



Important information



Sealed packs must be stored for at least 48 hours where they are to be laid.



Packs should be stored in a room with a minimum temperature of 18 °C



Do not open packs until you are ready to install the flooring



Follow the fitting instructions on the reverse of this sheet



Relative air humidity: 45-60%

 <b>Howden Joinery Group Plc</b> 40 Portman Square, London W1H 6LT <b>13</b> <b>DoP: HJ-004-JC</b>	
<b>EN 14342:2005+A1:2008</b>	
<b>Wood flooring for internal non structural use</b>	
Reaction to fire:	D <sub>0</sub> - S <sub>1</sub>
Minimum mean density:	550 kg/m <sup>3</sup>
Minimum overall thickness:	10 mm
Content of Pentachlorophenol:	≤5 ppm
Emission of Formaldehyde	Class E1
Slipperiness	USRV 100
Thermal conductivity:	0,14 W/mK
Durability (Biological):	NPD

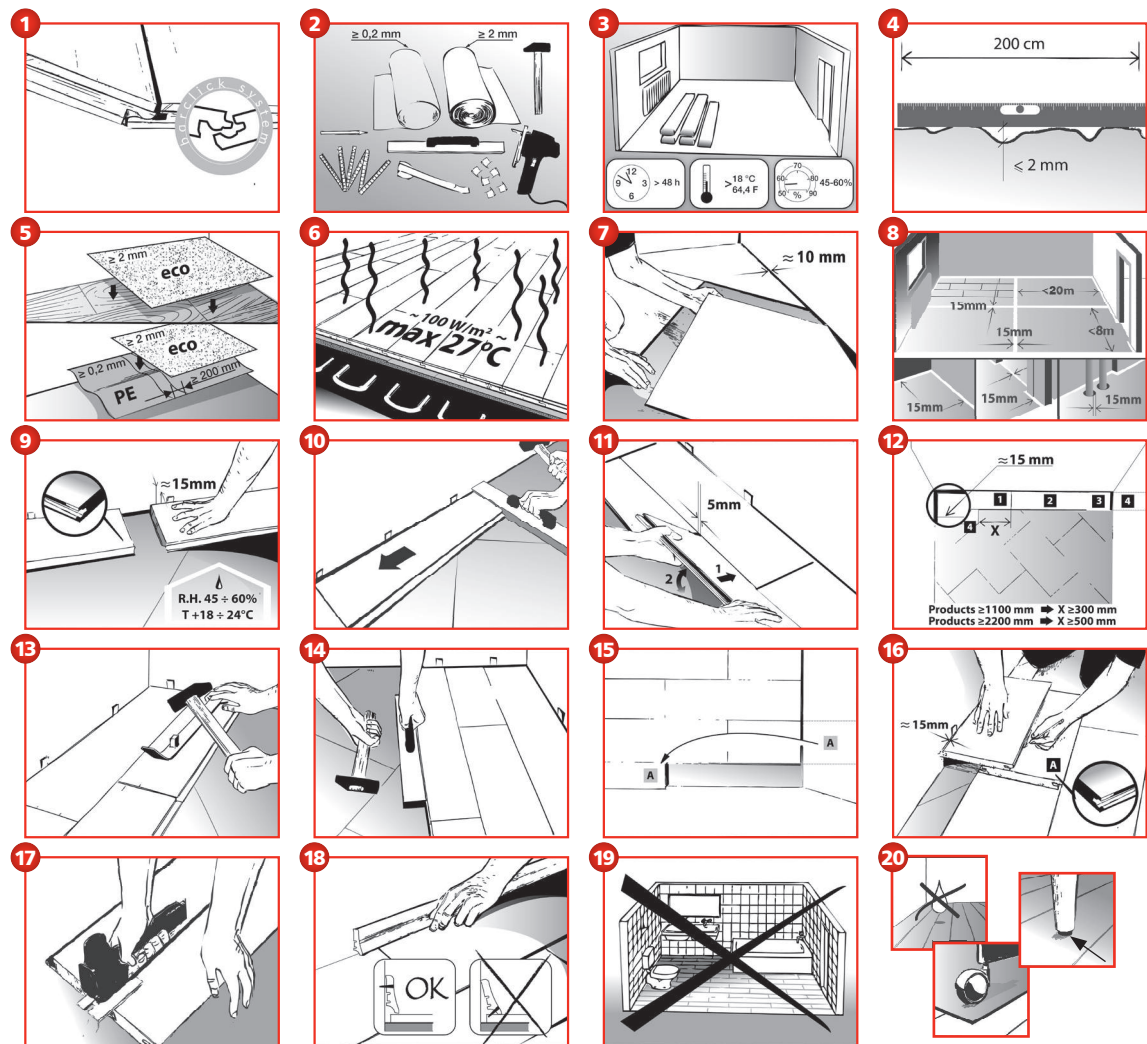
**IMPORTANT ENGINEERED FLOORING FITTING NOTICE**

