

NEW PRODUCTS, ENGINEERING ANALYSIS AND REPORTS BY AN APPROVED TESTING AGENCY

It is a common misunderstanding that new products must have an independent test report in order to be used by the construction industry. This assumption is based on incomplete understanding of what the intent of the ICC codes states.

2009 IBC 1713.1 “Where required. Where proposed construction is not capable of being designed by *approved* engineering analysis, or where proposed construction design method does not comply with the applicable material design standard, the system of construction or the structural unit and the connections shall be subjected to the tests prescribed in Section 1715.....”

The second sentence in 1713.1 above is the key, **only when engineering analysis cannot be applied, a third party test needs to be conducted.** The material design standards are AISC, NDS, and the other design standards referenced in the ICC codes.

This is also confirmed in the 2012 IRC R301.1.3 Commentary which states; “Generally, proper application of the code requires a clear understanding of and adherence to its prescriptive limitations, which are based on conventional construction. However, a building may contain structural elements that are either **unconventional** or exceed the prescriptive limitations of the code. **This is acceptable, if these elements are designed in accordance with accepted engineering practice by a design professional.**” (emphasis added). R301.1.3 also states in part “....Engineered design in accordance with the *International Building Code* is permitted for all buildings and structures, and parts thereof, included in the scope of this code.”

As noted above and stated in the IBC and IRC accepted engineering practice and design by an design professional (engineer) is acceptable without a third party report.

Hopefully this sheds some light on the common misunderstandings about third party testing reports and when they are required.