

WRAPX® HBD 52

PRODUCT DESCRIPTION

Two-component aromatic polyurethane-based elastomeric primer/finish, high-build. Low VOC. Flexible coating with excellent anticorrosive and abrasion resistance.

RECOMMENDED USE

Indicated as a protective coating for industrial equipment and structures, carbon steel floors, and for internal and external painting of pipelines, in chemical, sanitation, mining, oil and gas industries, among others, where physical protection with excellent anticorrosive resistance and quick return to service is required. Allows high-thickness applications in multiple passes, forming a single coat with mechanical properties capable of withstanding steel contraction and expansion, reducing repairs and execution time.

CERTIFICATIONS AND APPROVALS

Complies with AWWA C222 standard - Polyurethane Coatings for the Interior and Exterior of Steel Water Pipe and Fittings.

When supplied to comply with the ROHS Directive (Restriction of Certain Hazardous Substances), this product includes the letter R in its nomenclature description.

This product complies with Ministry of Health Ordinance GM/MS No. 888, dated May 4, 2021.

PACKAGING

Component A	20L Package containing 15L 200L Package containing 200L
Component B	5L Package containing 5L 200L Package containing 200L

CHARACTERISTICS

Color	Gray.
Gloss	Semi-Gloss
VOC content	3.02 g/l
Volume Solids	97 ± 3% (ISO 3233)
Shelf Life	12 months
Dry Film Thickness	400 µm - 8.000 µm
Dry Heat Resistance	Maximum temperature 120 °C. The product maintains its chemical properties up to a temperature of 120 °C, but from 60°C, color and gloss variations in the paint may occur.
Theoretical Coverage	0,23 m ² /l without dilution at a dry film thickness of 4.200 µm. Loss factors during application are not considered.

DRYING

Drying

	10 °C	25 °C	35 °C
Touch	2 hours	1 hour	20 min
Manipulation	3 hours	2 hours	45 min
Final	10 days	7 days	3 days
Release for traffic		2 hours	

Recoat Drying

	10 °C	25 °C	35 °C
Minimum	-	-	-
Maximum	5 hours	3 hours	1 hour

Topcoat Recoat Drying

	10 °C	25 °C	35 °C
Minimum	6 hours	3 hours	2 hours
Maximum	20 hours	16 hours	12 hours

SURFACE PREPARATION

Standard Surface Preparation

The performance of this product is related to the degree of surface preparation. In case of doubts, for more information, consult WEG's Technical Department.

The surface must be clean, dry, and free of contaminants. Completely remove oils, greases, and fats according to SSPC-SP1.

Remove accumulated dirt using a dry brush, clean dry cloth, compressed air blow, vacuum, or a combination of these. Remove soluble salts by washing with plenty of fresh water, preferably under low pressure (up to 5,000 psi), according to SSPC-SP12/NACE No. 5 standard.

Abrasive Blasting

Perform abrasive blasting to near-white metal, Sa 2½ grade, according to ISO 8501-1 visual standard (A Sa 2½, B Sa 2½, C Sa 2½, D Sa 2½), or according to SSPC-SP10/NACE No. 2, visual standard SSPC-VIS 1 (A SP10, B SP10, C SP10, D SP10, G1 SP10, G2 SP10, G3 SP10).

Inspect the freshly blasted surface, observing defects that may appear after treatment. Correct them by grinding, filling with welds and/or epoxy putty.

For areas near marine environments, wash with fresh water at low pressure (minimum 3,000 psi) before abrasive blasting. In some cases, repeat washing after blasting to remove soluble contaminants and perform a new abrasive blasting.

If oxidation occurs between the end of abrasive blasting and coating application, the surface must be blasted again until the specified visual standard is achieved.

The maximum soluble contaminant content on the blasted surface must meet ISO 8502-6 and ISO 8502-9 standards, not exceeding 20 mg/cm² (2 ¼g/cm²) in immersed, buried, or submerged areas.

Over Primer

The product must be applied over a specific primer. The primer must be clean, dry, and free of contaminants. The topcoat must be applied within the primer recoat interval. Consult the primer technical bulletin for correct application.

Respect the product recoat interval. If exceeded, perform light manual/mechanical sanding to break gloss and clean dust/residues for better adhesion between coats.

