



中国认可
国际互认
检测
TESTING
CNAS L2249

REPORT No. 26-0167-5

TEST REPORT

PRODUCT Film Faced Plywood

CUSTOMER Benchmark Industries Company Limited

CLASSIFYING ENTRUSTED TESTING

国家林业和草原局人造板及其制品质量检验检测中心（南京）
WOOD-BASED PANEL QUALITY INSPECTION AND TESTING CENTER OF
NATIONAL FORESTRY AND GRASSLAND ADMINISTRATION (NANJING)

南京林业大学木材及其制品测试中心

WOOD & WOODEN PRODUCT TESTING CENTER OF NANJING FORESTRY UNIVERSITY

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TESTING REPORT

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Inspected unit	Benchmark Industries Company Limited		
Production unit	Benchmark Industries Company Limited		
Product name	Film Faced Plywood	Trademark	/
Product size	Thickness: 18mm	Testing classification	Entrusted testing
Grade	/	Standard	EN 310:1993 EN 314-1:2004
Production date	March 6, 2026	Sample size	mm: 500×500×18 5pcs
Bonding class	Class 3	Wood species	Eucalyptus core
Testing item	Bonding quality、 Bending strength、 Modulus of elasticity in bending		
Conclusion	Required by Benchmark Industries Company Limited, According to the standard EN 314-1 and EN 310, Wood & Wooden product testing center of Nanjing Forestry University tests its sending the Plywood samples' Bonding quality、 Bending strength、 Modulus of elasticity in bending. Test values see in Page 2 /Page 3 /Page 4. Testing unit (stamp): Issuing date: March 31, 2026		
Remarks	1. The production unit's name and trademark of the product are supplied by the inspected unit. 2. This report is only responsible for sending samples. 3. Bonding quality' details of pretreatments EN314-1 5.1.1: Immersion for 24 hours in water at $(20 \pm 3)^{\circ}\text{C}$ and EN314-1 5.1.3: Immersion for 4 hours in boiling water, then drying in the ventilated drying oven for 16 hours to 20 hours at $(60 \pm 3)^{\circ}\text{C}$, then Immersion in boiling water for 4 hours, followed by cooling in water at $(20 \pm 3)^{\circ}\text{C}$ for at least 1 hour to decrease temperature of test pieces to 20°C.		

Approved by: 陈洪机 Reviewed by: 梁星宇 Compiled by: 刘娜

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Inspected unit		Benchmark Industries Company Limited		
Product name		Film Faced Plywood	Sampling method	Sending
Product size		Thickness: 18mm	Standard	EN 310:1993 EN 314-1:2004
Testing date		March 16, 2026 TO March 31, 2026		
Testing item		Unit	Standard used	Tested value
Bonding quality (glueline 1)	Mean shear strength(f_v)	N/mm ²	EN 314-1 (pretreatments by EN314-1 5.1.1)	1.44
	The standard deviation	—		0.16
	Mean apparent cohesive wood failure (W)	%		44
Bonding quality (glueline 2)	Mean shear strength(f_v)	N/mm ²	EN 314-1 (pretreatments by EN314-1 5.1.1)	0.84
	The standard deviation	—		0.20
	Mean apparent cohesive wood failure (W)	%		43
Bonding quality (glueline 3)	Mean shear strength(f_v)	N/mm ²	EN 314-1 (pretreatments by EN314-1 5.1.1)	1.05
	The standard deviation	—		0.25
	Mean apparent cohesive wood failure (W)	%		48
Bonding quality (glueline 4)	Mean shear strength(f_v)	N/mm ²	EN 314-1 (pretreatments by EN314-1 5.1.1)	1.02
	The standard deviation	—		0.18
	Mean apparent cohesive wood failure (W)	%		25
Bonding quality (glueline 5)	Mean shear strength(f_v)	N/mm ²	EN 314-1 (pretreatments by EN314-1 5.1.1)	1.79
	The standard deviation	—		0.45
	Mean apparent cohesive wood failure (W)	%		70
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Inspected unit		Benchmark Industries Company Limited		
Product name		Film Faced Plywood	Sampling method	Sending
Product size		Thickness: 18mm	Standard	EN 310:1993 EN 314-1:2004
Testing date		March 16, 2026 TO March 31, 2026		
Testing item		Unit	Standard used	Tested value
Bonding quality (glueline 1)	Mean shear strength(fv)	N/mm ²	EN 314-1 (pretreatments by EN314-1 5.1.3)	1.31
	The standard deviation	—		0.33
	Mean apparent cohesive wood failure (W)	%		59
Bonding quality (glueline 2)	Mean shear strength(fv)	N/mm ²	EN 314-1 (pretreatments by EN314-1 5.1.3)	0.81
	The standard deviation	—		0.28
	Mean apparent cohesive wood failure (W)	%		56
Bonding quality (glueline 3)	Mean shear strength(fv)	N/mm ²	EN 314-1 (pretreatments by EN314-1 5.1.3)	0.92
	The standard deviation	—		0.12
	Mean apparent cohesive wood failure (W)	%		67
Bonding quality (glueline 4)	Mean shear strength(fv)	N/mm ²	EN 314-1 (pretreatments by EN314-1 5.1.3)	0.91
	The standard deviation	—		0.24
	Mean apparent cohesive wood failure (W)	%		40
Bonding quality (glueline 5)	Mean shear strength(fv)	N/mm ²	EN 314-1 (pretreatments by EN314-1 5.1.3)	1.28
	The standard deviation	—		0.32
	Mean apparent cohesive wood failure (W)	%		67
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WOOD & WOODEN PRODUCT TESTING CENTER OF NANJING FORESTRY UNIVERSITY
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4 PAGES No.4

Inspected unit	Benchmark Industries Company Limited				
Product name	Film Faced Plywood	Sampling method	Sending		
Product size	Thickness: 18mm	Standard	EN 310:1993 EN 314-1:2004		
Testing date	March 16, 2026 TO March 31, 2026				
Testing item		Unit	Standard used	Tested value	
Bending strength	Longitudinal grain	N/mm ²	EN 310	Panel average	55.0
				Standard deviation	9.3
	Cross grain	N/mm ²		Panel average	42.3
				Standard deviation	6.2
Modulus of elasticity in bending	Longitudinal grain	N/mm ²	EN 310	Panel average	7970
				Standard deviation	452.1
	Cross grain	N/mm ²		Panel average	6120
				Standard deviation	422.8
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Remarks	Bending strength(specimen dimension:410mm×50mm×18mm; number: 6 with Longitudinal grain fibers and 6 with Cross grain fibers) Bonding quality(specimen dimension: 100mm×25mm×18mm; 10 test pieces per glue line) Modulus of elasticity in bending(specimen dimension: 410mm×50mm×18mm; number: 6 with Longitudinal grain fibers and 6 with Cross grain fibers)				

