



Solid Hardwood Flooring

Installation Instructions

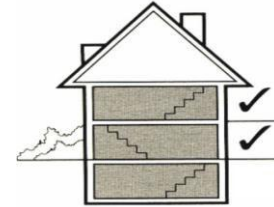
Read all instructions carefully

Product Description

Dasso solid hardwood flooring planks are designed for use in multiple locations, such as ground floors or high-rise buildings; whether directly glued to a concrete sub-floor or directly nailing or gluing to wooden sub-floor. The products are pre-finished under ideal conditions that meet or exceed industry standards.

Recommended Use

Grade Type	Nail Down	Glue Down	Float
Above Grade	Yes	Yes	No
On Grade	Yes	Yes	No
Below Grade	No	No	No



Sub-floor Type	Nail Down	Glue Down	Floating
Concrete	No	Yes	No
Plywood & OSB	Yes	Yes	No
Old wooden floor & other non-wood sub-floor	No	No	No

How Much Flooring to Order

Depending on the location and installation type, order 4% to 6% more flooring than needed to compensate for cutting losses.

Important: Examine each plank carefully. Contact the dealer immediately if the material is not acceptable. Materials installed with visible defects are not covered under warranty. Manufacturer will not assume any responsibility for installed materials.

Product liability will not be implemented for damages caused by unsuitable tools or the improper use of materials.

Crucial Points to Remember

1. Install your floor under good lighting conditions. Installation site should be warmed up for 5 to 6 days before plank delivery regardless of the season to remove residual moisture in the sub-floor. The floor surface must never be warmer than 85°F (29.5°C) during installation.
2. Plan your project by making an installation sketch. Determine the installation starting point. Consider if it is one regular-shaped room, a number of rooms with landings, or rooms on one floor, including a hall or main room. Think about how to get the most out of your project. If in doubt, ask your dealer for advice.
3. Choose the floor plank direction. It is strongly recommended that you install boards at a 45° or 90° angle to the joist direction.
4. Open several cartons of flooring at the same time as this can let you balance plank length, color and

wood grain variations in the wood and ensure pieces are evenly distributed over the entire floor. Allow the wood to acclimate in the room, where it is to be installed for 24-48 hours before installation.

5. Take precautions at all times not to damage the finish. For example, place tools on a protective mat during installation. Vacuum the floor frequently to eliminate sawdust and abrasives.
6. Before starting installation, cut the bottom moldings around door frames to insert the floor planks. Expansion joint is necessary to allow the wood to react to changes in ambient humidity. The expansion joint will be hidden by baseboards and quarter rounds, which will be nailed to the walls and not the floor.

Jobsite Preparation

Laying the floor should be the last step of your installation. Prior to the delivery of your flooring, make sure that:

- The jobsite is properly enclosed, with all doors and windows installed.
- Concrete, plaster, paint and the sub-floor are completely dry.
- The heating or ventilation system is working properly and that the conditions inside your home have been kept at an approximate temperature of 60-70°F (15°C - 20°C) and a relative humidity of 35% to 50% for at least one week.

Wood Sub-floor

The sub-floor (plywood or OSB) moisture content must not exceed 12%, and the difference in moisture between the sub-floor and floor planks should not be greater than 4% of the floor planks. If the difference is too high, do not continue with installation. Allow the wood to acclimate in the room, where it is to be installed for 24-48 hours before installation.

Concrete Sub-floor

For concrete sub-floors, a minimum of 30 days drying/curing time for a reliable moisture reading is necessary. Readings must not exceed 4.5% with a moisture meter for concrete (Tramex Moisture Encounter). In the presence of moisture, perform a calcium chloride test. The moisture level measured using the calcium chloride test must not exceed 3 lb./1,000 sq. ft./24 hours. If the reading exceeds 3 lb. but is below 7 lb., install a waterproof membrane.

Important: When it comes to floor installation, moisture is an important element that should be emphasized. The installer and homeowner are jointly responsible for checking the sub-floor moisture content. If the moisture content is too high, postpone floor installation. Speed up drying with extra heating and ventilation, and conduct a new test a few weeks later. Never install a hardwood floor if the calcium chloride moisture test reading exceeds 7 lb./1,000 sq. ft./24 hours. Any claims for failures or deficiencies related to job site quality is decline by the manufacturer.

Installation Work

Once ambient conditions are correct, bring the cases of floor planks to the installation site 24-48 hours before installation. On the day of installation, open a case to check that product species, grade, color, size, and quality are correct. If all job-site conditions are in order, you may open several more cases to ensure that color variation between planks can be arranged to reflect a homogenous floor covering.

