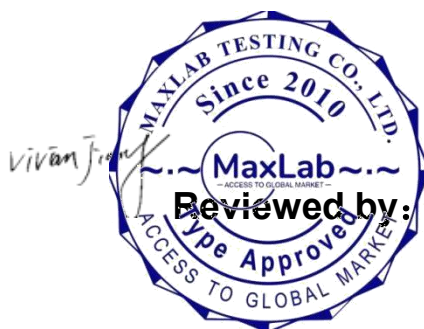


Applicant	Zhengzhou Vision International Trading Co., Ltd.
Address	Unit B04, 4th Floor, Binfeng City, Building 2, Compound 198, South Songshan Road, Huaihe Road Subdistrict, Erqi District, Zhengzhou City, Henan Province
Manufacturer	Zhengzhou Vision International Trading Co., Ltd.
Address	Unit B04, 4th Floor, Binfeng City, Building 2, Compound 198, South Songshan Road, Huaihe Road Subdistrict, Erqi District, Zhengzhou City, Henan Province

Equipment Under Test (EUT):

Sample Name	COLOUR STEEL ACTIVITY ROOM
Model No.	10FT COLOUR STEEL ACTIVITY ROOM 20FT COLOUR STEEL ACTIVITY ROOM 30FT COLOUR STEEL ACTIVITY ROOM 40FT COLOUR STEEL ACTIVITY ROOM
Trademark	N/A
Date of Receipt	01 September 2026
Date of Test	01 September 2026 To 07 September 2026
Standard(s) :	EN 1090-1:2009+A1:2011, EN 14509:2013, EN 14351-1:2006+A2:2016
Test Result	PASS
Date of Issue	07 September 2026

Approved by:



Reviewed by:

Gravin Zhang

Tested by:

Grace

TEST REPORT EN 1090-1:2009+A1:2011 Execution of steel structures and aluminium structures Part 1: Requirements for conformity assessment of structural components EN 14509:2013 Self-supporting double skin metal faced insulating panels - Factory made products - Specifications EN 14351-1:2006+A2:2016 Windows and doors - Product standard, performance characteristics - Part 1: Windows and external pedestrian doorsets without resistance to fire and/or smoke leakage characteristics	
Report reference No	MAX8890L151E
Testing Laboratory	
Name:	MAXLAB TESTING CO.,LTD.
Address:	1/F, Building B, Xinshidai GR Park,Shiyan Street, Bao'an District, Shenzhen,Guangdong, 518052, People's Republic of China
Date of issue	07 September 2026
Applicant Name:	Zhengzhou Vision International Trading Co., Ltd.
Applicant Address:	Unit B04, 4th Floor, Binfeng City, Building 2, Compound 198, South Songshan Road, Huaihe Road Subdistrict, Erqi District, Zhengzhou City, Henan Province
Test specification:	
Standard:	EN 1090-1:2009+A1:2011, EN 14509:2013, EN 14351-1:2006+A2:2016
Test procedure:	Regulation (EU) No 305/2011 (Construction Products Regulation)
Non-standard test method:	N/A
Test item	
Description:	COLOUR STEEL ACTIVITY ROOM
Trademark :	N/A
Model and/or type reference:	10FT COLOUR STEEL ACTIVITY ROOM 20FT COLOUR STEEL ACTIVITY ROOM 30FT COLOUR STEEL ACTIVITY ROOM 40FT COLOUR STEEL ACTIVITY ROOM
Manufacturer :	Zhengzhou Vision International Trading Co., Ltd.
Address :	Unit B04, 4th Floor, Binfeng City, Building 2, Compound 198, South Songshan Road, Huaihe Road Subdistrict, Erqi District, Zhengzhou City, Henan Province
Possible test case verdicts	
- test case does not apply to the test object:	N(.A)
- test object does meet the requirement :	P(Pass)
- test object does not meet the requirement:	F(Fail)

