



For the acceptable and applicable use of “Assigned” as the rating method, the structure must meet certain criteria. These requirements are presented in the September 29, 2011, Federal Highway Administration Memorandum [<http://www.fhwa.dot.gov/bridge/110929.cfm>] and are, also, outlined below:

1. The bridge was designed and checked using either the AASHTO Load and Resistance Factor Design (LRFD) or Load Factor Design (LFD) methods to at least HL-93 or HS-20 live loads, respectively; and
2. The bridge was built in accordance with the design plans; and
3. No changes to the loading conditions or the structure condition have occurred that could reduce the inventory rating below the design load level; and
4. An evaluation has been completed and documented, determining that the force effects from State legal loads or permit loads do not exceed those from the design load; and
5. The checked design calculations, and relevant computer input and output information, must be accessible and referenced or included in the individual bridge records.

It should be noted that, based on criteria 1 above, ASD is not an allowable design method, even for timber structures. If an “Assigned” rating using ASD is selected as the method on the summary form in MiBRIDGE, an error message will be displayed at the top of the form and you will not be allowed to save the load rating information.

The screenshot displays the 'LOAD RATING SUMMARY - asdf' form in the MiBRIDGE application. At the top, a red error message is visible: '- Federal Operating Rating Method (Item 63), Michigan Operating Method (Item 64MA) and Federal Inventory Rating Method (Item 65) cannot be entered as "B Assigned ASD, mTons" or "E Assigned ASD, RF" as per the FHWA memo dated September 29, 2011.' Below this, the form contains several sections: 'Required Fields' with 'Assigned Tier' set to 'No Tier Assigned' and 'Verified No Tier' as an unchecked checkbox; 'Tier Override Comment' as a text area; 'The above structure was analyzed using:' with a dropdown set to 'Other'; 'Version or Other:' as a text field; 'Rating considers field condition of members:' as a text area; and 'Controlling component and failure mode:' as a dropdown. At the bottom, the 'NEW INVENTORY CODING' section shows 'NBI Item 63- Operating Rating Method:' with a dropdown menu currently set to 'B Assigned ASD, mTons', which is circled in red. A red arrow points from this dropdown to a text box that reads 'Error Message when "Assigned ASD" is chosen as the Rating Method'. Other fields include 'NBI Item 64F- Federal Operating Rating:' set to 'cc.u'. The interface also features navigation tabs at the top and 'Print' and 'Print All' buttons at the top right.

Based on criteria 3 above, if any work has been performed on the structure since its original construction, an “Assigned” rating is not allowed, as this would constitute a change in the loading condition from its original design. Additionally, if the structure condition has deteriorated resulting in a reduction in capacity from the original design of the structure, an “Assigned” rating is not permitted. In this instance, a load rating analysis which considers the current field condition must be performed.

Further, per the October 30, 2006, Federal Highway Administration Memorandum [<http://www.fhwa.dot.gov/bridge/nbis/103006.cfm>], Load and Resistance Factor Ratings may no longer be reported in metric tons. If "3 LRFR in mTons" is selected on the summary form in MiBRIDGE, an error message will be displayed at the top of the form and you will not be allowed to save the load rating information.

