

Fire Retardant Insulators



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A fire retardant rated polymer will ignite if the temperature exceeds its ignition point. However, a FR material will self-extinguish after the heat source is removed.

Although no specific flammability standard exists for insulators, the most commonly referenced industry standards for FR rated materials are all equivalent: UL-94, ASTM D3801 and IEC60695.

UL 94

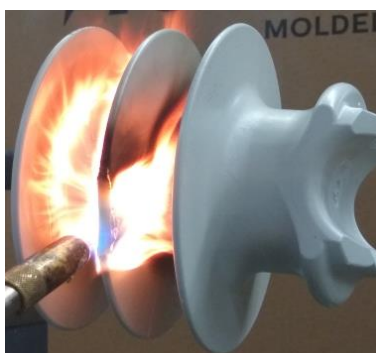
Hendrix flame retardant (FR) insulators are tested according to UL 94. The material passes vertical burning V-0, which is the most stringent rating for UL 94. Below is a summary of the test:

- UL 94 evaluates the flammability behavior of a polymeric material under an open flame or radiant heat source
- V-0 rating:
 - Flame self-extinguishes in ≤ 10 seconds after the ignition source is removed
 - Cotton balls located 300 mm (~11.8”) below the burning samples should not ignite by the flaming particles or drops

Conventional Test

In addition to the UL 94 test, a “field” burning test was conducted using a Hendrix FR insulator. A utility torch (Bernzomatic MAP/PRO) flame was directly applied to the insulator’s fin, the thinnest section (~1/8”), for 30 continuous seconds.

- Flame self-extinguished less than 5 seconds after the torch was removed
- The insulator burning drops self-extinguished and didn’t ignite the cotton balls placed 2ft below the insulator.



Heat source applied for 30 seconds.



Flame self-extinguished after heat source is removed.

All insulators are available in FR. Minimum order requirements apply. Contact rep or factory for details.