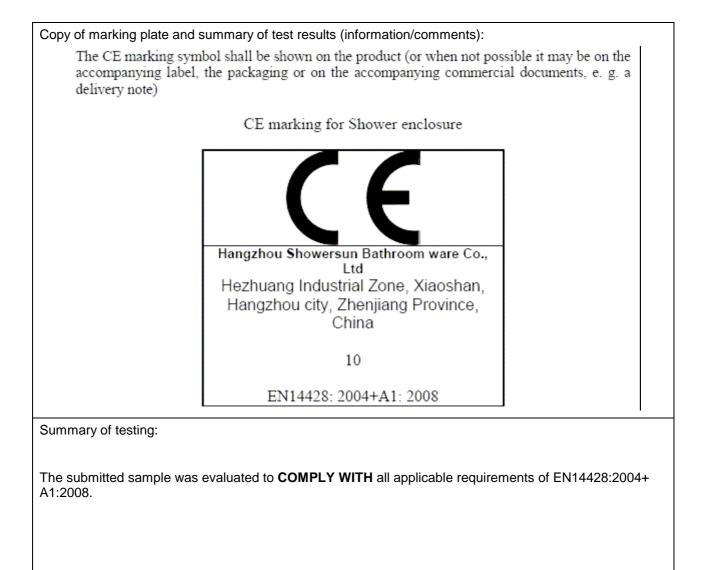


## **TEST REPORT**

# EN 14428 Shower enclosures – Functional requirements and test methods

Report Reference No	GZ10010951-3	
Tested by (name and signature):	Syanson Xu Syanson	
Approved by (name and signature):	Starry Li Starry Li	
Date of issue	Mar 5, 2010	
Contents:	Total test report 13 pages including: Report text: 6 pages Appendix A for product photos: 1 page	
	Appendix B for product drawings: 2 pages Appendix C for instructions: 4 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 510663	
Testing location	Same as above	
Applicant's name:	Hangzhou Showersun Bathroom ware Co., Ltd	
Address:	Hezhuang Industrial Zone, Xiaoshan, Hangzhou city, Zhenjiang Province, China	
Test specification		
Standard	EN 14428:2004+A1:2008	
Non-standard test method	N/A	
Test Report Form No	TTRF EN 14428:2004+A1:2008 A	
TTRF Originator:	Intertek Testing Services Shenzhen Ltd. Guangzhou Branch	
Master TTRF:	Dated 2008-01	
Test item description:	Shower Enclosure	
Trade Mark:	_	
Model and/or type reference:	Manufacturer's model: 87B05 Customer's model: PDA10	
Manufacturer	Hangzhou Showersun Bathroom ware Co., Ltd	
Rating(s)		



Test item particulars	
Classification of installation and use	Used for personal hygiene
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:	Jan 25, 2010
Date (s) of performance of tests:	Jan 25, 2010 to Feb 10, 2010

#### General remarks:

This report is for the exclusive use of Intertek's Client and is provided pursuant to the agreement between Intertek and its Client. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. Intertek assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this report. Only the Client is authorized to permit copying or distribution of this report and then only in its entirety. Any use of the Intertek name or one of its marks for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek. The observations and test results in this report are relevant only to the sample tested. This report by itself does not imply that the material, product, or service is or has ever been under an Intertek certification program.

"(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.

Models	Description
Manufacturer's model: 87B05 Customer 's model: PDA10	6mm thick transparent tempered glass, aluminium wall profile, without shower tray. Overall size: 900×900×1850mm.

	LIN 14420			
Clause	Requirement - Test	Result - Remark	Verdict	

4	Requirements		
4.1	General		Р
	The manufacturer shall provide with each shower enclosure detailed instructions on installation and use, to include at least the following information:		
	Description of installation with special consideration of building construction and necessary tools and sealant		Ρ
	Instructions for appropriate maintenance and care		Ρ
4.2	Cleanability		Ρ
	The surfaces of the components of the shower enclosures which are accessible during use and cleaning shall be free from sharp corners, edges and burrs		Ρ
	Using recommended cleaning agents in accordance with the manufacturer's installation and care instructions, there shall be no reduction in safety or function of the shower enclosure.		Ρ
4.3	Impact resistance/shatter properties		Р
4.3.1	General	Tempered glass and Aluminium Alloy Frame were used.	
	Shower enclosures may be glazed with various materials		Ρ
4.3.2	Thermally toughened safety glass	Pofer to report C710010051.2	
	Shall meet requirements of EN 12150-1:2000, or minimum particle counts shall be 40	Refer to report GZ10010951-2. The particle count was 101.	Ρ
4.3.3	Plastic materials		N/A
	Sheets shall not break or they shall break safely		IN/A
4.4	Durability		Р
4.4.1	General		
	Products conforming to the requirements of 4.2 and 4.3 and the following are deemed to be durable.		Ρ
4.4.2	Corrosion resistance		Ρ
	All components shall consist of corrosion-proof materials or shall be corrosion-protected		Ρ
	All corrosion protection shall conform to the relevant requirements specified in European and International Standards	After 96 hours test with 5% neutral salt solution according to ISO 9227, plated surface of parts showed no corrosion.	Ρ

