

Flooring Installation — Workbook

This workbook turns the course into a job you can actually run. Each section maps to a course module and gives you exercises to think through decisions, worksheets to spec materials and tolerances, and checklists to keep each phase in order. Keep it on a clipboard next to your miter saw as you move a real room from bare subfloor to finished trim. The aim is to make the habits that decide success, flatness checks, acclimation, a planned layout, and a real expansion gap, automatic before you click in the first plank.

Knowing the Floor and the Three Products

Pick the right product for each room and estimate the materials, trim, and waste before you buy.

Exercise: Match the Product to the Room

For each room you plan to floor, decide on a product and justify it against water exposure and traffic first. Write your reasoning.

- Will this room ever get wet (kitchen, bath, laundry, basement, entry)? If yes, why does that rule out laminate and engineered hardwood here?
- How heavy is the traffic, and what AC rating (laminate) or wear-layer mils (LVP) does that call for?
- Is the subfloor concrete, below grade, or a wood upper floor, and how does that affect your choice?
- State your final pick (laminate / SPC LVP / WPC LVP / engineered hardwood) and the one sentence that justifies it.

Worksheet: Product Spec Selection Sheet

Lock in the exact spec you will buy. Aim for 8 mm+ AC4 laminate, 5 mm+ SPC with a 20 mil wear layer, or 2 mm+ veneer engineered hardwood.

Room name

Product type (laminate / SPC LVP / WPC LVP / engineered hardwood)

Total plank thickness (mm)

Durability spec (AC rating for laminate / wear-layer mils for LVP / veneer mm for hardwood)

Waterproof? (Y/N) and is that right for this room?

Underlayment: pre-attached or separate?

Reason for this choice (water vs traffic vs subfloor)

Worksheet: Material and Quantity Estimate

Measure and order with the right waste factor. Add 10% for a straight layout, 15% for diagonal or complex rooms, plus one extra box of attic stock.

Room area (length x width, in sq ft) for each section

Total area across all sections (sq ft)

Waste factor used (10% straight / 15% complex)

Square feet per box (from the label)

Boxes to buy (rounded up, plus 1 attic-stock box)

Lot / batch number confirmed identical on all boxes

Underlayment, transitions, and trim ordered to match? (Y/N)

Checklist: Tools Ready-to-Start

- Tape measure, speed square, and a marking pencil
- Miter saw with a fine-tooth blade, or a score-and-snap laminate cutter
- Jigsaw with a down-cut blade for curves and notches
- Tapping block and pull bar to close joints without crushing the edge
- Spacers or wedges sized to your expansion gap (1/4 to 3/8 inch)
- Rubber mallet, oscillating multi-tool to undercut jambs, knee pads, utility knife
- Long straightedge or 6-to-10-foot level for the subfloor flatness check

Subfloor Prep and Acclimation

Flatten and dry-check the subfloor and acclimate the planks so the finished floor stays flat.

Exercise: Map the Subfloor

With the subfloor bare and clean, slide a long straightedge across it in a grid and record what you find before fixing anything.

- Where are the high spots (the straightedge rocks)? Mark them on the floor and list their locations here.

- Where are the low spots (light or a gap shows under the straightedge), and how deep is the worst one in inches?

- Does any spot exceed 3/16 inch over 10 feet (or 1/8 inch over 6 feet)? List each out-of-tolerance area.

- Is the subfloor plywood/OSB or concrete, and what fix does each problem area need (sand, grind, patch, self-leveler)?

Worksheet: Moisture Test Log

Run a moisture test on any concrete or below-grade subfloor and record the result before you install. Do not proceed on a fail.

Subfloor type (concrete slab / wood)

Test method (ASTM D4263 plastic sheet / ASTM F1869 calcium chloride / ASTM F2170 RH probe / pin meter)

Date started and date read

Reading or result (condensation Y/N, lb/1000 sq ft, % RH, or % MC)

Manufacturer's limit for your product

Pass or fail

Vapor barrier required? (Y/N) and type (6-mil poly / built-in)

Checklist: Subfloor and Underlayment Ready

- Old flooring, tack strip, staples, and debris fully removed; floor swept and vacuumed
- High spots ground or sanded flat; squeaky areas re-screwed first
- Low spots and seams filled with the right patch or self-leveler and feathered flush
- Re-checked with the straightedge: nothing rocks, no gap exceeds tolerance
- Moisture test passed for this product
- Vapor barrier laid over concrete, seams overlapped 6 to 8 inches and taped, run up the walls
- Correct underlayment rolled out (or confirmed pre-attached and NO second pad added)

Exercise: Acclimation Plan

Plan and then log the acclimation so you can prove it (and protect your warranty). Bring boxes into the actual install room.

- What does your manufacturer require for time, temperature, and humidity? Write the exact numbers.
 - Are the boxes flat in the installation room (not a garage or basement), cross-stacked or opened for airflow?
 - Is the home's HVAC running so the room is at normal lived-in conditions during acclimation?
 - Record start date/time and the planned end date/time; confirm you will not start early to save a day.
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Layout Planning and Installation

Plan direction and stagger, set the critical first rows, then click the field with a consistent gap.