Please talk to Distributor store associate immediately if any problems occur, our in-house installation team could be contracted to take over the installation if required. To avoid any variation in internal wood moisture levels before installation, avoid exposing the cases to rain or snow. Never store planks in unsuitable locations such as a shed, unheated garage, or basement.

Important: Prior to installing the floor, installer and homeowner must ensure that the installation site and sub-floor meet the conditions in this manual. Installer and homeowner are responsible for inspecting floor planks prior to installing them. Depending on the type of installation, you may also need special moldings for your floor such as nosing and reducer strips.

NAIL DOWN INSTALLATION

Nail down installation can only be used with oriented strand board (OSB) or plywood sub-floors. Manufacturer recommends using 3/4" (18 mm) OSB or plywood on joists spaced no more than 19.2" (450 mm) apart, center-to-center. OSB or plywood must be structurally sound.

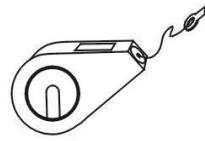
Recommended tools



Hardwood Nailer or Stapler



Electric Drill



Chalk Reel



Nail



Spiral Nail



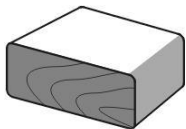
Stapler



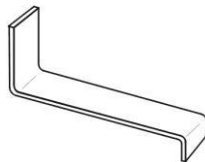
Nail Driver



Hammer



Knocking Block



Pull Bar

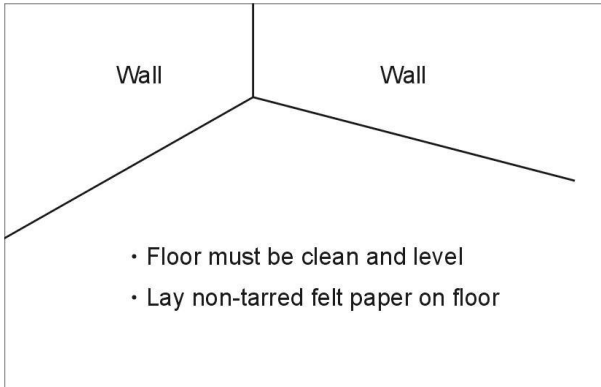


Hand Saw

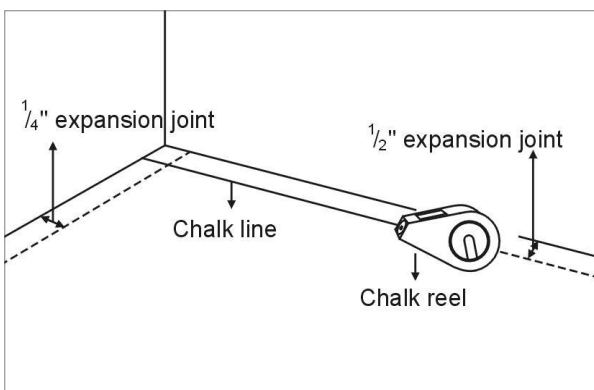


Ruler

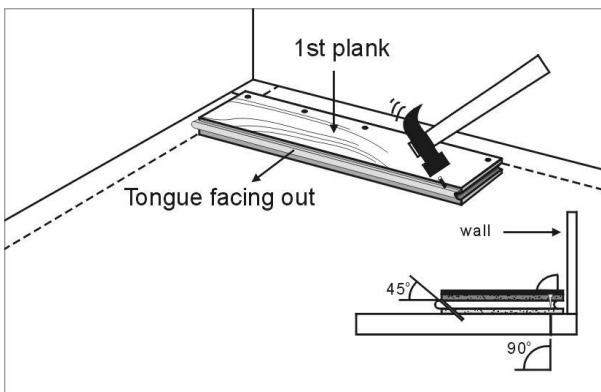
Nail Down Installation Steps



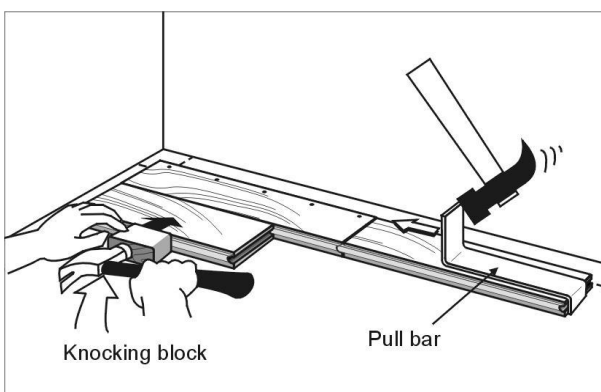
- Lay 15 lb non-tarred felt paper or equivalent (with 3" to 4" overlapping end) in the direction of the boards using staples. This will reduce the normal mechanical friction between materials and facilitate installation.
- Felt paper is not required if floor has radiant heating system or acoustic membrane.



