

Flame tests for electrical cables

Flame tests for electric cables UL 1581 section 1080 (FV-2 / VW-1 Flame Test)

Description	UL 1581 section 1080 - reference to standard UL 2556, section 9.4 (FV-2 / VW-1 Flame Test)
Length of specimen	610 mm
Burner	Bunsen burner with additional air supply (Tirril gas burner) Ø 9.5 mm
Test temperature	500 W flame
Position of specimen	vertical
Position of flame	20° to vertical specimen
Duration of flaming	5 x 15 seconds with at least 15 seconds flaming break
Conditions	<p>Paper max. 25% carbonized.</p> <p>The specimen may keep on burning for max. 1 minute after any application.</p> <p>Material dropping must not ignite the cotton (B) lying under the specimen.</p>

The diagram illustrates the UL 1581 section 1080 (FV-2 / VW-1) flame test setup. A vertical cable specimen is shown with a total length of 610 mm. A piece of paper, measuring 12.5 x 20 mm, is attached to the top of the specimen. A burner is positioned at the bottom, angled at 20 degrees to the vertical. The flame is applied to the specimen, with a 254 mm section being tested. The distance from the burner to the specimen is 230-240 mm. A cotton ball (B) is placed on the surface below the specimen.