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EUROSTONE BOND FOR NATURAL STONE PAVER JOINTS UP TO 1.5" (3.8 CM)

TDS Revision Date (dd/mm/yyyy): 29/05/2024

TECHNICAL DATA SHEET

Update: May 29, 2024

Make sure you have an updated data sheet on hand. Canada and U.S. dial **1-855-847-7767** or (450) 624-1611

Description:

EUROSTONE BOND is the first polymeric sand, that meets ASTM C144 gradation, specifically designed for natural stone pavers. It can be used in an application for traditional and overlay base systems. It is perfect for stone roads, piazzas, driveways, pathways & stone apron driveways. This complete multipurpose sand is available in one color, slate grey. It sets above the freezing temperature 32°F (0°C) and can be used for joints up to a maximum of 1.5" (3.8 cm) wide.

Features:

- Can be used for stone joints up to a maximum of 1.5" (3.8 cm)
- Traditional applications, rain safe 1 hour after water activation
- Overlay applications, rain safe 24 hours after water activation
- · Helps prevent weed sprouting and the damage caused by insects.
- · Helps prevent erosion due to climatic conditions, such as wind, rain and freezing.
- Sets at above freezing temperature 0°C
- · Does not haze natural stone pavers
- Sand gradation ASTM C- 144 allows use even in the tightest joints
- · Will resist mechanical brooming
- · In vehicular application stone must be interlocked or adhered to a permeable mortar bed
- Waterproof bags: Lay the bag flat on its back, so the front of the bag is facing you.
 Intact pallets can be stored outdoors
- 15 Year Limited Warranty

Maintenance of paved surface:

When maintaining the paver surface, apply <u>Gator Shampoo</u> to clean the entire paved surface including the paver joints. Wash, rinse and remove any residue by using a hose and a watering gun set to shower with the normal maximum water pressure from any residential or commercial building (typically 80 psi / 550 kpa).

Clay pavers:

Eurostone Bond is not recommended for clay pavers.

For clay pavers, we recommend <u>Gator Maxx G2</u>. If <u>Gator Maxx G2</u> is used on clay pavers, make sure they are 100% dry. Clay pavers tend to hold moisture, which can prematurely activate the <u>GATOR MAXX G2</u> while the sand is being spread over the paver surface, leaving a residue. Always apply on a test area before using the <u>GATOR MAXX G2</u> on clay pavers.

Moss:

EUROSTONE BOND will not cause nor prevent moss, mold or mildew. Moss, mold and mildew are caused by certain on site conditions, including excess moisture, shade, absence of ventilation, inadequate cleaning or maintenance, presence of soil or other organic debris left on the product.

Coverage:



Quantity required depends on the shape and size of the natural stone pavers as well as the width of the joints.

EUROSTONE BOND COVERAGE								
	NARROW	JOINTS	WIDE JOINTS					
22.7 Kg (50 lb)	m²	ft ²	m²	ft ²				
	6.6-8.1	70-90	2.2-4.2	24-46				



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EUROSTONE BOND IS IDEAL FOR NARROW OR LARGE JOINTS UP TO A MAXIMUM OF 1.5 in. (3.8 CM.) **EUROSTONE BOND** WORKS AT ITS OPTIMUM ON SURFACES WITH PROPER DRAINAGE SLOPES.

PLEASE NOTE:

All stone pavers must be completely interlocked for vehicular and pedestrian use. If stone pavers are fanned they are not considered interlocked. **EUROSTONE BOND** can be applied when stone pavers are installed directly open graded aggregates that lock or choke themselves. This means the **EUROSTONE BOND** polymeric sand will not migrate through the voids. Do not apply **EUROSTONE BOND** when the pavers are installed directly on aggregates with large voids.



THIS CROSS-SECTION REPRESENTS THE HEIGHT OF POLYMERIC SAND FOUND IN THE JOINTS





REQUIRED SUB-SURFACE PREPARATION AND FOUNDATION OPTIONS

EUROSTONE BOND is recommended for a variety of uses including pool decks, patios, footpaths, driveways, parking spaces, pavements etc. The natural stone pavers must be installed on a traditional base system composed of 2 layers. The upper layer can have a maximum of 1 inch (25 mm) of bedding <u>C 33 sand or ASTM No.9 stone</u>. The lower layer must have a minimum of 6 inches (15 cm) of crushed stone compacted at 98 % Proctor density. (See diagrams below)

1 Traditional base system:

- A minimum 2% top surface slope for proper water runoff
- EUROSTONE BOND at least 1/8" (3 mm) below the paver stone surface.
- Minimum depth of joint 1-1/2" (38 mm)
- Maximum joint width 1-1/2" (38 mm)
- Layer of bedding sand maximum of 1" (25 mm)
- Layer of 6" (15 cm) thickness of 0-3/4" (0-20 mm) compacted crushed stone
- For light or heavy traffic applications the stone pavers must be completely interlocked and unable to move.

