

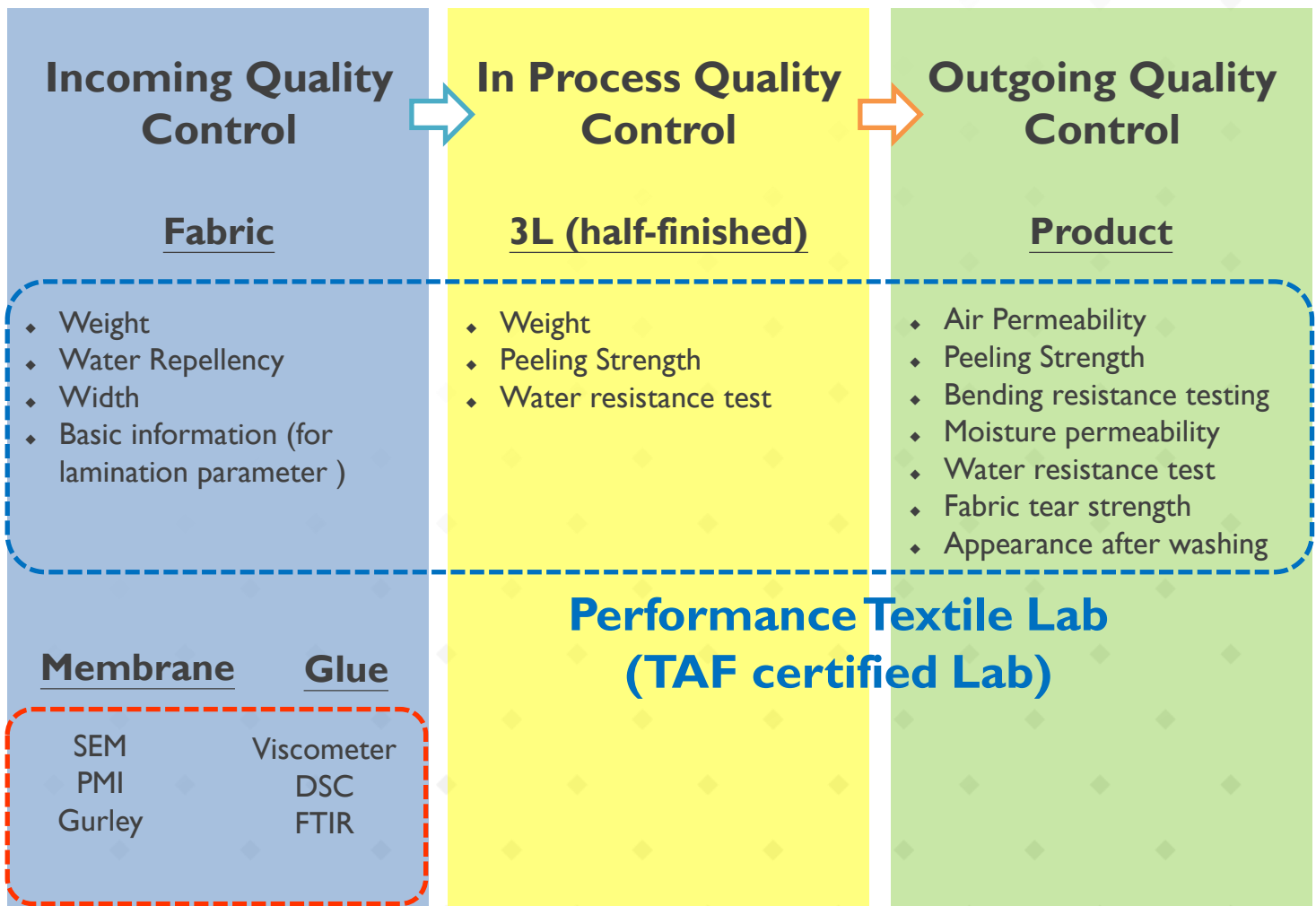


xpore



QUALITY SYSTEM
TAF CERTIFIED LAB

Xpore's waterproof-breathable textile technology is non-toxic and friendly to the environment. Tested against the toughest conditions at Xpore Lab, we ensure that users can enjoy the best waterproof, breathability, and dryness qualities and remain comfortable, regardless if it's light rain in the city or a storm on a mountain top.



BenQ Materials RD Center

- ◆ SEM: micro-structure of membrane
- ◆ PMI: pore sizes and distribution for membrane
- ◆ Gurley: air permeability test for membrane
- ◆ Viscometer: to measure viscosity of a glue
- ◆ DSC: thermo properties of glue
- ◆ FTIR: chemical identification

Xpore conducts strict testing using various fabric testing equipment to ensure that Xpore textiles have the best performance.



- ◆ Water Repellency
- ◆ Water resistance tester



- ◆ Moisture permeability testing machine
- ◆ UV back sheet tester



- ◆ Softness tester
- ◆ Peeling Strength tester
- ◆ Air permeability tester
- ◆ Martindale wear meter
- ◆ Bending resistance testing machine
- ◆ Fabric tear strength testing machine



