



**StedAIR**<sup>®</sup>

MOISTURE BARRIERS

**NFPA 1851  
REPAIR GUIDELINES**

## PRODUCT INFORMATION

### Stedair® 3000

This moisture barrier, certified to NFPA 1971 (2018 ed.), is comprised of Dupont's E89 substrate laminated to a Teflon bicomponent membrane.

### Stedair® 4000

This moisture barrier, certified to NFPA 1971 (2018 ed.), is comprised of a woven Nomex substrate laminated to a Teflon bicomponent membrane.

### Stedair® Gold

This moisture barrier, certified NFPA (2018 ed.), is comprised of a tri-blend Nomex/PBI/Kevlar substrate laminated to a Teflon bicomponent membrane.

### Stedair® Seam Tape

This seam tape works on all Stedair® moisture barriers and is available in three widths: 7/8", 1", 1.5". If a different width would better suit your needs, please contact Brian Barton ([bbarton@stedfast.com](mailto:bbarton@stedfast.com)).



## CARE

Follow the guidelines outlined in NFPA 1851 (2014 ed.) when caring for NFPA 1971 (2013 ed.) compliant turnout gear. As far as Stedair® moisture barriers are concerned, no deviations from this standard shall be made.

Stedfast recommends (i) keeping pH within recommended range of 6.0-10.5, (ii) keeping g-force less than 100, (iii) keeping maximum water temperature below 105F and (iv) avoiding diaphragm water extraction.

When the outer material requires a solvent to remove petroleum based stains, it is recommended that the moisture barrier is separated from the outer prior to pre-wash cleaning or soaking. Solvents that remove petroleum may dissolve adhesives.

Stedfast is proud to have the best warranties in the industry and to help ensure maintaining the performance and warranties of Stedair® products, we recommend that each organization assesses the suitability of all cleaning products based on the requirements outlined in NFPA 1851 (2014 ed.).

## INSPECTION

Follow the guidelines outlined in NFPA 1851 (2014 ed.) for routine and advanced inspections for the first 36 months of the garment's life. After 3 years, a complete liner inspection must be conducted as per NFPA 1851 (2014 ed.).

A change in the moisture barrier's natural color, from white to brown, is a signal that the garment may have been exposed to unusually high temperatures and that a complete liner inspection should be performed.

## REPAIR

Our settings were verified using a Digital Combo Model CD-8 by Geo Knight. If you already have this heat press and it is pre-programmed, you may have difficulty changing the settings. Contact Geo Knight directly to obtain a Control Board. Once this is installed, you can preset all the required settings for all of the moisture barriers that you repair. The table below provides a starting point for setting your press to repair Stedair® Barriers.

**\*Recommended Settings using Stedair® Seam Tape:**

Product	Temperature (°F)	Pressure Setting	Time (seconds)
<b>Stedair® 3000</b>	275 +/- 25	0.02	15 (+/- 3) sec.
<b>Stedair® 4000</b>	300 +/- 25	0.02	15 (+/- 3) sec.
<b>Stedair® Gold</b>	300 +/- 25	0.02	15 (+/- 3) sec.

Remember to avoid direct contact between heat plate and seam tape as excess adhesive may squeeze out and damage plate.

The adhesive on the seam tape will melt between 200-230F, so a lower temperature (e.g. 210F) may be used, if desired. The pressure application time may need to be adjusted to compensate for the lower temperature.

You may check the quality of your repair using a Hydrostat Tester and through liquid penetration testing.

Hydrostat: Apply 1psi pressure for 15 seconds (maximum). You should not see any water droplets on the surface.

Liquid Penetration Testing: Stedfast will test samples for Liquid Penetration Testing, according to NFPA 1851 (2014 ed.). Contact Brian Barton ([bbarton@stedfast.com](mailto:bbarton@stedfast.com)).

Please keep in mind that temperatures and pressures can vary from one heat press to another. The recommended settings are to be used as "starting points" for Care & Repair professionals who should be prepared for some trial and error. Coupling your expertise with regular heat press calibration and maintenance will ensure settings, suitable for your specific heat press, are confirmed and NFPA 1851 (2014 ed.). Verification can be obtained.

**PRODUCTS**

- Stedair® 3000 (5 yard minimum)
- Stedair® 4000 (5 yard minimum)
- Stedair® Gold (5 yard minimum)
- Stedair® Seam Tape 7/8" width (200 yards/roll)
- Stedair® Seam Tape 1" width (200 yards/roll)
- Stedair® Seam Tape 1.5" width (200 yards/roll)

Identify yourself as a Verified ISP.  
Be prepared to provide your TaxID number if shipment will be made to a US address.

**ACQUIRING STEDAIR PRODUCTS**

Stedair® moisture barriers and seam tapes may be acquired by contacting:

**Louise Choiniere**  
Internal Sales and Customer Service Manager.  
[lchoiniere@stedfast.com](mailto:lchoiniere@stedfast.com) tel. (450) 378-8441

For other enquiries, please contact:  
**Brian Barton**  
[bbarton@stedfast.com](mailto:bbarton@stedfast.com) tel. (603) 724-1875



NB: Stedair® 2000 is not certified to NFPA 1971 (2013 ed.). If repairs need to be performed on turnout gear made with this barrier: (a) use Stedair® 3000's lowest settings as a starting point when applying the seam tape and (b) use Stedair® 3000 when replacing Stedair® 2000 barrier. \*These settings were confirmed by an independent Verified ISP using a DC-8 Geo Knight Press with Stedair® materials and seam tape. All samples passed liquid penetration resistance tests in Stedfast's laboratory.