

Installation Assembling Instruction of



BOEN Sports floor Doubleflex Athletic

Model Doubleflex Athletic consists of:

- prefabricated assembling unit "double swing beam" 4000 x 97 x 46 mm
- counter floor moduls 4500 x 97 x 16 mm
- polyethylene foil 0,05 mm
- particle boards (chip boards) V100 E 1, with tongue and groove, 2050 x 925 x 16 mm

General preparation / conditions

Before starting with the installation the consignment of the a.m. material has to be checked with regard to

1. completeness
2. quantity
3. quality.

It has to be ensured that all material will be stored in clean, dry and locked rooms. Already during the installation the climate in the hall should be ca. 18° C and the relative air humidity should be ca. 55 % to be kept on a constant level. Provided a floor heating is to be

installed, the heating should already be in use.

In the storing rooms, in the areas of storing telescopic seatings rigid constructions should be provided.

1. Checking the subbase

Model Doubleflex Athletic has to be laid on a clean and dry subbase. If necessary a sufficient vapour barrier or sealing against rising dampness has to be granted. For the evenness of the subfloor we refer to DIN 18202, 1997-04 Tab.3. Please see also item 3.2. equalizing.

2. Rigid support

2 boards of pinewood (4500 x 97 x 16 mm) are screwed together on site; Distance of the screws: 500 mm. The boards are screwed together in a displaced way with an overlapping part of 200 mm.

The rigid beams are laid out alongside the hall on both sides with a distance to the wall of 50 mm.

side 1

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3. Double swing beams (4000 x 97 x 46 mm)

3.1. Laying out the double swing beams (distance centre/centre: 450 mm)

The 1st row of the double swing beams is laid out to the direction of the length side of the hall. Distance double swing beam – rigid beam: 450 mm spacing centre/centre.

The first rubber pad of the double swing beam which is next to the wall is replaced by a rigid wooden piece as close to the wall a rigid construction is necessary.

The 2nd row of the double beams is laid out intermittently displaced of the first row with a distance of 250 mm (longitudinal direction) = half distance of the rubber pad. Coming to the first side the rubber pad of double swing beam is replaced by a wooden beam as described above. The distance between the double swing beam is spacing centre/centre 450 mm.

Then the laying out of the swing beams is continued as mentioned above until the other side of the hall is reached whereas the 3rd row is laid out in the same way than the 1st row, the 4th row is laid out in the same way of the 2nd row.

3.2. Equalizing

After having laid out the double swing beams and the rigid beams the so-called equalizing of the construction has to be done, by laying specially prepared equalizing material (wool felt strips, wooden blocks) under each rubber pad of the double swing beams.

The equalizing material is glued together on both sides in order to avoid a moving away. From a height of 20 mm and more the equalizing material is fixed with nails or clips on both sides too in addition to the glue.

4. Counter floor module (4500 x 97 x 16 mm)

The counter floor beams are nailed crosswise onto the double swing beams.

Distance spacing centre/centre: 146,43 mm.

Length of the particle board = 2050 mm : 14 beams = 146,43 mm.

The counter floor beams are laid out intermittently displaced in each row with a distance of 900 mm (longitudinal direction) and nailed each with 2 pieces of T-nails 2,2 x 32 mm onto the double swing beam. Distance to the wall: spacing 20 mm.

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5. Polyethylene foil (0,05 mm thick)

The polyethylene foil is loosely laid out. An over-lapping of 100 mm on the joints has to be considered.

6. Particle board with tongue and groove (2050 x 925 x 16 mm)

The chipboards are laid out where the longitudinal side of the chipboard is displaced to the counter floor in an angle of 90°.

The chipboards are also laid out intermittently displaced (staggered) whereas the distance is half a side of the length of the board.

Tongue and groove of the chipboards are not glued.

The chipboards are screwed onto the counter floor:

- with screws 4,2 x 35 mm
- distance between the screws and the edge of the chipboard 20 mm
- on the longitudinal side the chipboard is screwed onto each counter floor beam
- crosswise with a distance of the screws of 147 mm
- in the interior part of the chipboard it is screwed onto each 3rd counter floor module in a distance of 300 mm.

The holes of the screws and the seams (joints) of the plywood-boards have to be sanded and filled with a spatula and sanded again if necessary.