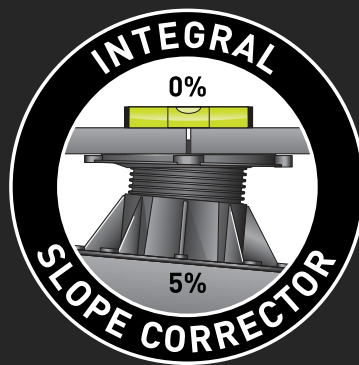
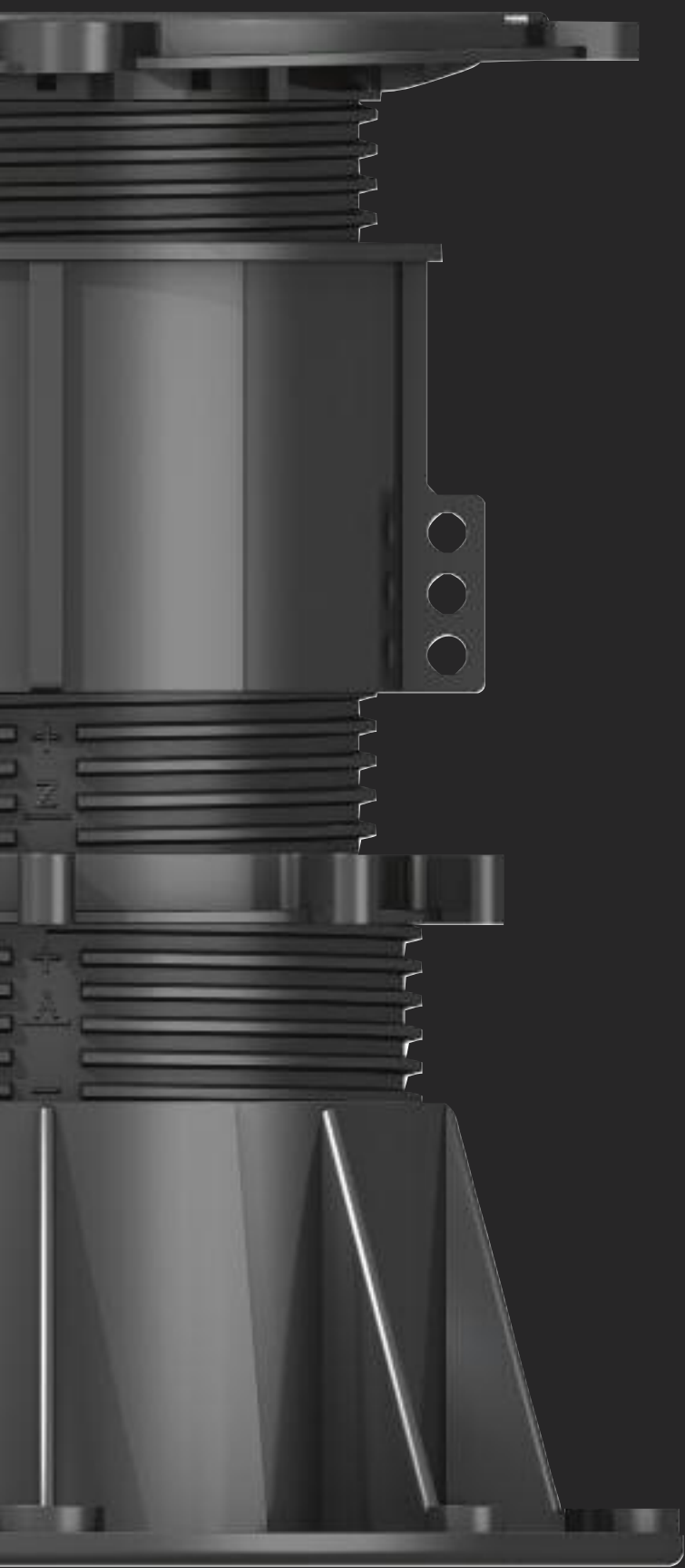




DPH Series

Adjustable pedestals for
raised access
external and internal floors





Contents

DPH presentation

Technical data

Assembly
and installation



The DPH System Adjustable pedestals for raised access roofs and floors



Contents



- The DPH concept
- The company
- Areas of use
- The product and its benefits
- Applications
- Summary



The DPH concept



- 1) increasing shift from wet construction to dry systems
- 2) rising popularity of internal raised floor systems
- 3) Need for development of dry, flexible and modular terrace construction system

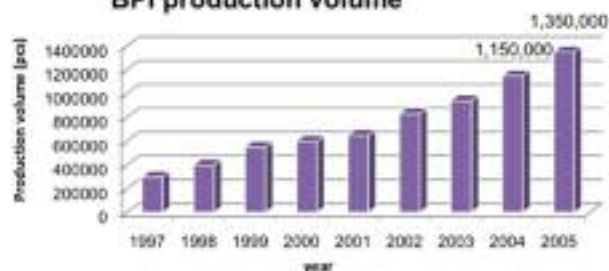


Buzon Pedestal International



- Family owned company
- Established in 1987
- Head office: Herstal, Belgium
- Production: 2 factories
- Global sales

BPI production volume



Buzon USA



- Sole rights to DPH system
- More than 3,000,000 units sold since 1994
- Case study references from 1995 onwards available
- Fast delivery – 3 to 10 days
- Proven track record with architects and specifiers
- Approved installer training on site

Areas of use



Roofs

Flat and low pitched roofs to create

- Terraces
- Green roofs (intensive/extensive)
- Decks



Areas of use



Roof substrates

		
Insulation boards	EPDM (rubber)	Liquid coatings
		
Bitumen waterproofing	Cement screed	Others

Areas of use



Ground level

- Raised access piazzas
- Water Features
- Terraces
- Industrial



Areas of use



Interior

- Raised access floors
- Atria
- Exhibition spaces



The product



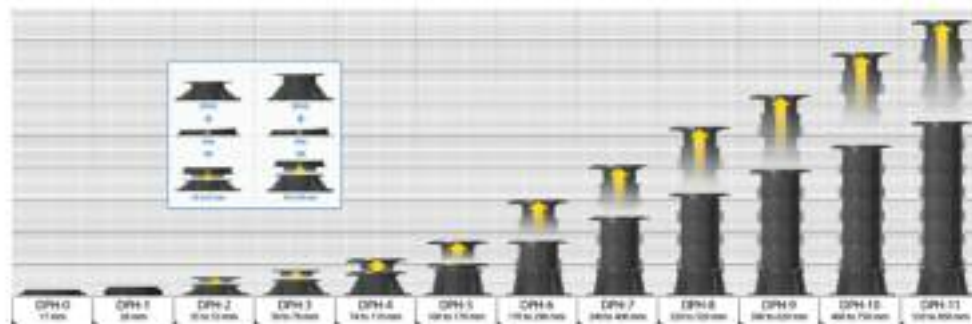
- Adjustable from 17-850mm
- Integral slope correction to 5%
- Excellent drainage capacity
- High loading capacity
- Offers easy access
- Protects services
- Sustainable manufacture



The product – height adjustment



Incremental height adjustment:
millimetre by millimetre from **17-850mm**



The product – slope correction




- Integral, easy to operate slope corrector allows for slope compensation up to 5%
- Tiles/deck totally horizontal
- Base of pedestal totally flat
- Even load maintained, so no risk of puncture





5% fall


The product – drainage



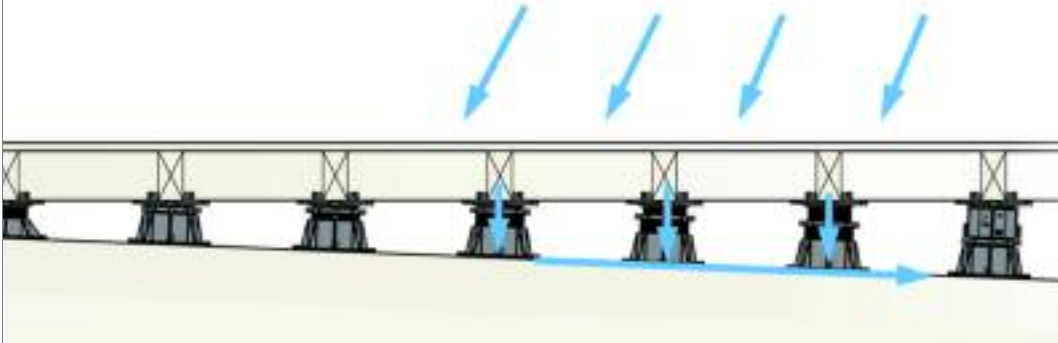

- Rapid drainage at deck level
- Rainfall simply passes through
- No ponding



The product – drainage



- Rapid drainage at roof substrate level
- Pitch of 1-5% maintained
- No ponding
- Prolonged life of substrate



The product – loadbearing



- Screwjack Pedestal System
- Each part is fixed into the other
- Forms one solid unit
- Up to 1000kg per pedestal



The product – loadbearing



- Most robust and most solid pedestal system on the market
- Base material 5 mm thick, Head 4 mm
- Compression test results by independent laboratory
- DPH5 (17 cm height): breakage at 1923 kg/f
- Safety margin of 50% up to 1000 kg max. load OK



The product – access/service protection



- Simple, direct access to services
- Access at any point
- Services protected from traffic and elements

