# Specifications for HARO Sports floor Melbourne 65

## PART 1 - GENERAL

1.01 DESCRIPTION

A. Related work specified under other sections.

B. CONCRETE SUBFLOORS

a) Depression: Slab depression is minimum 67mm

b) Tolerances: The general contractor shall furnish and install the concrete subfloor depressing the slab sufficiently to accommodate the floor system. The slab should be level within following tolerances according to DIN 18032, part II and DIN 18202:1997-04, figure 3:

3mm (1/8'') in a radius of 1 meter (3' 3'')
9mm (3/8'') in a radius of 4 meter (13' 1'')
12mm (1/2'') in a radius of 10 meter (39' 4'')
15mm (5/8'') in a radius of 15 meter (49' 2'')

For USA: Concrete tolerance 1/8" in radius of 10'

Differing spots shall be ground level, and low spots filled in with approved levelling compound by the general contractor.

c) Waterproof: On or below grade concrete sub-floors are generally acceptable if an effective moisture barrier is installed. Concrete subfloors on or below grade shall be adequately waterproofed beneath the slab and at the perimeter walls and on earth side of below grade walls by general contractor using suitable type membrane.

d) Moisture content of sub-floor: Concrete subfloors must not contain more than 2,5% moisture content (appropriate test method). Moisture content of wooden subfloors should be between 6-10%.

e) The subfloor must be clean.

1.0.2 QUALITY ASSURANCE

A. Floor System Manufacturer Qualifications

1. Manufacturer shall be an established firm experienced in field and have been in business under the same corporate name for a minimum of ten (10) years.
2. Manufacturer must meet qualifications of ISO 9001 and 14001.
3. Manufacturer shall submit a list of projects where the specified flooring has been installed.
4. Offered sports floors accredited by the World Squash Federation
5. Sportsfloor should be under permanent supervision of RAL and be marked with the RAL certificate RAL-GZ 942

B. Performance Qualifications of Flooring System

1. Floor system must exceed the requirements of DIN V 18032-2 Part II, as set out below.
   a. Shock Absorption: shall be minimum of 53%.

b. Ball Return: shall be a minimum of 90%.
c. Deflection: shall be minimum of 2.3mm.
d. Area of Deflection: shall be maximum of 15%.
e. Friction: Range 0.4 - 0.6 per DIN Test Method.
f. Rolling Load: 1500 Newton Load without damage

1.0.3 BIDDER MUST PROVIDE EVIDENCE OF ANY DEVIATION from these specifications including detailed drawings and statements itemising, where products deviate from or exceed these specifications. This data shall be provided with bid.

1.0.4 SUBMITTALS

a) The Bidder must include the attached Supplemental Pricing Sheet containing detailed costs in an itemised format. Final Purchase Price shall include all freight to Site, Taxes and Duty. It is intended that a final price be submitted.

b) The Bidder must describe any potential problems, which may impact the delivery date.

c) Manufacturer shall provide written evidence of previous installations of this floor currently in use. Installation shall have taken place within the past ten (10) years. This information shall be submitted with this bid. The Bidder must include a minimum of five (5) references for comparable systems and installation efforts successfully performed by the Bidder within the last 18 months.

d) Each Bidder is required to provide the following information in the amounts requested. Bidders who fail to provide any of the submittals requested will not be given consideration.

Submit three (3) copies of the Bid Form/Quotation Sheet.

Submit three (3) copies of manufacturer's descriptive literature and manufacturer's fabrication specifications.

Submit three (3) copies of manufacturer's warranty if different from the Vendor's Warranty as required in the Terms and Conditions.

1.0.5 DELIVERY, STORAGE AND HANDLING

A. Delivery of Materials
Materials shall not be delivered, stored or installed until all painting and plastering work has been completed, and all overhead mechanical work like lighting, backstops, scoreboards are installed. A room temperature of 18-22 degrees Celsius (64 to 72 degrees Fahrenheit) and a relative humidity of 45-55 % are to be maintained.
B. Materials shall not be stored at the installation location if the moisture content of the concrete slab differs from paragraph 1.0.1.d. „Moisture content of sub-floor".

1.0.6 JOB SITE CONDITIONS

Before installing a floor, inspect the job site thoroughly. Carefully inspect the outside surroundings for improper drainage and predictable or obvious sources of moisture. Be sure that, as a minimum, any concrete subfloor is at least 50-60 days old before installing a wood floor over it and the requirements of 1.0.1 B "CONCRETE SUBFLOORS" are met.

1.0.7 GUARANTEE

Hamberger Industries GmbH, of Rosenheim, Germany, warrants the model Melbourne materials to be free from manufacturing defects for a period of 5 years.

