



2016 Sections §140.0-140.5

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Changes to §140.3 B and C

Tables 140.3-B and C Prescriptive Envelope Criteria

- Changes were made to the maximum U-factors of the Opaque Envelope requirements for both Nonresidential and High-Rise Residential buildings. ASHRAE 90.1 was used as a benchmark, but we looked at a range of assemblies to determine the best performing assembly that is cost effective.

Table 140.3 Roof/Ceiling Insulation Tradeoff for Aged Solar Reflectance

- updated based on new proposed U-factors in Table 140.3-B and C.



Changes to Table 140.3-D

- Tables 140.3-D Prescriptive Envelope Criteria for Relocatable Public School Buildings
 - clean up for clarity
 - Updated the U-factor based on the Nonresidential Buildings.
 - Since relocatable classrooms may be manufactured off-site and shipped to any location, the relocatables must meet the stringency of the prescriptive requirements in any climate zone



Changes to 140.3(c)

In Climate Zones 2 thru 15, spaces greater than 5,000 sf and directly under a roof with ceilings higher than 15 ft:

- The total skylight area is at least 3% of the total floor area; or
- $\text{Skylight Area} \times VT \geq 1.5\% \times \text{Daylit zone under skylights.}$



Changes to §140.4(e)1, 4 & 5 and §140.4(m)

Clarification language

- Economizers are to be required for each cooling “air handler” over 54kBtu vs cooling “fan system”
- Dampers capable of modulating to fully Open/Closed instead of design supply air quantity
- Removed repetitive language about capacity
- Removed effective dates triggering multiple stages of cooling capacity
- Economizer damper leakage certified “to” the Energy Commission
- Removed effective dates triggering fan speed controls



New §140.4(n)

Mechanical System Shut-off:

- Operable windows or doors that serve a space with a thermostat must be equipped with interlock controls.
- If a window/door is open for more than 5 minutes, the interlock control will adjust heating/cooling setpoint
- Door/window control will:
 - Disable mechanical cooling or adjust temperature setpoint to 55 °F
 - Disable mechanical heating or adjust temperature setpoint to 90 °F

Exceptions:

- Doors has automatic closure
- Doors/Windows serving spaces that do not have thermostatic control
- Not required for alterations