Levelling Shims - Heavy Duty Plain

Description

Heavy duty plain levelling shims are used for alignment and levelling of heavy section steel plate and pre-cast concrete sections.

Manufactured from high strength, impact modified, rigid plastic they are able to withstand high loads without distortion or breakage. The shims are also fully resistant to corrosion.

Sizing & Packing

Item-No.	Thickness mm	Dimension mm	Pcs/ Bag	Pcs/ Pallet
PS2	2	70x70	125	15,000
PS3	3	70x70	125	15,000
PS4	4	70x70	125	15,000
PS5	5	70x70	125	15,000
PS6	6	70x70	125	15,000
PS7	7	70x70	125	15,000
PS8	8	70x70	125	12,000
PS9	9	70x70	50	12'000
PS10	10	70x70	125	10'000
PS12	12	70x70	125	8'000
PS15	15	70x70	50	8'000
PS20	20	70x70	50	6'000

Material:

- Polystyrol (PS)
- Free of PVC, CFC, HFC
- No substances of high concern according to candidate list of ECHA (REACH Regulations)

Packaging:
Free of halogenated products, azo dye & fire protection agents

Testing: Tested to a loading of >50kN.(see Kiwa rest report)

Note: In the absence of a specific harmonised European standard (hEN) or European Technical Approval (ETA), a CE Mark is not required.

Report of Test Results

Assignment No:
M 0446 / 2014

Client
Bluebay Building
Products

Assignment of		
Test objects	:	17 November 2014
Assignment	:	Underlay mountings plates
	:	To determine deformation under load/
Test performed on Test		pressure load
performed by Test	:	18 November 2014
period	:	Kiwa GmbH, Munich branch
	:	November 2014

Garching, 30 May 2014
ma/mz

pp.
Dipl.-Ing. (FH) Andreas Matzner
- Head of concrete and engineering construction -

pp.
Peter Maier
- Project handler –

This test report comprises 8 pages.
The test results relate to the sample material that was presented for testing. The test material was used up.

Opinions and interpretations of the test centre are indicated pursuant to DIN EN ISO/IEC 17 025 point 5.10.5 by the use of *italics*.

Contents

Annex:

- Photographs

1 General

Kiwa GmbH was instructed by Bluebay Building Products to determine the stress capacity/deformation under load of underlay mounting plates.

Mounting plates were supplied by Bluebay on 17 November 2014 for this purpose. The plates supplied were as follows:

5x UP 02 A solid plate

5x UP 05 A solid plate

5x UP 10 A solid plate

5x UP 10 NA lightweight plate

5x UP 15 A solid plate

5x UP 15 NA lightweight plate

5x UP 20 A solid plate

5x UP 20 NA lightweight plate

All samples were taken and all tests performed by personnel and with apparatus from our laboratory in Garching.

2 Test procedure

The following mounting plates were selected for the test:

3x UP 15 NA lightweight plate

3x UP 20 A solid plate

3x UP 20 NA lightweight plate

The mounting plates were photographed against a measurement scale prior to testing and checked for flatness.

The plates were then subjected to loads of 20 KN = 2t and 50 KN = 5t in the test press and their deformation subsequently inspected.

At the end of the test sequence, a load was applied to the plates until they reached deformation, and the deformation recorded.

3 Test results

3.1 Pressure load test

Plate	UP 20 NA Lightweight		
No.	1	2	3
Dimensions	69 x 69 x 20	69 x 69 x 20	69 x 69 x 20
At 20 KN pressure	69 x 69 x 20	69 x 69 x 20	69 x 69 x 20
At 50 KN pressure	69 x 69 x 20	69 x 69 x 20	69 x 69 x 20
At maximum load of 247 KN	72 x 72 x 18	-	-

Plate	UP 20 A Solid		
No.	1	2	3
Dimensions	69 x 69 x 20	69 x 69 x 20	69 x 69 x 20
At 20 KN pressure	69 x 69 x 20	69 x 69 x 20	69 x 69 x 20
At 50 KN pressure	69 x 69 x 20	69 x 69 x 20	69 x 69 x 20
At maximum load of 201 KN	69 x 69 x 20	-	-

Plate	UP 15 NA Lightweight		
No.	1	2	3
Dimensions	69.5 x 69.5 x 15	69.5 x 69.5 x 15	69.5 x 69.5 x 15
At 20 KN pressure	69.5 x 69.5 x 15	69.5 x 69.5 x 15	69.5 x 69.5 x 15
At 50 KN pressure	69.5 x 69.5 x 15	69.5 x 69.5 x 15	69.5 x 69.5 x 15
At maximum load of 174 KN	70 x 70 x 14.5	-	-

4. Remarks

The mounting plates of various thicknesses display no deformation at a pressure load of 50 KN.

