SHANGHAI VANTELL INDUSTRY DEVELOPMENT CO., LTD.

Product Data Sheet

High-Performance Building Envelope Sealing Tapes

1 Window & Door Opening Sealing System

VWFAXW Series - Window Sealing Tape

High-performance sealing tape specifically engineered for the exterior perimeter of doors and windows within the building envelope. It provides robust waterproofing and airtightness, effectively preventing moisture intrusion and air leakage around rough openings. Its excellent conformability makes it perfect for sealing complex gaps, ensuring a continuous and durable weather barrier against harsh environmental conditions.

Typical Application Styles: North American Window flashing

Model	Specification (Width x Length), m	Package (Roll/Ctn)
VWFAXW-10023	0.1 x 23	6
VWFAXW-15023	0.15 x 23	4
VWFAXW-22523	0.225 x 23	3
VWFAXW-30023	0.3 x 23	2

Technical Specifications

Test Item	Standard / Method	Condition / Requirement	Test Result
Material	-	-	Butyl
Tensile Stress / Strength	AAMA 711-20 / ASTM D412	-	MD: 16,107 kPa; CD: 13,294 kPa
Tensile Strength of Backing / Membrane	AAMA 711-20 / ASTM D5034	-	MD: 6.7 N/mm; CD: 5.5 N/mm
Water Penetration Around Fasteners	AAMA 711-20, Section 5.2	-	No water leakage observed; water column change < 3 mm
Peel Adhesion to OSB	AAMA 711-20 / ASTM D3330, Method F	-	0.70 N/mm
Peel Adhesion to Aluminum Sheet	AAMA 711-20 / ASTM D3330, Method F	-	0.78 N/mm
UV Accelerated Aging	AAMA 711-20 / ASTM G154	336 hours UV exposure	0.22 N/mm
Thermal Cycling	AAMA 711-20, Section 5.6	10 cycles from 50°C to -40°C	0.65 N/mm
Cold Temperature Pliability	AAMA 711-20 / ASTM C765	-18°C	No cracking or loss of adhesion
Water Immersion Adhesion	AAMA 711-20, Section 5.8	7 days water immersion	0.74 N/mm; no visible changes

VWFHYP Series – Butyl Vapor Permeable Tape (External)

Premium self-adhesive vapor permeable tape designed for exterior applications on ultra-low energy building envelopes. Applied to the outside of windows and doors, it acts as an effective weather-resistive barrier that blocks liquid water ingress while simultaneously allowing trapped moisture vapor to escape from the wall cavity. This intelligent moisture management promotes a dry, healthy, and highly durable structural assembly.

Typical Application Styles: European low-energy window installation

Model	Specification (Width x Length), m	Package (Roll/Ctn)
VWFHYP-10023	0.1 x 23	6
VWFHYP-12023	0.12 x 23	5
VWFHYP-15023	0.15 x 23	4
VWFHYP-20023	0.2 x 23	3

Technical Specifications

Test Item	Standard / Method	Condition / Requirement	Test Result
Material	-	-	Butyl
Thickness	GB/T 328.5-2007 (Ref. ASTM D3652)	Mechanical measurement, (23±2)°C	0.73 mm
Basis Weight	GB/T 328.5-2007	-	481 g/m²
Tensile Strength	GB 23441-2009 (Ref. EN 12311-2)	(23±2)°C, 100 mm/min	MD: 280 N/50 mm; CD: 246 N/50 mm
Elongation at Maximum Tensile Force	GB 23441-2009 (Ref. EN 12311-2)	(23±2)°C, 100 mm/min	MD: 61%; CD: 72%
180° Peel Adhesion	JC/T 942-2004	Housewrap, (23±2)°C, 100 mm/min	0.63 N/mm
180° Peel Adhesion	JC/T 942-2004	OSB / Board, (23±2)°C, 50 mm/min	0.41 N/mm
180° Peel Adhesion	JC/T 942-2004	Aluminum plate, (23±2)°C, 50 mm/min	0.41 N/mm
180° Peel Adhesion	JC/T 942-2004	Cement board, (23±2)°C, 50 mm/min	0.40 N/mm
Water Vapor Resistance / Sd Value	GB/T 17146-2015 (Ref. EN 1931)	Test C	Sd ≤ 0.13 m
Water Resistance	GB/T 328.10-2007	1000 mm water column, 2 h	No leakage
Plaster Surface Adhesion	GB/T 35467-2017	(23±2)°C, 100 mm/min	0.90 N/mm

