

ACTech Insulated Structural Panel System compared to Concrete Block Construction

The comparison between these two building “systems” must consider the following:

As the Insulated Panels weigh considerably less than the Concrete Blocks, the sizes of the required footings are able to be reduced. Also, the erection of the panels may begin immediately upon the removal of form boards, once again due to the light weight of the Insulated Panels. This alone can reduce construction time by a week or more,

No vertical reinforcing steel between foundation and walls is required, thus eliminating the requirements for pouring filled cells, reinforcing inspection holes and inspections, etc.

There is no reinforcing steel required for window and door lintels, thus eliminating the requirements for forming / pouring lintels, lintels inspections, etc.

There is no requirement for a poured tie-beam at the upper level of the walls again eliminating the costs for forming, installation of reinforcement, inspections, etc.

The possibility of cracking of wall construction, water leakage, moisture entrapment in the walls, mold, mildew, etc. is completely eliminated.

The requirements for embedded strapping for roof framing is eliminated.

All walls of the Panel System are by design “shear walls”, thus eliminating special reinforcing requirements as well as the requirements for “mixed construction” interior to exterior wall connections.

With the exception of a double overhead garage door, no special header or jamb framing is required. The Panel System assembly creates the required structural framing.

The installation of “bucks” for doors and windows is eliminated.

Virtually any exterior wall finish may be applied / fastened directly to the Panels, eliminating furring, etc.

Interior furring strips, if used, are not required to be pressure treated.

No additional interior wall insulation is required behind / between furring strips.

The insulation value of the walls is increased significantly.

There are no thermal paths from the exterior to the interior of the structure through the walls.

The Insulated Panels will withstand a Large Missile Impact in accordance with the Florida Building Code

Additional, revised or relocated openings may be cut into the walls without the requirements for lintels, reinforcing steel, separate concrete pours, etc.

The same Insulated Panels are also able to be used for the roof structure, eliminating the requirements for the installation of roof trusses (Cranes, additional labor, roof sheathing, etc.)

Openings through the walls for electrical outlets, fixtures, plumbing, etc. are readily cut and able to be completely sealed.

An additional 5"+ of perimeter floor area is provided due to the reduced thickness of the wall structure. (For example, for a 28' x 50' (1,400 sq. ft.) home, this results in an additional 65 sq. ft. of living space (4.6+%) considering the same site "foot print".)

Utilizing the Panel System for the roof structure eliminates the requirements for soffit and roof vents. Further, all ducts, HVAC equipment are now within the conditioned air space; the preferred location.

Any provided "attic spaces" are fully insulated and "conditioned".

All Panel System components are made of galvanized steel and may be exposed to weather on the site without risk of damage.

All Panel System components are normally delivered on one truck and may be off-loaded by hand or by fork lift (if site space / conditions permit).

For most one and two storey applications, the Panels may be erected without the requirement for a crane, lull, fork-lift, etc.

Total erection time for the structure is measured in days, not weeks.

Skilled labor is not required for the erection of the Panel System. Erection crews may be trained in a matter of days.

Site waste and required clean-up is considerably reduced. The site remains much cleaner. The majority of all site waste material is able to be recycled.



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