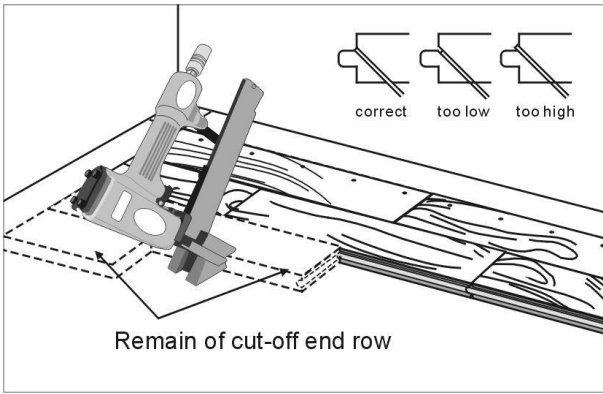
- Use chalk line to trace starting line with $\frac{1}{2}$ " expansion joint at the side and $\frac{1}{4}$ " at row end.
- Lay out 4 to 5 rows of planks ahead of time that match in terms of joints and color.
- Cut out imperfections planks or place them in less visible areas



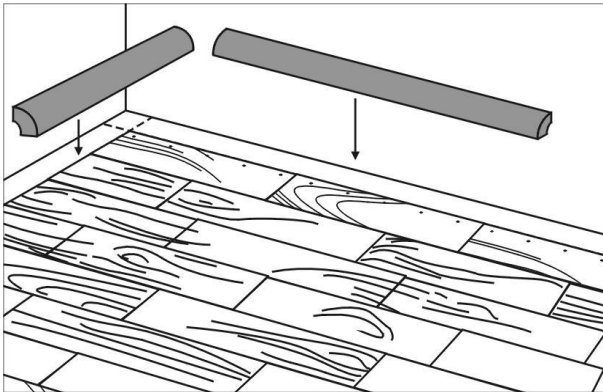
- Install the 1st plank along the starting line with the tongue facing out and groove facing the wall.
- 1st row must be hand-nailed. Drill holes at a 90° angle on the surface of the plank. Drive nails head in with a nail driver. Then drill holes at a 45° angle in the tongue and fasten with spiral nails.



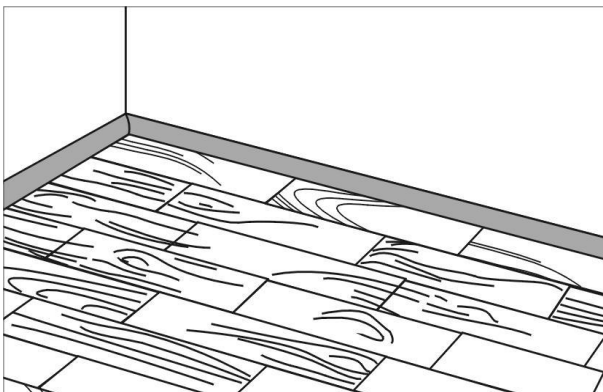
- Cut plank to fit end row and fasten with pull bar.
- Start subsequent row using the remainder of the cut-off end plank from previous row. The remainder should be at least 6". Fasten with knocking block at the side.



- Use manual or pneumatic nailer for subsequent rows. Fasten each plank with at least 2-nails. Do not nail less than 2" from plank end to prevent the tongue from splitting.



- The final planks should be installed the same way as the 1st plank.
- You may have to rip the last row lengthwise to leave a 1/2" for expansion joint.

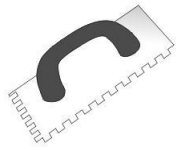


- Completed installation with moldings.

Glue Down Installation

Dasso solid hardwood flooring can be glued directly to a concrete sub-floor, wood sub-floor, ceramic tiling, or linoleum on the ground floor and second floor. Nevertheless, it is imperative to ensure the sub-floor is firmly adhered to substrate beneath.