- ◆ Smoothness appearance



- ◆ Washing machine
- ◆ Dryer

Type	Function	Equipment	Method	
Functional Clothing	Basic instrument	Round cutter 、 Cutter 、 Fabric thickness	Glue/ fabric basis weight, etc. (JIS L1096)	
		Electronic balance	Measuring amount of glue, fabric weight	
		Guard shell film	Measuring fabric bonding strength sample preparation	
	waterproof and moisture permeability		Universal tension machine	Measuring the bonding strength of the fabric
			Moisture permeability testing machine	JISL 1099-1A Positive cup 、 BI method
			Water resistance test machine	AATCC 127
			Air permeability tester	ASTM D 737
	Washing resistance		washing machine	EN ISO 6330
			Dryer	EN ISO 6330
			Autoclave	Measuring the resistance of medical fabrics to disinfection test
	fabric strength		Martindale wear meter	ASTM D4970
			Fabric wetness tester	ISO 4920
		Bending resistance testing machine	ISO7854	
		Fabric tear strength testing machine	ISO4674	
	Softness tester	ASTM D2923		
Seam Tape		Hot air blower	taping	
Functional Shoe	fabric strength	Resistance to tortuosity test(bally)	SATRA TM55	
		Flexibility test(vamp)	SATRA TM25	
		Bursting strength test	ASTM D2207	
		Fabric water absorption test	ASTM D1815	
	Shoe cover / whole shoe waterproof	Dynamic waterproof zigzag test	ISO 20344	
		Shoe cover leak test	Whole shoe leak test	
High/low temperature environment simulation		Humidity Chamber	Reliability test	
Human body feeling / high-Level moisture permeability	Human body feeling	Storm test laboratory	Reference TTRI & Science technology museum	
	high-Level moisture permeability	Wet impedance (Ret) testing machine	ISO11092	



Waterproof Performance

Water resistance
ISO 811

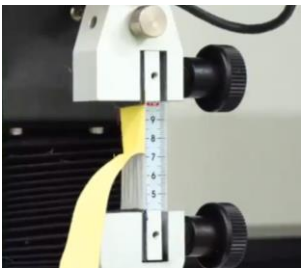
- ◆ Using ISO 811 standard with water resistance larger than 20K to ensure a high degree of Waterproof



Durability Performance

Washing process
ISO 6330

- ◆ Washing continuously for 24hrs with washing procedures set by Xpore to ensure high durability



Durability Performance

Peel Strength
ISO 2411

- ◆ Ensure that the membrane and fabric are firmly bonded, so the fabric is more durable and washable.



Comfort Performance

Water Vapor Permeability
JIS L1099 A1

- ◆ Using JIS L1099 A1 standard with water vapor permeability larger than 8K to ensure a high degree of water vapor permeability



Windproof
ASTM D737

- ◆ Using ASTM D737 standard with windproof larger than 0.05cfm to keep users warm and comfortable



Waterproofness of garments

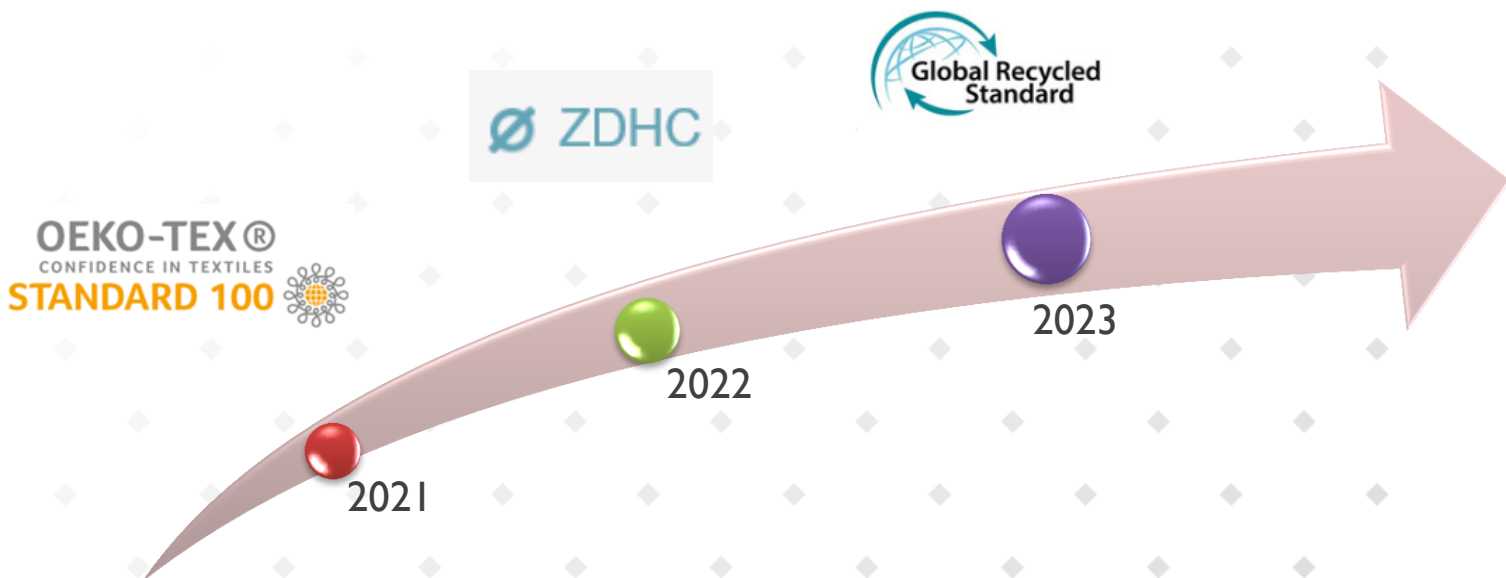
Modified Test
EN14360

- ◆ Test the waterproofness of garments and tape under the simulation of strong wind and heavy rain
 - Amount of water (2000 ± 50) l/(m²h)
 - Beaufort number 4(20–28 km/h)~6 (39–49 km/h)
 - Test duration 30 min

◆ Certification Obtained



◆ Certification Item for PROSPECT



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Website



<https://xpore-global.com>

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