Portofino Flooring

WPC
INSTALLATION GUIDE

Floating Click-Lock Installation · Waterproof Top Layer

READ THIS ENTIRE GUIDE BEFORE BEGINNING INSTALLATION

Failure to follow these requirements voids warranty coverage

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Before You Begin: Pre-Installation Checklist

Every box must be checked before the first plank goes down. Most installation failures trace back to skipping one of these.

- ☐ Correct product, color, style & quantity delivered — SKU on cartons matches purchase order
- ☐ Building fully enclosed; windows, doors & permanent HVAC installed and running
- ☐ HVAC operating for at least **48 hours**: temperature 60–80°F, humidity 35–55%
- ☐ Flooring acclimated on site **48 hours** in closed cartons, laid flat, in the conditioned space
- ☐ Subfloor clean, dry, structurally sound — no mold, moisture, squeaks or debris
- ☐ Subfloor flat within **1/8" over 4 ft** (high spots sanded, low spots filled)
- ☐ Concrete slabs moisture-tested and passing (see Section 3)
- ☐ 6-mil polyethylene moisture barrier on hand for concrete installs
- ☐ 3/8" spacers, tapping block, pull bar & saw ready
- ☐ Layout planned: final row ≥ 2" wide, end joints stagger ≥ 8"

INSPECT BEFORE YOU INSTALL

Installing a plank constitutes acceptance of that plank. Inspect every plank before installation — planks with visible manufacturing defects or damage must be set aside. Claims for visibly defective planks that were installed anyway will not be honored.

IF YOU FIND A DEFECT

Stop immediately. Do not open more cartons, and do not discard the opened carton or its labels. Contact Portofino Flooring with photos and the carton SKU before proceeding.

Tools Needed

- Tape measure & pencil
- Chalk line
- Utility knife / score-and-snap cutter
- Crosscut or circular saw
- Jamb saw or undercut saw
- 3/8" spacers
- Tapping block & rubber mallet
- Pull bar
- Safety glasses
- Cardboard for templates

1 Jobsite Conditions

1.1 Maintain interior temperature between **60°F and 80°F** and relative humidity between **35% and 55%** for at least 48 hours before installation, throughout installation, and continuously for the life of the floor. These conditions must reflect a normal, occupied living environment.

1.2 HVAC must run for a minimum of **48 hours** before installation begins. In new construction, do not install until all windows, doors, and permanent heating and cooling systems are installed and operating.

1.3 The jobsite must be clean, dry, structurally sound, and free of any signs of moisture intrusion. Subfloors with mold, mildew, active moisture, standing water, or structural instability are not acceptable and must be remediated first.

1.4 Portofino WPC is approved for interior installation **above, on, or below grade**. It is never approved outdoors or in areas exposed to the elements.

1.5 Over crawl spaces: minimum **18 inches** of clearance, insulated to code, with a **6-mil ground vapor barrier** and cross-ventilation of at least 1.5 sq ft per 100 sq ft of floor space. Exterior grading should slope away from the structure (3" over 10 ft).

1.6 Install flooring **last**, after other trades have finished, to prevent jobsite damage.

PROHIBITED AREAS

The top layer is waterproof, but the floor is not a moisture barrier and will not protect the subfloor beneath it. Do not install WPC flooring in full bathrooms containing showers or tubs, saunas, steam rooms, or sunrooms without active, permanent humidity control. Installation in these environments voids the warranty.

2 Acclimation

2.1 Acclimate WPC flooring in the installation environment for **48 hours** before installation. Keep cartons closed, laid flat and level on the floor — never on edge or leaning.

2.2 The acclimation space must hold consistent temperature and humidity within the approved range. Never acclimate or store WPC in garages, porches, exterior spaces, or any non-conditioned area.

3 Subfloor Requirements

3.1 The subfloor must be flat within **1/8 inch over a 4-foot span**. Sand down high areas; fill low areas with a suitable floor-leveling compound. Unevenness causes joint stress, deflection, and noise — and voids the warranty.

