2016 Sections 120.0-120.9

Mark Alatorre
Building Standards Development Office
Efficiency Division

Efficiency Lead Commissioner Hearing

Art Rosenfeld Room

March 3, 2015

Changes to §120.2(b)4

- Deleted the term "unitary single zone"
- Changes to Exception 2
    - Added gas furnaces, package terminal air conditioners and package terminal heat pumps
    - These system types do not have to comply with the communicating thermostat or demand shed controls.

Changes to §120.2(f)

- Dampers for Air Supply/Exhaust Equipment
  - Automatically close during unoccupied periods, except:
    - During pre-occupancy
    - When enabled by an occupant sensor
    - When enabled by an override signal with dampers open to provide outdoor air ventilation
  - Remain closed during setback heating and cooling, except:
    - When equipped with an economizer and outside air temperature is below high limit shut off set points.

Changes to §120.2(i)1-8

Clean up language

- Added:
  - Stand alone or integrated
  - Heating, only when applicable
  - How faults are reported (EMCS, Annunciated locally, Remotely to a HVAC service provider)

- Removed:
  - Examples of unitary dx systems and references to AHRI
  - Refrigerant pressure sensor accuracy

Changes to JA6

- Related to FDD certification
  - Guidance document test protocol
    - General applicability
    - Even Playing Field
- From guidance to required
  - Now incorporated into JA6

New §120.2(j)

- DDC to the zone is required in certain applications, see Table 120.2-A.
- DDC system capabilities:
  – Monitoring zone and system demands
  – Information transfer
    • Between zones and air distribution system controllers
    • Between air distribution system to heating and cooling plant controllers
  – Detect zones and systems that are driving reset logic excessively and inform system operator
  – Allow operator to remove zone(s) from algorithm
  – Trending and graphically displaying inputs and outputs (new buildings)
  – Resetting heating and cooling setpoints in all non-critical zones when signal is received.

New §120.2(k)

Optimum Start/Stop Controls for systems with DDC to the zone level.

- Optimum start controls (defined in §100.1) automatically adjust the start time of the HVAC system each day to bring the space to the desired temperature at the beginning of scheduled occupancy

- Optimum stop controls (defined in §100.1) setup or setback thermostat setpoints before scheduled unoccupied periods based on thermal lag and acceptable thermal comfort limits.

Changes to §120.3

- Formatting and clean up
- Increasing insulation thickness
  - from ½ inch ¾ inch for space cooling system piping (40-60 deg F)

New §120.6(f)

Elevators

- Lighting power density for cab lighting ≤ 0.6 W/sqft.

- Cab ventilation fans for elevators without AC ≤ 0.33 W/CFM at maximum speed.

- Occupancy controls to shut off lighting and ventilation fan when the cab is unoccupied more than 15 min.

- Controls to ensure lighting and ventilation remain operational in the event the elevator cabin gets stuck.

New §120.6(g)

Escalators and Moving walkways

- Applies to airports, hotels and transportation function areas
- Speed control to automatically slow to the minimum permitted speed when not conveying passengers
- Minimum speed determined by ASME A17.1/CSA B44(2013)

Changes to §120.7 and §120.8

- Moved the insulation placement requirements from §110.8(e) to §120.7(a)3.

- Clarified that buildings solely dedicated to housing computer equipment are exempted from mandatory insulation requirements.

- Moved the insulation requirements for demising walls from §110.8(f) to §120.7(b)7 and separated the requirements between Wood and Metal framing.

- Removed unnecessary reference to §120.6 given the scope of §120.8 excludes covered processes.

- Clean up language to align 120.8 and 10-103