



Specifications text

BC Series Screwjack Pedestal – 3rd Generation

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Introduction of the BC Series :

The 5 BC-series screwjacks pedestals of the 3rd generation BC series in polypropylene, infinitely adjustable from 28 to 200 mm, consist of 2 mutually threaded parts: a mounting head and a base.

The addition of sleeves (C3) and coupler inverter (C4) allows pedestals adjustable up to 1120 mm to be obtained.

The BC series pedestals and the accessories, in black colour, are made from talc-filled polypropylene copolymer materials that are UV stable, weather and chemical resistant, temperature resistant from -50° up to $+120^{\circ}$ and can support loads of more than 1000 kg/pedestal. Certified compression tests are available on request. The BC series pedestals are rot-proof and recyclable.

Accessories such as spacer tabs, a slope corrector from 0 to 5% and more, batten holders, various attachments, fixing screws, etc. can be fixed to the head of the BC series pedestals.

The base of pedestal type BC-4 adjustable from 85 to 140 mm and the base of pedestal type BC-5 adjustable from 116 to 200 mm are provided with two holes for access to two lock keys arranged so as to lock the base and the head of the pedestal and/or the sleeve after height adjustment. The sleeve, for adjustments from 200 to 1030 mm, is also fitted with two holes for access to two lock keys. The lock keys thus provide a simple and reliable way to keep the adjusted height in place.

The circular tabs - a special feature of the BC series pedestals - allow the Architect or Designer to create accessible terraces, green terraces or raised floors using pavers in different shapes such as triangular, pentagonal, hexagonal, circular, square or rectangular pavers, etc.

Pedestal BC



Head



Sleeve + Keys



Base + Keys

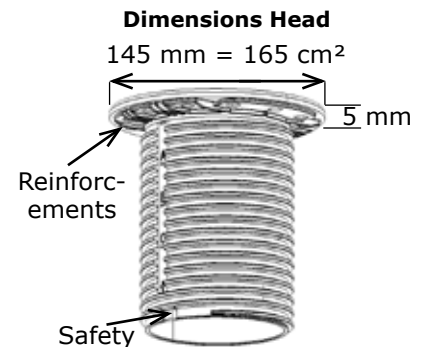




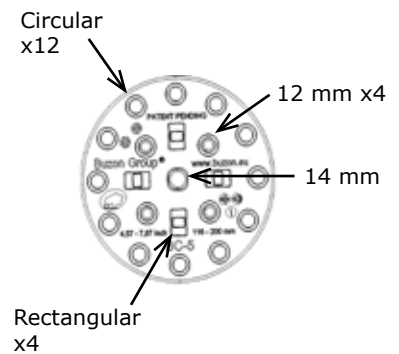
Description

1.1) Cylindrical supporting head in Polypropylene:

- Thickness = 5 mm - Diameter = 145 mm - Surface = 190 cm²
- Under the surface of the pedestal head are 14 reinforcement ribs for optimal load distribution.
- The large bearing surface serves as support for very large slab pavers, gratings, grilles, timber batten supports, etc.
- The head, which is continuously threaded over its full height, screws into the pedestal base or into a sleeve, type C3-BC series.
- On top of the base of the threaded part of the head is a safety clip to prevent total unscrewing, so that **three safety threads** are retained at all times.
- The surface of the pedestal head is provided with :
 - a) on its periphery: 12 circular holes for fixing circular spacer tabs of 2 - 4.5 - 6 - 8 - or 10 mm thickness, allowing angles of 30°, 45°, 60°, 90°, 120°, 145°, 150° and 180° to be obtained, when using triangular, pentagonal, hexagonal, circular, square, rectangular pavers or pavers of different shapes.
 - b) at its centre: 4 rectangular holes receiving rectangular spacer tabs of 2 - 4.5 - 6 - 8 - or 10 mm thickness, when using only square or rectangular pavers.
 - c) the centre of the pedestal head is fitted with a 14 mm threaded hole for screw or bolt fixing or for fixing of a batten support.
- In addition, it has 4 circular 12 mm threaded holes for screw or bolt fixing or for mounting circular tabs for 45° or 145° angles.
- A slope corrector from 0 to 5%, type PH5 (patented) can be fixed to the pedestal head.



