

ARMOUR-GUARD BOND COAT

Tough, flexible PMMA bond coat for Armour-Guard® Systems

Armour-Guard Bond Coat is a tough, flexible, waterproofing bond coat for Armour-Guard waterproofing membrane systems with excellent adhesion, high mechanical resistance, very high wear resistance, high reactivity and fast curing, even at low temperatures.

BENEFITS

- High reactivity
- Fast curing
- Applicable at low temperature
- Transparent or colored
- High impact and wear resistance
- Optimal viscosity
- UV resistant
- Tough, flexible

FIELD OF APPLICATION

Armour-Guard Bond Coat is the recommended bond coat to receive broadcast aggregate for Armour-Guard waterproofing membrane systems.

APPLICATION

Note: The following is a typical application description. In case of other jobsite parameters, please contact a Transpo regional manager.

Pre-application Checks

Armour-Guard Bond Coat is only applied to another Armour-Guard System. Before system installation, the substrate preparation and applying the products, it is important to test various parameters in order to achieve an optimal and sustainable result.

Compressive strength of the substrate: minimum 25 N/mm² / 3,500 psi.

Tensile strength of the substrate: minimum 1.5 N/mm² / 220 psi.

Armour-Guard Bond Coat must be applied a dry surface. Moisture content in the substrate: ≤6 % moisture.

Appropriate and correctly placed expansion joints must be provided where required and these should not be overcoated.

The flatness/slope of the surface must be consistent with the desired requirements. Should this not be the case, corrective measures must be taken to fill in or smooth out the unevenness with compatible products, such as Transpo T-17.

Shrinkage cracks and passive cracks can be coated provided that they are not used as expansion joints and they are isolated from other movements of the structure. They should be addressed and treated with products that are complementary to the substrate and to the Armour-Guard System to be installed.

Required Tools

- Mixer with spiral mixer (min. 300 rpm)
- Rubber squeegee
- Brush or pain roller suitable for synthetic resin-based products
- Masking tape

Preparation of the Substrate

Armour-Guard Bond Coat should be applied on an already cured Armour-Guard System. Always apply the products on a clean substrate, free from adhesion-reducing materials such as dirt, oil, grease, etc.

Cracks, joints and other parts that show water leaks must first be made completely water-tight and leak-proof using products compatible with Armour-Guard Systems.

The surface must be mechanically prepared to CSP 4-6 / SSPC-SP 10 (NACE No. 2) by abrasive blasting, scarification, milling, micro milling or other process providing that it achieves the required surface profile. Tiles are to be fully degreased and ground with a diamond blade. These treatments ensure that an open texture surface is obtained, to remove the cement laitance from concrete and old remnants of coatings and adhesives. Galvanized steel should be thoroughly cleaned in advance with water and soap or sandblasted. Degrease metal surfaces immediately after the mechanical preparation with MEK. After the MEK has fully evaporated, immediately apply a layer of Armour-Guard Primer F to prevent the steel from re-oxidizing.

High pressure water jetting is possible but then the surface must dry sufficiently before applying the primer. Moisture content in the substrate: ≤6% moisture. (Exception: ≤10% moisture if the primer Armour-Guard Primer W is used.)

Always apply the products on a clean surface, free from adhesion reducing and deleterious substances such as dirt, oil, grease, old coatings or surface treatments. Areas of the surfaces to be coated that do not meet the requirements as described above (compressive strength, tensile strength, parts that are not well connected) must be treated or removed and repaired according to a correct method and with products that are complementary to the substrate and the Armour-Guard System to be installed. Remove any loose parts by brushing properly and with compressed air/high-power leaf blowers and remove dust with an industrial vacuum cleaner.

Preparation of the Product

Mix Armour-Guard Bond Coat well before use. Paraffin can separate during storage. Dispense an amount of resin that can be processed within 15 minutes. For coloring Armour-Guard Bond Coat 8% pigment powder is added and homogeneously mixed before adding the Armour-Guard Catalyst. Add 1% to 6% curing powder. Armour-Guard Catalyst must be ordered separately.

Add Armour-Guard Catalyst to Armour-Guard Bond Coat

| Temp. | In % | Armour-Guard Catalyst per 1 kg Armour-Guard Bond Coat |
|-------------|------|---|
| 0°C / 32°F | 5% | 50 g |
| 5°C / 41°F | 4% | 40 g |
| 10°C / 50°F | 3% | 30 g |
| 20°C / 68°F | 2% | 20 g |
| 30°C / 86°F | 1% | 10 g |

Mix until the powder is completely dissolved.

Preparation of the Equipment

Always work with clean mixing containers and application material.

Application

Armour-Guard Bond Coat should be evenly distributed with a rubber squeegee or a short-haired paint roller. Apply sufficient Armour-Guard Bond Coat to create a layer of liquid that is capable of holding the required aggregate

broadcast. Processing time of Armour-Guard Bond Coat is 10 to 15 minutes. Do not disturb the paraffin layer that occurs during curing

Application Conditions

Conditions during the application and curing of the products. The recommended processing temperature for substrate, environment, material and products is between 0°C and +35°C / 32°F and 95°F. For temperatures lower than 0°C / 32°F please contact a Transpo regional manager for guidance.