Recommended tools



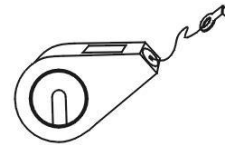
Notched Trowel



Urethane Base Adhesive



Guide Strip



Chalk Reel



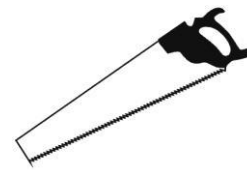
Nail



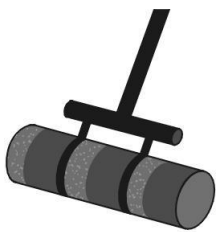
Blue Adhesive Tape



Hammer



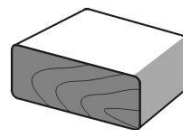
Hand Saw



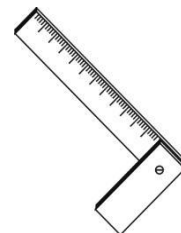
Roller



Expansion Spacer



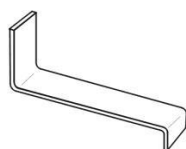
Knocking Block



Ruler

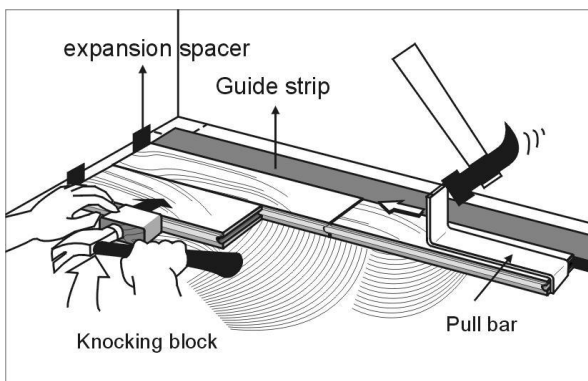
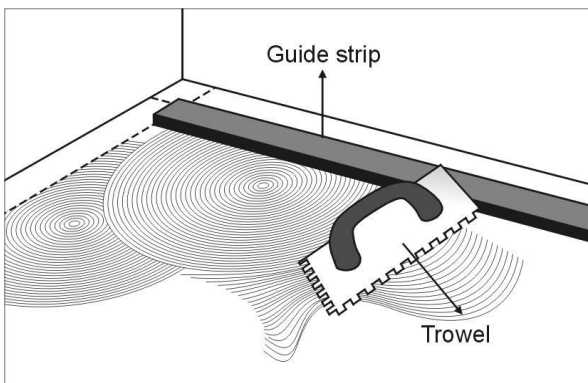
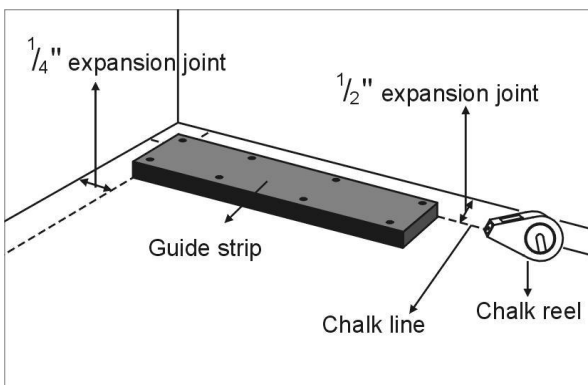
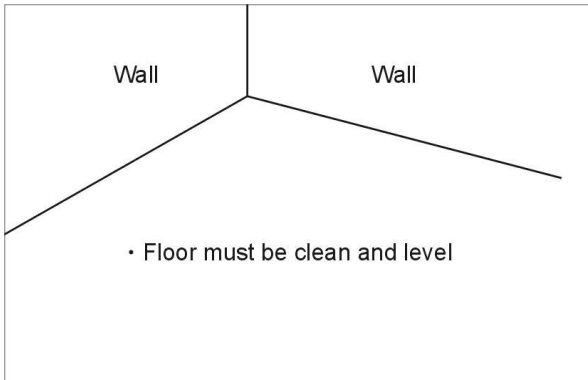


Rubber Hammer



Pull Bar

Glue Down Installation Steps

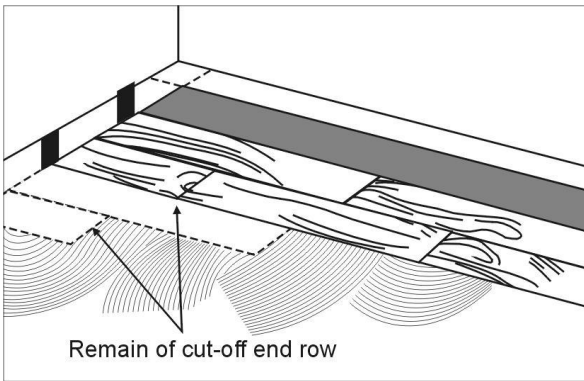


- The sub-floor should be free from any surface defect. If it is not, fill gaps with cement or sand.
- Lay out 4 to 5 rows of planks ahead of time that match in terms of joints and color.
- Cut out imperfections planks or place them in less visible areas.
- For concrete installation, ensure concrete is not low-density (below 3000 psi.).

