



PAVER BACKER

August 2024

REINFORCEMENT AND PROTECTION

BISON PAVER BACKER

Ideal for use with Bison Pedestals, the Bison Paver Backer offers a simple and lightweight paver backing to enhance the impact resilience and provide additional support to paver surface materials for outdoor areas.

- Weather resistant galvanized steel backer
- Adhered to the desired surface pavers on site before installation
- Standard 24" x 24" modular size fits 593-601 x 593-601 mm pavers
- Recommended for use on Bison Pedestals 1/8" to 36" in height
- Please note, the Bison Paver Backer does not provide wind uplift resistance
- Meets ASTM E136 testing requirements as a non-combustible surface material



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Covered by one or more patents or pending patents.

Bison Paver Backers

- Paver Backers can be combined to accommodate larger format pavers. See the Bison Paver Backer Assembly and Installation Guide for recommended configurations.
- Prior to installation and during assembly, limit exposure to moisture, direct sunlight, and temperatures outside of 40°F to 100°F (5°C to 37°C).
- Damaged or cracked pavers and corresponding backers must be replaced immediately. In case of breakage, Bison recommends ordering extra pavers and backers at the time of purchase.
- Do not submerge Paver Backers in water. Accelerated corrosion can occur when used in tidal areas or in direct contact with highly chlorinated or salt water.



Model No.	Description	Dimensions (L x W x H)
PT-BACKER-2424		23.35" x 23.35" x 0.02" (593 x 593 x 0.6 mm) Fits 593-601 x 593-601 mm Pavers
PT-BACKER-2418		23.35" x 17.52" x 0.02" (593 x 445 x 0.6 mm) Fits 595-601 x 445-453 mm Pavers
PT-BACKER-2416	Paver Backer with Adhesive	23.35" x 15.55" x 0.02" (593 x 395 x 0.6 mm) Fits 593-601 x 395-403 mm Pavers
PT-BACKER-2412		23.35" x 11.61" x 0.02" (593 x 295 x 0.6 mm) Fits 593-601 x 295-303 mm Pavers
PT-BACKER-2020 (Special Order)		19.49" x 19.49" x 0.02" (495 x 495 x 0.6 mm) Fits 495-503 x 495-503 mm Pavers
PT-BACKER-1818 (Special Order)		17.52" x 17.52" x 0.02" (445 x 445 x 0.6 mm) Fits 445-453 x 445-453 mm Pavers

Testing

The Bison Paver Backer and 2CM Paver System meet or exceed these standards. (Not tested for use with other pavers or surface materials.) Note: Customer to verify acceptable uses for each project according to the presiding building code authority. All products to be installed per the most recent Bison Paver Backer Specifications and Details at the time of installation.

Test	Description	Results/Requirements
Fire Resistance UL TGFU R38623 ASTM E108* ASTM E136	Roofing Systems Under the Classification Program Roof Fire Classification for Raised-Deck Systems Behavior of Materials in a Vertical Tube Furnace at 750°C	Compliant over Class A, B, or C roof systems Class A Pass
Gravity Loads ASTM E661* ASTM E661* ASTM E2322*	Foot Traffic Concentrated Static Load 550 [lbs] Over a 3 [in] Diameter Disc Foot Traffic Concentrated Static Load 400 [lbs] Over a 3 [in] Diameter Disc Immediately Following Impact Load Cycles Up to 75 [ft-lb] Uniform Load Test for Panels/Pavers Supported by Pedestals	Proof Load: 553.1 lbs (250.88 kg) Deflection: 0.146 in (0.371 cm) Proof Load: 400.9 lbs (181.85 kg) Deflection: 0.108 in (0.274 cm) Allowable Load: 176 psf (859.31 kg/m ²) Deflection: L/360 Ultimate Load: 1,165 psf (5,688.03 kg/m ²) 388.3 psf (1,895.85 kg/m ²) FoS:3
Bond Tensile Strength ASTM C297* ASTM D1183* & ASTM C297*	Adhesive Testing Bond Strength of 3M 550 FC Adhesive Testing Bond Strength Post Accelerated Aging of 3M 550 FC	93 lbf (42.18 kg)/~1.25 in ² (8.06 cm ²) 74 psi (5.20 kg/cm ²) (True Adhesive Bond Area) 129 lbf (58.51 kg)/~1.25 in ² (8.06 cm ²) 103 psi (7.24 kg/cm ²) (True Adhesive Bond Area)
Bond Shear Strength ASTM D905* ASTM D1183* & ASTM D905*	Adhesive Testing Block Shear Strength of 3M 550 FC Adhesive Testing Block Shear Strength Post Accelerated Aging of 3M 550 FC	108 lbf (48.99 kg)/~1.00 in ² (6.45 cm ²) 108 psi (7.59 kg/cm ²) (True Adhesive Bond Area) 123 lbf (55.79 kg)/~1.00 in ² (6.45 cm ²) 123 psi (8.65 kg/cm ²) (True Adhesive Bond Area)

*Tested to meet ICC AC423 (Acceptance Criteria for Raised-Deck Systems Installed Over Roof Assemblies or Exterior Supporting Structures).

Bison 2CM & Paver Backer Care & Maintenance Recommendations

Cleaning:

All spills should be cleaned as quickly as possible following the cleaning procedure below:

1. Check manufacturer's safety data sheets (SDS) for recommended personal protective equipment (safety glasses, respirators, and gloves) as well as safe handling practices, and disposal considerations in accordance with applicable laws.
2. Sweep thoroughly and mop with a clean damp mop using a pH balanced mild household detergent such as diluted dish soap to gently remove dirt, debris, or light stains.
3. Pick an inconspicuous area to clean first, before cleaning the entire deck.
4. Use ZEP ALL-IN-1 Premium Pressure Wash concentration (following recommended dilution ratio) and then thoroughly rinse.

Deep Cleaning:

1. Check the roofing and drainage systems SDS to ensure chemical and environmental stability of materials.
2. Follow **Cleaning** steps 1-3 above.
3. Focus on small areas to avoid contact with underlying tray and adhesive, as they may be adversely affected by these cleaners.
4. Use the following cleaners for the corresponding stains:
 - Dirt, grease, grime, mold, mildew, and algae: 30 Seconds Outdoor Cleaner or Simple Green Concrete and Driveway Cleaner
 - Food, drink, dyes, oils, and organic stains: FILA CLEANALL
 - Rust or lime scale stains: FILA DETERDEK

Pressure Washing:

1. Set the pressure washer to a pressure of 1200 psi or less.
2. Test an inconspicuous area first.
3. Clean the entire deck to avoid lap marks.
4. Avoid direct pressure stream on bonding adhesive.
5. Rinse thoroughly with clean water to remove any concentrate or solutions and prevent chemical build up.
6. Remove any standing water with a squeegee to help prevent dirt or chemical deposits from drying on surface.

DO NOT USE

1. Abrasives: Cleaners, brushes with hard metal bristles, scouring pads, steel wool, or sandpaper.
2. Acidic or Alkaline Substances (high or low pH): Vinegar, cleaners with acids, alcohol, ammonia, or strong alkaline agents. Low pH cleaners can damage glazed surfaces of the pavers. High pH can discolor pavers and degrade adhesive bonds.
3. Strong Oxidizing Agents: Alcohol, calcium hypochlorite, methylene chloride, potassium permanganate, liquid chlorine, or others.
4. Commercial floor scrubbers or buffing machines.