EN 1090-1:2009+A1:2011			
Clause	Requirements - Test	Result - Remark	Verdict
1	Scope		P
	This European Standard specifies requirements for conformity assessment of performance characteristics for structural steel and aluminium components as well as for kits placed on the market as construction products. The conformity assessment covers the manufacturing characteristics, and where appropriate the structural design characteristics.		P
2	Normative references		P
3	Terms, definitions and abbreviations		P
4	Requirements		P
4.1	Constituent products		P
4.1.1	General		P
	Structural components of steel and aluminium shall be made of constituent products as given in 4.1.2 and 4.1.3, respectively.		P
4.1.2	Constituent products for steel components		P
4.1.3	Constituent products for aluminium components		P
4.2	Tolerances on dimensions and shape		P
	The geometrical tolerances specified in EN 1090-2 and EN 1090-3 for the essential tolerances shall apply to all components . If any special tolerances apply these shall be stated in the component specification.		P
4.3	Weldability		P
	If steel and aluminium structural components are to be declared as weldable they shall be made of weldable constituent products according to EN 1090-2 or EN 1999-1-1 as appropriate. If relevant to the performance of a steel product the through-thickness properties shall be declared.		P
4.4	Fracture toughness		P
	Steel components shall be manufactured from constituent products that meet the fracture toughness properties required. The constituent products specified in the component specification shall be used.		P
4.5	Structural characteristics		P
4.5.1	General		P
4.5.2	Load bearing capacity		P

	Declaration of the load bearing capacity may refer to the resistance of the cross sections of the component, expressed as a characteristic value or as a design value. Alternatively the load bearing capacity may be expressed in terms of the loads the component can carry according to the applied design provisions, expressed as a characteristic value or as a design value.		P
4.5.3	Fatigue strength		P
	Declaration of the fatigue strength of a structural component shall be specific to fatigue actions against which the fatigue strength has been assessed.		P
4.5.4	Resistance to fire		P
	Declaration of the fire resistance of a structural member may refer to the fire exposure represented by the standard temperature-time relationship to be used for assessment of the performance characteristics R, E, I and M in the classification according to EN 13501-2.		P
4.5.5	Deformation at serviceability limit state		P
	The deformations at serviceability limit state determined by using the appropriate combination of actions shall be within the required limits for vertical and horizontal deformations specified in the design assumptions and/or European Standards		P
4.6	Reaction to fire		P
	Declaration of the reaction to fire shall be in accordance with the classes and test requirements given in EN 13501-1.		P
4.7	Dangerous substances		P
	Dangerous substances in this standard refer to the material properties with regard to emission of radioactivity or release of cadmium. Only constituent products shall be used for which any emission of radioactivity and any release of cadmium is non-existent or limited to be within an accepted limit in the territory of intended destination. Materials used in coatings shall not release or emit any dangerous substances in excess of the maximum permitted levels specified in a relevant European Standard for the material, or permitted in national provisions of the member state of destination.		P
4.8	Impact resistance		P
	Impact resistance is a material characteristic which expresses the same properties of steel as fracture toughness. There are no additional requirements.		P
4.9	Durability		P
	The component specification shall specify any requirements for corrosion protection. See EN 1090-2 for carbon steel, EN 1993-1-4 for stainless steel and EN 1999-1-1 for aluminium.		P
5	Evaluation methods		P
5.1	General		P

