

BROADCAST KITCHEN FLOORING SYSTEM

PRODUCT DESCRIPTION

Thermal-Chem's Broadcast Kitchen Flooring System was designed to provide high strength in thin overlays with a blend of silica aggregate combined with a pigmented polymer matrix. Finished thickness of a single broadcast system and a double broadcast system is approximately 50-62 mils and 110-125 mils respectively depending upon the broadcast sand size and texture desired. The Broadcast Kitchen Flooring System is design for restaurant kitchens, food preparation areas and industrial kitchens where hot water cleaning does not exceed 140° F. For kitchen areas subjected to thermal shock refer to Thermal-Chem's Industrial Kitchen System Installation Guide and Specification.

ADVANTAGES

- Superior surface protection
- Extremely durable and long wear
- Easy to clean
- Chemical resistant
- Customizable surface profile
- All products are 100% solids and VOC compliant
- Moisture insensitive
- All products are Green
- Can be installed with an integral cove base

TYPICAL USES

- Kitchens and food preparation areas

LIMITATIONS

- Concrete slab on grade or below-grade requires vapor/moisture testing. If a vapor drive in excess of 3 lbs. per 1,000 sq. ft. per 24 hours (ASTM F 1869) is present, an epoxy vapor barrier coating must be installed below the solid seeded system for proper performance.
- Do not install system if the ambient temperature and/or concrete substrate temperature is below 40° F or above 90° F. Product cure times are significantly affected by temperatures and can have a major affect on working time.
- Allow epoxy to cure for 24 hours prior to exposure to water and 2 days before the use of cleaning chemicals.

PHYSICAL PROPERTIES

Color	To be selected
Solids	100% Epoxies
VOC	Compliant
Cure Rate @73° F	Dry to touch: 5-8 hrs Recoat: 6-24 hrs
Hardness, Shore D ASTM D 2240	76-82
Elongation ASTM D 638	30-40%
Tensile Strength ASTM D 638	2,000 psi
Compressive Strength ASTM C 579	5,000 psi
Flexural Strength ASTM C 580	2,000 psi
Adhesion ACI 503R	250 psi (100% concrete failure)
Coefficient of Friction ASTM F 1679 (dry)	0.90 @ medium texture
Thermal Compatibility	Passes
Abrasion Resistance ASTM D 4060, CS-17 wheel, 1000 cycles	45 mgs loss Resin only
Flammability	Self-extinguishing over concrete

ASTM C = Mortar System
ASTM D = Resin only

COLOR

Colors are available in over 12 solid color patterns.

OPTIONS

- Various texture degrees ranging from smooth, medium, to aggressive can be achieved. The contractor should submit a texture sample and sign off approval by customer should occur before installation.
- EXPANSION AND CONTROL JOINTS MUST BE TREATED TO ALLOW FOR MOVEMENT.

- Prior to installation, different methods of treatment and repair should be discussed and agreed to by the manufacture and end user.
- Optional finish wear coats can be applied such as a polyurea or urethane that will provide improved wear, chemical, and UV resistance.
- A cove base can be installed to provide an integral seal between the floor and wall surfaces. Cove bases should be specified by height and length and radius prior to installation.
- Deteriorated concrete should be repaired to achieve a smooth level surface.
- A single broadcast may be installed where requirements dictate.

SURFACE PREPARATION

Proper surface preparation is essential for proper system installation. New concrete should be cured a minimum of 28 days. The substrate must be dry, clean, and sound. All surface contaminants such as dirt, oil, grease, paint, fats, wax, and concrete laitance should be removed.

GENERAL SUBSTRATES

Thermal-Chem systems can be applied to a variety of substrates if the surface is properly prepared. It is always recommended that the coating system be applied directly to concrete. If a selection is made to apply the Broadcast Kitchen Flooring System over an OLD COATING OR QARRY TILE FLOOR extreme care should be taken to insure the OLD COATING OR QUARRY TILE FLOOR is properly adhered. After selecting the surface preparation method, adhesion testing should be performed using an ACI 503 test method or a Simple Cup test method. Typically no adhesion warranty is offered regarding the continued adhesion of the old coating to the concrete.

CONCRETE SUBSTRATE

To insure proper system adhesion, concrete surfaces can be prepped by shot blasting, scarifying, or diamond grinding.

