

Technical Data Sheet for Barker-Tile

(1) Manufacturer

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(2) Product Description

Recommended Uses

Barker-Tile is 100% waterproof when installed using 100% silicone caulking and Barker's high quality solvent-based adhesive.

Barker-Tile is available in 4' x 8', 5' x 5', or 3' x 8' panels and is specifically designed for interior wall covering in any high moisture, high humidity application such as bathrooms, saunas, laundry rooms or kitchens. Tub enclosures and shower walls are the most predominant use. Kitchen back splashes; commercial restrooms and certain institutional applications such as dormitories and hotel/motel facilities are also popular applications. Barker-Tile is also a practical and attractive wainscoting in any of these areas.

Barker-Tile conforms to the U64 norm and has been approved by the Canadian Food Inspection Agency for use in food facilities on walls and ceilings in dry areas and storage.

Properly installed, Barker-Tile, in addition to offering the look and feel of expensive ceramic tile, will withstand years of use. Whether used in new construction or renovation, Barker-Tile makes installation quick and easy with the look of a professional job. One 4' x 8' or 5' x 5' panel of Barker-tile covers the same area as over 200 individual 4" ceramic tiles.

Product Composition

We use a 3mm thick hardboard panels, made from FSC-certified wood products draped with our specially formulated coatings called Ceramillite™. Ceramillite™ coatings cross link or dry within seconds when exposed to a catalyst; in this case a gas which is circulated within the curing chambers. The Ceramillite™ finish is extremely durable, hard yet flexible and superior to conventional melamine finishes. We also integrated the Microban® antimicrobial protection to our finish for added protection against mold, mildew, and bacteria.

Basic Limitations

Barker-Tile panels are intended for interior wall surfaces only and not as structural materials. They must be adhered to a suitable, solid wall using a high-quality solvent-based adhesive like the Barker adhesive.

Barker-Tile is permitted for use in areas where a flame-spread rating of 160 and a smoke developed classification of 150 is allowed.

When used as a waterproof wall finish, all seams, edges, holes and/or punctures must be adequately sealed with 100% silicone caulking. Panel swelling will occur if water is allowed to come into contact with the uncoated hardboard.

Pattern & Color Availability

Sheet Size			Pattern	Score Configuration		
3' x 8' 2440 x 915	4' x 8' 2440 x 1220	5' x 5' 1524 x 1524	Name	Size	Beveled	Classic
8405	N405	N/A	Dover White	6" x 6"		✓
8100	100P	N/A	Plain White	N/A	Unscored	
8003	3003	5003	Frosty White	6" x 6"	✓	
8026	3026	5026	Lexington	6" x 8"	✓	
8027	3027	5027	Atlantic	6" x 8"	✓	
8030	3030	5030	New Haven	6" x 8"	✓	
8036	3036	5036	Apple Breeze	6" x 6"		✓
8037	3037	5037	Nuance	6" x 8"		✓
8038	3038	5038	Sahara	4" x 4"		✓
8041	3041	5041	Glacier	4" x 4"		✓
8090	3090	5090	Crystal	6" x 6"	✓	
8093	3093	5093	Pillow Flower	6" x 8"	✓	
8095	3095	5095	Confetti	6" x 6"	✓	
8096	3096	5096	Emerald	6" x 8"	✓	

Sheet Thickness & Density

Size	Thickness	Density	Tolerance	Weight
3' x 8' 2440 x 915	.120" 3mm	54 lbs/cu ft 865 k/m ³	±.008" ±0.2mm	13.5 lb 6.12 kilos
4' x 8' 2440 x 1220	.120" 3mm	54 lbs/cu ft 865 k/m ³	±.008" ±0.2mm	16.5 lb 7.48 kilos
5' x 5' 1524 x 1524	.120" 3mm	54 lbs/cu ft 865 k/m ³	±.008" ±0.2mm	14.5 lb 6.58 kilos

(3) Structural Properties & Fire Rating

Structural Properties	Unit of Measure	Results
Tensile Strength - Parallel	KPa	648
Modulus of Rupture	psi kgf/cm ²	3414 240
Thickness Swelling (average maximum)	%	35
Density	lb/ft ³ kg/m ³	54 865
Moisture Content	%	4
Dimensional Tolerance		
Thickness (maximum)	inches mm	±0.008 ±0,2
Length & Width	inches mm	±0.024 ±2
Squareness (maximum)	inches/ft mm/m	0.024 2,0
Straightness (maximum)	inches/ft mm/m	0.018 1,5

*Fire Rating	Barker-Tile <u>Without</u> Back coating		
	Norm	Required Standard	Barker-Tile
Flame Spread Rating	ASTM E84	Max 200	130-160
Smoke Developed Classification	ASTM E84	Max 400	150
Fuel Contributed	ASTM E84	None Listed	125 - 150

**Fire Rating	Barker-Tile <u>With</u> Back coating		
	Norm	Required Standard	Barker-Tile
Flame Spread Rating	ASTM E84	None Listed	96
Smoke Developed Classification	ASTM E84	None Listed	140
Fuel Contributed	ASTM E84	None Listed	129

Testing conducted by Forintek Canada Corporation
Underwriters' Laboratories of Canada

Test Report #45-80-568
Test Report #CR1687

Chemical Resistance

Procedure: Few drops of each reagent is applied to surface and covered with watch glass for four (4) hours. Surface is then washed with water and left one (1) hour before checking.