5.2	Constituent products		P
	The constituent products shall be evaluated by checking that the inspection documents for the products used comply with the requirements of the component specification.		P
	The evaluation of constituent products shall also include a check that the geometry of the products is correct, using methods and instruments in accordance with 5.3.		P
5.3	Tolerances on dimensions and shape		P
	Geometrical tolerances shall be measured using methods and instruments selected from those listed in ISO 7976-1 and ISO 7976-2 and in accordance with provisions given in EN 1090-2 and EN 1090-3. Accuracy of measurements shall be assessed in accordance with ISO 17123-1.		P
5.4	Weldability		P
	If through-thickness properties are specified for steel products, they shall be assessed according to the quality classes: given in EN 10164.		P
5.5	Fracture toughness		P
	For fracture toughness of the constituent products, reliance may be placed on properties for impact strength associated with materials and components used as constituent products provided these are given by reference to a European Technical Specification and inspection documents.		P
5.6	Structural characteristics		P
5.6.1	General		P
	Assessment of structural characteristics shall be based on: a) the structural design, and b) the manufacturing characteristics of the component.		P
5.6.2	Structural design		P
	An adequate structural design may be demonstrated by: a) structural calculations, or b) structural testing supported by structural calculations for the component.		P
5.6.2.1	Structural calculations		P
5.6.2.2	Structural testing		P
5.6.3	Manufacturing characteristics		P
	The manufacturing characteristics shall be assessed in relation to the requirements in the component specification.		P
5.7	Resistance to fire		P
	The component specification shall specify all necessary information on the evaluation methods to be used; either they are performed by calculation or by testing.		P

5.8	Reaction to fire		P
	Constituent products of steel and aluminium fall within Class A1 of the European classification with respect to reaction to fire, and no further documentation is required. Galvanized steels and anodized aluminium components are also Class A1.		P
	In the case of coated components it shall be demonstrated that the component has a fire classification that complies with the requirements according to its use and function. Class 1 cation shall be performed in accordance with EN 13501-1.		P
5.9	Dangerous substances		P
	The requirement in 4.7 is fulfilled if the constituent products comply with the European Standards referenced in EN 1090-2 for steel or EN 1090-3 for aluminium. No further testing is required unless protective coatings are used for which a possible emission cannot be assessed indirectly by control of the raw coating material.		P
5.10	Impact resistance		P
	Impact resistance of steel products is assessed by evaluation of the fracture toughness of the product.		P
5.11	Durability		P
6	Evaluation of conformity		P
6.1	General		P
	The conformity of a component or kit with the requirements of this European Standard and with the stated values (including classes) shall be demonstrated by: a) initial type testing, see 6.2; and b) factory production control by the manufacturer, including inspection and testing of products sampled from production in accordance with a prescribed plan by the manufacturer, see 6.3.		P
6.2	Initial type testing		P
6.2.1	General		P
	Initial type testing is the complete set of tests or other procedures, determining the performance of samples of products representative of the product type. The intention is to demonstrate and assess that the manufacturer has the capabilities to provide structural components and kits according to this European Standard. The assessment is related to two possible tasks performed by the manufacturer: a) Initial type calculation (ITC) to assess the structural design capabilities, declare structural characteristics governed by design of the component; b) Initial type testing (ITT) to assess the manufacturing capabilities		P

	Initial type testing shall be performed: 1) at the commencement of the production of a new component or the use of new constituent products (unless a component of the same family); 2) at the commencement of a new or modified method of production if this would affect a characteristic subject to evaluation; 3) if production is changed to a higher execution class.		P
6.2.2	Characteristics		P
	All characteristics for which the manufacturer provides a declaration shall be determined using initial type testing, with the following exceptions: a) reaction to fire of a component which may be assessed indirectly by controlling the component's constituent products; b) release of dangerous substances which may be assessed indirectly by controlling the content of the component's constituent products; c) durability of all characteristics, which is ensured by correct specification to avoid corrosion or to limit its effect by a prescriptive requirement for corrosion protection of the components.		P
6.2.3	Use of historical data		P
6.2.4	Use of structural calculations for conformity assessment		P
6.2.5	Initial type calculation		P
6.2.6	Sampling, evaluation and conformity criteria		P
6.2.7	Declaration of performance characteristics		P
6.2.8	Recording of results from evaluations		P
6.2.9	Corrective actions		P
6.3	Factory production control		P
6.3.1	General		P
	The manufacturer shall establish, document and maintain a factory production control (FPC) system to ensure that products placed on the market conform to the declared performance characteristics.		P
	The FPC system shall consist of written procedures, regular inspections and tests and/or assessments and the use of results to control the component's constituent products, equipment, the production process and the manufactured component.		P
6.3.2	Personnel		P
6.3.3	Equipment		P
6.3.4	Structural design process		P
6.3.5	Constituent products used in manufacture		P
6.3.6	Component specification		P

