

Designation: F2058 - 07 (Reapproved 2021)

# Standard Specification for Candle Fire Safety Labeling<sup>1</sup>

This standard is issued under the fixed designation F2058; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon  $(\varepsilon)$  indicates an editorial change since the last revision or reapproval.

#### 1. Scope

- 1.1 This specification covers requirements for fire safety information to be placed on candle units of sale. It also includes requirements that retailers and distributors shall follow. It is not the intent of this specification to address any other labeling requirements.<sup>2</sup>
- 1.2 This international standard was developed in accordance with internationally recognized principles on standardization established in the Decision on Principles for the Development of International Standards, Guides and Recommendations issued by the World Trade Organization Technical Barriers to Trade (TBT) Committee.

#### 2. Referenced Documents

2.1 ASTM Standards:<sup>3</sup>

F1972 Guide for Terminology Relating to Candles and Associated Accessory Items

## 3. Terminology

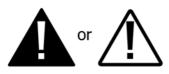
3.1 Definitions of Terms Specific to This Standard:

- <sup>1</sup> This specification is under the jurisdiction of ASTM Committee F15 on Consumer Products and is the direct responsibility of Subcommittee F15.45 on Candle Products.
- Current edition approved Feb. 1, 2021. Published February 2021. Originally approved in 2000. Last previous edition approved in 2014 as F2058-07 (2014). DOI: 10.1520/F2058-07R21.
- <sup>2</sup> It is possible that labels for use or distribution in certain countries, states, communities or locations will require other information not covered in this standard or additional language(s). It is the responsibility of the manufacturer to determine what additional information is necessary to comply with other applicable labeling regulations.
- <sup>3</sup> For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.

- 3.1.1 Certain candle-related terminology is addressed in Guide F1972, and the reader is directed to that guide for definitions not found in the following:
- 3.1.2 *filled candle*, *n*—a candle produced and used within the same vessel.
- 3.1.3 *fire safety warning, n*—precautionary information on the label, consisting of the safety alert symbol, the signal word (if present), the fire safety warning statement(s) and pictograms (if present) required by this standard to appear on the unit of sale.
- 3.1.4 *fire safety warning statement(s), n*—specific warning message(s) required by this standard.
- 3.1.5 *freestanding candle*, *n*—rigid candle (for example, pillar-shaped, column-shaped, or figurine) that is intended to be burned only on a heat-resistant, noncombustible surface or on a heat-resistant, noncombustible candle accessory.
- 3.1.6 *label*, *n*—display of textual or graphic matter on the unit of sale.
- 3.1.7 *packaging*, *n*—external container, such as a box, case, bag or sleeve in which a candle(s) is sold. Packaging does not include the vessel of a filled candle.
- 3.1.8 *pictogram*, *n*—graphic symbol intended to convey a message without the use of words.
- 3.1.9 *safety alert symbol*, *n*—graphic symbol consisting of an exclamation point inside of an equilateral triangle with the point of the triangle oriented upward (see 4.1).
- 3.1.10 *signal word*, *n*—the word WARNING as it appears in the fire safety warning.
- 3.1.11 *unit of sale, n*—the candle, or candle and its container or package, as purchased by the consumer.
- 3.1.12 *warning panel*, *n*—entire surface of the panel on which the fire safety warning appears on the unit of sale.

# 4. Graphic Symbols Specific To This Standard<sup>4</sup>

4.1 Safety Alert Symbol:



4.2 Pictogram for "Burn within sight":



4.3 Pictogram for "Keep away from things that catch fire":



4.4 Pictogram for "Keep away from children":



#### 5. Significance and Use

5.1 Fire safety warnings will help ensure that information concerning the safe use of candles is presented to consumers to help prevent fires.