Exercise: Plan Direction and Border Widths

Before laying anything, decide board direction and size the first and last rows so neither is a skinny sliver.

- Which way will planks run (parallel to the longest wall / toward the main window light / down a hallway), and why?
 - Divide the room width by the plank width: how wide is the leftover final row?
 - If that last row would be under about a third of a plank (roughly 2 inches), how much will you rip the first row to balance both borders?
 - What stagger offset will you use for end joints (at least 6 to 12 inches per your manual)?
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Checklist: First-Rows Checklist

- Spacers placed along the start wall and end wall to hold the expansion gap
- Chalk line snapped (or first row scribed to a bowed wall) so the leading edge is dead straight
- First row laid with the leading locking edge facing into the room
- End plank of the first row cut to length with its expansion gap at the end wall
- Sighted down the front edge: row one is perfectly straight before starting row two
- Second row started with a cut plank to stagger the end joints by the chosen offset
- Tapping block and pull bar used to close joints; never struck the locking lip directly

Worksheet: Layout and Stagger Plan

Sketch and record the plan from a dry run of three to four rows so the floor reads as intentional. Board run direction and the reason

Plank width and room width across the run

First-row rip width (if balancing borders)

Last-row width (room width minus full rows minus gap)

Stagger offset between rows (inches)

Number of boxes opened and mixed at once

Expansion gap used at all walls (inches)

Exercise: Rehearse the Obstacle Cuts

Walk the room and plan every cut that is not a straight rip before you reach it. Write your method for each.

- List each door jamb/casing: will you undercut it with the multi-tool using a scrap plank as a height guide?
 - List each pipe: hole 1/2 inch oversize plus a glued-back wedge to the plank edge?
 - Any irregular shapes (hearth, jog) needing a cardboard template and a jigsaw down-cut?
 - How will you draw the final row tight (pull bar) given there is no room to angle it in?
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Transitions, Trim, and Finishing

Finish with the right transitions and trim that hide the gap without ever pinning the floating floor.

Worksheet: Transition Schedule

List every doorway and floor change and assign the correct profile. Remember the track fastens to the SUBFLOOR only.

Location (doorway / floor change / edge / stair)

Surface and height on each side

Profile needed (T-molding / reducer / end cap / stair nose)

Color match to the flooring confirmed? (Y/N)

Track fastened to subfloor only (NOT through planks)? (Y/N)

Planks stopped short by the expansion gap under the molding lip? (Y/N)

Doubles as an expansion break for a long run (>30 to 40 ft)? (Y/N)

Checklist: Trim and Transition Checklist

- Correct transition profile chosen for each joint (T / reducer / end cap / stair nose)
- Transition tracks fastened to the subfloor only, centered on the gap, planks sliding freely beneath
- Baseboard or quarter round nailed into the wall or studs, never down into the planks
- A thin spacer kept under the shoe while nailing so it is not crushed onto the floor
- Corners coped or mitered tight; nail holes filled with putty
- Caulk run along the TOP of the molding to the wall only, never the bottom to the floor
- Long runs broken with a T-molding within the manufacturer's maximum span

Exercise: Final Walk and Defect Hunt

With trim on, walk the whole floor in socks under low-angle light and record anything to fix while it is still easy.

- Does any plank flex, tap hollow, or sit proud at a seam? List the locations.

- Is there lippage (one edge higher than its neighbor) anywhere under raking light?

- Did the floor creep tight to any wall, losing its expansion gap? Where?

- Which issues can you fix now from an edge or transition versus after furniture returns?

Exercise: Diagnose a Problem (or Prevent One)

Use the failure-to-cause logic from the course. For any symptom present (or to pressure-test your install), trace it to its upstream cause.

- Peaking or tenting at seams: is the expansion gap real at every edge, or is trim/a transition pinning the floor?

- Open gaps between planks in dry weather: was the floor acclimated and installed at normal humidity?

- Hollow or bouncy spot: was the subfloor under that area actually flattened, or is there a void?

- Squeak: have you confirmed it is the subfloor/underlayment rather than the planks before re-laying anything?

Your Action Plan

1. Pick each room's product against water exposure first, then traffic, and lock the exact spec (thickness, AC or mils, veneer).
2. Measure the area, add the right waste factor, and order flooring, underlayment, transitions, and trim in matching lots.
3. Strip the room to bare subfloor and map every high and low spot with a long straightedge.
4. Grind the humps and fill the hollows until nothing rocks and no gap exceeds 3/16 inch over 10 feet.
5. Run a moisture test on concrete or below-grade subfloors and lay a vapor barrier where

required.

6. Roll out the correct underlayment (or confirm pre-attached) and acclimate the planks in the room for the full required time.

7. Plan board direction and balance the first and last row widths so neither is a skinny sliver.

8. Set three straight, square, gapped first rows, then click the field staggering end joints 6 to 12 inches.

9. Undercut jambs, notch pipes, template irregular shapes, and draw the final row tight with a pull bar.

10. Install transitions to the subfloor only and trim to the wall only, then walk the floor and fix any flex, lippage, or pinched gap.

