



The Flood-Hardy Wall

Wood frame method for a flood resilient home

When building or restoring a home where flooding could possibly rise above the foundation, a **drainable, dryable wall assembly** is designed to survive with little or no damage and save you the cost and ordeal of gutting and replacement of most materials. After a flood, it can be washed out and dried quickly enough to avoid decay and reduce mold growth.

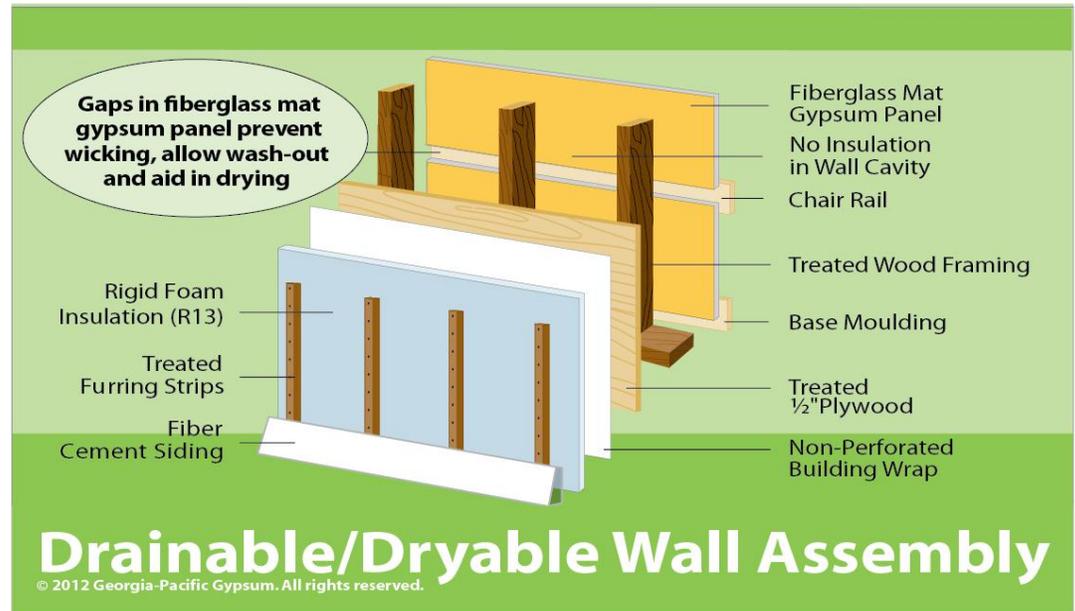


Illustration and model on-site at LaHouse Resource Center courtesy of Georgia-Pacific

Protect your home from future flood damage, expense and ordeal.

- 1) Elevate the structure above potential flood level, if possible.
- 2) Elevate equipment and wiring.
- 3) Build with cleanable materials that can get wet without damage.
- 4) Assemble materials so they can dry after they get wet. Avoid vinyl wallpaper.

A **Drainable, Dryable Wall** uses durable materials assembled in a special configuration that allows the wall cavity to drain and dry out after a flood event. From the outside to the inside of the wall, it contains:

- 1) **Siding** made from fiber-cement, vinyl or aluminum, or brick veneer (resilient to water),
- 2) **Furring strips** (spaces the siding away from the sheathing for good drainage), or brick weep holes.
- 3) **Rigid foam sheathing** (closed cell insulation is nonabsorbent, thus flood damage resistant).
Note: Home restoration alternative is rigid foam boards cut to fit inside stud cavity space or closed cell spray foam insulation installed to fill 60% of the cavity depth (i.e. 2 inches of foam in 2x4 framing).
- 4) **Weather barrier or housewrap** (to reduce water penetration during normal, non-flood conditions).
- 5) **Plywood sheathing** (provides racking resistance, impact resistance, nail holding ability, and better able to withstand wetting compared to OSB or fiberboard sheathing panels).
- 6) **Solid wood framing** (for best results, use pressure treated wood to resist termites, decay and mold).
- 7) **Paperless, moisture-resistant gypsum drywall** (made with a fiberglass mat instead of paper and a moisture-resistant core to minimize absorption and eliminate food source for mold and termites).

Leaving drywall gaps behind removable crown or chair-rail and baseboard moldings provides space where the wall cavity can be flushed out and ventilated to dry. Gaps also prevent wicking from lower to upper panels.