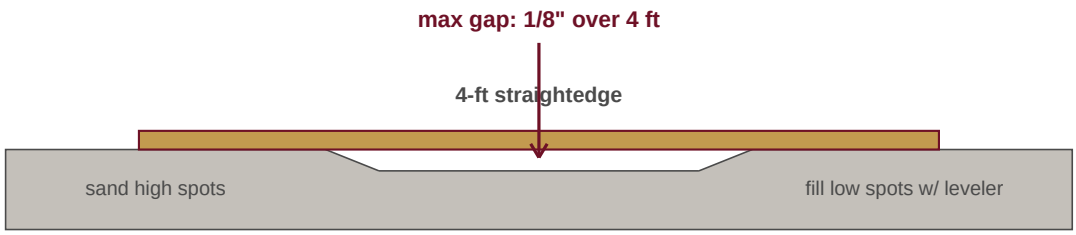


Fig. 1 — Check flatness with a 4-ft straightedge across the entire installation area.

3.2 All subfloors must be structurally sound, dry, and securely fastened. Repair loose or squeaky areas before installation. Remove debris, paint, residues, and old adhesive so planks make full, clean contact.

3.3 Vacuum the entire area. No nails, staples, or protrusions may remain — correct any obstruction that prevents full plank contact.

3.4 **Wood subfloors:** moisture content must not exceed **11%**. Fasten securely with nails or screws every 6" along joists to eliminate squeaks.

3.5 **Concrete moisture testing is required.** The slab must test at or below **80% relative humidity per ASTM F2170** (in-situ probe) or at or below **3 lbs / 1,000 sq ft / 24 hrs per ASTM F1869** (calcium chloride), with a surface **pH of 7–9**. Slabs exceeding these limits, or showing hydrostatic pressure, must be remediated before installation. Never install over wet or uncured concrete — new slabs typically require 60+ days of cure.

APPROVED SURFACES	PROHIBITED SURFACES
✓ Ceramic tile — grout lines filled & smoothed with self-leveler	✗ Existing laminate
✓ Non-cushioned vinyl — secure and flat	✗ Any existing floating floor (SPC, WPC, laminate)
✓ OSB & plywood — structurally sound	✗ Carpet — all types
✓ Hardwood — secure, over a **wood** subfloor only (never over concrete)	✗ Cork or any cushioned / soft substrate

Fig. 2 — Acceptable and unacceptable existing surfaces.

4 Underlayment & Moisture Barrier

4.1 A **6-mil polyethylene moisture barrier is mandatory** over concrete and any area with potential moisture concerns. The barrier must be continuous, with seams overlapped and taped. This is a warranty requirement.

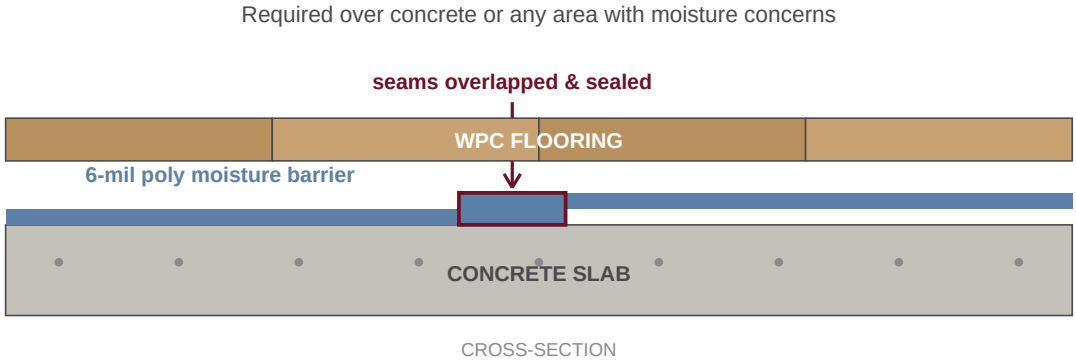


Fig. 3 — Moisture barrier installation over concrete.

4.2 All Portofino WPC planks include an **attached EVA underlayment pad**. Never add any additional padding, foam, cushioning, or sound barrier beneath them — over concrete, install only the 6-mil poly moisture barrier. Doubled-up padding causes excessive deflection and locking-system failure, and voids the warranty.

