

## TEST REPORT

### Performance Test

Report Reference No. .... : GZ10090502-1

Tested by (name and signature) ..... : Jacky Yao *Jacky Yao*

Approved by (name and signature)... : Jeff Deng *Jeff Deng*

Date of issue ..... : September 29, 2010

Contents..... : Total test report 8 pages including:  
Report text: 5 pages  
Appendix A for product photos A.1-A.6: 3 pages

**Testing Laboratory name** ..... : Intertek Testing Services Shenzhen Ltd. Guangzhou Branch

Address ..... : Block E, No.7-2 Guang Dong Software Science Park, Caipin Road,  
Guangzhou Science City, GETDD, Guangzhou, China

Testing location..... : Same as above

**Applicant's name** ..... :

Address ..... :

#### Test specification:

Standard..... : Protocol Axxcess-1-005

Non-standard test method..... : N/A

**Test item description** ..... : WPC Tiles

Trade Mark..... : —

Model and/or type reference ..... :

Manufacturer ..... :

Rating(s)..... : —

#### CONCLUSION:

The submitted samples were tested and listed the results accordingly.

**Test item particulars**

Classification of installation and use .....: —

Supply Connection.....: —

**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)

**Testing**

Date of receipt of test item.....: September 09, 2009

Date (s) of performance of tests.....: September 09, 2009 –September 29, 2009

**General remarks:**

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"(see remark #)" refers to a remark appended to the report.

"(see Appendix #)" refers to an appendix appended to the report.

Throughout this report a comma (point) is used as the decimal separator.

When determining the test result, measurement uncertainty has been considered.

**General product information:**

WPC (wood-plastics composites) tiles with two colours, intended to be tested according to client's specific testing protocol: Axxess -1-005. All testing results were based on brown colour (refer to A.1 & A.2), but Grey colour samples only were conducted UV test, Reaction of chlorine water solution.

Access-1-005			
Clause	Requirement	Result - Remark	Verdict
Label Verification (Product & Packaging)	Visual Check Exporter / Manufacturer's name and/or trade mark and the place of production or his authorized representative or the importer, or any other requirement by importer and regulation.	Not provided	—
Warning Label	Visual Check Report Actual (if any)	Not provided	—
Workmanship	Visual Check Use of material shall be visually clean and free from infestation; Product shall be free from sharp points or edges. Accessible Edges shall not present an unreasonable risk of injury.	No defects	P
Material Quality	Visual Check All parts shall be connected closely, no collapse, rustiness;	All parts were connected closely, no collapse, rustiness;	P
Configuration requirements	General visual check -stainless steel screws only -at least four stainless steel screws per separate board -impregnation of the whole board (inclusive the edges of cut and the bottom of the board) -the top of the board must be planed	Panel surface were planed, 10 Steel screws per separate board.	P
Assembly	Actual Use Assembly according to manufacturer's instruction, record any inconvenience. Shall be not convenient for end user to assembly, or unintended disassembly.	Easy to assembly, No unintended disassembly.	P
Weight	General method Individual panel in three shall have not more than 10% deviation of mass.	Average mass: 1379g; Maximum weight difference: 0.33%	P
Static point load	Property method The loading point and loading procedure shall comply with EN 1533, Record the maximum breaking force of a panel.	Maximum breaking force: 6828N	—
Bending strength	EN 310(Mod.) Report the data	Tested for a board, mean value: 23.9N/mm <sup>2</sup>	—
Impact test	EN 477 Report the data	No crack after a 1000g impactor released from 1.2m height.	—
Hardness	EN 1534 Report the actual data	HB: 11.4	—



