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**Canadian
Home Builders'
Association**



**Association canadienne
des constructeurs
d'habitations**

January 11, 2009

Bruce Clemmensen, Chair
Canadian Commission on Building and Fire Codes
c/o Anne Gribbon, Secretary
Canadian Codes Centre / National Research Council
Building M-23A
1200 Montreal Road
Ottawa, Ontario K1A 0R6

Re: Policy Issues affecting the National Energy Code for Buildings

Dear Mr. Clemmensen,

I am writing further to my letter of November 26, 2009 regarding the National Energy Code for Buildings and the need for policy direction from the CCBFC. In my letter I indicated that the Standing Committee on Energy Efficiency in Buildings (SCEEB) required direction on a number of key policy issues in time for their January meeting. It is most unfortunate that you were unable to provide that direction prior to the meeting that took place in Vancouver last week. Various task groups are continuing to work on recommendations that may be based on policy assumptions with which the CCBFC does not agree, resulting in lost time and effort.

Statements by some SCEEB members display disdain for the development industry and its members and these comments go uncensored by the chair or Code Centre staff. Concerns from the industry are dismissed summarily, in favour of the views expressed by those who support an approach that is quite radical. The overall result is an environment which is not conducive to consensus building.

The degree of increase in requirements over those in the current NECB is a policy question, as are the capital cost impacts, payback period and extent of disruption to current practice. The Standing Committee has few voices encouraging careful deliberation on these matters, and we are concerned that it will not be disposed to give arguments received in the public consultation proper consideration.

The following issues require direction:

Equipment

The SCEEB has decided to develop minimum efficiency requirements for equipment for the prescriptive compliance path that are higher than the minimum regulations of the Energy Efficiency Act. These requirements will represent a threshold below which the prescriptive path would not apply.

This would mean that equipment that is in compliance with the Energy Efficiency Act, but not in compliance with the Code, could not be used in new buildings unless some other compensating energy saving measure is introduced in the building being proposed.

Envelope Thermal Resistance Requirements

The envelope requirements are considerably higher than the NECB'97 and will affect the design of most buildings.

The levels were derived mainly on the basis of being 25% above estimated current practice and comparable to ASHRAE 90.1 (2007). There have been no construction details done to examine the practicality of these values. A window representative has said that the requirements would force manufacturers to retool. Some SCEEB members expressed the view that this is a good thing and will help to maintain market share in the US where requirements are also going up.

Calculations of simple payback done by SCEEB members are in the range of 15 to 25 years in most cases. The payback for unheated warehouses was more than 150 years but a separate category has since been created for this building type. A representative from the masonry industry has indicated that the proposed levels will lead to the use of insulation in the stud space in BV/SS walls causing an increase in wall failures.

The CCBFC should declare what would be an acceptable payback period rather than wait to see what the consultants come up with using the current proposals. It should also call for clear technical details on how acceptable thermal values could be achieved. This should include details for a range of values to determine where the nearest cost thresholds (jumps) are.

Maximum Fenestration Area

The SCEEB has chosen 30% as the threshold for window area above which the prescriptive path would not apply. The rationale is that 30% offers enough light and since windows are relatively inefficient, any additional window area is a luxury that should only be accommodated by some counterbalancing energy saving.

A SCEEB member argued unsuccessfully that having more glass makes smaller units more marketable so the measure would be counterproductive because larger units would result. One member said that they should ask for 30% knowing that they may have to negotiate back to 40%. Some SCEEB members stated that builders would complain whatever is proposed so they may as well be aggressive.

While the selected archetypes have less than 30% fenestration, most buildings that participated in NRCan's Commercial Buildings Incentives Program (CBIP) reportedly exceeded 30%. The current requirements in Ontario use a threshold of 40%. So, this requirement would have a significant impact on current practice. ASHRAE is considering reducing its requirement from 40% to 30% in the 90.1 standard for the 2010 edition but this has not yet been voted on.

There is a related issue at the other end of the spectrum. A highrise office building with 30% fenestration might have an overall R-value of R-7. Discussion at the Vancouver meeting suggested that the SCEEB may propose that buildings with less than 30% window area may use an equivalent overall energy target (approx. R-7) target in the performance path. While sensible, this would make the 30% limit extremely important and therefore create more resistance amongst SCEEB members to leaving it at 40%.

This is a key decision and the SCEEB has declared clearly that it wants to force this significant change. The CCBFC must take responsibility for this decision and the sooner the better.

Air Barriers

The SCEEB proposes to require conformance with standards for air barrier systems rather than just products as is currently the case. The tapes and connection details would have to be tested in a laboratory and presumably verified on site. While the SCEEB was advised that there are sufficient tested systems available, it would still represent a significant change from current practice. It is a policy question as to whether the Code is the appropriate vehicle to introduce this change and whether this is the appropriate time to do so.

Other

There are a number of less significant changes being adopted, such as requiring vestibules in buildings in warmer climate zones and a great many new off-switch requirements (manual and automated). Presumably, the CCBFC will take direct responsibility for these decisions if the cost/benefit information shows that capital costs and payback periods are greatly increased.

I look forward to receiving your response.

Yours truly,



John Kenward
Chief Operating Officer

cc. CHBA Executive Board