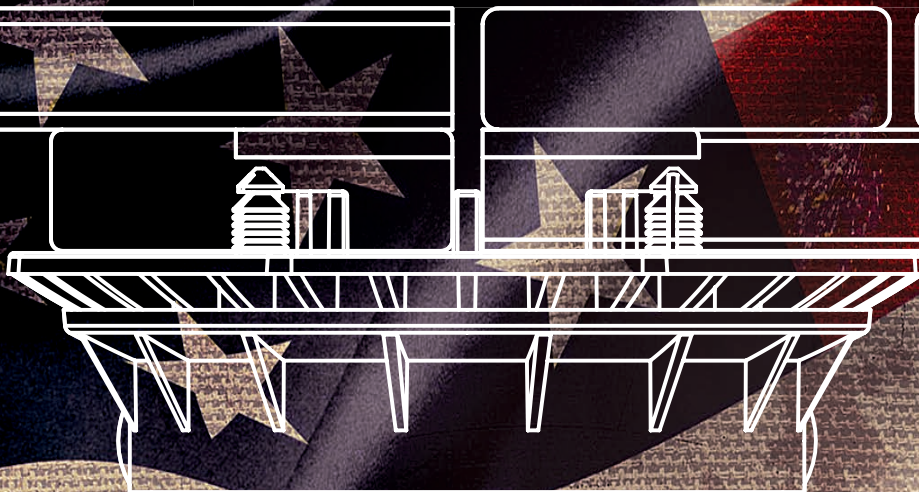


# ALTITUDES PEDESTAL™ DETAILS FOR HARDWOOD DECK TILES



**DeckWise**.com

Manufacturers of Hidden Deck Fasteners & Accessories

Adjustable  
Screw-jack  
Deck Tile  
Self-Leveling  
System

AMERICAN QUALITY. AMERICAN MADE. AMERICAN PRIDE.™



### 24" x 24" Hardwood Deck Tile Elevating System

The DeckWise®, Altitudes Pedestal™ System has been developed to build perfectly horizontal decking over underutilized spaces such as sloped roof tops and plaza areas. Pedestals will elevate 24" x 24" modular hardwood deck tiles over cracked concrete or walkways to build patio areas into beautiful spaces.

The Altitudes Pedestal™ System enables anyone to easily and quickly build an elevated all-natural hardwood deck surface. Build over sloping or uneven substrates — over pipes, cables, drains or service ducts — without the need to construct expensive supporting sub-

structures of sleeper/joists.

Each pedestal has the ability to be set from 4-5/32 inches at the lowest (this includes a short PVC pipe) up to 24 inches at their maximum safe height. The self-leveling swivel head has slope compensation from 0 - 5%. Precise 3/16 inch spacer tabs are integrated into the head to produce perfect tile gap spacing and are easily punched out for deck tile placements where tabs are not needed; such as around corners or around circumferences for added support. Additional pedestals are needed when supporting heavy objects such

as planters and grills.

The screw-to-adjust base height setting makes final adjustment levels effortless for perfectly level deck tile surfaces. The Altitudes Pedestal™ System head and base have deck drainage holes for water; are exceptionally stable with 4 in. PVC Schedule 40 Plain End Pipe; and are impervious to freeze thaw cycles from the use of 20% Talc added to a polypropylene resin.

