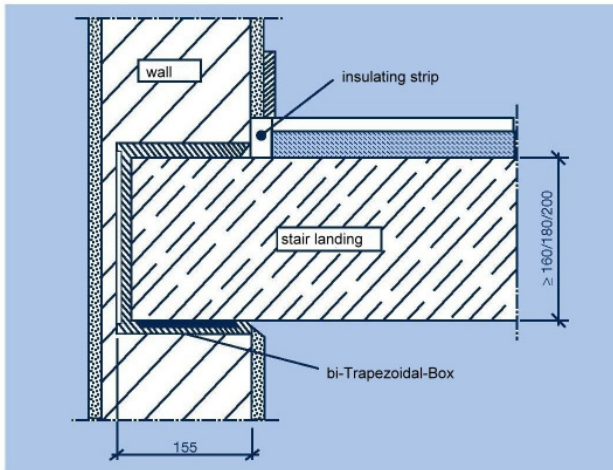


# Calenberg bi-Trapezoidal-Box<sup>®</sup>

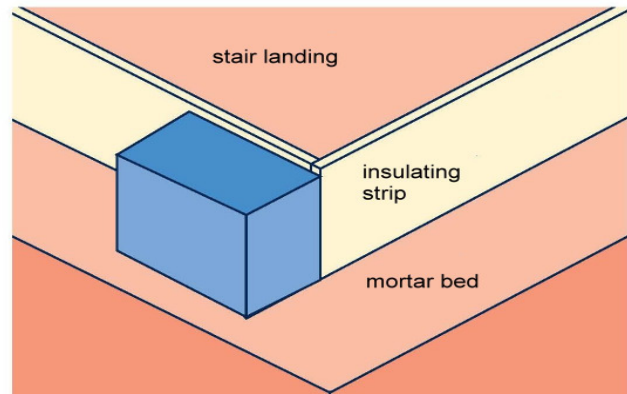
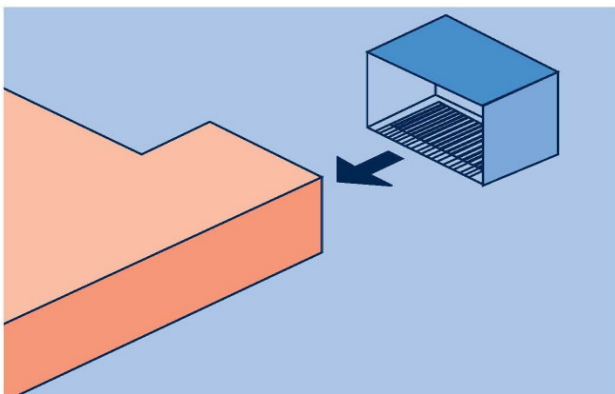
reliable footstep sound insulation of reinforced concrete stairs and stair landings



| Type<br>(F / S) * | Inside<br>dimensions<br>[mm] |       |       | Outside<br>dimensions<br>[mm] |       |       | Landing<br>thick-<br>ness<br>[mm] | Ideal<br>load<br>range<br>[kN/Box] | Footstep sound<br>reduction<br>according<br>to DIN 52210<br>[dB] | Insulation<br>degree<br>[%] | De-<br>flection<br>[mm] |
|-------------------|------------------------------|-------|-------|-------------------------------|-------|-------|-----------------------------------|------------------------------------|--|-----------------------------|-------------------------|
|                   | height                       | width | depth | height                        | width | depth |                                   |                                    |  |                             |                         |
| B 1000-16         | 160                          | 250   | 140   | 187                           | 274   | 155   | ≥ 160                             | 10 - 20                            | 23   | 87                          | 2,5                     |
| B 1000-18         | 180                          |       |       | 207                           |       |       | ≥ 180                             |                                    |  |                             |                         |
| B 1000-20         | 200                          |       |       | 227                           |       |       | ≥ 200                             |                                    |  |                             |                         |

permissible load: 200 kN/Box

\* Type F: For precast construction  
 Type S: For in-situ construction by using a one off polystyrene block



#### In the precast concrete plant:

- Consider the inside dimensions of the bi-Trapezoidal Box when making the landing brackets
- Push the bi-Trapezoidal-Box onto the landing bracket (notice marking "this side up") once concrete has hardened

#### At the constructions site:

- Position landing bracket onto mortar bed
- Close surrounding joint with insulating strips



#### Accessories of the bi-Trapezoidal-Box, Type S:

- bi-Trapezoidal-Box with board covering for the bearing
- Polystyrene block
- 4 nails for fixing the polystyrene block to the formwork
- Data sheet with mounting guidelines

The load will be carried by the reliable bi-Trapezoidal bearing with official certificate No. 849.0554/1. More technical details please take from the product information of the bi-Trapezoidal bearing.

By request the bi-Trapezoidal-Box can be provided with additional bearing elements, so that also negative or horizontal forces can be taken up.

#### Mounting guidelines

##### In-situ construction:

- Fix polystyrene block to the formwork by using the provided nails.
- Put the bi-Trapezoidal-Box over the polystyrene block till it flushes with the formwork. At this the right positioning of the bearing is important.
- After concreting and stripping remove the polystyrene block.

##### Masonry:

- Put the bi-Trapezoidal-Box with inserted polystyrene block onto the mortar bed and immure it. After hardening of the mortar remove the polystyrene block. In this case the 4 provided nails are not needed.

#### Standards, Certification, Approval of Suitability

Test Report No. 2729/1054 and Experts opinion No. 2729/1054-1: Measurements of natural frequencies as function of load, measurements of structure born sound insulation according to DIN 52221 and foot step sound insulation to DIN 52210 part 1; July 1994.

Official Certification No. P-849.0554/1: Material Testing Institute of the University of Hannover, July 2000

Fire Resistance Judgement No. 3799/7357-AR-: Judgement of Calenberg elastomer bearings in regard to classification in fire resistance class F 90 resp. F 120 according to DIN 4102 part 2 (edition 9/1977); Official Material Testing Institute of Civil Engineering and Building Construction, Technical University of Braunschweig; March 2005

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