

STEDAIR[®]

MOISTURE BARRIERS

STEDAIR 3000^e

- Blend of Nomex[®]/Kevlar[®] Durable Substrate
- PTFE Bi-Component Technology
- Weight : 145 g/m²
- Resistant to Blood Borne Pathogens
- Resistant to Viral Penetration
- Resistant to Common Chemicals

The enhanced bi-component membrane is comprised of an expanded PTFE (polytetrafluoroethylene, i.e.: Teflon[®]) matrix having a continuous hydrophilic (water-loving) and oleophobic (oil-hating) coating that is impregnated into the matrix. This provides improved adherence of the seam tape and superior quality for seam protection. The moisture barrier meets and exceeds all requirements of EN 469 Level 2. Also including viral penetration resistance as per ASTM F1671 and ASTM F1670, chemical penetration resistance as per ASTM F903 and provides excellent Total Heat Loss (THL), Thermal Protective Performance (TPP) and Water Vapour Resistance (RET) as per EN 31092.



eVent
PROTECTIVE

STEDFAST
ADVANCED BARRIER TECHNOLOGIES

WWW.STEDFAST.COM 1-450-378-8441

Specification

Blend of Nomex®/Kevlar® Durable Substrate

| Characteristics | Test Method | EN469 Requirement | Stedair® 3000e | | | | | | | | | | | | | | | |
|--|---------------------------------------|--|---|---------|---------|--------------------|-------|-------|---|------|------|---|--------------------|-----|-----------------------|------|---------|--|
| 6.1 Flame Spread | EN ISO 15025:2003-02 | No afterglow No afterflame No occurrence of debris No formation of hole Mean afterflame <2secs | No afterglow No occurrence of debris No formation of hole Afterflame = 0 secs | | | | | | | | | | | | | | | |
| 6.2 Heat Transfer (Flame) ** | EN 367:1992 | <table border="0"> <tr> <td></td> <td>Level 1</td> <td>Level 2</td> </tr> <tr> <td>HTI₂₄</td> <td>≥9.0</td> <td>≥13.0</td> </tr> <tr> <td>HTI₂₄₋₁₂ (based on lowest result)</td> <td></td> <td>≥3.0</td> </tr> </table> | | Level 1 | Level 2 | HTI ₂₄ | ≥9.0 | ≥13.0 | HTI ₂₄₋₁₂ (based on lowest result) | | ≥3.0 | <table border="0"> <tr> <td>HTI₂₄</td> <td>≥21</td> </tr> <tr> <td>HTI₂₄₋₁₂</td> <td>≥6.0</td> </tr> <tr> <td>Level 2</td> <td></td> </tr> </table> | HTI ₂₄ | ≥21 | HTI ₂₄₋₁₂ | ≥6.0 | Level 2 | |
| | Level 1 | Level 2 | | | | | | | | | | | | | | | | |
| HTI ₂₄ | ≥9.0 | ≥13.0 | | | | | | | | | | | | | | | | |
| HTI ₂₄₋₁₂ (based on lowest result) | | ≥3.0 | | | | | | | | | | | | | | | | |
| HTI ₂₄ | ≥21 | | | | | | | | | | | | | | | | | |
| HTI ₂₄₋₁₂ | ≥6.0 | | | | | | | | | | | | | | | | | |
| Level 2 | | | | | | | | | | | | | | | | | | |