VWFAYP Series - Butyl Vapor Barrier Tape (Internal)

Advanced self-adhesive vapor barrier tape tailored for the interior side of high-performance and super-low energy buildings. It provides a high vapor-resistance layer on the interior side, helping prevent indoor moisture vapor from diffusing into the wall cavity. By ensuring maximum airtightness around window and door frames, it significantly reduces thermal bridging and energy loss, maintaining strict internal climate control.

Typical Application Styles: European low-energy window installation

Model	Specification (Width x Length), m	Package (Roll/Ctn)
VWFAYP-10023	0.1 x 23	6
VWFAYP-12023	0.12 x 23	5
VWFAYP-15023	0.15 x 23	4
VWFAYP-20023	0.2 x 23	3

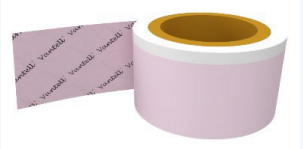
Technical Specifications

Test Item	Standard / Method	Condition / Requirement	Test Result
Material	-	-	Butyl
Thickness	GB/T 328.5-2007 (Ref. ASTM D3652)	Mechanical measurement, (23±2)°C	0.69 mm
Basis Weight	GB/T 328.5-2007	-	558 g/m²
Tensile Strength	GB 23441-2009 (Ref. EN 12311-2)	(23±2)°C, 100 mm/min	MD: 296 N/50 mm; CD: 235 N/50 mm
Elongation at Maximum Tensile Force	GB 23441-2009 (Ref. EN 12311-2)	(23±2)°C, 100 mm/min	MD: 59%; CD: 82%
180° Peel Adhesion	JC/T 942-2004	Housewrap, (23±2)°C, 100 mm/min	0.86 N/mm
180° Peel Adhesion	JC/T 942-2004	OSB / Board, (23±2)°C, 50 mm/min	0.40 N/mm
180° Peel Adhesion	JC/T 942-2004	Aluminum plate, (23±2)°C, 50 mm/min	0.45 N/mm
180° Peel Adhesion	JC/T 942-2004	Cement board, (23±2)°C, 50 mm/min	0.43 N/mm
Water Vapor Resistance / Sd Value	GB/T 17146-2015 (Ref. EN 1931)	Test C	Sd ≥ 272 m
Water Resistance	GB/T 328.10-2007	1000 mm water column, 2 h	No leakage
Plaster Surface Adhesion	GB/T 35467-2017	(23±2)°C, 100 mm/min	0.70 N/mm

VWFAIB Series - Acrylic Vapor Barrier Tape (Internal)

High-strength acrylic tape formulated specifically for interior vapor barrier sealing. This tape provides a high vapor-resistance layer against moisture vapor transmission, safeguarding insulation layers and structural components from condensation-related damage in highly airtight building designs.

Typical Application Styles: European low-energy window installation



Model	Specification (Width x Length), m	Package (Roll/Ctn)
VWFAIB-10023	0.1 x 23	6
VWFAIB-12023	0.12 x 23	5
VWFAIB-15023	0.15 x 23	4
VWFAIB-20023	0.2 x 23	3

Technical Specifications

Test Item	Standard / Method	Condition / Requirement	Test Result
Material	-	-	Acrylic
Basis Weight	-	-	≥ 250 g/m²
Thickness	GB/T 328.5 (Ref. ASTM D3652)	-	≥ 0.5 mm
Tensile Strength	GB 23441 (Ref. EN 12311-2)	-	MD: ≥ 500 N/50 mm; CD: ≥ 80 N/50 mm
180° Peel Adhesion to Aluminum Plate	GB/T 2792-2014	Room temperature / 80°C / -40°C	≥ 0.4 / ≥ 0.4 / ≥ 0.4 N/mm
180° Peel Adhesion to OSB Board	GB/T 2792-2014	Room temperature / 80°C / -40°C	≥ 0.4 / ≥ 0.4 / ≥ 0.4 N/mm
180° Peel Adhesion to MgO Board	GB/T 2792-2014	Room temperature / 80°C / -40°C	≥ 0.4 / ≥ 0.4 / ≥ 0.4 N/mm
Water Resistance	GB/T 328.10	100 cm hydrostatic head, 2 h	No leakage
Water Vapor Resistance / Sd Value	GB/T 17146 (Ref. EN 1931)	-	Sd ≥ 18 m

