

# 1/16" INDUSTRIAL FLOORING SYSTEM

#### **PRODUCT DESCRIPTION**

Thermal-Chem's 1/16" Industrial Flooring System was designed to provide high strength industrial coating combining a blend of aggregate broadcast into a pigmented epoxy polymer matrix. Finished thickness of the single broadcast system is approximately 1/16" depending upon the broadcast sand size and texture desired.

## **ADVANTAGES**

- Superior surface protection
- Extremely durable and long wear
- Easy to clean
- Chemical resistant
- Customizable surface profile
- Exterior or Interior
- All products are VOC compliant
- Moisture insensitive

### **TYPICAL USES**

- Resurface worn concrete surfaces
- Areas exposed to heavy industrial usage
- Maintenance Facilities
- Kitchen and food processing areas
- Garages and storage facilities

## 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 1/6' industrial floor 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.
- A UV resistant Urethane must be applied to all exterior surfaces.

## COLOR

Solid Seeded is available in over 6 solid color patterns.

## PHYSICAL PROPERTIES

Color	To be selected	
Solids	100% Epoxies	
VOC	Compliant urethanes	
Cure Rate @73° F	Dry to touch: 5-8 hrs Recoat: 8-16 hrs Auto traffic: 24 hrs	
Hardness, Shore D ASTM D 2240	78-82	
Elongation ASTM D 638	4% +/-1	
Tensile Strength ASTM D 638	6,000 psi	
Compressive Strength ASTM C 695	10,250 psi	
Impact Resistance ASTM D 2794	160 in/lbs	
Adhesion ACI 503R	350 psi (100% concrete failure)	
Thermal Compatibility	Passes	
Abrasion Resistance ASTM D 4060, CS-17 wheel, 1000 cycles	34 mgs loss	
Flammability	Self-extinguishing over concrete	

ASTM C = Mortar System ASTM D = Resin only

### **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 prior to installation.
- Optional finish wear coats can be applied such as a polyurea or urethane that will provide improved wear, chemical, and UV resistance.



## 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 1/6' Industrial System over an old coating, extreme care should be taken to insure the old coating 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 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. Refer to Installation Guide # 2001-IG for proper floor prep recommendations.

### SYSTEM MAINTENANCE

Thermal-Chem 1/16" industrial Floor 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.

## CLEANING SCHEDULE

Floors can be swept using ride on commercial sweepers. 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 products(s) offered at the time of publication. Published technical data is subject to change without notice.

## SYSTEM APPLICATION

	Material	Mix Ratio	Theoretical Coverage	Packaging
1 <sup>st</sup> Broadcast	#735 ArmorClad	2:1	100-120 sq. ft. / gal	3 or 15 gal units
	#A108 Broadcast Aggregate		0.5 lbs. / sq. ft.	50 lb bags
Grout Coat	#731 Armor Bond Resurfacer	2:1	40 to 80 sq. ft. / gal Depends upon Aggregate	3 or 15 gal units
Wear Coat (Optional)	#1057 Deco Finish E57 or #1061 Armor Finish E81 (No odor urethane)	1:1	300 sq. ft. / gal	2 or 10 gal units