



TECHNICAL DATA SHEET

Imperial Base Coat RC

PRODUCT DESCRIPTION

Imperial Base Coat RC is ideal for One Day Garage System. Imperial Base Coat RC is fast cure, VOC compliant, high solids, 2-component epoxy and designed as a base coat for color flake(chip) flooring. It can be applied to new and existing concrete and has a low viscosity. Imperial Base Coat RC provides excellent adhesion and hide to concrete in a single coat application. Imperial Base Coat RC withstands up to 9

lbs of Moisture Vapor Emissions when used on residential garage floors only up to 1,000 SQFT. Full Broadcast of flake (chips) is required to get a lifetime adhesion warranty. Imperial Base Coat RC adheres to damp or dry concrete and give ample open time for broadcasting the color flakes (chips).

AVAILABLE COLORS

- Clear
- Light Gray
- Medium Gray
- Dark Gray
- White
- Black
- Tan
- Beige
- Tile Red
- Safety Red
- Safety Blue
- Safety Green
- Safety Yellow

NOTE: BASE COAT is to be used as a PRIMER COAT ONLY and must be coated over with another pigmented epoxy, sealer or broadcast to refusal.

PRODUCT DATA

Volumetric Ratio	2 to 1
Solids	100% (+/- 1%)
Coverage	200-225 sqft/gal. at 8 mil or thicker if desired
Pigmented Base Coat	8-10 mils
Color Flake Coat	4-6 mils
Application Temperature	55°-90°F
Thinning	Not Required
Pot Life	none
Working Time on Floor	15-20 min.
Cure Time	1.5-2 hrs (walking) 10-12 hrs (light traffic)
Full Cure	2-4 days
Critical Re-Coat Time	None
(After full cure surface MUST be sanded prior to next coat.)	
Shelf Life	12 months
USDA Food & Beverage	Meets Req.

APPLICATIONS

- Garage floors
- Clean rooms
- Manufacturing facilities
- Automotive showrooms
- Commercial kitchens
- Grocery Stores
- Laboratories
- Basements
- Kennels
- Restrooms
- Locker rooms
- Aisle ways

ADVANTAGES

- Fast turn around, Fast Cure
- Self-priming over properly prepared substrate
- Lifetime adhesion warranty
- VOC Compliant

- Withstands up to 9 lbs of Moisture
- Vapor Emissions
- Chemically resistant
- Essentially odorless
- Low viscosity

PROPERTY

- Compressive Strength
- Flexural Strength
- Tensile Strength
- Bond to Concrete
- Taber Abrasion
- Flammability
- Hardness, Shore D
- Flash Point

VALUE

- 10,800 psi
- 11,700 psi
- 8900 psi
- 350 psi
- 75-80 Mgs
- Self-extinguishing
- 84
- >200°F

REFERENCE

- ASTM C 695
- ASTM D 790
- ASTM D 638
- ASTM D 4541 (Concrete fails at this point)
- ASTM D 4060
- ASTM D 2240



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CONCRETE PREPARATION

Before coating is applied, concrete must be:

- Dry – No wet areas
- Clean – Contaminants removed
- Profiled – Surface must be diamond ground to a CSP (Concrete Surface Profile) rating of "2" ... Roughly the feel of 100 Grit Sandpaper.
- Sound – All cracks and spalled areas repaired

Note: Mechanical preparation is the preferred method of preparing concrete for coating application. Shot-blasting, diamond grinding, scarifying and scab-bling are all acceptable methods.

REPAIR CRACKS

Voids, cracks and imperfections will be seen in finished coating if the concrete is not patched correctly. Joint Filler (Crack Repair) and/or Rapid Mender to fill cracks and imperfections. After the materials are cured, diamond grind patch. If another patching material is used, contact Royal Epoxy for a compatible and approved alternative.

MOISTURE VAPOR EMISSIONS WARNING

All concrete floors without effective moisture vapor barrier are subject to possible moisture vapor transmission that may cause blistering and failure of the coating system. It is the applicator's responsibility to conduct calcium chloride and relative humidity probe testing to determine vapor emissions prior to applying any coating. Royal Epoxy can supply moisture remediation products MVB15 (MOISTURE VAPOR BARRIER) that are up to 15 lbs. Royal Epoxy, sales agents will not be responsible for coating failures due to undetected moisture vapor emissions.

APPLICATION INSTRUCTIONS

Application of Imperial Base Coat RC for a nominal 8 to 16 mil coating system is applied in one coat.