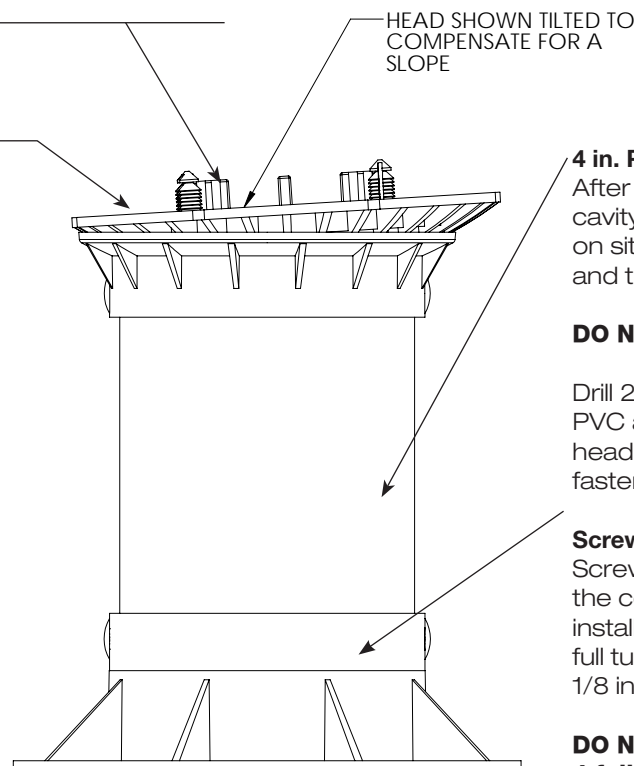
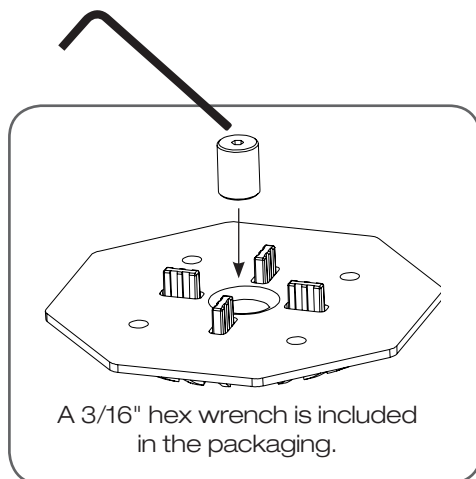
Pedestals are warranted up to 1,200 lbs. of load. For complete Lab testing results go to [www.DeckWise.com/pedestal/testing](http://www.DeckWise.com/pedestal/testing).

#### 3/16" Spacer Tabs (4)

To remove tabs: strike with hammer to punch them into the head cavity.

#### Leveling Head

Comes pre-assembled. Loosen the stainless steel insert with a 3/16" hex wrench prior to installation. Tighten the insert during initial leveling and final height adjusting.



#### 4 in. PVC Schedule 40 Plain End Pipe

After determining level deck tile cavity height, cut Schedule 40 PVC on site. PVC is press-fit into the head and the base.

#### DO NOT USE OPEN-CELL PVC!

Drill 23/64 inch holes through the PVC at the designated holes in the head and base to insert pine tree fasteners.

#### Screw-Jack Base

Screw-to-adjust base comes with the coupling fully seated. Prior to installation, turn the coupling out 1 full turn for fine adjustments; approx. 1/8 inches of threads will show.

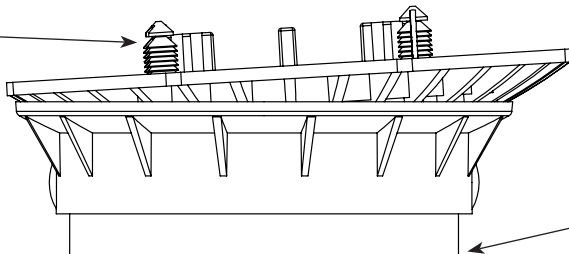
**DO NOT extend more than 4 full turns.**

## Self-Leveling Slope Compensating Head

### Pine Tree Fasteners

Pre-inserted pine tree fasteners fit into the bottom of deck tiles for extreme hold-down.

To remove, clip with wire cutting pliers as needed.



Pine tree fasteners included in packaging.

### 0 - 5% Slope Compensation

Pivot and slide the self-leveling head to match the desired slope in accordance to your cavity height.

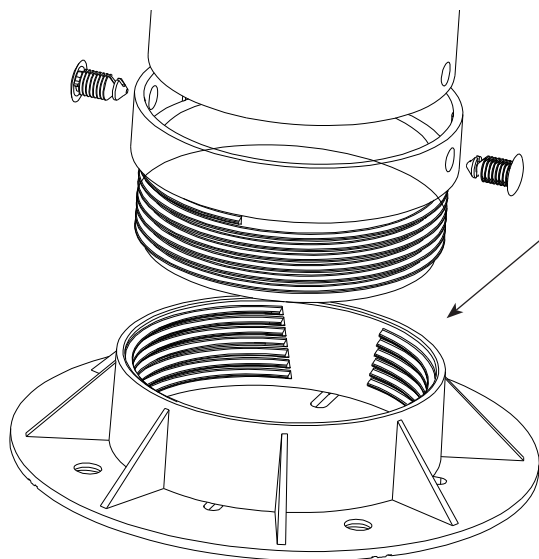
### Press-Fit PVC

PVC pipe is press-fit into the head as well as secured by 2 side mounted pine tree fasteners.

