

BLU-TERRACE

System 300: Amenity Deck Applications



SUSTAINABLU

ON STRUCTURE STORMWATER MANAGEMENT SYSTEMS

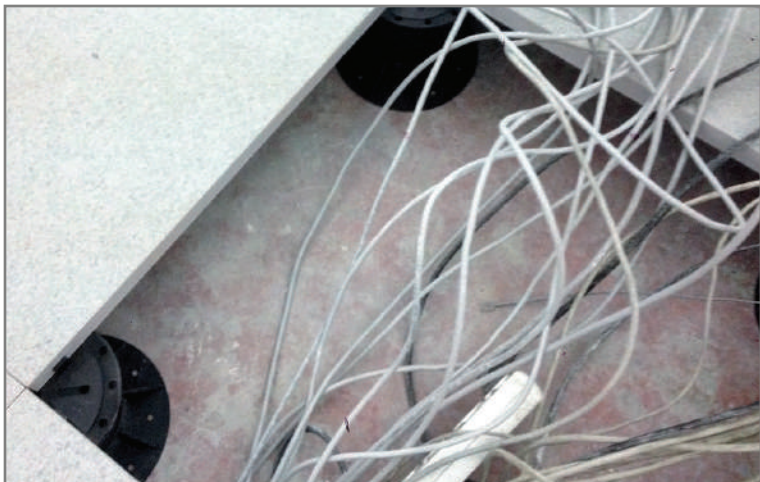
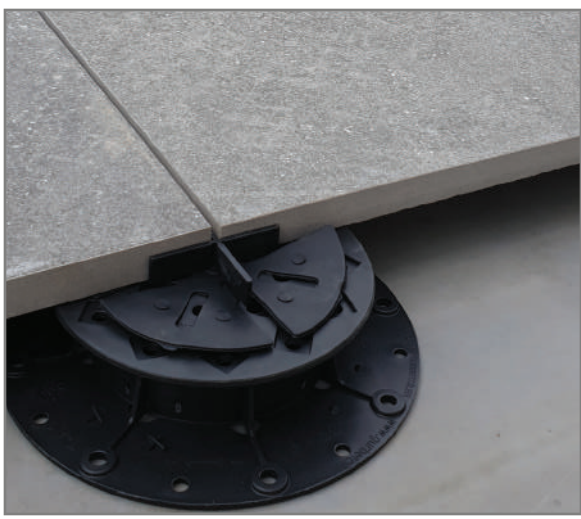


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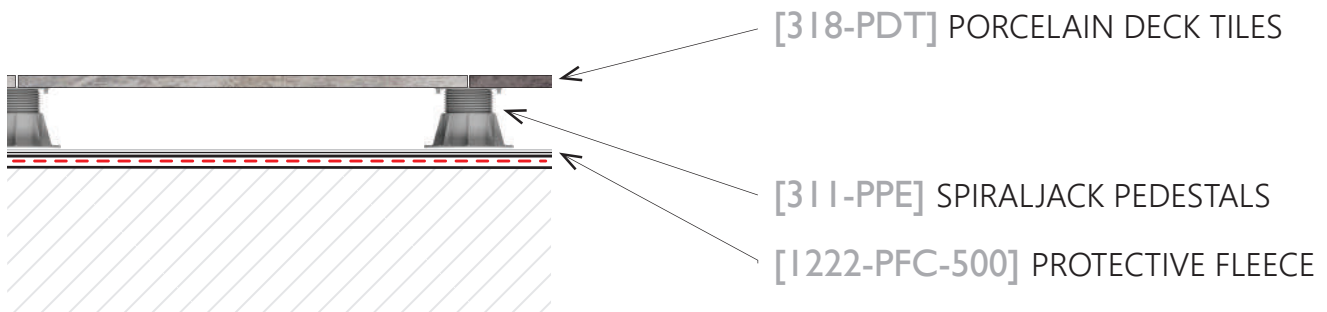
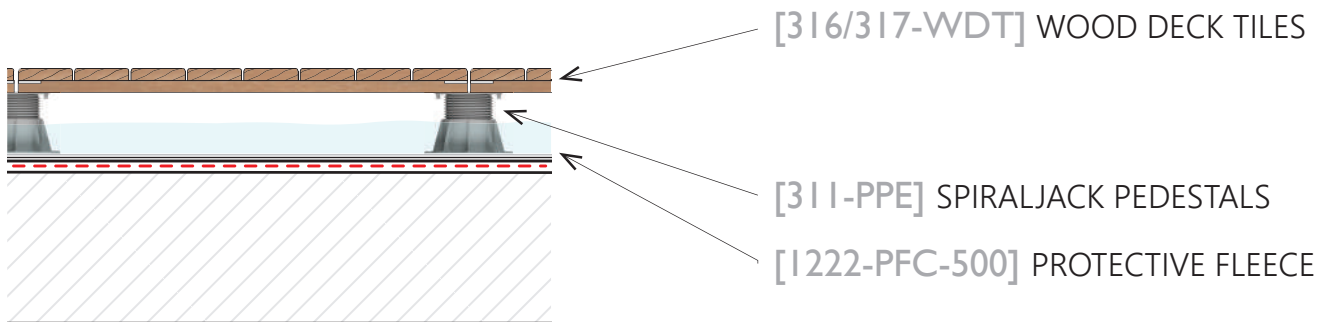
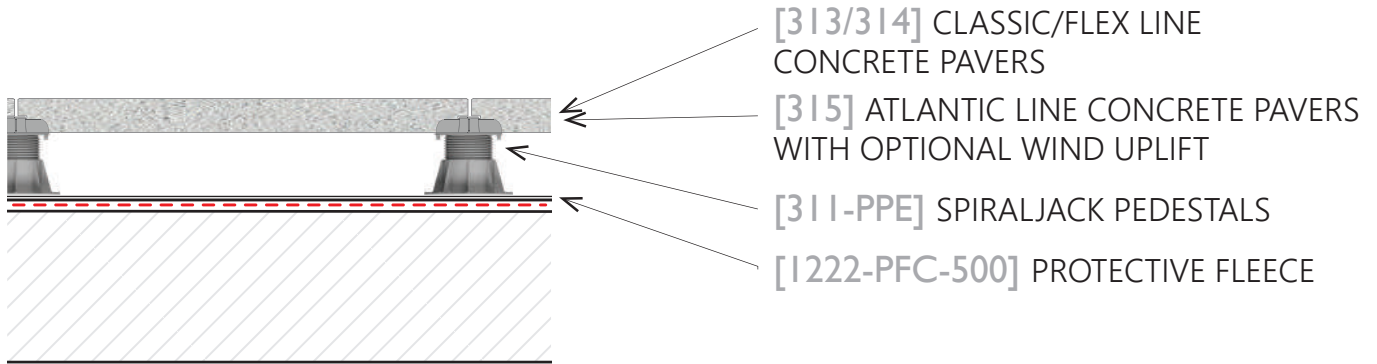
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Warranty

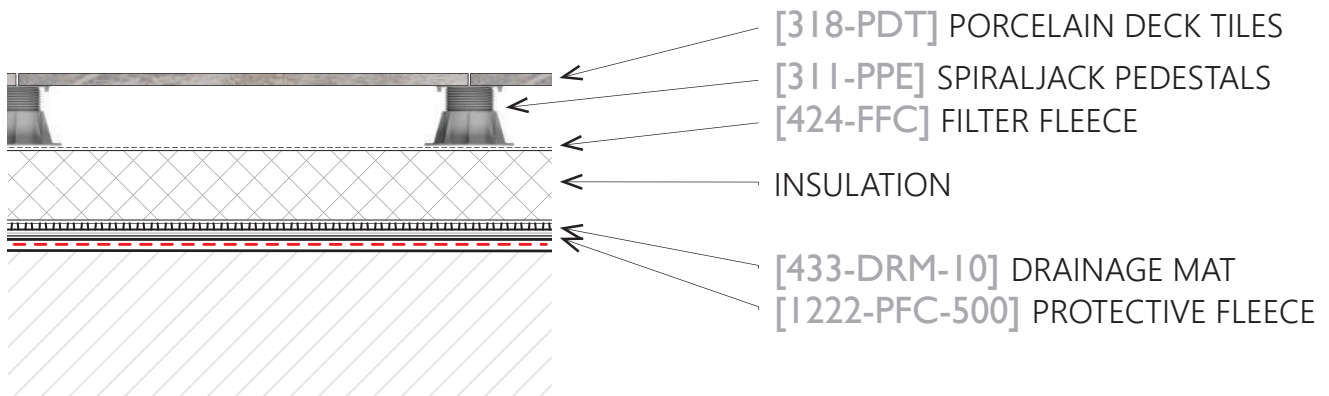
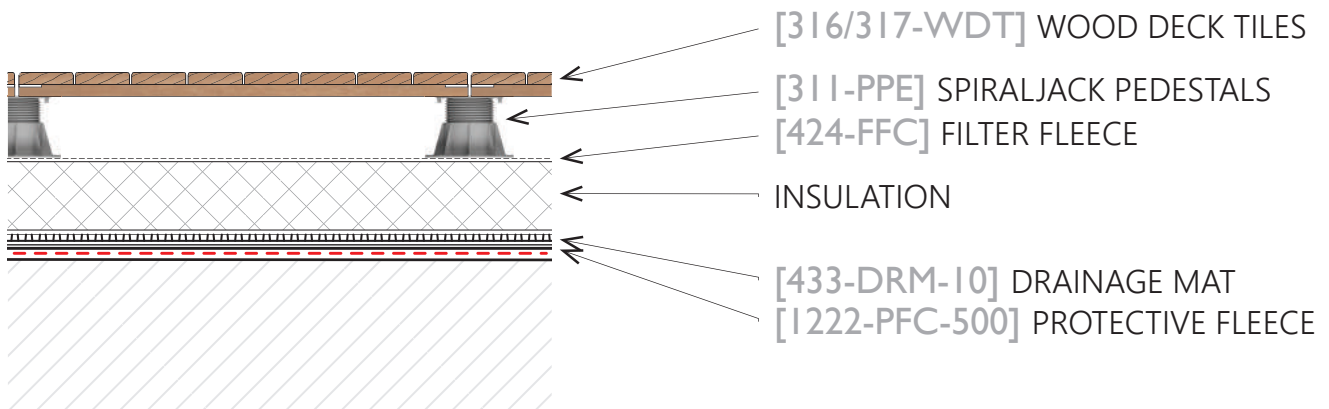
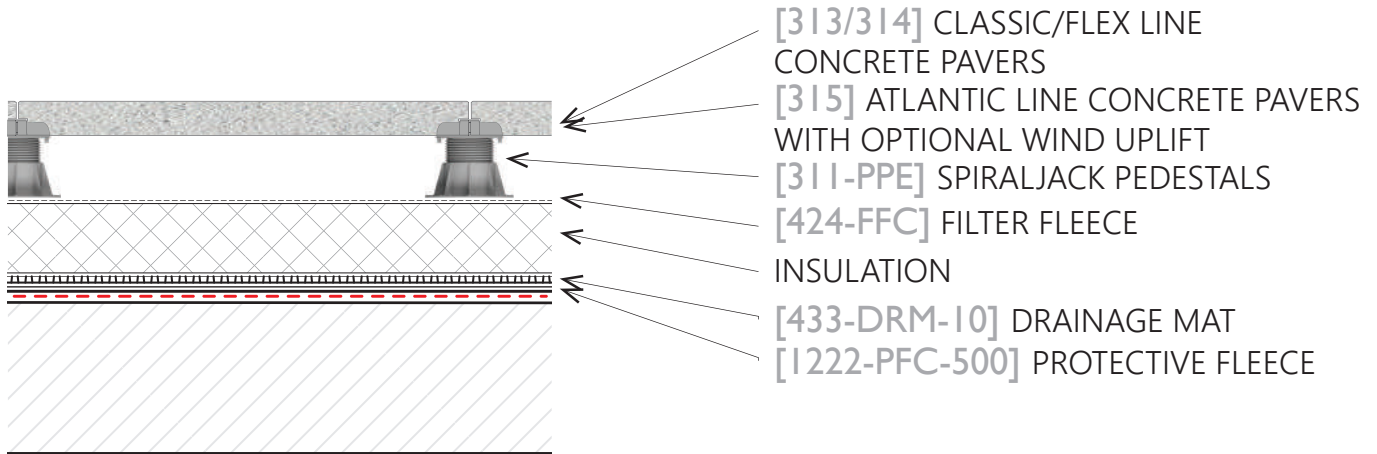
Blu-Terrace Materials Limited Warranty

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BLU-TERRACE - CONVENTIONAL ASSEMBLIES



BLU-TERRACE - INVERTED ASSEMBLIES



SPIRALJACK ADJUSTABLE PEDESTALS & COMPONENTS

Although there are many options for elevated pedestal systems, SpiralJack offers the only universal pedestal system. The versatility of the pedestal head meets any elevated deck need. From our wind uplift capabilities to our ability to meet endless geometric patterns, contractors can use a single solution that increases productivity and minimizes inventory through this universal design.