The product – sustainable manufacture

- Pedestals use 65% recycled materials*
- 100% recyclable at end of use



* Consumer and/or industrial recycled waste



DPH presentation

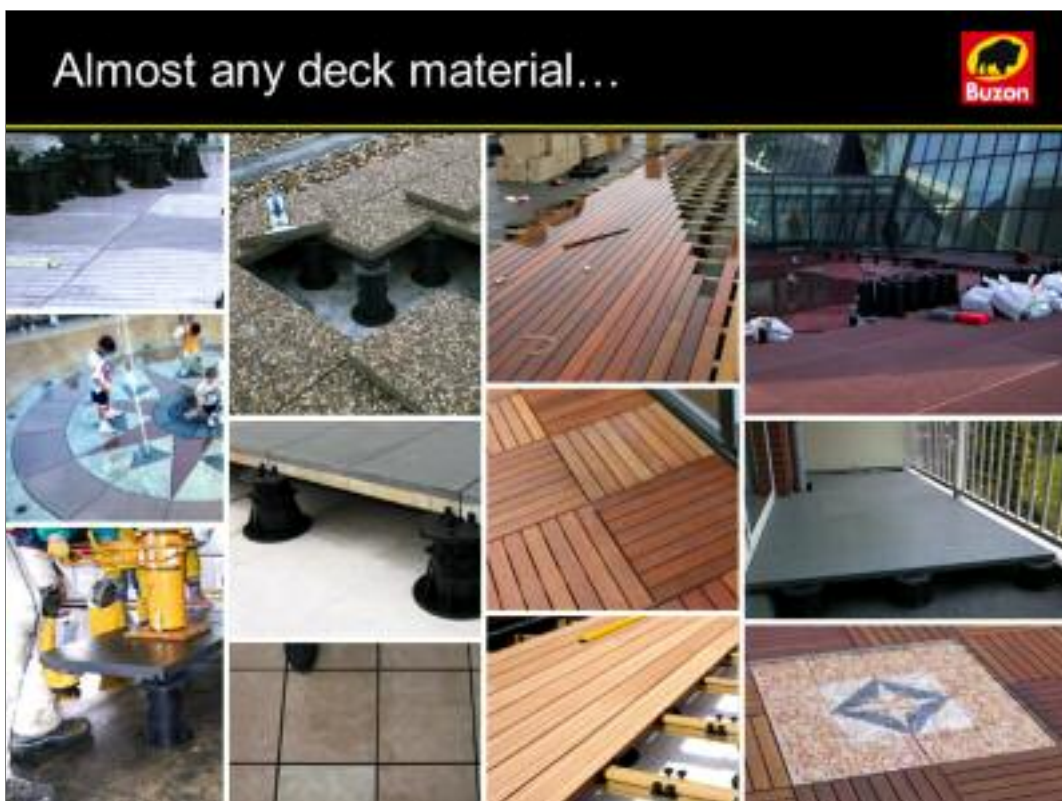
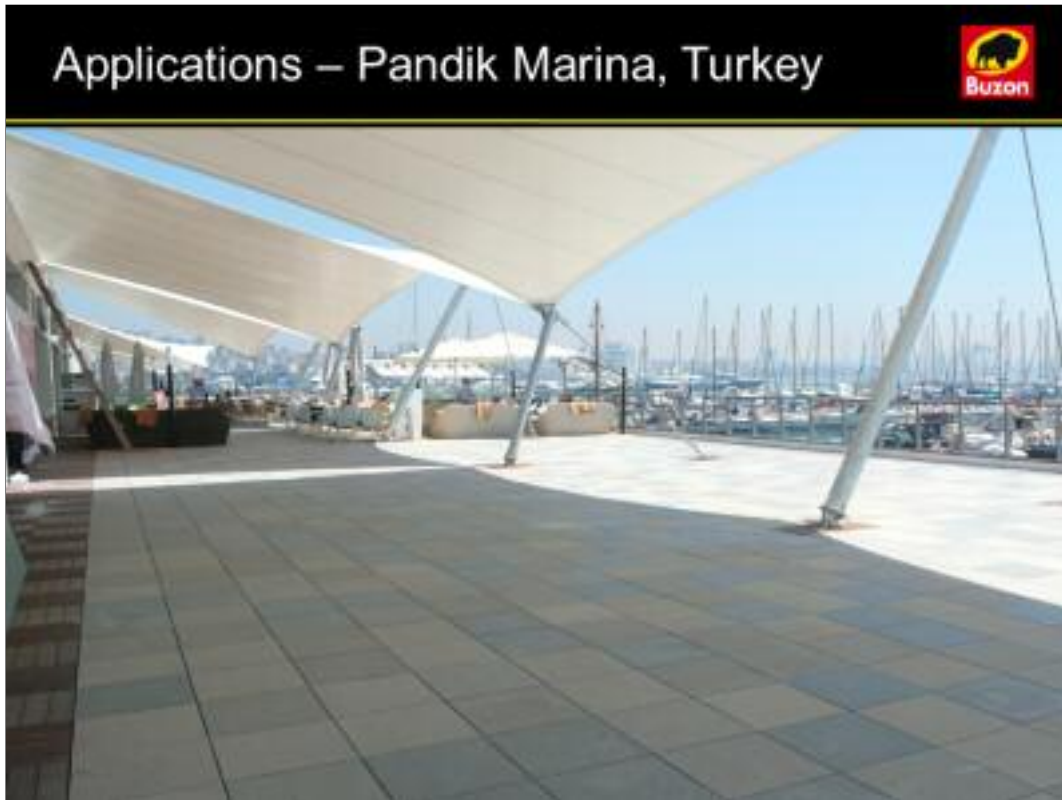


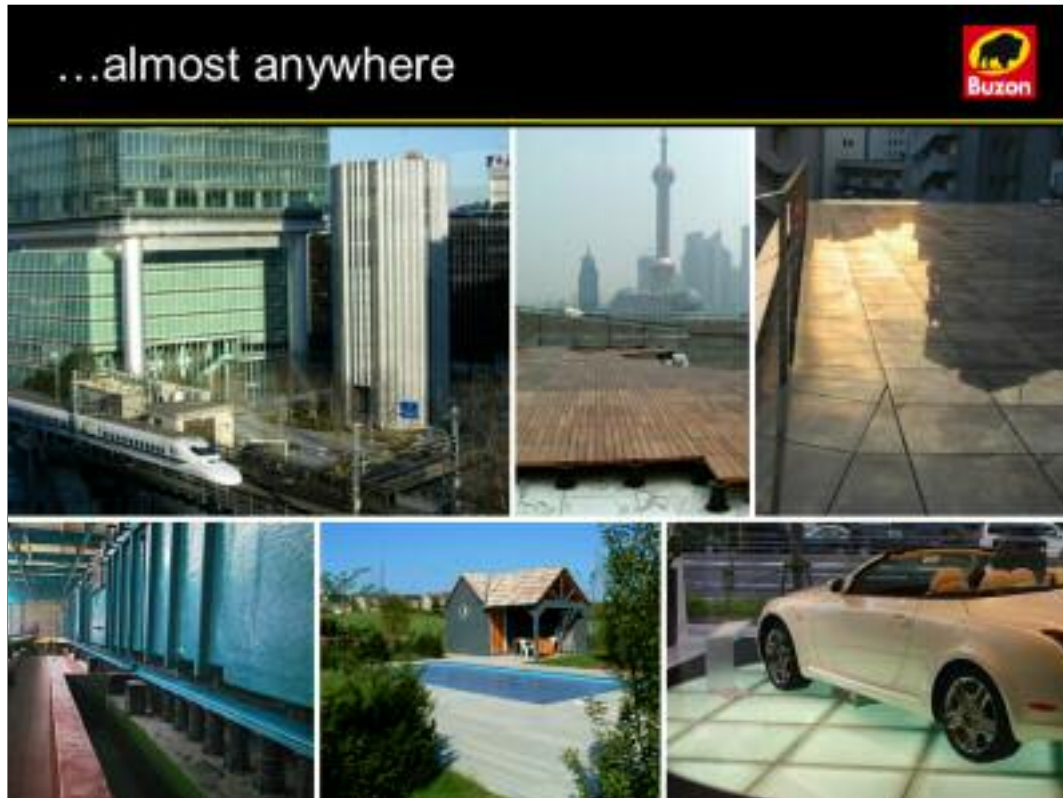
Applications – Grand Hyatt Hotel, Tokyo



Applications – City Hall, Athens




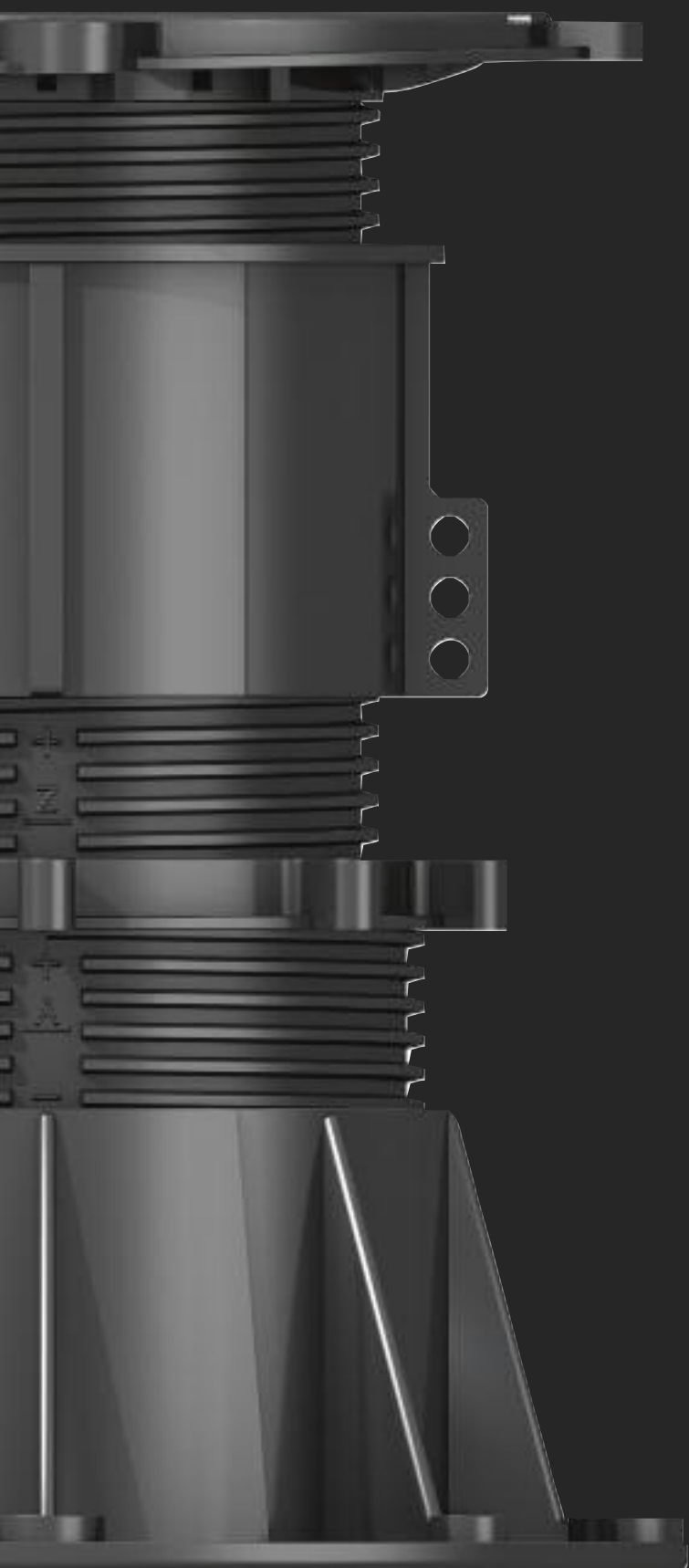




Summary

- The most proven, robust and sustainable pedestal on the market
- Integral slope correction
- Suited to wide range of substrates on wide range of roof applications
- Height adjustable
- Excellent drainage options
- Easy access to services
- Completely dry fix
- Easily configured, but rapid installation
- Available nationwide ex stock





Technical data

Product data*

Specification sheet*

NBS specification

Insulation data

Assembly
instruction sheets

Perimeter and
terrace layouts

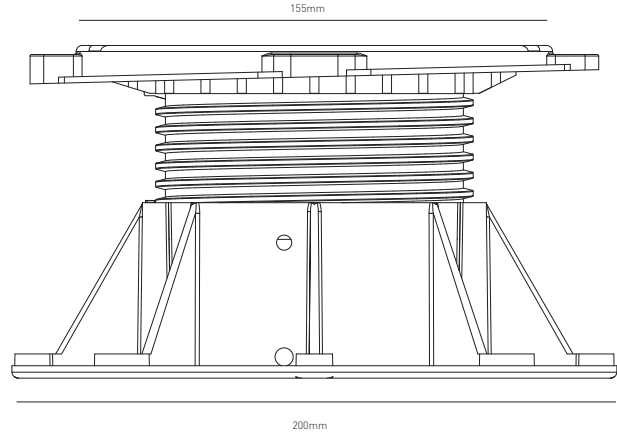
* samples only – a series of data sheets for each is currently in production

DPH4

Technical data sheet



74 - 110mm



Height range

Adjustable to within less than a millimetre from 74 to 110 mm.