## Screw-Jack Adjustable Base

### Screw-To-Adjust

Adjust base height up or down for minute fractional increments with the threaded base for perfectly straight and level deck.



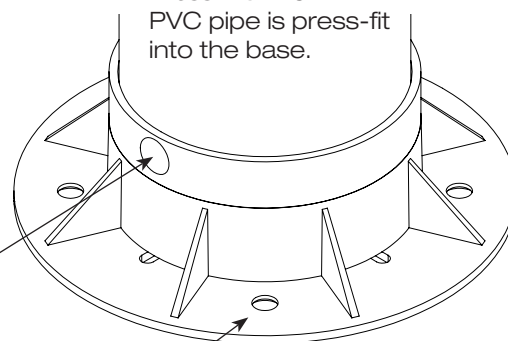
### Pine Tree Fasteners

Pine tree fasteners accompany all orders for securing the base and head to the PVC.

Drill 23/64 inch holes into the PVC to insert the pine tree fasteners.

### Press-Fit PVC

PVC pipe is press-fit into the base.



### Secure the Base

When applicable, fastening hardware can be used to secure the base to the substrate.

### Cutting Schedule 40 PVC Pipe

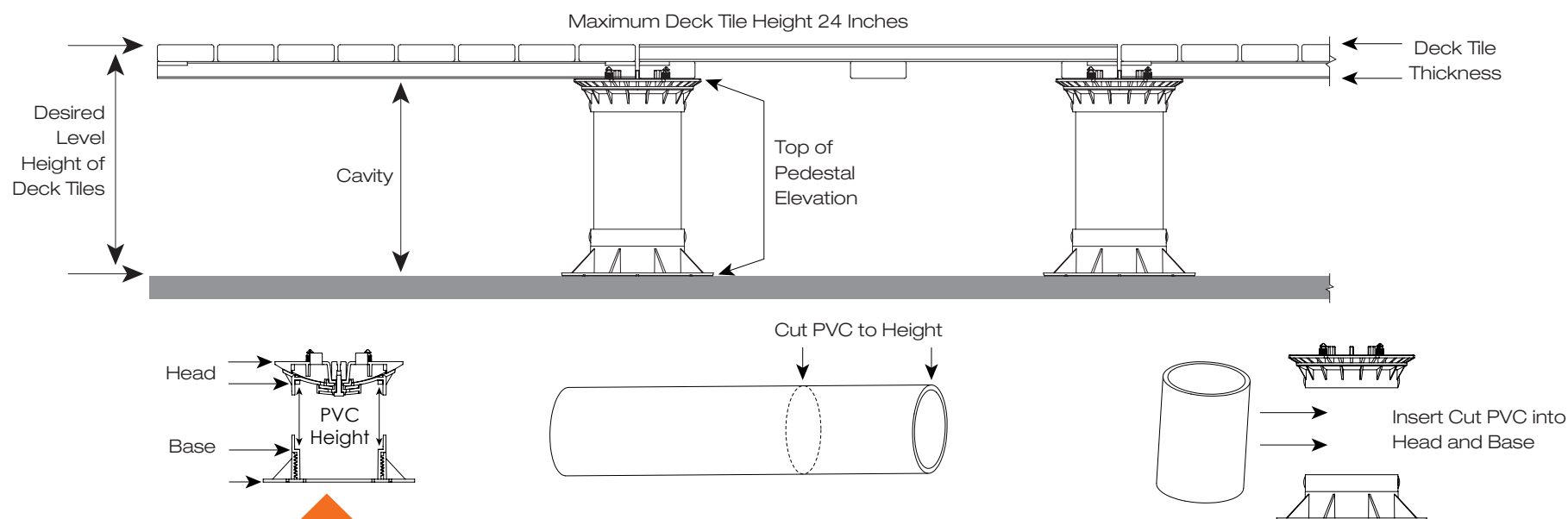
#### PVC Height Formula

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

#### EXAMPLE:

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

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



#### Cutting 4 in. PVC Schedule 40 Plain End Pipe to Size

The PVC pipe fits inside the cavity of the pedestal head and the pedestal base. To acquire the correct height of PVC; the head, base, and the nominal thickness of the deck tile must be subtracted from the finished elevation of the deck tile surface 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.

