
BBS MEMO

Ohio Board of Building Standards
9009

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UPCOMING OBC CHAPTER 16 CHANGES

The Board of Building Standards (BBS) will be initiating its full code update work later this year based upon the 2015 International Building Code (IBC). In anticipation of that update work the Board has completed a review of the 2012 edition of the IBC which will not be used as the basis for a full update. The 2012 edition review was performed to determine that, if necessary, the current 2009-model-code-based OBC code could be amended to incorporate any necessary 2012 changes in the interim. The provisions in IBC Chapter 16 in the 2012 and 2015 IBC model codes include many code language changes, figure changes, and cross-reference changes. Attempting to incorporate an updated Chapter 16 now, rather than as a part of the BBS 2015 update, would require correcting many cross-references wherever Chapter 16 is referenced in other OBC chapters as well as changing references to other chapters from a new Chapter 16.

The BBS is currently in the process of updating the Ohio Building Code (OBC), which is largely based on the 2009 International Building Code (IBC). Since the original effective date of the 2009 OBC, the International Code Council has continued with the traditional three year code update cycle and has published both a 2012 IBC as well as a 2015 IBC. The Board, acting on the concerns of stakeholders, has decided to make full updates to the OBC based upon every other model code update. This will allow greater time for training and will reduce expenses related to the purchase of code publications. As such, the 2012 IBC edition has been reviewed for any important changes that should be made now with a full update based on the 2015 IBC to follow. In order to assess the changes being made to the model code, the Board completed a review of the 2012 IBC and, in some cases, determined that a change was significant enough to adopt now. It was the decision of the Board that attempting to incorporate an updated Chapter 16 now, rather than as a part of the 2015 update, would not be feasible and could result in incorrect cross-references throughout the remainder of the current OBC. The Board will not be making any interim changes to Chapter 16 until the full update work is completed sometime in late 2016 or early 2017.

The purpose of this BBS Memo is to notify building departments and designers of the direction the Board will take when the 2015-Ohio Codes become effective. Specifically, these code changes will be moved forward to assure that the ground motion maps in the Ohio Building Code (OBC) will reflect current seismic hazard information. The Board intends to incorporate updated earthquake ground motion maps that reflect the 2008 seismic maps developed by the United States Geological Survey (USGS) National Seismic Hazard Mapping Project as well as technical changes adopted for the 2009 *NEHRP Recommended Seismic Provisions for New Buildings and Other Structures* (FEMA P750). This work was developed by the Building Seismic Safety Council with funding from the Federal Emergency Management Agency. Both projects are part of federal National Earthquake Hazard Reduction Program's (NEHRP) ongoing efforts to make the most current earthquake hazard information available to the building codes.

The 2008 USGS seismic hazard maps incorporate new information on earthquake sources and ground motion prediction equations including the new Next Generation Attenuation (NGA) relations. The ground motion maps used in the 2012 and 2015 IBC further incorporate technical changes adopted for the 2009 *NEHRP Provisions* that include use of: (1) risk-targeted ground motions, (2) maximum direction ground motions, and (3) near-source 84th percentile ground motions. The ground motion maps used in the 2012 and 2015 IBC reflect a current draft proposal for a change to the ASCE 7 standard update process.

If an owner or designer desires to use these anticipated seismic provisions in the design of a structure, this BBS Memo indicates that such a decision is consistent with anticipated Board action although an appeal would have to be made and a variance granted to permit a building department to accept a 2015-based design.

Those in need of precise design values can easily obtain them from the USGS web site <http://earthquake.usgs.gov/designmaps/us/application.php> by answering the questions listed.