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**BRIAN SMITH,**  
FOUNDER AND CHAIRMAN OF CARLSBAD, CA-BASED ECOLITE

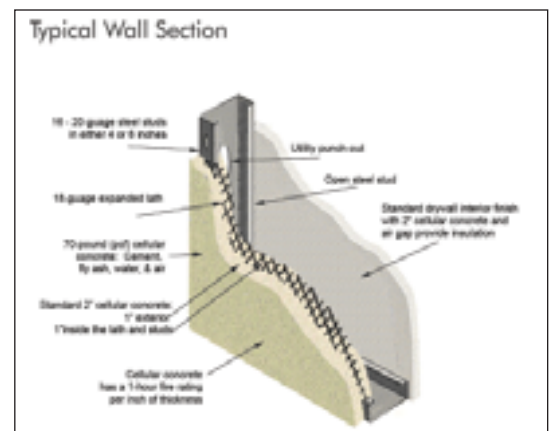
# Innovative Materials Made with 50 Percent Recycled Materials

Ecolite Concrete Depends on ICC Evaluation Service, Inc. to Demonstrate Code Compliance

Green building is no longer a trendy idea. It is quickly becoming the new standard for construction projects. Although building green is uppermost in the minds of many people, code professionals are also responsible for ensuring that sustainable products are up to code and meet the same requirements for strength, reliability and longevity as the more conventional solutions.

When Ecolite Concrete USA, Inc. (Ecolite) developed Ecolite’s metal stud-framed lightweight concrete wall panels, it knew that the product was an alternative to what is covered by the code. Because the product was new, the panels had not been tested to recognized standards; therefore, performance was based purely on manufacturer studies.

ICC Evaluation Service® (ICC-ES®), a subsidiary of the International Code Council® (ICC®), provides technical evaluation of building products, components, methods and materials. The organization helps manufacturers such as Ecolite by producing reports that prove their innovative products meet code requirements and warrant regulatory approval.



Ecolite Concrete Inc. USA

### Standard Directions

Ecolite looked to ICC-ES to verify that its innovative eco-friendly wall panels met building code requirements for quality, strength, effectiveness, fire resistance, durability and safety.

ICC-ES worked with Ecolite to develop the Acceptance Criteria (AC) that were used to do an objective evaluation of its wall panels. Then, ICC-ES staff evaluated and verified Ecolite's data to ensure that it met the requirements of the acceptance criteria. The end result was an Evaluation Report, ESR 1259, posted on the ICC-ES website that verified compliance.

Through the ICC-ES process of developing technical criteria with input from interested parties, and then issuing ICC-ES evaluation reports based on those criteria, ICC-ES allows the product a successful market entrance. Furthermore, there is an understanding that the process for evaluating all products is consistent and fair, transparent and from a third-party independent evaluation service.

### Emerging Opportunities

Already the Ecolite walls have been put to use. Ecolite recently completed the first phase of an \$11.8 million project at the U.S. Army's National Training Center in Fort Irwin, CA. Located in the Mojave Desert, the project consists of 54 buildings to be used for a training facility for Military Operations in Urban Terrain (MOUT). More recently, the product is being used in the new \$14 million, 50,662-square-foot, four-story family-oriented hotel at Camp Pendleton, San Diego.

The new Ecolite wall panels are prefabricated, noncombustible solid wall panels made from 50 percent recycled materials that emit no volatile organic compounds, and the small volume of concrete used reduces carbon dioxide emissions. Better yet, the new wall panels qualify for four different LEED categories. The wall system weighs approximately 400 percent less than conventional precast concrete wall systems.



*One of several facilities constructed at the U.S. Army's National Training Center in Fort Irwin, CA that will incorporate new environmentally-friendly Ecolite wall panels.*



*Construction crews install the Ecolite Metal Stud-Framed Lightweight Concrete Wall Panels at the U.S. Army's National Training Center in Fort Irwin, CA.*

Brian Smith, founder and Chairman of Carlsbad, CA-based Ecolite, stated "The panels are lightweight, making them easy to fabricate and handle. The cellular concrete provides thermal insulation that reduces air infiltration to conserve heating and cooling energy to virtually eliminate thermal bridging problems common in conventional concrete and steel stud walls. When it is eventually demolished, most of the materials can be readily separated for recycling."

Smith concludes, "Having the Evaluation Report has made it much easier to get the attention of architects, code professionals, and others in the industry as they continue to seek greener, more sustainable solutions. We have independent proof that our product performs as expected, which gives everyone confidence in the product as a viable option."

All Evaluation Reports can be accessed and downloaded free of charge at [www.icc-es.org/evaluation\\_reports](http://www.icc-es.org/evaluation_reports) and are readily searchable based on attributes such as product type, manufacturer, or report number.

*This article is intended to provide information on a new or innovative building product or system for which an ICC-ES Evaluation Report has recently been issued. It should not be construed as a product endorsement or a recommendation for its use.*