Material

Co-polymer polypropylene (CPP), material thickness 3 to 5 mm.

Composition: 65% **recycled** CPP, 15% primary CPP, 20% talc, 2% pigment.

Dimensions

Top diameter 155mm, surface area 188 cm²

Bottom diameter 200mm, surface area 314 cm².

Performance characteristics

Resistant to aging, poor weather conditions, UV light, almost all chemicals, and rot proof.

Suitable for use in temperatures from -50°C to +120°C.

Application

Support for raised floors and roofs in outdoor areas. Can support any kind of timber decking or ceramic, stone, concrete paving or flag material, as well as fibre glass or metal grid panels. Suitable for any kind of stable substrate, including directly over insulation panels.

Slope corrector PH5

Integral to pedestal. Provides slope correction from 0-5%.



Accessories

Spacer tabs: For achieving uniform gaps between used decking material. Available in 2, 4.5, 6 and 10 mm. Fixed to top of pedestal by clipping in only.



Joist support: Supports timber, aluminium or composite battens for most decking systems.



Shim: Enhance acoustic performance and can help level uneven paving materials.



Load capacity

Tests executed with load bearing on central (1/1), half (1/2) and quarter (1/4) position on the pedestal.

Position	Height (mm)	Load (daN)	Load (lbf)
1/1	92 (PH5=0%)	2730	6088
1/2		1590	3546
1/4		900	2007
1/1	110 (PH5=0%)	1580	3523
1/2		1080	2408
1/4		700	1494
1/1	110 (PH5=5%)	1700	3791
1/2		1050	2342
1/4		630	1405

Note: Safety value for maximum compression loading for DPH4 for pedestrian areas – load shown in the table divided by 2. For raised floors – load shown in table divided by 4.

Similar product data sheets for DPH0-DPH9 will be available in due course

Buzon specification sheet No. 1

Using Buzon DPH Pedestal with stone, ceramic or concrete pavers



The following specification is designed to assist architects, designers and specifiers in achieving the best possible raised access flooring system.

Key checklist for specification

- Manufacturer with minimum 5 years' experience
- Copolymer of polypropylene pedestal manufacturer
- 5% integrated slope correction device
- Adjustability from 17 to 850mm
- Reversible pedestal to increase support footprint where increase support surface is required
- Pedestals to be manufactured from 80% recycled materials and 100% recyclable



Buzon DPH Pedestal

To be manufactured using high-strength talc-loaded polypropylene co-polymer **with min 65% recycled content.**

The Pedestal shall be a screwjack, height adjustable pedestal and the pedestal (depending on height required and model used) is to include a Buzon PH5 slope corrector (for 0 to 5%) on the pedestal head, spacer tabs (2, 4.5, 6 & 10mm) to obtain an open joint for the stone tiles, ring clamp and supporting base.

The pedestal is to be adjustable starting from 45mm to 170mm, beyond 170mm by adding height adjusting coupler/s (pls refer to table below of various models of Buzon DPH Pedestal). All components of the pedestal shall be incorporated with a safety clip for maximum unscrewing as a safety feature.

The Buzon DPH Pedestal is covered by a patent.

Important criteria

Manufacturer of screwjack pedestal must have at least 5 years' project and manufacturing experience.

Supporting head surfaces: Diameter of 15.5cm for supporting surface with 4mm thickness and reinforced with reinforcement veins.

Patented PH 5 slope corrector: Diameter 170cm, adjustable at the head with clicking method either clockwise or anti-clockwise from 0 to 5% gradient (with 0.5% interval) to compensate the fall.

Spacer tabs: 4 slabs positioning rotating blades in order to obtain an open joint of either 2, 4.5, 6 or 10mm.

Coupler (height adjuster): Additional coupler/s into Buzon DPH 5 Pedestal (100 to 170mm) allows height beyond 170mm.

Ring clamp (adjust up and down): Allows ease and fine adjustment of the height of the pedestal once the four slabs have been laid and speed in application (available from DPH 5 onwards).

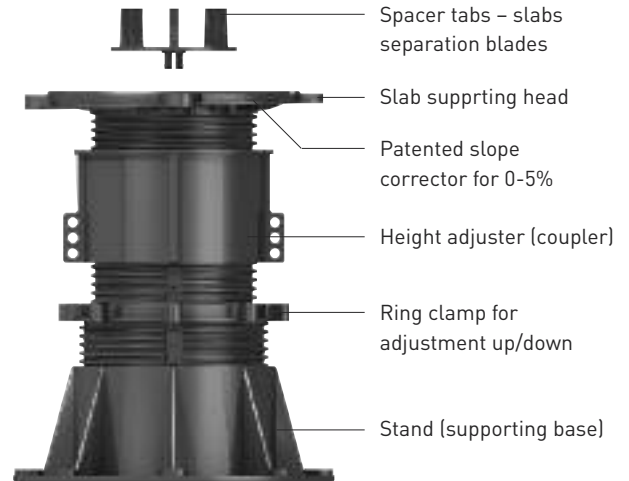
The stand (supporting base): Diameter 20 cm with thickness of 3 mm to ensure stability. The stand has a 125 mm diameter cylinder as well as 8 reinforcement veins of 5 mm thickness for stability and load distribution.

Buzon DPH Pedestal

The Buzon Screwjack Pedestal (DPH5 onwards) shall also be reversible, having the supporting base be able to function as the head, having the spacer tabs installable at the supporting base whilst still being able to read the slope correction calibration in reversed position.

Buzon specification sheet No. 1

Using Buzon DPH Pedestal with stone, ceramic or concrete pavers



Execution of work

- Surface to receive the Buzon Pedestal shall be relatively flat finish, cement concrete must be cured and dried for minimum 28 days and must be clean and free of debris that may impair the performance of the Buzon Pedestal.
- Prior to the installation of the Buzon Pedestal, the main contractor shall submit method statement on the installation and shop drawings to consultant/ owners for approval. Installer is to also submit the installation manual provided by Buzon, to ensure proper installation.
- Use a line marker to mark/ indicate the position of each Buzon DPH pedestal to be placed. For every position of the pedestal, there must be a precise measurement of the percentage and direction of the slope to be countered in order to be able to adjust the slope corrector in the Buzon DPH System. Measurement of the slope/gradient and direction could be achieved by using the digital leveler & water levelers. Gradient of the substrate must be checked regularly and indicate properly with a chalk crayon on the substrate the percentage of the gradient, as well as an arrow to indicate the direction of the slope. Before installing the Buzon DPH pedestal, ensure that the Buzon pedestal with the slope corrector be correctly set to the right gradient, and to the right direction.
- Finished elevation shall be established and marked on the perimeter of the wall with laser leveling device and water levelers. Constant checks for correct elevation of the installed pedestal by using digital levelers, laser leveling device, pre-installed pedestals as markings as reference.
- Buzon shims levelers must be used to serve as shock absorbers, compensating the irregularities of the tiles by placing on the head of the Buzon DPH pedestal.

DPH Pedestal System

Screwjack pedestal system for support of external raised paving, decking or internal raised floors.

- Enables drainage without visible grilles.
- Allows access throughout to concealed services.
- Load (maximum each pedestal): 1000 kg. Specific recommended maximum load varies with pedestal height, pitch of substrate, symmetry of loading and internal or external application.
- Pedestal height: 17-850 mm.
- Slope corrector fitted to top of pedestal, adjustable in half-degree increments. Suitable for pitched substrates (maximum): 5 %.
- Choice of pedestal material. Resistant to weather, UV, chemical products. Electrically non-conductive. Not susceptible to galvanic corrosion.
- Choice of spacer tabs suitable for joint width of topping material.

Usage:

- In conjunction with platform materials including concrete, metal grid, natural stone, terrazzo, fibreglass grating, temporary platforms, garden buildings or wood. Platform can be gravity laid or fixed to pedestal head. Also available in clear polypropylene (please request information)
- As support of the visible bottom surface of water features over service voids.
- Industrial floors. Not suitable for support of vibrating machinery.
- Temporary installations.

Compliance:

Conforms to French standard DTU.43.1 for water resistance of flat roofs and inclined roofs with a masonry structural member in a lowland climate.

More about DPH Pedestal System:

As standard - Options - Approvals

- Manufacturer: Buzon UK Ltd.

Web: www.buzonuk.com Tel: +44 (0)20 8614 0874.

Product reference: DPH Pedestal System.

- Substrate: [_____]

- Pedestal:

(AND)

[DPH0] Fixed height 17 mm.

[DPH0 with PH5 slope corrector] Fixed height (nominal) 27 mm; adjustable angle.

[DPH1] Fixed height 28 mm.

[DPH1 with PH5 slope corrector] Fixed height (nominal) 38 mm; adjustable angle.

[DPH2] Adjustable height 35-53 mm.

[DPH2 with PH5 slope corrector] Adjustable height (nominal) 45-63 mm; adjustable angle.

[DPH3] Adjustable height 50-78 mm.

[DPH3 with PH5 slope corrector] Adjustable height (nominal) 60-88 mm; adjustable angle.

[DPH4] With integrated PH5 slope corrector, adjustable height (nominal) 74-110 mm; adjustable angle.

[DPH5] With integrated PH5 slope corrector, adjustable height (nominal) 100-170 mm; adjustable angle.

[DPH6] With integrated PH5 slope corrector and C2 coupler (x1), adjustable height (nominal) 170-290 mm; adjustable angle.

[DPH7] With integrated PH5 slope corrector and C2 couplers (x2), adjustable height (nominal) 240-400 mm; adjustable angle.

[DPH8] With integrated PH5 slope corrector and C2 couplers (x3), adjustable height (nominal) 320-520 mm; adjustable angle.

[DPH9] With integrated PH5 slope corrector and C2 couplers (x4), adjustable height (nominal) 390-620 mm; adjustable angle.