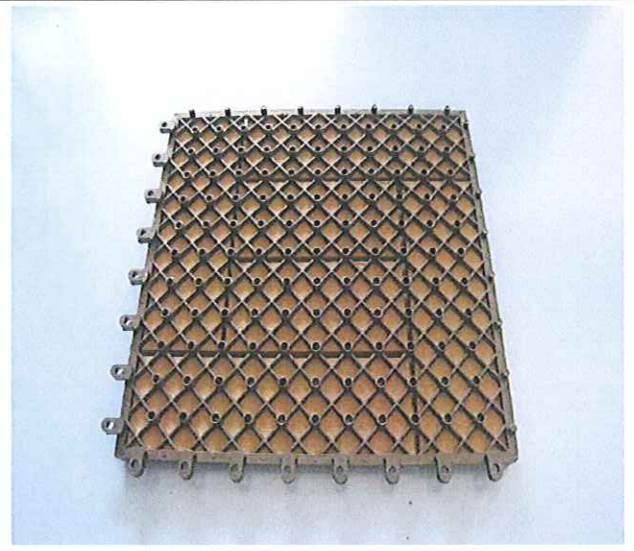
Access-1-005			
Clause	Requirement	Result - Remark	Verdict
Screw withdrawal	EN 13446 Direct screw withdrawal, number 10 type AB screws. Penetrate screws into upper centre of joists as received, and then apply a loading by a uniform motion at a rate 1.5mm/min to head of screw.	Maximum force: 1446N	—
Salt spray test	NSS test of ISO 9227 Total 240hrs exposure, shall be 15% to 20% rusting on head.	10% to 15% rusting	P
Swelling and water absorption	EN 317(mod.) Report the data	For WPC board, after immersion in water 72h. Swelling: 0.50% Water absorption: 0.50%	—
Dimensional change-changes in RH of air	EN 318 Report the data	For WPC board $\delta l_{65,85}$ :0.74 $\delta l_{65,30}$ :0.74	—
Reaction of chlorine water solution	Property method Drop 10mg/L concentration of chlorine water solution on surface of board and place it for 7 days at lab condition. No significant changes on the surface were observed after 7 days.	Brown and grey colour: Water stain were observed after 7 days, wash them and dry their surface, water stain weren't observed, wet them and water stain were observed again.	Waive-Pass based on client requirement
UV test	ISO 4892-3 Lamp: VA340; typical irradiance: 0.89W/m <sup>2</sup> /nm; approximate wavelength: 340nm; exposure cycle: 8h UV at 60(±3)°C black panel temperature, 4h Condensation at 50(±3)°C black panel temperature; from a total 20 cycles, Color change shall not less than Grade 4.	For WPC board  Grey colour: Grade 4 Brown colour: Grade 4	P
Slip resistance	EN 13893 Shall be more than 0.30	0.47	P
Total cadmium content	Shall comply with EU directive 91/338/EEC Painting should be cadmium ≤100ppm	For base: Less than 5 %; grey colour(board) part: Less than 5 %; brown colour(board) part: Less than 5 %;	P
PAHs	76/769/EEC& requirement PAHs(total) : less than 10mg/kg Benzo(a)pyrene: less than 1mg/kg	For base, Sum of PAHs: less than 0.8mg/kg; Grey colour: 0.2mg/kg; Brown colour: less than 0.2mg/kg;	P
DMF	Shall comply with EU directive 2009/251/EC Threshold: 0.1 ppm	Not applicable	N/A

Axxess-1-005			
Clause	Requirement	Result - Remark	Verdict
Phthalates (For Soft PVC parts)	Refer to EN 14372 The DEHP, DBP & BBP content shall be less than 0.1%	Not applicable	N/A

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**Appendix A****Product photos**

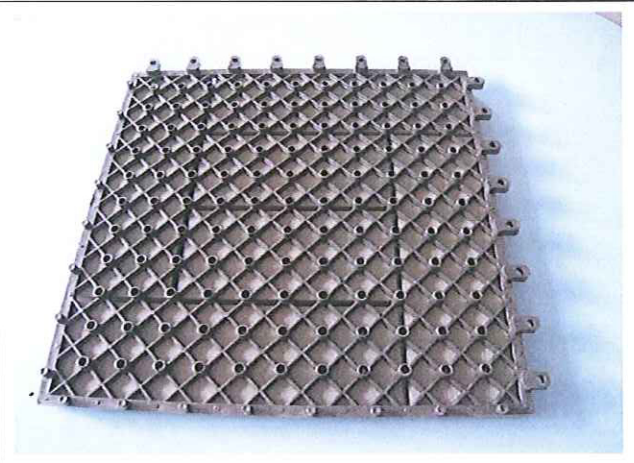
A.1 Front view for brown colour



A.2 Back view for brown colour



A.3 Front view for grey colour



A.4 Back view for grey colour

\*\*\*\*\*End of Page\*\*\*\*\*



## Appendix A (continued)

## Product photos



A.7 Brown colour  
Sample without UV exposure

A.8 Brown colour  
Sample after 240hrs UV exposure



A.9 Grey colour  
Sample without UV exposure

A.10 Grey colour  
Sample after 240hrs UV exposure

Note: Photos may show differences from the real product.

\*\*\*\*\*End of Report\*\*\*\*\*