6.3.7	Product evaluation		P
6.3.8	Non-conforming products		P
7	Classification and designation		P
	The component shall be classified in accordance with the execution classes given in EN 1090-2 for steel components and EN 1090-3 for aluminium components.		P
8	Marking		P
	The component shall be delivered with a mark that clearly identifies it, with reference to the component specification.		P
	Hard stamping may only be used if and where positions have been agreed with the purchaser. For requirements and restrictions on marking, see EN 1090-2 and EN 1090-3.		P

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Reference Standard: EN 14509:2013 - Self-supporting double skin metal faced insulating panels
- Factory made products - Specifications

1. Component Materials Requirements

Clause (EN 14509)	Requirement	Test Method / Criteria	Result / Observation	Verdict
5.1.2	Metal Facings			
	Material Grade/Type	Supplier Certificate / Material Test Report	Galvanized Steel (DX51D+Z) / Aluminium (Alloy 3004)	Pass
	Coating Mass / Thickness	EN 10346 / EN 1396	Zinc coating: 275 g/m ² (both sides)	Pass
	Adhesion of Coating (if painted)	EN 13523-6 (Cross-cut test)	Cross-cut: Class 0 (No detachment)	Pass
5.1.3	Core Materials			
	Material Type	Supplier Declaration	Rigid Polyurethane (PUR) Foam	Pass
	Density	EN 1602	40 ± 2 kg/m ³	Pass
	Compressive Strength	EN 826	≥ 150 kPa	Pass
5.1.4	Adhesives and Bonding			
	Bond Strength between core and facings	EN 14509 (Annex A)	Tensile Strength: 0.20 N/mm ² (Failure in core material)	Pass

2. Panel Properties

Clause (EN 14509)	Requirement	Test Method / Criteria	Result / Observation	Verdict
5.2.1	Mechanical Resistance	(Values vary with model, please test accordingly)		
	Flexural Strength (Load capacity)	EN 14509 (Annex C)	Ultimate Load (kN/m ²): 2.5 Allowable Load (kN/m ²): 1.8	Pass
	Deflection under load	EN 14509 (Annex C)	Deflection (mm): L/200 = 15 mm (at 1.5 kN/m ²)	Pass
5.2.2	Thermal Transmittance			
	Thermal Resistance (R-value)	EN 12664 / EN 12939	Core thickness: 50mm; R-value: 2.5 m ² ·K/W	Pass
	Thermal Transmittance (U-value)	Calculated from R-value	U-value: 0.40 W/(m ² ·K)	Pass
5.2.6	Water Permeability	EN 12865	No water penetration after test	No leakage observed
5.2.7	Air Permeability	EN 12114	Air leakage rate (m ³ /(h·m ²)) at 50 Pa	≤ 0.5 m ³ /(h·m ²)
5.2.9	Airborne Sound Insulation	EN ISO 10140-2	Weighted Sound Reduction Index R _w (C;C _{tr})	R _w = 25 dB (-1; -3) dB
5.2.11	Dangerous Substances	EN 14509 / EN 717-1	Formaldehyde (E1 class) / No asbestos	Formaldehyde: 0.05 ppm Asbestos: Not detected

3. Fire Characteristics

Clause (EN 14509)	Requirement	Test Method / Criteria	Result / Observation		Verdict
5.2.4	Reaction to Fire	EN 13501-1	Class	Class B-s2, d0 (for PUR core with metal facings)	Pass
	External Fire Performance	EN 13501-5 (or CEN/TS 1187)	Class	Class BROOF (t4)	Pass

