

DHCD, DBFR 2009 Code Change Process

Results of the March 26, 2009 Workgroup 1 Meeting

Energy Code Provisions and Issues

2009 I-Codes Technical Changes for the International Energy Conservation Code (IECC) and the International Residential Code (IRC):

1. EC 15: Approved requiring labeling of batts. A compressed batt loses R-1 or R-2 value. Administrative USBC may need statement to cover this being in IECC or IRC. Consensus to move forward?
2. EC18: Approved IRC glazing U-value at .35 instead of .40. Testimony debated impact on some products and why shouldn't it be the same as multi-family. One code change would have gone to .30. Consensus to move forward at .35?
3. EC33 and 36: Modest basement increases.
4. EC 45, 56 and 58: Approved to specifically detail trade-offs calculations can be used. Net effect to avoid gaming and save energy.
5. EC60: Approved extensive laundry list of air sealing locations that should assist in the new testing requirements. Consensus to move forward?

No negative comments on Items 1-5; will not be on agenda for future meetings.

6. EC 64: Approved blower door testing or 3rd party inspection of air barrier. Consensus to move forward with both options?

DHCD staff will review for conflicts with USBC Chapter 1 provisions (Sections 113.7 and 116.2) and for coordination with IECC Sections 401.3, 402.4.2.2, 403.2.2 and 501.2. Code change proposals are welcomed and staff will work on language for proposed regulations.

7. EC68: Approved programmable thermostats with forced air furnaces. Estimate is 40% are using today for new construction. Consensus to move forward?

No negative comments; will not be on agenda for future meetings.

8. EC71: Approved requiring duct testing at close-in or post-construction. Consensus to move forward with both options?

DHCD staff will review for conflicts with USBC Chapter 1 provisions (Sections 113.7 and 116.2) and for coordination with IECC Sections 401.3, 402.4.2.2, 403.2.2 and 501.2. Code change proposals are welcomed and staff will work on language for proposed regulations.

9. EC74: Approved requiring increase in mechanical piping from R-2 to R-3. Consensus to move forward?
10. EC80: Approved snow melting systems to have automatic shut-offs. Consensus to move forward?
11. EC 82: Approved pool water heaters to have automatic shut-offs. Consensus to move forward?
12. EC 84 and 140: Approved requiring 50% of installed light fixtures be high efficacy lamps. Consensus to move forward?
13. EC91 and 99: Approved code changes for energy simulations for equipment efficiencies. No longer permits site energy use but utilizes energy cost or source. Consensus to move forward?
14. EC 92: Approved reducing amount of glazing from 18% to 15%, except keeps for multi-family 18% glazing. Consensus to move forward?
15. EC105, 106 and 110: Approved requirement that cannot mix and match IECC with ASHRAE 90.1 to game the avoidance of appropriate R-Values for insulation in attics and slabs. Consensus to move forward?
16. EC136: Approved requiring fan system control measures. Big energy saver and done in many buildings today, especially enclosed garages. Consensus to move forward?

No negative comments on Items 9-16; will not be on agenda for future meetings.

17. EC137: Approved requiring outdoor heating to be radiant heating. Need to see if this will pose problems for restaurants using propane heaters (the most common form of heating for outdoor cafes/restaurants). Does USBC cover such outdoor heating systems? Consensus to move forward?

IECC Section 503.2.11 – Questions to resolve are whether the provision assumes heat from the devices is also heating the interior; how does the sensor work outside of the building at areas such as cashier station at outdoor garden supply or outdoor serving area; does radiant heat work and why not other fuels. Will consider further at next workgroup meeting.

18. EC147: Approved requiring the allowance of 4 types of zones for exterior lighting that will save considerable energy. Review issues with USBC and law on some changes like this one where IECC zones maybe out of scope for USBC but can cover electrical and structure parts? Consensus to move forward?

IECC Section 505.6.2 and Table 505.6.2(1) – Issues to resolve are whether there are conflicts with security concerns and means of egress lighting requirements for entrances and exit discharge and whether requirements are within the scope of the USBC. Will consider further at next workgroup meeting.

19. IECC 14: Denied that was a comprehensive package of code changes for a 30% solution. Many preferred doing code changes individually resulting in about 15-20%

savings being approved for the 2009 IECC. Are there changes to consider from this package?

20. EC16: Denied glazing U-factor from .40 to .35 for commercial and multi-family residential. There was a change to lower to .30, but that raised stout opposition on restriction of product. Discussion only.
21. EC27: IRC Denied increasing ceiling R-Value from 38 to 49 on basis of impact on framing and benefit for savings. Discussion only unless code change submitted.
22. EC 29: IRC Denied increasing frame wall R-13 to R-18 again based on framing would need to go from 2x4's to 2x6's in many cases depending on type of insulation materials used. Discussion only unless code change submitted.
23. EC 79: Denied requiring pilotless water heaters and denied IRC. Discussion only.
24. S23: Denied green roof system standard ANSI/SPRI. Can USBC cover all that might be in the standard? Can it be fixed and should it be included or wait until the 2012 cycle?

Items 19-24 are issues at the national level for the 2012 codes and will not be on the agenda for future meetings unless code change proposals for the USBC are received.

25. Above code term: USBC allows non-required systems and modifications for things meeting intent. Discussion only.

Above code programs and performance options are already permitted by USBC; will not be on the agenda for future meetings unless code change proposals for the USBC are received.

26. IRC Energy Chapter 11 review.

Roger Robertson and Steve Turchen will summarize differences between IECC and IRC energy provisions. Partial list is fenestration U values (.40 in IECC and .35 in IRC), R-38 for scuttle doors, blower door test in IECC, not IRC. Issues to consider are whether to submit proposals to align now or wait for first round at national level. Will consider further at next workgroup meeting.

27. Above Code has to be coordinated with USBC regulatory concept as the USBC already allow any building systems and equipment to be used based upon standards or manufacturer's instructions so as not to create unsafe conditions.

Above code programs and performance options are already permitted by USBC; will not be on the agenda for future meetings unless code change proposals for the USBC are received.

28. Coordinate IECC with the IEBC and IBC/IEBC compliance alternative sections.

Need to review alteration provisions of USBC, provisions for historic buildings, etc. to determine whether to align with IECC. DHCD staff to work on proposals for consideration at next workgroup meeting.

Suggested New Business Agenda Items for April 23, 2009 Workgroup Meeting

1. IECC 502.4.7 and definition of “entrance.” Does vestibule need to be provided for openings to outdoor garden center?
2. IECC 503.2.9.1 and air balancing/commissioning buildings. How should USBC apply? Guy Tomberlin offered to assist in draft code change.
3. Manual J – review practices and requirements, issues are whether to require at plan review, whether to be done and/or retained by contractor or at job site for inspector.
4. IECC 402.2.2 – reduction of insulation for ceilings without attic spaces. Is the 20% rule inequitable and would deleting it cause problems?
5. IECC Table 405.5.2(1) – equipment tradeoff for less insulation or glazing. Prevents the owner from later installing less efficient equipment. Does USBC already cover this?
6. Moving gray water appendix into IPC; Workgroup 3 issue with energy ramifications, so for consideration in this workgroup also.
7. Federal stimulus money; any effect on adoption or amendment of energy provisions?

***** Reminder*****

Next Work Group 1 meeting is April 23, 2009 at DHCD 1st floor Board Room commencing at 9:30a.m. Anticipate ending before noon.