- **MUST LEAVE 15MM EXPANSION GAP**
  - Around the entire floor including cabinet legs, radiator pipes and door frames
  - Do not install cabinets over the floor
- **SUB-FLOOR MUST BE CLEAN, DRY, FLAT AND LEVEL**
  - Timber based sub floors must be securely fixed before laying
  - Always use a moisture barrier paper on timber based sub floors
- **MUST USE HOWDENS FOAM OR XPS UNDERLAY**
- **ALWAYS USE A DPM ON CONCRETE FLOORS**
  - And any other mineral based subfloor

Flooring **MUST** be allowed to acclimatise

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# HOWDENS ENGINEERED FLOORING INSTALLATION: GLUELESS LOCKING SYSTEM



Howdens engineered flooring can be installed on any dry, clean, solid and even surface. Additionally, the humidity of the subfloor must be no more than 2% for a concrete surface, 8% for wooden, and 0.5% for an anhydrite surface. Packages should be stored horizontally in the environment they are to be installed for a minimum of 48 hours without opening the packaging. The evenness of the surface is measured with a min. 2 m measuring rod or a spirit level. The level difference should not exceed 2 mm over 2 meters of the subfloor. If the difference is greater, it is vital that it should first be evened out. The room should be well-ventilated and the packaging should only be opened on the day of installation. Prior to installation, the floorboards should be inspected and the pattern decided on. These instructions should be read carefully.

- The following tools are needed to install an engineered floor:
  - a hammer (1000 g), an assembly jig, wooden rule or measuring tape, fine-tooth manual saw or an electric sawing machine, wooden wedges, a push block for final positioning of floorboards.
- Use only the recommended underlay.

The direction in which the floorboards are to be installed is determined by the dimensions of the room. If none of the sides exceeds 8 m, it is recommended that the floorboards be installed along the direction of the light source or largest window. In the case of dimensions bigger than 8 m, or long but narrow rooms such as corridors, the floor should always be installed parallel to the longest side of the room. Having established the direction, the width of the room should be measured. This value should then be decreased by the width of the expansion gaps (usually 2 x 10 mm) and divided by the width of the top layer. In this way, the number of rows of floorboards to be installed can be calculated, and the dimensions of cutting the last row can be determined; if it is narrower than 70 mm, the first row of floorboards must be trimmed correspondingly.

**NOTE:** If humidity of a concrete subfloor exceeds 2-3%, damp insulation in the form of 0.2 mm polyethylene film is recommended in order to protect the floor covering against the damp penetrating from below. It should be installed with an overlap of 200 mm, the joints being protected with adhesive tape.
- Installation of the floor should begin with the underlay. You should butt the edges of the underlay (never overlapping), with the exception of softboard underlay which should be installed with a gap of 2 mm between the boards, and 10 mm between the boards and the wall.
- The first row of boards should be installed tongue facing the wall. Individual floorboards should be joined along the shorter sides (headers) by sliding parallel to the locking joint of the following boards. Another method is the frontal joining of boards by means of a hammer and a push block for the final positioning. The last board should be trimmed to maintain an expansion gap into which wooden wedges should be inserted.
- The following row of boards should commence with the cut off section of the board remaining from the first row, provided that its length exceeds 50 cm. It is also important to maintain a minimum of 50 cm between the ends of boards in the adjacent rows (staggered). The new row should be inserted tongue in groove and pressed manually towards the previous row (Fig. 1). The board should be tapped lightly with a wooden block into the previously installed row. The following board should be installed in the same manner, maintaining a distance of 5 to 8 mm between the fronts of the boards. The board should be indirectly tapped using a hammer and push block, thereby joining the boards' headers (Fig. 2).
- Each subsequent row of boards installed should be pushed from the front-side of the board in order to eliminate gaps in the header joints). Wedges should be inserted into the gaps along the walls.
- NOTE:** No belts or straps should be used in the installation of the floor. In the case of having to overcome an obstacle, such as central heating pipes, a fragment of the board needing additional manoeuvring ought to be marked appropriately, cut and fixed (Fig. 3), all the time remembering to maintain the 15 mm expansion gap around the element to be avoided (such as the central heating pipes). The resulting gap between the pipes and the floor can be covered up with a rosette.
- The last row of boards should be very carefully measured prior to installation. If they are too wide, the boards should be carefully cut accordingly. The joint of the last row boards should be cut off to leave a flat edge.
- Upon completing the installation, the wedges should be removed and the remaining gap should be covered with skirting boards, which should always be fastened to the wall (never to the floor).
- Immediately after installing the skirting, the new floor is ready for use.

**NOTES:** During installation it should be remembered that the maximum floor area without additional expansion joints is 8m of the board's width and 20m of its length. The floor should be used in the following conditions:

- air temperature: 18-24 °C
- relative air humidity: 45-60%.