SpiralJack provides over 40" of varying heights for its elevated pedestal assemblies. The versatility of our universal pedestal head accepts accessories for concrete pavers, wood & porcelain tiles as well as synthetic turf systems. When designing or installing exceptional exterior living spaces, use SpiralJack for its performance and its flexibility.



SpiralJack Elevated Pedestal system:

- has a **height range from 5/64" - 42 5/8"** for use with concrete pavers, wood, porcelain or stone tiles, and synthetic turf systems
- features **slope correction up to 4%**
- provides a **variety of spacing sizes**, allowing multiple surfaces to accurately line up
- provides **flexibility**; all components and accessories are easily inserted and secured to the pedestal
- does not penetrate or compromise waterproofing membranes due to its **large flat base** with **rounded edges**



• Full Box



• 20 Boxes per Pallet

TECHNICAL DATA

Materials:

- Recycled Polypropylene resistant to mold, alkali, & bitumen

Base Diameter:

- 7 43/64" (195 mm)

Height Range:

- 5/64" - 42 5/8" (2 mm - 1083 mm)

Slope Correction:

- 0-4%

Spacer Tab Thicknesses:

- 1/8" (3 mm)
- 5/32" (4 mm)
- 13/64" (5 mm)

Compressive Resistance:

- 1,984 lbs. minimum

Wind Uplift (PPC-WUA-C):

- D3161 - Up to 165 mph wind speed
- Range: 311-PPE-19 through 311-PPE-786

Standard Kit:

- Pedestal Base
- Pedestal Top
- **PPC-TSP** Spacer Tab
- **PPC-SHM-2** Neoprene Shims

Additional Components & Accessories:

- **PPC-EXT** Adjustable Height Extender
- **PPC-BSC** Bottom Slope Corrector
- **PPC-BCL** Bearer Holder
- **PPC-WUA-B** Basic Wind Uplift Assembly
- **PPC-WUA-C** Concealed Wind Uplift Assembly

Product # 311/312



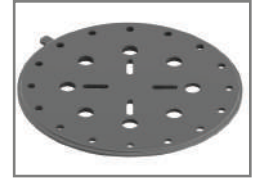
312-PPC-TSP
Spacer
Tab



312-PPC-SHM-2
Neoprene
Shims



312-PPC-EXT
Adjustable Height
Extender



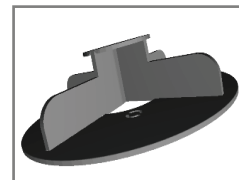
312-PPC-BSC
Bottom Slope
Corrector



312-PPC-BCL
Bearer
Holder



312-PPC-WUA-B
Basic Wind Uplift
Assembly



312-PPC-WUA-C
Concealed Wind Uplift
Assembly



311-
PPE-2 311-
PPE-7 311-
PPE-13 311-
PPE-16

5/64" 1/4" 1/2" 5/8"
2 mm 7 mm 13 mm 16 mm

* Spacer tabs are integral for all pedestals 5/8" or less in height.
* 312 Accessories, other than 312-PPC-SHM-2, do not work with pedestals 5/8" or less in height.



311-
PPE-19 311-
PPE-28 311-
PPE-36 311-
PPE-52 311-
PPE-83 311-
PPE-133 311-
PPE-189 311-
PPE-260 311-
PPE-364 311-
PPE-471 311-
PPE-576 311-
PPE-682 311-
PPE-786

3/4"-1" 1"-1 1/2" 1 1/2"-2" 2"-3 1/4" 3 1/4"-5 1/4" 5 1/4"-8 7/8" 7 1/2"-11 1/2" 10 1/4"-14 3/8" 14 3/8"-20" 18 1/2"-25 5/8" 22 5/8"-31 1/4" 26 7/8"-37" 31"-42 5/8"
19-25 mm 28-36 mm 36-51 mm 52-82 mm 83-135 mm 133-225 mm 189-293 mm 260-365 mm 364-507 mm 471-651 mm 576-795 mm 682-939 mm 786-1083 mm

* Dimensions in inches are nominal. Metric dimensions are actual.
* Slope correction necessary for roof pitches greater than 1/4" per foot

CLASSIC LINE CONCRETE PAVERS

Our Classic Line Concrete Pavers are inherently strong and offer superior performance. Suitable for use in a diverse range of applications and design needs, these pavers offer many advantages:

- manufactured using **face-mix technology**, the upper portion of each paver features a permanent blend of vibrant color pigments and high strength surface materials
- **non-fading colors** and **natural beauty** that will stand the test of time, thanks to its unique manufacturing process
- ideal for **light pedestrian to heavy traffic applications**
- **aesthetically appealing**, the pavers are available in a wide range of standard colors as well as custom varieties available upon request



LEED Credits available for:

- Sustainable Sites (SS)
- Materials & Resources (MR)



- Full Pallet
- Full Load



- 23 Pavers per Pallet (92 ft²)
- 20 Pallets per Load (1,840 ft²)

TECHNICAL DATA

Paver Dimensions (L x W x H):

CCP-24/24 23 13/16" x 23 13/16" x 2"

Paver Weight:

- 24 lbs. / ft²

Compressive Strength:

- > 8,000 lbs. / in²

Water Absorption (ASTM C 140):

- < 5%

Freeze-Thaw Durability (ASTM C 1262):

- < 1.0%

Coefficient of Friction (ASTM C 1028-89):

- 0.70 - 0.74 (wet)
- 0.80 - 0.84 (dry)

Stain Resistance (ISO 10545-14):

- Class 5

Fire Rating:

- Class A

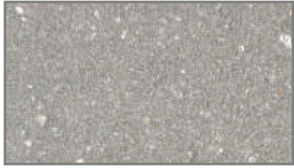
Building Strength & Breaking Load:

- Class 14

Abrasion Resistance (ASTM C 418):

- 9.5 cm³ / cm²
- 50%

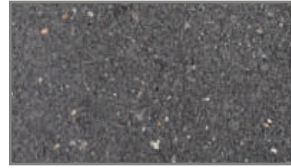
SOLID COLORS



VENTUS



KILWIN



MORAVIA



OCLUS



VIVE

BLENDED COLORS



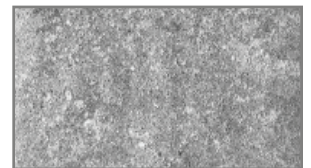
PRESCOTT



TRAVERTINE



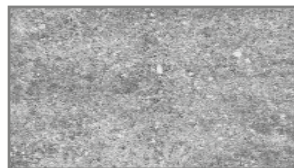
TRINITY



ERGO



EGLANTINE



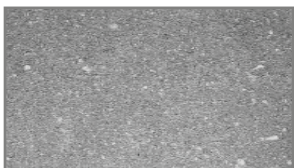
ROYAL



ROMA



CALICHE



FOLSOM

BALLAST PAVER (NOT FOR PEDESTAL APPLICATIONS)



SMOKE

FLEX LINE CONCRETE PAVERS

Our Flex Line Concrete Pavers are hydraulically pressed to superior European standards. Suitable for use in a diverse range of applications and design needs, these pavers offer many advantages:

- **high compressive strength** and durability comparable to stone, thanks to its unique manufacturing process
- stylish and strong, these pavers are **superior to conventional concrete pavers** in appearance and performance
- ideal for **heavy traffic applications**
- available in a **wide variety of paver sizes, colors, designs, and textures** to accent any building, decor, or landscaping
- system provides a **uniform and even spacing** and can accommodate custom designs to fit special paving patterns



LEED Credits available for:

- Sustainable Sites (SS)
- Materials & Resources (MR)



- Special order product



- Full Pallet
- Full Load



- 12/24 - 44 Pavers per Pallet (88 ft²)
- 24/24 - 22 Pavers per Pallet (88 ft²)
- 36/24 - 22 Pavers per Pallet (132 ft²)
- 48/24 - 13 Pavers per Pallet (104 ft²)
- 22 Pallets per Load

TECHNICAL DATA

Paver Dimensions (L x W x H):

- FCP-SC-12/24** 11 3/4" x 23 1/2" x 2"
- FCP-SC-24/24** 23 7/8" x 23 7/8" x 2"
- FCP-SC-36/24** 35 7/8" x 23 7/8" x 2"
- FCP-SC-48/24** 47 7/8" x 23 7/8" x 2 1/2"

*Additional sizes and thicknesses available

Paver Weight:

- 2" Thickness = 24 lbs. / ft²
- 2 1/2" Thickness = 30 lbs. / ft²

Compressive Strength:

- 9,705 - 11,385 lbs. / in²

Water Absorption (ASTM C 140):

- 3.5 - 3.6%

Freeze-Thaw Durability (ASTM C 67):

- 0.8 - 1.0%

Coefficient of Friction (ASTM C 1028-89):

- 0.70 - 0.74 (wet)
- 0.80 - 0.84 (dry)

Stain Resistance (ISO 10545-14):

- Class 5

Fire Rating:

- Class A

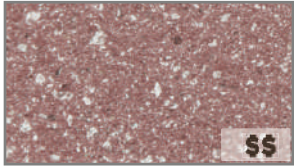
Building Strength & Breaking Load:

- Class 14

Abrasion Resistance (ASTM C 418):

- 9.5 cm³ / cm²
- 50%

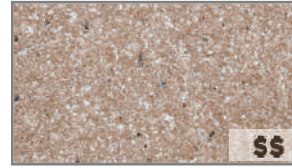
QUARRY STONE FINISH



BRICK RED



CARIBBEAN GOLD



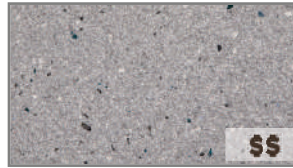
BLEACHED CORAL



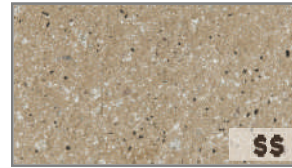
CHESTNUT BRICK



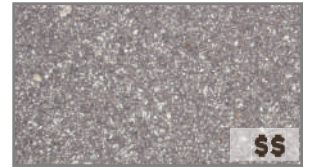
GREY STONE



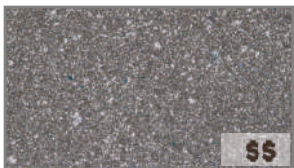
SANDY DUNE



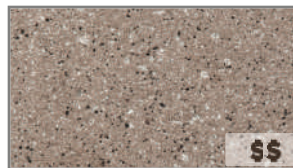
CALIFORNIA GOLD



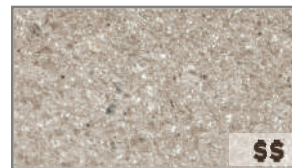
MERLOT



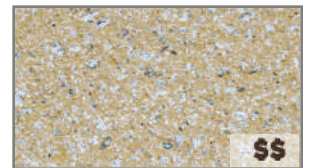
SILVERSTONE



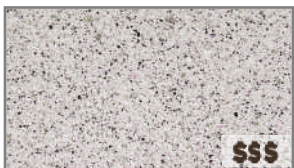
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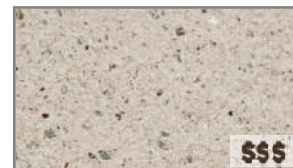
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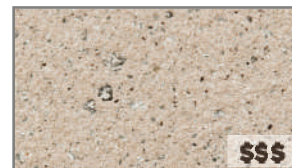
TUSCAN



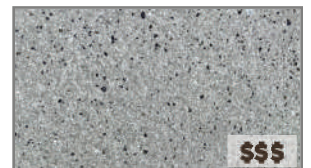
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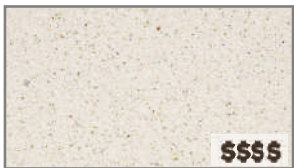
PAPER WHITE



