Standard Fire Retardant Poly Sheeting - 6 Mil

NFPA 701 Test, Method 2 Test

ACCREDITATION To ISO/IEC 17025 for a defined Scope of Testing by the International Accreditation Service

SPECIFICATIONS OF ORDER

Determine flame resistance in accordance with Test Method 2 of NFPA 701, 2015 Edition, as per Element Quotation No. 20-002-152343 accepted March 9, 2020.

SAMPLE IDENTIFICATION (Element sample identification number 20-002-S0182-1)

Plastic film material described as, "6 mil with 5% flame retardant", identified as:
"6 mil FR Sheeting"

SUMMARY OF TEST METHOD

For conducting flame tests of fabrics hung in folds, at least four specimens, each 610 x 1200 mm (24 x 47 inches) are required. Each specimen is folded longitudinally to form four folds. Those specimens that cannot easily be folded are tested in the flat configuration.

For conducting flame tests of materials in the flat configuration, Test Method 2 of NFPA 701 specifies testing at least ten specimens, each 125 x 1200 mm (5 x 47 inches).

Prior to testing, the specimens are conditioned at 105°C (220°F) for a period of 1 to 3 hours. If specimens melt or permanently deform at 105°C they are instead conditioned at 20°C ± 5°C for at least 24 hours prior to flame exposure.

Each specimen is removed from the conditioning chamber individually, and immediately suspended in a steel stack testing apparatus, 305 mm (12 inches) square and 2133 mm (84 inches) high. The stack is open at both the top and bottom and is supported 305 mm above the floor. The lower edge of the specimen is positioned 100 mm (4 inches) above the tip of a gas burner which is inclined at 25° to the vertical. The burner is adjusted to yield a flame 280 mm (11 inches) in height and is positioned directly beneath the specimen for a period of 2 minutes. Char length is then measured. Char length is defined as the original length of the specimen minus the distance from the top edge of the specimen to the horizontal line above which all material is intact.

Flame Resistance Requirements:

Specimen Configuration	Maximum Char Length or Destroyed Material Length (mm)	Maximum Afterflame Time (s)	Maximum Duration of Flaming Drips on Floor of Tester (s)
If Folded	1050	2.0	2.0
If Flat	435	2.0	2.0

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TEST RESULTS

NFPA 701-2015 Test Method 2

Standard Methods of Fire Tests for Flame Propagation of Textiles and Films

Trial	Length of Char (mm)	Afterflame Time (s)	Flaming Dripping (s)	Result
1	390	0.0	0.0	Pass
2	430	0.0	0.0	Pass
3	430	0.0	0.0	Pass
4	400	0.0	0.0	Pass
Average:	413	-	-	-
Maximum Specified (Individual)	1050	2.0	2.0	-

Note: Material was tested "as-received" and in the folded configuration.

Measured Weight: 138 g/m^2

CONCLUSIONS

When tested "as-received" and in the folded configuration, the material identified in this report meets the flame propagation requirements of Test Method 2 of NFPA 701, 2015 Edition.