled Strip; Coils and Cut Lengths:**

**TABLE IV**

Specified Thickness Inch	Tolerance, Inch, Plus and Minus For Width Ranges, Inches												
	Up to 1, excl	1 to 3, excl	3 to 6, incl	Over 6 to 9, incl	Over 9 to 12, incl	Over 12 to 16, incl	Over 16 to 20, incl	Over 20 to 23-15/16 incl	Over 20 to 23-15/16 incl	Over 20 to 23-15/16 incl	Over 20 to 23-15/16 incl	Over 20 to 23-15/16 incl	
0.010	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.0015
0.011	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.0015
0.012	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.0015
Over 0.012 to 0.016, incl	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002
Over 0.016 to 0.019, incl	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002
Over 0.019 to 0.025, incl	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.0025
Over 0.025 to 0.028, incl	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.003
Over 0.028 to 0.034, incl	0.0015	0.0015	0.002	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025	0.003
Over 0.034 to 0.039, incl	0.002	0.002	0.0025	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.004
Over 0.039 to 0.049, incl	0.002	0.002	0.0025	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.004
Over 0.049 to 0.068, incl	0.002	0.002	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.004
Over 0.068 to 0.099, incl	0.002	0.002	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.004
Over 0.099 to 0.160, incl	0.002	0.003	0.003	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.005
Over 0.160 to 0.187, incl	0.002	0.0035	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.006

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**AMS 2252C**

2.5 Rectangular Sheared Plates: Minus tolerance for all sizes shall be 0.010 in.; plus tolerance shall be as specified in Table V.

**TABLE V**

Specified Thickness Inches	Tolerance, Inch, Plus For Width Ranges, Inches						
	Up to 48, incl	Over 48 to 60, excl	60 to 72, excl	72 to 84, excl	84 to 96, excl	96 to 108, excl	108 to 120, excl
Up to 0.250, excl	0.016	0.016	0.020	0.020	0.024	0.028	0.032
0.250 to 0.312, excl	0.016	0.020	0.020	0.024	0.028	0.032	0.036
0.312 to 0.375, excl	0.020	0.020	0.024	0.024	0.028	0.032	0.036
0.375 to 0.437, excl	0.020	0.024	0.024	0.028	0.032	0.036	0.040
0.437 to 0.500, excl	0.024	0.024	0.028	0.028	0.032	0.036	0.040
0.500 to 0.625, excl	0.024	0.028	0.028	0.032	0.036	0.040	0.040
0.625 to 0.750, excl	0.028	0.028	0.032	0.032	0.036	0.040	0.044
0.750 to 1.000, excl	0.032	0.032	0.036	0.036	0.040	0.044	0.048
1.000 to 1.250, excl	0.040	0.044	0.048	0.048	0.048	0.052	0.056
1.250 to 1.500, excl	0.052	0.052	0.056	0.056	0.056	0.064	0.068
1.500 to 1.750, excl	0.060	0.060	0.064	0.064	0.064	0.072	0.080
1.750 to 2.000, incl	0.068	0.068	0.072	0.076	0.076	0.086	0.094

3. WIDTH:

3.1 Hot Rolled or Cold Rolled Sheets; Cut Edge, Coils and Cut Lengths:

**TABLE VI**

Specified Width Inches	Tolerance, Plus Only, Inch
Over 12 to 30, incl	1/8
Over 30 to 48, incl	3/16
Over 48 to 60, incl	1/4
Over 60 to 80, incl	5/16
Over 80	3/8

3.2 Hot Rolled Strip; Coils and Cut Lengths, Except as Noted:

3.2.1 Mill Edge: Width measurements on mill edge strip include the mill edge.

TABLE VII

Specified Width Inches	Tolerance, Inch Plus and Minus
Up to 2, incl	1/32
Over 2 to 5, incl	3/64
Over 5 to 10, incl	1/16
Over 10 to 12, incl	3/32

3.2.2 Slit Edge:

TABLE VIII

Specified Width Inches	Tolerance, Inch, Plus and Minus For Thickness Ranges, Inch	
	Up to 0.109, incl	Over 0.109
Up to 2, incl	0.008	0.016
Over 2 to 5, incl	0.008	0.016
Over 5 to 9, incl	0.010	0.016
Over 9 to 12, incl	0.016	0.016