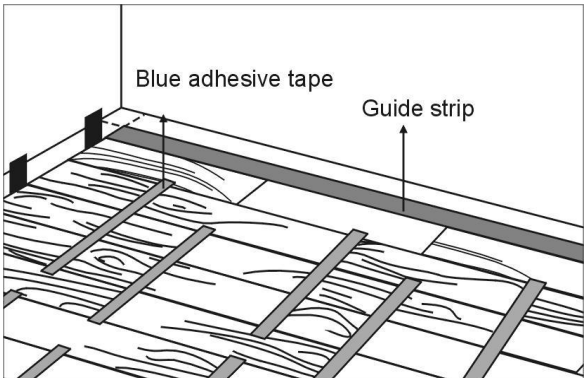
- Use chalk line to trace starting line with $\frac{1}{2}$ " expansion joint at the side and $\frac{1}{4}$ " at row end.
- Nail the guide planks along the starting line. The plank will serve as a guide for the 1st row of plank.
- Width of the guide plank will be the same as the width of the flooring you choose.

- Use the trowel and apply adhesive at a 45° angle from the starting line outward.
- Install the first plank along the guide strip with tongue facing you and the groove facing the starting wall.

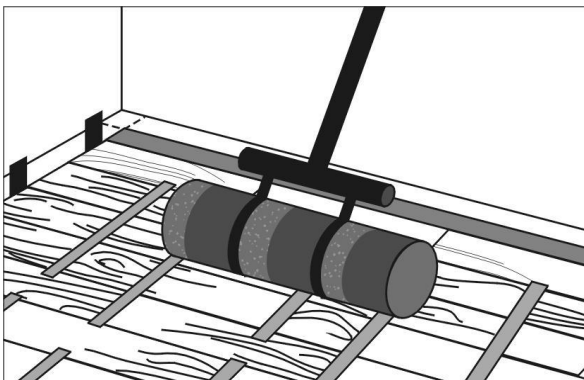
- Proceed from left to right to install other planks in the rows.
- Do small sections to ensure adhesive does not dry before the planks are laid.
- Use knocking block and pull bar to fasten the joint.



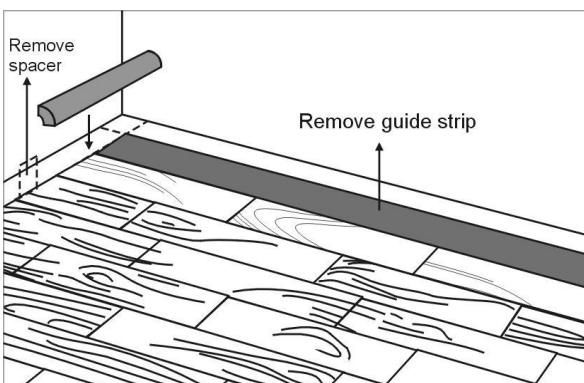
- Start subsequent row using the remainder of the cut-off end plank from previous row. The remainder should be at least 6”.
- Insert the tongue end into the groove and lower the plank as close as possible to the adjacent one, avoiding contact with the adhesive as much as possible.



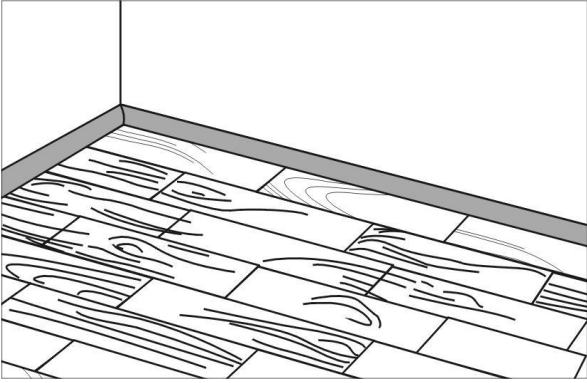
- Use blue adhesive tape every five or six rows to ensure planks remain firmly in place.



- Use 100-150 lb. roller to apply pressure to installed sections while the adhesive is still active (approximately 45-60 mins).



- Once the entire surface is covered, remove the guide planks and replace with flooring plank.
- Remove the expansion spacer to install molding to cover the expansion joint.



- Completed installation with moldings.

Important: During Installation, immediately wipe any adhesive from the floor surface using paint thinner and towels.