NATURAL TAN



SHIRE



ARCTIC WHITE

OTHER TEXTURES



DIAMOND

ATLANTIC LINE CONCRETE PAVERS

Our Atlantic Line Concrete Pavers blend functional performance with aesthetic design to create a look that's both attractive and practical. Suitable for use in a diverse range of applications and design needs, these pavers offer many advantages:

- a **high-strength paver** created with only the finest materials that can last for the long haul
- produced with commercial spaces in mind, able to **withstand heavy loads** and **handle the effects of harsh weather**, sun exposure and water
- ideal for **light pedestrian to heavy traffic applications**
- are recommended for elevated pedestals and on basework for **Antique and Wenge Matte Finishes** and are only suitable for installation over basework or as ballast for **other Ornamental Matte Finishes** (5,000 psi)
- available in an **array of colors** ranging from earthy to vibrant that aim to mimic natural materials
- system provides a **uniform and even spacing** and can accommodate custom designs to fit special paving patterns



LEED Credits available for:

- Sustainable Sites (SS)
- Materials & Resources (MR)



- Compatible with wind uplift accessory for up to 165 mph wind speed



- Special order product



- Full Pallet
- Full Load



- 12/24 - 40 Pavers per Pallet (80 ft²)
- 24/24 - 20 Pavers per Pallet (80 ft²)
- 36/24 - 20 Pavers per Pallet (120 ft²)
- 22 Pallets per Load

TECHNICAL DATA

Paver Dimensions (L x W x H):

- ACP-12/24** 12" x 24" x 2"
- ACP-24/24** 24" x 24" x 2"
- ACP-36/24** 36" x 24" x 2" (Antique Only)

*Additional sizes and thicknesses available

Paver Weight:

- 24.5 lbs. / ft² - Antique & Wenge Matte
- 22.5 lbs. / ft² - All other Matte Finishes

Compressive Strength:

- 8,500 lbs. / in² - Antique & Wenge Matte
- 5,000 lbs. / in² - All other Matte Finishes

Water Absorption (ASTM C 140):

- < 5% - Antique & Wenge Matte
- < 7% - All other Matte Finishes

Freeze-Thaw Durability (ASTM C 1262):

- < 1.0%

Coefficient of Friction (ASTM C 1028-89):

- 0.70 - 0.74 (wet)
- 0.80 - 0.84 (dry)

Stain Resistance (ISO 10545-14):

- Class 5

Fire Rating:

- Class A

Building Strength & Breaking Load:

- Class 14

Abrasion Resistance (ASTM C 418):

- 9.5 cm³ / cm²
- 50%

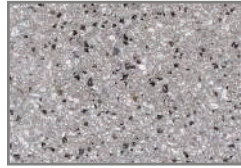
ANTIQUE FINISH



AVALANCHE



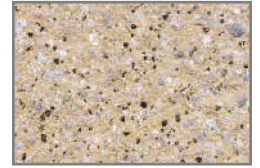
URBAN CHIC



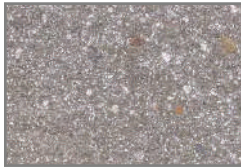
MISTY DUSK



SLATE FUSION



CORAL ESSENCE



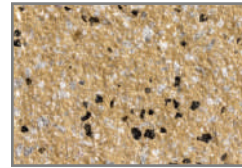
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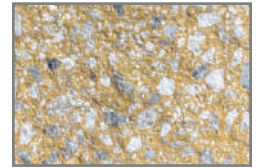
PALE TAUPE



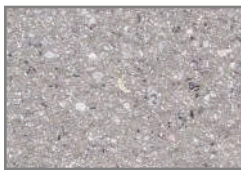
HEATHERED GREY



POTTERS CLAY



MUESLI



VANILLA STONE



TERRACOTTA SLATE



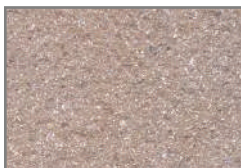
RODEO DUST



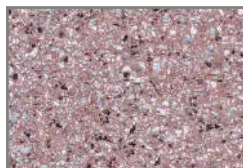
FRENCH BEIGE



ROSY FINCH



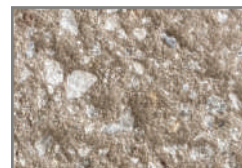
OLD COPPER



SPICE MIX



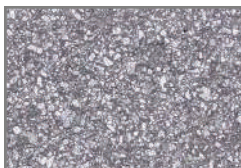
IRISH COFFEE



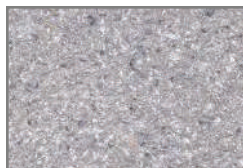
PALE OYSTER



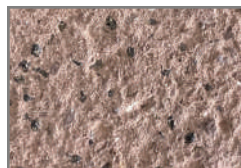
FENA



SOYBEAN



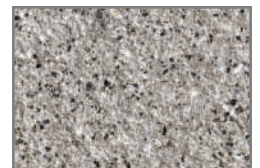
FLINT



EMBERSTONE



HEMLOCK



LIGHT SMOKE



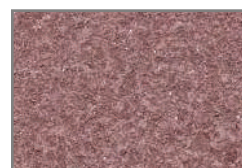
NOIRGRIT



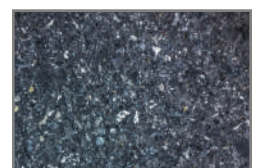
GRAVEL



DORADO

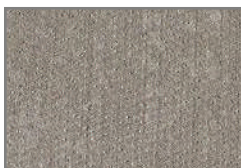


WINE



BALTIC SEA

MATTE FINISH (ORNAMENTAL BALLAST PAVER)



WENGE



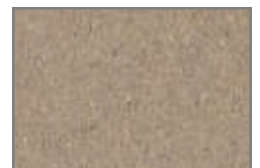
LAPAPILLIONNE



SUNSET



CALIGINOUS



ECRU

CLASSIC WOOD DECK TILES

Our Wood Deck Tiles can be used for most commercial or residential applications including rooftop decks, elevated terraces, plazas, and other large exterior spaces. Our Wood Deck Tiles:

- are **structural decking tiles** which are prefabricated panels of 13/16" slats screwed into three solid wood support battens with stainless screws
- have exceptional **strength, durability, and resistance** to flexing
- are used with adjustable height pedestals for construction of elevated decks on rooftops and over sloping or uneven surfaces
- can be laid over existing concrete using fixed height spacers (1/2" - 1") to lift the tiles off the surface and ensure **sufficient drainage**
- have slots cut in the corner of each tile which enables the Lock Down Tab to be inserted, ensuring a **safe, secure and level surface**



• Special order product



• Full Pallet
• Full Load



• 320 ft² per Pallet
• 26 Pallets per Load (8,320 ft²)

TECHNICAL DATA

Paver Dimensions (L x W x H):

WDT-SPECIES-24/24 24" x 24" x 1 1/2"

WDT-SPECIES-48/24 48" x 24" x 1 1/2"

Paver Weight:

- 4 lbs. / ft²

Janka Hardness:

- 1,798 lbs. (Classic-Light)
- 2,100 lbs. (Classic-Dark)

Modulus of Elasticity:

- 2,900,000 lbs. / in² (Classic-Light)
- 2,560,000 lbs. / in² (Classic-Dark)

Modulus of Rupture:

- 20,950 lbs. / in² (Classic-Light)
- 18,400 lbs. / in² (Classic-Dark)

Density @ 12% Moisture:

- 930 KG / m³ (Classic-Light)
- 850 KG / m³ (Classic-Dark)

Resistance to Decay & Insect Attack:

- Decay, fungi, & termites

*Not resistant to marine borers

Freeze-Thaw Durability:

- Class A

Fire Rating:

- Class A

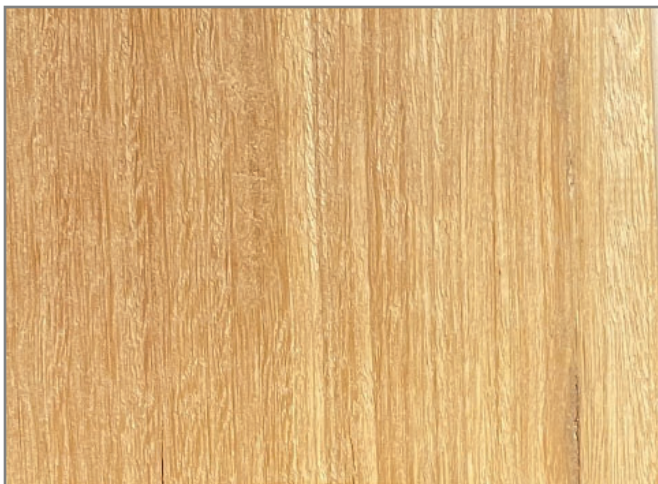
Shrinkage:

- 8.8% tangential
- 6.3% radial

Wood Deck Tiles come in two standard sizes: **24" x 24" squares** and **48" x 24" rectangles**. Each wood option below can be ordered in either size to suit your decking needs and design aesthetic.



24" x 24" WOOD DECK TILE



CLASSIC - LIGHT [CLL]



CLASSIC - DARK [CLD]

CUSTOM WOOD DECK TILES

Our Wood Deck Tiles can be used for most commercial or residential applications including rooftop decks, elevated terraces, plazas, and other large exterior spaces. Our Wood Deck Tiles:

- are **structural decking tiles** which are prefabricated panels of 13/16" slats screwed into three solid wood support battens with stainless screws
- have exceptional **strength, durability, and resistance** to flexing
- are used with adjustable height pedestals for construction of elevated decks on rooftops and over sloping or uneven surfaces
- can be laid over existing concrete using fixed height spacers (1/2" - 1") to lift the tiles off the surface and ensure **sufficient drainage**
- have slots cut in the corner of each tile which enables the Lock Down Tab to be inserted, ensuring a **safe, secure and level surface**



LEED Credits available for:

- Sustainable Sites (SS)
- Materials & Resources (MR)



- FSC Certified Wood



- Special order product



- Full Pallet
- Full Load



- 400 ft² per Pallet
- 26 Pallets per Load (10,400 ft²)

TECHNICAL DATA

Paver Dimensions (L x W x H):

WDT-SPECIES-24/24 23 7/8" x 23 7/8" x 1 1/2"

WDT-SPECIES-48/24 47 3/8" x 23 7/8" x 1 1/2"

Paver Weight:

- 6 lbs. / ft²

Compressive Strength:

- 13,633 lbs. / in²

Modulus of Elasticity:

- 3,045,792 lbs. / in²

Modulus of Rupture:

- 24,656 lbs. / in²

Density @ 12% Moisture:

- 215-242 lbs. / in²

Resistance to Decay & Insect Attack:

- Decay, fungi, & termites

*Not resistant to marine borers

Freeze-Thaw Durability:

- Class A

Fire Rating:

- Class A

Shrinkage:

- 7% tangential
- 6% radial
- 1.2 tangential/radial shrinkage ratio

Wood Deck Tiles come in two standard sizes: **24" x 24" squares** and **48" x 24" rectangles**. Each wood option below can be ordered in either size to suit your decking needs and design aesthetic.



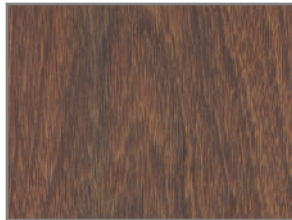
24" x 24" WOOD DECK TILE



48" x 24" WOOD DECK TILE



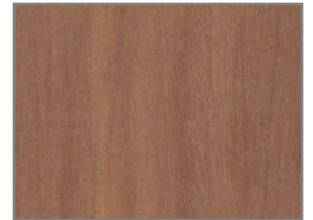
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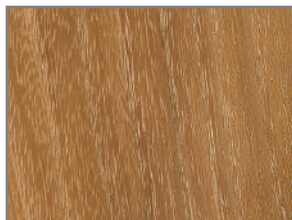
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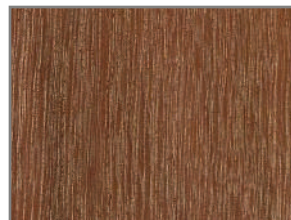
TIGERWOOD [TIG]



CUMARU [CUM]



BLACK LOCUST [BLA]



MASSARANDUBA [MAS]

PORCELAIN DECK TILES

Our Porcelain Deck Tiles are structural decking tiles; ideal for use in public or private environments, these pavers/tiles offer many advantages:

- modular tiles are **removable**, allowing the gap created underneath the floor to be **easily inspected** and can house electric cables and hydraulic pipes
- **frost-resistant**; it buffers thermal expansion of the concrete substrate; the floor will no longer 'crack'
- **less load bearing** on floors and balconies where the layer of concrete slab and adhesive is not required
- slight gap present between adjacent tiles allows for the **proper drainage** of water
- ideal for **medium to heavy traffic**
- simulated **wood and stone finishes** to match any design aesthetic
- **easy to clean**; porcelain deck tiles can be cleaned with standard household cleaners or pressure washed with a low pressure washing device



LEED Credits available for:

- Sustainable Sites (SS)
- Energy & Atmosphere (EA)
- Materials & Resources (MR)



- Special order product



- Full Pallet
- Full Load



- 12/48 - 64 Tiles per Pallet (256 ft²)
- 24/24 - 68 Tiles per Pallet (272 ft²)
- 36/24 - 40 Tiles per Pallet (240 ft²)
- 48/24 - 32 Tiles per Pallet (256 ft²)
- 26 Pallets per Load

TECHNICAL DATA

Tile Dimensions (L x W x H):

PDT-12/48	11 5/8" x 47 5/8" x 3/4"
PDT-24/24	23 5/8" x 23 5/8" x 3/4"
PDT-36/24	35 5/8" x 23 5/8" x 3/4"
PDT-48/24	47 5/8" x 23 5/8" x 3/4"

Tile Weight:

- 9 lbs. / ft²

Concentrated Load (ISO 10545-4):

- 2,594 lbs. (center)

Distributed Load (ISO 10545-4):

- 2,641 lbs.

