

MEETING MINUTES
Mayor's Task Force on Sustainable Buildings
Advisory Committee - Residential Subcommittee
September 12, 2008
8:30 AM
1901 S. Alamo, Board Room

Advisory Committee members attending: Ross Bacon, Bill Barker, Kathe Doran, Tenna Florian, Karen Guz, Mike Hogan, Lanny Lambert, Brent Lane, Jerry Morrissey, Rod Radle, Garland Scott

Technical Support Team members attending: Barry Archer, Peter Bella, Stephen Colley, Michael DeWein (via telephone), Mike Myers, Erin Zayko

Staff Liaisons attending: Laurence Doxsey, Liza Meyer, Marisol Robles, Aaron Stein

Guests: Carl Allsup, Richard Chamberlin, Joe G. Mendoza, Richard Milk, Howard Rogers

Handouts: Meeting Minutes from August 29 Meeting, EC-14 Residential IECC proposals

Action Items

- Liza to forward information to the committee about an upcoming Community Development forum
- Create web-based system for document and information sharing
- Create sustainable building glossary
- Send AC members info about Zachry Construction location for next meeting

I. Approval of the August 29, 2008 Meeting Minutes

Laurence Doxsey called the meeting to order at 8:35 AM. Minutes from the August 29th meeting were approved pending the addition of Mike Myers' last name to references under *Item V. Discussion of What Other Municipalities are Doing*. The purpose is to distinguish Mike Myers from Mike Hogan.

II. Discussion on the Advanced Residential Building Code Trends and Options

Richard Chamberlain discussed the upcoming IECC 2009 vote in Minneapolis. The vote could include a 30% residential improvement above IECC 2006. One thousand people may be voting, including three representatives from San Antonio's Development Services. The process includes input from manufacturers, home builders associations, the DOE, energy coalitions, code officials, etc. The three year update process started in Palm Springs where new proposals were first brought before committees. The Energy Efficient Codes Coalition (EECC) proposed the 30% Solution for residential. It was not approved by committee. Changes have been made to retry for approval in Minneapolis. EC-14 is the complete package of the same proposals. EC-154 is an appendix of the proposals. The EECC has three strategies: to propose the passage of EC-14 in entirety, which has been edited to be less stringent, to push individual proposals therein in, and/or to pass EC-154. Once codes standards are adopted they in turn have to be adopted by individual state or local jurisdictions. Richard reviewed the individual proposals that affect Climate Zone 2 (refer to handout). Mike Hogan asked about mold in reference to EC-64. Mike DeWein: New studies by the Buildings Science Corporation Building America program have shown that in hot humid climates tightening up buildings may be the number one preventative measure for reducing the mold problem, proper use of air barriers and vapor retarders are used. The IECC includes provisions for vapor retardants. Mike Myers suggested making note of this item for future examination with regards to testing and compliance. Jerry Morrissey asked how international is the IECC? Richard explained that three groups came together in 1995 to form the IECC after the passage of NAFTA. They were BOCA (East

Coast), UDC (West Coast), and Standard BC (South). Barry and Mike DeWein added that the IECC codes are used by Canada, the US, and other countries like India, Mexico, and South America.

