

Comprehensive Test Report

English Reference Translation

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Prepared: 15 October 2026

Test Report

Report No.: SHS25100028-01; date: 2025-10-28 (sample-information page); results dated 2025-11-24

Client: Shandong Xiangjie New Materials Co., Ltd.

Sample: Wood decorative panels, carbon crystal panels, impact-resistant panels, bamboo-wood fiber wall panels and marine panels

Inspection category: commissioned sample inspection.

ICAS Testing Technology Service (Shanghai) Co., Ltd. | No. 155 Pingbei Road, Minhang District, Shanghai |
Hotline: 400-182-9001 | Tel: 0086 21 51682918 | www.icas.org.cn

Sample and Test Information

Field	Information
Client / manufacturer	Shandong Xiangjie New Materials Co., Ltd.
Address	100 m east of Provincial Road 229, Houlizhuang Village, Kuangkeng Town, Lanling County, Linyi City, Shandong Province
Sample name (this page)	Wood decorative panels, carbon crystal panels, Jingang wood, bamboo-wood fiber wall panels and marine panels
Model / specification	3000 x 600 mm
Production date / batch	2025.10.23
Quantity	12 pieces
Sample No.	S25100028-01
Received	2025-10-28
Test period	2025-10-28 to 2025-11-24
Testing address	No. 155 Pingbei Road, Minhang District, Shanghai
Prepared by	Niu Lidong
Reviewed by	Sun Changsheng
Issued by	Zhang Jinjie, Authorized Signatory

The samples and information were supplied and confirmed by the client. ICAS is not responsible for verifying sample authenticity or for confirming the accuracy, appropriateness and/or completeness of the information supplied by the client.

Methods: GB/T 24137-2009, Wood-plastic decorative panels; GB/T 17657-2013, Physical and chemical test methods for wood-based panels and surface-decorated wood-based panels; GB 8624-2012, Reaction-to-fire classification of building materials.

Assessment: GB/T 24137-2009 and client requirements; GB/T 39600-2021, Formaldehyde emission grading for wood-based panels and their products; GB 8624-2012. See subsequent pages for results.

Source Page 3

This source page contains only laboratory / contact information. No test results appear on it.

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Source control number: NCA0643391.

Physical Properties

Item	Unit	Standard (as printed)	Requirement	Result	Assessment
Dimensional stability	%	GB/T 17657-2022	≤ 0.1	0.08	Conforms
Moisture content	%	GB/T 17657-2022	≤ 0.1	0.06	Conforms
Mean flexural strength	MPa	GB/T 17657-2022	≥ 20	23	Conforms
Minimum flexural strength	MPa	GB/T 17657-2022	≥ 16	18	Conforms
Longitudinal flexural modulus	MPa	GB/T 17657-2022	≥ 170	186	Conforms
Transverse flexural modulus	MPa	GB/T 17657-2022	≥ 60	96	Conforms
Shore hardness	HD	GB/T 2411	≥ 60	62	Conforms
Peel force	N	JB/T 5792021	≥ 50	58	Conforms
Thickness swelling after water absorption	%	GB/T 17657-2022	≤ 0.22	0.16	Conforms
Paint-film adhesion	Grade	GB/T 15036.2-2018	Appearance grades 1-5	1	Conforms
Impact resistance	/	ASTM D4495-21	Drop weight 4.54 kg; diameter 63.5 mm; no penetration at 500 mm	No penetration	Conforms
Falling-ball impact	mm	JB/T 579-2021	Dent diameter ≤ 12	6	Conforms
Surface bond strength	MPa	GB/T 17657-2022	≥ 1.32	1.82	Conforms
Surface stain resistance	Grade	JB/T 5792021	≤ 2	0	Conforms
Artificial weathering resistance	Grade	JB/T 5792021	Light colorfastness, gray scale ≥ 3	4	Conforms
Transverse static bending strength	MPa	GB/T 24137-2009	≥ 1.3	1.6	Conforms
Longitudinal static bending strength	MPa	GB/T 24137-2009	≥ 2.6	2.9	Conforms

Remarks: none. Standards and values are reproduced as printed in the source, including differences between its sample-information and results pages.

Formaldehyde, TVOC and Fire Classification

Item	Method	Unit	Detection limit	Result	Limit / grade	Assessment
Formaldehyde emission	GB 18580	mg/m ³	0.005	0.01	≤0.025; E0	Conforms
TVOC	HJ 571-2010	mg/(m ² .h)	-	0.23	≤0.5	Conforms

Assessment basis printed in the source: GB 18580, Formaldehyde emission grading for wood-based panels and their products; HJ 571-2010, Environmental labeling product technical requirements.