APPLICATION PREPARATION

Mixing	Homogenize the content of component A using mechanical or pneumatic stirring. Ensure no sediment remains at the bottom of the container. To avoid bubble formation, stirring is not recommended for component B.
Mixing Ratio	By volume: 3 A x 1 B.
Thinner	Not applicable.
Dilution	Ready to use.
Pot Life	5 min The shelf life of the mixture is reduced as the ambient temperature increases. The pot-life test of the mixture is carried out according to ABNT NBR 15742; however, different volumes of paint prepared at once, combined with varying ambient and paint temperatures, will affect the mixture's shelf life, potentially resulting in outcomes different from those stated in this technical bulletin.
Induction Time	No induction time required. In very hot locations, we recommend consulting WEG's Technical Department.

APPLICATION METHODS

Airless Spray Gun	Airless: Plural Component Sprayer (350.180.2/110) motor 350mm Fluid pressure: 2200 - 4100 psi
--------------------------	--



Hose: 3/8" inner diameter
Nozzle: 0.025" - 0.031"
Note: Flow rate 28.6 L/min.

Cleaning of the equipments:

Not applicable.

Notes

The data presented serves as a guide and similar equipment may be used.
Changes in pressures and nozzle sizes may be necessary to improve spraying characteristics. Purge the compressed air line to avoid paint contamination.
Before application, ensure that the equipment and respective components are clean and in optimal condition.
After mixing two-component products, if there are application stops and the pot life has been exceeded (paint shows variation in flow), it can no longer be re-thinned for later application.
Reinforce all sharp corners, gaps, and weld beads with a brush to avoid premature failures in these areas.
Do not leave material in hoses, guns, or equipment used for spraying. Thoroughly wash all used equipment.

APPLICATION PERFORMANCE

For anti-slip performance, it is suggested to sprinkle particulates such as mineral quartz (silicon dioxide) with 10 or 14 grain size within 2 to 5 minutes for proper fixation. Excess must be vacuumed before applying a topcoat.

For coatings applied in coastal areas exposed to sea spray, it is recommended to wash with fresh water between coats to remove deposited impurities.

Do not apply the product after the pot life has been exceeded.

For optimal application properties, the paint temperature should be between 21°C and 27°C before mixing and application.

Substrate temperature, climatic and environmental conditions during application and curing, as well as applied film thickness, may affect drying time.

Painting is recommended only if the surface temperature is at least 3°C above the dew point and maximum temperature of 60°C. For different application temperatures, consult WEG Technical Department.

This product has low resistance to exposure to sunlight. When exposed to weathering, the applied film will show loss of color and gloss over time. The film is not impaired regarding anticorrosive protection.

Must not be applied under adverse conditions, such as relative humidity (RH) above 85%, as color and appearance changes may occur.

WRAPX® HBD 521 allows reinforcement with polypropylene mats for applications requiring increased structural properties of the coating. Consult WEG Technical Department for more information.

Polyurethane systems (components A and B) are sensitive to relative humidity, which may cause defects in the dry film and reduction in pot life. After use, keep containers closed and protected.

Paintings performed with varying application methods on the same project may result in differences in gloss and final appearance.

On freshly painted surfaces in direct contact with water during the curing process, localized staining with color change (more visible in darker colors), curing delay, and compromised product performance may occur.

Small variations in color, appearance, and gloss (more noticeable in dark colors), as well as delayed curing and performance compromise, may occur during high humidity, rainy days, cold locations, or when parts dry outdoors.

SAFETY PRECAUTIONS

Product developed for industrial use intended for handling by qualified professionals. Carefully read all information contained in the SDS of this product, available at: www.weg.net.

Store in a covered and well-ventilated place. Keep the container tightly closed and away from sources of heat or ignition.

Use only in well-ventilated areas, avoiding the accumulation of flammable vapors. Keep the product away from heat and sources of ignition.



Do not inhale mists/vapors/aerosols generated during handling and/or application. Use protective gloves/protective clothing/eye protection/face protection.
Empty containers and materials with paint residues must be disposed of according to current legislation. Take care of the environment.

NOTE

The information contained in this technical bulletin is based on the experience and knowledge acquired in the field by WEG's technical team.

In the event of using the product without prior consultation with WEG regarding its suitability for the purpose for which the customer intends to use it, the customer acknowledges that the use will be at their own exclusive responsibility, and WEG is not liable for the behavior, safety, suitability, or durability of the product.

Some information mentioned in this bulletin is only an estimate and may vary due to factors beyond the manufacturer's control. Therefore, WEG does not guarantee and assumes no responsibility for performance, efficiency, or any material or personal damages resulting from the incorrect use of the products in question or from the information contained in this Technical Bulletin.

The information contained in this technical bulletin is subject to periodic modifications, without prior notice, due to our policy of continuous improvement and evolution of our products and services, providing quality solutions to meet the needs of our customers.