Page 5 of 13

	EN 14428		
Clause	Requirement - Test	Result - Remark	Verdict
4.4.3	Resistance to chemicals and stains The glazing materials shall not show permanent staining or deterioration	Not show permanent staining or deterioration	Р
4.4.4	Resistance to wet and dry cycling The glazing materials shall not show any cracks, crazing or discoloration	Not show any cracks, crazing or discoloration.	Р
4.4.5	Endurance Shower enclosures shall not show any functional deterioration after 20 000 closing-opening cycles:	No functional deterioration.	Р
4.4.6	Shower enclosures shall withstand an energy representing the impact of a human body on a large impact area without any functional deterioration which could result in injury to the user.	No functional deterioration.	Р
4.4.7	Water retention Shower enclosures shall retain water. A few small drops of water on the outside of the water retaining area are acceptable	No leakage.	Р
4.5	Dangerous substances		NPD
6	Marking		Р
	Name or identifying mark and registered address of the manufacturer:	See the Marking on page 2	_
	The last two digits of the year in which the marking is affixed	10	_
	Reference to this European Standard	EN 14428:2004+A1:2008	
	Information to those relevant characteristics	All essential characteristics are satisfied	_
7	Evaluation of conformity		
7.1	General The compliance of a shower enclosure with this standard shall be demonstrated by clause 7.2 and 7.3		Р
7.2	Initial type testing	1	Р
	General		
7.2.1	Type testing shall be performed before the product is put on the market for the first time and each time when its characteristics are changed.		Р

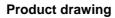
	EN 14428				
Clause	Requirement - Test	Result - Remark	Verdict		
7.2.2	Samples, testing and compliance criteria The shower enclosure shall be subjected to and pass the relevant tests in Table 3		Р		
7.3	Factory Production Control (FPC)		Р		
7.3.1	General The manufacturer shall establish, document and maintain a factory production control (FPC) system to ensure that the products placed on the market conform with the stated performance characteristics.	The applicant supplied ISO 9001 certificate.	Р		
7.3.2	Test equipment All weighing, measuring and testing equipment shall be calibrated and regularly inspected according to documented procedures, frequencies and criteria.	The applicant supplied ISO 9001 certificate.	Р		
7.3.3	Raw materials and components The specifications of all incoming raw materials and components shall be documented, as shall the inspection scheme for ensuring their conformity.	The applicant supplied ISO 9001 certificate.	Р		
7.3.4	Product testing and assessment The manufacturer shall establish and document procedures to ensure that the stated values of all of the characteristics are maintained.	The applicant supplied ISO 9001 certificate.	Р		
7.3.5	Non-conforming products If during the factory production control non- conforming products are detected, there shall be immediately implemented measures for correction of failure and handling defective products	The applicant supplied ISO 9001 certificate.	Ρ		

