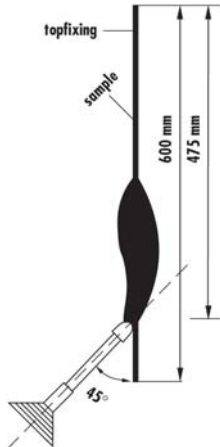
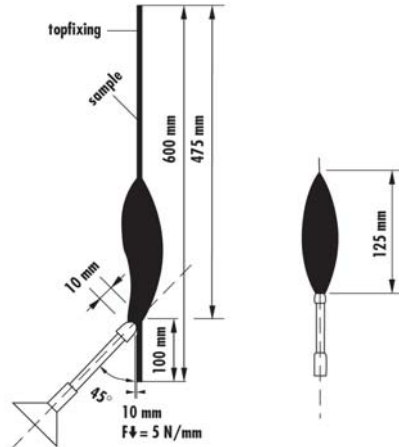


# FLAMABILITY TESTS FOR ELECTRICAL CABLES

## Tests on electric and optical fibre cables under fire conditions

Description	EN 60332-1-2 acc. to IEC 60332-1-2	EN 60332-2-2 acc. to IEC 60332-2-2
Length of specimen	600 mm/23.62 inches	600 mm/23.62 inches
Burner	acc. to IEC 60332-1-1	acc. to IEC 60332-2-1
Test temperature	1 kW flame	defined by the stipulated setting of the flame length
Position of specimen	vertical	vertical
Position of flame	45° to vertical specimen	45° to vertical specimen
Duration of flaming	see table 1	20 seconds
Conditions	Cable must be self-extinguishing. The damage or carbonization may only reach max. 50 mm/1.97 inches under the upper fixing clamp.	Cable must be self-extinguishing. The damage or carbonization may only reach max. 50 mm/1.97 inches under the upper fixing clamp.
		

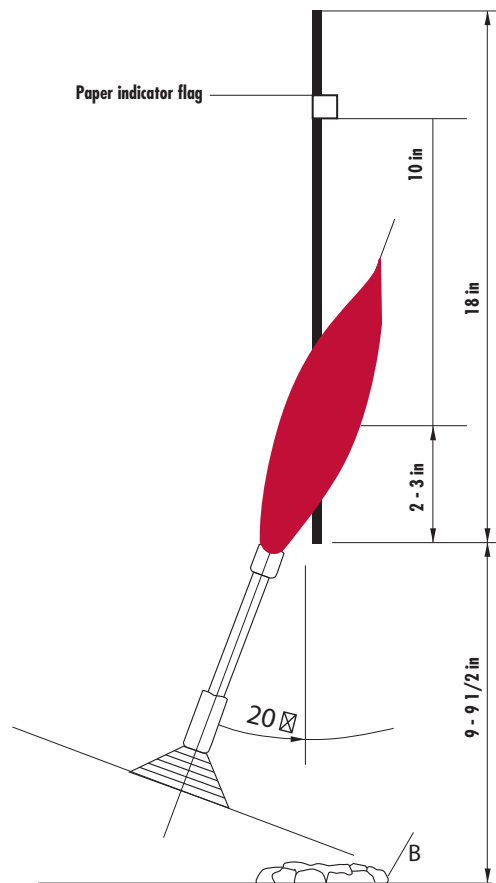
**Table 1**

outer diameter *) of specimen	Duration of flaming in seconds
$D \leq 0.98$ inches (25 mm)	60
$0.98$ inches (25 mm) $< D \leq 1.97$ inches (50 mm)	120
$1.97$ inches (50 mm) $< D \leq 2.95$ inches (75 mm)	240
$D > 2.95$ inches (75 mm)	480

\*) If cables or insulated cables are tested that are not round (e.g. flat twin cables) their dimensions is to be measured and an equivalent diameter must be calculated from this.

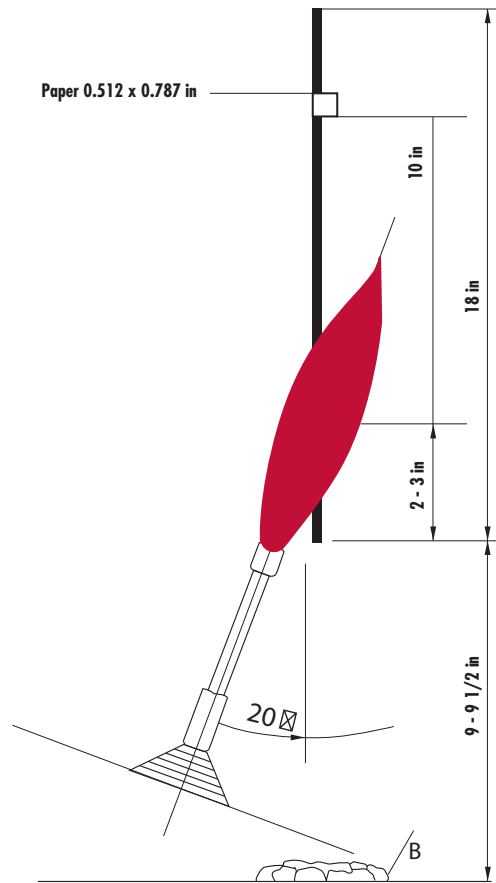
# FLAMABILITY TESTS FOR ELECTRICAL CABLES

Description	UL 1581 section 1080 (VW-1 Flame Test)
Length of specimen	455 mm/17.913 inches
Burner	Bunsen burner with additional air supply (Tirril gas burner) $\varnothing$ 9.5 mm/0.374 inches
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	Paper max. 25% carbonized. The specimen may keep on burning for max. 1 minute after any application. Material dropping must not ignite the cotton (B) lying under the specimen.



# FLAMABILITY TESTS FOR ELECTRICAL CABLES

Description	UL 1581 section 1061 (Cable Flame Test)
Length of specimen	455 mm/17.913 inches
Burner	Bunsen burner with additional air supply (Tirril gas burner) $\varnothing$ 9.5 mm/0.374 inches
Test temperature	500 W flame
Position of specimen	vertical
Position of flame	20° to vertical specimen
Duration of flaming	3 x 60 seconds with 30 seconds between each flaming
Conditions	Paper max. 25% carbonized. The specimen may keep on burning for max. 1 minute after the last application. Material dropping must not ignite the cotton (B) lying under the specimen.



# FLAMABILITY TESTS FOR ELECTRICAL CABLES

Description	UL 1581 section 1060 (Vertical Flame and FT1 Test)
Length of specimen	455 mm/17.913 inches
Burner	Bunsen burner with additional air supply (Tirril gas burner) $\varnothing$ 9.5 mm/0.374 inches
Test temperature	500 W flame
Position of specimen	vertical
Position of flame	20° to vertical specimen
Duration of flaming	5 x 15 seconds with each 15 seconds flaming break
Conditions	Paper max. 25% carbonized. The specimen may keep on burning for max. 1 minute after the last application.

