HPR-143-PWB
Polyurethane Floor Coating

Revised 09/2019—Issue 2 : REF : PEWB 2016 11

DESCRIPTION

HPR-143-PWB is a coloured UV stable polyurethane finish for application onto concrete, plaster and wood or as a seal coat on Parker James Ltd wall and flooring systems. Grades available:

- HPR-143-PWB (Coloured) - Satin finish
- HPR-143-PWB Matt (Coloured) - Matt finish

(See separate datasheet for HPR-143-PWB Clear products)

ADVANTAGES

- Excellent chemical resistance
- UV stable
- Good abrasion and impact resistance
- Hygienic and easy to clean
- No VOC's
- Resistant to hot water
- Skydrol resistant

RECOMMENDED USES

- As a seal coat for other Parker James Ltd floor coatings and screeds
- Laboratories
- Food factory units
- Prisons and police cells
- Pharmaceutical areas
- Medical and healthcare
- Can be used on floors and walls

PRODUCT INFORMATION

System Thickness (Recommended)	100-150 microns WFT 40-60 microns DFT *The suggested thickness range is calculated based on average volume solid as a general recommendation for the specified condition and for each application it may vary.
Solids Content by Weight	53% It may vary slightly for different colours
Solids Content by Volume	40% It may vary slightly for different colours
Pack Sizes	5 litres
Pack Make Up	1 x Base 1 x Hardener
Shelf Life	24 months (Base) 12 months (Hardener)
Storage	Keep out of direct sunlight. Store in a dry place, between 15°C- 30°C.

APPLICATION INFORMATION at 20°C

Coverage Rate (Theoretical)	5 litres will cover 50m^2 @ 100 microns wet film 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	Up to 60 minutes * water based coatings may stay liquid for longer than specified pot life but it is recommended to use all mixed paint within the pot life time frame. Application after pot life may affect the cure properties such as gloss and adhesion.
Recoating Intervals	6-8 hours
Light Traffic	12-16 hours
Full Traffic	48 hours
Full Chemical Cure	7 days

Specification

Product : HPR-143-PWB

Finish : Satin or Matt

Recommended thickness range : 100-150 µm WFT per coat

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

Products required for this system

Primer : HPR-143-EWB Clear or HPR-143-MVT on damp substrates where required

System : 1 or 2 Coats of HPR-143-PWB (Multiple coats will be required to achieve full coverage on low opacity colours such as bright yellows and reds)

Preparation

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

Timber Floors : Must be clean, sound, dry . Old clear varnish/topcoat must be removed/sanded prior to application, as it may affect the inter- coat adhesion with HPR-143-PWB.

Existing Concrete Floors: Remove all dirt, oil, grease, old paints or any or 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. Local repairs should be carried out using HPR-143-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 advise on intercoat adhesion and suitability, as it may not be compatible with existing floor coating.
Where HPR-143-PWB is applied to masonry/concrete surfaces, care must be taken to ensure that surface preparation is thorough but does not disfigure the surface.
Where surfaces are found to be porous a primer coat may be required to achieve a uniform sealed surface.

Priming

HPR-143-PWB may be applied direct to concrete or as a seal coat or top coat to a resin floor system specified in our datasheets where a primer is not required. When applied direct to porous substrates the surface may require priming. Dry surfaces may be primed with HPR-143-EWB **Clear** or HPR-143-ST.

Where the Relative Humidity of the substrate exceeds 75% HPR-143-MVT should be specified and selected on the basis of hygrometer readings in accordance with BS 8203. 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

Application

The ambient temperatures of the area should not be allowed to fall below 10˚c throughout application and curing. Surface temperature must be above 5˚c.

Mixing: Pre-mix the base component to a uniform consistency then add the entire contents of the hardener to the base and mix by using a slow speed hand held powered mixer and mixing paddle for approximately two to three minutes to achieve consistent mixture. Note: Do not use a separate mixing bucket as it may affect the mixing ratio.

Apply the whole mixed paint by using spreading rake, roller and brush to achieve the maximum coverage within the specified pot life time frame.

Do not add water to this product.

Slip resistance can be improved by lightly broadcasting anti slip aggregates on the first coat (after primer) whilst still wet and back rolling, at a rate of 50/100 g/m^2. When cured apply the second HPR-143-PWB coat to secure the aggregates.

Category Guide

FeRFA Category : 1 and 2

Technical Information

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

Slip Resistance	Dry > 60
Method BS7976 pt1-3 2002	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	130.6 mg loss per 1000 cycles
Method BS8204 /ASTM D4060	
Temperature Resistance	Tolerant of sustained temperatures of up to 60°C
Chemical Resistance	Excellent chemical Resistance Consult Parker James Ltd on specific materials
VOC	<10 g/l calculated per full mixed unit

Health and Safety

HPR-143-PWB 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.

The information given in this data sheet is derived from tests and experience with the products and is believed to be reliable. The information is offered without guarantee to enable purchasers to determine for themselves the suitability of the product for their particular application. Any specification or advice given by Parker James Ltd or its agents is based on the information supplied by the purchaser. Parker James Ltd cannot be held accountable for errors or omissions as a result of that information being incorrect or incomplete. No undertakings can be given against infringement of patents. Some materials are derived from natural sources. As such some variation may occur. Site conditions may also contribute to variation in finish and colour.

Highlands Performance Resins
A brand of Parker James Protective Coatings Ltd

Unit 4 Aldridge Depot, Adridge,
Walsall,WS9 8SR, United Kingdom
01922 457664
www.parkerjames.co.uk
sales@parkerjames.co.uk