Water Absorption (ISO 10545-3):

- < 0.38%

Freeze-Thaw Durability (ISO 10545-12):

- Complies with standard

Slip Resistance (ASTM 1028-07):

- > 0.80 (wet)
- > 0.80 (dry)

Impact Resistance (ISO 10545-5):

- > 0.7 coefficient of restitution

Stain Resistance (ISO 10545-14):

- Class 5

Abrasion Resistance (ISO 10545-6):

- Class 4

Fire Rating:

- Class A

WOOD FINISH



ASH

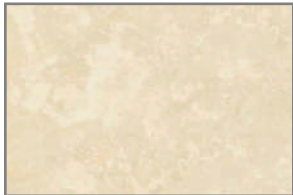
STONE FINISH



QUARZ IVORY



LIMESTONE COFFEE



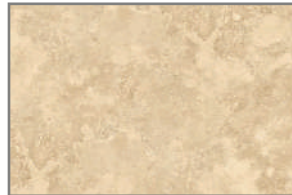
TRAVERTINE IVORY



QUARTZ SILVER



LIMESTONE GREY



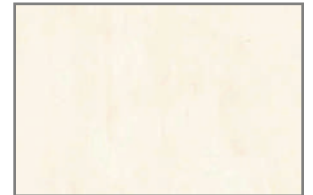
TRAVERTINE NAVONA



QUARTZ GREY



LIMESTONE IVORY

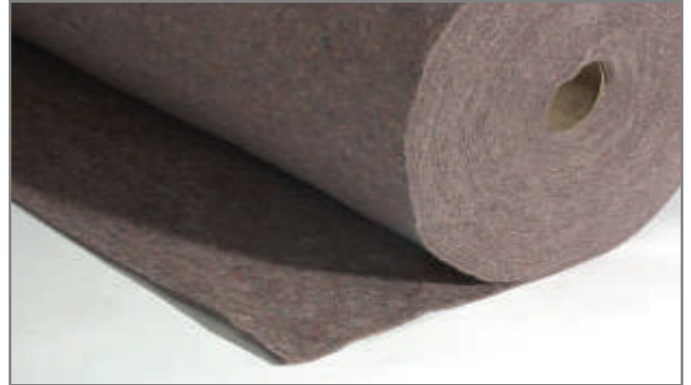


CEMENT IVORY

SEMI-INTENSIVE PROTECTIVE FLEECE - 15 oz

Our Semi-Intensive Protective Fleece is designed specifically for use within Blu-Terrace Amenity Deck systems & Blu-Garden Semi-Intensive systems. Specific to this product, it:

- **protects the roof membrane** and/or root barrier against damage from light mechanical demands
- **separates materials** of incompatible substrates from one another
- **stores water**, increasing water holding capacity
- has a mass/structure and water holding capacity designed with the dead load weight and plant palettes of the Blu-Terrace amenity deck systems in mind to give the perfect **balance of water holding capacity and protection**



Protection and Storage Fleece RMS 500 by

OPTIGRÜN
ROOF GREENING



LEED Credits available for:
• Materials & Resources (MR)



- Individual Roll
- Full Pallet



- 1,076 ft² per Roll
- 5 Rolls per Pallet (5,380 ft²)

TECHNICAL DATA

Materials:

- Polypropylene, Polyester & Recycled Acrylic Thread

Material Thickness:

- 0.16", 15 oz.

Roll Dimensions (W x L):

- 6' 6 3/4" x 164' 1/2"

Roll Diameter:

- 1' 7 3/4"

Roll Weight:

- 110 lbs.

Total Saturated Weight:

- 0.81 lbs. / ft²

Water Holding Capacity:

- 0.14 in³ / in² (0.085 gal / ft²)

Rot & Pathogen Resistant:

- Yes

Puncture Resistant:

- Yes

Use:

- Blu-Terrace amenity deck systems
- Blu-Garden semi-intensive systems

Installation Requirements:

- Overlap fabric by 6"

PEDESTRIAN PAVING DRAINAGE MAT

Our Pedestrian Paving Drainage Mat is designed for drainage beneath accessible areas that do not need water storage and on vertical building components. Specific to this product, it:

- is a **composite drainage layer** consisting of a three-dimensional drainage core and a filter fabric
- includes a **filter fabric bonded to the core**, preventing intrusion of the overburden into the drainage channels
- **retains soil or sand particles** as well as freshly placed concrete allowing filtered water to pass through to the drainage core
- is typically used in areas necessitating a **moderate compressive strength material for drainage**, specifically for low load pedestrian accessibility for pavers, concrete or asphalt walkways, and patios



• Special order product



- Individual Roll
- Full Pallet



LEED Credits available for:
• Materials & Resources (MR)



- 200 ft² per Roll
- 7 Rolls per Pallet (1,400 ft²)

TECHNICAL DATA

Materials:

- Recycled HDPE, Polypropylene Thread

Material Thickness:

- 0.40"

Roll Dimensions (W x L):

- 4' x 50'

Roll Weight:

- 39 lbs.

Compressive Strength (ASTM D 1621):

- 15,000 lbs. / ft²

Drainage Core Flow (ASTM D 4716):

- 21 gal / min / ft

Filter Fabric Flow Rate (ASTM D 4491):

- 140 gal / min / ft²

CBR Puncture (ASTM D 6241):

- 250 lbs.

Grab Tensile (ASTM D 4632):

- 100 lbs.

Use:

- Drainage below insulation in inverted assemblies
- Pedestrian compressive strength grade drainage used below pathways or vegetated areas that do not need water storage

Installation Requirements:

- Peel fabric back two dimples and overlap two rows of dimples, snap in place.
- Fold fabric back over joint.
- Cover boards with overburden immediately to protect from UV rays & wind uplift



300-Series

Blu-Terrace Roof Paver And/Or Tile on Pedestal System
September 24, 2025

SECTION 07 76 00 BLU-TERRACE ROOF PAVER AND/OR TILE ON PEDESTALS SYSTEM

PART 1 GENERAL

I) RELATED DOCUMENTS

- A) Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

II) SUMMARY

- A) Furnish and install a complete Roof Paver and/or Tile on Pedestals System; including, but not limited to: rot and pathogen protective fleece, rot and pathogen resistant filter fabric, SpiralJack pedestals, Concrete Pavers, Wood Deck Tiles, and Porcelain Deck Tiles. This section should be completed in coordination with Section 07 72 00 Roof Accessories, {07-xx-xx Applicable Waterproofing and Roofing Specifications} and Section 07 59 00 Electronic Leak Detection (ELD), in order to maintain the system warranty.

**SPEC NOTE: Summary section to be modified on a job-by-job basis. Please contact Sustainable for specific details. Architect to reference related vegetated roof and leak detection section if applicable.*

III) RELATED TRADES

- A) Section 02 40 00 Demolition
- B) Section 03 30 00 Concrete
- C) Section 04 00 00 Masonry
- D) Section 06 00 00 Carpentry
- E) Section 06 15 20 Composite Synthetic and Other Decking
- F) Section 07 14 01 Instant Setting Fluid Applied Rubber
- G) Section 07 14 13 Hot Rubberized Asphalt Waterproofing
- H) Section 07 18 13 PMMA Liquid Applied Waterproofing
- I) Section 07 52 16 Modified Bitumen Roofing
- J) Section 07 53 23 EPDM Roofing
- K) Section 07 54 00 Fluid Applied Waterproofing
- L) Section 07 54 19 Thermoplastic Roofing
- M) Section 07 59 00 Electronic Leak Detection – High & Low Voltage
- N) Section 07 60 00 Sheet Metal
- O) Section 07 72 00 Roofing Accessories
- P) Section 07 76 00 Roof Paver and/or Tile on Pedestal System
- Q) Section 07 90 00 Caulking & Sealants
- R) Section 22 14 16 Roof Drains
- S) Section 26 05 19 Low Voltage Electrical
- T) Section 32 84 00 Landscape Irrigation
- U) Section 32 90 00 Landscaping

IV) REFERENCES

- A) ANSI: American National Standards Institute www.ansi.org
- B) ASTM: American Society of Testing Materials www.astm.org
 - 1) ASTM D 638 – Tensile Properties of Plastics
 - 2) ASTM D 790 – Flexural Properties of Unreinforced and Reinforced Plastics Insulating
 - 3) ASTM D 1525 – Vicat Softening Temperature of Plastics
 - 4) ASTM D 3161 – Roofing Products Wind Resistance Test

- C) EN-ISO: International Organization for Standardization
- D) OSHA: Occupational Safety and Health Administration
- E) Factory Mutual Insurance Co. 1-35 Green Roof Systems
- F) USGBC: US Green Building Council,
 - 1) Leadership in Energy and Environmental Design LEED Reference Guide, Version 3.0
 - 2) USGBC Project Calculation Spreadsheet. www.usgbc.org.

v) QUALIFICATIONS

- A) Only a contractor approved and licensed by the System Provider shall install the Roof Paver and/or Tile on Pedestals System.

vi) SUBMITTALS

- A) Submit under provisions of Section 01 30 00.
- B) Submit System Provider's written approval or license for contractors for Roof Paver and/or Tile on Pedestals System.
- C) Submit most recent copy of System Provider's literature applicable to products and specifications to be used, as specified.
- D) Product Data Sheets: For each component within the Roof Paver and/or Tile on Pedestals System.
- E) Samples for Verification on request: For each of the following components of Roof Paver and/or Tile on Pedestals System:
 - 1) Submit three sheet samples approximately 6 x 6 inches or alternately 3 units that are representative of the following products:
 - (a) Protection Fleece
 - (b) Roof Pavers/Tiles: Send finish options for architect/owner to determine exact finish. Note on samples if certain finishes/types would include an increase in cost from original bid. Samples should be in approximately 2" x 2" blocks. Also include product data stating actual versus nominal dimensions of each paver type.
 - (c) Pedestal System: Send a complete pedestal assembly with slope adjusting components (if applicable) along with shims and spacer tab.
- F) Shop Drawings: Submitted by contractor showing all components required for the paver & pedestal requirements. Shop drawings shall include:
 - 1) Include plan drawings showing layout of all paver areas and detail drawings showing how the various components of the system fit together.
 - 2) Include installation recommendations and instructions for pedestals.
 - 3) Include detailed installation drawings for all precast pavers.
- G) Warranty: Sample warranty from the System Provider.
- H) Submit Maintenance Data before start of required warranty and maintenance periods to be included in project closeout maintenance manuals.

vii) QUALITY ASSURANCE

- A) Roof Paver and/or Tile on Pedestals System Installer Qualifications: A qualified Roof Paver and/or Tile on Pedestals System installer approved, authorized, or licensed by Sustainability, whose work has resulted in successful establishment of Roof Paver and/or Tile on Pedestals Systems.
 - 1) Field Supervision: Require Installer to maintain an experienced full-time supervisor on Project site when work is in progress.
 - 2) Provide a list of at least 3 projects, satisfactorily completed within the past 5 years, of similar scope and complexity to this project.