C 33 Sand or ASTM No. 9 Stone can be used under natural stone pavers as a bedding layer.





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2 Overlay base system:

- A minimum 2% top surface slope for proper water runoff
- EUROSTONE BOND at least 1/8" (3 mm) below the paver stone surface.
- Minimum depth of joint 1-1/2" (38 mm)
- Maximum joint width 1-1/2" (38 mm)
- · Layer of permeable mortar bed
- Layer of 6" (15 cm) thickness of 0-3/4" (0-20 mm) compacted crushed stone
- For light or heavy traffic applications the stone pavers must be completely interlocked and unable to move.

3 Overlay base system:

- A minimum 2% top surface slope for proper water runoff
- EUROSTONE BOND at least 1/8" (3 mm) below the paver stone surface.
- Minimum depth of joint 1-1/2" (38 mm)
- Maximum joint width 1-1/2" (38 mm)
- Layer of bedding sand maximum of 1" (25 mm)
- Layer of 4" (10 cm) thickness of concrete with 2" (5 cm) drainage hole every 10 feet filled with 3/8" (9mm) clean stone and cover with a geotextile for water evacuation
- For light or heavy traffic applications the stone pavers must be completely interlocked and unable to move.

2% Slope NATURAL STONE PAVER EEDDINGSAND (maximum of flinch/25 mm) CONCRETE SLAB (minimum of 4 in/10 cm) GATOR FABRIC GF4.4

DRAINAGE HOLE

2% Slope

NATURAL STONE PAVER STONE NATURAL STONE PAVER

RUSHED STONE 0-3/4 in (0-20

GATOR FABRIC GF4.4

Note

- 1. Remove all loose and fragile concrete.
- 2. Cover the surface with a Gator Fabric GF4.4, refill with crushed stone and compact it.
- 3. C 33 Sand or ASTM No. 9 Stone can be used under natural stone pavers as a bedding layer.

INSTALLATION INSTRUCTIONS:

METHOD for applying EUROSTONE BOND for a TRADITIONAL BASE SYSTEM on a NEW NATURAL STONE PAVER SURFACE:

IMPORTANT INSTALLATIONS NOTES

- A. Always refer to the latest **EUROSTONE BOND** <u>Technical Data Sheet (TDS)</u> at <u>AllianceGator.com</u> before installing **EUROSTONE BOND**.
- B. Installation of natural stone pavers must be done in accordance with a drainage foundation before adding EUROSTONE BOND.
- C. Natural stone pavers' sides and top surfaces must be completely dry. Do not apply if the natural stone pavers surfaces are damp or wet. The damp or wet surface will cause **EUROSTONE BOND** to prematurely activate and will lead to the polymers sticking on the natural stone pavers surfaces.
- D. Do not apply **EUROSTONE BOND**, if the natural stone pavers joints are damp or wet. This will prevent the **EUROSTONE BOND** from properly sliding into the joints and obtaining very densely packed joints, which is critical to the product's performance.
- E. Temperature must be above 0°C with dry conditions. A minimum of 1 hour of dry weather is required after activation of the **EUROSTONE BOND**.
- F. For all natural stone pavers surfaces, and particularly around in-ground pools, there must be a minimum slope of 1/8" (3 mm) per 12" (30 cm) away from the edge of the pool or structures to ensure water evacuation off the paver surface.
- G. For the pool coping units, it is mandatory to use mortar in the joints. For the rest of the natural stone pavers installation around the pool, you can use **EUROSTONE BOND**.
- H. Do not sweep **EUROSTONE BOND** over asphalt.
- Install **EUROSTONE BOND** a minimum of 1/8" (3 mm) below top of natural stone paver's surface or 1/8" (3 mm) below the chamfer. The filled and cured polymeric sand joints should never be in direct contact with foot traffic or tires, because erosion may occur.





