

1070

EPOXY POLYMER FLOORING

Technical Data Sheet

DESCRIPTION:

1070 flooring is a two-component, 100% solids, tough and chemical resistant epoxy coating. It is designed to provide a stipple finish coat to aggregate-filled polymer floor systems. 1070 flooring is available in clear and is compatible with Epoxy Color Add. 1070 flooring can also be used as a standalone coating.

ADVANTAGES:

- Good chemical and abrasion resistance
- Easy to maintain surface, highly UV stable
- Solvent free, low odor
- Fast cure at 55°F
- Excellent hiding capabilities
- Can be used with Epoxy Color Add

TYPICAL USES:

- Light industrial or commercial floors
- Electronic equipment rooms
- Maintenance garages
- Warehouses
- Storage areas

SYSTEM SPECIFICATION:

1070 flooring as manufactured by Valspar shall consist of R-90/H-100 as the primer and 1070 Resin and 1070 Hardener as the topcoat(s). 1070 flooring can be applied as the topcoat over approved polymer floor systems.

LIMITATIONS:

- Heat resistance limit of 140°F for continuous exposure and 160°F for intermittent exposure.
- This product is not designed for exterior use, immersion, or any use where moisture can reach the underside of the flooring.
- Technical Data Sheets are updated periodically. To ensure the most current version is being used, visit Technical Resources on www.valsparflooring.com.
- Proper material application is the responsibility of the user. Site visits by Valspar personnel are for making technical recommendations only and not for supervising or providing quality control.
- Do not apply to concrete floors less than 60 days old without consulting Valspar Technical Service.

TYPICAL PHYSICAL PROPERTIES:

TYPE TEST	TEST METHOD	TYPICAL VALUE
Compressive Strength	ASTM D-695	5,800 psi (40 MPa)
Tensile Strength	ASTM D-638-91	3,164 psi (22 MPa)
Abrasion Resistance	ASTM D-4060	0.067 gm
Fire Resistance	ASTM E-84	<ul style="list-style-type: none"> • Flame Spread Index – 3 • Smoke Development - <5 • Classification – 1 or A
Tensile Elongation	ASTM D-638	1.75%
Flexural Strength	ASTM D-790	>3,500 psi
Shore D Hardness	ASTM D-2240-91	85
Specular Gloss Factor	ASTM D-523	70

Above typical values based on 7 days cure @ 75 °F

- Do not apply to floors previously treated with curing and parting compounds or other coatings unless they have been completely removed by chemical or mechanical means.
- Do not use on vinyl, asphalt, rubber, glazed tile, paving brick, quarry tile, Mexican tile, or similar materials.
- Do not apply if the floor, air, or product temperature is below 55°F or over 90°F or if the relative humidity is above 85%.
- Do not apply over honeycombed or structurally unsound surfaces.
- Before applying for protection against specific chemical environments, consult Chemical Resistance Guide or Valspar Technical Service.
- If the product is to be applied in or near areas containing foodstuffs, they should be removed before the application and until the coating has fully cured and all vapors have dissipated.
- Do not thin these products. Addition of thinners will slow the cure and reduce the ultimate properties of the products. Critical recoat times will also be affected.

VALSPAR FLOORING

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PRELIMINARY FLOOR INSPECTIONS:

In general, the area to be surfaced must be clean, sound, dry and above 55°F to assure a successful installation. If there is uncertainty as to whether or not a curing compound or any coating is present on the floor, the following two tests may be performed in order to find out:

1. Pour a cup of water on three or four areas of the floor. If the water puddles out, then there probably is no curing compound or any coating on the floor, and the preparation process may begin. However, if the water beads up like on a waxed car, this may indicate the presence of a curing compound or any coating that must be removed by chemical or mechanical means.
2. Place a drop of PC-42 ACID CONDITIONER on the floor. If the acid bubbles, a curing compound or any coating is not present.

Always be alert to any possible airborne or surface contaminants, which may contribute to problems such as fisheyes, crawling, cratering, etc.

The concrete floor should be examined for the presence of moisture. This can be accomplished by the following means:

1. Calcium Chloride Test
2. Delmhorst Moisture Meter
3. Polyethylene Sheet Method.

Calcium Chloride Test: This test method works by a change in weight of moisture absorbing anhydrous calcium chloride and indicates the amount of moisture transmitting out of a large concrete surface area. Pounds is the equivalent weight of the water that is emitted from a 1,000 square foot concrete slab surface area in a 24-hour period of time (standard test duration is 60-72 hours). Follow instructions as outlined by the supplier of the test kits. Make sure the concrete surface to be tested is completely clean of any residue and any debris. All seals, including curing compounds must be removed prior to performing tests. Sources: Roofing Equipment Inc., Denver, CO 303-371-7667; Sealflex Industries Inc., Costa Mesa, CA 714-708-0850; Vinyl Plastics Inc., Sheboygan, WI 920-458-4664; and Floor Seal Technology, San Jose, CA 408-436-8181

SURFACE PREPARATION:

All oil, grease, wax, laitance, curing compounds, water-soluble concrete hardeners and other surface contaminants must first be removed. PC-43 WASH OFF REMOVER or PC-46 DRY EZE should be used for removal of sealers, finishes and paints. Inspect the concrete and remove loose or soft concrete by scarifying or sand blasting.