- 3) Contractor to receive a current structural plan of the project area for where the work and/or logistics for the project are to take place. This structural plan will confirm the point loading capacities of the roof where pavers are to be installed and/or logistical loading areas.
 - 4) Installer must provide at time of proposal submittal a general liability insurance certificate showing \$1,000,000 in coverage.
- B) Pre-installation Conference: Conduct conference at project site.
- 1) After award of Contract and prior to the commencement of the Work of this Section, schedule and conduct meeting to discuss the Work of this Section and to coordinate with related work. Coordinate with pre-construction meeting specified in Section (xxxxxx). Convene pre-construction meeting to comply with requirements of Division 1 and as follows:
 - (a) General Contractor to notify all attendees at least two weeks prior to the conference.
 - (b) Require attendance of parties directly affecting Work of this Section, including, but not limited to: Owner, Contractor, Architect, System Provider, System Installer, Roofing Membrane Provider, Roofing Membrane Installer and Plumbing Installers.
 - (c) Review methods and procedures related to installation and operation of Work of this Section, including coordination with related Work.
 - (d) Document proceedings, including corrective measures or actions required, and furnish copy of record to each participant.
 - 2) Mockups:
 - (a) Complete a mockup, as directed by Architect, for the evaluation of installed procedures and to ascertain that workmanship is acceptable prior to complete installation of Roof Paver and/or Tile on Pedestals System.
 - (b) Do not proceed with install until mockup is approved by Architect and System Provider.
 - (c) Redo mockup as required until fully approved by Architect and System Provider.

VIII) DELIVERY, STORAGE, AND HANDLING

- A) Packaged Materials:
- 1) Contractor to designate Project Coordinator to be responsible for coordinating all shipments with the System Provider, Project Coordinator to alert System Provider a minimum of 3 weeks prior to delivery to ensure availability of product, additional lead time may be required for certain products or plantings, reference System Provider's Terms and Conditions for exact lead times.
 - 2) Store materials under cover and elevated above ground, out of direct sunlight.
 - 3) Store roll material lying down and on pallets. Fully protect from moisture and direct sunlight exposure.
 - 4) Remove damaged material from job site. Report and replace damage materials.
 - 5) When storing materials on the roof be sure that the load of the materials does not exceed the load of the structure. Coordinate with architect and general contractor on structural allowances for placing pallets on the roof and ensure crane is appropriately sized to reach designated areas of the roof.

IX) PROJECT CONDITIONS

- A) The Pedestal System is specified for use with pedestrian traffic only.
- B) All four (4) sides of the Roof Paver and/or Tile on Pedestals System must be contained with perimeter blocking and/or walls.
 - 1) Roof Paver and/or Tile on Pedestals System must not be allowed to move laterally.
- C) All waterproofing surfaces must be broom clean, frost free, and free of dirt, oil, or any rough foreign matter which may impair the waterproofing and/or roofing manufacturer's guarantee.
- D) All waterproofing surfaces must be covered with SB 3320 Protective Fleece, or an approved equal protective fabric, to protect roofing and/or waterproofing surfaces to provide the minimum protective requirements of roofing and/or waterproofing manufacturers.

- E) Roof Paver/Tile not to exceed the loading capabilities of Pedestal System.
- F) Decks over Roofing/Waterproofing:
 - 1) If an appropriate and accepted PSI of either EPS or XPS polystyrene insulation is installed on top of the membrane in a protected membrane system, the Roof Paver and/or Tile on Pedestals System may be installed directly on top of the accepted insulation.
 - 2) Do not use the Roof Paver and/or Tile on Pedestals System over any insulation that is not approved and accepted for the installation of the system.
 - (a) Prior to install, submit insulation manufacturer's approval of compatibility with the Roof Paver and/or Tile on Pedestals System.

X) WARRANTY

- A) The System Provider, in conjunction with the contractor, shall furnish a warranty that states that all labor and material related to this specification section shall remain free of any defects for a minimum of three years.

XI) BIDDING REQUIREMENTS

- A) Pre-Bid Meeting: A pre-bid meeting shall be held with the Owner's Representative and involved trades to discuss all aspects of the project. The Applicator's field representative or roofing foreman for the work shall be in attendance. Procedures to avoid rooftop damage by other trades shall be determined.
- B) Site Visit: Bidders shall visit the site and carefully examine the areas in question as to conditions that may affect proper execution of the work. All dimensions and quantities shall be determined or verified by the contractor. No claims for extra costs will be allowed because of lack of full knowledge of the existing conditions unless agreed to in advance with the Owner or Owner's Representative.

PART 2 PRODUCTS

I) ROOF PAVER AND/OR TILE ON PEDESTALS SYSTEM

- A) Basis of Design: Sustainablu, <http://www.sustainablu.us>
- B) All products and services shall be approved/procured through the system provider, Sustainablu, in order to ensure integrity of the system and maintain system warranty.

II) PROTECTION LAYER

- A) Protective Fleece: To protect membrane from pedestals.
 - 1) Type: Semi-Intensive Protective Fleece [1222-PFC-500]
 - (a) Properties: 15 oz Polypropylene, Polyester and Recycled Acrylic Thread
 - (b) Water Holding Capacity: 20.16 in³/ft²
 - (c) Total Saturated Weight: 0.81 lbs/ft²

III) PEDESTAL SYSTEM

- 1) Type: SpiralJack Adjustable Pedestals Assembly [311-PPE / 312-PPC]
 - (a) Properties: Recycled Polypropylene resistant to mold, alkali and bitumen.
 - (b) Base Diameter: 7 43/64"
 - (c) Height Range: 5/64" – 42 5/8"
 - (d) Compressive Strength: 1,984 lbs.
 - (e) Pedestal Accessories:
 - (i) Bottom Slope Corrector: Slope compensation from 0-4%.
 - (ii) Bearer Holder: For use with or without slope compensation, supports all beams, joists, or stringers up to 2 1/2".

- (iii) Spacer Tabs: Available in 1/8", 5/32", & 13/64" widths, may be used with any height pedestal, with or without slope compensation.

**SPEC NOTE: Choose appropriate spacer tab thickness for your layout. Please contact Sustainableblu with additional questions.*

- (iv) Basic Wind Uplift Assembly: Recommended for porcelain tile or concrete paver applications in areas with standard wind requirements.
- (v) Concealed Wind Uplift Assembly: Concealed lockdown for porcelain tile or concrete paver applications in areas with excessive wind conditions.
- (vi) Neoprene Shims: For minor adjustment required for pedestals, or use on their own.

IV) ROOF PAVERS

- 1) Type: Classic-Line Concrete Pavers [313-CCP]
 - (a) Finish: Available in 14 standard colors as well as custom varieties available upon request.
 - (b) Standard size: 23 13/16" x 23 13/16" x 2" (Actual)
 - (c) Weight: 24 lbs. / ft²
 - (d) Compressive Strength: > 8,000 lbs. / in²
- 2) Type: Flex-Line Concrete Pavers [314-FCP]
 - (a) Finish: Available in 17 standard colors as well as custom varieties available upon request.
 - (b) Standard size: 23 7/8" x 23 7/8" x 2" (Actual)
 - (i) Other Available Sizes (Actual):
 - (i) 1 1/4" - 3" thicknesses
 - 1. 11 3/4" x 11 3/4"
 - 2. 11 3/4" x 23 1/2"
 - (ii) 1 1/2" - 3" thicknesses
 - 1. 11 3/4" x 36"
 - 2. 12" x 36"
 - 3. 14 1/2" x 14 1/2"
 - 4. 14 5/8" x 29 5/8"
 - 5. 15 3/4" x 15 3/4"
 - 6. 15 3/4" x 23 5/8"
 - 7. 17 5/8" x 17 5/8"
 - 8. 18" x 18"
 - 9. 17 5/8" x 23 1/2"
 - 10. 23 1/2" x 23 1/2"
 - 11. 23 3/4" x 23 3/4"
 - 12. 24" x 24"
 - (iii) 2" - 3" thicknesses
 - 1. 17 5/8" x 35 3/8"
 - 2. 23 1/2" x 29 1/2"
 - 3. 23 1/2" x 35 3/8"
 - 4. 29 1/2" x 29 1/2"
 - 5. 29 3/4" x 29 3/4"
 - (iv) 2 1/2" - 3" thicknesses
 - 1. 35 1/2" x 35 1/2"
 - (c) Weight: 23 lbs. / ft²
 - (d) Compressive Strength: > 9,500 lbs. / in²
 - 3) Type: Atlantic-Line Concrete Pavers [315-ACP]
 - (a) Finish: Available in 30 standard colors as well as custom varieties available upon request.
 - (b) Standard size: 24" x 24" x 2" (Actual)
 - (i) Other Available Sizes (Actual):
 - (i) 12" x 12" x 2"

- (ii) 12" x 24" x 2"
 - (iii) 12" x 36" x 2"
 - (iv) 18" x 18" x 2"
 - (v) 18" x 24" x 2"
 - (vi) 36" x 24" x 2"
- (c) Weight: 24.5 lbs. / ft²
- (d) Compressive Strength: 8,500 lbs. / in²
- B) Type: Classic Wood Deck Tiles [316-WDT]
 - 1) Materials: Classic – Light, and/or Classic - Dark
**SPEC NOTE: Architect to choose desired wood species.*
 - (a) Sizes:
 - (i) 24" x 24" x 1 1/2"
 - (ii) 24" x 48" x 1 1/2"
 - (b) Weight: 4 lbs. / ft²
- C) Type: Custom Wood Deck Tiles [317-WDT]
 - 1) Materials: Itauba, Ipe, Cumaru, Tigerwood, Black Locust, and/or Massaranduba.
**SPEC NOTE: Architect to choose desired wood species.*
 - (a) Sizes (Actual):
 - (i) 23 7/8" x 23 7/8" x 1 1/2"
 - (ii) 23 7/8" x 47 7/8" x 1 1/2"
 - (b) Weight: 6 lbs. / ft²
- D) Type: Porcelain Deck Tiles [318-PDT]
 - 1) Finish: Available in 10 different finishes. Please contact Sustainability for samples.
 - 2) Sizes (Actual):
 - (a) 11 5/8" x 23 5/8" x 3/4"
 - (b) 11 5/8" x 47 5/8" x 3/4"
 - (c) 23 5/8" x 23 5/8" x 3/4"
 - (d) 35 5/8" x 23 5/8" x 3/4"
 - (e) 47 5/8" x 23 5/8" x 3/4"
 - 3) Weight: 9 lbs. / ft²

PART 3 EXECUTION

I) EXAMINATION

- A) Verify that the surfaces and site conditions are ready to receive work.
- B) Verify that the roof surfaces are dry and free of ice or snow.
- C) Verify all elevations, required pedestal heights and deck dimensions. Commencement of work shall imply acceptance of surfaces & deck conditions.
- D) Applicator shall verify that the work done under related sections meets the following conditions:
 - 1) Roof drains and/or scuppers have been reconditioned and/or replaced and installed properly.
 - 2) Roof curbs, nailers, equipment supports, vents and other roof penetrations are properly secured.
 - 3) All surfaces are free of dirt, debris and incompatible materials.

II) PREPARATION

- A) Remove trash and debris from the roof.

III) PROTECTION LAYER

- A) Protection Fleece

- 1) Roll out protective fleece on top of waterproof membrane roofing. Overlap seams a minimum of 4 inches along sides and 12 inches along ends. Wet fabric as necessary to provide short-term ballast. For long term ballast use sandbags or paver slabs. Never cut near the roofing membrane when cutting fabric for installation. Only cut fabric using industrial shears, and never with a utility knife.

