

CrownShield™ HD • clear & tinted

TECHNICAL DATA SHEET

Product Number: 8327

Revision Date: 05/05/17

High-Build Clear Epoxy Floor Coating for Decorative Metallic & Broadcast Media

DESCRIPTION

CrownShield™HD is a clear, 2-component, 100% solids, thermosetting epoxy designed specifically for the CrownQuartz™ and CrownFlake™ or other chip-broadcasting decorative epoxy flooring systems. CrownShield™HD reinforces the visual depth and texture of the quartz and chip blends and can be used as a grout coat. When properly prepped and applied, the coating will become a monolithic part of the concrete; increasing the durability and life of the floor. It can provide different appearances from smooth to aggressive textures, solid colors, and random flaked or attractive patterns of colors.

TYPICAL USES

- Commercial Buildings
- Garage Floors
- Retail Stores
- Schools
- Hotels
- Entertainment Venues

BENEFITS

- Complies with LEED® Green requirements
- Great working time
- No VOC's – 100% solids formula
- Moisture-insensitive formula
- Cures down to 50°F (10°C)
- Excellent strength properties
- Excellent impact resistant

COLORS

Clear
Color Tint available (Special order only)

PACKAGING

3 gallons & 15 gallons (2 Sided Kits)

COVERAGE

Neat Base Coat: 13-20 mils (80-125 ft²/Gal)

STORAGE

This product has a maximum shelf life of one year when stored off the ground in a dry area at 50° to 110°F, in the original sealed container.

LIMITATIONS

This product is best suited for application in temperatures between 55°F and 95°F. Substrate must be clean, sound, and dry. Apply the next coating within 24 hours if the ambient temperature is below 85°F and 18 hours if above 85°F. Do not apply direct to concrete substrates.

HANDLING/SAFETY

Warning! Eye and skin irritant. May cause dermatitis and sensitization. Always read and understand the product SDS. Avoid contact with eyes, skin or clothing. Avoid breathing vapor, mist or spray. Use with good ventilation.

FIRST AID

In case of contact:

1. Eyes: Immediately flush with water for at least 15 minutes.
2. Skin: Immediately remove from skin with dry cloth followed by thorough washing with soap and water.
3. Inhalation: Remove to fresh air. If breathing is difficult, give oxygen.
4. Ingestion: Immediately call a Poison Center/Doctor. Do NOT induce vomiting. If vomiting occurs naturally, lie on your side, in the recovery position.

CAUTION

Always read and understand the specific product data guide and SDS sheets before using this product. For more information contact Crown Polymers.

THE TECHNICAL DATA

DESCRIPTION	PHYSICAL PROPERTIES
Mix Ratio by Volume	2 parts: Side A, 1 part: Side B
Potlife	15 – 20 minutes
Consistency	Nearly Self-Leveling
Tack Free Time @ 50°F	10-12 hours
73°F	6-8 hours
90°F	5-7 hours
Tensile Properties (ASTM D638)	4800 psi
Elongation (ASTM D638)	5 %
Hardness (ASTM D2240)	Shore D 80
Adhesion to Concrete (ACI 503 R)	400 PSI 100% Concrete Failure
Compressive Strength (ASTM D695)	8500 psi
Shelf-Life	1 year in original unopened containers
Sold and Packaged	3 gal. and 15 gal. Kits

CHECK THE CONCRETE

Concrete must be structurally sound and free of curing membrane, paint or other sealer. If you suspect that the concrete has been previously sealed, call Crown Polymers technical support for further instructions.

CHECK FOR MOISTURE

Concrete must be dry before application of this floor coating material. Concrete moisture testing must occur. Calcium chloride testing or “In-situ” relative humidity testing is recommended. Test methods can be purchased at www.astm.org, see ASTM F1869-11 or F2170-11, respectively or follow manufacturer’s instructions. Readings must be below the defined threshold as specified for each Crown Polymers system to be installed directly to the concrete substrate. Please refer to the appropriate Technical Data Sheet for this information.

CHECK THE TEMPERATURE & HUMIDITY

Floor temperature and materials should be between 65°F (18°C) and 90°F (32°C). Humidity must be less than 95%. DO NOT coat unless floor temperature is more than (5°F) over the dew point.

Note: Although testing is critical, it is not a guarantee against future problems. This is especially true if there is no vapor barrier or the vapor barrier is not functioning properly and/or you suspect you may have concrete contamination from oils, chemical spills or excessive salts.

