



Apply Horizontal Liquid-Applied Membranes QA Checklist

Apply horizontal liquid-applied membranes using this interactive checklist—commentable and field-ready—covering DFT, curing, pinholes, and adhesion verification. Export as PDF/Excel for records.

Project:
Date:
Filled by:

Pre-Application Conditions

1	Confirm substrate is sound, clean, and sloped to drains ($\geq 1:80$ or per specs); remove laitance, oil, curing compounds; document with wide-angle and close-up photos.
2	Measure substrate moisture with a carbide (CM) meter or equivalent; acceptance $\leq 5\%$ or per approved project specifications; record readings, method, grid locations, and photos.
3	Record ambient/substrate temperature and relative humidity; ensure substrate is ≥ 3 °C above dew point; acceptance: no condensation risk; log thermometer, hygrometer, and dew-point calculations.
4	Verify surface profile/texture matches project specifications; acceptance: uniform profile without loose fines; capture scaled photos (ruler/coin) across representative areas.
5	Mask terminations, drains, and joints; install temporary protection and plug drains; acceptance: edges defined, no pathways for runs; photo evidence before priming.

Materials and Mixing

6	Check product type, batch numbers, and shelf life; acceptance: within expiry and approved submittals; record lot numbers, delivery dockets, and COAs.
7	Condition materials to 18–25 °C; verify with IR thermometer; acceptance: within range for stated pot life; log container temperatures and ambient conditions.
8	Mix components using a low-speed drill and paddle (≈ 300 – 500 rpm); scrape sides/bottom; acceptance: streak-free, uniform mix; record start/finish times and pot life start.
9	Apply a 1 m ² test patch on representative substrate; acceptance: no fisheyes, no bleed, good wet-out; document photos and note working time.

Application (Roller/Squeegee)

10	Prime substrate by roller at specified rate (g/m ²); measure WFT with comb at start/middle/end; acceptance: continuous film, WFT within spec $\pm 10\%$; record readings.
11	Broadcast kiln-dried sand to refusal if required; acceptance: uniform coverage; remove loose after cure; document with close-up photos and quantity per m ² .
12	Apply base coat by squeegee, then back-roll crosswise; measure WFT every 10 m ² ; acceptance: target WFT per specs $\pm 10\%$; log location-tagged readings and photos.
13	Reinforce cracks, joints, and penetrations with fabric embedded in wet base coat; acceptance: full wet-out, 50 mm minimum laps; photo evidence at each detail.
14	Apply second coat after tack-free; cross-rolling to avoid pinholes; acceptance: cumulative DFT meets spec; verify via WFT targets and later DFT checks; record batch usage.

Thickness Verification (WFT/DFT)	
15	Calculate expected DFT from measured WFT and solids by volume; acceptance: projected DFT \geq specified minimum; attach calculation snapshot with inputs.
16	Measure DFT after cure using appropriate gauge (magnetic/ultrasonic); take ≥ 5 readings per 10 m ² ; acceptance: average within spec, no point $< -10\%$; record gauge ID.
17	Mark thin areas; apply additional coat by roller; remeasure DFT after cure; acceptance: meets specified minimum; capture before/after photos and final readings.
18	Reconcile material usage versus covered area (L/m ²); acceptance: variance $\leq 10\%$ from theoretical; upload consumption log and area take-offs.

Curing and Protection	
19	Record tack-free, recoat, and walk-on times at measured conditions; acceptance: within product data expectations; time-stamp observations and photos of status labels.
20	Protect fresh membrane from dust, traffic, rain, and standing water; acceptance: no indentation or contamination; install barriers/signage; photo evidence daily.
21	Perform tack test and solvent rub (if applicable); acceptance: no pigment transfer, surface firm; log results and any hold points.

Pinhole and Holiday Testing	
22	Inspect in raking light and with magnifier; acceptance: no pinholes, craters, or fish-eyes; mark defects on plan and photos.
23	Conduct low-voltage wet sponge holiday test on conductive substrates after cure; acceptance: zero indications; record instrument, settings, sweep paths, and readings.
24	Repair all defects with compatible material; feather edges; allow to cure; retest; acceptance: zero holidays after repair; upload repair logs and photos.

Adhesion Verification	
25	Perform pull-off adhesion testing with dollies; ≥ 3 tests per 100 m ² ; acceptance: bond strength \geq value per specs; record MPa, failure mode, and locations.
26	Check edge adhesion using a putty-knife lift test at perimeters; acceptance: no debond beyond 5 mm; photo evidence and notes.
27	Confirm terminations at drains and upstands are sealed or mechanically secured per details; acceptance: continuous bond and seal; close-up photos of each termination.

Documentation and Sign-Off	
28	Upload environmental logs, WFT/DFT records, holiday and adhesion test reports, and batch data; acceptance: complete set on file; QC initials and date.
29	Obtain digital approvals from contractor and inspector; acceptance: e-signatures with timestamps; attach distribution list for stakeholders.
30	Export final report as PDF/Excel with embedded QR for authenticity; acceptance: archived to project folder; verify accessible link.

Comments:

Filled by:

Signature:

Introduction	How to use this checklist
<p>Apply horizontal liquid-applied membranes confidently with a job-ready, non-spray workflow that prioritizes thickness control, cure verification, pinhole detection, and adhesion. This checklist aligns with common liquid waterproofing practices and roller-applied or squeegee-applied coating methods to deliver uniform, durable protection on slabs, podiums, balconies, and wet areas. It excludes spray systems to reduce overspray risk and improve consistency on horizontal substrates. You will confirm environmental conditions, mix and apply materials correctly, measure wet and dry film thickness (WFT/DFT), monitor curing, perform holiday testing, and verify bond strength—capturing photos, readings, and sign-offs as you go. Following these steps helps avoid common failures such as under-thickness, entrapped moisture, cratering, and poor adhesion, all of which can lead to leaks, blistering, and premature repairs. Use this interactive checklist on any project where project specifications and authority requirements govern acceptance. Start now: tick items, add comments, attach evidence, and export to PDF/Excel from a QR-secured link.</p>	<p>1. Preparation: Gather tools (WFT comb, DFT gauge, pull-off tester, wet sponge holiday detector, IR thermometer, hygrometer), rollers/squeegees/brushes, mixing gear, PPE, and project specifications. Establish test areas, masking, and protection routes. 2. Project setup: Create a checklist session, define zones (grid or by m²), add drawings, and preload target WFT/DFT, cure times, and acceptance criteria per approved project specifications. 3. Using the Interactive Checklist: Start interactive mode; tick items as completed, add comments, attach photos and readings, and tag locations. Log instrument IDs and batch numbers. Flag nonconformances and assign actions. 4. Quality review: Verify all evidence is uploaded—environmental logs, WFT/DFT records, holiday and adhesion tests. Resolve open comments, close actions, and request digital approvals from stakeholders. 5. Sign-Off and Export: Capture digital signatures, then export the full record as PDF/Excel. Share QR-authenticated links with the client and archive to the project folder.</p>