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#### 6. Requirements

- 6.1 *Exclusions*—This specification does not pertain to birth-day candles or candles intended for places of worship, commercial institutions, or industrial use.
  - 6.2 General:
- 6.2.1 The fire safety warning must be placed on the unit of sale and shall be visible to the consumer at the point of sale. The fire safety warning shall not be covered, obstructed, or removed by the manufacturer, distributor or retailer.
- 6.2.1.1 When the unit of sale consists solely of a candle (including its vessel if present), the fire safety warning shall appear on the top, bottom, or a side of the candle, or be attached to the candle (such as a tag).
- 6.2.1.2 When the unit of sale consists of a candle and its packaging:
- <sup>4</sup> The fire-safety pictograms in Section 4 were created by the National Candle Association for the express purpose of developing universally recognized graphic symbols depicting important candle fire-safety precautions. The National Candle Association has granted to the public the free, universal, and unrestricted rights to use these candle fire-safety symbols without its permission or consideration. Reproduction-quality images of the fire-safety pictograms can be accessed by the public, without charge, at www.candles.org/pictograms.

- (1) The fire safety warning shall appear on the top or sides of the packaging, or must be otherwise attached to the packaging (such as a tag). It cannot be on the bottom of the package as intended for display at retail unless the statement "See bottom panel for safety information" or its practical equivalent appears on the top or a side of the packaging with a minimum letter height of 1.5 mm (0.06 in.) based on the height of a capital or upper case letter.
- (2) For free standing and filled candles (excluding tealights), the fire safety warning must appear on the top, bottom, or a side of the candle as well as on the packaging.
- (3) When the sole packaging consists of a transparent material (such as a clear shrink wrap) and the fire safety warning is visible on the top, bottom or a side of the candle, the fire safety warning and the statement "See bottom panel for safety information" is not required on the packaging.
- 6.2.2 The fire safety warning shall be in distinct contrast from its background. Its message(s) shall be in a legible sans-serif font, such as Helvetica, Century Gothic, or equivalent typeface, in combinations of uppercase and lowercase letters unless otherwise specified.
- 6.2.3 The fire safety warning need not be limited to a specific shape. It can conform to the shape of the overall label to allow for the most efficient use of available space. It is permissible to outline the fire safety warning with a border.
- 6.2.4 There are two fire safety warning options. One is a text-only option (see 6.3) and the other is a text-and-pictogram option (see 6.4). All units of sale shall comply with one of these two labeling options.
- 6.2.5 The fire safety warning statement(s) specified in this standard represent minimum fire safety warning requirements. Additional appropriate manufacturers' warnings or instructions are permitted. These warnings or instructions can precede or follow the fire safety warning or appear elsewhere on the unit of sale, but cannot interrupt the fire safety warning.
- 6.2.6 The total surface area of the warning panel determines the minimum letter height, graphic symbol size and content of the fire safety warning. Guidance on how to determine the total surface area of the warning panel is shown in Appendix X1.
  - 6.2.7 Example labels are provided in Appendix X2.
  - 6.3 Fire Safety Warning (Text-Only Option):
- 6.3.1 The text-only fire safety warning shall consist of the safety alert symbol followed immediately by the signal word "WARNING" in uppercase boldface letters, after which the following fire safety warning statements or their practical equivalents shall appear in this order:

Burn within sight.

Keep away from things that catch fire.

Keep away from children.

It is permissible for these statements to appear in stacked format or in paragraph form.

6.3.2 For candles with warning panels of 21 cm² (3.3 in.²) or less, and for all individually labeled taper candles, manufacturers have the option of using an abbreviated text-only fire safety warning consisting solely of the safety alert symbol and the single fire safety warning statement "Burn within sight" or its practical equivalent.

TABLE 1 Minimum Size Requirements for the Components of the Text-Only Fire Safety Warning Option

Surface Area of the Warning Panel	Minimum Height of the Safety Alert Symbol and the Signal Word "WARNING"	Minimum Height of Fire Safety Warning Statements
21 cm <sup>2</sup> (3.3 in. <sup>2</sup> ) or less <sup>A</sup>	1.5 mm (0.06 in.)	1.3 mm (0.05 in.) <sup>B</sup>
Greater than 21 cm² (3.3 in.²) but less than 60 cm² (9.3 in.²)	1.5 mm (0.06 in.)	1.3 mm (0.05 in.) <sup>B</sup>
60 cm <sup>2</sup> (9.3 in. <sup>2</sup> ) or greater	1.8 mm (0.07 in.)	1.5 mm (0.06 in.) <sup>B</sup>

<sup>&</sup>lt;sup>A</sup> This size label qualifies for the abbreviated text-only fire safety warning option. See 6.3.2.