4.3 The subfloor surface must be smooth and clean before the barrier goes down. Correct any wrinkles, folds, or air pockets — the flooring needs uniform support.

5 Radiant Heat

5.1 WPC may be installed over **embedded hydronic (water-based) systems only**, with at least **1/2 inch** of separation between the heating elements and the flooring. Heat must be evenly distributed with no hot spots.

5.2 The floor surface temperature must never exceed **80°F (27°C)** — note this is lower than for SPC. An in-floor temperature sensor is required to prevent overheating.

5.3 **New systems:** operate at capacity for at least **3 weeks** before installation to cure residual moisture out of the cementitious topping. Concrete moisture must not exceed **2.5% (CM method)**.

5.4 Turn the heat **OFF 24 hours before** installation, keep it off during installation, and leave it off for **24 hours after**. Maintain 60–80°F room temperature during installation by other means if needed.

5.5 After installation, raise the temperature gradually in **5°F increments** back to normal operating level.

NO ELECTRIC MATS

Electric heating mats, foil systems, and any surface-level radiant system in direct contact with the flooring are prohibited under WPC and void the warranty.

6 Layout Planning

6.1 Identify the straightest wall or the longest visually dominant wall in the room — this is your starting foundation for the first row.

6.2 Measure the room width and calculate the final row. If the last row would be narrower than **2 inches**, rip the first row down to rebalance.

6.3 Maintain a **3/8-inch expansion gap** at all perimeter walls, door frames, columns, cabinets, and every fixed vertical structure. Use spacers to hold the gaps during installation.

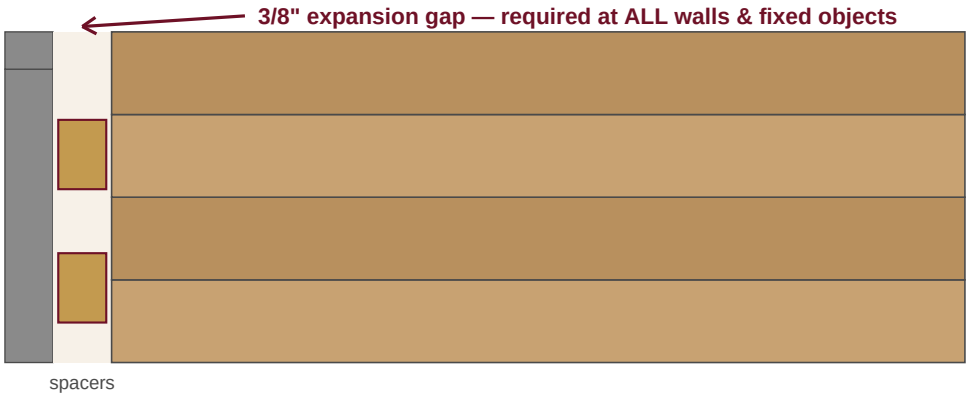


Fig. 4 — 3/8" expansion gap held with spacers at every wall and fixed object.

6.4 Dry-lay several rows first to check pattern and color distribution — especially with high-variation colors, to avoid clustering or streaking.

6.5 Stagger end joints a minimum of **8 inches** between adjacent rows, and avoid repeating patterns. Staggering is structural, not just cosmetic.