Tenna Florian clarified if item #2 under EC-14 should say “increase” instead of “decrease”? Richard Chamberlain indicated that was a clerical error and will revise to show “increase” in R-value as U-values decrease. There were several comments regarding the insufficiency of using R-factors as a sole determinate of efficiency. Materials with technically low R values can be very effective insulators. Mike DeWein added that certain manufacturers gain from promoting R-value over other considerations of efficiency. Additional research can be done to come up with true performance measures of products that have lower R-values. Stephen Colley mentioned that efficiency is greatly improved in the “unvented attic” scenario where the insulation is inside the attic up against the roof deck. Ducts are in a semi-conditioned space. Laurence Doxsey stated that 2x4, 2x6 or 2x8 space does it add up to the right r-value? Insulated rafters are a fantastic way to insulate says Barry Archer. Stephen Colley added 2x6 rafters with urethane foam gets r-value, a 5 degree difference in home. Howard Rogers stated even if you have 2x4 foam wraps around rafter get rid of thermal bridge. One problem, if you don’t address the reflectivity of the roof you’re wasting time. Florida test, Fort Myers test the foam didn’t perform well with a dark roof. Laurence Doxsey opened the floor for additional comments, using mechanical over-sizing as an example. Kathe Doran noted that CPS promotes reexamining mechanical systems after all commercial efficiency retrofits have been implemented. Downsizing systems may be possible at this point. Stephen Colley noted that the Build San Antonio Green program has sizing requirements. Edition 8 of Manual J looks at the relationship between heat load and AC. Jerry Morissey inquired what is the standard assumption for temperature setting? Mike DeWein responded Manual J is based on calculations in the ASHRAE Handbook of Fundamentals which includes an algorithm that takes temperature into account. He added that oversized units don’t run long enough to properly dehumidify, leading to mold problems. Karen Guz asked how does air flow affect cooling? If doors are closed to make a room colder, how can air flows be addressed in design? How expensive is it to ensure air flow? Mike DeWein responded IECC Codes do not address this issue very well. In Florida, transfer and return grills for central return have been addressed by the State. Grills through walls will raise the cost. Door cuts would not be as expensive. Tenna Florian added that air changes are addressed in EC-64. Stephen Colley asked if this includes Manual D? Richard Chamberlain didn’t see it. Nor did Laurence Doxsey. Mike DeWein responded the issue can be addressed at the State or jurisdictional level. Manual D and Manual J calculations include standpoints of applicability, satisfaction and comfort. Mike Myers stated good duct design will significantly reduce energy. Manuel D addresses duct design. Testing for leaks and proper sealing is important. Kathe Doran agreed that leaking ducts are a problem. CPS offers rebates for eligible equipment installed by residential contractors. Contractors are attending home efficiency rebate training more than ever before. Mike DeWein stated advanced codes offer the benefit of training opportunities to demonstrate specific equipment like transfer grills etc. Tenna Florian stated solar hot water heaters improve peak performance and were found to be huge energy savers with high payback rates. She also mentioned the IECCs failure to consider radiant barriers and reflective roofs. Richard Chamberlin mentioned cost as a prohibitive factor. Karen Guz added water and energy can be saved by using hot water pipe insulation. Laurence Doxsey said the idea was not approved in Palm Springs but the issue will come back up in Minneapolis. Mike DeWein noted only in conditioned spaces do hot water pipes have to be insulated. Laurence Doxsey asked Rod Radle if insulating hot water pipes would be a burden. Rod Radle responded our pipe runs are short and insulation would not be a cost burden. Bill Barker mentioned his interest is the solar readiness of homes so that it’s easier to add solar PV and hot water heaters after build. Richard Chamberlain said that all these comments would be taken into account along with those made by experts who testify at the upcoming hearing in Minneapolis. Mike Hogan mentioned that changing codes every three years creates confusion. Mike Myers explained the code adoption process. After IECC adopts a standard, the State Energy Conservation Office (SECO) reviews the code and receives public comment. Comments are provided to ESL. ESL has six months to recommend amendments/changes and send back to SECO. The final product cannot be adopted as law for another 9 months. This translates into State adoption no earlier than 2010, at which point the code would be binding on San Antonio. Currently, San Antonio can monitor the IECC hearings and adopt the outcomes with or without changes before the State adopts a code in 2010. ESL will still have to review the changes.

Richard Milk, Community Development Coordinator for the City of San Antonio Planning and Community Development Department, made a special announcement. The strategic plan for community development will incorporate recommendations from the Buildings Task Force committee and the Transportation committee. Liza will forward information to the committee about an upcoming Community Development Summit.

III. Next Steps & Next Meeting Date

The Executive Committee has charged the Advisory Committee to look at efficiency increases between 15-30%. Some were more hesitant than others about raising the standard by 30%. Laurence Doxsey clarified that San Antonio currently follows IECC 2000 with the 2001 supplement. IRC-2006 residential code for all other components.

Mike Myers recommended creating a sustainable building glossary for the next meeting. Laurence Doxsey reiterated the creation of a web based system for information. The next meeting will be at Zachry Construction. A map of the location with room information will be sent to AC members. Mike DeWein extended an invitation for anyone going to Minneapolis to attend the EECC reception at the Millennium Hotel on Friday September 19 from 6-8:00 PM.

The meeting was adjourned at 10:05 AM.