SYSTEM INSTALLATION

BASE COAT BROADCAST

Premix the A component of the basecoat, then pour both A and B components together into a clean mixing container and mix for 2 minutes. Immediately pour the entire mixed material onto the substrate in a ribbon

pattern and spread with a flat squeegee using overlapping two-direction squeegee passes. For edges and hard to reach areas use a paintbrush. Cross roll with a ¼ inch mohair roller at a spread rate of **120 square feet per gallon**. Overlap roller passes to remove squeegee line and roller marks.

Once the material has been spread, and is still wet (10-15 minutes) begin evenly broadcasting quartz aggregate to the point of rejection.

Broadcasting to rejection typically will require ½ lb. of quartz per square foot. Quartz may be broadcast by hand or mechanical blower. Broadcast the quartz granules by throwing upward and out. Do not throw downward at a sharp angle that can cause chunks curing unevenly and mounding on the surface.

Allow to cure (cure times vary depending of environmental conditions), remove any excess aggregate by broom or vacuum. The excess quartz aggregate may be recycled for future use if properly cleaned by removing dirt and debris. **Make any necessary cosmetic repairs or touch-ups to the surface of the first broadcast before continuing to the second broadcast.**

SECOND BROADCAST

Premix the A and B component as described in the base coat broadcast excluding the pigment. Immediately pour the entire mixed material onto the substrate in a ribbon pattern and spread with a flat squeegee using overlapping two-direction squeegee passes. Cross roll with a ¼ inch mohair roller at a spread rate of **80 square feet per gallon**. Overlap roller passes to remove squeegee line and roller marks.

Once the material has been spread, and while the material is still wet (10-15 minutes) begin evenly broadcasting the quartz aggregate to the point of rejection. Broadcasting to refection typically will require ½ lb. of quartz per square foot. Allow it to cure for 5 to 7 hours then remove any excess aggregate by broom or vacuum.

GROUT COAT

Premix the resin as described above. Immediately pour the entire mixed material onto the substrate in a ribbon pattern and spread with a flat squeegee using overlapping two-direction squeegee passes as described above at the rate of rate of **100 square feet per gallon**. Do not allow material to puddle.

FINISHED TEXTURE

Texture is typically achieved through a combination of quartz granule sizes, how aggressively the cured floor is sanded prior to applying a topcoat and the thickness and number of topcoats.

One of Thermal-Chem's aluminum oxide sizes (fine, medium, coarse or extra coarse) may be used to enhance an aggressive texture. The use of approximately 3 pounds per 100 sq. feet may be applied into the wear coat and bank rolled while still wet.

CLEANUP

Clean up mixing and application equipment immediately after use. Use xylene and be careful to observe all fire and health precautions when handling or storing solvents.

Safe and proper disposal of excess materials shall be done in accordance with applicable federal, state, and local codes.

SYSTEM MAINTENANCE

Thermal-Chem's Broadcast Kitchen Flooring System when properly maintained will retain their gloss for several years.

GENERAL CARE

If the coating is gouged, it should be patched immediately.

Always clean up chemical spills to avoid possible staining.

Refrain from dragging heavy loads or equipment across the floor surface.

SYSTEM APPLICATION CHART

	Material	Mix Ratio	Theoretical Coverage	Packaging
1st Coat and Broadcast	FlexGard T #309	2:1	120 sq. ft. / gal	3 or 15 gal units
	Broadcast A110 #7		0.5 lbs. / sq. ft.	50 lb bags
2nd Coat and Broadcast OPTIONAL	FlexGard T #309	2:1	80 sq. ft. / gal	3 or 15 gal units
	Broadcast A110 #7		0.5 lbs. / sq. ft.	50 lb bags
Grout Coat	FlexGard T #309	2:1	100 sq. ft. / gal	3 or 15 gal units

Note: If additional texture is required broadcast Alumni Oxide A-120 Coarse into the Grout coat at the rate of 3 lbs. per 100 sq. ft. and back roll.

CLEANING SCHEDULE

Floors should be swept, washed down and mopped on a daily basis. Heavy soil load environments may require auto scrubbing. Dirt, grease, oil, spills, and other surface contaminants represent a safety issue and should be addressed by a regular floor-cleaning schedule. Facility soil loads, safety and appearance, all contribute to frequency and what type of cleaning is required. Consult Thermal-Chem's Care and Maintenance Guide for polymer floor systems.

DISCLAIMER

The data on this sheet represent typical values obtained by the methods indicated. Since application variables are a major factor in product performance, this information should serve only as a general guide. Such information and recommendations are subject to change and pertain to the product(s) offered at the time of publication. Published technical data is subject to change without notice.