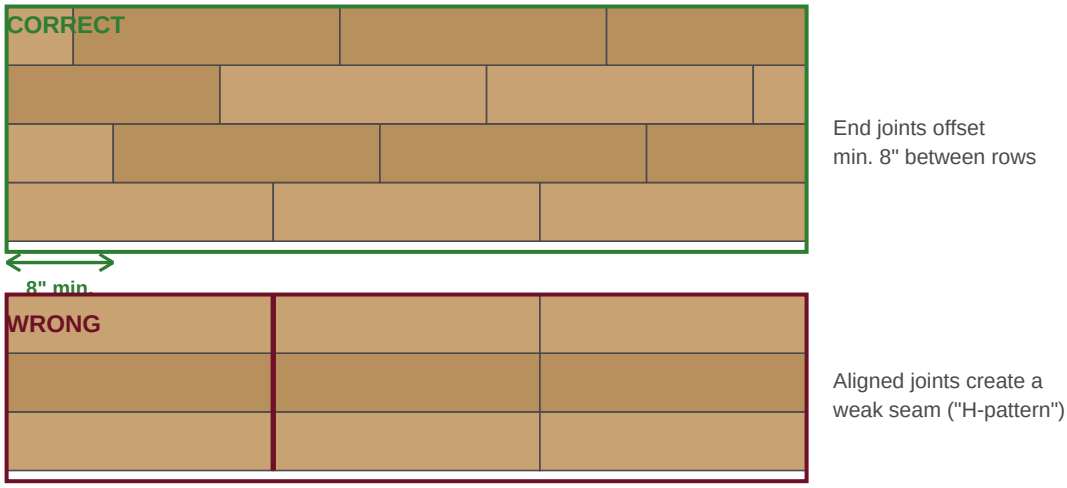


Fig. 5 — Correct random stagger (top) vs. aligned joints that weaken the floor (bottom).

6.6 Inspect the locking system of each plank before use. Never force damaged profiles together.

6.7 Continuous runs must not exceed **50 feet** in any direction. For runs beyond 50 feet, increase perimeter gaps to **1/2 inch** and install an expansion break with a T-molding. In commercial installations, T-moldings are required at all doorways.

7 Installation Procedure

Floating click-lock installation — no glue, no nails.

7.1 **Set a working line.** Measure one plank width plus the 3/8" gap out from the starting wall at both ends and snap a chalk line. If the wall is out of square, scribe-cut the first row to follow the line — the line is straight even when the wall is not.

7.2 Start the first row with the **groove side facing the wall**, spacers in place, aligned to the working line. The first row must be perfectly straight — it determines the accuracy of the entire floor.

7.3 Connect planks by angling the tongue into the groove and lowering gently into place. A tapping block may be used for light persuasion — never hammer planks directly or force them.

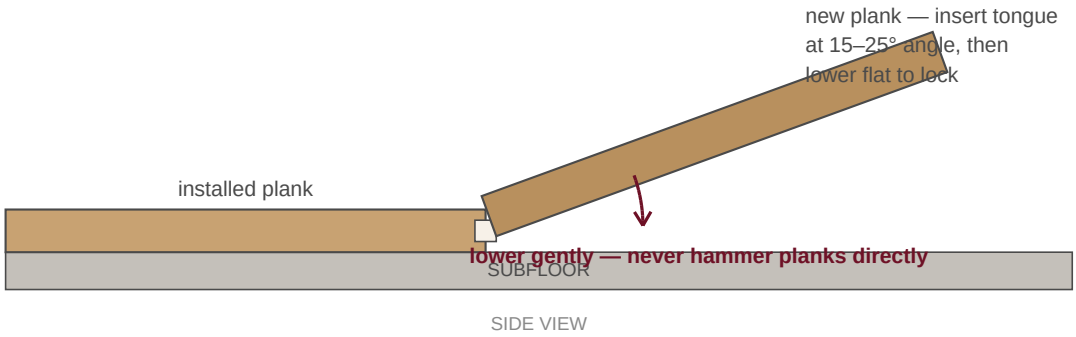


Fig. 6 — Angle-and-lower locking technique.

7.4 Cut planks with a score-and-snap cutter, WPC-rated cutter, or power saw. Cuts must be clean and square for proper locking engagement.

7.5 Start row two with a plank at least **8 inches** longer or shorter than the first plank of row one. Slide the long side into place and lock by lowering along the angle.

7.6 Complete each row before starting the next. Confirm every joint is fully engaged — seams flush, no raised edges or gaps.

7.7 Check alignment frequently as you go. Walls are rarely perfectly straight; make small adjustments to hold a consistent line.

7.8 At door jambs, undercut the jamb so the plank slides underneath with full expansion clearance. Never force planks under fixed frames or pinch the floating floor.

> **PRO TIP**
>
> Save your cut-offs. An offcut from the end of one row often makes a perfect, already-staggered starter for the next row — less waste, better stagger.

8 Cabinets, Fixed Items & Heavy Loads

8.1 Install WPC **after** permanent cabinets and islands, and **before** baseboards and trim. A floating floor must never be trapped beneath cabinetry — this restricts expansion and causes buckling.

