HPR-143-VF
Epoxy Floor Coating

Revised 09/2019 Issue 4—REF : FLVF

DESCRIPTION

HPR-143-VF is a self smoothing epoxy resin seamless floor finish with low VOC content, with non dusting aggregates designed to provide a flat hard wearing gloss finish 2-3 mm in thickness following the profile of the existing floor. The system gives aesthetically pleasing results with good chemical resistance and durability.

ADVANTAGES

- Seamless
- Silica free
- Hard wearing durable floor for industrial use
- Ease of application
- Hygienic
- Excellent abrasion and impact resistance
- Good chemical resistance
- Smooth finish for precise operation equipment

RECOMMENDED USES

- Pharmaceutical production
- Printing and packaging areas
- Television studios
- Automotive production
- Domestic studios
- Industrial workshops
- Medical and healthcare

PRODUCT INFORMATION

System Thickness (Recommended)	2-3mm
Solids Content by Weight	100% solids by weight
Pack Sizes	29.5kg
Pack Make Up	1 x Base 1 x Hardener 1 x Filler SL1 Aggregate
Shelf Life	36 months (Base, Hardener & Aggregate)
Storage	Keep out of direct sunlight. Store in a dry place, between 15°C- 30°C.

APPLICATION INFORMATION at 20°C

Coverage Rate (Theoretical)	29.5kg will cover 7.8m^2 at 2mm thickness or 5.2m^2 at 3mm thickness *Coverage rate is calculated based on a sealed and smooth surface and may vary based on the substrate roughness and other conditions.
Pot Life	25-30 Minutes
Recoating Intervals	12-16 hours
Light Traffic	24 hours
Full Traffic	72 hours
Full Chemical Cure	7 Days

Specification

Product : HPR-143-VF

Finish : Smooth gloss

Recommended thickness range: 2-3mm

Colour : Available in a range of colours, please consult Parker James Ltd

Products required for this system

Primer : HPR-143-ST or HPR-143-MVT on damp surfaces, where required.

System : HPR-143-VF

Optional Finish Coat: HPR-143-EWB Clear Matt for a matt finish

Preparation

New Concrete Floors: New concrete must be clean, sound, dry, fully cured and surface laitance removed by vacuum enclosed shot blasting or mechanical grinding, a minimum strength of 25N/mm^2 is required.

Existing Concrete Floors: Remove all dirt, oil, grease, old paint or any other surface contaminants by vacuum enclosed shot blasting, scarifying or mechanical grinding. Fats, oils or greases must be removed by mechanical means and detergent washing and make sure all residue of detergent is washed and removed by rinsing with clean water. Local repairs should be carried out using **Resuscreed PA**.

Existing Floors (previously coated)
All previous coatings and loose floor paints must be removed by mechanical preparation as described in the above section and primed as specified. if the old resin flooring cannot be removed, then please consult with our technical team for advice on intercoat adhesion and suitability, as it may not be compatible with existing floor coating.

Priming

Open and porous substrates will require priming with HPR-143-ST on dry substrates only with less than 75% ERH reading.

Where the Relative Humidity of a substrate exceeds 75% ERH HPR-143-MVT should be specified and selected on the basis of hygrometer readings in accordance with BS 8203:2017. The number of coats to be applied is chosen in accordance with the following table.

ERH%	Required Coating Thickness
75-85	1coat of HPR-143-MVT at 200 microns per coat
85-92	2coats of HPR-143-MVT at 200 microns per coat
92-97	3coats of HPR-143-MVT at 200 microns per coat

For further information please refer to individual product data sheets.

Application

The ambient temperatures of the areas should not be allowed to fall below 15°C throughout the application and the curing period, as this could have an adverse effect on the appearance and colour of the system. Surface temperature must be above 10°C. Where possible it is recommended that the application area is heated to a minimum temperature of 15°C ideally to allow the ambient and substrate temperature to stabilise prior to installation.

Mixing: Pre-mix the coloured component (base) to a uniform colour, then mix the entire contents of base with the hardener. If a separate mixing bucket is being used ensure all contents of both components are removed from the buckets supplied. Mix using a slow speed electric mixer for approximately one to two minutes until the two components have fully combined then add the aggregate slowly.
Mix for a further 1-2 minutes until the aggregate has fully combined and there are no lumps. The mixed unit should be applied immediately.

HPR-143-VF should be worked with a trowel or float to achieve an even smooth finish. This is best achieved by the application of smooth even
pressure with the compound poured over the correct coverage rate after fixing the stop ends to control the flow of the material.
Then roll the area with a spiked roller to achieve an even smooth surface and remove entrapped air. Do not re-roll the area later than 10-15 mins.
The surface should be protected from temperatures of less than 10°C and moisture in the early stages of cure.
This could adversely affect the flow, levelling and surface finish of HPR-143-VF.

Category Guide

FeRFA Category : 5

Technical Information

The following figures are obtained from laboratory tests and our experience with this product .

Slip Resistance	Dry > 60
Method BS7976-1 + A1 2013 Method BS7976-2 + A1 2013 Method BS7976-3 + A1 2013	Wet Please consult Parker James Ltd

The slip resistance of a floor surface can vary as a result of the installation process, conditions at the time of application and subsequent traffic. Inappropriate cleaning or maintenance can adversely affect the performance. For further advice on potential wet areas please consult Parker James Ltd.

Abrasion Resistance (BS EN 13892-4:2002	AR 0.5 (< 50 microns wear)
Shore D Hardness (BS EN ISO 868:2003)	85
Tensile Strength (BS EN ISO 527-2:2012)	20 N/mm^2
Flexural Strength (BS EN ISO 178 +A1:2013)	45 N/mm^2
Bond Strength (BS EN 13892-8:2002)	>3 N (Substrate failure)
Temperature Resistance	Tolerant of temperatures up to 60°C
Chemical Resistance	Good Chemical Resistance. Consult Parker James Ltd on specific materials
VOC	81 g/l Calculated per full mixed unit

Health and Safety

HPR-143-VF is formulated from materials designed to achieve the highest level of performance as safely as possible. However, specific components require
proper handling and suitable equipment, this information is given in the relevant safety data sheets. In all cases, spillages or skin contamination should be cleaned as soon as practically possible, by dry wiping of the affected area, and thorough washing with soap and water.

Highlands Performance Resins
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