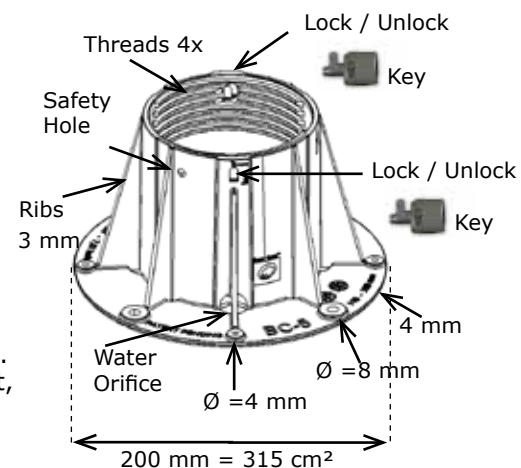
Composition Head



1.2) Cylindrical base in Polypropylene:

- Thickness 4 mm - Diameter = 200 mm - Supporting surface = 315 cm²
- This base has good stability and sits perfectly on a ROOFING, PVC, EPDM or any other other surface, **to prevent punching failure of the support.**
- All edges of the pedestal base **are rounded** to prevent degradation of the ROOFING, PVC or EPDM support.
- The base is fitted with a 125 mm diameter cylinder, 4 mm in thickness and provided with 8 reinforcement ribs, 3 mm thick, for good stability and load distribution. On the inside of the cylinder, it is fitted with 4 clamping threads for receiving the pedestal head or a sleeve.
- The internal cylinder has a safety orifice (hole) to prevent total unscrewing of the pedestal head.
- At the end of the external and internal cylinder are orifices to allow proper rainwater drainage, thereby preventing stagnation. Similarly, interconnected drainage channels are provided under the pedestal base.
- To allow the pedestal base to be fixed to a concrete, epoxy, wood or steel support, the periphery of the base is fitted with 8 holes of 4 and 8 mm diameter with a 6 mm neck. These 8 holes are arranged with respect to the 8 reinforcement ribs so as to improve the solidity of the pedestal.
- The upper and external part of the base has a small hole into which the pointed end of a nail can be inserted to unlock the safety clip on the pedestal head, thereby allowing the pedestal head to be unscrewed in order to fit one or more additional sleeves (C3) and coupler inverter (C4) up to a max height of 1120 mm.
- In the upper and external part of the base are two Lock and Unlock orifices providing access to two lock keys, which are arranged so as to lock the pedestal head and/or the sleeves after height adjustment of the pedestal head. The lock keys thus provide a simple and reliable way to keep the adjusted height in place. **Patented system.**

Base BC-5





- A new slope corrector from 0 to 5%, type BC-PH5 (patented) can be mounted under the pedestal head.
- Certified compression tests carried out with screwed pedestal base and head or with sleeves at different heights are available on request.



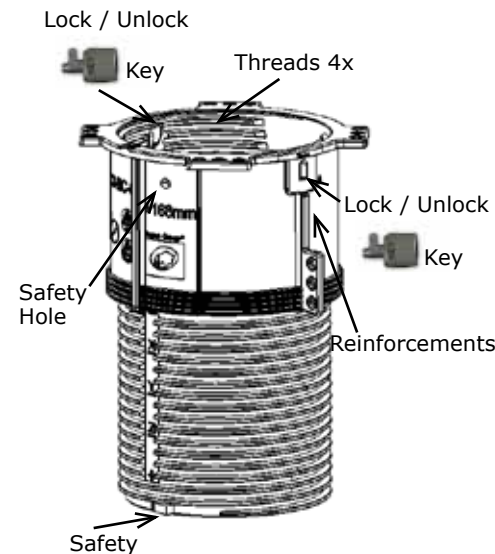
Slope corrector BC-PH5

2.) Sleeve in Polypropylene, adjustable by + 120 mm :

