

GORE® PYRAD® Fabric - FAQs

1. What is GORE® PYRAD® Fabric?

GORE® PYRAD® fabric is a breakthrough in self-extinguishing fabric technology that adds heat, flame, and arc protection properties to non-flame retardant textiles such as polyester and Nylon. GORE® PYRAD® fabric can leverage properties of low water pick-up, fast dry-out, and textile produced in Hi-Vis colors that have traditionally been difficult to achieve with conventional FR textiles.

2. Why is this new type of arc flash resistance outerwear needed when many products already exist today? What makes GORE® PYRAD® fabrics so unique?

GORE® PYRAD® fabric was developed in response to utility lineman needs for an ASTM F1891 ensemble with ANSI 107 hi-vis color, and delivers the well-known performance of durable, breathable GORE-TEX® products. Ensembles with GORE® PYRAD® fabric provides the ONLY combination of ASTM F1891 and ANSI 107 protection with durable, breathable, fast-drying, water-proof comfort.

3. What is ASTM F1891 and what does it cover?

ASTM F1891 is the Standard Specification for Arc and Flame Resistant Rainwear. ASTM F1891 requirements include the arc-flash testing and the waterproofness testing of a small swatch of seam-sealed material only; not full-ensemble testing.

4. Isn't passing ASTM F1891 enough? What other performance attributes beyond the standard are really needed?

Passing ASTM F1891 allows for lineman gear to meet the MINIMUM requirements for safety and performance stated above. Ensembles with GORE® PYRAD® fabric add further valuable performance advantages. The fabric is evaluated for breathability, low water pick-up, and fast dry-out. Additionally, Gore's system-level testing includes arc testing the jacket on a mannequin, and storm-shower testing the full ensemble for waterproofness.

The result:

Ensembles with GORE® PYRAD® fabric deliver broad protection that allows for increased comfort in challenging weather conditions. The comfort benefits include warmth in cool conditions, being cooler in warm conditions, reduced clammy/cold feeling while using multiples times per shift. Hi-vis attributes within the fabric eliminates the need for external hi-vis vests, thereby reducing overall bulk.

- 5. When will the GORE® PYRAD® fabric be available? Will it be available in different colors?

 The product is available now, only through Gore-certified manufacturers. It is available in black and ANSI-107 hi-vis yellow. Hi-vis orange is being explored as an option for the future; no timing on orange has yet been established.
- 6. Are ensembles with the GORE® PYRAD® fabric breathable?

 Yes. GORE® PYRAD® fabric meets the requirements within ANSI 107 for hi-vis fabrics which claim moisture vapor breathability (evaporation of sweat through the garment). It is unique in its ability to provide the

combination of breathability, low weight, fast dry-out, and integrated ANSI 107 high visibility as well as being arc-rated.

7. How is the durability of ensembles with GORE® PYRAD® fabric?
Ensembles with GORE® PYRAD® fabric have shown that they are durable in use; anticipating the garment would last for multiple seasons. Field trials were conducted over a winter season in some of the most challenging environments in North America.

Waterproofness and arc-flash resistance were maintained. The fabric has gone through rigorous testing for delamination resistance (fabric layers did not separate) and seam-tape adhesion (seam tape did not peel off).

8. What else did field trials show?

Feedback from the field trials have been very positive. Field testers have commented on the good durability of the test ensembles in use, and no one complained about getting wet. Testers also observed greater overall comfort compared with traditional FR rainwear and reported better freedom of movement.

9. How does the ePTFE membrane of the GORE® PYRAD® fabric differ from other ePTFE-based fabrics on the market today?

GORE® PYRAD® fabric membranes are the most advanced membranes available from the makers of GORE-TEX® products. The membrane in GORE® PYRAD® fabrics is among the strongest available today; offering the best combination of durable waterproof protection and breathable comfort.

10. How are ensembles with GORE® PYRAD® fabrics cleaned and maintained?

Users should follow the garment manufacturer's instructions for cleaning. The garments can typically be washed in home washing machines and dried in home dryers. Dry-cleaning is not recommended.

Additionally, it is planned that a patch kit for repairing small holes or tears will be available from manufacturers.