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



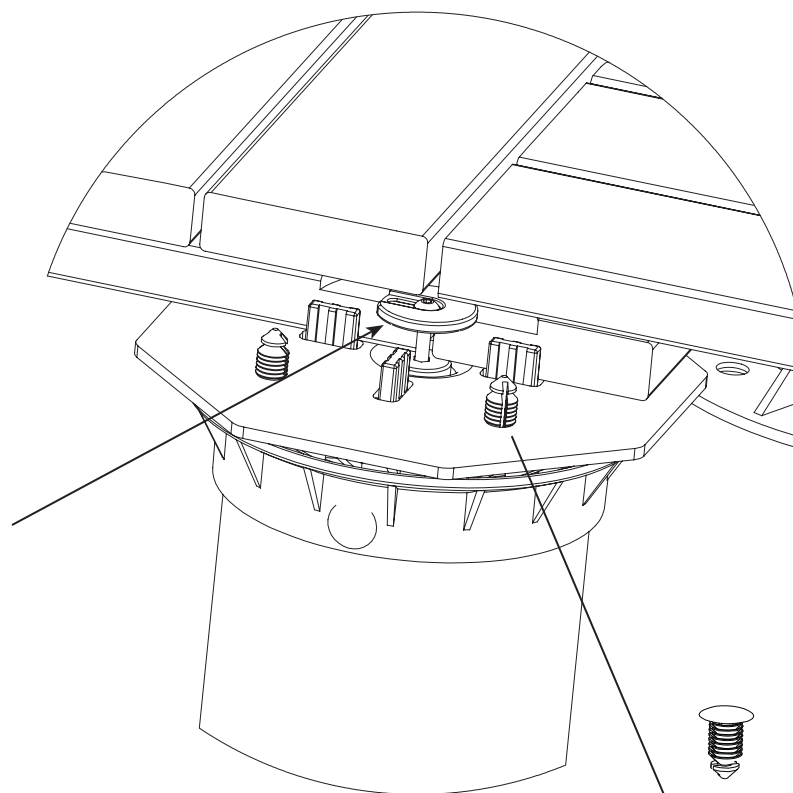
### Locking Deck Tiles Together

#### 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.

Insert the Lockit Down Washer™ into the corner kerf cut slot of all 4 hardwood deck tiles where they meet on a pedestal. First, slide a washer into 2 tile kerf corner slots and hand thread the 3/32" stainless steel screw into the stainless steel insert of the pedestal head. Install a 3rd deck tile by sliding the washer out of the way and place over the pine tree fastener. Next install the 4th deck tile onto the pedestal's 4th corner in the same manner. Once all 4 deck tiles are in place and levelness is checked, center the washer and securely tighten the screw for maximum hold-down.

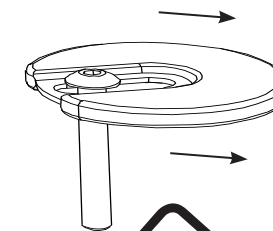
To remove a deck tile: loosen the stainless steel screw and slide the washer to the side into adjoining deck tiles and out of the way. All 4 corners of the deck tile that is to be removed, will need to have the washer loosened and slid to the side for deck tile removal.



