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# COMPRESSION TEST ON PEDESTALS "BUZON" DPH5

### TEST REPORT N° GT 7660/01.

Number of pages: 4

Requested by: BUZON Pedestal International s.a. (BPI) Belgium

Z I des Hauts Sarts, zone 1 Prolongement Abbaye, 134 - B 4040 Herstal - www.bpi.be

## Description of the product tested:

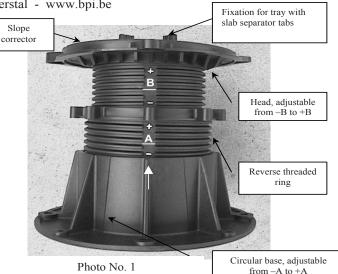
- A. The Buzon pedestals type DPH5, adjustable in height from 10 to 17 cm (with a corrector for slopes from 0 to 5% fixed on the head of the support), have a thickness of +/- 5 mm and are made up of 5 pieces: (photo No. 1)
  - A circular base (\angle 200 mm).
  - A reverse threaded ring screwed into the support base.
  - A circular head (Ø 150 mm).
  - A corrector for slopes from 0 to 5 cm / metre fixed to the support head.
  - A tray with four slab separator tabs that can be fitted to the head of the support.
- B. For adjustments above 17 cm, the DPH5 pedestal can be fitted with couplers, type C2/DPH5 (photo No. 2). The C2/DPH5 coupler, with a thickness of +/- 5 mm, is made up of a section with an outside thread that can be screwed into the reverse threaded ring and a section with an inside thread into which the head of the pedestal can be screwed.

The DPH5 pedestal is adjustable:

- with 1 coupler, from 17 to 29 cm
- with 2 couplers, from 24 to 40 cm
- with 3 couplers, from 32 to 52 cm
- with 4 couplers, from 39 to 62 cm
- with 5 couplers, from 46 to 75 cm



Photo No. 3



Date of report: 12-10-00

of a BUZON DPH5 pedestal, adjustable from 10 to 17 cm, in polypropylene

Details of the various parts



Coupler adjustable from – Z to + Z

Photo No. 2 Coupler, C2/DPH5, in polypropylene

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Etablissement reconnu par l'application de l'arrêté-loi du 30 Janvier 1947.

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The various parts of the BUZON DPH5 pedestals and C2/DPH5 couplers are made of polypropylene loaded with 20 % tale. The supports are manufactured for use in the making of roofing terraces, podiums, plinths and raised false floors etc.

### Safe value of permitted maximum compression loading for DPH5 and C2/DPH5

- <u>Safety level for pedestrian terraces:</u> divide the value of load shown in the table by **2**
- <u>Safety level for raised false floors</u> divide the value of load shown in the table by **4**

<u>Note</u>: The BUZON DPH5 pedestals in polypropylene are not designed to support machines or equipment that may subject them to vibration

#### 1.1 Method:

The tests were carried out on a universal testing machine, type Instron 1185 n $^{\circ}$  H - 4573, with a capacity of 100 kN, fitted with a 100 kN force transducer No. 2518 - 201. The tests were carried out in accordance with the manufacturer's recommendations. The loading speed was 10 mm/min.

The mean RUPTURE value, expressed in daN or en lbf, is the result of carrying out the test on 3 BUZON DPH5 supports and at different heights.

## 1.2 Test results

### 1.2.1 Load centred on the head of the pedestal



The load was applied directly over the entire surface of the head of the BUZON DPH5 pedestal by a steel block

Height of the DPH5	Number of couplers	% setting of slope corrector	Adjustment of the sections	Mean value of load at rupture, centered load	
				daN	lbf
← 17 cm	0	0 %	-A -B	1923	4240
17 cm	0	5 %	-A -B	1710	3770
↑ 28 cm	1	0 %	-A –Z -B	1690	3726
28 cm	1	5 %	-A –Z -B	1637	3608
→ 39 cm	2	0 %	-A-Z-Z-B	1627	3586
39 cm	2	5 %	-A-Z-Z-B	1597	3520
↓ 50 cm	3	0 %	-A-Z-Z-B	1577	3476
50 cm	3	5 %	-A-Z-Z-B	1540	3395
60 cm	4	0 %	-A-Z-ZZZ-B	1695	3737
60 cm	4	5	-A-Z-ZZZ-B	1522	3355
± 70 cm	5	0 %	-A-Z-Z—Z-ZZ-B	1573	3469
70 cm	5	5 %	-A-7-7—7-77-R	1403	3094

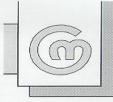
Note: 1 daN  $\sim$  1 kgf  $\sim$ 2.23 lbf

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# **COMPRESSION TEST ON "BUZON" PEDESTALS DPH5**

1.2.2 Eccentric loading: (applied to one quarter of the pedestal head)



Application of eccentric load



The load is applied to one quarter (90° sector) of the head of the BUZON DPH5 pedestal by a steel block

1.2.3 Eccentric loading: (applied to half of the pedestal head)

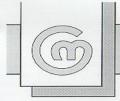


Application of eccentric load



The load is applied to half (180° sector) of the head of the BUZON DPH5 pedestal by a steel block





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# COMPRESSION TEST ON "BUZON" PEDESTALS DPH5

Eccentric load (applied to 1/4 of the head of the pedestal)

Height of the DPH5	Number of couplers	% setting of slope corrector	Adjustment of the sections	Mean value of load at rupture, eccentric load on 1/4 daN lbf	
← 17 cm	0	0 %	-A -B	838	1848
17 cm	0	5 %	-A -B	772	1701
↑ 28 cm	0	0 %	-A –Z -B	828	1826
28 cm	0	5%	-A -Z -B	838	1848
→ 39 cm	2	0	-A-Z-Z-B	813	1793
39 cm	2	5	-A-Z-Z-B	832	1834
↓ 50 cm	3	0	-A-Z-Z-B	787	1734
50 cm	3	5	-A-Z-Z-B	835	1841
60 cm	4	0	-A-Z-ZZZ-B	832	1834
60 cm	4	5	-A-Z-ZZZ-B	808	1782
± 70 cm	5	0	-A-Z-Z—Z-ZZ-B	792	1745
70 cm	5	5	-A-Z-Z—Z-ZZ-B	807	1778

Eccentric load (applied to ½ of the head of the pedestal)

Height of the DPH5	Number of couplers	% setting of slope corrector	Adjustment of the sections	Mean value of load at rupture, eccentric load on 1/2	
				daN	lbf
← 17 cm	0	0 %	-A -B	1372	3024
17 cm	0	5 %	-A -B	1215	2679
↑ 28 cm	0	0 %	-A -Z -B	1317	2903
28 cm	0	5%	-A –Z -B	1308	2884
→ 39 cm	2	0	-A-Z-Z-B	1272	2804
39 cm	2	5	-A-Z-Z-B	1252	2759
↓ 50 cm	3	0	-A-Z-Z-B	1280	2822
50 cm	3	5	-A-Z-Z-Z-B	1230	2712
60 cm	4	0	-A-Z-ZZZ-B	1220	2690
60 cm	4	5	-A-Z-ZZZ-B	1195	2635
± 70 cm	5	0	-A-Z-Z—Z-ZZ-B	1202	2649
70 cm	5	5	-A-Z-Z—Z-ZZ-B	1135	2502

Note:  $1 \text{ daN} \sim 1 \text{ kgf} \sim 2.23 \text{ lbf}$ 

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Head of laboratory: Dr. Ir. J.F. LUCARELLI

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