Garching, 18. November 2014

Kiwa GmbH

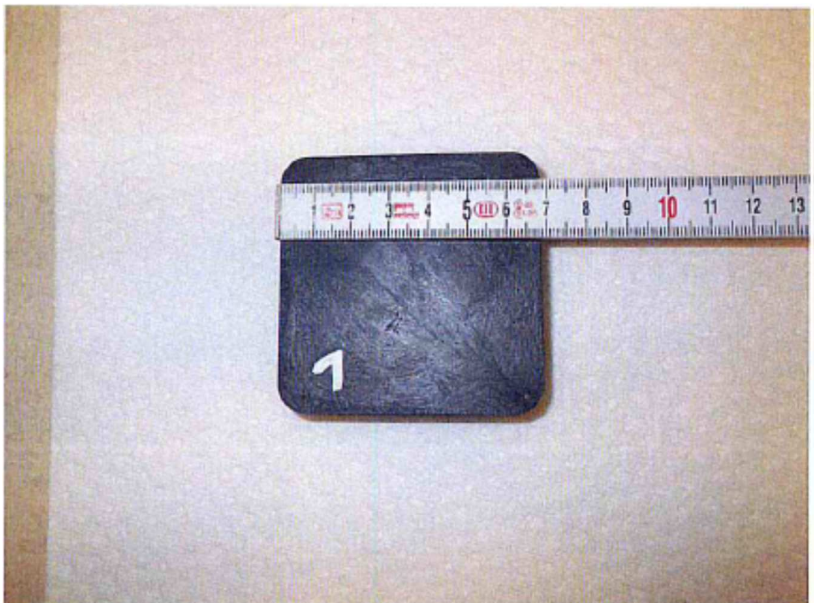

Fig. 1: Mounting plate UP 20 NA lightweight before load test.

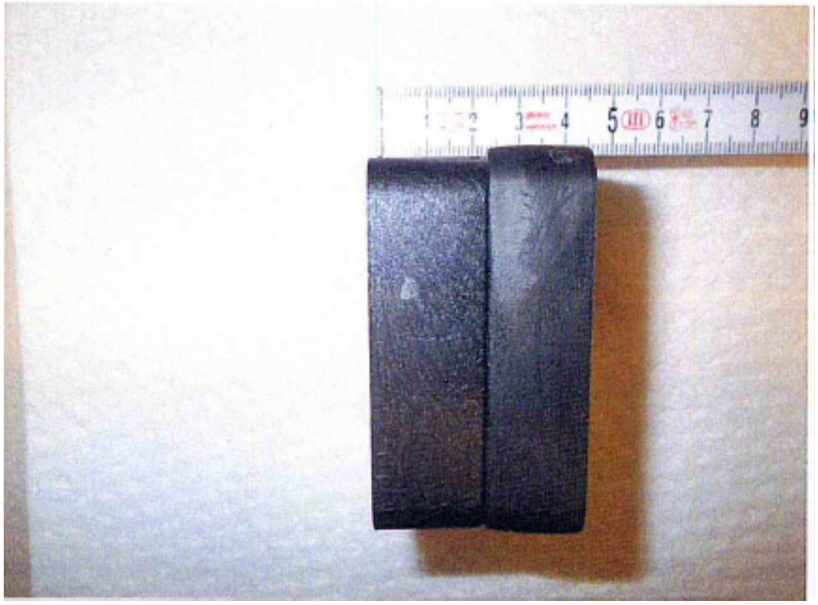

Fig. 2: Mounting plate UP 20 NA lightweight after maximum stress, with distinctly discernible deformation in the plate on the right.

Fig. 3: Mounting plate UP 15 NA lightweight before load test.

Fig. 4: Mounting plate UP 15 NA lightweight after maximum stress, with slight discernible deformation.