1. Always apply in descending temperatures. Concrete is porous and traps air. In ascending temperatures (generally mornings) the air expands and can cause out gassing in the coating. It is safer to apply coatings in the late afternoon, especially for exterior applications.
2. Optimum ambient temperature should be between 55-90°F during application. Note: Cure times are affected by ambient and slab temperatures. Temperatures of 55°F and lower can slow cure times. Temperatures of 85°F and higher will speed up working and times.
3. Mix 2gal kit of Imperial Base Coat RC using above mixing instructions.
4. Apply approximately 200 SF per gallon by immediately pouring out on surface in a ribbon, while walking and pouring at the same time until bucket is empty.
5. Using a metal smoother squeegee on a pole, pull Imperial Base Coat RC over substrate. As a coat over bare concrete, pull resin as thin as possible while still wetting out concrete and uniformly covering surface. This allows trapped air to escape more easily.
6. Using a 3/8" non-shedding phenolic (plastic) core paint roller, roll coating forwards and backwards.
7. Lastly, back roll in the opposite direction as step 6.
8. NOTE: Imperial Base Coat RC is specifically designed to be a "Primer Coat" epoxy only, and will always need to be covered over by a full broad-cast or another coat of standard 100% Solids Pigmented

PACKAGING

2 GALLON KITS

PART A	1.33 GAL
PART B	0.67 GAL

15 GALLON KITS

PART A	10 GAL
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CLEAN UP

Imperial Base Coat RC, while in an un-reacted state, may be cleaned up with hot water and degreaser. Isopropyl alcohol or acetone may be needed once the resin begins hardening.

SPECIAL NOTE

ALL Epoxies manufactured by Royal Epoxy are NOT UV stable and can and WILL amber and discolor when exposed to UV light.

MIXING

The ratio of Imperial Base Coat RC is 2 to 1. That is, two parts A (resin) to one part B (hardener). Mix the following with a drill and mixing paddle.

Note: If using a drill mixer, use a low speed (not to exceed 300 rpm) to prevent air entrainment.

1. Premix 1.33 gallon of Part A for 30-45 seconds.
2. Add 0.67 gallon of Part B into 2gal pail (Part A) and mix for another 60-90 seconds.
3. Imperial Base Coat RC is designed to be immediately poured on the floor. The Pot life is less than 2 minutes. Once poured out on the floor, 15-20 minutes of working time can generally be expected.

CHIP/SILICA SAND BROADCAST INSTRUCTIONS

Chip Broadcast

1. Following Step 6 above. Broadcast Color Chips/Micro Chips (at 10 to 12 lbs. per 100 sq. ft.) by tossing them into the air and allowing them to gently rain down into the wet resin.
2. Anything less than FULL BROADCAST NOT RECOMMENDED. And not warranted
3. Allow to cure. Then scrape the basecoat with a drywall scraper in all directions. Vacuum small pieces and dust. Silica Sand Broadcast

1. Following Step 6 above, gently throw the silica sand up into the air, allowing it to fall without lumping in one spot or moving the resin. Do this until the floor is totally saturated with the silica sand and the resin will not accept any more. This generally requires 1/2 to 3/4 lbs. per sq. ft. Allow to dry for 2- 4 hours.
2. Sweep floor and stone any high spots.
3. Application of sealer coat will vary GREATLY in SQFT per gallon depending on the type of coating you go over. Consult a Royal Epoxy Tech Support to advise you on best coverage rates.

WARNING! SLIP AND FALL PRECAUTIONS

OSHA and the American Disabilities Act (ADA) have now set enforceable standards for slipresistance on pedestrian surfaces. The current coefficient of friction required by ADA is .6 on level surfaces and .8 on ramps. Royal Epoxy recommends the use of angular slip-resistant aggregate in all coatings or flooring systems that may be exposed to wet, oily or greasy conditions. It is the contractor and end users' responsibility to provide a flooring system that meets current safety standards. Royal Epoxy will not be responsible for injury incurred in a slip and fall accident.

Handling Precautions

Use only with adequate ventilation. Appropriate cartridge-type respirator must be used during application in confined areas. Avoid contact with skin. Some individuals may be allergic to epoxy resin. Protective gloves and clothing are recommended.

WARRANTY

Royal Epoxy products are warranted for one year after date of purchase. Please refer to the Limited Material warranty for additional clarification.