IV) PAVERS ON PEDESTALS SYSTEM

- A) Install in accordance with System Provider and other contributing manufacturer's instructions. Installation requirements vary for each individual project site. Roof paver and/or tile used, pattern, grid layout, starting point, and finished elevation should be shown on plan view shop drawings, which have been prepared and approved by the designer, installing contractor and/or owner.
- B) Elevation & Layout:
 - 1) Once the starting point and the finished elevation of the deck surface have been determined, the 'Top of Pedestal Elevation' (finished elevation less roof paver/tile thickness) is established and marked around the perimeter using a transit water level or laser leveling device.
 - 2) Precise measurements should be taken and deck area should be accurately defined. Mark off and 'square up' all outside edges with control lines using 'snapped' chalk lines. Mark two (2) lines in both directions marking the location of each pedestal. Use the control lines as references to periodically check and assure a square layout during installation.
 - 3) Next, a pedestal must be placed where each measured grid line meets the perimeter. Remove two (2) spacer tabs in line with one another atop each pedestal system placed around the perimeter. Remove all four (4) spacer tabs at corners.
 - 4) For installation of pavers and/or tiles in large areas, one paver/tile shall be installed onto four (4) pedestals at random positions at every 2000 square feet. The paver/tile shall be installed at the correct elevation using a laser leveling device (or water level) and serve as a reference point to verify exact elevation of remaining pavers/tiles.
 - 5) Adjust each pedestal height to the 'Top of Pedestal Elevation' marked on the perimeter. Position the pedestal as close to the edge of the perimeter as possible, with the two remaining spacer tabs aligned with the grid line. Using the elevation marked on the perimeter, stretch a mason's line along and slightly ahead of the second row of pedestals. A laser leveling device may also be used for this purpose.
 - 6) On larger decks, it is recommended that the Pedestal System be pre-assembled and pre-set to the proper elevation and placed in position prior to the installation of roof paver/tile.
 - 7) As the pedestals located along the grid lines are loaded with pavers/tiles, fine vertical height adjustment can be made by spinning the pedestal from the side. Clockwise rotation of the pedestals will lower the bearing surface and the deck. Counter-clockwise rotation will raise the top bearing surface and deck.
 - 8) Always maintain adequate thread engagement. Pedestals utilize locking rings that shall be used where possible for maximum strength and long-term stability of pedestals.
 - 9) Slight irregularities in roof paver/tile thickness should be compensated by using one (1) to four (4) shim segments. Place on top of the pedestal, under the corner(s) of the roof paver/tile. Use no more than four (4) shims on top of the pedestal.

V) PERIMETER CONTAINMENT

- A) Any area of the pedestal deck that is not restrained by a parapet or foundation wall must be 'boxed-in' and contained. Roof pavers/tiles will move if all sides are not adequately restrained.

- B) Perimeter framing and edging boards located at the outside of the deck perimeter must be installed to provide restraint.
- C) No movement should be allowed at the perimeter of the deck system greater than one tab width.

VI) FIELD QUALITY CONTROL

- A) Inspect often during installation to assure that grid spacer lines are being maintained in a straight and consistent pattern and that roof pavers/tiles are level and not rocking. Unless otherwise specified in writing to allow for expansion, inspect to assure that all paver spacing between tiles and at perimeter walls does not exceed a tab width. Particular attention should be made to assure that all pedestrian entry or access points to the deck are level.

VII) ROUTINE MAINTENANCE AND CARE

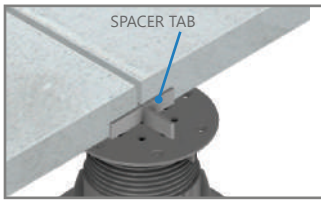
- A) Owner to follow Sustainablu's standard maintenance requirements. Contact sustainablu.us for specific information.
- B) The deck owner must perform routine maintenance of the deck. Check for rocking pavers and adjust or shim immediately. Pedestals can settle and may have to be realigned. Failure to do so can cause a tripping hazard. Periodically check spacer tabs and immediately replace broken tabs to limit deck movement. Make sure the perimeter containment stays intact and structurally sound.
- C) Extra Materials: Deliver supply of maintenance materials to the owner. Furnish not less than 1 percent maintenance materials from same lot as materials installed, and enclosed in protective packaging with appropriate identifying labels.

END OF SECTION

UNDERSTANDING THE SPIRALJACK PEDESTAL

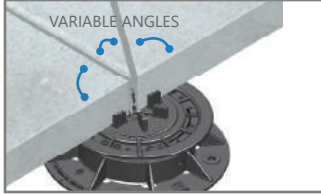
STANDARD FEATURES

- HEIGHT RANGE: 5/64" - 42 5/8"
- THREADED FOR FINE HEIGHT ADJUSTMENTS
- 100% POST-CONSUMER RECYCLED MATERIAL - LEED®
- UNAFFECTED BY MOLD, ALGAE, OR PONDING WATER
- SUPPORTS 1,984 LBS. (8.82 kN) (MINIMUM LOAD CAPACITY)



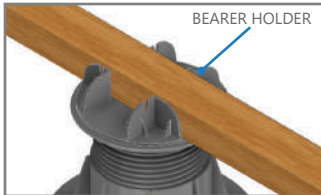
SPACER TAB

Spacer Tabs with thickness from 3 mm (1/8") to 5 mm (13/64") meet all necessary spacing sizes, dependent on your paver size and spacing requirements.



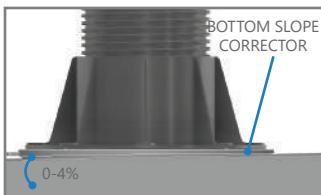
VARIABLE ANGLE SPACER TAB

Variable Angle Spacer Tabs allow pedestals to support up to eight pavers with different corner angles (special order).



BEARER HOLDER

Bearer Holders support single and twinned 2 x 4 or 2 x 6 joists to keep bearers firmly in place on pedestals.

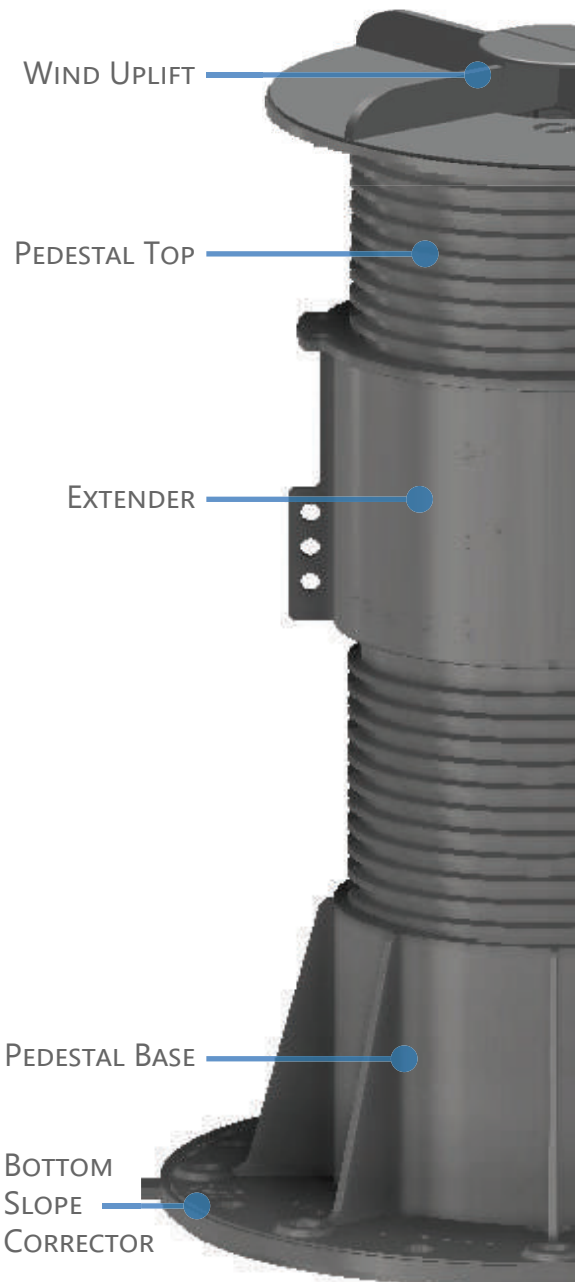


BOTTOM SLOPE CORRECTOR

Bottom Slope Correctors allow pedestals to remain firmly upright on inclines of up to 4%.

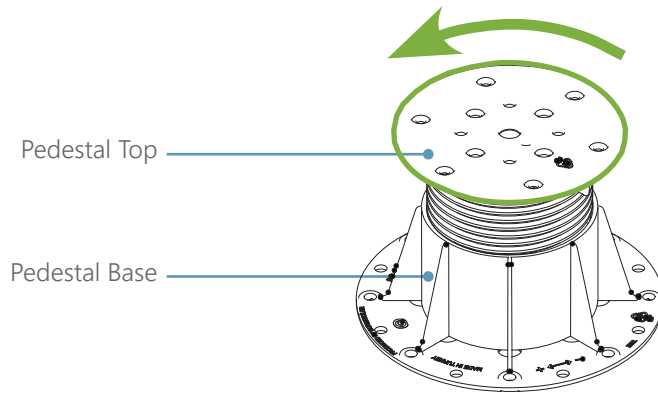
OPTIONAL FEATURES

- SLOPE CORRECTION ADJUSTMENT AVAILABLE
- CUSTOM COMPONENTS AVAILABLE
- WIND UPLIFT COMPONENTS FOR HIGH WIND CONDITIONS UP TO 165 MPH



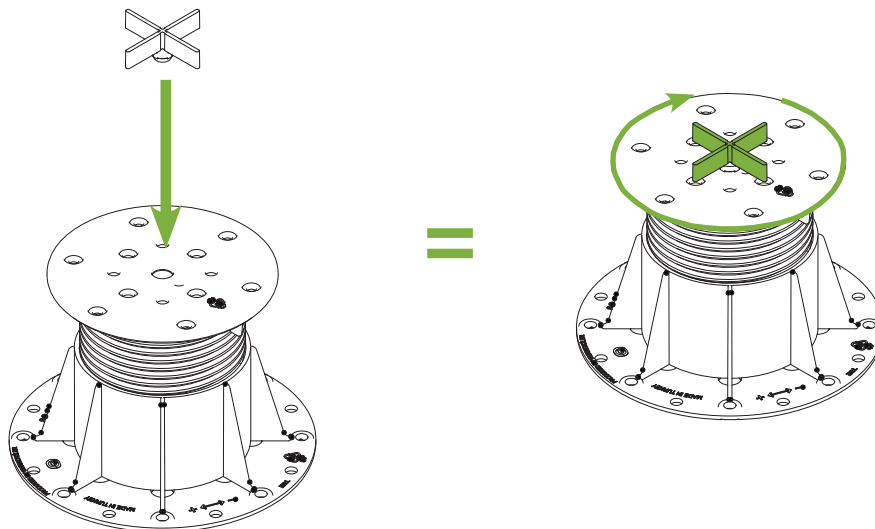
ADJUSTING PEDESTAL HEIGHT

- 1 Hold pedestal base.
- 2 Rotate pedestal top clockwise to reduce height or counter-clockwise (as shown) to increase height.



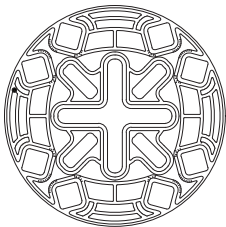
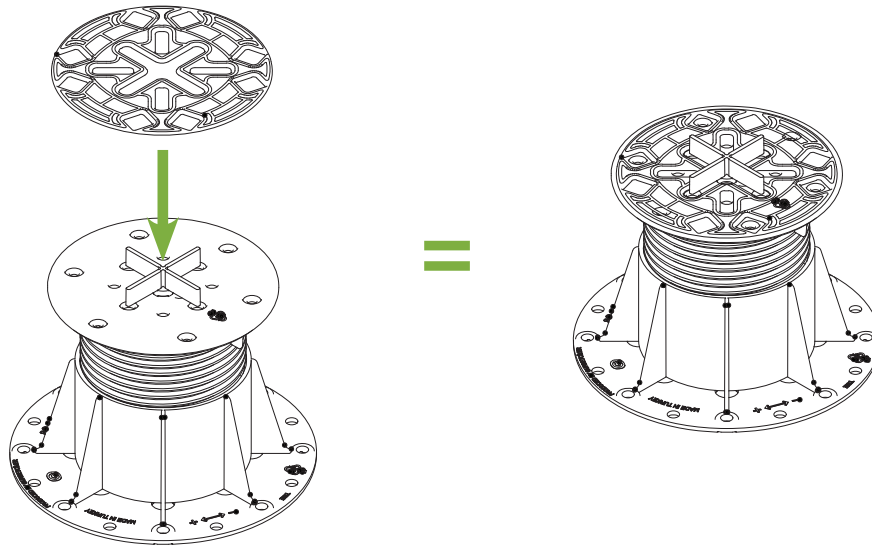
INSERTING SPACER TABS

- 1 Firmly connect spacer tab into hole on top of pedestal.
- 2 Rotate spacer tab in any direction to achieve desired orientation.

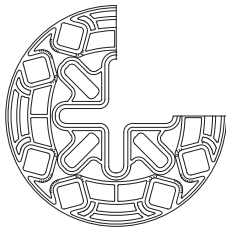


NEOPRENE SHIMS

- 1 Neoprene shims can be used together to create level surfaces when using pavers of varying thicknesses.
- 2 Always use a 2 mm whole shim underneath porcelain pavers (optional for other paver/tile products).



