



# Install Horizontal PVC/Bituminous Membranes Checklist

Install horizontal PVC/bituminous membranes with our interactive checklist—commentable and ready to export as PDF/Excel. Verify substrate, laps, terminations, and protection for watertight results.

Project:

Date:

Filled by:

## Pre-Installation Verification

1	Confirm scope, documents, weather, and substrate suitability before starting horizontal membrane works.
2	Review approved drawings, manufacturer data sheets, and method statements; confirm only horizontal areas are included; record superintendent sign-off.
3	Check weather window: no rain forecast, substrate dry, ambient and substrate $\geq +5^{\circ}\text{C}$ ; wind $\leq 10 \text{ m/s}$ ; upload weather app screenshots.
4	Measure substrate moisture: concrete/screed $\leq 75\%$ RH or $\leq 4\%$ CM; photograph meter readings with date/location tags.

## Substrate Preparation

5	Survey flatness using 2 m straightedge; tolerance $\pm 5 \text{ mm}$ over 2 m; mark highs/lows and upload annotated photos.
6	Grind high spots; patch low areas with compatible repair mortar; recheck flatness; record product batch/lot and cure times.
7	Clean surface by vacuum; remove dust, laitance, oil, and debris; show before/after photos and waste disposal log.
8	Apply approved primer/adhesion promoter uniformly per manufacturer guidance; verify coverage rate and no puddling; record batch numbers.

## Membrane Installation – PVC or Bituminous

9	Lay insulation/vapour control layers (if specified) with staggered joints; tight butted; no gaps $> 5 \text{ mm}$ ; photo evidence.
10	PVC: unroll sheets, relax 20–30 minutes; set alignment; avoid wrinkles; document roll numbers and layout sketch.
11	PVC mechanical fastening: install fasteners per design grid; verify edge and field spacing; record pull-out tests and torque values.
12	Bituminous: torch-apply or self-adhere per data sheet; achieve uniform bond without burn-through; show continuous bleed at laps 5–10 mm.

### Laps and Seams

13	Set side/end laps: PVC $\geq$ 60 mm side/100 mm end; bituminous $\geq$ 80 mm side/100 mm end; mark guides; photo tape measure at seams.
14	PVC welding: hot-air weld with automatic welder; target weld width $\geq$ 30 mm; probe entire seam; log welder settings and probes.
15	Conduct seam testing: peel/shear samples at defined intervals; or air-channel tests where applicable; record locations, readings, and repairs.

### Terminations and Penetrations

16	Pipes/penetrations: fit compatible boots or field-fabricated collars; weld/adhere fully; install clamp rings; photo close-ups.
17	Drains/scuppers: recess flanges, remove burrs; weld/adhere 360°; install strainers; flood test drain area; record no leakage.
18	Horizontal edge terminations: fix termination/drip profiles at $\leq$ 200 mm centers; seal edges; show continuous compression and sealant bead.

### Protection, Testing, and Handover

19	Install geotextile protection $\geq$ 300 g/m <sup>2</sup> or boards over membrane before traffic; document overlaps and continuity.
20	Place screed, pavers, or ballast per design; use separation layer if hot works; monitor membrane temperature with IR thermometer; record Tmax.
21	Leak test where permitted: flood or electronic detection after cure; maintain test duration; document results, locations, and any repairs.
22	Compile as-built: seam maps, test logs, batch numbers, photos, approvals; obtain installer and inspector signatures.

### Comments:

Filled by:

Signature:

Introduction	How to use this checklist
<p>Install horizontal PVC/bituminous membranes is the head term for this focused checklist guiding crews and inspectors through critical steps on flat roofs, podium decks, terraces, and horizontal slabs. It covers horizontal waterproofing membranes, from PVC sheets to torch-applied bituminous systems, emphasizing substrate readiness, seam performance, penetrations, terminations, and protection layers. Vertical membrane work is intentionally excluded to keep scope precise at plane transitions and edges only. By following these steps you avoid blistering from trapped moisture, seam failures from poor welding or adhesion, and leaks from poorly executed drains or terminations. You also deliver predictable outcomes: consistent laps, traceable batch and test data, protected membranes under screeds or pavers, and clean handover documentation per approved project specifications and authority requirements. Use this interactive checklist on site: tick items as complete, add comments with photos and readings, and export your record to PDF/Excel with a QR code for secure verification.</p>	<p>1. Preparation: Gather tools (RH/CM meter, 2 m straightedge, IR thermometer, seam probe, welder/torch), approved specs, data sheets, PPE, and confirm safe access and weather window. 2. Open the interactive checklist on your device; create a project and area (roof grid or slab zone) to structure evidence by location. 3. Start work: For each item, tick completion, attach photos, meter readings, and batch numbers; add comments noting locations and corrective actions if needed. 4. Use the checklist's validation cues: ensure tolerances and acceptance criteria are met before moving to the next stage. 5. Conduct internal review with the supervisor; resolve flagged comments; retest seams after repairs and upload updated evidence. 6. Export your record as PDF/Excel with embedded photos and location tags; share QR code for authentication with stakeholders. 7. Sign-Off: Capture digital signatures from installer, inspector, and client; archive the checklist and as-built documents in the project folder.</p>