Reaction-to-fire assessment: GB 8624-2012. The sample meets Class B1(C) for flat building materials.

Item	Requirement	Result	Assessment
FIGRA0.4MJ (W/s)	≤250	146.3	Conforms
Lateral flame spread	Does not reach long-wing edge	Did not reach long-wing edge	Conforms
THR600s (MJ)	≤15	7.2	Conforms
Flame-tip height within 60 s (mm)	≤150	Surface ignition <150; edge ignition <150	Conforms
Flaming droplets igniting filter paper within 60 s	None	Surface / edge: no droplets; no ignition of filter paper (source contains a typographical wording error)	Conforms
Overall assessment	Standard requirements	GB 8624-2012, flat materials Class B1(C)	Conforms

Methods: GB/T 20284-2006; GB/T 8626-2007.

The results relate only to specimen performance under the specified test conditions and must not be used as the sole basis for assessing potential fire hazards in actual use.

Sample Photograph

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ICAS Testing Center: Tel. 0086 21 51682918; info@icas.org.cn; No. 155 Pingbei Road / No. 1298 Pingan Road, Minhang District, Shanghai.

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检测报告

No:SHS25100028-01

样 品 名 称	:木饰面碳晶板防撞板竹木纤维墙板海洋板
委 托 单 位	:山东祥杰新材料有限公司
检 测 类 别	:委托送检

英格尔检测技术服务(上海)有限公司



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样品数量 : 12块

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检测内容:	
检测地址	:上海市闵行区瓶北路155号
检测项目	:请参见下一页
检测方法	GB/T 24137-2009木塑装饰板、GB/T 17657-2013人造板及饰面人造板理化性能试验方法、GB 8624-2012 建筑材料的燃烧等级分级
判定依据	GB/T24137-2009木塑装饰板及委托方要求、GB/T 39600-2021《人造板及其制品甲醛释放量分级》、GB 8624-2012 建筑材料的燃烧等级分级
检测结论	:请参见下一页

(孙昌盛)

(~~拟~~) 签字人: 张金杰)



检测报告

报告编号：SHS25100028-01

日期：2025-11-24

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检测结果:

一、物理性能

序号	检测项目		单位	检测标准	技术要求	检测结果	单项判定
1	尺寸稳定性		%	GB/T17657-2022	≤0.1	0.08	符合
2	含水率		%	GB/T17657-2022	≤0.1	0.06	符合
3	抗弯强度	平均值	MPa	GB/T17657-2022	≥20	23	符合
		最小值	MPa		≥16	18	符合
4	抗弯弹性模量	纵向	MPa	GB/T17657-2022	≥170	186	符合
		横向	MPa		≥60	96	符合
2	邵氏硬度		HD	GB/T 2411	≥60	62	符合
3	剥离力		N	JB/T5792021	≥50	58	符合
4	吸水厚度膨胀率		%	GB/T17657-2022	≤0.22	0.16	符合
5	漆膜附着力		级	GB/T15036.2-2018	外观等级分为1-5级；	1	符合
6	耐冲击性		/	ASTM D4495-21	落锤质量4.54Kg ; 落锤直径63.5mm, 500mm 处未冲破	未冲破	符合
7	落球冲击		mm	JB/T579-2021	压痕直径≤12	6	符合
8	表面胶合强度		MPa	GB/T17657-2022	≥1.32	1.82	符合
9	表面耐污染性能		级	JB/T5792021	≤2	0	符合
10	耐人工气候老化		级	JB/T 5792021	耐光色牢度(灰色样卡)≥3级	4	符合
11	静曲强度	横向	MPa	GB/T 24137-2009	≥1.3	1.6	符合
		纵向	MPa		≥2.6	2.9	符合
备注：无							



检测报告

报告编号：SHS25100028-01

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二、 甲醛释放量

判定依据：GB 18580 《人造板及其制品甲醛释放量分级》

检测项目	检测方法	单位	检出限	检测结果	限值量	甲醛释放限量等级	单项判定
甲醛释放量	GB 18580	mg/m³	0.005	0.01	≤0.025	E0级	符合

判定依据：HJ 571-2010 《环境标志产品技术要求》

检测项目	单位	检测标准	技术要求	检测结果	单项判定
总挥发有机化合物 (TVOC)	mg/ (m² . h)	HJ 571-2010	≤0.5	0.23	符合

