

ICE BARRIER REQUIREMENTS

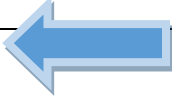
780 CMR Residential Code

Frequently Asked Question (FAQ)

Background: Massachusetts amends 2015 International Residential Code (IRC) Table R301.2(1). The modification refers the reader to Section R905.2.7 (see [table](#) and [link below](#)).

Section R905.2.7 simply refers the reader back to Section R905.1.2 (see [sections below](#)) where the requirement is qualified by the statement *“In areas where there has been a history of ice forming along the eaves . . .”*.

Table R301.2(1) CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA

| | | |
|--|-----------------------|--|
| Ground Snow Load | | Table R301.2(4) |
| Wind Design | Speed | Table R301.2(4) |
| | Topographic effects | No |
| | Special Wind Regions | No |
| | Windborne debris zone | Any area within a windborne debris region, as defined in Chapter 2 of 780 CMR 51.00: <i>Massachusetts Residential Code</i> |
| Seismic Design Category | | No |
| Subject to Damage From | Weathering | Severe |
| | Frost line depth | 48 inches. For shallow foundations, see R403.3(2). |
| | Termite | See Figure R301.2(6). |
| Winter Design Temperature | | Dry bulb |
| Ice Barrier Underlayment Required | | For roofing, see R905.2.7.  |
| Flood Hazards | | See section 322. |
| Air Freezing Index | | For shallow foundations, see R403.3(2). |
| Mean Annual Temperature | | See https://www.ncdc.noaa.gov/sotc/global/201607 |

<https://www.mass.gov/doc/780-cmr-ninth-edition-residential-chapter-3-building-planning-amendments/download>

R905.2.7 Ice Barrier. Where required, ice barriers shall comply with Section 905.1.2.

R905.1.2 Ice Barriers. *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 shall be installed for asphalt shingles, metal roof shingles, mineral-surfaced roll roofing, slate and slate-type shingles, wood shingles and wood shakes. The ice barrier shall consist of not fewer than two layers of underlayment cemented together, or a self-adhering polymer-modified bitumen sheet shall be used in place of normal underlayment and extend from the lowest edges of all roof surfaces to a point not less than 24 inches (610 mm) inside the exterior wall line of the building. On roofs with slope equal to or greater than 8 units vertical in 12 units horizontal, the ice barrier shall also be applied not less than 36 inches (914 mm) measured from the eave edge of the building.

Exception: Detached accessory structures not containing conditioned floor area.

Question: Is it the intent of Massachusetts Residential Code, Ninth Edition, to require ice barriers as specified in Section R905.1.2 for single- and two-family homes and townhouse buildings?

Response: **Yes.** Weather patterns over the years have demonstrated that residential buildings in Massachusetts are subject to ice formation @ roof eaves that may cause water backup. The installation of ice barriers as required by the referenced section helps prevent damaging effects of water backup.