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**Preferred
Thicknesses for
Uncoated Flat Metals
(thru 12 mm)**

SAE Recommended Practice
Reaffirmed June 1984

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PREFERRED THICKNESSES FOR UNCOATED FLAT METALS (THRU 12 MM)

1. SCOPE:

The preferred thicknesses in Table 1 provide an orderly metric (SI) series for designating the thickness of uncoated flat metal products of rectangular cross section. The thicknesses shown are also applicable to base metals which may be coated in later operations.

TABLE 1 - Preferred Thicknesses for Uncoated Metal and Alloys^a

mm	mm	mm	mm	mm	mm
<i>0.05</i>	<i>0.28</i>	<i>0.80</i>	<i>1.6</i>	<i>3.0</i>	<i>5.5</i>
<i>0.06</i>	<i>0.30</i>	<i>0.85</i>	<i>1.7</i>	<i>3.2</i>	<i>6.0</i>
<i>0.08</i>	<i>0.35</i>	<i>0.90</i>	<i>1.8</i>	<i>3.4</i>	<i>6.5</i>
<i>0.10</i>	<i>0.40</i>	<i>0.95</i>	<i>1.9</i>	<i>3.5</i>	<i>7.0</i>
<i>0.12</i>	<i>0.45</i>	<i>1.00</i>	<i>2.0</i>	<i>3.6</i>	<i>7.5</i>
<i>0.14</i>	<i>0.50</i>	<i>1.05</i>	<i>2.1</i>	<i>3.8</i>	<i>8.0</i>
<i>0.16</i>	<i>0.55</i>	<i>1.1</i>	<i>2.2</i>	<i>4.0</i>	<i>9.0</i>
<i>0.18</i>	<i>0.60</i>	<i>1.2</i>	<i>2.4</i>	<i>4.2</i>	<i>10</i>
<i>0.20</i>	<i>0.65</i>	<i>1.3</i>	<i>2.5</i>	<i>4.5</i>	<i>11</i>
<i>0.22</i>	<i>0.70</i>	<i>1.4</i>	<i>2.6</i>	<i>4.8</i>	<i>12</i>
<i>0.25</i>	<i>0.75</i>	<i>1.5</i>	<i>2.8</i>	<i>5.0</i>	

^a Sizes shown in italics are first preference sizes from ANSI B32.3-1977. All others are second and third preference sizes. Within the Construction and Agriculture equipment industry, the 0.70 mm size is a preferred choice.

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2. GENERAL:

Requirements of industry permit leeway in the choice of thickness in some instances, but it is recognized that for many applications, particularly the tonnage requirements of the mass production industries, thicknesses are normally determined by critical engineering design or manufacturing considerations.

- 2.1 However, for general applications or where requirements permit some latitude in the selection of thickness, the preferred thicknesses given in Table 1 will facilitate interchangeability of different metals in design, reduce inventory, and increase the availability in warehouse stocks of thicknesses commonly required for general applications.
- 2.2 All of the sizes listed are not necessarily produced in all metals and grades. Producers or distributors must be consulted to determine availability of a particular thickness for a given metal product.

3. BASIS OF TABLES:

Most of the thicknesses in Table 1 were derived from preferred numbers listed in ANSI Z17.1. Some deviations from this listing occur as the result of rounding and as the result of demonstrated or anticipated need for sizes other than those which occur in the above document.

NOTE: This recommended practice is under the jurisdiction of SAE Iron and Steel Technical Committee, and is the direct responsibility of Division 32 on Sheet and Strip Steel.

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