



SIP No. 2061

Subject: ICC ES Evaluation Report

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R-Control SIPs have a long history of complying with the model building codes of the U.S. The most common method to demonstrate compliance with a building code is to work with the International Code Council Evaluation Service (ICC ES) to develop an evaluation report. ICC ES is recognized as the leader in the evaluation of building products.

ICC ES developed ACO4, "Acceptance Criteria for Sandwich Panels" as a method to evaluate SIPs. A SIP manufacturer must meet the requirements of ACO4 to be recognized in an ICC ES evaluation report.

R-Control SIPs have been evaluated by ICC ES and are recognized by ICC ES evaluation report ESR-2233. ESR-2233 covers the use of R-Control SIPs in compliance with the 2006 International Building Code® (IBC) and 2006 International Residential Code® (IRC).

A summary of the ICC ES evaluation report process provided by ICC ES is attached to this bulletin to help provide a better understanding of the ICC ES and its role in the use of products such as R-Control SIPs in compliance with the model building codes.

For more information on ICC ES, please visit their website at www.icc-es.org. A current copy of the R-Control SIP evaluation report is also available on their website.



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ICC-ES News

"Code Approval"; The Basics, The Subtleties, and The Abuses

Nothing is more basic to the Code and code enforcement than Approval. It is the decision solely of the Authority Having Jurisdiction (AHJ), in most instances represented by the code official. But imprecise language and misunderstanding have crept into the world of design, construction and enforcement. This threatens the jurisdiction's authority and integrity of buildings.

The building code sets minimum requirements for life safety and preservation of property. It gives the AHJ the power to enforce its provisions. It also gives the AHJ the latitude to allow materials and methods of construction that are not addressed in the Code. This lets the jurisdiction enjoy the benefits of technical innovation, proprietary products, and more. For purposes of this article, the term "product" will represent building materials, products, components and systems.

Imprecise language and misunderstanding, however, have allowed parties to cloud the AHJ's authority. Products have been labeled as "Approved" based on manufacturers' self-certification, without any oversight. Evaluation reports on products have been erroneously construed as making the decision for the code official rather than providing an independent technical resource from which a decision can be justified.

The Code

The building code presents minimum design/performance requirements and in some instances prescriptive guidance. It also sets forth limitations and conditions of use. Structural panels, like plywood, are addressed in the code but are not automatically approved. The panels must meet performance and manufacturing requirements to "comply with the Code."

Alternate Material Provisions of the Code

The Code provides the AHJ latitude to allow materials and methods of construction that are not addressed therein. With new building products continually being introduced for industry use, this allowance is needed to promote rather than hinder innovation. Section 104.11 of the International Building Code and Section R104.11 of the International Residential Code provide this authority.

It is not the intent to recognize proprietary products in the Code. Mentioning thousands of such products would be unmanageable and certainly unfair to complying products not mentioned. As stated previously, the Code specifies minimum requirements relating to life safety and preservation of property and also sets forth prescriptive requirements of construction.

Implementing Alternate Material Provisions of the Code

The code official utilizes the alternate material provisions in two ways in approving a building product. The official can perform his own analysis of evidence presented or can rely on independent, qualified sources that do the analysis and provide their findings.

Data can be provided to the AHJ for review and a decision. However, this places a significant burden on the code official. What are the underlying requirements of code language? Does the material meet them? Does a product listing address all applicable code requirements? Is the agency that tested the material qualified? Were the proper tests performed? Were all the tests performed? Is the material on the jobsite the same as what was tested?

An evaluation report, issued by ICC Evaluation Service (ICC-ES), facilitates the AHJ's use of alternate material provisions. ICC-ES is a subsidiary of ICC, promulgator of the I-Codes and successor to BOCA, ICBO and SBCCI.

