

# ALTITUDES PEDESTAL<sup>®</sup> INSTALLATION

Min. Height  
4-5/32"

## FOR HARDWOOD DECK TILES

### SJB-4156 Self-Leveling Screw-to-Adjust Pedestal System



**Complete details and full installation at [www.DeckWise.com/altitudes-pedestal.html](http://www.DeckWise.com/altitudes-pedestal.html)**

The DeckWise<sup>®</sup>, Altitudes Pedestal<sup>®</sup> System has been developed for hardwood deck tiles to build perfectly horizontal decking over underutilized spaces such as sloped roof tops and plazas. Pedestals elevate 24" x 24" modular hardwood deck tiles over any area to construct beautiful living spaces. Proudly **USA Made** in Bradenton, Florida.

Manufactured By  
**DeckWise.com**

Limited Warranty. Patented in the USA and other patents pending.

#### Deck Tiles and Pedestals

Order deck tiles and pedestals in accordance to the measurement of the total area to be tiled to determine the number of deck tiles and pedestals needed. Create a planning guide of the layout area with a grid pattern to scale for the size of the deck tiles.

Attention to, and inspection of hardwood deck tiles and pedestals must be completed prior to installation. Drawings of the deck tile pattern, layout grid, threshold starting point, and finished elevation should be shown on a architectural planning guide. Plans, CAD drawings and/or illustrations should be prepared and approved by an accredited architect or construction designer. Owner approval and sign-off of plans should be in writing and documented. Verify all pedestals and tiles are in good condition, verify cavity elevations, desired top-of-pedestal heights and overall installation dimensions. Inspect the roof top substrate to confirm that it has been correctly prepared. If roof top preparation is the responsibility of others, notify the construction designer, contractor and architect in writing. Any deviations from the manufacturer's recommended installation guidelines will void warranty or create an unsafe surface.

#### Determining Cavity Height

The cavity height is the space between the substrate and the bottom of the hardwood deck tiles. This area typically has drainage slope for water and can likewise be used to hide conduit running across the substrate surface.

To determine the cavity height, first verify with the architect, general contractor or building owner what the finished height of the deck tile surface will be. Most often, this is determined by the height of threshold(s) located around the installation area.

**NOTE: The minimum height allowed for Altitudes Pedestals<sup>®</sup> is 4-5/32 inches high. Minimum height pedestals must include 1-1/2" Schedule 40 PVC to connect the head and base.**

**Always seek the professional advice of a licensed and accredited architect prior to installation. ALL LOCAL AND STATE BUILDING CODES MUST BE ADHERED TO AT ALL TIMES.**

#### Parapets, Blocking and Retention Walls

Any intended installation area of a hardwood deck tile pedestal system must fit tight inside the walls of the installation cavity and be restrained and contained. Any installation area must utilize – where applicable – parapet retaining walls, concrete dividers or other structural perimeter restraint capable of resisting lateral forces including seismic and wind. Blocking must be installed when elevations change height such as stepping up or down.

Additional pedestals may be needed for radius placement, thresholds, corners, and diagonal wall placement including extra pedestals for around the installation perimeter.

#### Create a Planning Guide

Transpose the construction site measurements onto a deck tile and pedestal Planning Guide. This will determine the number of deck tiles and pedestals needed for the installation area. Additional pedestals may be needed for radius placement, thresholds, corners, and diagonal wall placement including extra pedestals for around the installation perimeter.

#### Grid Layout

Once the Perpendicular (Starting Point) Guideline and the finished elevation of the pedestal height have been determined, precisely measured grid lines must be laid out with chalk lines onto the substrate. Mark grid lines in both directions with chalk lines. Grid line intersections will spot the location of each deck tile pedestal. Use the Perimeter Guideline as a reference point to periodically check for square alignment.

