

Chapter 21 - Flooring

Things to Consider

- Floors in common living area will be covered with laminate flooring. First floor bedrooms are also optionally covered with laminate flooring.

Components

Underlayment	Rolled Vinyl	Laminate Flooring
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Timing & Prerequisites

- This phase of the project cannot begin until the painting is complete.
- The House/Project Lead will work with the Habitat Supervisor to co-ordinate these volunteer activities.

Materials Needed	
Vinyl Underlayment	Laminate Flooring
4x8 Sheets of Underlayment (Luaun) Skim Coat 1" Crown Staples	Laminate Underlayment Tape for Laminate Underlayment Boxes of Laminate Flooring Transition Strips / Threshold Finishing Nails
Vinyl Flooring	
Construction Paper Masking Tape Foam Vinyl Flooring Vinyl Floor Adhesive	

Phase Specific Tools Needed	
Description:	Quantity:
Framing	
<ul style="list-style-type: none"> ○ Compressor ○ Pneumatic Stapler ○ Belt Sander with Medium-grit Belts ○ Circular Saw with Plywood Blade ○ 3" Wide Spackle Knife ○ Sponge ○ 100 lb. Flooring Roller ○ Fine-Toothed Trowel ○ Shop Vac ○ Laminate Flooring Install Kit ○ Rubber Mallet 	

- Jig Saw

Activities – Vinyl Flooring

Install Vinyl Flooring Underlayment (Luaun)

1. Clean and Level Floor
 - Sand off high points in the OSB sub-floor.
 - Remove any spackle or mud caked on the floor.
 - Set any nails / screws which are raised up.
 - Vacuum the floor.
2. Layout the Underlayment

Installation notes:

 - a) The underlayment will be laid perpendicular to the OSB sub-floor.
 - b) Sheets are laid out such that their edges do not coincide with the seams of the sheets of the OSB sub-floor.
 - c) Where possible install factory edges to factory edge.
 - d) Stagger the end joints of the underlayment on subsequent rows.
3. Measure and snap chalk lines for placement of the underlayment.
4. Install the first row of luaun
5. Begin with a wall which runs perpendicular to the subfloor.
6. Loosely butt the sheets together.
7. Cut the end pieces to fit wall-to-wall.
8. Fasten the underlayment using a pneumatic stapler and 1” crown staples.
9. Staple every 2” around the edges of each sheet and every 4” in the field making a grid pattern.

Apply Skim Coat

1. Mix the skim coat material to a very thin consistency. Note: this material dries very fast, so **do not mix** until you are ready to use it.
2. To ensure a smooth surface, apply skim coat to the joints; over the staples; and over any depressions with a 3” wide spackle knife.
3. Remove excess material immediately using a slightly damp sponge only.
4. Let the skim coat completely dry.

Sand Skim Coat

1. Lightly sand the skim coat until it is smooth.

2. Vacuum up any dust or dirt, making sure the surface is smooth and clean.

Install Vinyl Flooring

Make a Template for the Vinyl

1. Cover the area with heavy construction paper. Tape the pieces together.
2. Fold the paper back at the edges. Tape the folded paper down.
3. The template must extend half way through any doorway or 3" down any hallway.
4. Mark the paper with key points and adjoining objects in the room such as exterior doors and bathtubs.
5. Make sure there are enough marks to orient the paper to the room later.
6. Mark the paper with any openings such as toilets or registers.
7. Cut several diamonds into the paper at various places around the edge. These will be used later to tape the paper to the vinyl.

Cut the Vinyl

1. Unroll the vinyl out in a warm, flat area. Do not pick an area with a finished floor that could be damaged in this process.
2. Lay the template on the vinyl ensuring that the template is oriented with **the top side facing up and the vinyl is face up**. If there is a pattern to align, make sure the template is aligned properly.
3. Tape the template to the vinyl. Tape over the diamonds and along the edges.
4. Cut around the template through the vinyl with a sharp utility knife.

If the surface below the vinyl is concrete, pieces of scrap plywood may be slid under the vinyl.

Be very careful not to cut into the vinyl under the template.

Cutting the vinyl slightly larger than the template will provide some material to trim off once the vinyl is in place.

Cutting the vinyl too big will make it difficult to get the vinyl to lay flat.

Do not cut out the hole for registers or toilets at this time.

5. Roll up the vinyl with the template still attached for movement to room.
Be careful not to bend the vinyl.
Keep the vinyl dry.

Dry-fit the Vinyl

1. Gently roll out the vinyl over the clean underlayment to test the fit.

2. Verify that the marks on the paper are aligned with the objects in the room.
3. If necessary, trim edges to fit the area with a sharp utility knife.
4. Cut out register and toilet openings.
5. Leave the extra material in the doorways and hallways. The carpet layer will cut this off later.
6. Trim the vinyl at the top of the basement stairs even with the front of the nosing of the first step. A bull nose will be installed later.

Apply the Vinyl Adhesive

1. Carefully fold the vinyl back on itself exposing approximately half of the room.

Do not crease the vinyl as you fold it back.

2. Use a fine-toothed trowel to spread vinyl flooring adhesive evenly over the exposed underlayment.
3. Allow the adhesive to cure for 30 minutes. After this time, the adhesive should be very sticky and will grip the vinyl flooring well.

Install the Vinyl Flooring

1. Unfold the vinyl back over the adhesive.

Have several volunteers lift the folded vinyl up holding it off of the floor.

Let the vinyl slowly drop down in place, smoothing it with your hands.

Continue to slowly lower the vinyl and smoothing it into place until it completely lays flat.

2. Roll the vinyl flat using a 100 lb. flooring roller.

Starting at the middle, roll the vinyl out from the middle to the far edge.

Turn the roller 90° and roll the vinyl out from side to side.

3. Repeat the process for the other half of the room

Activities – Laminate Flooring

Acclimate the Flooring

- Store the flooring in the room for 24 to 48 hours before installing it. The flooring will need to be stored in a room with controlled temperature and humidity to avoid any buckling problems. Follow the manufacturer's instructions.

Plan your work

- Determine the direction in which the flooring will be laid. Flooring should be laid so the seams run toward the greatest source of natural light.
- Hiding visibility of the seam when entering the house by running the seams toward the doors should also be considered.
- Calculate the size of the first row. The manufacturer will specify the minimum size of the last row. The width of the first row will change the width of the last row. Adjust the size accordingly.
- The size of the first row may also affect the location of the seam across doorways in the opposite wall.

Installing the Underlayment

- Clean the sub-floor by removing any spackle or mud caked on the floor. Flooring must be installed over a smooth surface.
- Install the foam underlayment which provides a cushion underneath the flooring.
- Cut strips of the foam underlayment to fit across the room. A sharp knife will be required.
- Place the strips on the floor edge-to-edge; covering the entire floor. At the edges, cut off any excess.
- Tape the seams with the tape provided with the underlayment.

Install Laminate Flooring

Install First Row

- Cut and layout the pieces for the first row. The first and last piece must be at least 12" long.
- Rip the pieces for the first row based on the calculations made above.
- Placing the first board in the corner of the room. Insert ¼" wedges provided in the installation kit between the board and the walls. Do not put the board directly up against the wall. Place wedges on both the long and short sides of the board.
- Place the second piece next to the first piece and lock it in. Slightly tip the board to allow the locking tabs to interlock. Place a wedge between the board and the wall. Continue installing boards across the room.
- Cut and install the last piece in the row. Lock the last piece in using the hooked pry bar provided in the installation kit. Hook the bar over the end of the board and tap on the hook on the other end of the bar back towards the row until the board locks in.

Install Second Row

- Layout the pieces for the second row. Use the cut off piece from the end of the first row to start the second row.
- Cut the last piece and save the cutoff to start the next row.
- Place the boards next to the boards of the first row. Starting at the same end as before, tap the boards into place using a tapping block and rubber mallet.

Install Remaining Rows

- Continue installing flooring rows across the room.

- Periodically check all of the rows to ensure they have not become loose and that no gaps have opened up. If the rows are not perfectly straight across, adjust the first row to correct the line.
- At the end of each row, check and tighten the previous rows using the hooked pry bar.

Install Last Row

- Rip the pieces for the last row. If there is a doorway into another room, notch pieces to fit into the doorway.
- If the flooring will stop in a doorway, cut the pieces to allow for the installation of a threshold. The threshold should be installed half way through the doorway. Rip pieces to fit under the lip of the threshold.
- If the flooring will continue into the next room, continue installing rows through the doorway. Fit the pieces the entire width of the doorway.
- Install the pieces as in previous rows. All of the pieces must be locked in using the hooked pry bar.

Install Thresholds

- Cut and install the threshold using a finish nailer; Install 3 or 4 nails per threshold.

Tips & Techniques

◆ Applying Adhesive with Trowel

1. Scoop out a small amount of adhesive using wide putty knife.
2. Roughly spread the adhesive with the trowel alternating strokes back and forth and up and back.
3. Even the adhesive out by pulling the trowel across the area while holding it at a 45° angle from the floor. This will leave just the right amount of adhesive on the floor.

Quality Assurance Checklist

- ◆ Check the vinyl for bubbles, tears, or cuts.