



TECHNICAL ADVISORY T1-16

**CODE and SECTION: IBC 2012 – Section 1507
IRC 2012 – Section R905 and Table R301.2 (1)**

COMMON NAME: ICE BARRIER UNDERLAYMENT

Date: **September 28, 2016**

Name of Requestor: **Mr. Tim Boland**

Title and edition of the model code and code section(s) to be considered for the code interpretation. **2012 IBC and 2012 IRC**

Question One of One: In Montana is Ice Barrier Underlayment required by code to be installed on new and re-roof situations?

Answer (Question One of One): Yes, under both the 2012 International Building Code (IBC) and the 2012 International Residential Code (IRC) ice barrier underlayment is required for new and re-roof installations in Montana. The question is evaluated using both the IBC and the IRC since no distinction as to which code (commercial or residential) the question was applied. Specifically, Section 1507 of the IBC requires ice barrier underlayment but specifies such requirement in two separate but equal ways. In the IBC the ice barrier underlayment sections contain the following language:

“In areas where there has been a history of ice forming along the eaves causing a backup of water, an ice barrier that consists of at least two layers of underlayment cemented together or of a self-adhering polymer-modified bitumen sheet shall be used in lieu of normal underlayment and extend from the lowest edges of all roof surfaces to a point at least 24 inches inside the exterior wall line of the building”

Additionally, one section of the IBC has similar content but different language as follows:

“In areas where the average daily temperature in January is 25 degrees F or less or where there is a possibility of ice forming along the eaves causing a backup of water, an ice barrier that consists of at least two layers of underlayment cemented together or of a self-adhering polymer-modified bitumen sheet shall be used in lieu of normal underlayment and extend from the lowest edges of all roof surfaces to a point at least 24 inches inside the exterior wall line of the building”

Table R301.2 (1) and Section R905 of the IRC require ice barrier underlayment as well. In the IRC the ice barrier underlayment sections contain the following language:

“In areas where there has been a history of ice forming along the eaves causing a backup of water as designated in Table R301.2 (1), an ice barrier that consists of at least two layers of underlayment cemented together or of a self-adhering polymer-modified bitumen sheet shall be used in lieu of normal underlayment and extend from the lowest edges of all roof surfaces to a point at least 24 inches inside the exterior wall line of the building”

Both the IBC and IRC sections carry an exception to these sections which reads:

“Exception: Detached accessory structures that contain no conditioned floor area”

In all of these code sections the language is clear to detail that if conditions are possible for ice formation ice damming can occur and as such additional underlayment requirements are needed. Weather conditions throughout the entire State of Montana are certainly conducive to and definitively produce ice formation and as such ice barrier underlayment provisions of the IRC apply to



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those structures for which that code is applicable. Similarly, ice barrier underlayment provisions of the IBC apply to those structures for which that code is applicable.

This Code Technical Advisory is produced by the Building Codes Bureau of the Montana Department of Labor and industry by David W. Cook, Bureau Chief – Building Codes Bureau.

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