

DOCKET

12-BSTD-01

DATE _____

RECD. MAR 20 2012

“Docket No. 12-BSTD-1,”

45 day comment-
To

2013 Building Energy Efficiency Standards

SECTION 150150.0 – MANDATORY FEATURES AND DEVICES

150150.0 Residential Mandatory Features

SUBCHAPTER 7

LOW-RISE RESIDENTIAL BUILDINGS – MANDATORY FEATURES AND DEVICES

SECTION 150150.0 – MANDATORY FEATURES AND DEVICES

3. Insulation Protection. Insulation shall be protected from damage, including that due to sunlight, moisture, equipment maintenance, and wind. Protection includes but is not limited to the following:

A. Insulation exposed to weather shall be suitable for outdoor service; e.g., protected by aluminum, sheet metal, painted canvas, or plastic cover. Cellular foam insulation shall be protected as above or painted with a coating that is water retardant and provides shielding from solar radiation that can cause degradation of the material.

B. Insulation covering chilled water piping and refrigerant suction piping located outside the conditioned space shall have a include a Class I or Class II vapor retard~~ing facingant located outside the insulation, or the insulation shall be installed at the thickness that meets~~qualifies as a Class I or Class II vapor retarder~~(unless the insulation is inherently vapor retardant), and all penetrations and joints of which shall be sealed.~~

Proposed Change

3. Insulation Protection. Insulation outside the conditioned space shall be protected from damage, including that due to sunlight, moisture, equipment maintenance, and wind. Protection includes but is not limited to the following:

A. Insulation exposed to weather shall be suitable for outdoor service; e.g., ~~protected by aluminum, sheet metal, painted canvas, or plastic cover.~~ Cellular foam insulation shall be protected as above or ~~painted with a coating that is water retardant and~~ shall provides shielding from solar radiation that can cause degradation of the material. **Adhesive tapes shall not be permitted.**

B. Insulation covering chilled water piping and refrigerant suction piping located outside the conditioned space shall have a include a Class I or Class II vapor retard~~ing facingant located outside the insulation, or the insulation shall be installed at the thickness that meets~~qualifies as a Class I or Class II vapor

retarder (unless the insulation is inherently vapor retardant), and all penetrations and joints of which shall be sealed.

Justification for change:

The 2012 IECC & the IECC committee and the reason the committee accepted a modified proposal that omitted the prescription list to be in line with performance based codes.

INTERNATIONAL CODE COUNCIL
2009/2010 CODE DEVELOPMENT CYCLE

2009 ICC PUBLIC HEARING RESULTS

EC110-09/10

Committee Action: Approved as Modified

Modify proposal as follows:

403.3.1 Protection of piping insulation. Piping insulation exposed to weather shall be protected from damage, including that due to sunlight, moisture, equipment maintenance, and wind, ~~by means including, aluminum, sheet metal, painted canvas, or plastic cover or other protection suitable for outdoor service.~~ Cellular foam insulation shall be protected as above or painted with a coating that is water retardant and shall provide shielding from solar radiation that can cause degradation of the material. Adhesive tape shall not be permitted.

Committee Reason: Protection of outside piping insulation is necessary to assure durable materials to meet the energy code requirements. The modification simply removes the laundry list of possible protections, as the committee felt this was unnecessary.

***Adhesive tapes shall not be permitted** as adhesives break down due to heat, constant exposure to moisture and bacteria. Adhesive tape when wrapped over the entire length of the insulation-*

- 1. Restricts the insulations ability to expel condensation **especially significant for a suction line outdoors.***
- 2. Trapped water leads to reduce thermal efficiency and is counterproductive to the code requirement.*
- 3. Corrosion of the piping and degradation of the insulation.*
- 4. Removal of Adhesive tapes from insulation during maintenance usually destroys the insulation*

B. This language is necessary - and all penetrations and joints of which shall be sealed.