

Flame Spread

ASTM D635 "Rate of Burning and/or Extent and Time of Burning of Plastics in a Horizontal Position".

A bar specimen of 5" long x 0.5" wide x 0.5" thick is used. The sample is marked 1" in from each end. A flame is used to ignite one end. The other end is clamped within the 1" area. When the flame reaches the open end 1" mark, a timer is started. The sample is observed to note if the sample extinguishes itself, in what time, and how far the flame travels. If it continues to burn, the flame and travel is timed until the flame reaches the 1" mark at the clamped end, which is a timed flame travel of 3".

Sample	Flame travel over 3"	Result
1	6 min., 30 sec.	100% consumed
2	7 min., 36 sec.	100% consumed
3	8 min., 15 sec.	100% consumed