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in permeable hardscape

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PERMEABLE HARDSCAPE
North America

Xtreme

vdw 850 plus

The PHNA Xtreme is a 2-component epoxy paving joint compound designed for large format natural stone, concrete paver surfaces, and other high traffic areas - both residential and commercial. The following are a few specific details about the product:

- Water-permeable
- Can be applied in rain and low temperatures
- Self-compacting
- Clean, stain-free surface
- No need to protect surface from rain
- Highly frost and de-icing salt resistant
- Durable and abrasion resistant
- Pressure washer friendly
- 3/16" joint width or larger
- For light to medium traffic loads

Available Colors



Neutral



Stone Grey



Basalt

Contact

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Additional information, installation videos,
and a Consumption Calculator can be found
on our website:

www.phna-usa.com



Technical Data

Application Time

Approx. 30 minutes at 20°C | 68°F* application temp.
*Quick hardening at higher temperatures, and slow hardening at lower temperatures.

Application Temperature

2-26°C | 37-80°F (Do not lay onto frozen ground.)

Compressive Strength

33.1 N/mm² / 4800 psi

Flexural Strength

10.3 N/mm² / 1494 psi

E-Modulus

5500 N/mm²

Dry Density

Set mortar density: 1.62 g/cm³

Water Permeability

approx. 0.06 gal/min/sq. ft. for a joint fraction of 10%

Storage Life

1 year if stored unopened in sealed and undamaged packaging. Must also be kept dry and frost-free. Do not store at temperatures above 20°C / 68°F



Installation Instructions

for PHNA Xtreme / vdw 850 plus

1. Construction Site Requirements

A stable, load-bearing structure, water-permeable sub-base, and the bedding layer - we recommend the [PHNA Xtreme Trass Bedding Compound \(vdw 480\)](#) - must all be correctly designed and installed for the anticipated traffic loads and in accordance with ASTM. The PHNA Xtreme jointing compound is designed for small up to large format and cannot be used to compensate any settlement of the substructure, or for the sealing and waterproofing of any surfaces. Movement joints must be installed as necessary to comply with the required structural design and any anticipated levels of movement. The PHNA Xtreme jointing compound can be applied on damp / wet paving and in high humidity and even in the rain.

2. Preparation

Preparation / Pre-wetting: Clean the surface thoroughly of all dirt, cement residues, organic materials or any other possible contaminants including cleaning out all of the joints to the required depth. We recommend a pre-treatment with the [PHNA Xtreme Stone Protect 3-in-1 \(vdw 950\)](#) for any porous and/or sensitive paving surfaces - please allow at least 24 hours after application prior to grouting. Thoroughly pre-wet the surface of the paving and mask adjacent surfaces which are not to be jointed. Always use clean and fresh tap water!

3. Mixing

Open your bucket of PHNA Xtreme jointing compound and remove the separate bottle of liquid hardener, then set it aside. Using an appropriate dual- or single-paddle drill mixer, pre-mix the aggregate for a minimum of 30 seconds, then add the hardener and mix for a minimum of 2 minutes until the mixture is smooth and homogeneous. Proper mixing is important! Any material that is not thoroughly mixed must not be used. No water should be added during the mixing process.

4. Filling the Joints

Apply immediately after mixing, by pouring the PHNA Xtreme jointing compound directly onto the pre-wetted surface. Work the self-compacting material thoroughly into the joints using a rubber squeegee and/or stiff broom. If the viscosity of the product diminishes re-moisten by spraying lightly with water from a hose. The paved area must be kept constantly wet during application. We recommend working from the highest to the lowest points. Do not mix partial units of the product. Any unmixed material must not be used. All tools and shoes should be regularly cleaned with water.

5. Cleaning Off

Remove any excess PHNA Xtreme jointing compound residue from the area within 5 minutes (immediately at temperatures over 20 °C / 68 °F) by spraying lightly with water from a hose. You will notice a white film being washed away. Avoid washing material out of the joints. Be careful to clean the paved surface towards areas not yet jointed and do not allow any water containing residues to pond, stand, or dry out on the completed areas. Finally remove any remaining fine residues with a damp coconut fiber brush - do not brush any residual dry material into any unfilled joints. Clean this brush in water frequently.

6. Important Information

Remain off the freshly applied areas for a period of min. 24 hours, or until the paving surface is no longer tacky. Then the areas can be walked over. The area can be fully released to vehicular traffic after 3 - 5 days, when fully hardened. In general, a strength test should be carried out before final clearance of the area. A very thin film of the resin binder may remain on rough surfaces or any surfaces that are not cleaned thoroughly. This film will disappear after a period of exposure to traffic and weathering.