1. SURFACE PREPARATION

Requires ICRI CSP 3

This product requires proper surface profile to perform as expected. Substrate must be mechanically profiled (ASTM 4259-83), clean, sound, and dry.

THE APPLICATION PROCESS

2. APPLICATION EQUIPMENT

Tools: 3" Disposable brush, low speed drill (450 rpm) with a 3.5" Jiffler blade, 3/8" nap non-shedding phenolic core roller, and a flat rubber squeegee.

3. MIXING

The temperature of the (A) and (B) portions should be between 70° to 80°F (20°-25°C). Mix them separately to ensure a uniform consistency. For a 3 gallon kit add (Side B) into (Side A) in a 3.5 gallon bucket. Mix contents thoroughly until all components are completely incorporated and no streaking is observed. Do not thin, mixed thoroughly. These portions are accurately measured and best product performance will be obtained if all the Hardener and resin is mixed homogenously. Pouring from one container to the other (boxing) during mixing is very helpful in insuring complete mixing. Mix for 2 minutes.

4. ROLL ON

After mixing all contents as instructed, immediately pour out into a ribbon on the surface. Squeegee the material out evenly and check for desired film thickness by using a wet-film thickness gauge. Back-rolling and then cross rolling is critical. Allow to dry minimum of 12 hours before recoat.

CLEAN-UP

Clean-up mixing station, tools and application equipment immediately after completion. Use suitable solvent as specified by Crown Polymers' Technical Services Team or if permissible by law, xylene, as a general over-the-counter solvent. Observe all fire hazards, legal, and health and safety precautions when handling or storing solvents, particularly in confined spaces. Make sure the working area is well ventilated at all times during application and curing times.

DISPOSAL

Dispose all excess materials, packaging, and other waste in accordance with federal, state, and local regulations.

MAINTENANCE

Occasionally inspect the installed floor by spot cleaning and spot repairing any damaged or cracked areas. To prolong the life of the flooring system, a daily cleaning maintenance program is highly recommended to ensure the floor is safe for its intended purpose.

TECHNICAL SUPPORT

For any application questions, please call our Crown Polymers Technical Team. PLEASE SEE SAFETY DATA SHEET (SDS) FOR SAFETY AND PRECAUTIONS. USE PRODUCT AS DIRECTED. KEEP OUT OF THE REACH OF CHILDREN.

DISCLAIMER

All guidelines, recommendations, statements, and technical data contained herein are based on information and tests. The accuracy and completeness of such tests are not guaranteed and are not to be construed as a warranty, expressed or implied. It is the responsibility of the user to document information and tests to determine the intent of the product for ones' own use. The application, job conditions and user assumes all risks and liability resulting from use of the product. We do not suggest or guarantee any hazards listed herein are the only ones, which may exist. Neither seller nor manufacturer shall be liable to the buyer or any third person for any injury, loss or damage directly or indirectly resulting from use of, or inability to use the product. Recommendations or statements, whether in written or verbal, other than those contained herein shall not be binding upon the manufacturer, unless in writing and signed by a corporate officer of the manufacturer. Technical and application information is provided for the purpose of establishing a general profile of the material and proper application procedures. Test performance results were obtained in a controlled environment and Crown Polymers makes no claim that these tests or any other tests accurately represent all environments. Not responsible for any typographical errors.

LIMITED WARRANTY

Crown Polymers warrants its products to be free of manufacturing defects and meets all Crown Polymers current published physical properties. Crown Polymers' sole responsibility shall be to replace the portion of any product proved to be defective. There are no other warranties by Crown Polymers of any nature whatsoever expressed or implied, including any warranty of merchantability or fitness for a particular purpose in connection with this product. Crown Polymers shall not be liable for damages of any sort, including remote or consequential damages resulting from any claimed breach of any warranty whether expressed or implied. Crown Polymers shall not be responsible for the use of this product in a manner to infringe on any patent held by others. In addition, no warranty or guarantee pertaining to appearance, color, fading, chalking, staining, shrinkage, peeling, normal wear and tear or improper application by the applicator will be issued. Damage caused by abuse, neglect and lack of proper maintenance, acts of nature and/or physical movement of the substrate or structural defects are also excluded from the limited warranty. Crown Polymers reserves the right to conduct performance tests on any material claimed to be defective prior to any repairs by owner, general contractor, or applicator.