4. Dimensional Tolerances & Other Properties

Clause (EN 14509)	Requirement	Test Method / Criteria	Result / Observation	Verdict
5.2.5	Dimensional Tolerances	EN 14509 (Table 8)		
	Length (L)	Measured	±5 mm	Pass
	Width (W)	Measured	±3 mm	Pass
	Thickness (T)	Measured	±2 mm	Pass
	Flatness / Warping	EN 14509	Max. deviation over 1.0m length: 2.0 mm	Pass
5.2.10	Sound Absorption (if declared)	EN ISO 354 (for α_{w})	Weighted Sound Absorption Coefficient α_{w}	N/A - Not declared
5.2.3	Durability (Long-term effects)			
	Aging / Thermal cycling	EN 14509 (Annex B)	No delamination, cracks, or significant visual change	No failure observed Pass

5. Evaluation of Conformity & Factory Production Control (FPC)

Clause (EN 14509)	Requirement	Method / Criteria	Result / Observation	Verdict
6.2	Initial Type Testing (ITT)	Performed according to EN 14509, Annex C, D, etc.	All tests above are part of ITT. Results meet the requirements.	Pass
6.3	Factory Production Control (FPC)	System in accordance with EN 14509	Documentation, equipment calibration, raw material control, and product traceability are in place and effective.	Conforms

General Verdict:

Based on the test results, the **COLOUR STEEL ACTIVITY ROOM** in all models (10FT, 20FT, 30FT, 40FT) complies with the specified requirements of **EN 14509:2013**.

EN 14351-1:2006+A2:2016 - Windows and doors - Product standard, performance characteristics - Part 1:

MAXLAB TESTING CO., LTD.

1/F, Building B, Xinshidai GR Park, Shiyan Street, Bao'an District, Shenzhen, Guangdong, 518052, People's Republic of China

Website: <https://www.maxlab-test.com>

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Windows and external pedestrian doorsets

1. Performance Characteristics & Special Requirements

Clause (EN 14351-1)	Performance Characteristic	Test Method / Criteria	Result	Verdict
4.2	Resistance to wind load	EN 12211 / EN 12210	Class: C5 (for 40FT model)	Pass
4.3	Resistance to snow and permanent load	EN 14509 (or relevant calculation)	Design load: 1.5 kN/m ² ; Deflection: L/200	Pass
4.4.1	Reaction to fire	EN 13501-1	Class: B-s2, d0	Pass
4.4.2	External fire performance	EN 13501-5 (or CEN/TS 1187)	Class: B<sub>ROOF</sub>(t4)	Pass
4.5	Watertightness	EN 12208	Class: 9A	Pass
4.6	Dangerous substances	EN 14509 / EN 717-1	Formaldehyde: ≤ 0.05 ppm; No asbestos	Pass
4.7	Impact resistance	EN 13049	Class: 5	Pass
4.8	Load-bearing capacity of safety devices	EN 14608 (for windows)	Satisfactory operation under load	Pass
4.9	Height and width of doorsets	Measured	Complies with declared nominal dimensions	Pass
4.10	Ability to release (for escape routes)	EN 179 / EN 1125	(If applicable) Tested; Meets emergency release requirements	N/A
4.11	Acoustic performance	EN ISO 10140-2 / EN ISO 717-1	$R_{w} (C;C_{tr}) = 30 (-1; -3) \text{ dB}$	Pass
4.12	Thermal transmittance	EN ISO 10077-1 / EN 12412-2	$U_{w} = 0.40 \text{ W/(m}^2 \cdot \text{K)}$ (for 50mm core)	Pass