The Warranty does not cover problems caused in whole or in part by accident, circumstances beyond control, neglect, negligence, ordinary wear and tear, abuse, use for which the material is not designed,

faulty construction of the building, settlement of the building walls, failure of other contractors to adhere to specifications, separation of the concrete slab, mechanical failure, excessive dryness, or excessive moisture from humidity, spillage, migration through the slab or walls, or any other source (the excluded conditions).

This warranty is in lieu of all other warranties whether oral, written, expressed, implied or statutory, including but not limiting any warranty of merchantability or fitness for a particular purpose, and of any other obligation on the part of Hamberger Industries GmbH.

Any and all representations, promises, warranties, or statement by the installer or by any other party that differ in any manner from the terms of this written warranty shall be at no force or effect.

# Part 2 Products

A. Moisture barrier
1.) 6-mil polyethylene or
2.) PVC-Foil, 0,5 mm or
3.) Bituminous coating V60S4, 4mm thick

B. HARO Sports Floor Model Melbourne 65
HARO elastic batten,
HARO counterfloor module and
HARO hardwood floor
- surface elastic
- ventilated

## Assembly and construction

1.1) Elastic construction

- Module-unit HARO elastic batten
  consisting of:
- HARO sprung element consisting of Regupol pads made of EPDM granules and PUR binder; thickness: 20 mm/unit weight: 700 kg/m3
- beam 4000 x 96 x 17 mm

- HARO Counterfloor-Module
  Measurements: 4000 x 96 x 17 mm
  The counter-floor-module is staggered in the jointing area and nailed crosswise onto the module unit double swing beam.

- Polyethylene foil 0,03 mm thick

- HARO SPORTS hardwood floor
Fabrication shall consist of a construction with 9 mm plywood BFU 100, acc. to DIN 68705, part 3 and 3.6 mm wear layer, kiln dried, tongue and groove made of plywood. The plywood should be a 7 ply northern birch plywood, using exterior grade (water resistant) glue. All knots and voids will be filled and sanded. The finished flooring shall be installed with no expansion spaces between the panels, giving a clean smooth appearance. There should not either be joints or expansion spaces between the lamellas. The floor should be factory finished with a SST Depth impregnation.
The hardwood floor is stapled nailed onto the counterfloor.
The expansion gap between the hardwood floor and the wall should not be more than 15mm.

Type of wood: _____

Construction height: 66.6 mm

2. SANDING AND FINISHING:

Wear coating on finished flooring shall be factory applied with a UV cured multi layer high-grade mineral varnish (Polyurethane). Game lines will be painted on top of the finished flooring with two-component urethane paint which requires no finish over the top. Paint must be HARO game line paint.

# Part 3-Execution

3.01 Inspection

A. Inspect concrete subfloors for proper tolerances and dryness, and report any discrepancies to the general contractor in writing.

B. All work required to put the concrete subfloors in acceptable condition shall be the responsibility of the general contractor.

C. Subfloor shall be swept clean by the general contractor prior to flooring installers arriving at the jobsite

3.02 Installation

A. Follow all manufacturers installation instructions carefully.

B. Install moisture barrier over concrete slab per manufacturers instructions.

C. Install elastic batten lengthways in the facility leaving a 40 mm gap at the width and a 60mm gap at the length of the hall.

D. Nail counterfloor onto elastic batten with 2.2 x 32 mm T-Nails

E. Lay poly film over counterfloor.

F. Staple finish flooring to counterfloor with 10 x 38 mm staples leaving an expansion gap of 15 mm to the wall.

G. Paint game lines as per architect’s plans

H. Clean up jobsite and put all waste in general contractor’s dumpster.

1.0.3 Maintenance

1. BASIC CLEANING

Basic cleaning is carried out with our special Wax Remover, using a floor-care machine with a very low water factor. After basic cleaning the floor plates must be opened in order to allow mop-water which may have seeped in to evaporate.

2. GENERAL CARE

After every basic cleaning, the complete sports floor may be treated with Parquet Gloss.

3. ROUTINE CLEANING

After every day of use, the sports floor should be cleaned by damp mopping. This is necessary for hygienic reasons and to remove dust, hair, light dirt etc. from the surface.
Intermediate care should be carried out once or twice a week, depending on the usage of the hall.

## PLEASE NOTE!!:

Wood is a natural product. HARO Hardwood Sports Floor must NOT be flooded with water, since this may cause a swelling of the floor and thus damage the floor. It is therefore essential to be careful when cleaning and maintaining the floor and to economise with water and water-based products.