



StedAIR®
Moisture
Barriers

StedAIR® **GOLDe**

The Ultimate Moisture Barrier
Blended with **Pbi**  
DuPont™
Nomex.
DuPont™
Kevlar.

Stedair® Golde meets and exceeds the requirements of EN 469 Level 2 and is additionally compliant to AS/NZS 4967. The woven face fabric is comprised of the ultimate blend of Nomex®, Kevlar® and PBI®. The combination of FR fibres creates the most flame and heat resistant moisture barrier in the market place along with unmatched durability. The enhanced bi-component membrane is a combination of an expanded polytetrafluoroethylene (ePTFE i.e. Teflon®) matrix and a hydrophilic (water-loving) /oleophobic (oil-hating) coating. This provides improved adherence of the seam tape and superior quality for seam protection. The membrane also provides blood borne pathogen and viral penetration resistance as per ISO 16604.



STEDAIR® Golde product benefits:

- Compliant to EN469:2005 and AS/NZS 4967
- Waterproof
- High breathability
- Flame retardant
- Resistant to heat
- Flexible
- Resistant to viral penetration
- Resistant to chemical penetration

Specification

STEDAIR® GOLDe

Characteristics	Test Method	EN469 Requirement	Stedair® GOLDe									
Weight	N/A	N/A	170 g/m ²									
6.1 Flame Spread **	EN ISO 15025:2003-02 Procedure A 3 specimens [Not applicable to moisture barrier in certification]	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 Barrier Only Tested									
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</td> <td>≥3.0</td> <td>≥3.0</td> </tr> </table> (based on lowest result)		Level 1	Level 2	HTI ₂₄	≥9.0	≥13.0	HTI ₂₄₋₁₂	≥3.0	≥3.0	HTI ₂₄ ≥19 HTI ₂₄₋₁₂ ≥5.0 Level 2
	Level 1	Level 2										
HTI ₂₄	≥9.0	≥13.0										
HTI ₂₄₋₁₂	≥3.0	≥3.0										
6.3 Heat Transfer (Radiation) **	EN ISO 6942: 2002 Method B at 40kW/m ²	<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</td> <td>≥3.0</td> <td>≥4.0</td> </tr> </table> (based on lowest result)		Level 1	Level 2	RHTI ₂₄	≥10.0	≥18.0	RHTI ₂₄₋₁₂	≥3.0	≥4.0	RHTI ₂₄ ≥25 RHTI ₂₄₋₁₂ ≥7.0 Level 2
	Level 1	Level 2										
RHTI ₂₄	≥10.0	≥18.0										
RHTI ₂₄₋₁₂	≥3.0	≥4.0										
6.5 Heat Resistance	EN ISO 17493:2000 180°C for 5 mins After 5 wash-dry cycles	Materials shall not ignite or melt Shrinkage % < 5	No melt, drip, separation or ignition Shrinkage % = <1% 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 1. 40% NaOH 2. 36% HCl 3. 30% H ₂ SO ₄ 4. 100% o-xylene	No penetration to innermost surface. Repellency rate > 80%	1. > 95% 2. > 95% 3. > 95% 4. >95% No penetration									
6.11 Resistance to Water Penetration	EN 20811: 1992 (1996) After 5 wash-dry cycles	Level 1 < 20kPa Level 2 ≥ 20kPa	> 100 kPa Level 2									
6.11 Resistance to Water Penetration (SEAMS)	EN 20811: 1992 (1996) EN 811(1981) After 5 wash-dry cycles	Level 1 < 20kPa Level 2 ≥ 20kPa	> 100 kPa									
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 = < 20 m ² Pa/W									

ADDITIONAL STEDAIR® GOLDe TEST DATA ABOVE AND BEYOND EN469 REQUIREMENTS

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 1971-2018 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 1971-2018 Resistance of materials used in Protective Clothing to Penetration by synthetic blood	Pass = No Penetration	Pass = No Penetration

**Tested in composite form