

# Stonedeck™

## Structural Natural Slate and Granite Deck Tiles



### What is StoneDeck™ and how does it work?

StoneDeck™ combines premium quality natural slates, granites and quartzite with a high strength composite fiberglass backing. The fiberglass backing creates incredible strength and stiffness to the system and when paired with the natural stone, you will find these tiles are one of the best modular decking systems on the market utilizing genuine stone. This system features a fastening matrix of joist plates that connect the tiles to any joist or flooring system. Can be installed over any hard floor

surface creating a removable system for any urban patio or deck. These plates will connect the tiles on all four corners to joists, or to solid floors. There is no mortar or grout and no attachment to hard floor applications.

The high strength panels and interlocking matrix form a structure that is flexible, yet strong enough to support 4,000 pounds per square foot. Each tile is 16" x 16" and covers 1.78 square feet. A single tile weighs 15 pounds (9Lbs per square foot), including the composite backing. This is about half the weight of any concrete paver.

## StoneDeck™ Structural Deck Tiles

will install quickly and efficiently over a joist system or raised pedestal. Some key features include:

- Industrial or commercial grade deck tiles in a perfect square or rectangle. Custom sizes can be built to order
- Supports loads up to 4000 lbs with the Elmich Versajack or Spirapave Pedestal system (sophisticated yet easy to use adjustable pedestal supports)
- Design and build level decks on rooftops or any structural surface with a high end natural stone finish.

### StoneDeck™ can be used for:

- Building creative rooftop decking environments
- Urban patios, terraces and rooftop decks
- Large, commercial flat rooftop terraces and plazas
- Deck pedestals for roof pavers: concrete pavers, wood tiles, stone, etc.
- Decks on green roofs
- Residential decks over cracked concrete patios & on-grade
- Decking and landscaped areas on streets and curbsides
- Commercial decks, residential decks and retrofitted decks



## StoneDeck™ Installation Points

1. Frame deck 16 inches on center.
2. Install solid blocking every 5 feet.
3. Check that framing is square using 345 method by running string lines down center joist and along the front edge of first stone course.
4. Screw down a joist plate for the first course using the string line as a guide (16" off of rim joist).
5. Space the joist plate on the rest of the joist working from the center joist toward the outside edges. (Spacing is 16 inches on center).
6. Use PL400 to glue down first row following string line.
7. Tap joist into the groove in the backing aligning spacers tight to the stone.
8. Screw the joist plate into the joist using the center hole in the spline and two more screws in two opposing holes.
9. Using a nomarrubber mallet, tap next row of panels into place and repeat steps 6 and 7 until surface is complete.
10. Seal deck with a stone sealer.



### What is the cost of the Deck Tile system?

You can expect to pay \$6–\$12 per square foot for most hardwood deck tiles products. Add approximately \$1–\$3 per square foot for installation labor on a typical square or rectangular balcony.

## Specifications

### 1) Stone Deck Panel

- a. Size 16" x 16" = 1.78 square feet
- b. Fiberglass and Stone union
- c. System thickness is 1 1/16" from top of joist to top of stone.
- d. Panel weight = 8 to 10 pounds per s.f. depending on stone type.
- e. Panel Strength minimum of 4000 p.s.f. of flexural strength. Strength varies with stone and done in accordance with AC #174.

### 2) Fiber Reinforced Backing

- a. meets or exceeds ASTM test
  - i. D790 Flexural strength
  - ii. D638 – tensile strength
  - iii. D695 – Compressive strength
  - iv. D953 – Bearing strength
  - v. D570 Water Absorption
  - vi. D696 Coefficient of Thermal Expansion
  - vii. D635 Self Extinguishing

### 4) Stones

- a. Size nominal 16" x 16" x 9/16"
- b. Stones have an ASTM #C121 water absorption of .01% to 1.1% depending on stone type. Granites have an ASTM #C1026 Freeze thaw unaffected rating or a natural resistance to damage under freeze thaw conditions.
- c. Generally all stones have an ASTM# 1028 coefficient of friction equal to or greater than wood or composites. (Granites have a thermal or sandblasted surface and Slates have natural clef ting)

### 5) Joist Plate

- a. High Strength Polyethylene composite – 9 5/8 inches long with a connecting spline molded to the plate. Four 1/8" spacers are molded to the plate on each wing to self space the Stone Deck panels. Each Joist Plate is predrilled to run on top of the joist and requires a minimum of three screws (one in the center and two in opposing holes on top of the joist). Screws Use #7 x 1 1/4" countersunk screws in the Joist Plate countersunk screw holes. Make sure screws are compatible with the framing material. Construction Adhesive Use an exterior grade construction adhesive (PL400 or equivalent) to fasten panel to Joist Plate as necessary

