



CONCRETE WALL PERFORMANCE:

The Basis of a Completely Different Wall System (A more complete statement on their performance.)

- Walls have zero infiltration and greatly reduced conduction of heat.
 -“R” factors are usually more than doubled over ordinary 2 by 4 walls...to around R-40.
 -additionally, the concrete becomes a “*Thermal Mass*”, leveling extremes of outside temperature.
 -it all contributes to huge savings in utilities...reductions to 40% or more are common.
 -the insulated foundation supports passive geothermal heating to 60-65degrees, without supplementation.
- Non-combustible...concrete will not burn; foam will melt but not support combustion.
- Nearly indestructible by forces of weather, even resistant to earthquakes. 8 times stronger than wood.
- Outside sounds reduced by 70-80%.
- Exceeds all existing code requirements everywhere.
- Does not rust or rot or support mold, even if allowed to get wet.
- Insect and rodent proof.
- It can even save time in constructing foundations and walls,
 -cures concrete faster, gets the home under roof faster, minimizing weather damage.

(*): In Moore, OK, and elsewhere, although some of the roofs have been destroyed, the walls, in every single instance, withstood tornados. In California fires of recent years, only homes with concrete walls did not burn in the “flash fires” that swept the hillsides.



Secondary benefits enabled:

- Lower fuel bills by an average of 60%.
- Greatly increased safety for occupants; “*safe rooms*” made easy.
- Outside sounds reduced by 70-80%, party wall sound non-existent.
- Greatly reduced maintenance...nothing to mold, rot or rust.
- Enables consideration of all-electric energy;
 -saving gas tap-on fees and distribution expenses, and eliminates
 -all danger of gas leaks, and the need for combustion air and exhaust.
 -circulation and filtration of inside air still recommended.
- The sizing of heating-cooling equipment can be reduced by 50%.
- Home insurance significantly reduced.
- Overall values are preserved into the indefinite future; resale enhanced.
- It’s very stucco-friendly, enabling the high-end stucco exteriors at a bargain.
- The homes qualify for all kinds of “green” awards:
 -up to half the lumber otherwise used...several large trees saved.
 -A “LEEDS-Green” designation is automatic, could be higher.



A home built with concrete walls.

In the face of such enormous benefits, the cost differential should be easy to justify. Studies estimate that added costs are repaid within 3-4 years by utility savings alone. Already, we would believe that achieving this performance with traditional building methods in place would be simply impossible.

And it should not affect the appearance in any way. The single visible change: windows and doors are set into thicker walls, and so window sills are larger....and everyone loves them!