1061 Cable Flame Test

1061.1 A vertical specimen of the finished cable:

- a) Shall not convey flame along its length, and
- b) Shall not convey flame to combustible materials in its vicinity

during, between, or after three 60-s applications of a standard test flame. The standard test flame is to be nominally 125 mm high and is to produce heat at the nominal rate of 500 W (1700 Btu/h). The period between applications is to be 30 s regardless of whether flaming of the specimen ceases of its own accord within 30 s of the previous application. This test is to be conducted as described in 1080.2–1080.11 and 1061.2 using one of the fuels described in 1080.3 and the standard laboratory burner and calibration as specified in 1080.1. The results of this test are to be judged as indicated in 1061.3.

1061.2 The burner is to be tilted forward into position to apply the gas flame to the specimen, kept there for 60 s, quickly tilted back to the stop to remove the flame from the specimen for 30 s, and so forth for a total of three 60-s applications of the gas flame to the specimen with 30 s between applications. The gas flame is to be reapplied to the specimen 30 s after the previous application regardless of whether flaming of the specimen ceases of its own accord within 30 s of the previous application.

1061.3 Where any specimen shows more than 25 percent of the indicator flag burned away or charred (soot that can be removed with a cloth or the fingers, and brown scorching, are to be ignored) following the three applications of flame, the cable is to be judged capable of conveying flame along its length. Where any specimen emits flaming or glowing particles or flaming drops at any time that ignite the cotton on the burner, wedge, or testing surface (flameless charring of the cotton is to be ignored), or continues to flame longer than 60 s after three applications of the gas flame, the cable is to be judged capable of conveying flame to combustible materials in its vicinity.

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1080 VW-1 (Vertical-Specimen) Flame Test

1080.1 A vertical specimen:

- a) Shall not convey flame along its length, and
- b) Shall not convey flame to combustible materials in its vicinity

during, between, or after any of five 15-s applications of a standard test flame. The standard test flame is to be nominally 125 mm high and is to produce heat at the nominal rate of 500 W (1700 Btu/h). The period between applications is to be 15 s where the specimen flaming ceases within 15 s or less time, or the duration of the specimen flaming where the specimen flame persists longer than 15 s. This test is to be conducted as described in 1080.2 – 1080.13 using one of the fuels described in 1080.3 and the standard laboratory burner^a described in ASTM D 5025-99. The gas flame produced by the burner is to be calibrated as described in ANSI/ASTM D 5207-98. The results of this test are to be judged as indicated in 1080.14.

^aSources of burners that comply with ASTM D 5025-99: