**Staple-Down Installation**

1. This method of flooring installation may give some advantages over the other methods in installation-speed, reduced labor and installation materials. And the more immediate “use” of the floor. However the process is consequently more difficult and some professional-hands might be required, because of the possible use of special cleats, and the need for some professional tools and equipment to carry out the work.
2. This method demands plywood sub-floor with thickness of at least 18 mm (3/4”) installed to reach the degree of surface flatness as specified in “Surface Preparation”. Gaps for expansion-space between plywood boards and around the perimeter of the installed plywood sub-floor must be provided in accordance with their manufacturer’s specifications. The moisture-content of the plywood must be ensured to meet what is specified under “Inspection & Preparation”.
3. The First Step is to locate the longest wall in the room by which direction of the flooring should follow. Depending on the type of flooring used, draw a starting line on the plywood sub-floor parallel to that wall, by a distance of (the width of the floorboard chosen + ½ inch). For instance, when installing GreenBay flooring with 127 mm (5 inch) width, the distance from the wall should be (5 inch + ½ inch) = 5-1/2”. The ½ inch additional space is meant to create space for expansions. Ensure that the line is totally straight and that installation started with perfectly straight and square start.
4. Pick the first floorboard and align it along the start-line, with the groove’s side facing to the wall. This way the installation should ideally start from the right side of the room. Alignment must be done between the outer edge of the floorboard and the start-line, not between the tip of the tongue and the start-line. Use spacing wedge if necessary to ensure the correct distance to create the needed 12 mm (1/2 inch) expansion-gap. Once the floorboard is aligned perfectly, face-nail the board with the staple nail perpendicular to the surface. Place nail as close as possible to the wall, so that after completion. When the base molding is fixed, the head of the nail will be concealed under the base molding. Nailing the other long side of the floorboard on the tongue for this first row has to be done with the nail slightly inclined and the nail-head driven flush with a nail punch.
5. Care must be taken on the placement of the staple nails. The staple nails should be spaced every 10 to 12 mm (4 to 5 inch) apart, and should be more than 5 cm (2 inch) from either ends of each floorboards. Use 1.5 to 2 inch staple nails depending on the thickness of the floorboards installed.
6. Continue the same step until the first row is completed. Ensure to cut floorboard for the last piece in the row to create the needed expansion gap of 12 mm (1/2 inch) from the wall. Start the second row in the same manner, use the remaining board from the first row or use fresh floorboard, cut the board if necessary or create staggered joints that at least 240 mm (6 to 10 inch) apart.
7. From this second row onward, staple nailing is done on the tongue side only. The first couple of rows must be nail down by hand because they are close to the wall, which may cause vertical obstruction, if nailing-machine is used. Continue to install all the remaining rows, use a nailing-machine if necessary to speed-up the job (except for the last couple of rows, which again may have vertical obstructions from the wall of the other side of the room).
8. If a nailing machine is used, do not hesitate to sacrifice some pieces of floorboards to test and adjust the machine. Hardwood species used for the floor material vary in their densities between one species and the other and the machine has to be adjusted from time to time accordingly to suit the particular job. The base-plate of the nailing machine must be clean, smooth and free from any nicks and scratches to avoid damages to the flooring’s surfaces. Do not put down machine directly over the pre-finished floor’s surface; always use protective cardboard or mats. Do not hesitate to seek professional assistance whenever required.
9. The last or the final row is usually narrow and it might be required to cut floorboards lengthwise to fill-in this row. Measure the remaining space and cut the boards accordingly, ensure that a 12 mm (1/2 inch) gap should also be provided at all sides. Nail down this last row in the same manner like the nailing of the first row, and complete the installation.
10. Once the staple-down work is completed, install all the skirting and moldings. Make sure that all skirting/moldings are fixed onto the adjacent wall only, and not directly fixed onto the floor. Clean the floor’s surface and refer to “Care and Maintenance” for additional information.