Relative humidity: Max. 85%

Dew point: The temperature of the substrate and of the applied product must be at least 3°C higher than the dew point. Avoid condensation on the surface from the moment that the application starts until the complete curing of the products. Ensure adequate ventilation and a low relative humidity during curing.

Cleaning and Maintenance

Clean the used tools with MEK, acetone or m/ethyl acetate before the curing of Armour-Guard Bond Coat. Cured products residues must be removed mechanically.

Complementary Products

- Cleaning solvent for tools: MEK, acetone or m/ethyl acetate
- Armour-Guard Catalyst
- Pigment powder

TECHNICAL DATA

Appearance — Composition

Liquid with low viscosity, azure blue, slightly cloudy.

Reaction Times

Processing time after mixing: 10 to 15 min.

Walkable: after 1 hour

Recoat: after 1 hour

Fully mechanical load: after 2 hours

Full chemical resistance: after 2 hours

Times measured at 20°C / 68°F; lower temperatures extend the curing time.

Consumption

Approx: 0.5-1.0 kg/m² / 80-40 ft/gal²

Technical Data

| | |
|--|---|
| Odour | Methyl methacrylate |
| Initiator: Armour-Guard Catalyst | BPO 50%, depending on the temperature from 1% to 6% weight calculated on the proportion of Armour-Guard Bond Coat |
| Viscosity | 150 - 300 mPa.s (20 °C Brookfield, spindle III/200 rpm) |
| Density | 1 g/cm ³ ±0,1 (20°C) |
| Flash point | 10°C (MMA, DIN 51 755) |
| Hardening test (test volume) | 300 g Armour-Guard Bond Coat with 6 g curing powder |
| Exothermic peak | 130 - 145°C |

Armour-Guard Bond Coat + 2 % Armour-Guard Catalyst

| | |
|------------------|------------------------|
| Density | 0.98 g/cm ³ |
| Colour | Transparent |
| Shore D hardness | 70 – 80 |

Chemical Resistance

Polymerized Armour-Guard resins have good chemical resistance to alkalis, petroleum derivatives, acid, salts and maintenance products. For more information please contact a Transpo regional manager.

CE Marking



Transpo Industries

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EN 13813

Synthetic resin floor/coating for indoor use in buildings

| | |
|------------------------------------|-----------------|
| Release of corrosive substances | SR |
| Abrasion resistance | AR0,5 |
| Bond strength | ≥ B1,5 |
| Impact resistance | ≥ IR6 |
| Reaction to fire | E _{fl} |



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EN 1504-2:2004

DoP N°: DOP02PLC01S2

DoP N°: DOP02PLC02S2

DoP N°: DOP02PLC03S2

DoP N°: DOP02PLC04S2

Reference Documents

Information sheet "Armour-Guard Odour."



FM 78518



PACKAGING

Armour-Guard Bond Coat

| | |
|--------------------|------------|
| 20 kg / 5.28 gal | Metal pail |
| 180 kg / 47.55 gal | Drum |

To be ordered separately:

Armour-Guard Catalyst

| | |
|-----------------|--------------|
| 10 kg / 22 lb | Plastic pail |
| 25 kg / 55.1 lb | Box |

Pigment Powder

| | |
|-----------------|--------------|
| 1 kg / 2.2 lb | Plastic pail |
| 5 kg / 11 lb | Plastic pail |
| 25 kg / 55.1 lb | Bag |



STORAGE AND SHELF LIFE

Store Armour-Guard products in a dry, well-ventilated storage area between +5°C and +35°C / 41°F and 95°F.

Shelf life: 12 months after production date.

In case of doubt, please contact Transpo and state the batch number on the packaging. Do not discharge into groundwater, surface water or sewers. Dispose of contaminated packaging and residues in accordance with the applicable legal requirements.

SAFETY PRECAUTIONS

Carefully read the safety data sheets before using Armour-Guard products. A characteristic odour arises during processing. Ensure adequate ventilation, keep away from sources of ignition and do not smoke. Avoid skin contact. Eye irritation and/or hypersensitivity may occur with severe vapor concentration, inhalation and/or skin contact. Do not store food, drinks in the same workspace. Always wear personal safety equipment in accordance with the applicable local guidelines and legislation. Gloves and safety glasses are mandatory.

WARRANTY: The following warranty is made in lieu of all other warranties, either expressed or implied. This product is manufactured of selected raw materials by skilled technicians. Neither seller nor manufacturer has any knowledge or control concerning the purchaser's use of either product and no warranty is made as to the results of any use. The only obligation of either seller or manufacturer shall be to replace any quantity of this product that proves to be defective. Neither seller nor manufacturer assumes any liability for injury, loss, or damage resulting from use of this product.