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INSTALLATION INSTRUCTIONS:

METHOD for applying EUROSTONE BOND for a TRADITIONAL BASE SYSTEM on a NEW NATURAL STONE PAVER SURFACE:

INSTALLATIONS STEPS

- Spread EUROSTONE BOND with hard-bristle broom. Make sure the EUROSTONE BOND completely
 fills the joints. Do not use with other materials in the joints. Leave a layer of EUROSTONE BOND on the
 surface to aid in the vibrating and consolidation of EUROSTONE BOND into joints.
- 2. Vibrate the **EUROSTONE BOND** into the natural stone pavers joints using a vibratory plate compactor. A rubber pad is recommended. A roller compactor or handheld tamper is best for natural stone slabs installations. Joints sand level must be at least 1/8" (3 mm) below top of natural stone pavers surfaces. It is best to compact in several directions to ensure there are no air gaps or voids in the joints. Repeat steps 1 and 2 to ensure joints are filled and consolidated. Narrow joints require more care to completely fill.
- 3. Sweep off excess **EUROSTONE BOND** from the paved surface, first with a hard-bristle broom, then a soft-bristle broom. Take care to leave the height of **EUROSTONE BOND** at least 1/8" (3 mm) below top of natural stone pavers surface.

WATER ACTIVATION (IMPORTANT NOTES)

- A. Work in manageable sections, ideally about 50 sq. ft (4.6 sq..m.). at a time, depending on temperature.
- **B.** Do not allow **EUROSTONE BOND** to wash out of joint.
- **C.** Never allow paved surface to dry out during the water activation phase.
- **D.** Watering must be started at the lowest point of the paved surface.
- **E.** Use a watering gun connected to a hose. Setting should be set to shower.
- **4.** Shower for a minimum of 90 seconds for 50 sq. ft. (4.6 sq. m.) or until the **EUROSTONE BOND** repels the water and the water starts to accumulate over the polymeric sand joints.

Note:

Use a leaf blower to remove any excess water remaining on the natural stone pores and crevices. This blowing action is necessary to help remove any remaining **EUROSTONE BOND** residue left on the natural stone surface from the previous steps. If not done properly, a white haze may appear on paver surface after installation. This is due to excess **EUROSTONE BOND** residue left on natural stone paver surfaces. This haze will dissipate over time, or it could be removed by using GATOR CLEAN Efflorescence Cleaner



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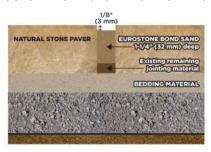


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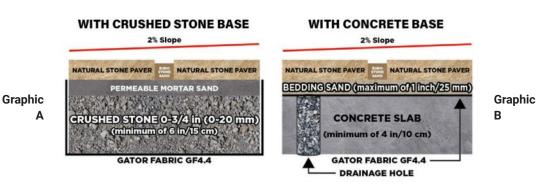
INSTALLATION INSTRUCTIONS:

METHOD for applying EUROSTONE BOND on an EXISTING NATURAL STONE PAVERS SURFACE



- 1. Remove existing jointing material. Be careful not to disturb the bedding material under the natural stone pavers. Natural stone pavers must be completely dry before installing a minimum of 1 1/2" (38 mm) deep into the joints. Ensure that **EUROSTONE BOND** lies at least 1/8 inch (3 mm) below top of the natural stone pavers surface or 1/8 inch (3 mm) below the chamfer. The filled and cured polymeric sand joints should never be in direct contact with foot traffic or tires.
- 2. Follow step 1 to step 4 of NEW STONE JOB instructions (above).

METHOD for applying EUROSTONE BOND for an OVERLAY BASE SYSTEM for a NEW NATURAL STONE PAVERS SURFACE:



IMPORTANT INSTALLATIONS NOTES

Graphic A Make sure the natural stone pavers are completely fixed in permeable mortar sand and cannot move.

Graphic A Having a layer of bedding sand maximum of 1" (25 mm), covering a 4" (10 cm) thickness of concrete with 2" (5 cm) drainage hole every 10 feet (3 m) filled with %" (9 mm) clean stone and cover with a geotextile GF 4.4 for

water evacuation.

Graphics A/B Make sure the sides and top surfaces of the natural stone pavers are dry before applying the **EUROSTONE BOND** polymeric sand.

- 1. Sweep **EUROSTONE BOND** in between the natural stone pavers joints.
- 2. Compact the sand between the joints with the help of a vibrating plate and a hand tamper in restricted areas.