STANDARD TESTS:

Refer to the standard test methods below for further information.

ASTM D 4258-83	Standard Practice for Surface Cleaning Concrete for Coating
ASTM D 4259-83	Standard Practice for Abrading Concrete
ASTM D 4260-83	Standard Practice for Acid Etching Concrete
ASTM D 4262-83	Standard Test Method for pH of Chemically Cleaned or Etched Concrete Surfaces

CHEMICAL PREPARATION:

PC-40 DYNAMITE should be used as directed to remove all traces of grease, oil, and dirt followed by a thorough rinsing to remove all cleaning residues. Remove excess water with a good wet vacuum. To remove laitance and to give a slight texture to area to be surfaced, acid-etch using PC-42 ACID CONDITIONER. Using a 1:1 dilution ratio with water, apply evenly as possible to the surface and vigorously scrub into the surface with a stiff bristle brush or automatic scrubber. Thoroughly rinse with copious quantities of water and use wet vacuum to remove any residues. **Repeat this process until concrete surface is the texture of medium grit sandpaper.**

MECHANICAL PREPARATION:

Mechanically abrade or "shot-blast" the surface to the texture of medium grade sandpaper, then vacuum up any dust. Whenever "shot-blasting" is utilized, be careful to leave concrete with a uniform texture.

APPLICATION INFORMATION:

Process Step	Material	Mix Ratio	Theoretical Coverage
Primer	R-90/H-100	2:1	300-400 sq.ft./gal
Topcoat(s)	1070 Resin/1070 Hardener	2:1	250-320 sq.ft./gal

Primer:

- Premix the R-90 and H-100 separately using a low speed drill and Jiffy mixer. Mix for two minutes and until uniform, exercising caution not to introduce air into the material.
- Add 2 parts R-90 and 1 part H-100 by volume. Mix with a low speed drill and Jiffy mixer for three minutes and until uniform.
- R-90/H-100 may be applied by roller, trowel or squeegee. Coverage will vary depending on the porosity of the substrate and surface texture.

CURE TIME:

At a cure temperature of 75°F, allow 12-14 hours for foot traffic and 24 hours for light traffic. For heavy traffic and/or chemical spillages allow 72 hours.

Topcoat(s):

- Topcoat must be applied within 6 to 24 hours of priming at 77°F. It can be applied as soon as the primer is tack free.
- Premix the 1070 Resin and 1070 Hardener separately using a low speed drill and Jiffy mixer. Mix for two minutes and until uniform, exercising caution not to introduce air into the material.
- For pigmented 1070, add 1 quart Epoxy Color Add to 2 gallons of 1070 Resin. Mix for two minutes and until uniform. One (1) gallon of 1070 Hardener should then be added to the pigmented 1070 Resin. Mix with a low speed drill and Jiffy mixer for three minutes and until uniform.
- For clear, add 2 parts 1070 Resin and 1 part 1070 Hardener by volume. Mix with a low speed drill and Jiffy mixer for three minutes and until uniform.
- Pot life of 30 minutes at 75°F and working time will be greatly reduced at elevated temperatures.
- 1070 may be applied utilizing a high quality 3/8" roller or by trowel/squeegee and backrolling. Apply at a rate of 250-320 sq.ft./gal. Apply evenly to obtain uniform texture.
- It is important to apply subsequent coats within 12 to 24 hours at 75°F. If 1070 cures longer than the 24 hours before subsequent recoats, screening is required.

CLEAN UP:

Tools should be cleaned right away with soap and water. Solvents such as Xylene or UR-9 MCU THINNER can also be used. Any cured or hard material can be removed with the use of PC-46 DRY EZE.

REFER TO MATERIAL SAFETY DATA SHEET FOR
FURTHER SAFETY AND HANDLING
INFORMATION.

See individual labels for more caution statements.

KEEP OUT OF THE REACH OF CHILDREN.

DISPOSAL:

Dispose in accordance with federal, state, and local regulations. Use licensed hazardous waste company.

Empty containers may contain product residue, including flammable or explosive vapors. Do not cut, puncture or weld on or near container. All label warnings must be observed until the container has been commercially cleaned or reconditioned.

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