Waterproofing & Layout Checklist

Build a leak-proof shower from the studs up.

Verify your tub surround's structural integrity before mixing a single batch of thinset. This checklist ensures a lasting, waterproof finish.



Critical Waterproofing Specs

Min. 2 inches
Hidden sheet membrane seam overlap

1/4-inch per foot
Pre-sloped niche sill downward pitch

Past the lip
Tile overlaps flange directing water

1/16 to 1/8-inch
Gap shimmed off tub deck

Every 8 inches
Cement board screw spacing on studs

Tooling Matching Silicone

Spray the fresh bead of matching 100% silicone sealant lightly with soapy water before tooling. This prevents a sticky mess and leaves a perfectly smooth finish.

Choose Your Waterproof Layer

Find your row: **Your membrane choice**

Your membrane choice	Your pick	Why
Polyethylene sheet	Unmodified thinset	Bonds directly to the wall
Liquid membrane	Two heavy coats min.	Wait for full color change
Foam backer board	No separate membrane	Combines structure and waterproof layer

Verify Before You Mix

- ○ Mark the exact center of each vertical stud on ceiling and deck.
- ○ Trace your fixture templates onto the cement board to anticipate difficult cuts.
- ○ Test the niche sill with a torpedo level before mortar hardens permanently.
- ○ Verify adhesive compatibility with your membrane manufacturer before purchasing heavy mortar.

Layout & Installation Sequence

1. **Support the First Row** Screw a level temporary ledger board directly into the studs to hold heavy tiles while mortar cures.
2. **Center the Tile Layout** Start from the visual center of the main wall to ensure equal cuts at both room corners.
3. **Tape the Cement Seams** Embed alkali-resistant fiberglass mesh tape into thinset over every joint to create one monolithic wall.
4. **Waterproof the Niche Box** Wrap the entire inside with your sheet membrane, paying special attention to the four inside corners.
5. **Mix Mortar Consistency** Combine powder and water until the thinset holds sharp ridges, resembling creamy peanut butter.

Project Notes

Take ten minutes to double-check your prep work—it's your best insurance policy!