Damage to the floor caused by incorrect installation or damp do not constitute a defective product. Acoustic effects connected with using the floor covering are a natural feature of wooden floors and, again do not constitute any faults. Nor does the variation in colour and change of hue (darkening), which is the result of exposure to the sun rays and is a natural feature of wood. The floor must not be installed in unheated, damp rooms (bathrooms, saunas, laundries, etc.) or outdoors. Wooden floorboards must be checked both before and during installation with regard to

possible defects. Installation of a floor with faulty boards will invalidate warranty claims. Floorboards which are found to have defects prior to installation are subject to warranty claims. Please note that the boards may have natural wood losses, minor scratches, dents, filled-in cracks and the effects of the varnish treatment, which are not necessarily considered defective. Any defects should be reported immediately before continuing with the installation.

## MAINTENANCE AND CARE OF FLOOR COVERINGS

In order to provide additional protection to the installed flooring, it is permissible to apply additional layers of varnish or oil. (Subject to the existing finish – do not apply oil over varnish for example).

After installation of a varnished floor, and during its subsequent use, it is recommended to apply proper cleaning and maintenance agents, following the attached instructions. The floor covering is easy to clean; this can be done with a vacuum cleaner with a special end for wooden floors or with a brush. Spilt water and other contaminations should be removed immediately. The worst enemies of wooden floors are water and sand; in order to protect a floor against them, it is recommended to place protective mats at the entrance to the property. Pedestals, and other areas of furniture pressure, should be protected by gluing felt pads underneath them (not to be fastened with nails). When using office furniture, e.g. chairs on casters, it is recommended to position roll-stop protective mats. If the relative air humidity in the room drops below 40% (e.g. in the heating season), air humidifiers should be used.

## RENOVATION OF VARNISHED FLOORS

When varnishing for renovation and regeneration purposes, polyurethane varnish is recommended. Ensure you follow the manufacturer's guidelines for the application. Slightly worn surface areas can be varnished if there are no clear gaps in the original varnish applied by the manufacturer. A test-varnishing should be performed on a spare piece of floorboard remaining after installation.

Then proceed as follows:

- Area should be degreased and any previously applied maintenance agents should be removed thoroughly.
- The entire surface should be carefully matted lengthways with fine sand paper (granulation 180-250), to enhance the adhesion between the old and the new coats of varnish. Failure to do so can result in the occurrence of visible scratches. Next, the sanded floor should be dusted. Before applying the new layer, an adhesion test should be performed on a less conspicuous patch of the floor.
- The varnishing can then commence – the new layer should be applied following the instructions on the varnish label.

**NOTE:** Renovation work should be carried out by a professional contractor.

## REGENERATION OF VARNISHED SURFACES

After years of use, or when heavily used, a varnished floor surface can become worn and the wood damaged. In such cases the varnished surface can be refreshed by applying a new layer of varnish, observing the recommended guidelines and using polyurethane varnish.

- Surface preparation:
- Remove any maintenance agents from the surface in the appropriate manner (following the manufacturer's recommendations).
  - When dry, the floor should be tarnished with a disk sander to remove the existing layer of varnish and then dusted.

Varnishing:  
Polyurethane varnish is recommended to be used following the manufacturer's instructions after a prior test.

**NOTE:** Normal usage of the floor can resume after approximately 7 days. When applying the varnish, tools designed for polyurethane products should be used. The renovation should be performed by a professional contractor. The thickness of the veneer guarantees the performing of floor renovation a minimum of three times. In the case of substantial damage to a specific part of the floor, one or more floorboards can be replaced.

## INSTALLATION OVER UNDERFLOOR HEATING

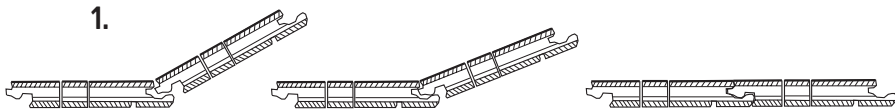
- Set the heating at 18 °C on the surface of the floor for 2 weeks minimum prior to installation.
- The flooring should be installed at the same temperature, following the standard instructions for floating installation.
- The recommended unit power is 100 W/m<sup>2</sup>.

**CAUTION:** A precondition for laying the floor on the underfloor heating system is to perform a preheating for a period of 30 days while gradually increasing the temperature from the lowest values to the maximum ones allowed by the heating system. If the installation is not to be carried out at once, but is scheduled to be done later, the heating system must be set to 18 °C (measured on the floor surface) 2 weeks before the installation and the floor must be laid at the same temperature. In order to prevent wood from warping make sure that the floor humidity does not exceed 7 ± 2 % when laying the floor.

## After installation:

- Set the temperature at 18 °C at the floor surface for no less than 48h. Then slowly increase the temperature by 1 or 2 °C a day until the optimal temperature has been reached. Do not make any sudden changes to the heating output during this period.
- Do not raise the temperature above 27 °C on the floor surface.

1.



2.



3.