- Thickness: 4 mm - Cylinder diameter: 105 mm
- The sleeve (C3) is used for heights from 200 mm to 1030 mm and until 1120mm with coupler inverter (C4).
- The sleeve is fitted with 2 cylinders. These two cylinders are injection moulded in one piece. The multi-threaded lower part of the cylinder screws into the pedestal base and has a safety clip to prevent total unscrewing. The upper part of the cylinder has 4 threads for receiving the pedestal head or additional sleeves, and also a safety clip to prevent total unscrewing of the pedestal head or sleeve.
- The sleeve (C3) has 4 vertical reinforcement bars on the outside.
- At the centre of the internal cylinder is a 3 mm thick plate with reinforcement bars to ensure rigid locking. This plate is fitted with 8 holes to ensure proper rainwater drainage.
- On the upper cylinder of the sleeve (C3) are two Lock and Unlock orifices providing access to two lock keys to lock up the pedestal head or sleeves after height adjustment of the pedestal head or the screwed sleeves. These two lock keys thus provide a simple and reliable way to keep the adjusted height in place.

Patented system.

- The upper and external part of the sleeve has a small hole into which the pointed end of a nail can be inserted to unlock the safety clip, thereby allowing the pedestal head to be unscrewed in order to fit one or more additional sleeves (C3) and coupler inverter (C4) up to a max height of 1120 mm.
- Certified compression tests carried out with screwed base + sleeve (C3) + head at different heights (until 1030mm) are available on request.
- Certified compression tests carried out with screwed base + sleeve (C3) + Coupler Inverter (C4) + head at different heights (until 1120mm) are available on request.

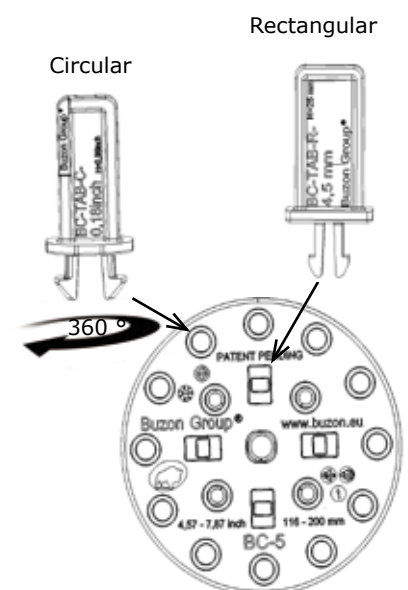


Sleeve C3-BC-5

3) Spacer tabs in POM :

Two types: circular and rectangular.

- Tab thickness = 2 - 4.5 (standard) - 6 - 8 or 10 mm
- The tabs are mechanically fixed to the pedestal head by simply clicking them into place.
- Part in high impact resistant POM material, in black colour.
- Circular tab with cylindrical base allows 360° rotation on the pedestal head for 30° / 45° / 60° / 90° / 120°, 145°, 150° or 180° angles . The circular tab can be rotated to easily adapt to the angle of triangular, circular, pentagonal, hexagonal, square, rectangular pavers or pavers of different shapes.
- Tab with rectangular base allows fixed mounting on the pedestal head for 90° or 180° angles and is used for applications using only square or rectangular pavers.





4) Lock key in PA-Nylon Patented system:

The keys are mounted after height adjustment of the BC series pedestal elements.

The lock keys are used to :

- a) Lock the pedestal head in the pedestal base.
- b) Lock the pedestal head in the sleeve.
- c) Lock the sleeve in the pedestal base.
- d) Interlock the sleeves screwed into each other.

In the upper and external part of the pedestal base and in the sleeves are two Lock and Unlock orifices providing access to two lock keys, which are arranged so as to lock the pedestal head after height adjustment of the pedestal head. The lock keys thus provide a simple and reliable way to keep the adjusted height in place.

