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To: Parties Interested in Cold-Formed Steel Framing Members
From: Woods McRoy, P.E.
Date: December 24, 2008
Subject: Indentions on Stud Flanges and Corrugations in Stud Webs

MEMO

In the process of reviewing data, ICC-ES has encountered a cold-formed steel C-section (stud) in which the manufacturer is placing small indentations on the flange of the stud. Upon further investigation, ICC-ES has learned that this is a common practice. ICC-ES has also learned of the practice of placing one or more corrugations in the web of a stud and other deviations from the basic C-section.

ICC-ES evaluation reports on steel framing members may provide a figure (illustration) for each member included in the report and it is ICC-ES' intention that all evaluation reports that are issued or reissued in the future contain such figures. These figures, along with the text of the report, represent ICC-ES' understanding of the member profile. In the case of members with profiles showing only flat, smooth surfaces (similar to Figure C2-1 in AISI-S201-07), the members discussed in the report were evaluated as such. In cases where ICC-ES has evaluated members whose profiles that contain deviations from the basic profile, figures in the evaluation reports and accompanying text indicate the profiles covered by the reports.

C-sections with deviations from the basic section profile are currently evaluated on a case-by-case basis under ICC-ES Acceptance Criteria for Cold-Formed Steel Framing Members (AC46). However, as noted above, ICC-ES has been recently informed that it is a common practice to have indentations in the flange, corrugations in the web, insets of the web and other deviations from the basic C-section. The consensus of industry is that "lightly" embossing the stud flange with indentations and/or providing one or more "light" corrugations in the stud web or flange and other such deviations have no negative affect on the structural performance of the stud. However, industry has not yet defined the limits of such deviations before they begin to affect performance.

ICC-ES plans to address this issue (how far may deviations go before they negatively affect performance) in a manner that will allow reports to still be processed and while the issue is being dealt with ICC-ES will proceed as follows:

1. Report holders whose products consist of C-sections having indentations, corrugations or other modifications in the flange and/or the web *not currently identified* in the report, must

identify all such members. An application for revisions, accompanied by corrected profiles and structural justification addressing changes, will be necessary.

2. Input from industry is requested providing specific parameters for permitted modifications to flanges and webs of C-sections. The parameters must be structurally justified. If acceptable to the Evaluation Committee, the ICC-ES Acceptance Criteria for Cold-Formed Steel Framing Members (AC46) will be modified to incorporate the suggested parameters. Information from industry is needed by **February 19, 2009**, for this to be included for consideration during the June 2009 Evaluation Committee meeting.
3. If the parameters cannot be determined as noted above, then reports will be handled on a case-by-case basis, which may require testing to justify the C-section modifications.

If you have any questions, please contact Woods McRoy, P.E. at 800-423-6587, extension 5686. Emails should be sent to wmcroy@icc-es.org.