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.

**Drainable/Dryable Wall Assembly**

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.