Patented system.



Safety Keys

5) Slope corrector from 0 to 5% in Polypropylene :

- In talc-filled polypropylene copolymer, black colour.
- Consists of two cylinders factory assembled.
- Thickness of elements = 3 to 5 mm.
- Disc external diameter = 155 mm for mounting on top of the pedestal head.
- Assembly thickness at 0% = 13 mm to be added to the pedestal height.
- Assembly thickness at 5 % = 18 mm to be added to the pedestal height.

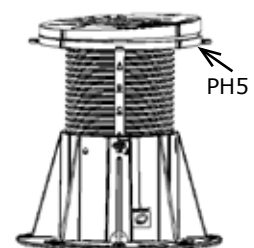
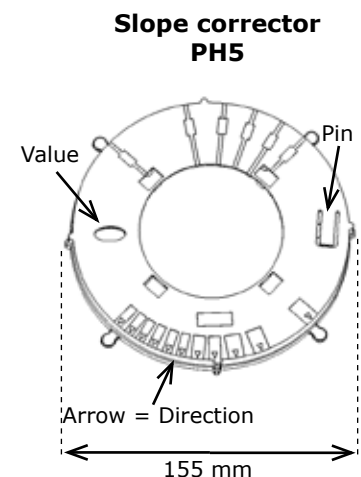
Slope corrector type PH5 is fixed to the pedestal head and compensates for horizontal slopes from 0 to 5%, allowing a perfectly level surface above the pedestal head to be achieved. It is used **only with rectangularly shaped tabs**.

Adapted to the head of the pedestal, the upper cylinder is adjustable through 360° to find the correct slope value, viewable through **an oval reading window**, allowing slopes of 0.5 / 1 / 1.5 / 2 / 2.5 / 3 / 3.5 / 4 / 4.5 / 5% to be corrected. (0 to 5 cm/m)

A pin holds the chosen value in place and prevents both cylinders from moving. Corrector PH5 can rotate on the pedestal head to enable it to be placed in the correct slope direction by means of an arrow indicating the value of the selected slope.

The complete pedestal assembly is then positioned in the direction of the slope to be corrected with the aid of the indicator arrow printed on the plate of the corrector with the value of the slope to be corrected. (from 0 to 5%). The pedestal will then be horizontal in all directions with respect to the slope to be offset.

The slope corrector should allow the adjustment of the gradient, WITHOUT the need to lift up part of the pedestal, meaning that slope corrector can be done, also with tile placed on the top of the pedestal, as this will significantly influence the speed of application.



6) BC-PH5 slope corrector from 0 to 5% in Polypropylene :

Corrector BC- PH5 is used **in combination with circular and rectangular tabs**.

- In talc-filled polypropylene copolymer, black colour.
- Composed of two cylinders with spacer is factory assembled.
- Thickness of elements = 3 to 5 mm
- Disc external diameter = 225
- Assembly thickness at 0% = 13 mm to be added to the pedestal height.
- Assembly thickness at 5 % = 18 mm to be added to the pedestal height.



Slope corrector BC-PH5 is mounted under the pedestal base and therefore in direct contact with the sloping ground. As a result, the pedestal mounted on slope corrector BC-PH5 (after correction) will always be positioned vertically (90°) with respect to the slope of the ground. The pedestal head will always be horizontal (0%) with respect to the slope of the ground.

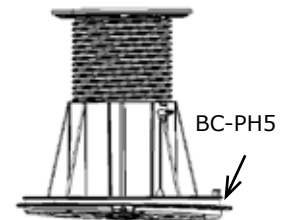
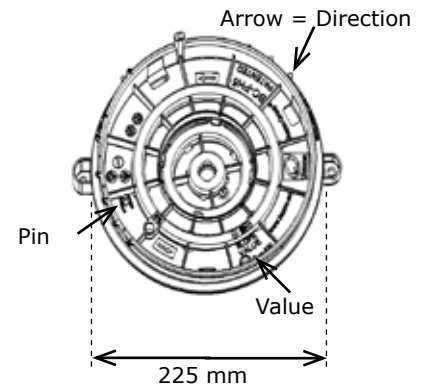
Slope corrector BC-PH5 allows slopes of 0.5 / 1 / 1.5 / 2 / 2.5 / 3 / 3.5 / 4 / 4.5 / 5% to be corrected.

