



**PLASTIC SHOWER UNIT CERTIFICATION TEST RESULTS
FULL SERIES REPORT**

Manufactured By: Tower Industries LLC
PO BOX 647
Massillon, OH 44648

Manufacturer CR Number: 6538

Report Number: 65380307242

Date of Inspection:

Inspected By:

Date Unit Received: 3/15/2007

Unit Model Style: 3636

Date Unit Tested: 3/20/2007

Unit Serial Number: Not Supplied

Date of Report: 4/23/2007

Date of Manufacture: 1/17/2007

Tests performed in accordance with ANSI Z124.1.2-2005-Plastic Shower Units

2.0 GENERAL REQUIREMENTS

2.1	Materials	Pass
	Reinforcement - Resin / Filler	
	Plastic - Resin	
	Fillers - Alumina Trihydrate	
	Substrate Pigments - Titanium Dioxide	
	Surface Finish - Solid Surface	
	Unit Characteristics - Solid Surface White Shower Receptor	
2.2	Dimensional Tolerances: 36" x 36" x 5 ½"	Pass
	The unit's finished trim measurements shall be within tolerance of manufacturer's stated rough-in dimensions.	
2.3	Unit for Testing	Pass
	Unit shall be randomly selected from manufacturer's finished goods inventory.	
2.4	Installation Instructions	Pass
	Written installation instructions shall be affixed to the unit in a visible location.	
2.5	Care and Maintenance Instructions	Pass
	Written care and maintenance instructions shall be affixed to the unit in a visible location.	
2.6	Identification	Pass
	Manufacturer's name and/or trade mark shall be permanently and legibly marked on the unit in a visible location.	
2.8	Raised Flange and Tiling Bead	Pass
	Units for installation against a wall shall incorporate a raised flange of not less than 1" above the rim at any point.	

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3.0 WORKMANSHIP AND FINISH

- 3.3 Surface Test **Pass**
Unit shall be free of cracks, chipped areas and blisters. The number of molding and other defects or blemishes shall not exceed those given in Table 1 of the referenced standard.
- 3.4 Subsurface Test **Pass**
No visual blemishes or voids larger than 1/16 of an inch in diameter shall be observed below the surface finish.

4.0 STRUCTURAL INTEGRITY

- 4.2 Drain Fitting Connection Test **Pass**
During and after the application of 50 pounds by using a 24 inch lever arm in three radial positions, no cracks shall be observed around the drain opening. During the load application in the three positions, no leaks shall be observed.
- 4.3 Point Impact Load Test **Pass**
After the impact of a 1 1/2 inch half-pound steel ball from a height of 36 inches and 24 inches, no cracks or chips shall be observed in any of the surface areas tested.
- 4.4 Load on Seat Test **N/A**
- 4.5 Bottom and Threshold Load Test **Pass**

Bottom Load

Measurements recorded under the applied loading of 300 pounds on three different bottom surface areas shall not exceed the maximum allowable deflection of 0.150 inches. After removal, the unit shall not exceed the maximum allowable residual deflection of 0.008 inches. No cracks shall be observed in the surface finish.

Position Number	Deflection (inches)	Residual Deflection (inches)
1	0.084	0.000
2	0.048	0.000
3	0.035	0.000

Rim Load

A 300 pound load shall be applied to the end and mid sections of the rim. No cracks shall be observed in the surface finish.

Rim Load

A = P

B = P

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- 4.6 Area Impact on Wall Surrounds Test **N/A**
- 4.7 Wall Surround Load Test **N/A**
- 4.8 Radii Load Test **Pass**
Surface shall not show cracks, chips, or voids under the applied load of 10 pounds with a half-inch diameter nylon rod on the unit's radial surface areas.

5.0 PHYSICAL CHARACTERISTICS

- 5.1 Colorfastness Test **Pass**
The test sample shall show no significant change in color or surface texture after 200 hours of exposure to a xenon arc-type light-exposure apparatus in accordance with ASTM D2565.
- 5.2 Stain Resistance Test **Pass**
Ratings for removal of the seven stains listed in the referenced standard are as follows:

REAGENT	COVERED	UNCOVERED
1. Black crayon	3	3
2. Black liquid shoe polish	3	3
3. Blue washable ink	5	5
4. Gentian Violet solution	5	6
5. Lipstick	3	2
6. Hair dye	1	1
7. Iodine solution	1	1
TOTALS	21	21
Thickness of material lost = 0 inches	Stain resistance rating = 42	

The stain resistance rating shall not exceed 50. The maximum allowable thickness of material removal to eliminate the stain shall be 0.005 inches.

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- 5.3 Wear & Cleanability Test
- A. Wear **Pass**
The surface finish of the three test samples shall not wear through to the supporting subsurfaces after 10,000 scrub cycles with an abrasive slurry solution.
- B. Cleanability **Pass**
The average absolute loss of white-light reflectance after application and removal of standard dirt with liquid detergent shall not exceed 5.0 percent. The average absolute loss of white-light reflectance after additional cleaning with an abrasive slurry solution shall not exceed 2.0 percent.
- Loss after liquid detergent application = **.7%**
Loss after abrasive slurry application = **0%**
- 5.4 Cigarette Test **Pass**
After contact with three lighted cigarettes, the test sample shall show no ignition, progressive glow, or unrepairable damage. Damage to the surface shall be easily repairable by using abrasive and/or polishing compounds.
- 5.5 Chemical Resistance Test **Pass**
The surface finish shall be unaffected by the 12 reagents used. Any superficial surface change shall be easily repairable by using abrasive and/or polishing compounds.
- 5.6 Ignition Test **Pass**
After application of a 1 inch flame from a propane torch for 30 seconds, each of the five samples tested shall cease to burn within 30 seconds after removal of the torch.

Sample Number	Burning Period in Seconds Applications	
	1st	2nd
1	0	1
2	0	0
3	0	0
4	1	1
5	0	0

6.0 MATERIALS TESTING

- 6.1 Water Resistance Test **N/A**
- 6.2 Non-integral Flange Test **N/A**

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Comments:

Shipping damage, if any, did not influence test results. The unit was inspected for tampering prior to arrival. These tests were performed under the direct and continuous supervision of laboratory personnel. The plastic shower, as selected, **passed** all of the sections of the ANSI Z124.1.2-2005 standard detailed in this report.



Charles P. Arnold

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May 17, 2007

Mr. Todd Gaebelein
Tower Industries LLC
PO BOX 647
Massillon, OH 44648

CR#: 6538

Dear Mr. Gaebelein:

Please find enclosed a copy of the test report on the unit submitted for evaluation.

If you have any questions, please do not hesitate to contact me.

Sincerely,

A handwritten signature in blue ink, appearing to read "C. P. Arnold".

Charles P. Arnold
Project Manager

Enclosure

cc: K. Jerald-Hall, Accounting

LABORATORY & CERTIFICATION SERVICES

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