Whole



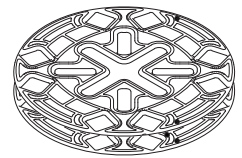
Three-Quarter



Half



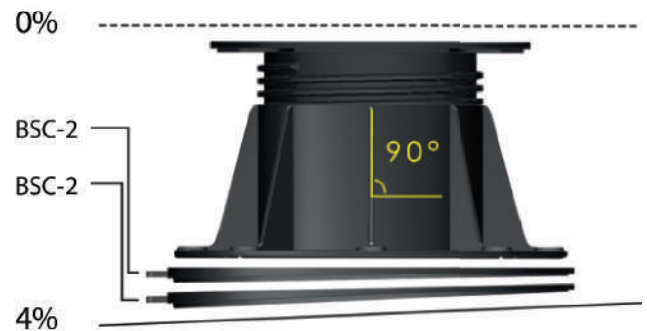
Quarter



Stacked

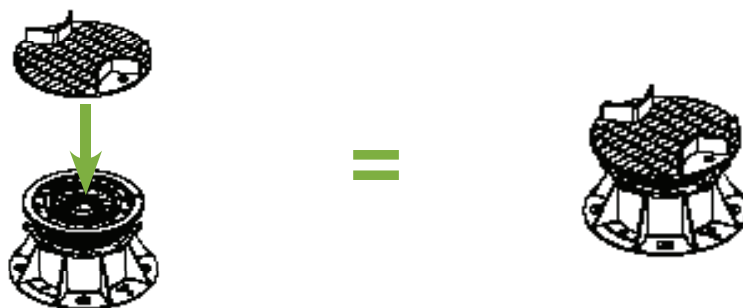
CORRECTING SLOPES - USING BOTTOM SLOPE CORRECTOR

- 1 Firmly connect pedestal to Bottom Slope Corrector
- 2 Stack with additional Bottom Slope Correctors for projects with greater slope

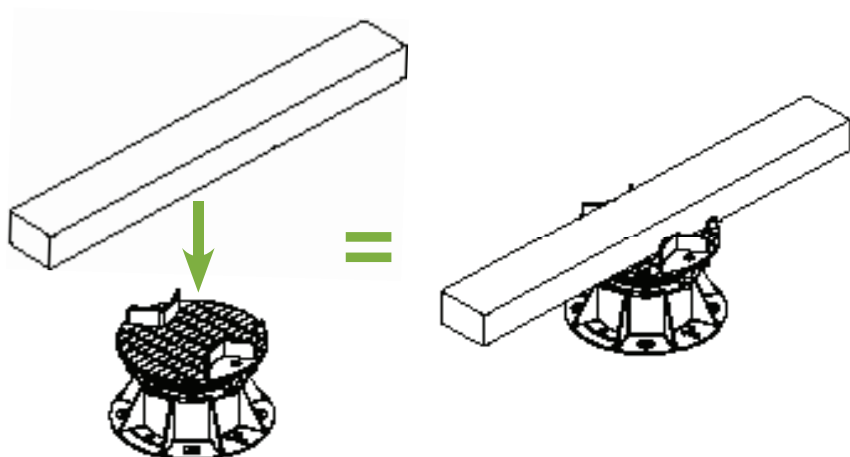


JOIST-BASED DECKING PLATFORMS - USING BEARER HOLDER

- 1** Firmly connect bearer holder into hole on top of pedestal.
- 2** Rotate bearer holder in any direction to achieve desired orientation.

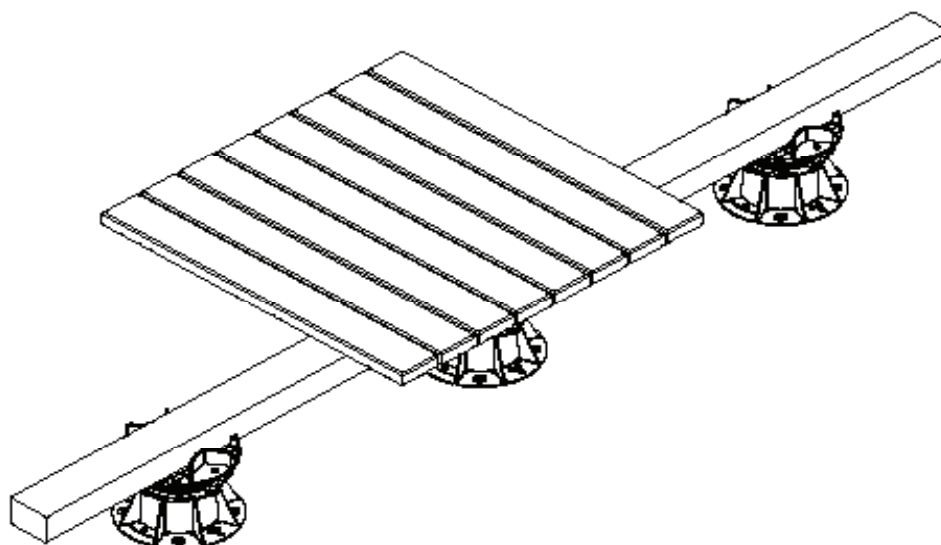


- 3** Place joist on top of the existing pedestal and bearer holder combination and drive fastening screws through tabs of bearer holder to fasten joist in place.



Joist	Spacing
2 x 4" Joist	Pedestal every 24" max.
2 x 6" Joist	Pedestal every 30" max.
2 x 8" Joist	Pedestal every 36" max.
Twinned 2 x 4" Joist	Pedestal every 48" max.

- 4** Install deckboards perpendicular to joists.

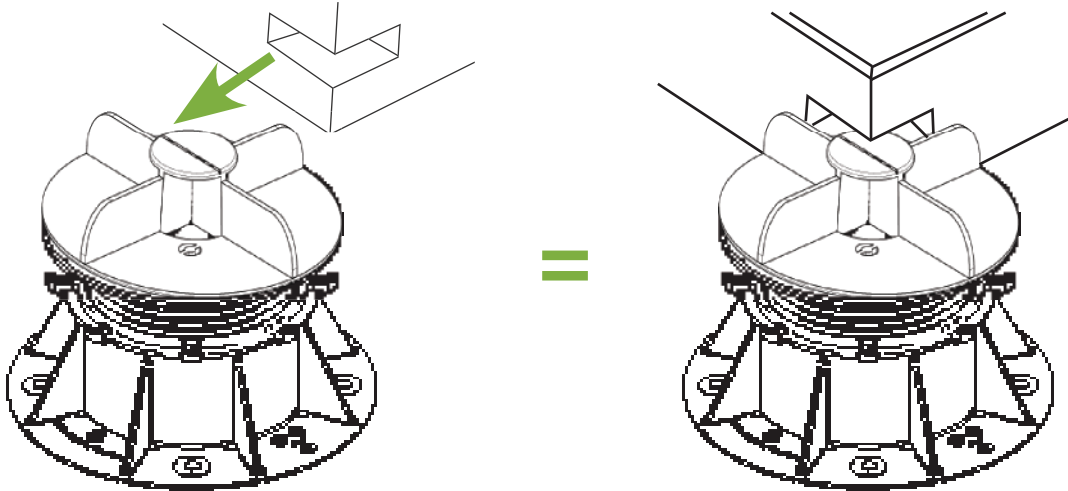


CONCRETE PAVER INSTALLATION - USING WIND UPLIFT ACCESSORY

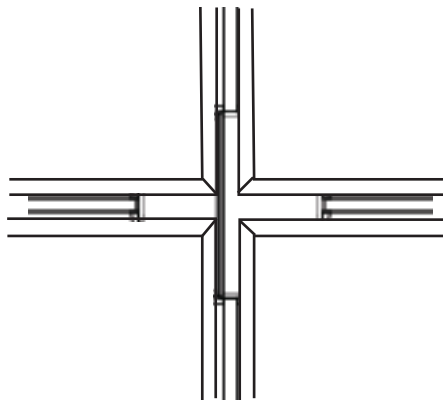
- 1** Firmly connect wind uplift accessory into holes on top of pedestal. Rotate in any direction to achieve desired orientation.



- 2** Place the concrete paver upon the pedestal and slide towards center of pedestal.



- 3** Place the remaining concrete pavers onto the pedestal.



[300] BLU-TERRACE MAINTENANCE GUIDELINES

311/312: SPIRALJACK PEDESTALS AND COMPONENTS:

No maintenance necessary.

313/314/315: CLASSIC, FLEX, & ATLANTIC LINE CONCRETE PAVERS:

CLEANING:

- Debris in Paver Cracks:
 - Debris falling between the gaps in the pavers can normally be removed with a vacuum cleaner.
 - For high debris areas, it is recommended to remove the paver and clean below it every few years.
- Pressure Washing:
 - Use pressure washing as the cleaning method removes built-up dirt, mold or mildew from your concrete paver tiles.
 - Use the lowest possible and a consistent PSI for concrete paver cleaning.
 - A maximum of 1200 PSI is suggested.
 - Test an inconspicuous area first and be careful to use even strokes to avoid lap marks.
 - It is recommended to use a professional deck cleaning contractor for best results.
- Chemical:
 - For more intense stains, use a deck cleaning product which safely cleans the concrete paver and also kills mold spores.
 - Always test any product you apply in an inconspicuous place to make sure it performs as you expect before cleaning entire paver deck.
 - If previously sealed and desired, re-seal pavers after they are cleaned.

SEALING:

- Concrete paver stabilizers or sealants can give the paver a richer finish, if desired.
- Follow Sealer Manufacturer's applications instructions and it is recommended to test an inconspicuous area first before a complete application.
- Further applications of decking oil or sealant should be undertaken at regular intervals depending on the degree of exposure of your deck to direct sunlight, local climatic conditions and the recommendations of the manufacturer of the decking oil/sealant used.

316/317: WOOD DECK TILES:

CARING FOR WOOD DECK TILES:

- Like any exterior wood product, (WDT) Wood Deck Tiles will gradually fade to a silvery gray color over time.
 - The rate at which this occurs depends largely on the degree of exposure to direct sunlight, the climatic conditions and the frequency at which any preservative treatments are applied.
 - Wood Deck Tiles are coated with a decking oil at the factory, this is just a simple decking oil basically designed to enhance the initial appearance of the tiles.
- To reduce the rate at which the tiles will naturally fade when exposed to direct sunlight and to keep the appearance of your deck at its optimum condition, we strongly recommend you apply a good quality decking oil with a brush or roller to the top surface and edges of the tiles as soon as practical after installing the tiles.
- Decking oils which contain micro-fine or nanotechnology pigments or other proprietary UV absorbing or reflecting compounds and have a high solids content are preferred for longer term results and extended periods between applications of the decking oil/sealant. These specialized products will help maximize the durability, beauty and value of your decking tiles and assist in maintaining the original wood color as long as possible.

APPROVED MAINTENANCE PRODUCTS:

- PPG Olympic Maximum Semi-Transparent Stain
- Flood CWF - UV Penetrating Oil Finish
- Penofin Penetrating Oil Finish
- Behr Weatherproofing Wood Sealer
- Thompson's Water Seal
- Messmers' UV Plus for Hardwood Decks
- Defy - Deck Stain for Hardwoods

Further applications of decking oil or sealant should be undertaken at regular intervals depending on the degree of exposure of your deck to direct sunlight, local climatic conditions and the recommendations of the manufacturer of the decking oil/sealant used.

318: PORCELAIN DECK TILES:

No maintenance necessary.