3.2.3 Sheared Edge, Cut Lengths Only: Tolerance shall be +1/8 in., -0 for all sizes.

3.3 Cold Rolled Strip; Coils and Cut Lengths, No. 3 Slit Edge:

TABLE IX

Specified Width Inches	Tolerance, Inch, Plus and Minus For Thickness Ranges, Inch			
	Over 0.0099 to 0.068, incl	Over 0.068 to 0.099, incl	Over 0.099 to 0.160, incl	Over 0.160 to 0.187, incl
Up to 1/2, incl	0.005	0.008	0.010	--
Over 1/2 to 6, incl	0.005	0.008	0.010	0.016
Over 6 to 9, incl	0.005	0.010	0.016	0.020
Over 9 to 12, incl	0.010	0.010	0.016	0.020
Over 12 to 20, incl	0.016	0.016	0.020	0.031
Over 20 to 24, excl	0.020	0.020	0.020	0.031

**AMS 2252C**

- 3.4 Hot Rolled or Thermally Treated Plate, Sheared or Gas Cut: Minus tolerance shall be 1/4 in. for all sizes; plus tolerance shall be as specified in Table X.

TABLE X

Specified Width Inches	Specified Length Inches	Tolerance, Inches, Plus For Thickness Ranges, Inches			
		Up to 3/8, excl	3/8 to 5/8, excl	5/8 to 1, excl	1 to 2, incl
Up to 60, excl	Up to 120, excl	3/8	7/16	1/2	5/8
60 to 84, excl	Up to 120, excl	7/16	1/2	5/8	3/4
84 to 108, excl	Up to 120, excl	1/2	5/8	3/4	1
108 and over	Up to 120, excl	5/8	3/4	7/8	1-1/8
Up to 60, excl	120 to 240, excl	3/8	1/2	5/8	3/4
60 to 84, excl	120 to 240, excl	1/2	5/8	3/4	7/8
84 to 108, excl	120 to 240, excl	9/16	11/16	13/16	1
108 and over	120 to 240, excl	5/8	3/4	7/8	1-1/8

4. LENGTH:4.1 Hot Rolled or Cold Rolled Sheet:TABLE XI

Specified Length Inches	Tolerance, Inches, Plus Only
24 to 30, incl	1/4
Over 30 to 60, incl	1/2
Over 60 to 120, incl	3/4
Over 120 to 156, incl	1
Over 156 to 192, incl	1-1/4
Over 192 to 240, incl	1-1/2
Over 240	1-3/4

## AMS 2252C

4.2 Hot Rolled Strip:

TABLE XII

Specified Length Inches	Tolerance, Inches, Plus Only For Width Ranges, Inches		
	Up to 3, incl	Over 3 to 6, incl	Over 6 to 24, excl
Up to 60, incl	1/4	3/8	1/2
Over 60 to 120, incl	3/8	1/2	3/4
Over 120 to 240, incl	1/2	5/8	1
Over 240 to 360, incl	3/4	3/4	1-1/4
Over 360 to 480, incl	1	1	1-1/2
Over 480	1-1/2	1-1/2	1-3/4

4.3 Cold Rolled Strip:

TABLE XIII

Specified Length Inches	Tolerance, Inch, Plus Only For Width Ranges, Inches	
	Up to 12, incl	Over 12 to 24, excl
24 to 60, incl	1/4	1/2
Over 60 to 120, incl	1/2	3/4
Over 120 to 240, incl	3/4	1

4.4 Hot Rolled or Thermally Treated Plate, Sheared or Gas Cut: Minus tolerance shall be 1/4 in. for all sizes; plus tolerance shall be as specified in Table XIV.

TABLE XIV

Specified Width Inches	Specified Length Inches	Tolerance, Inches, Plus For Thickness Ranges, Inches			
		Up to 3/8, excl	3/8 to 5/8, excl	5/8 to 1, excl	1 to 2, incl
Up to 60, excl	Up to 120, excl	1/2	5/8	3/4	1
60 to 84, excl	Up to 120, excl	5/8	11/16	7/8	1
84 to 108, excl	Up to 120, excl	3/4	7/8	1	1-1/8
108 and over	Up to 120, excl	7/8	1	1-1/8	1-1/4
Up to 60, excl	120 to 240, excl	3/4	7/8	1	1-1/8
60 to 84, excl	120 to 240, excl	3/4	7/8	1	1-1/4
84 to 108, excl	120 to 240, excl	7/8	1-1/8	1-1/4	1-3/8
108 and over	120 to 240, excl	1	1-1/8	1-1/4	1-3/8