ICC-ES is a consolidation of BOCA-ES, ICBO-ES, SBCCI PST&RSI and NES. ICC-ES engineers are familiar with Code requirements and can determine if a product complies. ICC-ES requires that the product be tested successfully by accredited laboratories. ICC-ES requires that a quality control system is in place so that future production of the product is the same as the product tested. Their report resulting from the evaluation is evidence on which the AHJ can base an "approve" or "disapprove" decision.

Product Identification

Evaluated building products need to be clearly identifiable in the field. ICC-ES has requirements on labeling products, or their packaging, so that a code official can match the product to an evaluation report, and make a decision as to whether the product can be approved. ICC-ES requires the following information to be on the product or packaging:

1. Manufacturer's name
2. Product name if any.
3. Evaluation report number
4. Name of inspection (listing) agency when required

The ICC-ES mark is an optional feature which is not a substitute for the four items listed above. When the mark is used, the evaluation report number must also be displayed adjacent to it. Prior permission by ICC-ES to use the mark is required.



ICC-ES Mark

Abuses and Problems

Abuses arise when someone erroneously suggests that their product is approved by the AHJ or misrepresents the significance of an evaluation report.

When a product manufacturer without an evaluation report states in advertising, catalogs or product literature that its product is "Code Approved", it is making a self-certifying claim which has no bearing on an AHJ's decision. The product may or may not meet Code requirements. This can only be determined through an independent analysis that includes the evaluation of data and confirmation of manufacturing quality control.

A company holding an evaluation report may overstate the meaning of a report. Most importantly, having an evaluation report does not obligate the AHJ to approve the evaluated product. The report is simply technical evidence upon which the AHJ can approve the product if, on the job site, it is used within the report conditions. The approval decision lies with the AHJ.

Evaluation reports have product limitations based on the scope and conditions. An evaluation report on one product from the XYZ Company may not apply to all the company's products. Code provisions can impose limitations based on the building use, type of construction and location.

Accepting the product in the field without evidence to confirm compliance creates problems if there is a failure. Having evidence of code compliance, as with a valid, applicable ICC-ES evaluation report, provides the AHJ and manufacturer with independent technical verification. This type of justification is extremely valuable when use of a product is challenged.

What to Look For

With the previous explanation of ICC-ES evaluation reports and how they should and should not be used, the following marketing terms raise red flags on "product approvals":

Approved or Certified	Code Approved
ICC or ICC-ES Approved	Code Accepted
ICC or ICC-ES Certified	

If products addressed in the code are not approved by the AHJ based on submitted evidence of compliance or if not covered by an evaluation report acceptable to the AHJ, the products on a job site are in jeopardy. At that point a code official could demand removal.

For products covered by evaluation reports, the code official, specifier, etc. has a basis of accepting them. Required identification on the product or packaging in compliance with a valid evaluation report provides a basis of approval by the code official. An evaluation report in good standing can be easily verified by viewing the report on the [ICC-ES web site](#) or calling the ICC-ES office at (800) 423-6587. Because evaluation reports are often revised at the request of the report holder to include new products, it is to everyone's benefit to verify that a current report addresses the products. Innovative products are vital to improving construction and lowering costs. Evaluation reports are an important tool in avoiding technical barriers that might prohibit their use.

Marketing references to an evaluation report number often refer to a group of products, but not necessarily an entire product line. If a manufacturer includes a general reference to an evaluation report number in marketing efforts on a website or in brochures or catalogs, responsible parties should consult a valid evaluation report to determine the extent of recognition.

The Road Ahead

The code establishes minimum requirements for building construction. The authority having jurisdiction (AHJ) has the responsibility to enforce the code provisions. Responsible designers, builders and product manufacturers have an obligation to ensure that the AHJ's authority is not diluted or misrepresented.

To address the misrepresentations that have been described, a concerted effort is being initiated by ICC-ES to inform the building industry of verified infractions. Through this activity, information for the AHJ and other users of ICC-ES services will be better protected and the integrity of the ICC-ES product evaluation program preserved.