



Surface Burn
*Doesn't Ignite
 Under Hotter Flame*
 UL 94 5VA
 UL 94 5VB



Vertical Burn
Self Extinguishing
 UL 94 V-0 (Best)
 UL 94 V-1 (Good)
 UL 94 v-2 (Drips)



Horizontal Burn
Slow Burn Rating
 Takes more than 3 min.
 to burn 4 inches

Glossary of Terms

UL94

Refers to Underwriter's Laboratory ratings for flame spread. The 94HF-1 and 94V-0 classifications have the most stringent requirements in the respective tests.

UL1570

Applies to fluorescent lighting fixtures.

UL1571

Applies to incandescent lighting fixtures.

UL1572

Applies to HID lighting fixtures
 (High Density Discharge)(Indoor and Outdoor)

UL94HBF

A material classified 94HBF shall: *a.* Not have any specimens with a burning rate exceeding 1.5 inch (38.1mm) per minute over a 4.0 inch (101.6mm) span or *b.* Have each specimen cease to burn before the flaming or glowing reaches the 5.0 inch (127 mm).

UL94HF-1

A material classified 94HF-1 shall: *a.* Not have more than one specimen out of each set of five specimens continue to flame for more than 2 seconds after the test flame is removed. However, this one specimen shall not flame for more than 10 seconds. *b.* Not have any test specimens affected for a distance greater than 2.25 inches (57.2mm) from the end exposed to the test flame. *c.* Not have any of the specimens drip flaming particles which ignite dry absorbent surgical cotton placed 12 inches (305mm) below the specimen.

UL94V-0

A material classified 94V-0 shall: *a.* Not have any specimens that burn with flaming combustion for more than 10 seconds after either application of the test flame. *b.* Not have a total flaming combustion time exceeding 50 seconds for the 10 flame applications for each set of five specimens. *c.* Not have any specimens that burn with flaming or glowing combustion up to the holding clamp. *d.* Not have any specimens that drip flaming particles that ignite the dry absorbent surgical cotton located 12 inches (305mm) below the test specimen. *e.* Not have any specimens with glowing combustion that persists for more than 30 seconds after the second removal of the test flame.

ASTM

American Society for Testing & Materials. The ASTM develops standards on properties and performance of materials. ASTM D-41, D-746, D-1056, D-1667, D-3574 and D-3575 are referred to throughout this brochure. Test specifications are available from Boyd Sales Representatives.

K-FACTOR

A measure of thermal conductivity of heat insulation. Expressed as BTU's/sq.ft., 1" thick in 1 hour/degrees F. Lower values indicate better insulating materials.

WATER ABSORPTION

Amount of water absorbed by a polymer during submersion under pressure.