[DPH10] With integrated PH5 slope corrector and C2 couplers (x5), adjustable height (nominal) 460-750mm; adjustable angle.

[DPH11] With integrated PH5 slope corrector and C2 couplers (x6), adjustable height (nominal) 530-50mm; adjustable angle. [To suit levels as drawing].

- Material: [Glass fibre reinforced polyester] Self extinguishing. 20% talc loaded.

[Polycarbonate, transparent] Nonstandard option.

[Polypropylene copolymer] 20% talc loaded.

- Spacertabs: [Not required] [2 mm] Nonstandard option. Requires level topping installed to fine tolerances [4.5 mm] [6 mm] [10 mm] [As drawing].
- Attachment: [Gravity lay] Large pedestal base allows direct placement on waterproof membrane. [Mechanical fix].
- Platform attaching: [Gravity laid panels]. [Joist support plate with plug and pin clip] Timber decking. [Mechanical fix, using Buzon plugs, pin clips and flat head pins]. Guidance for DPH Pedestal System from Buzon UK Ltd

More about DPH Pedestal System: As standard – Options – Approvals

As standard

- Adjustment:

Height: Base, couplers and head are threaded for assembly and height adjustment. Secured by safety clips. Releasable by insertion of pointed object. May be supplemented by 2 mm rubber shims.

Pitch: By rotation of slope corrector. Secured by insertion of pin.

Components:

Base unit: Diameter 200 mm. Includes external flange with four 4 mm holes and four 8 mm holes for fixings to substrate. Female with internal threading.

Intermediate coupler: Lower part male with external trading. Upper part female with internal threading.

Head: Diameter 155 mm. Includes hole for insertion of spacer tabs.

- Options

Spacer tabs: Clip into hole in Head. Spacer size determines joint width in decking. Special spacers available – consult Buzon.

- Platform:

Timber decking: Decking planks screw fixed to joists. Joists located by joist support plates and secured by screw fixing through side flanges. Joist support plates located by proprietary plugs and pin clips.

Approvals

- CRIF (Centre de Recherches Scientifiques et techniques de l' Industrie des Fabrications Metalliques) Liege, Belgium: 7660

Compression testing on Buzon DPH5 pedestals with C2/DPH5 couplers.

Further information

Literature: Additional information may be available for Buzon UK Ltd from ribaproductselector.com.

Contacts: www.buzonuk.com info@buzonuk.com

Tel: +44 (0)20 8614 0874 Fax: +44 (0)20 8977 0825

Insulation performance

On terrace constructed with BPI – Buzon Screwjack Pedestal System

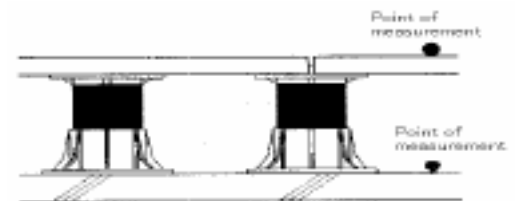


The test measures the temperature on top of tiles of the terrace and the temperature of the roof slab beneath the tiles. This data has been compiled into the table below.

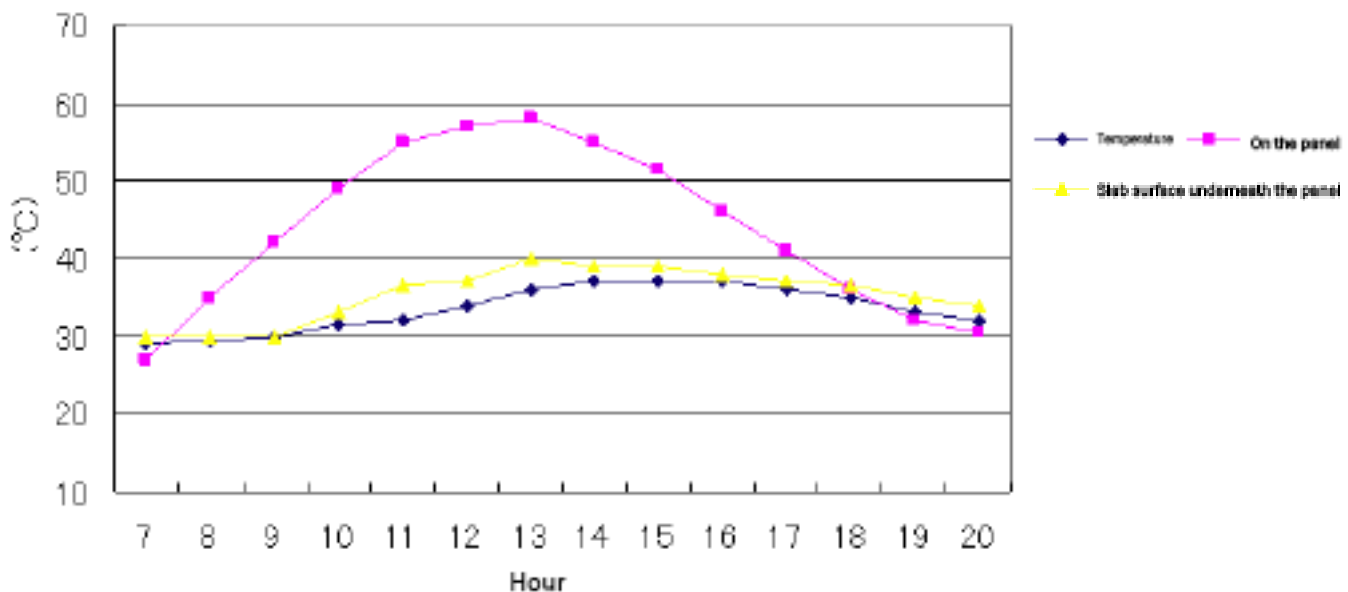
- Location of test site: Kasukabe City, Japan
- Date: July 12, 2001
- Tile: Cement made tiles measuring 600x600x30mm weight approx. 25kg
- Height of pedestal: 150mm
- Surface area: 4.8 sqm (3m x 1.6m) upstand insulated so that no airflow can enter from the sides

Temperature reduction performance

	Temperature (°C)	Difference with air temperature (°C)
Air temperature	36	-
Tile surface	58	+ 22
Slab surface beneath tile	40	+ 4



Temperature transition of each part of the system



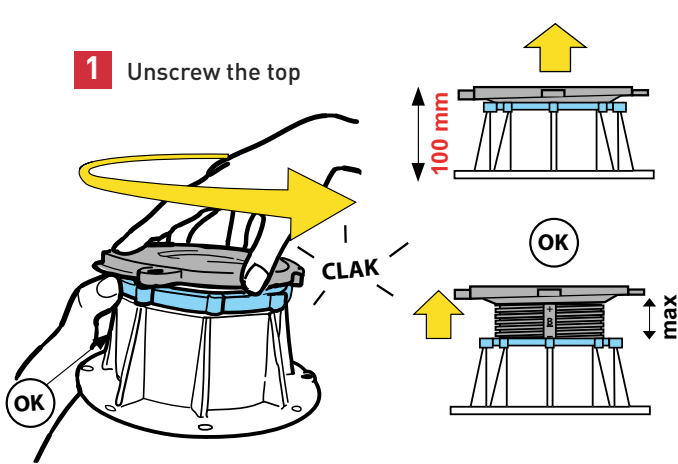
The test results in the chart above show the temperature on top of the panel is about 20 °C higher than the outside air temperature and the temperature on the slab under the tiles is only 4 °C higher than the outside air temperature. Therefore the temperature reduction performance of a terrace constructed with the Buzon Screwjack Pedestal System can be recognised as a result of this test.

Using the DPH5 pedestal

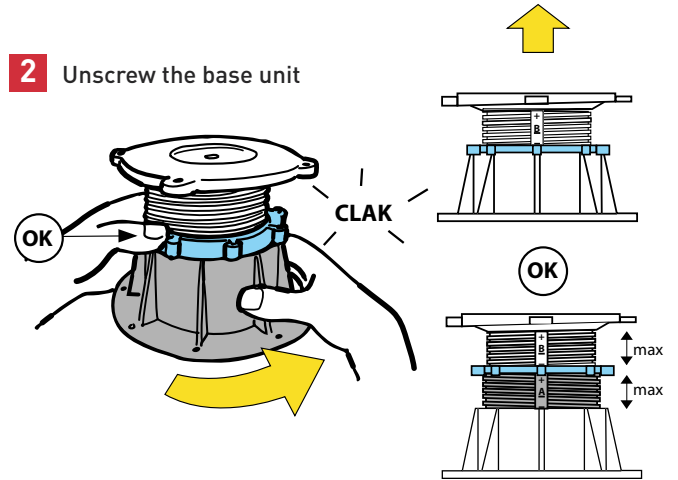
Assembly instructions



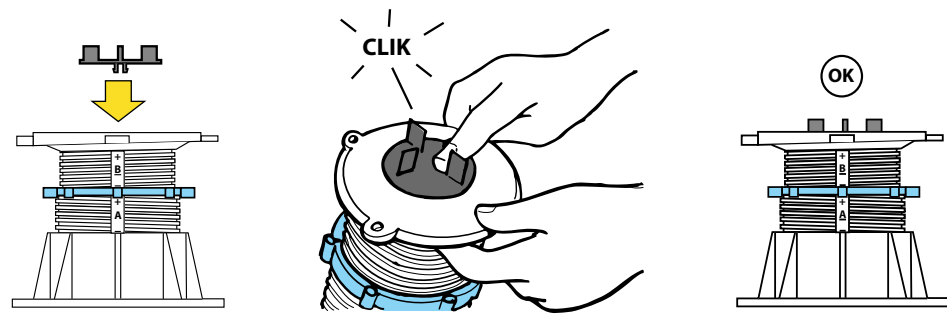
1 Unscrew the top



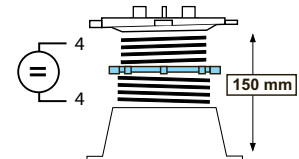
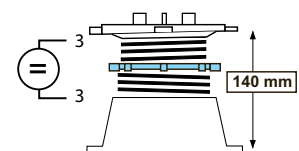
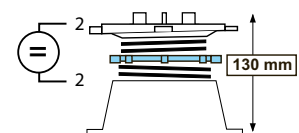
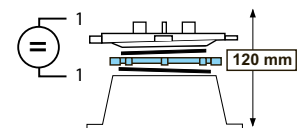
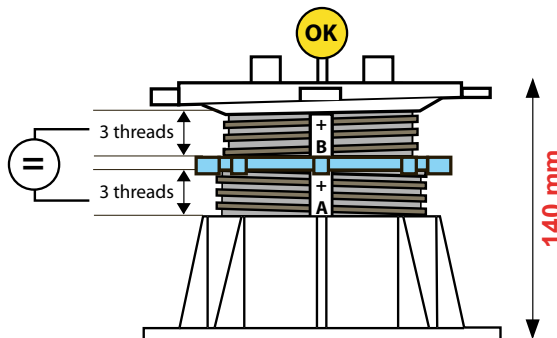
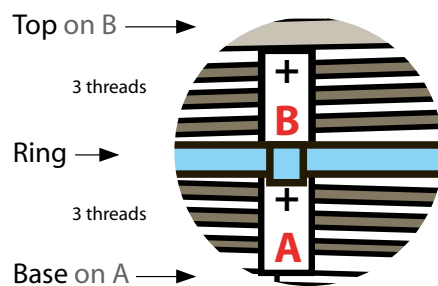
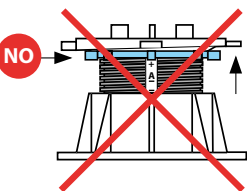
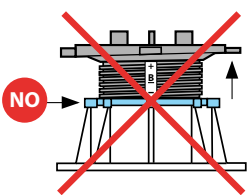
2 Unscrew the base unit