TABLE 2 Minimum Size Requirements for the Components of the Text-and-Pictogram Fire Safety Warning Option

Surface Area of the Warning Panel	Minimum Height of the Safety Alert Symbol	Minimum Diameter of the Pictograms	Minimum Height of the Fire Safety Warning
, , , , , , , , , , , , , , , , , , ,		3	Statements
21 cm <sup>2</sup> (3.3 in. <sup>2</sup> ) or less <sup>A</sup>	4 mm (0.15 in.) <sup>B</sup>	8 mm (0.31 in.)	1.3 mm (0.05 in.) <sup>C</sup>
Greater than 21 cm <sup>2</sup> (3.3 in. <sup>2</sup> ) but less than 60 cm <sup>2</sup> (9.3 in. <sup>2</sup> )	5 mm (0.20 in.) <sup>B</sup>	10 mm (0.39 in.)	1.3 mm (0.05 in.) <sup>C</sup>
60 cm <sup>2</sup> (9.3 in. <sup>2</sup> ) or greater	8 mm (0.31 in.) <sup>B</sup>	16 mm (0.63 in.)	1.5 mm (0.06 in.) <sup>C</sup>

<sup>&</sup>lt;sup>A</sup> This size label qualifies for the abbreviated text-and-pictogram fire safety warning option. See 6.4.2.

<sup>C</sup> Minimum height of letters is based on the height of a capital or upper case letter.

- 6.3.3 The minimum size requirements for components of the text-only fire safety warning (including the abbreviated text-only fire safety warning) are indicated in Table 1.
  - 6.4 Fire Safety Warning (Text-and-Pictogram Option):
- 6.4.1 The text-and-pictogram fire safety warning shall consist of the safety alert symbol followed immediately by the pictograms shown in 4.2, 4.3, and 4.4, in that order. Immediately following or in close proximity to the pictograms, the following fire safety warning statements or their practical equivalents shall appear in this order:

Burn within sight.

Keep away from things that catch fire.

Keep away from children.

It is permissible for these statements to appear in stacked format or in paragraph form.

- 6.4.2 For candles with warning panels of 21 cm<sup>2</sup> (3.3 in.<sup>2</sup>) or less, and for all individually labeled taper candles, manufacturers have the option of using an abbreviated text-and-pictogram fire safety warning consisting solely of the safety alert symbol followed by the "Burn within sight" pictogram (see 4.2) and the fire safety warning statement "Burn within sight" or its practical equivalent.
- 6.4.3 The minimum size requirements for the components of the text-and-pictogram fire safety warning (including the abbreviated text-and-pictogram fire safety warning) are indicated in Table 2.

### 7. Keywords

7.1 candle; labeling; pictograms; safety

 $<sup>^{\</sup>it B}$  Minimum height of letters is based on the height of a capital or upper case letter.

<sup>&</sup>lt;sup>B</sup> The minimum height of the safety alert symbol must always be at least half the height of the pictogram(s). If the pictogram(s) is larger than the minimum size, the safety alert symbol must be enlarged to at least half of the pictogram's height.

#### **APPENDIXES**

(Nonmandatory Information)

#### X1. CALCULATING THE WARNING PANEL SURFACE AREA

X1.1 The letter height and pictogram size requirements of the fire safety warnings depend on the surface area of the panel on which it appears. This appendix provides information for calculating the warning panel surface area.

X1.2 The first step to determine the minimum size of the components of the fire safety warning is to calculate the entire surface area of the warning panel. Using that result, refer to Table 1 (for text-only) or Table 2 (for text and pictogram) in the standard to determine the minimum size requirements for the components of the fire safety warning. It is important to note that it is the *total* surface area of the warning panel that is calculated, not the size of the labeled area or only the spot where the fire safety warning appears. Thus, if a manufacturer uses a 4 by 4 cm adhesive label to place the fire safety warning on the side of a box measuring 10 by 10 cm, the required size of the warning's text and graphic elements is based on a warning panel surface area of 100 cm<sup>2</sup> (the surface area of one side of the box), not 16 cm<sup>2</sup> (the surface area of just the adhesive label).