The two cylinders are adjustable through 360°; a pin holds the value in place and prevents both cylinders from moving. The correct slope value can be viewed through an oval reading window. Example: for a 3% slope, both cylinders are rotated until they are positioned on the same value, i.e. 3% (both arrows on top of each other). Next, the complete BC-PH5 slope corrector assembly is positioned in the direction of the slope to be corrected with the aid of the indicator arrow printed on the lower plate of the corrector with the same value of the upper plate. The pedestal, mounted on slope corrector BC-PH5, will then be horizontal in all directions with respect to the slope to be offset.

Good practice requires that the ground must have a slope of at least 2% to ensure proper rainwater drainage.

A set of two BC-PH5 correctors allows slopes of up to 10% to be corrected.

Slope corrector BC-PH5



7) Reverse coupler C4-BC-INV adjustable by + 32 mm in Polypropylene :

- In talc-filled polypropylene copolymer, black colour
- Thickness: 5 mm
- External diameter = 105 mm

The coupler (C4) with reverse threading consists of two cylinders with multiple inner and outer threads, and is completely factory assembled.

The reverse coupler (C4) has two functions.

- a) It is suitable for use on pedestal type BC-4 for adjustment from 198 to 230 mm.
- b) It is always mounted on top of the last sleeve (C3) to facilitate fine height adjustment of the pedestal head by + 32 mm under pavers, gratings, raised floors or wood strip surfaces and/or for green terrace gratings.

The reverse coupler (C4) clicks into the base of pedestal type BC-4 or BC-5 and is held in place. Next, a pedestal head BC-4 or BC-5 and/or a sleeve is screwed **completely** into the upper part of the reverse coupler.

The reverse coupler (C4) is fitted with a safety system to prevent total unscrewing, so that at least 3 clamping threads are retained at all times.

The two parts of the reverse coupler (C4) have a 5 mm thick plate on the inside to rigidly attach them together. They are fitted with holes to ensure proper rainwater drainage.

The upper part of the reverse (C4) coupler has a small hole into which the pointed end of a nail can be inserted to unlock the safety clip, allowing the pedestal head to be unscrewed.

The mounting of the reverse coupler (C4) on the sleeve (C3) and of the pedestal head in the reverse coupler is explained in the attached reference sheet, AIP-7-BC.

Reverse coupler C4-BC-INV



8) Batten support plate, BC-Batten type :

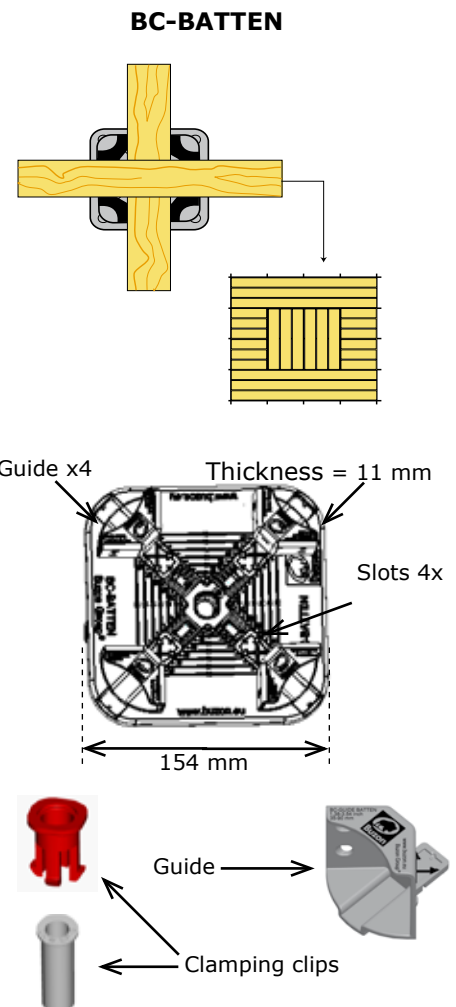
The batten support plate is used for wooden or composite terrace decks placed and mounted on battens.

