




StedAIR®

Moisture Barriers

StedAIR® 3000e

- 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

Stedair® 3000e is constructed of a hydro entangled, meta-aramid/para-aramid face fabric laminated to a bi-component polytetrafluoroethylene (PTFE) / polyurethane (PU) membrane matrix. The enhanced bi-component membrane is comprised of a hydrophilic (water loving) and oliophobic (oil hating) coating that is impregnated into the matrix providing improved adherence of seam tape. Additional testing includes Viral and Blood Borne Pathogen Resistance (ISO 16604/ASTM F1671/ASTM F1670).



*The industries FIRST
moisture barrier compliant to
AS/NZS 4967-2009,
NFPA 1971-2018 and EN469
certification*

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	
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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	
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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															
Viral Penetration	ISO 16604	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