

Abrasion Resistance

Series: Berkshire HDP Glaze Finish: Glazed

Color - Sizes: 25535 - 6x24 ANSI Tile Type: Porcelain Floor Tile

Reported by: John Heckman Report Date: March 11, 2011

Procedure: ASTM C1027

<u>Description:</u> Tiles are placed on an ASTM compliant abrasion tester and abraded by the rotation of an abrasive media

acting on the tiles.

Classification:

Revolutions to Visible Abrasion	Class	Classification
100	0	Not recommended for floors
150	1	Light Residential
600	2	Residential
750 or 1500	3	Heavy Residential/Lt Commercial
2100, 6000, or 12000	4	Commercial
12000+ and stain test	5	Heavy Commercial

Results:

Revolutions	Class	Classification
2100	4	Commercial

Dan Marvin

^{**} Tests were conducted by an independent third party laboratory using industry standard equipment and techniques. Values are offered in good faith as being accurate and typical of normal production. Due to natural variation of raw materials and manufacturing processes, the values of tile purchased for any particular installation may vary from these numbers. Buyer should evaluate suitability and safety of any product prior to installation. No warranty of any kind, expressed or implied, is made with respect to the information contained herein.



Breaking Strength

Series: Berkshire HDP Glaze Finish: Glazed

Color - Sizes: 25535 - 6x24 ANSI Tile Type: Porcelain Floor Tile

Reported by: John Heckman Report Date: March 11, 2011

Procedure: ASTM C648

<u>Description:</u> Tiles are placed on a standard breaking strength machine and stressed until broken. The maximum force

achieved before breaking is the strength of the sample. Reported value is the average of 10 pieces.

Requirement: ANSI standards require a minimum breaking strength for tile of this type to be equal or greater than 250 lbs

Average: 800 lbs avg Pass

Dan Marvin

^{**} Tests were conducted by an independent third party laboratory using industry standard equipment and techniques. Values are offered in good faith as being accurate and typical of normal production. Due to natural variation of raw materials and manufacturing processes, the values of tile purchased for any particular installation may vary from these numbers. Buyer should evaluate suitability and safety of any product prior to installation. No warranty of any kind, expressed or implied, is made with respect to the information contained herein.



Moh's Hardness

Series: Berkshire HDP Glaze Finish: Glazed

Color - Sizes: 25535 - 6x24 ANSI Tile Type: Porcelain Floor Tile

Reported by: John Heckman Report Date: March 11, 2011

Procedure: EN 101

Description: Tiles are tested by moving a mineral tipped stylus across the surface and looking for a scratch to be produced

during 4 test cycles. The scale is calibrated using increasingly more dense minerals.

Classification:

Moh's Scale	Mineral
5	Apatite
5.5	Opal
6	Turquoise
6.5	Jade
7	Quartz
7.5	Emerald
8	Topaz
8.5	Alexandrite
9	Ruby
10	Diamond

Results:

Moh's Scale	Mineral
6	Turquoise

Dan Marvin

^{**} Tests were conducted by an independent third party laboratory using industry standard equipment and techniques. Values are offered in good faith as being accurate and typical of normal production. Due to natural variation of raw materials and manufacturing processes, the values of tile purchased for any particular installation may vary from these numbers. Buyer should evaluate suitability and safety of any product prior to installation. No warranty of any kind, expressed or implied, is made with respect to the information contained herein.



Water Absorption

Series: Berkshire HDP Glaze Finish: Glazed

Color - Sizes: 25535 - 6x24 ANSI Tile Type: Porcelain Floor Tile

Reported by: John Heckman Report Date: March 11, 2011

Procedure: ASTM C373

<u>Description:</u> Dried samples are boiled for 5 hours, then allowed to sit for 24 hours in distilled water. The percent

water absorption is calculated by the difference in weight between the wet tile and the dry tile.

Classification:

Scale	Classification
≤0.5%	Porcelain
0.5% - 3.0%	Vitreous
3.0% - 7.0%	Semi-Vitreous
7.0% - 20.0%	Non-Vitreous

Results: Result Classification
≤0.5% Porcelain

Third Party Certification: This product is Certified Porcelain by the Porcelain Tile Certification Agency



Dan Marvin

^{**} Tests were conducted by an independent third party laboratory using industry standard equipment and techniques. Values are offered in good faith as being accurate and typical of normal production. Due to natural variation of raw materials and manufacturing processes, the values of tile purchased for any particular installation may vary from these numbers. Buyer should evaluate suitability and safety of any product prior to installation. No warranty of any kind, expressed or implied, is made with respect to the information contained herein.



Static Coefficient of Friction

Series: Berkshire HDP Glaze Finish: Glazed

Color - Sizes: 25535 - 6x24 ANSI Tile Type: Porcelain Floor Tile

Reported by: John Heckman Report Date: March 11, 2011

ASTM C1028 Procedure:

Description: Tiles are tested wet and dry. A neolite 'heel' is weighted with a 50 lb weight and force is applied until assembly

begins to move. The peak force is recorded and the coefficient of friction is calculated versus a standard tile.

Reported averages are from three separate test samples from the same lot

Wet Average 0.6 Results:

Dry Average 0.7

Dan Marvin

^{**} Tests were conducted by an independent third party laboratory using industry standard equipment and techniques. Values are offered in good faith as being accurate and typical of normal production. Due to natural variation of raw materials and manufacturing processes, the values of tile purchased for any particular installation may vary from these numbers. Buyer should evaluate suitability and safety of any product prior to installation. No warranty of any kind, expressed or implied, is made with respect to the information contained herein.



Percentage of Recycled Content

Series: Berkshire HDP Glaze Finish: Glazed

Color - Sizes: 25535 - 6x24 ANSI Tile Type: Porcelain Floor Tile

Reported by: John Heckman Report Date: March 11, 2011

Procedure: Calculated per LEED for New Construction and Major Renovations Rating System, April 2009

<u>Description:</u> The amount of pre- and post-consumer waste is calculated based on a percentage of the body by weight

Results: Pre-consumer RMC

Post-consumer RMC

40.00% 0%

Dan Marvin

Director of Quality Assurance

Due to natural variation of raw materials and manufacturing processes, the values of tile purchased for any particular installation may vary from these numbers. Buyer should evaluate suitability and safety of any product prior to installation. No warranty of any kind, expressed or implied, is made with respect to the information contained herein.

 $^{^{\}star\star}$ Values are offered in good faith as being accurate and typical of normal production.



Certification of Physical Properties

Florida Tile Quality Assurance Department

Bond Strength

Series: Berkshire HDP Glaze Finish: Glazed

Color - Sizes: 25535 - 6x24 **ANSI Tile Type:** Porcelain Floor Tile

Reported by: John Heckman Report Date: March 11, 2011

Procedure: ASTM C482

<u>Description:</u> Tiles are bonded with a standard mortar to a standard cement block.

Force is applied to the tile until the bond fails. Results are average force required for failure for 5 pieces.

Requirement: ANSI standards require a minimum bond strength for tile of this type to be equal to or greater than 50 PSI

Results: Average: 377 PSI Pass

Dan Marvin

^{**} Tests were conducted by an independent third party laboratory using industry standard equipment and techniques. Values are offered in good faith as being accurate and typical of normal production. Due to natural variation of raw materials and manufacturing processes, the values of tile purchased for any particular installation may vary from these numbers. Buyer should evaluate suitability and safety of any product prior to installation. No warranty of any kind, expressed or implied, is made with respect to the information contained herein.