3 Clip spacer tabs

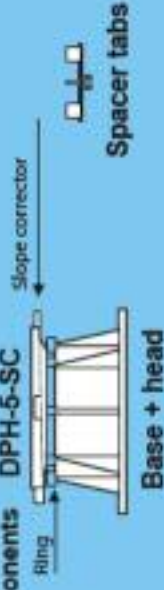


Use ring to adjust height from 100 to 170mm

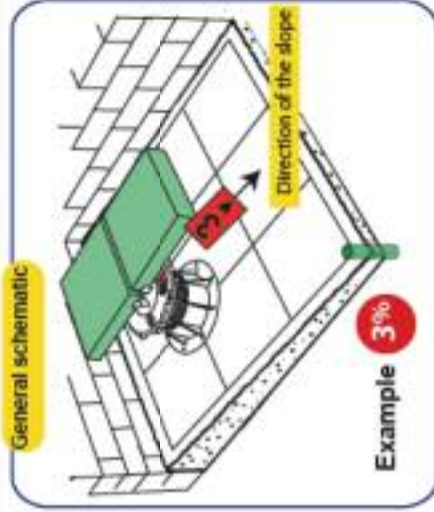


How to adjust the pedestal DPH-5-SC and its integral slope corrector from 0 to 5% (0 to 5 cm/meter)

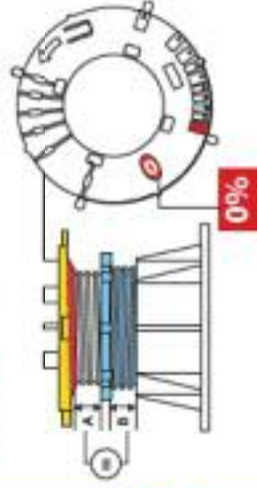
Components DPH-5-SC



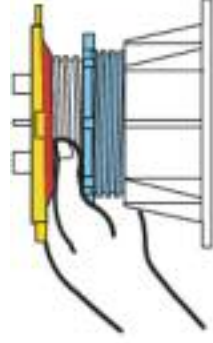
General schematic



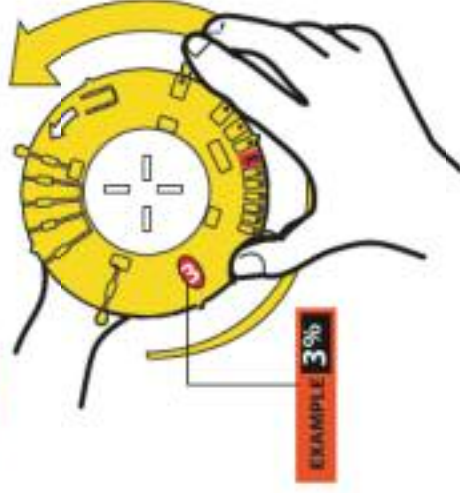
1 Pedestal before adjustment on "0"



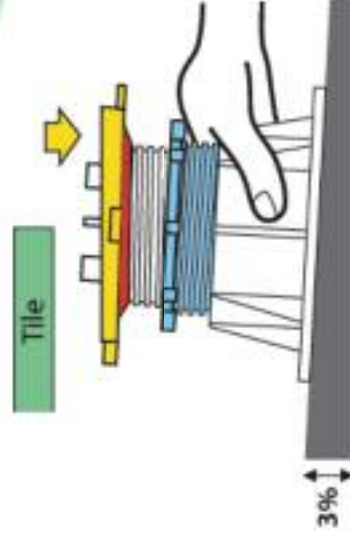
2 Hold the head of the pedestal in your hand



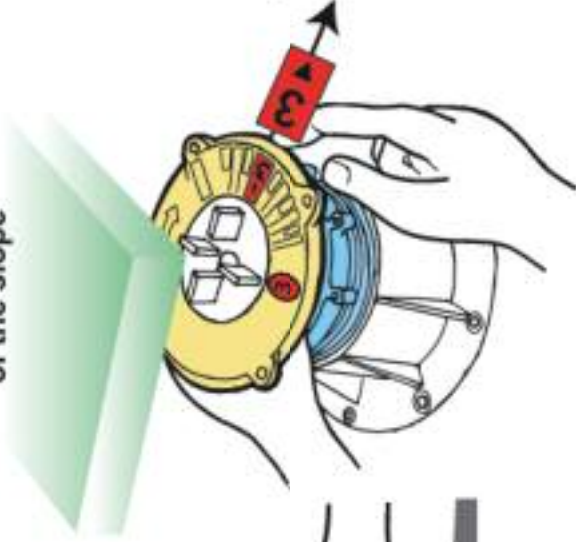
3 Adjust the slope corrector to the value of the slope



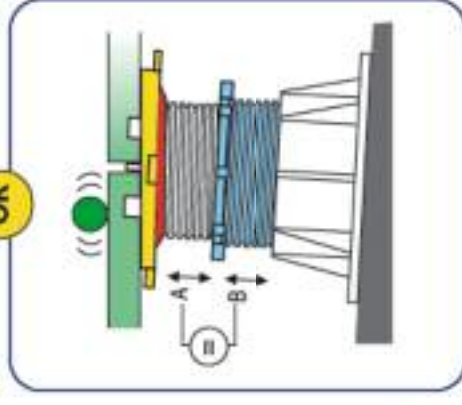
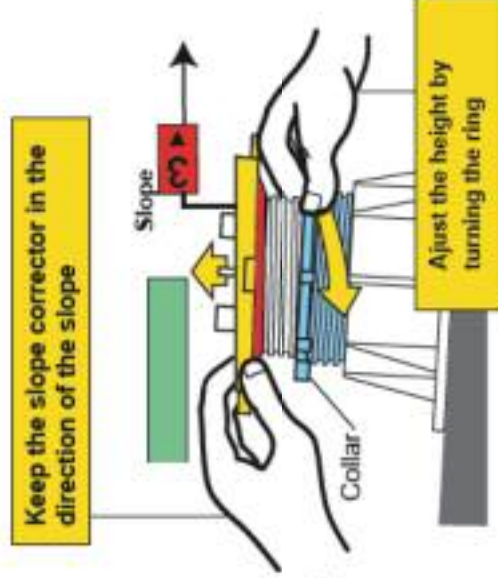
4 Place the pedestal under the paving tiles



5 Point the slope corrector to 3% in the direction of the slope

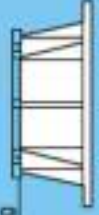


6 Adjust the height with the ring

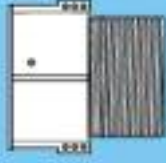


How to assemble the DPH-5-SA pedestal with the coupler

Components
Ring



Base DPH-5



Coupler C2/DPH-5

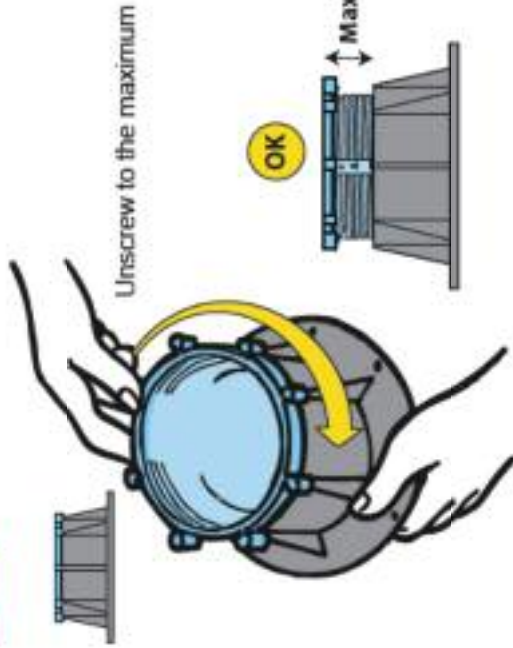


Spacer tabs

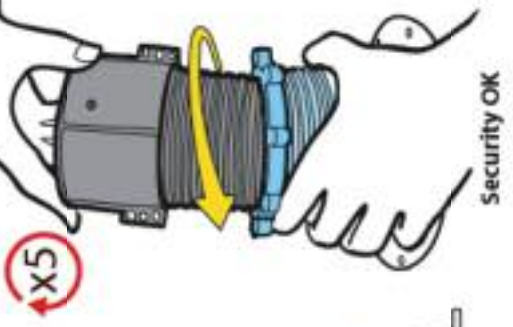
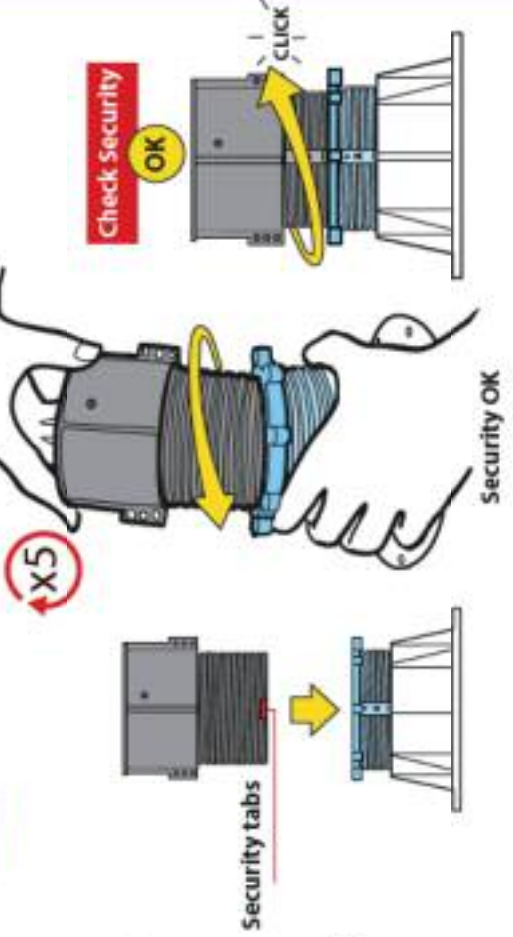