# StoneDeck™ Stone Color Chart



Multi-Color Slate



Quartzite



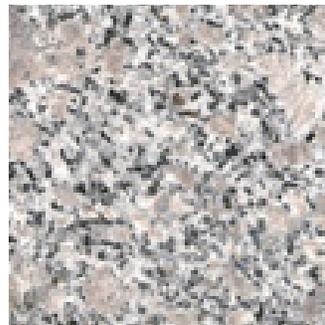
Green Slate



Gray Slate



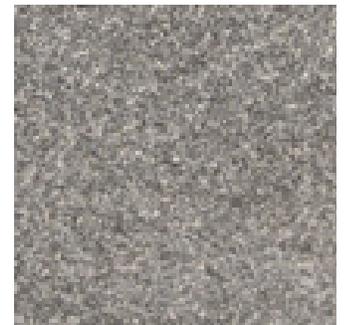
Tan Granite



Pearl Granite



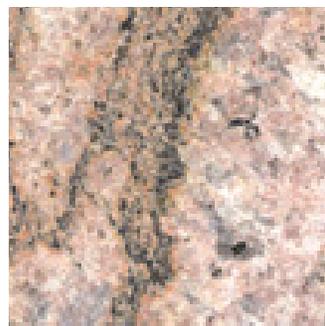
Autumn Leaf Granite



China Black Granite



Combo Red Granite



Swirl Granite

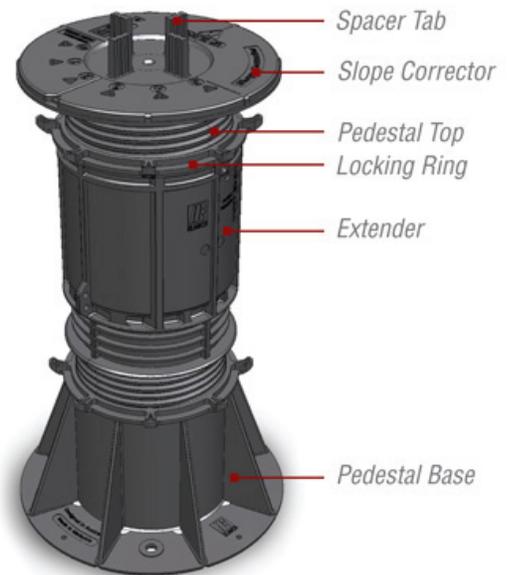


Sand Granite

## VersiJack®

### Telescoping Paver and Deck Supports

VersiJack® 75 is a heavy duty adjustable lightweight telescopic pedestal with an integrated slope corrector manufactured from 100% recycled or clear virgin plastics. It is used to support pavers, beams and bearers in the construction of roof terraces, pedestrian walkways, roof gardens and platforms. VersiJack® 75 is adjustable in height from 75 mm to 150 mm. The height may be increased to 1050 mm using proprietary Extenders and Locking nuts to ensure maximum stability. VersiJack® 75 reduces sound transmission and increases heat insulation. Unsightly services may be concealed within the cavity under the elevated platform, allowing easy access when required. VersiJack® 75 can be used with most pavers such as granite, marble, precast concrete, timber as well as industrial gratings. A hollow internal core allows additional ballast such as cement infill to be used when required. labor on a typical square or rectangular balcony.



## VersiJack® Specifications

<b>Height range</b>	75 mm to 150 mm
<b>Color</b>	Black
<b>Dimensions</b>	Head diameter 155 mm Base diameter 205 mm Extender height 75 mm
<b>Compressive Strength</b>	> 1,600 kg
<b>Slope Compensation</b>	151 mm onwards with Extenders, - 112.5 mm <i>,additional heights possible with bracing system</i> 0% to 5% @ 1% increments
<b>Weight</b>	VersiJack®75 ~ 0.7 kg
<b>Service Temperature</b>	-20°C to 120°C Unaffected by molds and algae and good resistance to alkali and bitumen
<b>Material</b>	Polypropylene Extender ~ 0.3 kg <i>VJ Bearer Holder For 50 mm to 75 mm width</i> <i>,compression strength varies with different heights</i>



## VersiJack® Specifications

- Use sight or laser lines to mark the intersections of the corners of each paver to be laid.
- Position VersiJack® 75. Adjust the 0% to 5% slope corrector to compensate for any fall in the slab.
- If necessary, saw along marked score lines on the base so that the units may be positioned along wall edges or in corners.
- Position the first paver in a corner and subsequent pavers along a wall edge.
- Place pavers or wood panels on VersiJack® 75 and simply adjust either up or down to obtain level required. Use rubber shims, if required, to ensure that the finished surface is level and has a solid feel.



# SpiraPave™

## Low Height Decking Support

### Height flexibility

- height range 17 mm to 87 mm
- height range increased by adding Extenders
- easy and accurate height adjustments in 1 mm increments

**Slope correction** by slope corrector

**Strength** unmatched compressive strength made possible by a 'step' design

**Security** can be secured to the supporting surface and locked at chosen height

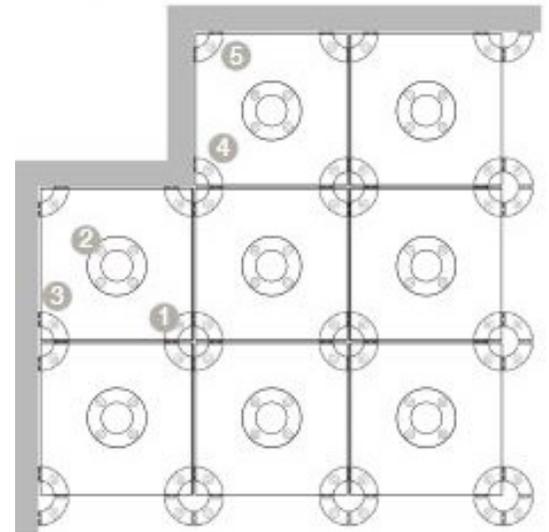
**Environmentally sustainable** manufactured from recycled plastics