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- 3. Sweep off all excess **EUROSTONE BOND** that is on the natural stone paver surfaces. The **EUROSTONE BOND** must lie at least 1/8 inch (3 mm) below top of the natural stone pavers surface or 1/8 inch (3 mm) below the chamfer. It is best to compact in several directions to ensure there are no air gaps or voids of the natural stone pavers joints or erosion may occur. The filled and cured polymeric sand joints should never be in direct contact with foot traffic or tires. Repeat twice the sweeping and compacting of the joint to ensure a good consolidation of the joint. Narrow joints require more care to completely fill. Using a leaf blower, remove any **EUROSTONE BOND** residue from the natural stone pavers surfaces. Depending on the physical layout, it may be more appropriate to remove residue by using a vacuum unit.
- **4.** Use a watering gun connected to a hose. Setting should be set to shower. Shower for a minimum of 90 seconds for 50 sq. ft. (4.6 sq. m.) or until the **EUROSTONE BOND** repels the water and the water starts to accumulate over the polymeric sand joints.

Note:

Use a leaf blower to remove any excess water remaining on the natural stone pores and crevices. This blowing action is necessary to help remove any remaining **EUROSTONE BOND** residue left on the natural stone surface from the previous steps. If not done properly, a white haze may appear on paver surface after installation. This is due to excess **EUROSTONE BOND** residue left on natural stone paver surfaces. This haze will dissipate over time, or it could be removed by using <u>GATOR CLEAN Efflorescence Cleaner</u>

TYPICAL PROPERTIES									
Test	European Method	North American Method	Cure	Units European (American) method	Typical Value*				
					minimum	maximum			
Sand Gradation	DIN EN 13139	ASTM C-144	N/A	N/A	Compliant	Compliant			
Penetration resistance	ISO 1920-14	ASTM C-403	7 days	N/mm² (PSI)	4,4 (640)	6,5 (950)			
			28 days		39 (5660)	52 (7550)			
Water Absorption	BS EN 12808-5	ASTM D-1403	28 days						
	30 minutes	30 minutes		g (g/100cm ²)	0,17 (1,1)	0,24 (1,5)			
	4 hours	4 hours			0,20 (1,2)	1,5 (9,6)			
Erosion resistance	ISO 19392-3	ASTM D-7538	60 minutes	erosion %	5	20			
Flexural strenght	BS EN 13892-2	ASTM C-348	7 days	N/mm² (PSI)	0,5 (70)	1,1 (160)			
			28 days		2,8 (410)	3,9 (570)			
Compressive strenght	BS EN 13892-2	ASTM C-109	7 days	N/ 3 (DOI)	1,4 (210)	2,2 (320)			
			28 days	N/mm² (PSI)	10 (1480)	14 (2010)			



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Packaging: Products Size Units per Pallet

EUROSTONE BOND - Slate Grey 22.7 kg (50 lbs) 56

- Plastic bags

- Intact pallets can be stored outside

LIMITED WARRANTY:

15-YEAR LIMITED WARRANTY

Please note that this limited warranty applies when the product is used for residential purposes exclusively (home owners or contractors using the product for single or multi-unit dwellings that are exclusively for residential use). The manufacturer cannot guarantee results as it has no control over surface and sub-surface preparation and product application. (Proper installation of natural stone pavers to ensure long-term stability of work, including granular foundation of certified crushed stone of 0-3/4 inch (0-20 mm) bedding layer and appropriate installation of borders in accordance with above specified method for applying product). However, for a period of 15 years from purchase, the manufacturer agrees to refund the purchase price if the product is proven to be defective and on the condition that it was installed pursuant to the method of application of surface and sub-surface preparation described above. Proof of purchase is required for any claim.

EXCLUSION OF RESPONSIBILITY

THE PARTIES AGREE THAT REFUND OF THE PURCHASE PRICE AS STATED IS THE ONLY OBLIGATION OF THE MANUFACTURER. IN ALL EVENTS, THE MANUFACTURER SHALL NOT BE LIABLE FOR ANY OTHER DAMAGES OR COSTS WHATSOEVER, (INCLUDING REMOVAL OR REINSTALLATION OF SAND OR NATURAL STONE PAVERS) DIRECT OR CONSEQUENTIAL. TO THE EXTENT PERMITTED BY LAW, THE MANUFACTURER EXCLUDES ANY IMPLIED WARRANTY OF QUALITY, MERCHANTABILITY OR FITNESS FOR PURPOSE.

ALLIANCE DESIGNER PRODUCTS INC. excludes any responsibility for the presence of moss, mold, mildew, or similar factors that may occur on the product after its installation. ALLIANCE DESIGNER PRODUCTS INC. excludes any responsibility for use of EUROSTONE BOND with Clay Pavers or any installation not installed to manufacturer's specifications and <u>ICPI Tech Spec #2</u>.