Head DPH-5-SA

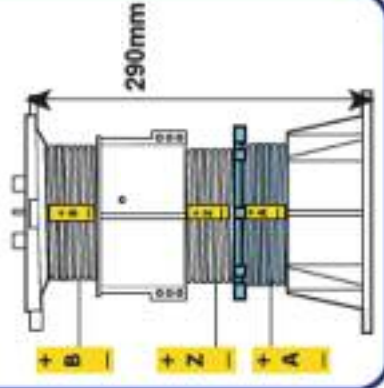
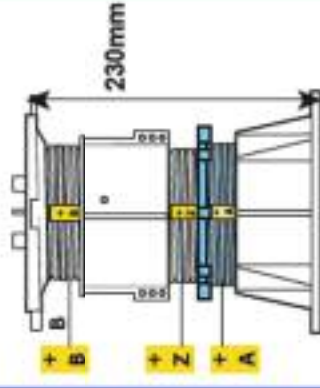
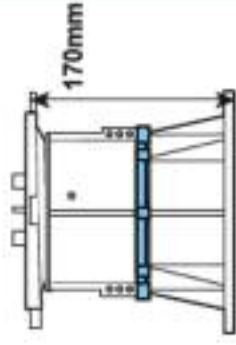
1 Unscrew the ring from the base



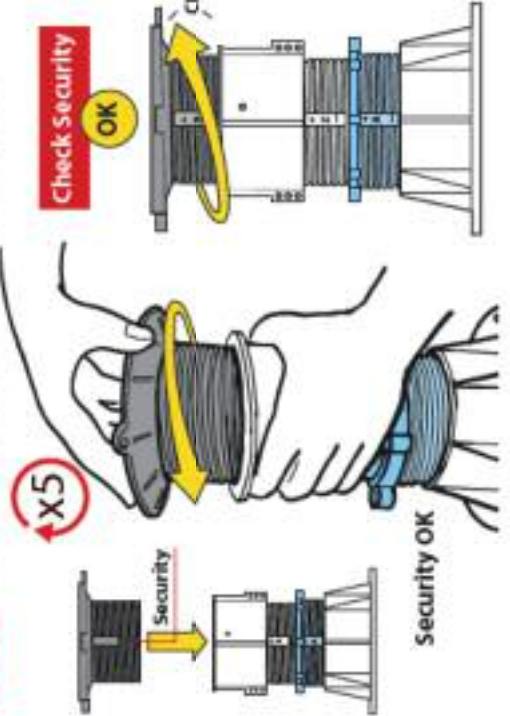
2 Screw in the coupler



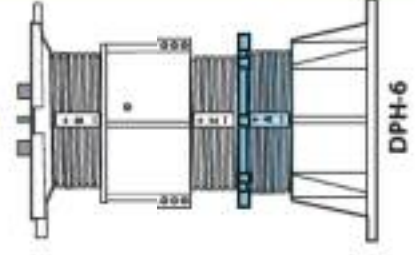
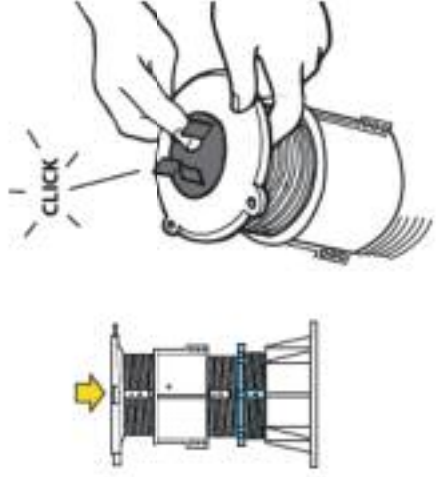
Adjust from 170 to 290mm by turning the ring



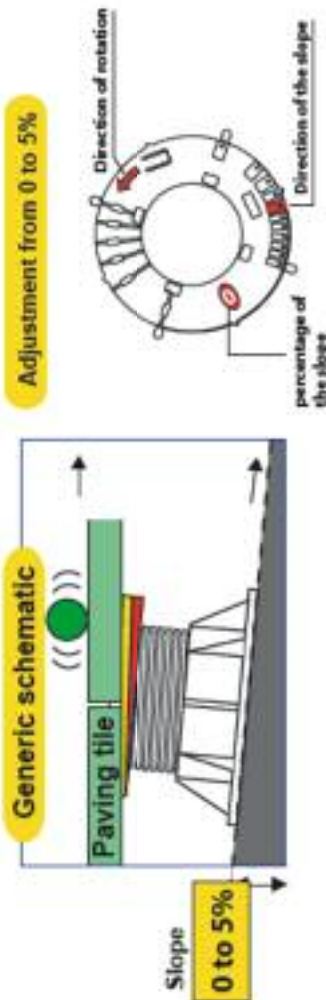
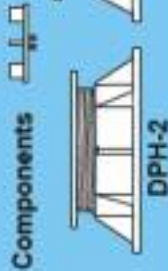
3 Screw the head into the coupler



4 Fix the tab



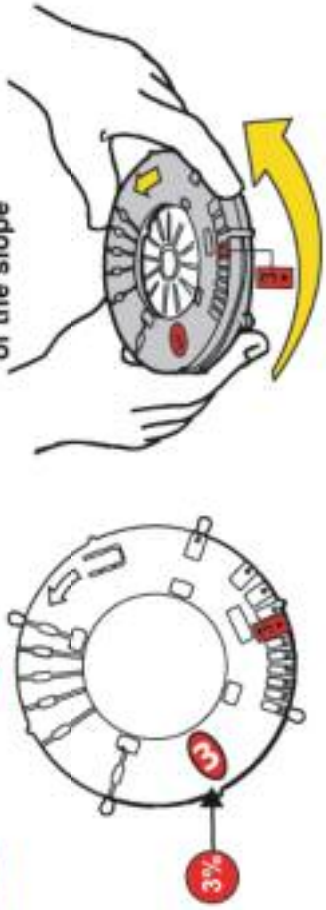
How to attach and adjust the slope corrector (0 to 5%) on the DPH-2 and DPH-3 pedestal



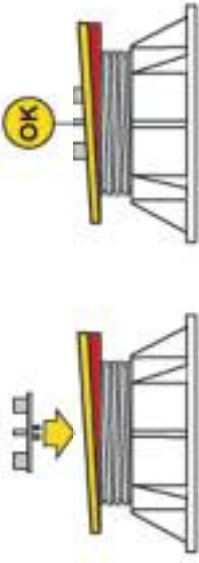
1 Fix the PH5 on top of the DPH-2 or DPH-3 pedestal



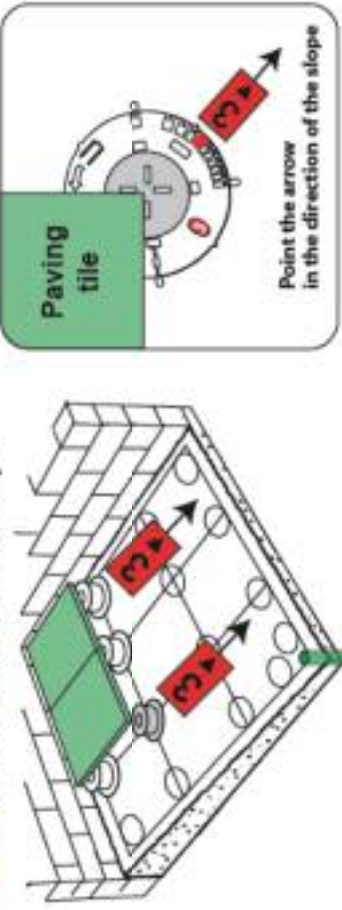
2 Exemple 3% Adjust the slope corrector PH5 to the value of the slope



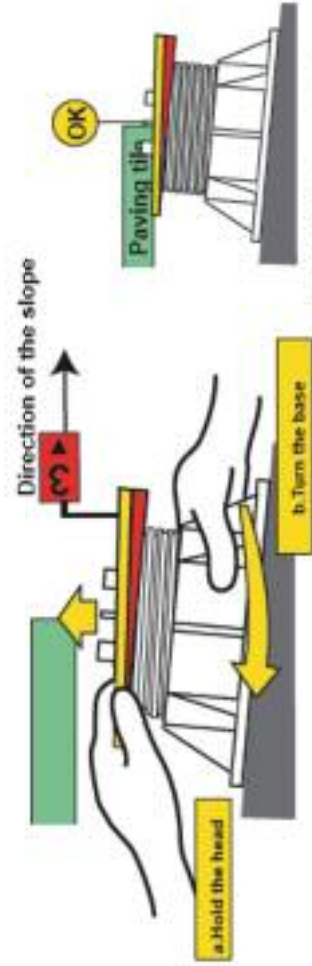
3 Place the spacer tab on to the pedestal



4 Place the pedestal under the tile and point the PH5 in the direction of the slope



5 a. Hold the head keeping the 3 in the direction of the slope
 b. Adjust the pedestal in height by turning the base



