

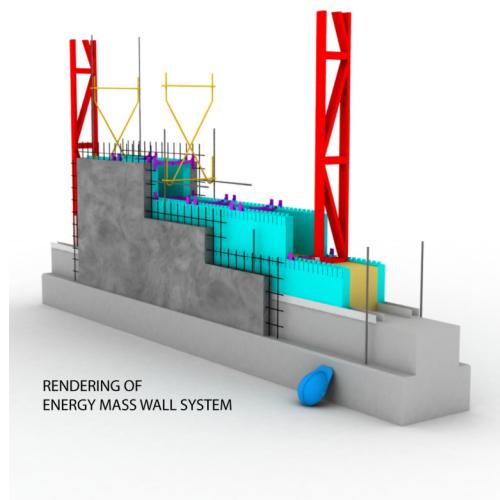
ENERGY MASS™ WALL SYSTEM

resilient | dependable | adaptable

RESILIENT STRUCTURE

Energy Mass™ Wall System is a concrete construction comprised of two 3" concrete skins that sandwich an up to R-100 insulating core. The two skins are thermally isolated but remain structurally connected by non-conductive fiberglass rebar. The wall performs both as a vertical and lateral load resisting system. The strength inherent in its geometry greatly exceeds building code standards for life safety.

The System has a 4-hour fire rating, the highest recognized by the international building code, and is vapor impermeable. Structural testing and analysis show that The System meets performance engineering standards for continued occupancy following maximum credible earthquakes or superstorms.



DEPENDABLE ENERGY STORAGE

The Geometry of **Energy Mass™ Wall System** ensures that the concrete thermal mass and insulating core are positioned for optimal performance. The exterior concrete skin absorbs heat from the exterior environment during the day and releases that heat at night, like a flywheel; the insulating core prevents the thermal transfer of heat through the wall; and the interior concrete skin stores cooling potential to effectively level and shift peak demands and loads.

The wall section can vary in thickness from 14" to 22" -- depending on the desired level of insulation, which ranges from R-60 to R-100, accordingly. **The Passive System**, appropriate in Mediterranean climates, utilizes diurnal temperature swings and the thermal and insulative properties inherent in the technology to produce comfortable interior environments and significant energy savings.

The Active System utilizes radiant cooling in areas without strong diurnal temperatures and to meet the demands of more energy intensive applications like cold storage or winery barrel buildings. The advanced mechanical system can shift load demands to off peak pricing offering substantial energy cost savings and/or utilize on-site thermal storage to maintain ideal temperatures independent from an electrical grid. In the event of a disaster where electrical power is disrupted, the active system protects the building's contents, often representing the life savings of its owners.

ADAPTABLE TO MULTIPLE PROGRAMS

Energy Mass™ Wall System has been used successfully in applications as varied as homes, churches, wineries, and agricultural cold storage. The System is quick and easy to construct and has none of the geometric limitations of precast or panelized systems. **Energy Mass™ Wall System** is a resilient structure with dependable energy storage that is adaptable to virtually any use -- be it working with the exterior environment to help level peak loads, or completely isolating the exterior and using stored thermal energy to control interior temperatures.

We have perfected the structure and energy storage -- you tell us what the best application is for you.