#### CALCULATIONS FOR SURFACE AREAS

X1.3 Squares and Rectangles—For square or rectangle surfaces, multiply the width (w) by the height (h) to obtain the surface area. See Fig. X1.1.

X1.4 *Circles* —For round or circular surfaces, multiply the square of the radius (r) by 3.14 ( $\pi$ ) to obtain the surface area. See Fig. X1.2.



 $Note \ 1 \\ \hline -Surface \ area = w \times h \\ \hline \ FIG. \ X1.1 \ Surface \ Area \ of \ Squares \ and \ Rectangles$ 

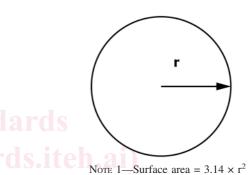
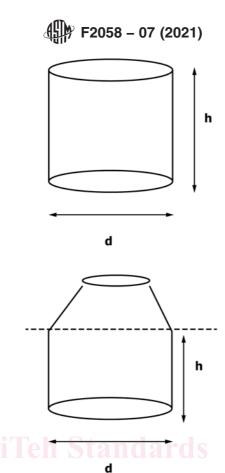


FIG. X1.2 Surface Area of Circles

X1.5 Cylinders —For the side of cylindrical surfaces, the warning panel is considered to be 40 % of the total surface of the height of the cylinder. This 40 % represents approximately the area that can be seen at one time by someone looking at the side surface of the cylinder. To calculate the surface area multiply 0.4 times the diameter (d) times the height (h) times  $3.14 \, (\pi)$  (that is,  $0.4 \times d \times h \times 3.14$ ). See Fig. X1.3.



Note 1—Surface area =  $0.4 \times d \times h \times 3.14$ . For cylindrical surfaces that have a rounded neck or shoulder, the height measurement excludes the neck and shoulder of the container.

FIG. X1.3 Surface Area of Cylinders

#### X2. EXAMPLE LABELS

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X2.1 The following example labels are provided solely to assist the reader in envisioning some of the many ways in which the fire safety warning can be used on different candle label formats. The use and placement of the fire safety warning within the specifications of this standard are at the discretion of the manufacturer.

X2.2 Examples include labels that might appear on the bottom or side of a candle, on a surface of a candle package, on a hangtag, etc. Some examples are shown with pictograms and others in the text-only version.

X2.3 Because a growing number of companies label their products in more than one language, some of the label examples are in multi-language formats. Although the use of multiple languages is not discussed in the standard, candles sold in some locations may be required to be labeled in more than one language.

X2.4 Example labels are also shown for different sized warning panels, including "small labels"—warning panel surface areas of 21 cm<sup>2</sup> (3.3 in.<sup>2</sup>) or less; "medium labels"—warning panel surface areas greater than 21 cm<sup>2</sup> (3.3 in.<sup>2</sup>) but less than 60 cm<sup>2</sup> (9.3 in.<sup>2</sup>); and "large labels"—warning panel

surface areas of 60 cm<sup>2</sup> (9.3 in.<sup>2</sup>) or greater.

X2.5 Many of the example labels also include mock UPC bar codes, use instructions, the name/address line of manufacturer, net weight, country of origin, etc. These items are not addressed in this standard and are shown solely for illustrative purposes. It is the responsibility of the manufacturer to determine what information is required to appear on a product.

X2.6 Fig. X2.1 is an example of an abbreviated text-only label that might appear on the bottom of a votive. Because the warning panel surface area would be less than 21 cm², it qualifies for using the abbreviated warning: △ Burn within sight. In this example, the manufacturer has chosen to label only in English, and to provide additional caution and use instructions that he has deemed appropriate. Because there was sufficient room on the label, the manufacturer chose to exceed the minimum type size requirements for the warning.

X2.7 Fig. X2.2 is an example of an abbreviated text-and-pictogram label that might appear on the bottom of a votive or other candle with a diameter up to 5.1 cm (2.0 in.). Because the warning panel surface area is less than 21 cm<sup>2</sup> (3.3 in.<sup>2</sup>), the