VWFAHP Series - Acrylic Breathable Tape (External)

Innovative acrylic breathable tape crafted for exterior airtightness applications. It seals structural gaps and joints while permitting essential outward vapor diffusion. This ensures that the building envelope remains airtight against external elements without trapping interstitial moisture, promoting superior building durability.

Typical Application Styles: European low-energy window installation

Model	Specification (Width x Length), m	Package (Roll/Ctn)
VWFAHP-10023	0.1 x 23	6
VWFAHP-12023	0.12 x 23	5
VWFAHP-15023	0.15 x 23	4
VWFAHP-20023	0.2 x 23	3

Technical Specifications

Test Item	Standard / Method	Condition / Requirement	Test Result
Material	-	-	Acrylic
Basis Weight	-	-	≥ 200 g/m²
Thickness	GB/T 328.5 (Ref. ASTM D3652)	-	≥ 0.5 mm
Tensile Strength	GB 23441 (Ref. EN 12311-2)	-	MD: ≥ 450 N/50 mm; CD: ≥ 130 N/50 mm
Elongation at Break	GB 23441 (Ref. EN 12311-2)	-	MD: ≥ 20%; CD: ≥ 80%
180° Peel Adhesion to Aluminum Plate	GB/T 2792-2014	Room temperature / 80°C / -40°C	≥ 0.4 / ≥ 0.4 / ≥ 0.4 N/mm
180° Peel Adhesion to OSB Board	GB/T 2792-2014	Room temperature / 80°C / -40°C	≥ 0.4 / ≥ 0.4 / ≥ 0.4 N/mm
180° Peel Adhesion to MgO Board	GB/T 2792-2014	Room temperature / 80°C / -40°C	≥ 0.4 / ≥ 0.4 / ≥ 0.4 N/mm
Water Resistance	GB/T 328.10	100 cm hydrostatic head, 2 h	No leakage
Water Vapor Resistance / Sd Value	GB/T 17146 (Ref. EN 1931)	-	Sd ≤ 0.25 m

2 WRB & Membrane Seam Sealing System

VSST Series - Acrylic Single-Sided Sealing Tape

Versatile acrylic single-sided tape dedicated to sealing seams and overlapping joints of various building membranes. It ensures continuous airtightness and water-resistance across the building envelope, providing strong, long-lasting adhesion to housewraps, breathable membranes, and vapor barriers to eliminate drafts and leaks.

Model	Specification (Width x Length), m	Package (Roll/Ctn)
VSST-5020	0.05 x 20	12

Technical Specifications			
Test Item	**Standard / Method**	**Substrate**	**Test Result**
Material	-	-	Acrylic
180° Peel Adhesion	JC/T 942-2004	Non-woven fabric	1.5 N/mm
180° Peel Adhesion	JC/T 942-2004	Board	1.5 N/mm
180° Peel Adhesion	JC/T 942-2004	Aluminum plate	1.9 N/mm
180° Peel Adhesion	JC/T 942-2004	Cement board	1.5 N/mm

VDST Series - Acrylic Double-Sided Sealing Tape

Specialized double-sided acrylic tape designed for securing and sealing overlapping layers of waterproof and vapor-permeable membranes. It creates an invisible, secure bond between membrane layers, preventing wind- washing and moisture penetration in critical envelope lap joints without compromising the exterior surface.

Model	Specification (Width x Length), m	Package (Roll/Ctn)
VDST-5020	0.05 x 20	12

Technical Specifications			
Test Item	**Standard / Method**	**Substrate**	**Test Result**
Material	-	-	Acrylic
180° Peel Adhesion	JC/T 942-2004	Non-woven fabric	1.5 N/mm
180° Peel Adhesion	JC/T 942-2004	Board	1.5 N/mm
180° Peel Adhesion	JC/T 942-2004	Aluminum plate	1.9 N/mm
180° Peel Adhesion	JC/T 942-2004	Cement board	1.5 N/mm

3 Waterproof Flashing & Butyl Sealing System

VBT Series - Waterproof Butyl Tape

Heavy-duty waterproof butyl tape built for universal flashing and sealing applications. Its superior conformability and exceptional adhesion make it ideal for sealing complex geometries, roof penetrations, wall joints, and terraces. It delivers immediate and permanent watertight protection across various demanding outdoor scenarios.