8.2 Hold the 3/8-inch gap around every vertical obstruction: pillars, stair posts, fireplaces, floor vents, sliding-door tracks, built-ins. Never fill these gaps with grout, mortar, or any rigid material.

8.3 For pipes and other penetrations, drill holes at least **3/8 inch larger** than the object. Cover with escutcheon plates or color-matched silicone that does not restrict movement.

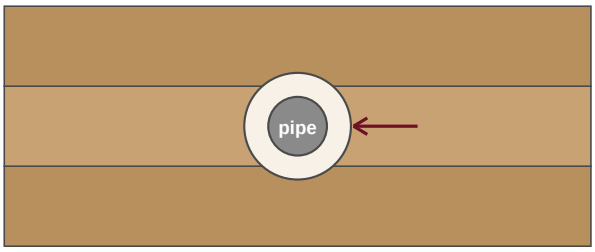


Fig. 7 — Clearance at plumbing penetrations.

8.4 For irregular shapes, make cardboard templates first for clean, accurate cuts.

8.5 The floor must remain unpinned. Transition strips, track systems, closet-door guides, and threshold brackets must fasten to the **subfloor only** — never screw through the flooring.

8.6 Move refrigerators, ranges, dishwashers, washers, and dryers over rigid protective panels (plywood or masonite). Never drag appliances directly across the floor — it can separate the locking system.

8.7 Install up to the edge of extremely heavy units that fasten to the structure; do not trap flooring beneath them. When reinstalling appliances, use protective panels and distribute the weight.

8.8 Rolling loads — office chairs, carts, wheelchairs, hand trucks — require caution. The WPC core is softer and more comfortable underfoot than SPC, which also means narrow wheels and high point loads can mark or dent it more easily. Use protective mats where traffic concentrates and chair pads under desks.

9 Trim, Moldings & Transitions

9.1 After the last row, remove all spacers. Install baseboards or quarter-round to cover the expansion gaps — nailed to the **wall only**, never the flooring.

9.2 Where WPC meets other flooring (tile, carpet, hardwood), use reducers, end caps, or thresholds as appropriate. Anchor all transition pieces to the subfloor only.

9.3 Never glue or adhere WPC at perimeter edges. The floor must remain fully free-floating at all times.

9.4 Trim must not press down on the flooring surface — the floor needs to slide freely beneath it.

10 Completing the Installation

10.1 Confirm all boards are securely locked with no lifted or gapped joints. Use a pull bar to gently tighten loose end joints.

10.2 Vacuum with suction only (beater bar disabled). Remove all dust, packaging debris, and installation residue.

10.3 Inspect for uniformity, alignment, and correct expansion spacing. Verify nothing — molding, cabinetry, fasteners — restricts the floating floor.

10.4 In multi-room installations, walk the entire path to confirm smooth transitions, full engagement, and consistent movement allowance.

10.5 If other trades will work in the space afterward, protect the floor with **rosin paper** — clean the floor first, overlap and tape the paper edges to each other, and tape to trim, never to the flooring. Do not use plastic film or non-breathing covers.

11 Post-Installation Care

Leave this page with the homeowner.

11.1 Keep heavy furniture and appliances off the floor for **24 hours** after installation so the floating system can settle.

11.2 Fit felt pads under all furniture legs and replace as they wear. Sharp or narrow legs need weight-distributing protectors — especially important on WPC's softer core.

11.3 Clean with a dry or slightly damp microfiber mop and a pH-neutral cleaner rated for vinyl flooring. No harsh chemicals, abrasives, wax, polish, or oil-based products.

11.4 Place walk-off mats at all exterior doors to catch grit and stones. Avoid rubber- or latex-backed mats, which can stain the flooring.

11.5 Maintain temperature and humidity within the warranty range (60–80°F / 35–55% RH) year-round.

11.6 Never drag furniture or appliances across the floor — lift, or use protected transport boards.

MOISTURE & CLEANING

No steam mops. No wet mopping. No standing water. While the top layer is waterproof, standing water can damage the finish, seep to the subfloor, and cause issues not covered under warranty.

Questions during installation?

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