How to remove the coupler from the DPH-6-SA pedestal

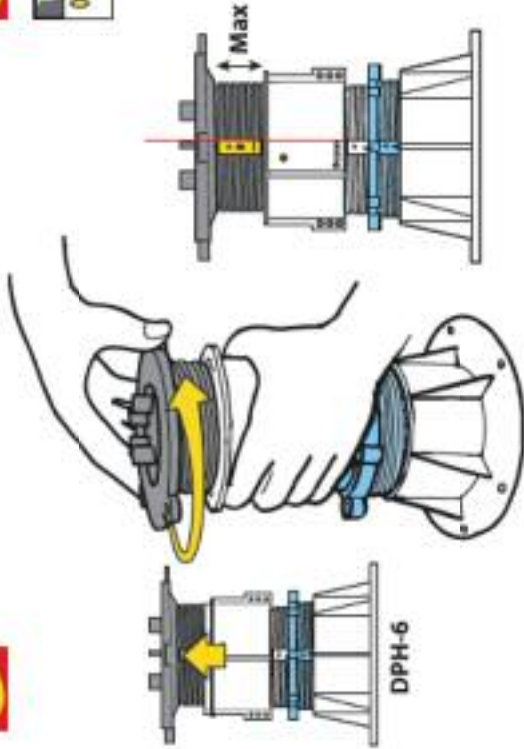
Components

DPH-6-SA

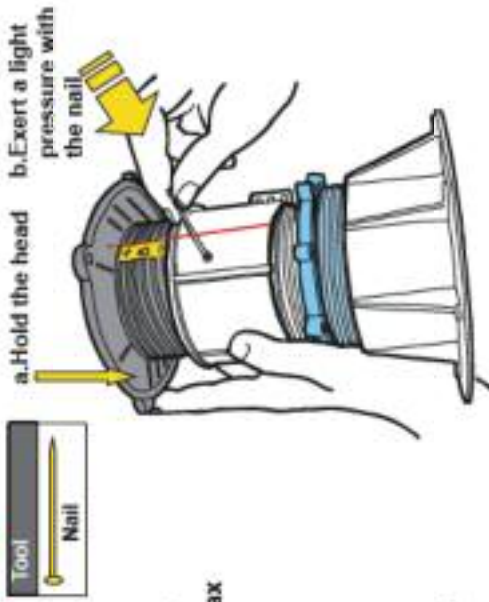
Ring

Spacer tabs

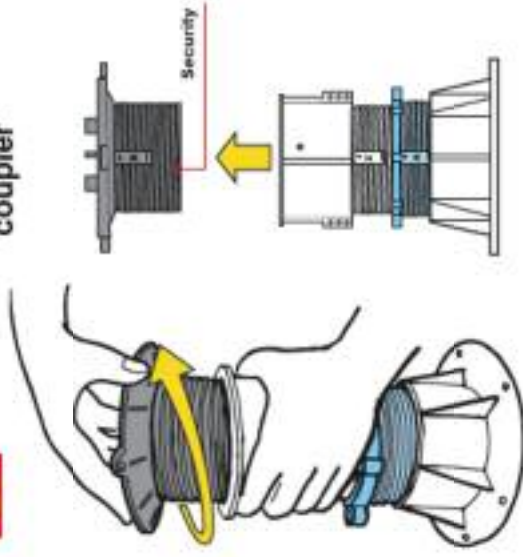
1 Unscrew the head to the maximum



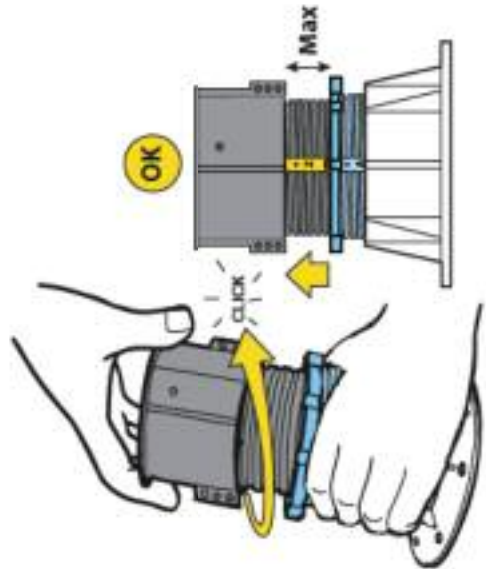
2 Unblock the security locking tab



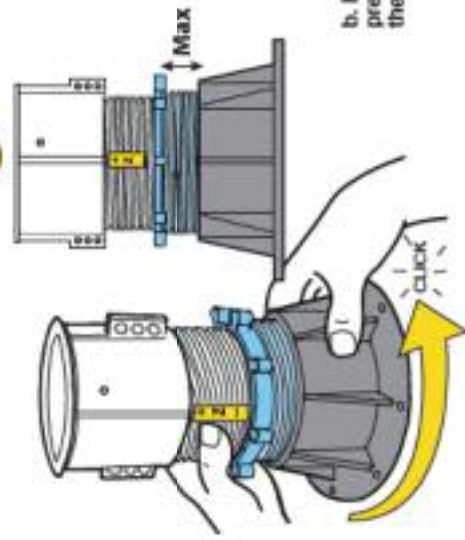
3 Unscrew the head from the coupler



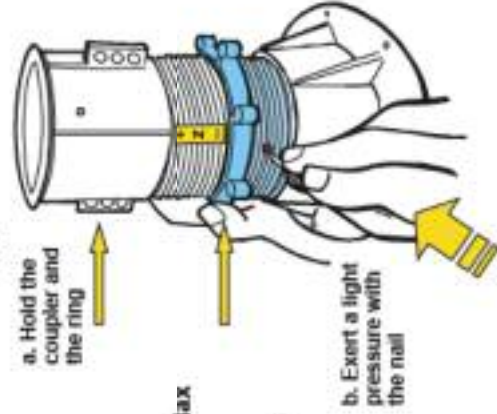
4 Unscrew the coupler to the maximum



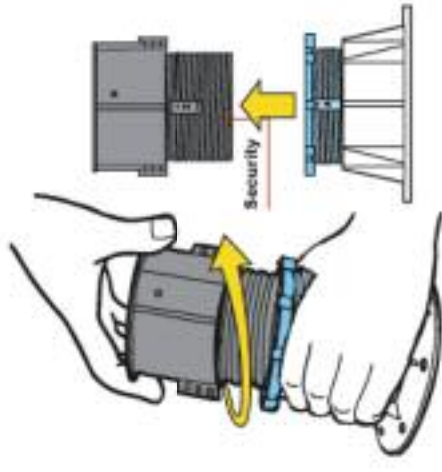
5 Unscrew the base to the maximum



6 Unblock the security locking tab



7 Unscrew the coupler from the base



DISASSEMBLING INSTRUCTION FOR THE TOP OF THE PEDESTAL DPH-5-SC

Contents DPH-5-SC

Ring

Base unit

Spacer Tabs

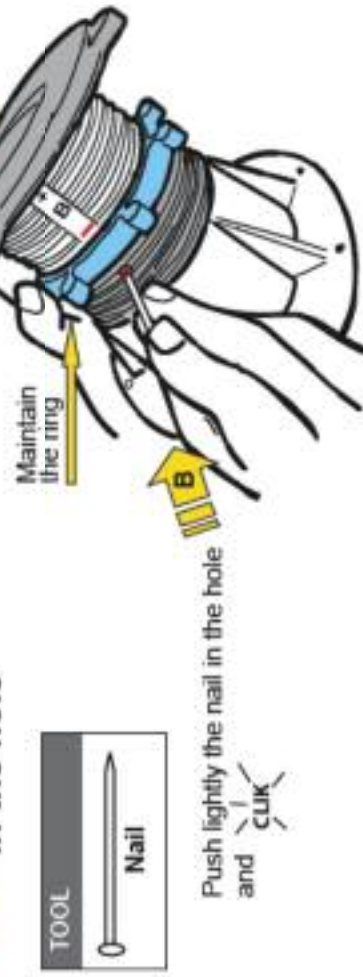
1 Unscrew the top on maximum



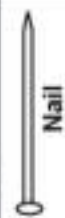
2 Unscrew the base unit to see the hole



3 Exert a light pressure in the hole

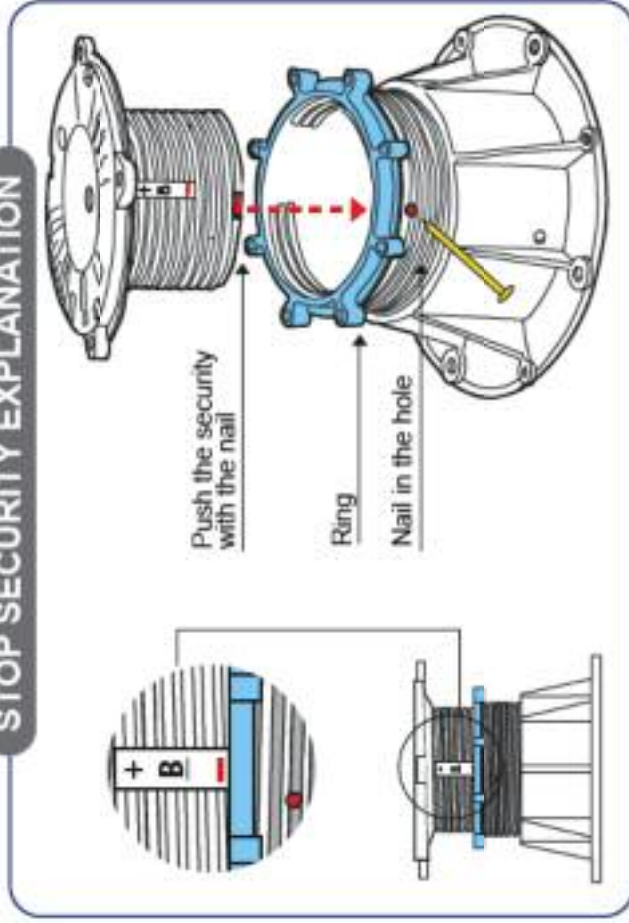


TOOL

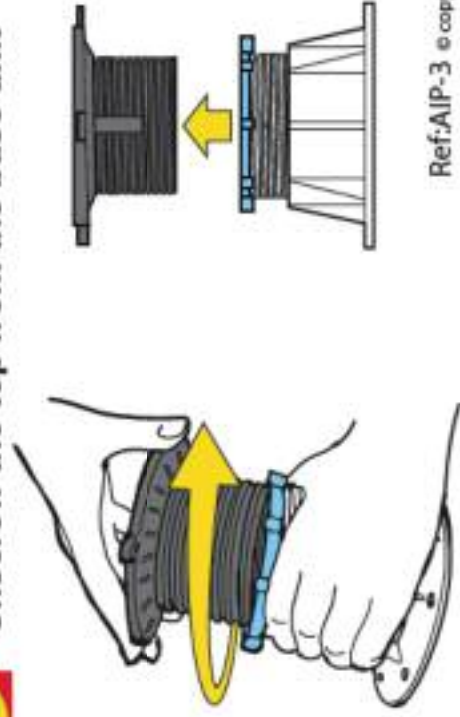


Push lightly the nail in the hole and **CLAK**

STOP SECURITY EXPLANATION



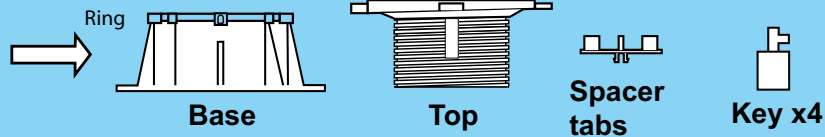
4 Unscrew the top from the base unit



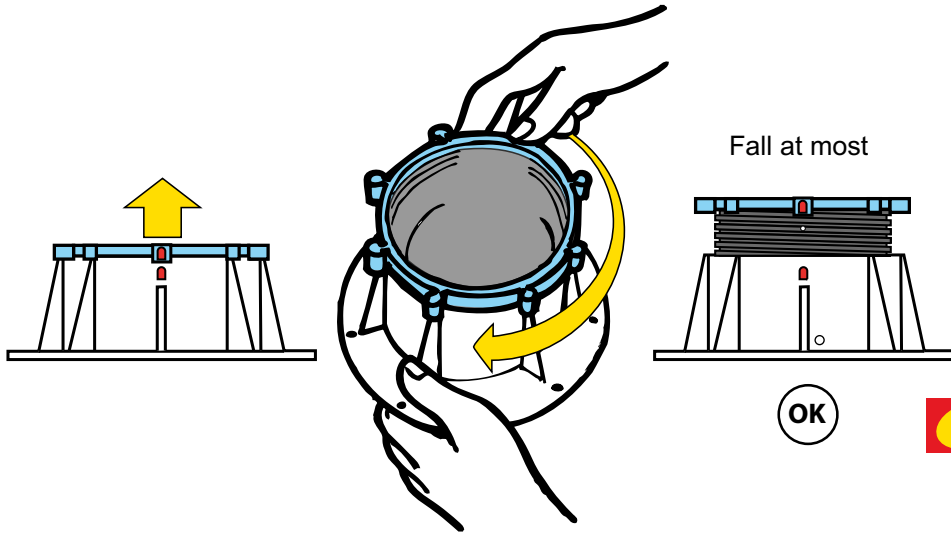


How to assembly the DPH-5 pedestal adjustable from 100 to 175mm
How to adjust and block the height with keys

