

How Superior Walls Insulated Precast Concrete Foundation Systems can help you in meeting Green Building Standards



Superior Walls insulated precast concrete foundations provide you with leading edge foundation technology that can help you attain green points for your new building project. NAHB* and ICC** joined to develop the National Green Building Standard (ICC 700-2008). This program awards points based on design and material selection (see chart). Superior Walls foundation systems offer drainage, pre-insulated panels and built-in dampproofing protection for residential and light-commercial projects. Homeowners benefit from the safe, comfortable, and energy efficient living space that all Superior Walls systems provide.

Homeowners will love the comfort of their new home, because with the **built-in insulation** that is bonded directly to the precast concrete, Superior Walls create an excellent thermal and **air sealing envelope** around the living space. This minimizes the potential for drafts and energy loss, resulting in lower energy costs. For northern climates, additional insulation can be added to maximize R-value up to R-50+, and when we permanently join the wall panels together with bolts and our specially formulated **low VOC sealant**, you will experience a dry healthy living space. This happens because the face shell consists of 5000+ psi concrete with a low water to cement ratio. It keeps you dry with superior **moisture protection** that helps prevent the transfer of moisture through the wall, enhancing **durability**. The dampproofing is built-in (ICC-ES***: ESR 1553 & ESR 1662). No on-site sprays or bituminous coatings are required to make the walls dampproof, helping to keep the soil and local water supply free of contaminants.

*National Association of Home Builders **International Code Council ***International Code Council Evaluation Service

Safe and Sustainable Structures

from  **Superior Walls**

Builders and homeowners can both appreciate that when installed, precast walls produce very little **jobsite waste**.

Superior Walls panels are **prefabricated precast assemblies**. The product is formed with 5000+ psi reinforced precast concrete studs, located at 24 inches O.C., that are cast with holes for wiring and ready to receive interior finishing. By utilizing the cavity space between the reinforced concrete studs, Superior Walls panels contain substantially less concrete (up to 70% less) and therefore **fewer resources** than traditional “built on-site” foundation walls. Superior Walls products are built to custom specifications in one of our many indoor production facilities strategically located throughout the United States where basements are prevalent. The raw materials used in our concrete come from **locally available indigenous sources**, and in most cases from within 300 miles of the project site. The panels are installed in just hours by a certified crew with a crane. This helps builders to shorten project construction time, which can **minimize the time soil is exposed to erosion**.

Superior Walls is committed to providing our customers with energy efficient, resource efficient, durable, and family safe foundation products.

What about Recycled Materials?

DOW® extruded polystyrene used in Superior Walls panels contains up to 40% post industrial recycled content and all steel reinforcing bar used in Superior Walls panels is 100% recycled content.



National Green Building Standard Credits

Superior Walls Xi and R-5 Walls

POSSIBLE POINTS

Lot Design Preparation and Development

503.3 (1.3.3)†: **Activities scheduled to minimize soil exposure time to prevent erosion.**

5

Resource Efficiency

601.2 (2.1.2): **Use an advanced code compliant structural system.**

3

601.5 (2.1.6): **Prefabricated components. Precut or preassembled components or panelized or precast assemblies are utilized for a minimum of 90 percent for the floor, wall, roof or modular system.**

4

602.3.2 (2.2.3): **Interior and exterior foundation perimeter drains are installed and drain pipe is sloped to discharge to daylight, drywell or sump pit. (Superior Walls of America [SWA] requires a perimeter drain pipe on all installations.)**

4

607.1 (2.7.1): **Use products that contain fewer resources than traditional products.**

3

608.1 (2.2.8): **Use locally available indigenous materials.**

10
MAX

Energy Efficiency

702.2 or 703.1.1 (3.2.1): **Home is at least 10% above the IECC††.**

10-
120

703.2.1 (3.3.6.1): **Insulation and air sealing. (Third party verification required.)**

3-
15

Indoor Environmental Air Quality

901.9.1(7.1.3) **Exterior low-VOC adhesives: A min. of 85 percent of site-applied products used meet one or more listed requirements.**

5

1003.2.3 (6.2) **Information on maintaining relative humidity between 30 and 60% (SWA supplies a Homeowner Guide with each installation.)**

1

†The 500, 600, 700, 900 and 1000 series numbers reference the 2009 National Green Building Standard. The numbers in parentheses reference the equivalent criteria from NAHB’s 2006 Model Green Home Building Guidelines.

††International Energy Conservation Code