[300] BLU-TERRACE MATERIALS LIMITED WARRANTY

By purchasing a Sustainablu, LLC product, you accept the LIMITED WARRANTY terms herein. THIS LIMITED WARRANTY AND REMEDIES HEREIN ARE EXCLUSIVE AND INSTEAD OF ALL OTHER WARRANTIES AND REMEDIES, WHETHER ORAL, WRITTEN, STATUTORY, LEGAL OR EQUITABLE, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION, WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE AS WELL AS WARRANTIES AGAINST HIDDEN OR LATENT DEFECTS. ALL WARRANTIES ARE EXCLUDED EXCEPT THOSE EXPRESS WARRANTIES STATED ON THE FACE OF THIS LIMITED WARRANTY. REMEDIES FOR ANY BREACH OF THIS LIMITED WARRANTY ARE LIMITED TO SUSTAINABLU' ABSOLUTE OPTION TO REPAIR OR REPLACE THE DEFECTIVE PRODUCT AND THERE IS NO OTHER REMEDY AVAILABLE. SUSTAINABLU, LLC SHALL NOT BE LIABLE FOR DAMAGE TO PROPERTY BEYOND SUSTAINABLU' PRODUCT(S); AND, SUSTAINABLU, LLC IS NOT LIABLE FOR DIRECT, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR PUNITIVE DAMAGES FOR ANY CLAIMS, INCLUDING BUT NOT LIMITED TO TORT, STRICT LIABILITY, STATUTORY, BREACH OF EXPRESS WARRANTY, BREACH OF IMPLIED WARRANTY, AND BREACH OF CONTRACT. NO PERSON IS AUTHORIZED TO MAKE ADDITIONAL STATEMENTS, PROMISES, GUARANTIES, WARRANTIES OR REPRESENTATIONS REGARDING PERFORMANCE OF SUSTAINABLU' PRODUCTS. Terms that are either additional to, conflicting with or different from those herein are excluded unless specifically agreed to in a separate writing and signed by a corporate officer of Sustainablu, LLC. This LIMITED WARRANTY is for the benefit of the original purchaser of the Sustainablu, LLC product who may transfer this LIMITED WARRANTY to the owner of the real estate where the warranted product is originally installed.

Sustainablu, LLC products are warranted to be free from defect in material and workmanship during manufacturing based on applicable industry standards. Warranty periods begin on delivery date of the warranted product and extend for the period listed below:

- Product Lines 311 & 312, SpiralJack Paver Pedestals and Components are warranted for five (5) years if properly installed according to project specifications.
- Product Lines 313 & 314 Classic & Flex Line Line Concrete Roof Pavers are warranted for three (3) years if properly installed according to both project specifications and usage of Sustainablu's pedestal system when applicable.
- Product Line 315 Atlantic Line Concrete Roof Pavers are warranted for ten (10) years if properly installed according to both project specifications and usage of Sustainablu's pedestal system when applicable. For purposes of this warranty, "defects" or "defective" shall refer only to any paver(s), caused by freeze-thaw, cracking, or delamination, where such cracking or delamination results from a loss in dry weight greater than 1-1/2%, or by testing and evaluation, renders the paver(s) unsuitable for its intended use. If more than five (5) years but less than ten (10) years following the original delivery of the pavers, the pavers shall exhibit defects, Sustainablu shall repair or replace the defective paver(s) subject to the terms and limitations described within this document; but the Claimant shall reimburse Sustainablu the percentage of the cost of such replacement set forth below:

Date of Claim

Customer Percentage

- | | |
|--|-----|
| • More than 5 years, but less than 6: | 10% |
| • More than 6 years, but less than 7: | 20% |
| • More than 7 years, but less than 8: | 30% |
| • More than 8 years, but less than 9: | 40% |
| • More than 9 years, but less than 10: | 50% |
- Product Lines 316 & 317, Classic and Custom Wood Deck Tiles are warranted for five (5) years if properly installed according to both project specifications and usage of Sustainablu's pedestal system when applicable.
 - Product Line 318, Porcelain Pavers are warranted for five (5) years if properly installed according to both project specifications and usage of Sustainablu's pedestal system when applicable.

NOTE: Placing any paver/tile on non-Sustainablu, LLC's pedestals voids this LIMITED WARRANTY.

If any Sustainablu, LLC product fails to perform due to a defect in workmanship or materials within the applicable warranty period, then Sustainablu, LLC, at its sole option, will either repair or replace the defective product. The dollar amount of warranty coverage under this LIMITED WARRANTY shall not exceed the invoiced price for the defective product itself, excluding, installation, sales tax and freight. This LIMITED WARRANTY is void if the product is not maintained as recommended by Sustainablu, LLC. Sustainablu, LLC's warranty does not cover cosmetic scratches, dents, normal discoloration or fading. Due to inherent properties of concrete, wood and porcelain products, it is normal for variations in shading or color to be present in a finished product or occur over time due to sunlight exposure or other environmental factors and such variations in shading or color are not covered by this LIMITED WARRANTY. Sustainablu, LLC's LIMITED WARRANTY does not cover cracking, chipping or other damage caused by: (a) settling or other foundation movement or failures regardless whether caused by man-made or natural environmental (such as flood, hurricane, earthquake, lightning, fire, et al) and environmental conditions (such as air pollution, mold, mildew, et al), (b) Improper installation of Sustainablu, LLC's products and/or failure to abide by Sustainablu, LLC's installation guidelines, including but not limited to failure to install the tiles on a solid, flat surface or a surface that is not properly drained, (c) failure of non-Sustainablu, LLC products, (d) Use of Sustainablu, LLC's products in an application not recommended by Sustainablu, LLC's guidelines and local building codes, (e) Improper storage or handling after delivery, (f) Ordinary wear and tear, AND FOR ANY PRODUCT IN WHICH SUSTAINABLU, LLC HAS NOT BEEN PAID IN FULL (This will be based on Sustainablu, LLC's records). There is no warranty for damage caused by impact, neglect, and vandalism; acts of third parties or natural disaster. Alteration of product, floor or tiles voids this LIMITED WARRANTY. Installation of structures, fixtures or utilities on or through the product without prior written approval from Sustainablu voids this LIMITED WARRANTY.

It is not Sustainablu, LLC's responsibility to determine the effectiveness, fitness, suitability and safety of the Sustainablu LLC's products in connection with its use in any application. No person or entity is authorized by Sustainablu LLC to make any statement or representation as to the quality or performance of Sustainablu LLC products other than as contained in this warranty and Sustainablu LLC shall not be bound by any such statements or representations. This warranty may not be altered or amended except by means of a written document signed by both Sustainablu LLC and owner of said warranty. As a precondition to validate any warranty claim, purchaser must present written notice of a warranty claim to Sustainablu, LLC within 30 days after a warranty claim accrues or within 30 days after purchaser first notices an alleged defect, whichever is earlier.

Refer to the TERMS AND CONDITIONS for information regarding damage and defects identified prior to installation. If purchaser or its installer believes a defect exists, do not install the product. In order to maintain the warranty, the owner is obligated to contact Sustainablu, LLC within 24 hours after notice of alleged defect and make a warranty claim to Sustainablu, LLC. While this LIMITED WARRANTY is in effect, Sustainablu, LLC and its agents shall have free access to inspect, test, repair or remedy the warranted product and Sustainablu shall have the first opportunity to remedy any alleged defect.

In any dispute as to the LIMITED WARRANTY or defective product, the purchaser or Owner making a claim (Claimant) has the burden of proving all elements under applicable law plus: (1) the product was installed according to applicable industry and project specifications, (2) the product was maintained according to applicable maintenance recommendations, and (3) the product was defective within the meaning of this LIMITED WARRANTY. In the event a civil action is filed, Sustainablu, LLC and Claimant shall attempt mediation. Any, such dispute shall be submitted to mediation with the American Arbitration Association ("AAA") in accordance with the Commercial Mediation Rules then in effect at AAA regional office in Chicago, IL. If the mediation process has not resolved the dispute within thirty days of the submission of the matter, the dispute shall be decided by arbitration as follows: All claims, disputes and other matters in question not resolved by mediation (hereinafter referred to as a "Controversy") between the parties arising out of or relating to this Warranty shall be submitted to private, binding arbitration with AAA at the AAA regional office in Chicago, IL. The arbitration shall be conducted in accordance with the Commercial Arbitration Rules of the AAA then in effect. Such agreement to arbitrate and any other agreement or consent to arbitrate entered in accordance herewith will be specifically enforceable under the prevailing arbitration laws of any court having jurisdiction. Notice of demand for arbitration must be filed in writing by Claimant with the AAA. The demand must be made with thirty (30) days after the Controversy has arisen. In no event may the demand for arbitration be made after institution of legal or equitable proceedings based on such Controversy or if such Controversy would be barred by the applicable statute of limitations. Any arbitration may be considered with any other arbitration proceedings. The award of the arbitrator shall be specifically enforceable in a court of competent jurisdiction. Sustainablu, LLC and Claimant shall be responsible for their own mediation fees and any other expense associated with mediation as well as paying for an equal share of any arbitration fees as designated by the final ruling of the AAA.

To obtain installation or maintenance recommendations, request information on extended warranties or make a warranty claim, contact Sustainablu, LLC, by email at ve@sustainablu.us. This warranty shall only be applicable and enforceable in the United States of America and Canada.



SUSTAINABLU FOCUSES ON DESIGN INTEGRATION, PROJECT DELIVERY, AND PRODUCTS FOR ON STRUCTURE STORMWATER MANAGEMENT AND GREEN INFRASTRUCTURE. CAPABILITIES RANGE FROM **AMENITY DECKS, GREEN ROOFS, BLUE ROOFS, SOLAR ROOFS AND SMART LEAK DETECTION SYSTEMS**, PROVIDING THE MOST COMPLETE LINE FOR EFFECTIVE ON STRUCTURE STORMWATER MANAGEMENT SYSTEMS AND PRODUCTS AVAILABLE.

WITH ON-STAFF DESIGNERS AND A NETWORK OF LANDSCAPE ARCHITECTS, CONTRACTORS, ARCHITECTS, ENGINEERS, AND DEVELOPERS, SUSTAINABLU IS THE COMMON THREAD FROM IDEA CONCEPTION TO COMPLETION. THE COMPANY PROVIDES PRODUCTS FROM TOP VENDORS AROUND THE WORLD, TAILORING PRODUCTS TO EACH UNIQUE DESIGN. PRODUCT LINES OFFERED INCLUDE PAVER PEDESTALS, CONCRETE ROOF PAVERS, WOOD DECK TILES, PORCELAIN TILES, GREEN ROOFING SOLUTIONS, SMART DRAINS AND LEAK DETECTION SYSTEMS.

SUSTAINABLU HAS COMPLETED PROJECTS IN CITIES ACROSS NORTH AMERICA AND HAS REPRESENTATION AND WAREHOUSES THROUGHOUT THE UNITED STATES.

SUSTAINABLU

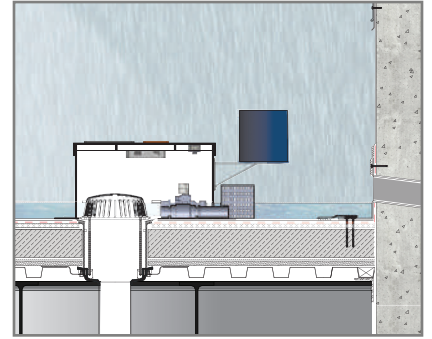
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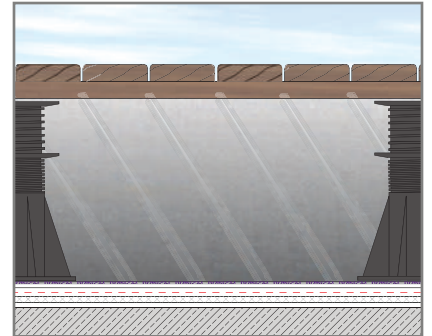
BLU-SMART

[180] - BLU-SMART SYSTEMS



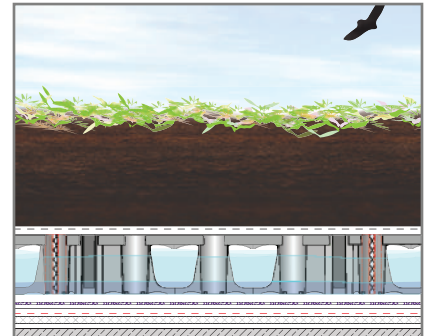
BLU-TERRACE

[300] - BLU-TERRACE SYSTEMS



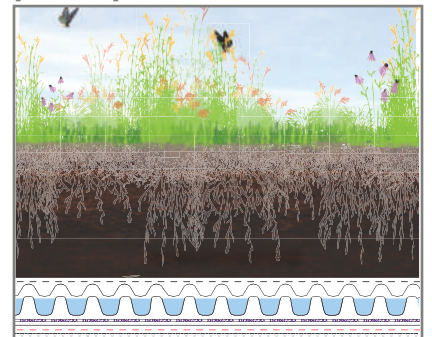
BLU-VAULT

[350] - BLU-VAULT SYSTEMS



BLU-GARDEN

[400-2400] - BLU-GARDEN SYSTEMS



BLU-SOLAR

[5000] - BLU-SOLAR SYSTEMS