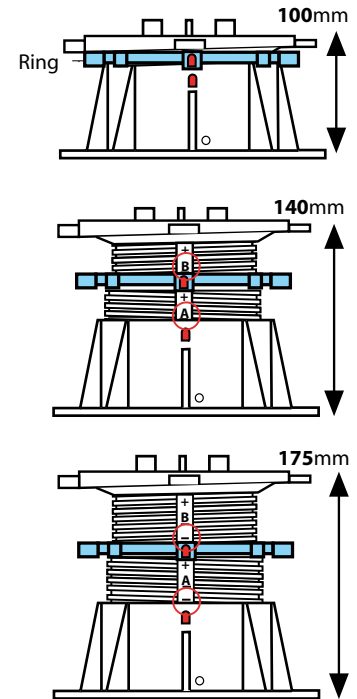
Contents DPH-5



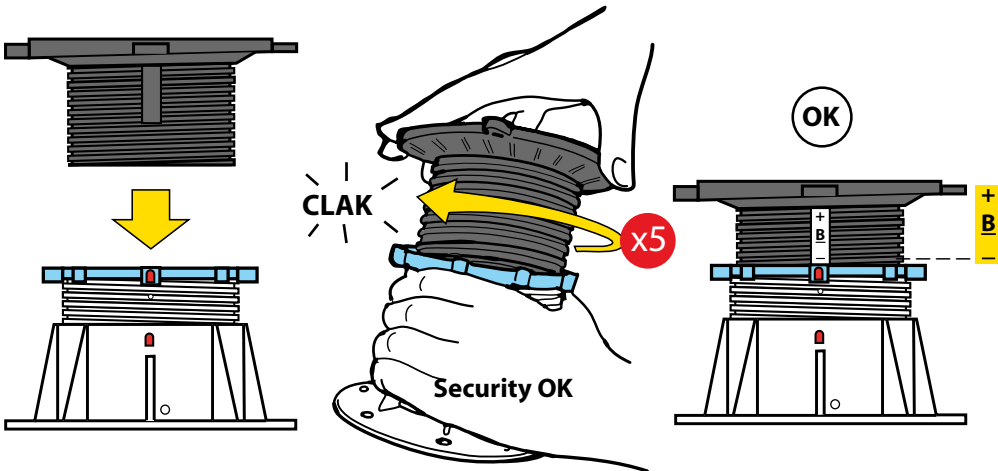
1 Unscrew height adjustment ring on base unit



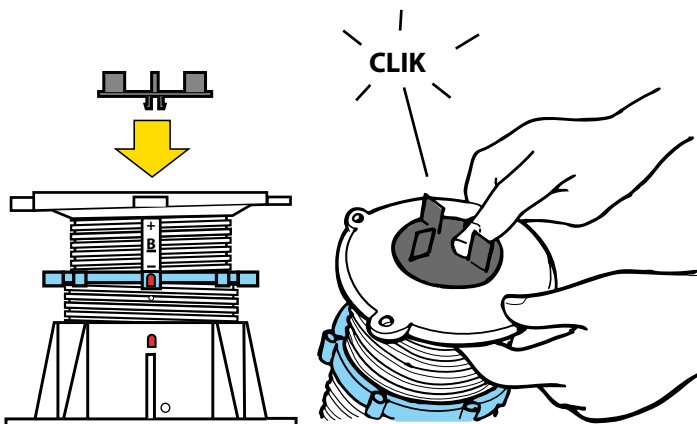
4 Adjustment from 100 to 175mm by turning the clamp ring



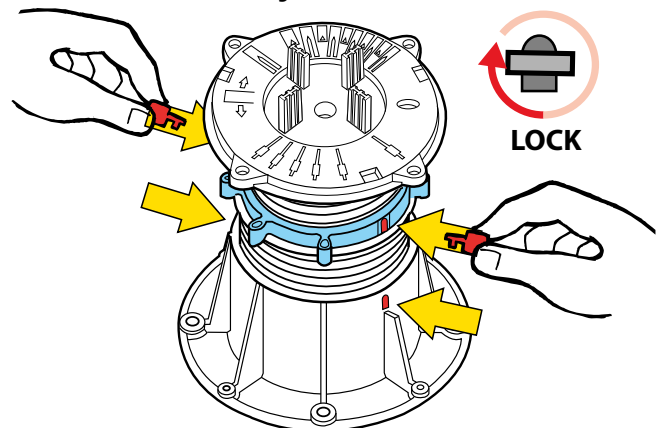
2 Screw the top into base unit



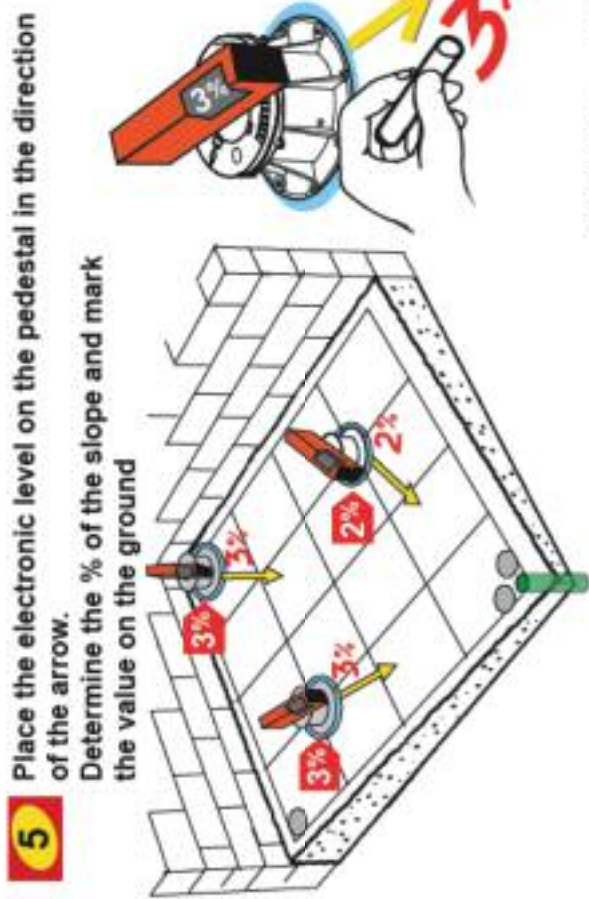
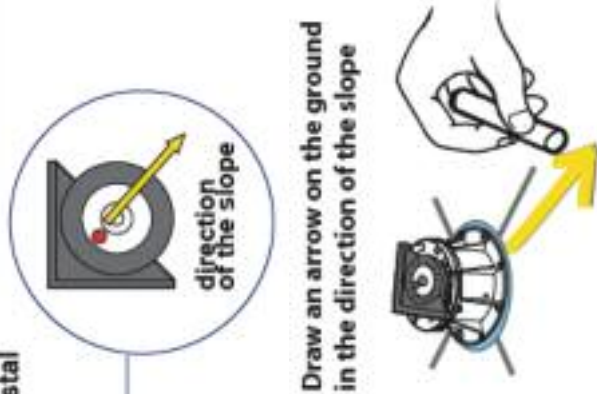
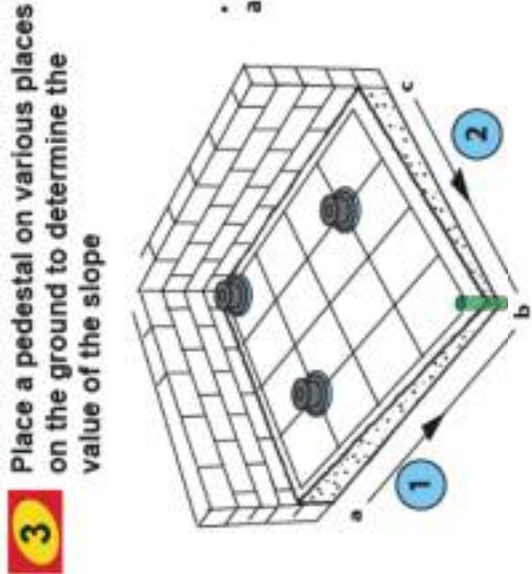
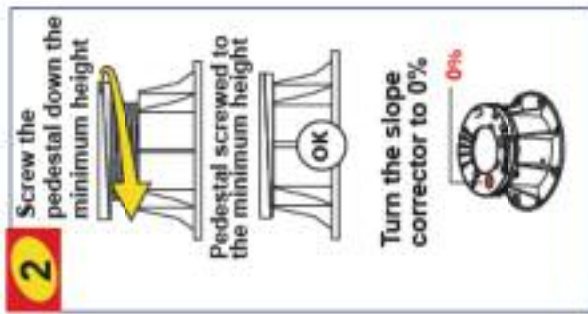
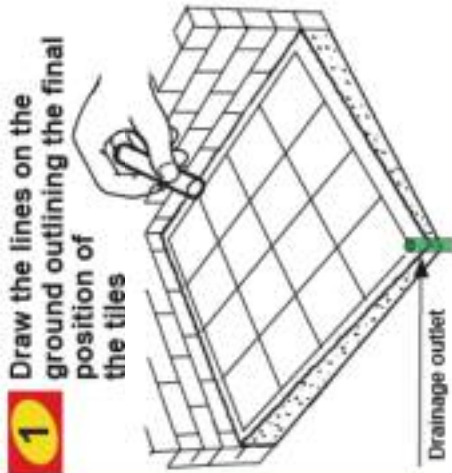
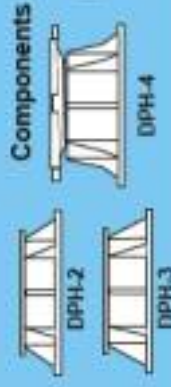
3 Clip Spacer Tabs



5 Block at the height wished with 4 keys



How to prepare the terrace: direction and value of the slope from 0 to 5%





...Very clever



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