三、 燃烧性能分级

判定依据：GB 8624-2012建筑材料的燃烧等级分级

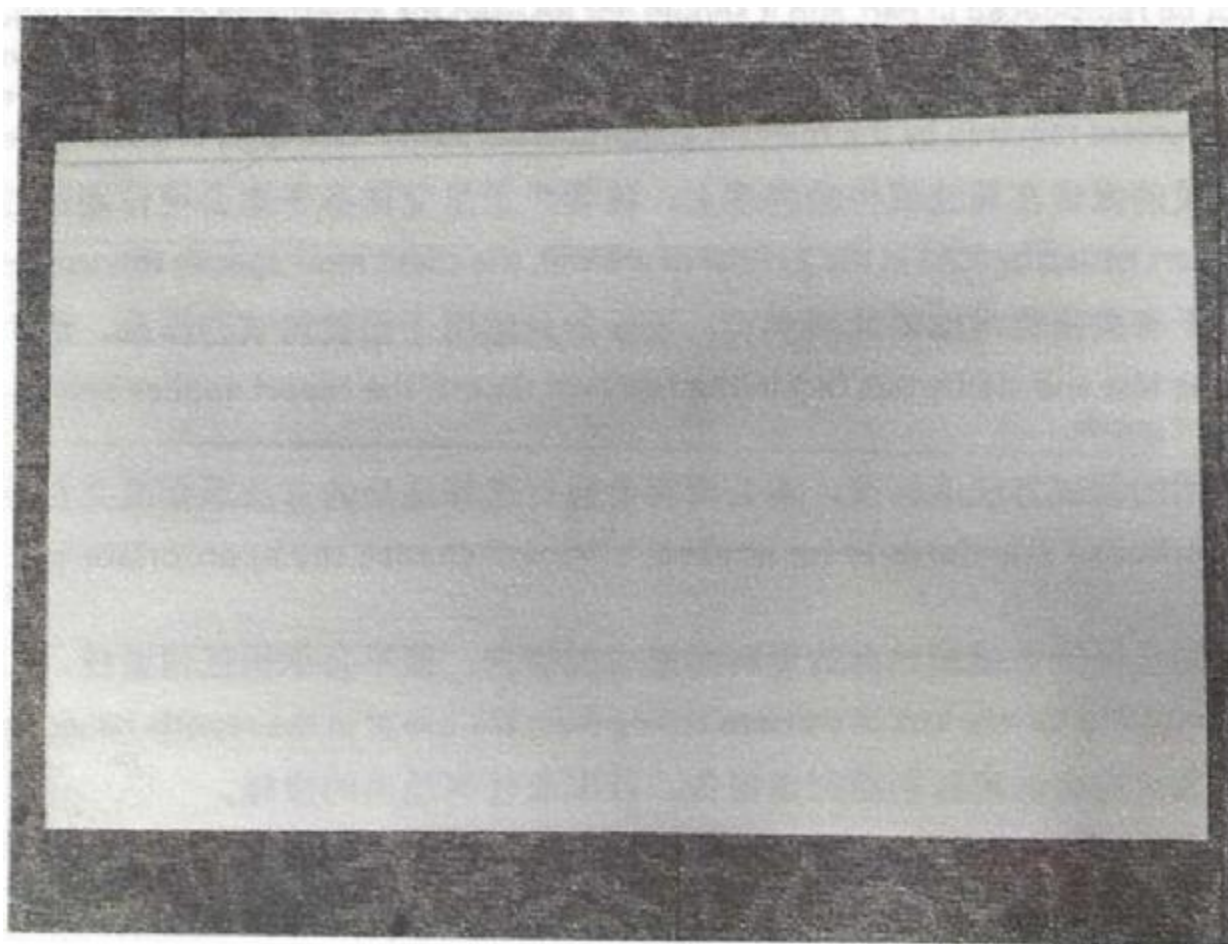
检测结果：经检测，所检样品符合GB 8624-2012建筑材料的燃烧等级分级平板状B1(C)级。

检测项目	项目描述	单位	标准值	实测值	评价	方法标准/备注
燃烧性能 分级	燃烧增长速率指数 FIGRA0.4MJ	W/s	≤250	146.3	符合	GB/T 20284-2006 GB/T 8626-2007
	火焰横向蔓延	---	未达到试样 长翼边缘	未达到试样长翼边 缘		
	600s的总放热量 THR600s	MJ	≤15	7.2		
	60s内焰尖高度	mm	≤150	表面点火：<150 边缘点火：<150		
	60s内无燃烧滴落 物引燃滤纸现象	---	无	表面点火：无滴落 物，为引燃滤纸 边缘点火：无滴落 物，为引燃滤纸		
	综合评定	---	按标准要求	符合GB8624-2012 平板状B i（C）级		
备注	试验结果只与特定的试验条件下试验的性能有关；试验结果不能作为评估制品在实际使用条件下潜在火灾危险性的唯一依据。					



检测报告

样品照片



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NCA

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31/25/18/8F Huading Tower,2368W.Zhongshan Rd,Xuhui District,Shanghai

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