



**PYRO-GUARD SYSTEM**

Pyro-Guard products were designed and developed to satisfy the electrical requirements of the Nuclear Regulatory Commission (NRC), Regulatory Guide 1.75 and Institute of Electrical and Electronics Engineers, standard - IEEE 384.

Many nuclear power plants are unable to fully comply with spatial separation distances as required by NRC Regulatory Guide 1.75 without the use of interposing barriers. This situation occurs mainly as cables exit trays or conduits. The Pyro-Guard System offers several interposing barrier methods for complying with NRC Regulatory Guide 1.75.

**CABLE DERATING CONSIDERATION**

If standard cable sizing design criteria has been followed, the use of Pyro-Guard products will not cause any additional cable ampacity derating.

TEST QUALIFICATIONS

- Ametek Corp.** High temperature textile in Boric Acid/Sodium Hydroxide solution  
Ref: Con Edison No. 114-IP
- Ametek Corp .** Tensile strength to ASTM-D-579-49
- Ametek Corp.** MIL-I-24244-Chloride test MIL-C-2457CA
- Wyle Lab Reports** "Electrical Separation Verification Testing"  
(1) 17666-02 (2) 046287-1 (3) 47506.02
- McCrone Labs** No. J-19228 Polarized Microscopy Test for Crystalline Silica content  
PSE&G Company

**PYRO-GUARD SPECIFICATIONS**

**METHOD A**

A convenient method for wrapping Pyro-Guard is shown in photo at right. Fabricated in convenient widths of 6", 12", 24", and 36" with attached ceramic tie cords and velcro straps for ease of installation. For most typical installations, Pyro-Guard is wrapped longitudinally around the cable or cable bundle; a two wrap minimum is recommended. Pyro-Guard products are fabricated from high grade, flexible silica textiles. The base fabrics are produced from amorphous silicon-dioxide (98% SiO<sub>2</sub>) material. The fabrics have a low chloride content and can withstand temperatures to 3000° F.



**METHOD B**

Pyro-Guard woven silica tapes are available in widths of 1", 2", 4" and 6" by 50 foot lengths.

For most typical installations, the tape is wrapped spirally around the cable or cable bundle, a 50% minimum overlap is recommended. Tape is secured at the terminus and at intervals throughout the length of cable with ceramic cord. This will eliminate the possibility of telescoping of the wrap.

**METHOD C**

Pyro-Guard woven silica tapes are available in widths of 1", 2", 4" and 6" by 50 foot lengths with an overwrap of adhesive backed glass tape. (Identical to Method B as described above with the addition of the overwrap of adhesive backed glass tape.)

For most typical installations, the tape is wrapped spirally around the cable or cable bundle, a 50% minimum overlap is recommended, then the glass tape should be applied over the spirally installed tape in the opposite direction that the Pyro-Guard tape was installed. A 50% minimum overlap of the glass tape is recommended.

**METHOD D**

Pyro-Guard RB 1800 incorporates the latest technology for ease of application and maximum protection. RB 1800 is both moisture and abrasion resistant, which allows installation in harsh environments. Pyro-Guard RB 1800 is a combination of 50% 188CH silica blanket and 50% silicone coated 188CH silica blanket. Fabricated in convenient widths of 6", 12", 18", 24", and 36" by 50 foot lengths.

For most typical installations, Pyro-Guard RB 1800 is wrapped longitudinally around the cable or cable bundle, with the silicone coated portion as the outer wrap. A two wrap minimum is recommended

**METHOD E**

Pyro-Guard braided sleeving is available in plain braided, or silicone coated. Inside sleeving dimensions range from 1/8" up to 3", and are packaged in 10 or 25 pound spools.

For most typical installations, the Pyro-Guard braided sleeving is used prior to termination of single cables or conductors in panels or enclosures. Sleeving is also frequently used for tying cable bundles and securing blankets.