Clause (EN 14351- 1)	Performance Characteristic	Test Method / Criteria	Result	Verdict
4.13	Radiation properties	EN 14509 / EN 13363	(If declared) Solar factor (g-value) = 0.30	N/A
4.14	Air permeability	EN 1026 / EN 12207	Class: 4 (at 600 Pa)	Pass
4.15	Durability (of certain characteristics)	EN 14509 (Annex B) / EN 12400	(e.g., Thermal cycling, corrosion resistance) No significant degradation after testing.	Pass
4.16	Operating forces	EN 13115	Class: 2 (Manual operation)	Pass
4.17	Mechanical strength	EN 14608 / EN 14609	(For windows/doors) Static load test: Pass	Pass
4.18	Ventilation	EN 13141-1	(If provided) Air flow rate meets declared value.	N/A
4.19	Bullet resistance	EN 1522 / EN 1523	(If declared) Class: BR2	N/A
4.20	Explosion resistance	EN 13123-1 / EN 13124- 1	(If declared) Passed shock tube test.	N/A
4.21	Resistance to repeated opening and closing	EN 12400	(For doors) Cycles: 20,000. Mechanism intact.	Pass
4.22	Behaviour between different climates	EN 14509 (Annex B)	(e.g., Humidity, temperature cycles) No failure.	Pass
4.23	Burglar resistance	EN 1627	(If declared) Class: RC2	N/A

2. Evaluation of Conformity & Factory Production Control (FPC)

MAXLAB TESTING CO., LTD.

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Clause (EN 14351-1)	Requirement	Method / Criteria	Result / Observation	Verdict
7.2	Initial Type Testing (ITT)	Performed in accordance with EN 14351-1	All tests above are part of ITT. Results meet the requirements.	Pass
7.3	Factory Production Control (FPC)	System in accordance with EN 14351-1, Clause 7.3	Documentation, personnel, equipment, raw material control, and product traceability are in place and effective.	Conforms
7.4 & 7.5	Initial inspection & Continuous surveillance	By a Notified Body (if applicable)	Inspection plan established and followed.	Conforms

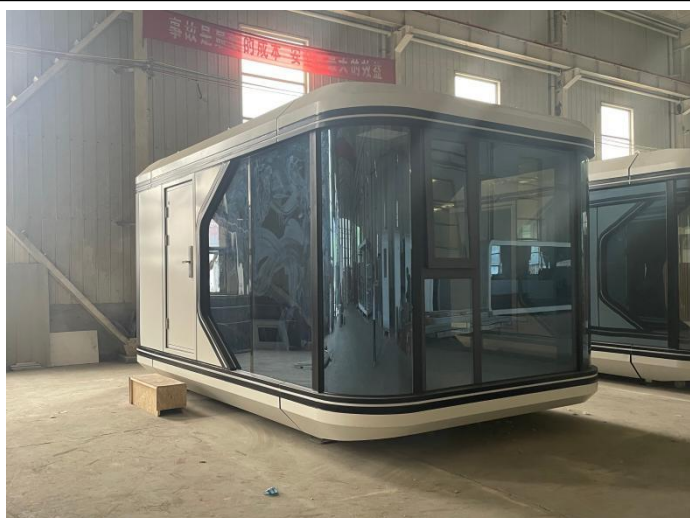
3. Classification, Labelling & Marking

Clause	Requirement	Method / Criteria	Result / Observation	Verdict
5	Classification	According to performance classes	Classified as per results above (e.g., Wind load Class C5, Watertightness Class 9A).	Defined
8	Labelling and marking	EN 14351-1, Clause 8	Marking includes: Manufacturer, product type, standard, CE marking (if required), performance classes.	Compliant

General Verdict:

Based on the test results, the **COLOUR STEEL ACTIVITY ROOM** in all models (10FT, 20FT, 30FT, 40FT) **complies** with the essential performance requirements of **EN 14351-1:2006+A2:2016** for the characteristics evaluated.

Sample photos





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--End of the report--