

ARENA MASTER, PORTABLE SPORTS FLOOR SPECIFIER'S AND INSTALLATION INSTRUCTIONS

INFORMATION ARENA MASTER

D 1.0	General information, Sports floor systems
D 13.1	Specifier's and Installation instructions

Table 1

Underneath each floor panel is fitted four sheets of birch plywood, 12 mm thick. These give the panels a great deal of strength and durability. The panels are reinforced in each end with aluminum profiles.

Construction height: 49 mm including foam (34 mm when installed on turf).

Underlay:

The panels are installed on top of a 15 mm polyethylene foam layer to provide the correct amount of shock absorption and resilience.

Installation on turf:

If the floor system is installed on top of turf, the 15mm foam is not used as an intermediate layer and the panels are installed on a 0.20 mm moisture barrier only.

Performance:

The floor is categorized as area elastic with medium shock absorbency and elasticity suitable for ball games, fitness and aerobics as well as a temporary use, e.g. international tournaments requiring special game lines. The floor system fully conforms to EN 14904:A3.

Flexible installation - CenterRow panels:

For faster and more flexible installation ask for Junckers CenterRow Panels that makes two way installation possible.

Transition ramp:

A transition ramp around the floor provides a strong, protective and firm edge to the perimeter.

Storage carts:

Junckers custom designed storage carts make transportation and storage of the panels easy.

Read all information:

Please note that full documentation of this floor system comprises General information and Specifier's and Installation instructions, see table 1.

1. SYSTEM SPECIFICATION

Panel construction:

Junckers Arena Master Portable Sports Floor is based on 22 mm solid hardwood floorboards, prefabricated into light weight panels. Each floor panel is easily locked into position by means of factory fitted metal brackets.

Lengthwise the panels have a tongue and groove connection and at ends the panels are joined using loose tongues.

2. GENERAL REQUIREMENTS

Climatic Conditions:

The relative humidity in the building should be between 35 and 65 %. The temperature should be between 18 and 25 °C. The system must be stored and/or acclimated in the same climatic environment in which it will be installed, in order to avoid initial cupping of the panels due to sudden changes in the relative humidity.

Time frame for use:

The floor is recommended for use up to 12 weeks. If longer down time is required, please consult our Technical department.

Flatness of the subfloor: The subfloor must be flat according to recommendation in section 8, Flatness of the subfloor.

Backstops and heavy equipment:

If portable backstops will be placed on the floor, plywood blocking must be used in lieu of the foam in the area beneath the backstop. Typically, a 2.4 x 2.4 m plywood footprint matching the thickness of the foam is required for each portable backstop.

When moving heavy equipment across the floor, i.e., backstops and scissor lifts, 1 layer of 18 mm plywood "tracks" must always be used to protect the playing surface.

Painted areas and on-site applied lacquer

For heavily painted areas and floors with on-site applied lacquer, a roller application method must be used. To prevent / minimize sidebonding of the panels, the floor must be disassembled within the first 72 hours after paint / lacquer has been applied. Use a utility knife to score the paint / lacquer to create a clean break between the panels the first time the floor is disassembled. Keep recommended Paint / lacquer consumption per m².

3. FLOOR COMPONENTS - ARENA MASTER

1. **Junckers 22 mm solid 2-strip floor panels.**

Wood species, grade and surface:

- Beech Premium, Silk matt
- Maple Champion, Silk matt

Width x length:

- Full size 0.93 m²: 517.5x1800 mm
- Half size 0.47 m²: 517.5x900 mm

2. **Assembly brackets**

Prefixed metal brackets.

3. **Plywood**

4 sheets of prefixed birch plywood, 12 mm + reinforcement in each end of the panel with aluminum profiles.

4. **Resilient underlay**

Junckers 15 mm Sports Foam

5. **Moisture barrier on concrete**

Junckers 0.20 mm PE membrane

6. **Transition ramp**

Black painted aluminium.

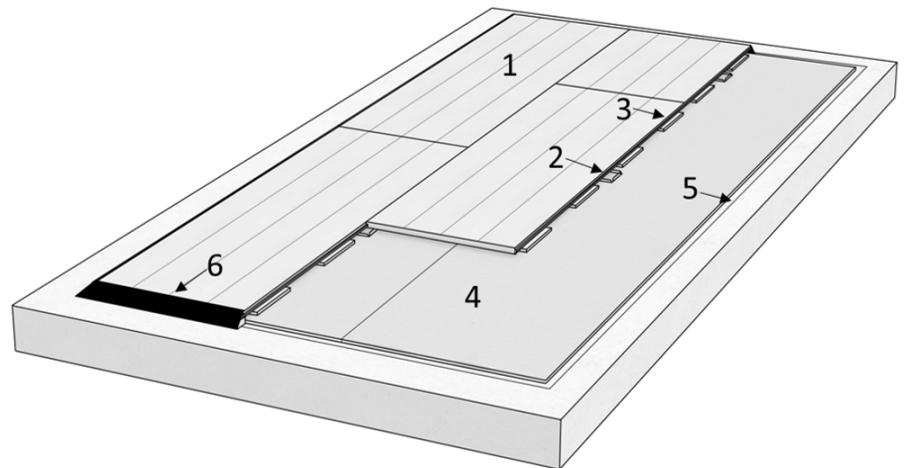


Fig. 1

4. LOAD-BEARING STRENGTH OF THE SYSTEM

Load-bearing strength of the system depends on the type of load, see table 1.
 See also data sheet D 1.0 - Stiffness and load-bearing strength of floors.

TABLE 2	Loading types			
	System	Area load Per m ²	Point load ø25 mm	Point load 100x100 mm
ARENA MASTER	1.000 kg	350 kg	500 kg	See D 1.0 Table 1

5. CHOICE OF SUB FLOOR

- Dry self-supporting subfloor made of concrete or lightweight concrete
- Existing hard floors
- Soft surfaces / point elastic floors like rubber or vinyl
- Turf and ice rinks

6. BEFORE BEGINNING TO INSTALL THE FLOOR

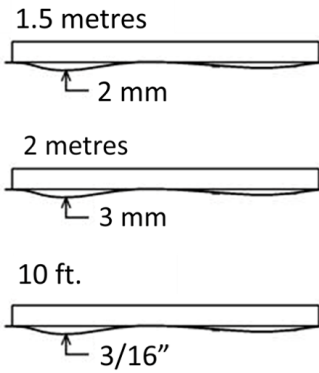
The building must be weather tight. The heating system must be installed and tested. During the heating season there should be a constant heat supply. Cast concrete elements, including casting of sockets for fixtures and fittings, screeding and other wet trades which can contribute moisture to the building, e.g. priming of paintwork, must also be completed.

The relative humidity in the building must be within the relative humidity interval expected, when the building is in use and the room temperature approx. 20 °C.

7. MOISTURE PROTECTION

The residual moisture contained in the concrete or screed must not exceed 90 % RH. (UK: 75 % acc. To BS 8201).

On concrete sub floors with risk of moisture penetration, a moisture barrier of 0.20 mm PE membrane, e.g. Junckers Moisture Barrier, is laid directly on the sub floor with a 200 mm overlap.



8. FLATNESS OF THE SUB FLOOR

The subfloor must be levelled so that any deviations in the flatness do not conflict with the requirements of the method stated below.

Straight edge:

The subfloor must be flat with a maximum deviation of 2 mm under a 1.5 m straight edge.

(UK: 3 mm under a 2 m straight edge).

(US: 3/16" under a 10 ft. straight edge).

Deviations are measured as gaps under the straight edge. The surface must be smooth. Any irregularities must be corrected by grinding or by using a self levelling compound.

9. NET CONSUMPTION OF MATERIALS

Net consumption for a basketball court according to the official FIBA rules 19 x 32 metres (including a 2 metres safety zone around the court):

Full size panels: 648 pcs.

Half size panels: 36 pcs.

Loose tongues: 684 pcs.

Sports Foam 15 mm: 632 m² (9 rolls of 75 m²)

Moisture barrier, 0,2 mm PE-foil: 700 m² incl. overlaps.

Extracting hook: For extracting loose tongues when dismantling the floor.

Skirting/Reducer: 50 pcs + 4 left- and 4 right corner pcs.

Optional:

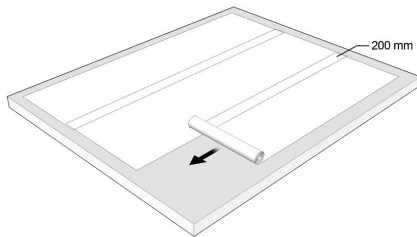
Center Row panels.

Storage carts. One cart stores 40 full size panels.

The calculated floor area:

The calculated m² of the floor will due to the floor panel size in most cases be slightly larger than the specified floor area. E.g. the above mentioned basketball court is 19.15 x 32.4 metres.

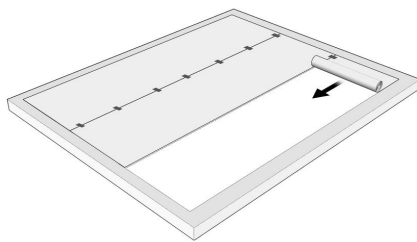
HOW TO INSTALL THE FLOOR



1. MOISTURE BARRIER

A moisture barrier of min. 0.20 mm PE membrane is laid, e.g. Junckers Moisture Barrier.

The moisture barrier is laid with an overlap of 200 mm at all joints. The polythene has to be taped at all lap joints using a tape 50 mm wide.



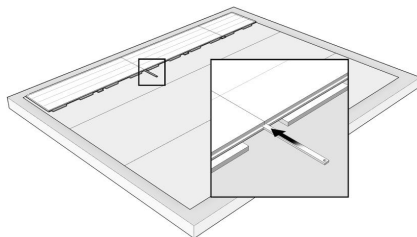
2. SPORTSFOAM

Junckers Sportsfoam mat is laid parallel to the laying direction of the panels with joints fully closed and taped in place.

Floors subject to heavy loads

By heavy loads from e.g. portable basketball backstops, etc., the resilient foam along the perimeter of the floor and under the backstops can be replaced by plywood.

This prevents undesirable deformation of and thereby damage to the panels.



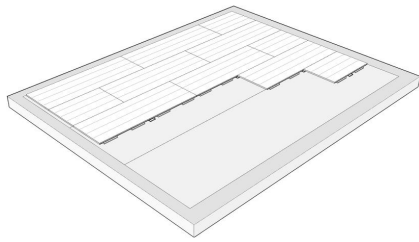
3. INSTALLATION - FIRST ROW

Keep a 500 mm distance to the wall and fixed installations in order to allow free access and mounting of loose tongues.

The first row of panels is laid in a straight line with the metal bracket pointing in the laying direction.

The panels are joined at ends by using loose joining tongues (See the small drawing).

All the panels should be numbered on the back side or on the metal bracket, to ensure that they are correctly placed each time the floor is laid, so that line markings, etc. are aligned.

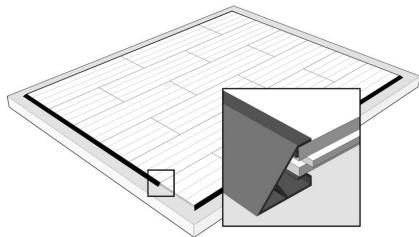


4. INSTALLATION - THE FOLLOWING ROWS

The panels are laid in an interlocking pattern so that all end joints are staggered 900 mm from row to row.

The panels are pressed close together in lengthwise tongue and groove joints before they are pressed down into the metal bracket.

Panels without the metal bracket are used for the last row.

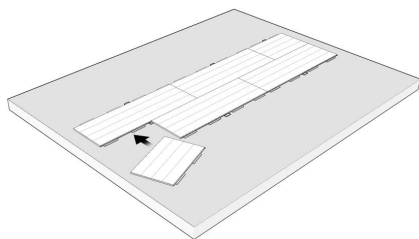


5. SUPPORTING TRANSITION RAMP

A supporting and protecting transition ramp forms a strong edge of the floor perimeter.

Start with the 8 corner profiles and then adjust the ramp. Use a rubber hammer if necessary.

Make sure the ramp is in correct position in order to support the panels (see small picture).

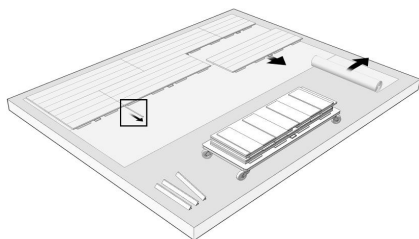


6. FLEXIBLE INSTALLATION - CENTER ROW PANELS

Centre Row panels are available on request with this floor system.

These panels come with metal brackets on each side and are laid out in the middle/centre of the floor as a starting row.

In this way two installation teams can work at the same time.



7. DISMANTLING

Remove loose joining tongues using the removal hook, and dismantle the panels row by row starting with the last installed panel.

Carefully take up the panels and stack them in the storage carts. Front against front and back against back.

The Sports Foam is rolled up and stored in an upright position.

The panels must be stored in the same relative humidity as when the floor is in use.