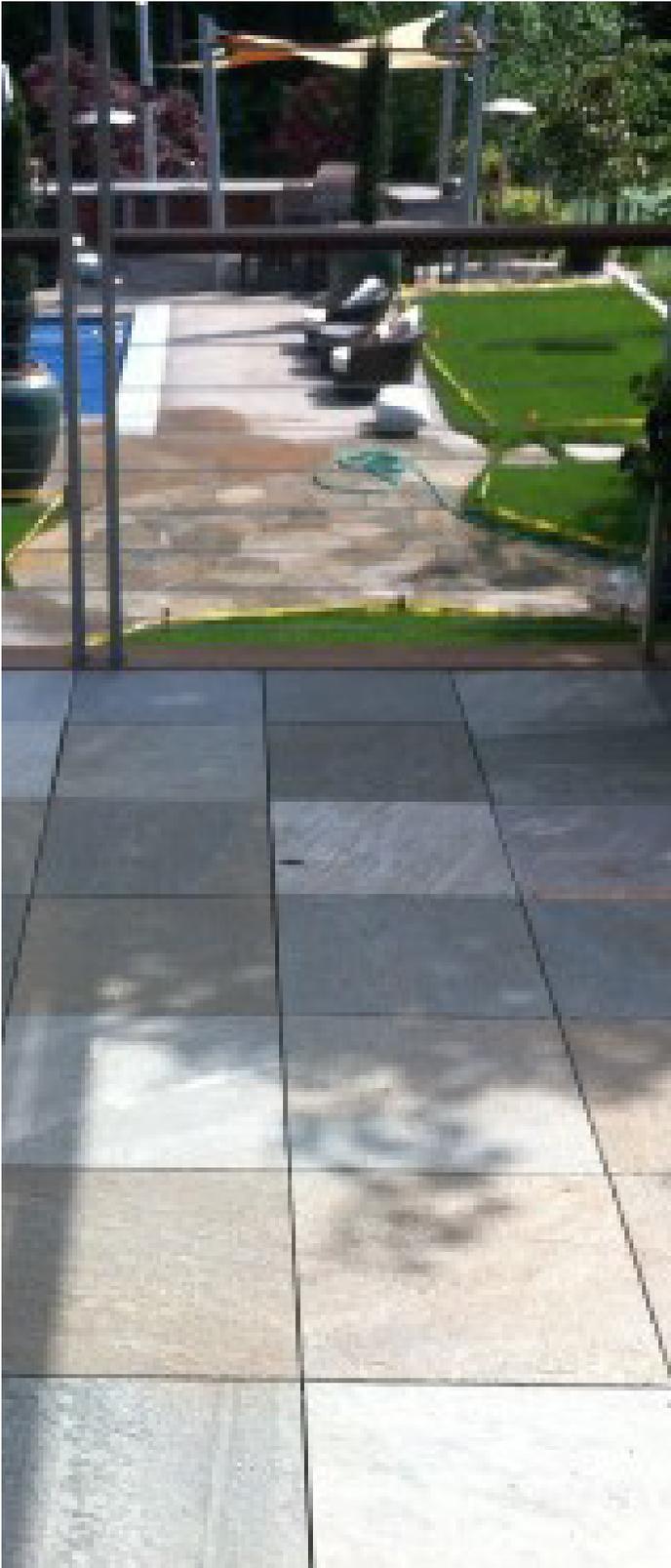


**SpiraPave®** is a new generation pedestal consisting of separate components paired to create pedestals of different heights, each capable of stepping up or down for accurate height adjustments.

**SpiraPave®** minimum height of 12 mm makes it ideal for installations where conventional height-adjustable pedestals are generally too high to be used.

**SpiraPave®** has a slope corrector which may be placed either on the top or bottom of the pedestal for fall compensation of up to 5%.





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**Corp office:**

Eco Arbor Designs  
2525 San Clemente Ave,  
Vista CA, 92084

**Toll Free** 888 335 8453

**Direct Northern California** 831 359 4435

**Direct Southern California** 858 914 2423

**Fax** 831 515 5054

VISIT US ONLINE AT [www.ecoarbordesigns.com](http://www.ecoarbordesigns.com)

EMAIL US AT INFO [@ecoarbordesigns.com](mailto:@ecoarbordesigns.com)

**Warehouse and distribution centers**

ECO ARBOR DESIGNS WEST COAST

**The Gilbert Company**

2849 Ficus St  
Pomona, CA 91766

**JSI Logistics**

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Carson, CA 90746

ECO ARBOR DESIGNS EAST COAST

**The Gilbert Company**

1000 Riverside Drive  
Keasbey, NJ 08832