Model	Specification (Width x Length), m	Package (Roll/Ctn)
VBT-10023	0.1 x 23	6
VBT-15023	0.15 x 23	4
VBT-22523	0.225 x 23	3
VBT-30023	0.3 x 23	2

Technical Specifications			
Test Item	**Standard / Method**	**Substrate / Condition**	**Test Result**
Material	-	-	Butyl
Tack Retention	JC/T 942-2004	Requirement: ≥ 20 min	No slipping or detachment
Heat Resistance	JC/T 942-2004	80°C, 2 h	No bleeding, no cracking, no deformation
Low Temperature Flexibility	JC/T 942-2004	-40°C	No cracks
180° Peel Adhesion	JC/T 942-2004	Waterproof membrane; requirement: ≥ 0.4 N/mm	0.73 N/mm
180° Peel Adhesion	JC/T 942-2004	Cement mortar board; requirement: ≥ 0.6 N/mm	1.30 N/mm
180° Peel Adhesion	JC/T 942-2004	Pre-painted steel plate	1.60 N/mm
Peel Adhesion after Heat Aging	JC/T 942-2004	Waterproof membrane; 80°C, 168 h	1.45 N/mm
Peel Adhesion after Heat Aging	JC/T 942-2004	Cement mortar board; 80°C, 168 h	1.04 N/mm
Peel Adhesion after Heat Aging	JC/T 942-2004	Pre-painted steel plate; 80°C, 168 h	0.92 N/mm
Water Immersion Adhesion	JC/T 942-2004	Waterproof membrane; water immersion, 168 h	1.99 N/mm
Water Immersion Adhesion	JC/T 942-2004	Pre-painted steel plate; water immersion, 168 h	1.38 N/mm

VDSBT Series - Double-Sided Butyl Tape

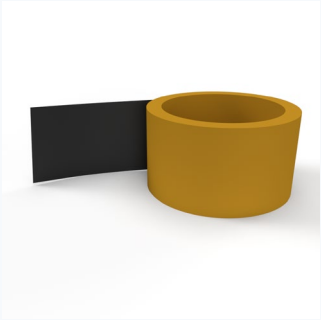
Premium double-sided butyl sealant tape used to create robust, watertight, and airtight bonds between diverse building materials. Highly effective for integrating interior vapor barrier films to walls and ceilings, as well as sealing lap joints in challenging environmental conditions requiring a strong, dual-sided gasket effect.

Model	Specification (Width x Length), m	Package (Roll/Ctn)
VDSBT-5023	0.05 x 23	12
VDSBT-10023	0.1 x 23	6

Technical Specifications			
Test Item	**Standard / Method**	**Substrate / Condition**	**Test Result**
Material	-	-	Butyl
Heat Resistance	JC/T 942-2004	80°C, 2 h	No bleeding, no cracking, no deformation
Low Temperature Flexibility	JC/T 942-2004	-40°C	No cracks
180° Peel Adhesion	JC/T 942-2004	Waterproof membrane; requirement: ≥ 0.4 N/mm	0.73 N/mm
180° Peel Adhesion	JC/T 942-2004	Cement mortar board; requirement: ≥ 0.6 N/mm	1.30 N/mm
180° Peel Adhesion	JC/T 942-2004	Pre-painted steel plate	1.60 N/mm
Peel Adhesion after Heat Aging	JC/T 942-2004	Waterproof membrane; 80°C, 168 h	1.45 N/mm
Peel Adhesion after Heat Aging	JC/T 942-2004	Cement mortar board; 80°C, 168 h	1.04 N/mm
Peel Adhesion after Heat Aging	JC/T 942-2004	Pre-painted steel plate; 80°C, 168 h	0.92 N/mm
Water Immersion Adhesion	JC/T 942-2004	Waterproof membrane; water immersion, 168 h	1.99 N/mm
Water Immersion Adhesion	JC/T 942-2004	Pre-painted steel plate; water immersion, 168 h	1.38 N/mm

VDT Series - Vantell Deck Tape / Roof Deck Tape

Durable butyl deck and roof deck sealing tape designed for protecting deck joists, roof deck seams, sheathing joints, and critical flashing details from water intrusion. It provides strong adhesion to common building boards and metal substrates, helping improve long-term durability in outdoor deck and roofing applications.