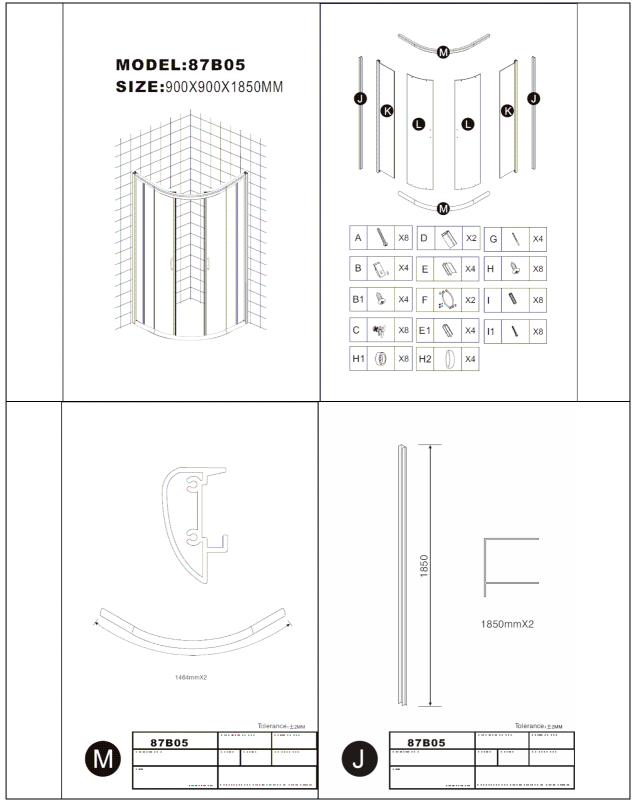
### Appendix A

## Product photo

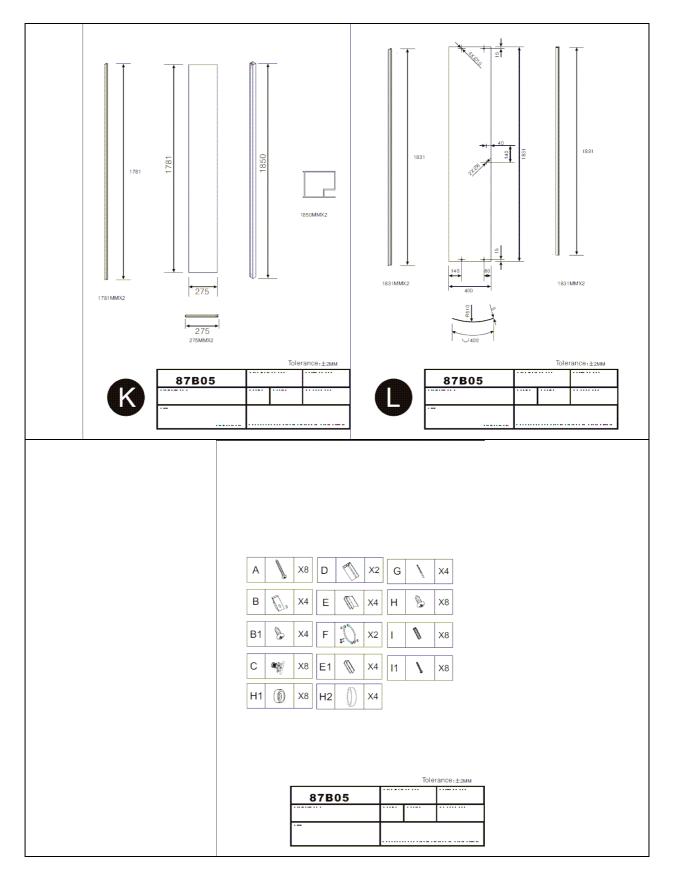


### Appendix B



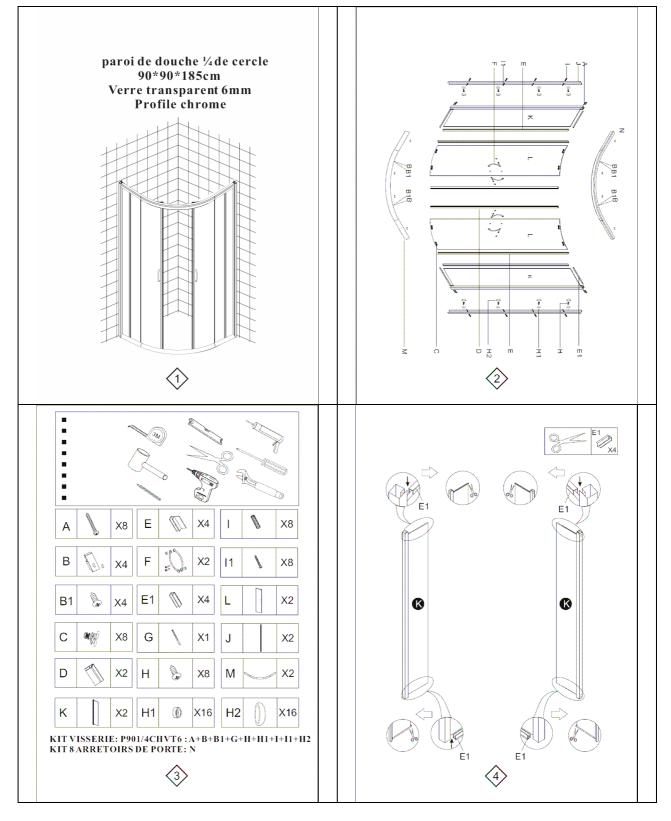


TTRF EN 14428:2004+A1:2008 A Originator: Intertek Testing Services Shenzhen Ltd. Guangzhou Branch Page 9 of 13

