YHBitucoat-4600

Waterborne Bitumen Waterproofing Coating

DESCRIPTION

YHBitucoat-4600 is a high-performance, self-developed emulsified asphalt coating formulated to form a highly elastic, seamless membrane with excellent crack bridging capability and low vapor permeability. Enhanced with specialized additives and graded fillers, this polymer-modified bitumen coating provides superior waterproofing protection.

WHERE TO USE

It is suitable for a wide range of industrial and civil applications, this coating is designed for concrete roofs, below-grade structures, such as retaining walls, basements, columns, and foundations, and diverse architectural surfaces. It demonstrates exceptionally performance in repairs, on irregularly shaped structures, and in detailed areas. Compatible with membrane systems and other coatings, it enables the development of high-performance composite waterproofing solutions.

CHARACTERISTICS AND PACKAGING

Items	Description
Physical state	Viscous liquid
Color	Chocolate brown
Package size	20Kg per plastic pail

ADVANTAGES

- Fast Drying & Easy Application: The product dries quickly, and the dried film resists foot adhesion.
- Smooth Construction & Strong Adhesion: It ensures smooth application, easy thickness control, and excellent adhesion.
- Ready-to-Use & Eco-Friendly: A water-based, eco-friendly solution that is ready for immediate use.
- High crack bridging capability.
- Low water permeability.
- Can be applied directly on damp surface.

PROPERTIES

Items	Test Methods	Values
Depth of Water Penetration[mm]	DIN 1048 Pt 5:1991	0
Water Vapor Transmission Rate[g/h·m^2]	ASTM E96/ E96M-22	≤1
Solid content[%]	ASTM D2939	≥60
Crack Bridging[3.2mm]	ASTM C836/C836M-18	No crack
Pull off Strength[Mpa]	ASTM D4541-02 METHOD A	⩾1.0

Tensile Strength[N/mm^2]	ASTM D412:2016	≥0.50
Elongation at Break[%]	ASTM D412:2016	≥1000
Drying time	-	4h(23±2)℃
Waiting time to overcoating	-	2h(23±2)℃
Heat resistance	-	(110±2)℃
Water-tightness	BS EN 15814	Pass

NOTE: All values are based on test results determined under laboratory conditions and with product samples taken from original stock. Independent laboratory test values are available upon request.

APPLICATION INSTRUCTIONS

Materials Consumption

Material consumption depends on the porosity and texture of the substrate. Typically, it is approximately 2.0-2.2kg/m^2 for a 1 mm dry film thickness.

Application Instructions

- **Substrate preparation:** The concrete substrate should be clean, dry, sound, and free of all contamination, such as dirt, oil, and grease. Surface defects, such as blowholes and voids, must be repaired. Filling of joints and surface leveling must be carried out before coating. It is recommended to use a water-based specialty primer to enhance the substrate preparation.
- **Detailing:** First, apply the coating to detail areas such as deformation joints, water outlets, and concave and convex corners. Install fabric reinforcement between two wet coats to ensure thorough penetration. The total thickness of the composite coating layer should be at least 1 mm.
- **Coating application:** The coating should be applied in multiple thin layers, with mechanized spraying being the preferred method (roller coating is also acceptable). Use a cross-spraying technique to ensure even application, with each wet film layer not exceeding 1.0mm in thickness. Begin with a thin primer coat (wet film thickness ≤ 0.5mm) to enhance adhesion. After the first coat has dried, apply the second coat, followed by the third coat once the second coat has dried. Drying time for each coat ranges from 2 to 12 hours, depending on ambient temperature and humidity. In humid conditions, extend the drying time appropriately.

TRANSPORTATION AND STORAGE

The product should be stored in ventilated areas, protected from sunlight, rain, and fire. Avoid collisions during transportation. The recommended storage temperature range is 5°C to 35°C. The shelf life is a minimum of 12 months under normal transportation and storage conditions.

PRECAUTIONS

- Users must familiarize themselves with all risks, safety regulations, and adhere to the manufacturer's recommendations, including material handling and storage specifications.

- Once opened, the product should be used on the same day. Any remaining material must be properly sealed and used as soon as possible.
- The recommended construction temperature range is 5°C to 35°C. Construction is prohibited during rain, snow, or if such weather is predicted within 24 hours.
- Do not dilute the product with water or solvents, as this will compromise its performance.
- Ensure the waterproof layer is applied evenly. Avoid walking on the surface before it is fully dried to prevent damage to the waterproof layer.
- The complete drying time for each coat ranges from 2 to 12 hours, depending on ambient temperature and humidity. Extend drying time appropriately in humid environments.
- Subsequent construction steps, such as membrane laying, can only proceed after the coating is completely dried to ensure the stability of the composite waterproof system.
- Avoid long-term exposure to humid and poorly ventilated environments.

HEALTH AND SAFETY

Please read the safety manual carefully, our security experts will be pleased to give you advises about safety, health and environmental issues.

DISCLAIMER

The above information and recommendations which are based on our experience are as for reference, they can't replace the customers' own experimental results. Since our company, our representatives or distributors can't control the transportation, storage, handling and use conditions of the products, the economic disputes and the quality accident caused by improper use can't be attributed to our suggestions. In any application, the customer shall be responsible to comply with obligations of third-party intellectual property rights. Without our consent, anyone shall not provide technical information to third parties.