



R-100 Polymer Mortar

Product Data Sheet

DESCRIPTION

Raeco R-100 is single component topping compound consisting of a uniform, premixed blend of portland cements and graded washed silica aggregates with polymer modification to promote lasting surface adhesion, for renovation and new construction. R-100 can be applied from a feathered edge to 1/2" (12.7 mm), for thickness greater than 1/2" use appropriate aggregate. R-100 can be used for horizontal, interior and exterior use, a sealer or coating is recommended when used for a wearing surface. R-100 contains no gypsum, chlorides, ferrous metals or corrosive agents.

PROPERTIES

COMPRESSIVE STRENGTH, PSI (ASTM C-1439)
7 Days: 3400 28 Days: 4100

SHEAR BOND (ASTM C-1092 Mod.)
7 Days: 700 psi

FLEXURAL STRENGTH (ASTM C-348)
28 Days: 1800 psi

TENSILE STRENGTH (ASTM C-190)
28 Days: 900 psi

The values presented are typical averages and are intended to serve as a guide only.

- Horizontal application
- Fire Retardant
- Non-toxic

Fuel Contribution	0
Flame Spread	0
Smoke Development	0

SURFACE PREPARATION

Surfaces to be covered must be structurally sound, clean and free of dust, oil, grease, sealers, curing compounds, laitance, release agents or other surface contaminants. Where possible, cut vertical shoulders at edges to accommodate repair. For smooth surfaces, we recommend mechanical abrasion to achieve an acceptable surface profile. The cleaning and preparation method selected depends on both the sub-floor material and its condition. Acid etching is not recommended. For optimum adhesion, dampen surface with water and remove any puddles before application of product. Raeco R-2000 may be used as a bonding medium.

AREAS OF USE

- Repair floors and concrete slabs
- Underlayment for all finished floor products
- Horizontal applications, may be covered up walls
- Exterior applications for walkways & ramps
- Filling holes, cracks and spalled areas
- Areas exposed to medium-duty loads
- Leveling or creating pitch to drains
- Areas with varying weather cycle
- Rained out or freeze damaged slabs
- Elevation transitions

PACKAGING

- 50 lb. bags (22.5 kg.)
- (48 bags per pallet)

APPROXIMATE COVERAGE

50 lb. bag: 50 sq. ft. (4.6 m²) @ 1/8" (3.18 mm)

Bulked with #8 Silica sand
50 lb. bag: 18.75 sq. ft. (1.73 m²) @ 1/2" (12.7 mm)

Bulked with 3/8" pea gravel
50 lb. bag: 9.06 sq. ft. (.83 m²) @ 1" (25.4 mm)

For Thickness:
1/2" to 1" use #8 silica sand @ 25 lbs. (11.25 kg) per bag
1" & up use 3/8" pea gravel @ 25 lbs. (11.25 kg) per bag

MIXING

Raeco R-100 is mixed by adding clean water at a rate of approximately 4 – 5.5 quarts (3.80– 5.23 liters) per 50 lb. sack. Water should be added to the mixing container first, then the R-100, followed by the appropriate aggregate if necessary. Using a mixing paddle (a whip type is recommended) with a low speed drill (400 to 500 rpm), mix thoroughly (2 to 3 minutes) until the powder has been completely dispersed and the mix has acquired a smooth homogeneous texture. Do not add more water once R-100 has started setting up. The pot life of the mix averages about 35 minutes and working time 35 to 45 minutes, depending on the temperature. It is recommended to mix only the amount of R-100 that can be applied within that amount of time.

APPLICATION

Apply the Raeco R-100 mixture on the prepared surface. Should a broom finish be desired, do so right away. Do not add or spray water onto the surface for finishing, it may cause the surface to blister or spall. Rough spots or trowel marks may be shaved or sanded off the surface after a few hours, using a medium to fine grit sandpaper. Sanding should be accomplished after an appropriate time of curing has occurred. When R-100 is going to be a wearing surface, a sealer or coating is recommended. Allow an adequate curing time before applying a sealer or coating. Before installing any finished floor products, make sure to follow the adhesive manufacturer's recommendations.

When R-100 is to be applied on surfaces other than concrete (i.e., wood, metal, terrazzo, etc.), consult Raeco's Technical Service Department for recommended preparation, bonding, and application procedures.

LIMITATIONS

Raeco R-100 should only be applied over substrates that are between 40° and 90° F. (4.4° and 32.2° C.) Do not apply in the rain, and do not allow to freeze within 24 hours of application. When applying R-100 to thickness greater than 1/2" (12.7 mm), bulk the mix with the appropriate type and amount of aggregate (refer to Coverage Section).

WARNING

Raeco R-100 contains Portland cement and silica sand. Use of a dust respirator, safety goggles and rubber gloves are recommended. In case of contact with eyes, immediately flush with water and consult a physician. Avoid hazards by following all precautions found in the Material Safety Data Sheet (MSDS), product labels and technical literature. **Please read this information prior to using product.**

WARRANTY

Raeco, Inc. warrants that if its products prove to have manufacturing defects and Raeco is notified of such within six months from the date Raeco shipped the products, Raeco will replace the defective products F.O.B. factory. Such product replacement shall constitute the sole and exclusive remedy for any claim under this warranty. Raeco does not authorize anyone, including Raeco Representatives, to make any statements that supersede, modify or supplement the information provided on its printed literature or package labels without written confirmation from the Raeco Technical Service Department. Any installations proceeding without this confirmation, or improper installations of the products will void this warranty. Under no circumstances will Raeco be liable for economics, special, incidental, or consequential damages or losses of any kind whatsoever arising out of or occasioned by selection, use installation or replacement of this product.

GUIDE SPECIFICATIONS: Consult Raeco for R-100 Guide Spec (4 pages) latest edition.

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