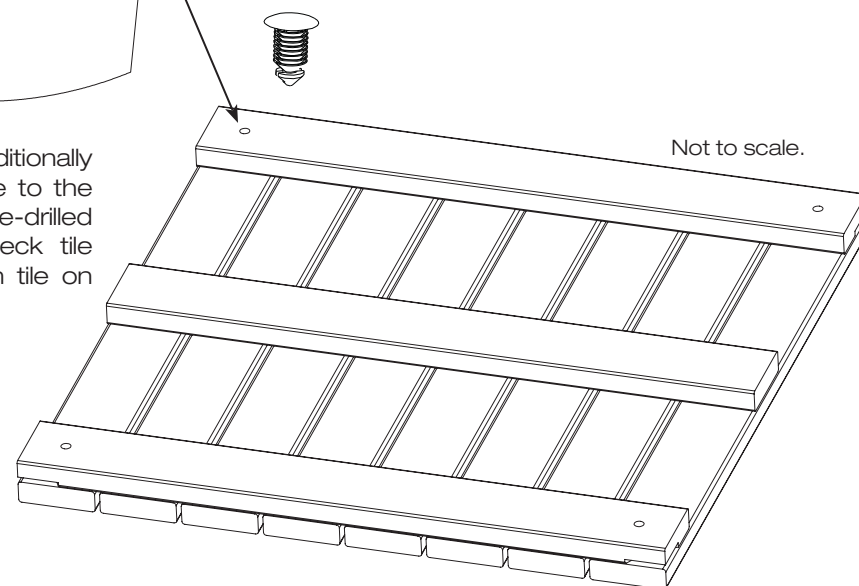
Pine tree fasteners additionally secure each deck tile to the pedestal head. Pre-drilled holes under each deck tile precisely position each tile on the pedestal head.



To move the washer, loosen the stainless steel screw and slide the washer inside the kerf slots of adjacent deck tiles.

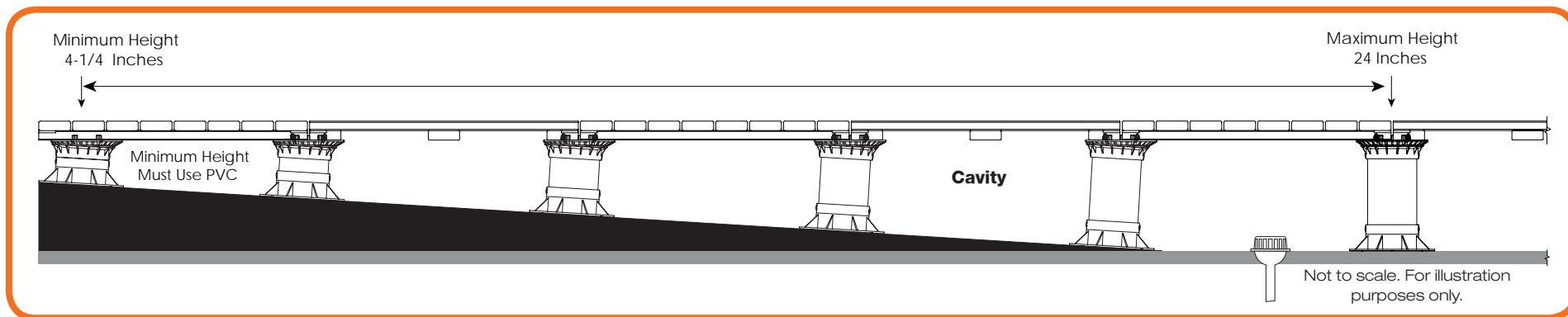


A 3/32" hex wrench is included in the packaging.



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### Slope Compensation



#### Fixed Height or Slopes

Pedestals can be either a fixed height or adjustable for slope compensation. 0-5% slopes are easily managed by positioning the self-leveling head at the desired angle in accordance to the overall deck tile height 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

### Perimeter Containment

#### Parapets, Blocking and Retention Walls

Any intended installation area of a pedestal hardwood deck tile system must fit tight inside the walls of the installation cavity and be restrained and contained. Roof tops must have parapet retaining walls, concrete dividers or other structural perimeter restraint capable of resisting lateral forces including seismic and wind. Blocking must be installed where deck tiles change heights such as

stepping up or down. Deck tiles and pedestals will move if all sides are not tightly fit. Perimeter "structural" framing and edging boards located at the outside of the deck tile perimeter must also be installed to provide restraint. No movement greater than one spacer tab should be allowed at the perimeter of the deck pedestal system. Cumulative movement in excess of 3/16 of an inch will void the Altitudes Pedestal™ System Limited Warranty.

**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.**

## Installation

### Substrate Surface

The substrate surface which will receive the deck tile pedestal system must be clean and free of any projections and debris. It must be compact and structurally capable of carrying the live and dead load projected which, if not, may impair the performance of the pedestal system. The use of protection board, insulation and waterproof membrane must meet or exceed local building codes.

### Installing Deck Tiles and Pedestals

Prior to installation, verify all cavity elevations, desired 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.