| 6.3 Heat Transfer (Radiation) ** | EN ISO 6942: 2002 | <table border="0"> <tr> <td></td> <td>Level 1</td> <td>Level 2</td> </tr> <tr> <td>RHTI₂₄</td> <td>≥10.0</td> <td>≥18.0</td> </tr> <tr> <td>RHTI₂₄₋₁₂ (based on lowest result)</td> <td>≥3.0</td> <td>≥4.0</td> </tr> </table> | | Level 1 | Level 2 | RHTI ₂₄ | ≥10.0 | ≥18.0 | RHTI ₂₄₋₁₂ (based on lowest result) | ≥3.0 | ≥4.0 | <table border="0"> <tr> <td>RHTI₂₄</td> <td>≥28</td> </tr> <tr> <td>RHTI₂₄₋₁₂</td> <td>≥9.0</td> </tr> <tr> <td>Level 2</td> <td></td> </tr> </table> | RHTI ₂₄ | ≥28 | RHTI ₂₄₋₁₂ | ≥9.0 | Level 2 | |
| | Level 1 | Level 2 | | | | | | | | | | | | | | | | |
| RHTI ₂₄ | ≥10.0 | ≥18.0 | | | | | | | | | | | | | | | | |
| RHTI ₂₄₋₁₂ (based on lowest result) | ≥3.0 | ≥4.0 | | | | | | | | | | | | | | | | |
| RHTI ₂₄ | ≥28 | | | | | | | | | | | | | | | | | |
| RHTI ₂₄₋₁₂ | ≥9.0 | | | | | | | | | | | | | | | | | |
| Level 2 | | | | | | | | | | | | | | | | | | |
| 6.5 Heat Resistance | EN ISO 17493:2000 180°C for 5 mins | Materials shall not ignite or melt Shrinkage % < 5 | No melt, drip, separation or ignition Shrinkage % = 0.4 L= 0.7 W= 0.2 | | | | | | | | | | | | | | | |
| 6.9 Dimensional Change | EN ISO 5077:2008 | Shrinkage % Max ± 3% | Shrinkage % L: -2.5% W: -1% | | | | | | | | | | | | | | | |
| 6.10 Resistance to penetration by liquid chemicals ** | EN ISO 6530:2005 | No penetration to innermost surface. Repellency rate > 80% | 1. 40% NaOH > 95% 2. 36% HCl > 95% 3. 30% H ₂ SO ₄ > 95% 4. 100% o-xylene >95% No penetration | | | | | | | | | | | | | | | |
| 6.11 Resistance to Water Penetration | EN 20811: 1992 (1996) | Level 1 < 20kPa Level 2 ≥ 20kPa | < 90 kPa ** Membrane side tested after 25 wash/dry cycles = < 45kPa After heat = < 45kPa After Dry Cleaning = < 45kPa Level 2 | | | | | | | | | | | | | | | |
| 6.11 Resistance to Water Penetration (SEAMS) | EN 20811: 1992 (1996) | Level 1 < 20kPa Level 2 ≥ 20kPa | < 20 kPa * testing complete at 20kPa | | | | | | | | | | | | | | | |
| 6.12 Water Vapour Resistance (Ret) ** | EN ISO 31092:1993 | Level 1 > 30m ² .Pa/W Level 2 ≤ 30m ² .Pa/W | Barrier Only = < 8 m ² Pa/W Composite = < 16 m ² Pa/W Additional testing after 25 washes = Composite = <18 m ² Pa/W | | | | | | | | | | | | | | | |

ADDITIONAL STEDAIR® 3000E TEST DATA ABOVE AND BEYOND STANDARD

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|--|--|--|--|
| Viral Penetration | NFPA 1971-2007 ASTM F1671-2007 | No visual penetration Assay Titer (PFU/mL) <1 | Pass No visual penetration <1 PFU/mL |
| Blood Borne Pathogen Resistance + (SEAMS) | ASTM F 1671-07 NFPA 1971-2013 Resistance of materials used in Protective Clothing to Penetration by synthetic blood using PHI-X174 Bacteriophage | Exposure: 5 min @ 0 psig 1 min @ 2psig 54 min @ 0 psig Pass = No Penetration | Pass = No Penetration |
| Synthetic Blood Resistance | ASTM F 1670-98 NFPA 1971-2013 Resistance of materials used in Protective Clothing to Penetration by synthetic blood | Pass = No Penetration | Pass = No Penetration |

** TESTED IN COMPOSITE FORM