#### Pedestal Starting Point

The Perimeter Guideline will be set with full deck tiles first. Start where the Perimeter Guideline and the Perpendicular (Starting Point) Guideline meet. The first 2 rows of pedestals will follow the Perimeter Guideline horizontally to the perimeter wall. (Later, pedestals will be placed along the Perpendicular (Starting Point) Guideline, creating a "T" shape.)

At the starting point, deck tile pedestals must be positioned where each measured grid line intersects the Perimeter Guideline. With a laser level receiving unit, measure each pedestal location for "Top of Pedestal Elevation" and cut the appropriate size of Schedule 40 PVC for each pedestal. Final level adjustments will be made with the screw-to-adjust base.

Continue installing pedestals down the Perimeter Guideline followed by deck tiles onto the pedestals. Fine-tune with the screw-to-adjust base as you go.

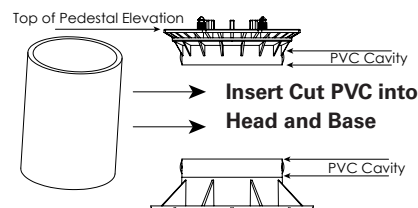
#### PVC Height Formula

Top of Pedestal Elevation - Head & Base (Combined is 2-5/8") = PVC Height

**NOTE:** The 2-5/8" measurement compensates for the head and base PVC insertion cavities.

#### EXAMPLE:

8-1/2" - 2-5/8" = 5-7/8" PVC Length



#### Cut Schedule 40 PVC Pipe

To acquire the correct height of the PVC, subtract the head and base from the overall desired "top of pedestal" height/elevation for accuracy. The screw-to-adjust base will provide final height adjustments. The PVC "press fit" connection of the head and bottom screw-jack base requires no gluing.

**SJB-4156**

## Formula for Calculating Pedestals

24" x 24" Hardwood Deck Tile, 4 sq.ft. per tile  
(Net Finished Dimensions: 1-11/16" x 23-7/8" x 23-7/8")

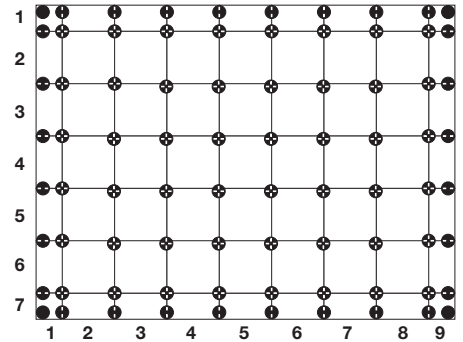
**The number of pedestals required for your specific area will depend on the following:**

- Total number of hardwood deck tiles used
- The dimensions of the hardwood deck tiles (24" x 24")
- The shape of the installation area. An irregular shaped area will need more pedestals than a square or rectangular shaped area
- Any anticipated heavy load on the deck. Additional pedestals will be needed for support

**The following formula can be used as a guide. Always refer to your grid layout.**

- Count the number of hardwood deck tiles along the width and the length.  
Add 1 to each of these deck tile counts
- Multiply these two total numbers together. This will give an approximate minimum number of pedestals for the installation area

Deck Tiles on Length:  $9 + 1 = 10$   
Deck Tiles on Width:  $7 + 1 = 8$   
 $10 \times 8 = 80$  Pedestals Needed

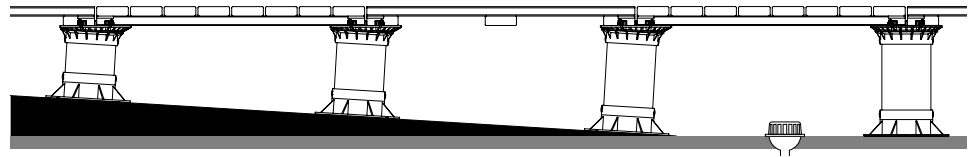


**Order pedestals at a 3% overage to account for additional installation variances.**

### Slope & Height Compensation

The SJB-4156 System will provide slope compensation from 0% to 5%, and has adjustable heights with a maximum safe height up to 24 inches. Constructing a level hardwood deck tile surface over sloping substrates is accomplished by the following:

- Schedule 40 PVC pipe cut to required height dependent to the "Top of Pedestal" elevation marked around the perimeter
- Screw-jack base extension for precise height adjustments



- Self-Leveling head tilts and pivots in any direction for slope compensation
- Pedestals must be leveled in each succeeding row as the installation proceeds
- Shims or construction adhesive are not needed

**1% slope = .120 inches per foot drop**  
**2% slope = .240 inches per foot drop**  
**3% slope = .360 inches per foot drop**  
**4% slope = .480 inches per foot drop**  
**5% slope = .600 inches per foot drop**  
**6% slope not approved**

## Installation Considerations and Helpful Tips

### Threshold Pedestal Installation

Thresholds will typically have the shortest pedestal height and will slope down toward drainage areas where the tallest pedestals will reside.

**NOTE:** Your architect/engineer, general contractor or building owner must be sure to consult local building codes and should consider all aspects of the project prior to install.

### "T" Method Installation

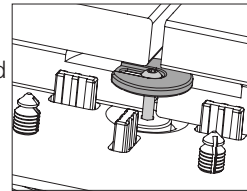
Once a row of full deck tiles has been placed on the Perimeter Guideline, pedestals and full deck tiles will be installed on the Perpendicular (Starting Point) Guideline. Continue installing 2 rows of pedestals down the Perpendicular (Starting Point) Guideline followed by full deck tiles as you go. This will form a "T" shaped pattern with the Perimeter Guideline.

### Perimeter Deck Tile Placement

After all full deck tiles have been installed in the middle/center portion(s) around the "T" shape, the perimeter pedestals and cut deck tiles will be installed. Pedestals must be placed as close to the perimeter containment wall as possible. This means spacer tabs will need to be removed from the pedestal head. Use a hammer to punch the spacer tabs out.

### Lockit Down Washer™

Deck tiles are secured to the pedestal with pine tree fasteners (rated up to 166 lbs. of wind hold-down strength) and our patented adjustable Lockit Down Washer™. The washer fits into the corner kerf cut slots of deck tiles which, in turn lock and hold down deck tiles to the pedestal head.



### Radius & Diagonal Pedestal Installation

Radius installation will require additional pedestals to accommodate angular and curve-cut deck tiles. Extra pedestals must be ordered during the architectural planning. Remove spacer tabs where needed and use construction adhesive to secure radius tiles to the pedestal heads.

### Drain Pedestal Installation

When a drain is located at or near a grid intersection for a pedestal, this may impede the installation of deck tile pedestals. Special steps must be taken to allow for proper drainage with additional pedestals and deck tiles.

Depending on the size of the drain area, 1-2 additional deck tiles will be used as a secondary base to "bridge" over the drain and act as a support for the "Top of Pedestal Elevation" deck tiles.

Spacer tabs and pine tree fasteners can be removed either by pairs or all 4 to accommodate irregular shaped deck tile fitting. Trimming pedestals is reserved specifically for the base – not the head. Trim the screw-jack base as needed to fit.

### Step Down & Fascia Board Applications

When a step down is needed, blocking and containment is vital to control possible lateral movement. A ledger board must be secured to the Schedule 40 PVC pipe of each pedestal along the step, onto each pedestal's PVC support. Use stainless steel screws to fasten the ledger board onto the PVC followed by a fascia board to cover the ledger board. Secure the fascia board with stainless steel finish screws.

### Substrate Protection

Substrate protection should be installed prior to installing pedestals and hardwood deck tiles. The use of protection board, insulation, drainage mats, and waterproof membrane must be professionally installed and must meet or exceed local building codes before pedestal installation.

### Quality Assurance

The pedestal installer, contractor and or subcontractor assume the responsibility for the structural capability and acceptability of the installation structure to carry the dead and live load weight(s) involved. Altitudes Pedestal® System is specified to be used with pedestrian traffic only.