Results:	Reagent	% Solution	Effect
	Sodium Hydroxide	5%	None
	Ammonium Hydroxide	10%	None
	Hydrochloric Acid	5%	None
	Citric Acid	5%	None
	Acetic Acid	5%	None
	Liquid Detergent (Fantastik™)		None
	Liquid Bleach (Javex™)		None
	Nail Polish Remover		Film swollen very slightly
	Mineral Spirits		None

Stain Resistance

Procedure: Small amount of each material is applied to surface and covered with watch glass for four (4) hours. Surface is then wiped with damp cloth and left one (1) hour before checking.

Results:	Material	Effect
	Lipstick	None
	Mercurochrome	None
	Grease	None
	Shoe Polish (Black Paste)	Stained film *
	Mineral Oil	None
	Wax Crayon	None
	Mustard	None
	Soft Drink (Cola)	None

*Stain is completely removed with liquid bleach.

Heat Resistance

Procedure: Sample of finished product in oven at 150°F for 24 hours. Color retention was then checked.

Results: In some cases (less than 1%), there is a very slight change in color

Steam Resistance

Procedure: A panel is first submitted to three (3) flexions of the surface, and three (3) flexions of the back to verify that the panel's flexibility is good. A 4" x 4" sample, taken from this panel, with back and edges sealed with acrylic lacquer is then suspended face down, 1" above mouth of a 500 ml Erlen Meyer flask. The flask half filled with water is maintained at mild boil and the first cycle runs for eight (8) hours. Let sample recover for 16 hours and grade.

Results: 1st cycle: No cracking, no change in color
2nd cycle: Test ran for 40 hours – no cracking, no change in color

Humidity Resistance

Procedure: Sample of finished product 6" x 8" with back and edges sealed with acrylic lacquer and vinyl tape is exposed face down on Q. panel tester. Water at 125° F is condensed on surface of panel for period of 1.5 hours. Surface is dried by warm air blowing on surface for one-half hour. This cycle is continuous twenty-four (24) hours per day. Exposure time: minimum of two (2) months. Sample checked every week for cracking, peeling, delaminating, etc.

Results: After an exposure of twenty-four (24) weeks, no cracking – no change in color.

Color Retention

Procedure: A sample is placed under a UVA-351 lamp (QUV). The color change (dE) is calculated by exposure time.

Results: After 100 hours: 2.5 dE (not noticeable to the naked eye)
After 500 hours: 4 dE (not noticeable to the naked eye)

Abrasion

Procedure: Tester consists of a reservoir for the abrasive (Ottawa sand), and guide tube 36". Test panel supported at an angle of 45° to the vertical at a distance of 1" below the axis of the guide tube. Panel is placed face up on the holder and the sand is allowed to fall on the surface until topcoat has been worn away up to ink portion. (Ink exposed over diameter of approximately 5/32").

Results: (Expressed as liters of sand required)
27 liters of sand

Adhesion

Procedure: Lines are scored into surface of sample with razor blade to form a configuration similar to the diagram below. Masking tape is applied to the scored area and firmly pressed onto the surface. Masking tape is then removed by pulling off in a fast, swift motion.

Measure amount of coating removed along edges of score lines.

Representation of score lines 

Results: Excellent – no coating removed along edges of scored lines

(4) Warranty

Barker-Tile panels are manufactured, inspected and tested in accordance with our high standards of quality and we affirm that every effort is made to ensure that Barker-Tile panels are free of manufacturing defects.

An exclusive 25-Year Limited Warranty covers Barker-Tile provided:

- Installation is done according to the J.J. Barker Company's written instructions.
- Installation is done with Barker's Adhesive and Barker 100% Silicone.
- All seams, edges, holes and/or punctures are adequately sealed with Barker 100% Silicone.
- No nails or screws are used to install Barker-Tile.
- Barker-Tile is properly maintained.

Note: If Barker Adhesive and Silicone are not available in your area, use a high quality solvent based panel adhesive and a high quality 100% silicone caulk.

Our Responsibility

Any cracking, peeling, moisture infiltration, and other alterations of the surface of the substrate, which are caused by the manufacturer and/or a manufacturing defect.

Beyond our Control

Alterations due to improper handling, improper storage, incorrect installation, lack of proper maintenance or damages caused to the product once it has left our plant.

The J.J. Barker Company's liability shall be limited to the replacement or refund (at J.J. Barker's option) of the defective Barker-Tile panels.

Please keep your receipt

The J.J. Barker Company needs the receipt in order to verify date and proof of purchase to resolve any problems that may occur.

The J.J. Barker Company reserves the right to validate any claim.

(5) Maintenance

Barker-Tile may be cleaned with any non-abrasive cleanser. The use of cleansers that contain abrasives, acids or alkalis may damage the decorative waterproof surface. Stubborn stains and soap scum may be removed with bleach such as Clorox® followed by rinsing with clean, warm water.

(6) Technical Services

For samples, literature, questions or technical assistance, please contact us at our toll-free Customer Service line at (800) 567-2635 Monday to Friday from 8:30 am to 5:00 pm EST.