**CEPI-29-21**

**IECC®: C402.1, C402.1.4.3 (New)**

**Proponents:**

Duncan Brown, New York City Department of Buildings, representing New York City Department of Buildings

**2021 International Energy Conservation Code**

**Revise as follows:**

C402.1 General.

Building thermal envelope assemblies for buildings that are intended to comply with the code on a prescriptive basis in accordance with the compliance path described in Item 1 of Section C401.2.1 shall comply with the following:

1. The opaque portions of the building thermal envelope shall comply with the specific insulation requirements of Section C402.2 and the thermal requirements of either the R-value-based method of Section C402.1.3; the U-, C- and F-factor-based method of Section C402.1.4; or the component performance alternative of Section C402.1.5. ~~When~~ Where the total area of ~~the~~ through penetrations ~~from the through the-wall~~ of mechanical equipment ~~or equipment listed specified in Table C403.3.2(4)~~ ~~exceeds~~ is greater than 2percent of the opaque above-grade wall area, the building thermal envelope shall comply with C402.1.4.3 ~~the U-, C- and F-factor-based method of Section C402.1.4~~.

2. Roof solar reflectance and thermal emittance shall comply with Section C402.3.

3. Fenestration in building envelope assemblies shall comply with Section C402.4.

4. Air leakage of building envelope assemblies shall comply with Section C402.5.

Alternatively, where buildings have a vertical fenestration area or skylight area exceeding that allowed in Section C402.4, the building and building thermal envelope shall comply with Item 2 of Section C401.2.1 or Section C401.2.2.

Walk-in coolers, walk-in freezers, refrigerated warehouse coolers and refrigerated warehouse freezers shall comply with SectionC403.11.

**Add new text as follows:**

**C402.1.4.3 Thermal Resistance of mechanical equipment penetrations.** ~~When~~ Where the total area of through penetrations ~~from through-the-wall~~ of mechanical equipment ~~or equipment~~ ~~listed~~ ~~specified in Table C403.3.2(4) exceeds~~ is greater than 2 percent of the opaque above-grade wall area, ~~the~~ such area ~~of the mechanical equipment penetrations area~~ shall be calculated as a separate wall assembly with a published U-factor for that equipment or a default U-factor of 0.5.