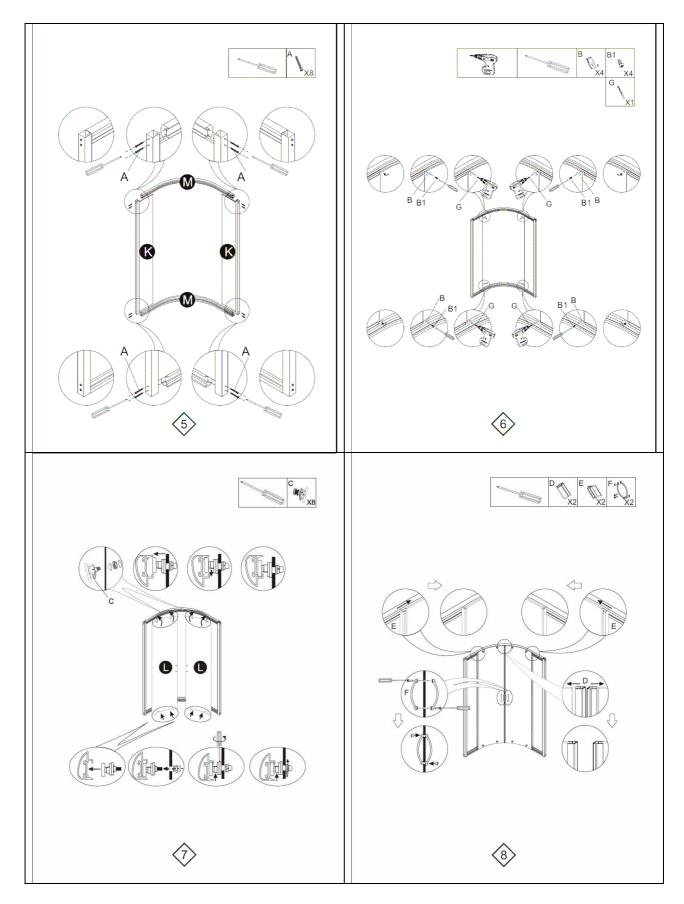


#### Appendix C

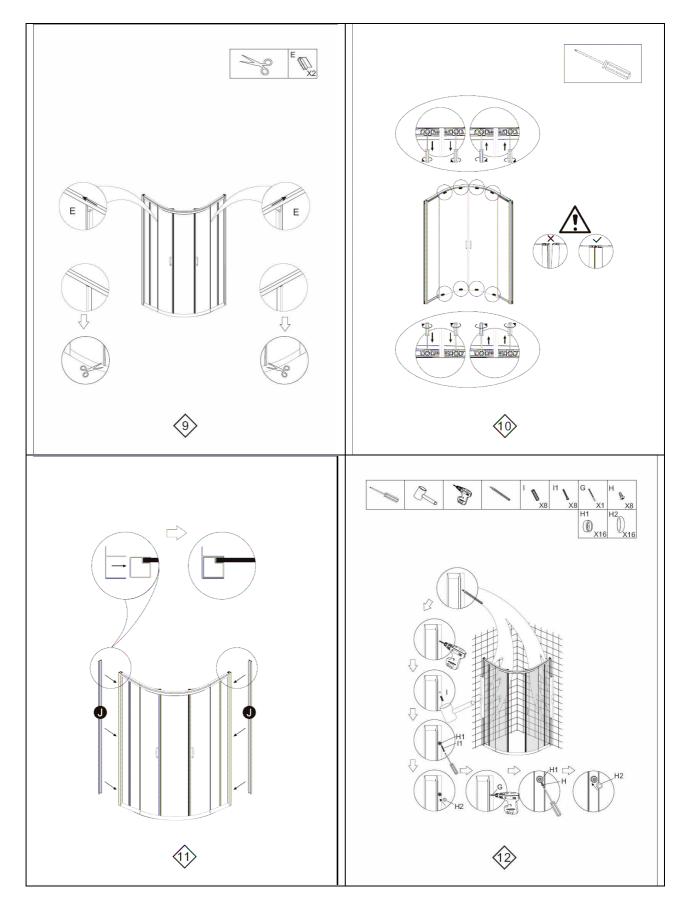
#### Instructions



Page 11 of 13



Page 12 of 13



Page 13 of 13