Model	Specification (Width x Length), m	Package (Roll/Ctn)
VDT-5020	0.05 x 20	12
VDT-10020	0.10 x 20	6

Technical Specifications

Test Item	Standard / Method	Substrate / Condition	Test Result
Material	-	-	Butyl
Basis Weight	-	-	687 g/m²
Thickness	-	-	0.56 mm
180° Peel Adhesion	GB/T 2792-2014	Aluminum board; room temperature (28°C), 24 h	1.351 N/mm
180° Peel Adhesion	GB/T 2792-2014	Aluminum board; 80°C for 24 h, then test at room temperature	1.24 N/mm
180° Peel Adhesion	GB/T 2792-2014	Aluminum board; -40°C for 24 h, then test at room temperature	1.304 N/mm
180° Peel Adhesion	GB/T 2792-2014	OSB board; room temperature (28°C), 24 h	1.174 N/mm
180° Peel Adhesion	GB/T 2792-2014	OSB board; 80°C for 24 h, then test at room temperature	1.122 N/mm
180° Peel Adhesion	GB/T 2792-2014	OSB board; -40°C for 24 h, then test at room temperature	1.111 N/mm
180° Peel Adhesion	GB/T 2792-2014	MgO board; room temperature (28°C), 24 h	1.293 N/mm
180° Peel Adhesion	GB/T 2792-2014	MgO board; 80°C for 24 h, then test at room temperature	1.249 N/mm
180° Peel Adhesion	GB/T 2792-2014	MgO board; -40°C for 24 h, then test at room temperature	1.271 N/mm

VCJT Series - Concrete Structure Joint Butyl Tape

Self-adhesive butyl sealing tape designed for concrete structure joints, precast panel joints, slab-to-wall transitions, and other critical waterproofing details. It forms a conformable sealing layer on concrete and related building substrates, helping reduce water intrusion at joints and transitions.

Model	Specification (Width x Length), m	Package (Roll/Ctn)
VCJT-10020	0.10 x 20	6
VCJT-15020	0.15 x 20	4
VCJT-20020	0.20 x 20	3

General Product Information

Item	Description
Material	Butyl
Product Type	Self-adhesive waterproof concrete joint sealing tape
Primary Applications	Concrete structure joints; precast panel joints; slab-to-wall transitions; waterproofing and flashing details
Typical Substrates	Concrete, cementitious board, masonry, metal, and compatible waterproof membranes
Surface Requirement	Substrate should be clean, dry, firm, and free of dust, oil, and loose particles
Installation Note	For porous or dusty concrete surfaces, primer or project-specific adhesion verification is recommended

VFSP Series - Fastener Sealing Patch

Die-cut self-adhesive butyl sealing patch designed to seal fastener holes, screw penetrations, nail holes, and small localized punctures in building envelope assemblies. It provides a quick, localized waterproof and airtight repair layer for membranes, sheathing, roofing details, and related substrates.

Model	Specification	Package
VFSP-50	Ø 50 mm round patch	Custom
VFSP-75	Ø 75 mm round patch	Custom
VFSP-100	Ø 100 mm round patch	Custom

General Product Information

Item	Description
Material	Butyl
Product Type	Die-cut self-adhesive fastener sealing patch
Primary Applications	Sealing fastener holes, nail holes, screw penetrations, and small punctures in waterproofing or air barrier details
Typical Substrates	WRB, housewrap, roofing underlayment, waterproof membranes, OSB, plywood, MgO board, cement board, and metal
Surface Requirement	Substrate should be clean, dry, firm, and free of dust, oil, and loose particles
Installation Note	Press firmly around the full patch area; project-specific adhesion verification is recommended before large-scale use