Attention to, and inspection of hardwood deck tiles and pedestals must be completed prior to installation.

Review of the deck tile pattern, layout grid, threshold starting point, and finished elevation should be shown on a plan view architectural drawing. 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.

Install deck tiles and pedestals in accordance with Altitudes Pedestal<sup>™</sup> Systems and any other product manufacturer's guidelines. Installation requirements will vary for any individual job site.

**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.**

## Special Considerations

### Tips for Safe Installations

Planters, grills and heavy objects must have 6 pedestals underneath each deck tile for additional support. Add a pedestal to the sides of all deck tiles that will receive additional weight.

- Pedestal bases may be trimmed for a tight fit around a corner. DO NOT cut or trim the pedestal head
- Conduit and services running inside the cavity below can be easily accessed by removing 1 or more tiles
- Cut tiles to fit around conduit; use stainless steel screws from the underside to secure wood slats
- Notch out tile corners to fit around conduit where needed
- Use construction adhesive to secure spacer tabs
- between tiles when not attached to the pedestal
- Tiles must fit snug around the perimeter with no movement allowed greater than 1 tab width
- Fill perimeter spaces with a section of tile to assure a tight fit; use construction adhesive for additional hold
- On small tile pieces/sections around the perimeter or a radius use construction adhesive on the pedestal for additional support
- Bottom leveling shims are not necessary





# ALTITUDES PEDESTAL™

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

Adjustable Screw-jack Deck Tile Self-Leveling System

## Maximum Pedestal Load

### 1,200 lbs. Maximum Load (maximum each pedestal)

Safety value for maximum permissible load of 1,200 lbs. per pedestal shall not be exceeded. Specific usage is intended for pedestrian terrace roofs, plazas and technical floors. The various components of the DeckWise® Altitudes Pedestal™ System are manufactured from polypropylene resin charged with talc 20%.

Pedestals are warranted up to 1,200 lbs. of load.

Please see complete Limited Liability Warranty for details at [www.DeckWise.com/warranty](http://www.DeckWise.com/warranty)

## Load Testing

### Pedestal Load Testing and Comparisons

The DeckWise® Altitudes Pedestals™ have been tested by an independent laboratory. Four tests were run using three samples per test with a zero slope and a 5% slope. A hydraulic press capable

of generating 55 tons of downward pressure was used for testing. A 50 Kip MOREHOUSE load cell in combination with a Fluke data acquisition unit was used to record the loading of the sample. Samples were set in the press and loaded until failure.

Maximum load data provided for informational purposes only.

	Height	Level Head; Base Retracted	Level Head; Base Extended 4 Turns	5% Slope Head; Base Retracted	5% Slope Head; Base Extended 4 Turns
Altitudes Pedestal™	6.75"	11,483 lbs.	6,389 lbs.	13,939 lbs.	5,974 lbs.
	Height	Level Head; Base Retracted	Level Head; Base Extended Fully	5% Slope Head; Base Retracted	5% Slope Head; Base Extended Fully
*Competing Device 1	6.75"	Not applicable	4,240 lbs.	Not applicable	3,770 lbs.

**Altitudes Pedestal™ utilized Schedule 40 PVC to reach height requirement.**

**Competing device 1 pedestal screw threads fully extended to reach height requirement.**

**\*According to competitor's published device data.**

	Height	Level Head; Base Retracted	Level Head; Base Extended 4 Turns	5% Slope Head; Base Retracted	5% Slope Head; Base Extended 4 Turns
Altitudes Pedestal™	24"	11,483 lbs.	6,389 lbs.	13,939 lbs.	5,974 lbs.
	Height	Level Head; Base Retracted	Level Head; Base Extended Fully	5% Slope Head; Base Retracted	5% Slope Head; Base Extended Fully
*Competing Device 1	24"	Not applicable	3,737 lbs.	Not applicable	3,355 lbs.

**Altitudes Pedestal™ utilized Schedule 40 PVC to reach height requirement.**

**Competing device 1 pedestal screw threads fully extended and couplers added for additional height requirement.**

**\*According to competitor's published device data.**

For complete Lab testing results got to [www.DeckWise.com/pedestal/testing](http://www.DeckWise.com/pedestal/testing)

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