The batten support plate is provided with adjustment guides from 35 to 90 mm and more, for receiving battens of different shapes and thicknesses. The battens are fastened to the adjustment guides with stainless steel screws.

Description :

- The batten support plate consists of 7 parts:
1 rectangular plate + 4 adjustment guides in Polypropylene for fixing the battens + 2 clamping clips in POM for fixing the batten plate to the Propylene pedestal head.
- Dimensions of the square-shaped plate = 154 x 154 x H 11 mm
- Plate surface = 240 cm² with reinforcement slots 3 mm in thickness.
- At the centre of the plate is a 15 mm diameter hole for mounting the 2 fixing clips on the pedestal head.
- The surface of the plate has 4 slots 75 mm in length for receiving the 4 adjustment guides.
- Dimensions of adjustment guides = triangular shaped parts, 30 x 50 x H 35mm, which click into the slot of the plate.
- The adjustment guides can receive battens of the following thicknesses : 35 / 40 / 45 / 50 / 55 / 60 / 65 / 70 / 75 / 80 / 85 / 90 mm and more.

The mounting of the battens on the batten support plate and the mounting on the pedestal is explained in the attached reference sheets, AIP-3-BC and AIP-16-BC.



9) Compression tests :

Three major types of test were carried out on each BC series pedestal type on :

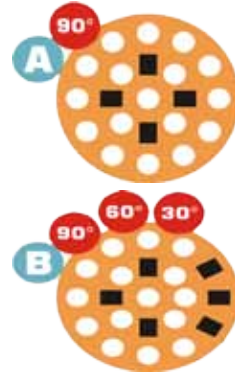
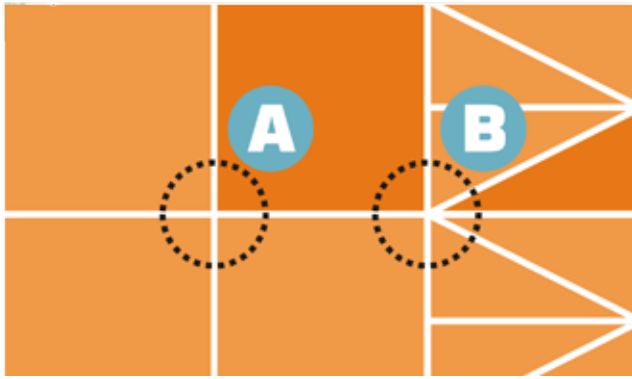
- a) The complete surface area of the pedestal head screwed to the pedestal base and at different heights.
- b) Half the surface area of the pedestal head screwed to the pedestal base and at different heights.
- c) A quarter of the surface area of the pedestal head screwed to the pedestal base and at different heights.

The test report was issued and certified by SIRRIS. www.sirris.be

The tests were carried out on a universal test machine, type Instron 1185 (ME002), of 100 kN capacity, equipped with an Instron load cell type 2525 – 801 code 200 (CE003) of 100 kN capacity. The load cells were calibrated by an accredited external laboratory (UKAS Lab n° 0019). The loading speed was 10 mm/min. Each type of pedestal was tested on the complete surface area of the pedestal (1/1), on half the surface area of the pedestal (1/2) and on a quarter of the surface area of the pedestal (1/4).

10) Applications :

a) Rectangular or square paver



b) Triangular paver



c) Hexagonal paver



d) Pentagonal paver

