

Proposed Changes

May 19, 2014

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TG-1: Administration, Compliance, and Operation & Owner Education

Chapter 1: Scope and Administration

Proposal ID TBD	LogID 739	102.1 Applicability
Submitter:	Thomas Culp, Birch Point Consulting LLC	
Requested Action:		
Proposed Change:	<p>102.1 Applicability. The provisions of this Standard shall apply to design and construction of the residential portion(s) of any building not classified as an institutional use or R-1 occupancy in all climate zones. This Standard shall also be used for subdivisions, building sites, and the residential portions of alterations, additions, renovations, mixed-use residential buildings, and historic buildings, where applicable.</p> <p><i>or if you don't wish to use occupancy classes,</i></p> <p>102.1 Applicability. The provisions of this Standard shall apply to design and construction of the residential portion(s) of any building not classified as an institutional use, <u>hotel</u>, or <u>motel</u> in all climate zones. This Standard shall also be used for subdivisions, building sites, and the residential portions of alterations, additions, renovations, mixed-use residential buildings, and historic buildings, where applicable.</p>	
Reason:	<p>Hotels and Motels. Currently, the standard does not use the same scope for residential buildings as the IECC or ASHRAE. I understand this is from the desire to cover apartment buildings not just below 3 stories. However, the generic term "residential" can be interpreted as also containing hotels and motels, which are R-1 occupancies, although these have very different construction and use than other residential buildings. For this reason, hotels and motels are treated as commercial buildings in the IECC. As just one example, hotels commonly use commercial windows and curtain wall assemblies rather than residential windows in lobby areas, rooms, or both. HVAC and lighting are also very different. My previous comments attempted to address this in the window section by pointing to the commercial sections of the IECC for these types of buildings. They were rejected because the committee felt windows should not be treated differently than the rest, and also stated "Hotels and motels are covered under commercial building." I agree, but since hotels and motels are group R-1, I think this proposed change in the Applicability section helps clarify this.</p>	
TG Recommendation (AS or AM or D):		
Modification of Proposed Change:		
TG Reason:		
TG Vote:		

Proposal ID TBD	LogID 5278	Other for Chapter 1 (include section number and title below)
Submitter:	Shelly Leonard, Green Space Consultants LLC	
Requested Action:	Add new as follows	
Proposed Change:	<u>101.6 Commentary. The National Green Building Standard(™) Commentary will be released in conjunction with the current ANSI approved National Green Building Standard(™). The Commentary expands on the compliance language in the Standard including scope and administration, compliance methods, and requirements and prescriptions for all chapters within the Standard.</u>	
Reason:	Given that the Commentary is a published companion to the Standard, it should be listed along with referenced documents and appendices and noted in Chapter1, Section 101 General. Since the Commentary provides expanded insight and details related to the intent and implementation of practices in the Standard, it should be released/published at the same time as the corresponding Standard and not several months thereafter.	
TG Recommendation (AS or AM or D):		
Modification of Proposed Change:		
TG Reason:		
TG Vote:		

Proposal ID TBD	LogID 5047	Other for Chapter 1 (include section number and title below)
Submitter:	Robert Hill, Home Innovation Research Labs	
Requested Action:	Add new as follows	
Proposed Change:	102.5 Significant Decimals. Values used to determine compliance with minimum or maximum values or for determining point allocations shall be rounded to the same number of decimal places as specified value in the practice.	
Reason:	General industry practice is to round values to the same number of decimal places as in the specification. There is typically uncertainty associated with most values and clarifying how to interpret values would be helpful.	
TG Recommendation (AS or AM or D):		
Modification of Proposed Change:		
TG Reason:		
TG Vote:		

Chapter 2: Definitions

Proposal ID TBD	LogID 5150	202 Definitions
Submitter:	Stephen J Holzer, eM8s, LLC	
Requested Action:	Add new as follows	
Proposed Change:	<p>BUILDING INFORMATION MODELING (BIM)</p> <p>A computer generated model based process that simulates three dimensional planning, design, coordination, construction and operations for buildings.</p>	
Reason:	<p>Building Information Modeling (BIM) is a computer generated model based process that simulates planning, design, construction and operations for buildings. It is a single repository for both three-dimensional, two-dimensional, and material properties information that allows data interoperability of all stakeholders to better inform design and construction decisions with the goal of producing the best product possible. This information technology will increase design and construction efficiencies and decrease costs for builders and end users. BIM may also facilitate better communication, collaboration and coordination among building industry professionals and trades working on the same project. Credit should be given to Builders utilizing the open industry standards as defined in the National Building Information Modeling Standard.</p>	
TG Recommendation (AS or AM or D):		
Modification of Proposed Change:		
TG Reason:		
TG Vote:		

Proposal ID TBD	LogID 5122	202 Definitions
Submitter:	Robert Hill, Home Innovation Research Labs	
Requested Action:	Add new as follows	
Proposed Change:	<p>High priority natural resources - Mature wildlife habitat, trees, shrubs, and water features that could not be quickly reestablished. Other natural features as identified as environmentally important by a licensed professional.</p>	
Reason:	<p>Without a definition, the interpretation of what is a “High priority” resource worthy of 5 points is open to inconsistent interpretation. The proposed definition certainly needs refinement and is offered only as a starting point.</p>	
TG Recommendation (AS or AM or D):		
Modification of Proposed Change:		
TG Reason:		
TG Vote:		

Proposal ID TBD	LogID 5123	202 Definitions
Submitter:	Robert Hill, Home Innovation Research Labs	
Requested Action:	Revise as follows	
Proposed Change:	MINORCOMPONENT. Building materials or systems <u>that do not meet the definition of a major component but exceed at least 0.1% of the building material cost. that are not considered a major component. (also see Major Component).</u>	
Reason:	The current definition allows any material or component earn points as a minor material regardless of how insignificant the usage is. The committee is encouraged to refine the cost percentage threshold.	
TG Recommendation (AS or AM or D):		
Modification of Proposed Change:		
TG Reason:		
TG Vote:		

Proposal ID TBD	LogID 5124	202 Definitions
Submitter:	Robert Hill, Home Innovation Research Labs	
Requested Action:	Revise as follows	
Proposed Change:	MAJORCOMPONENT. 1. All structural members and structural systems. 2. Building materials or systems that are typically applied as a part of over 50%of the surface area of the foundation, wall, floor, ceiling, or roof assemblies <u>excluding vapor barriers, WRB, architectural coatings.</u>	
Reason:	The current definition allows for claiming of the excluded materials as major elements but the impact on resources efficiency of the excluded materials is not the same magnitude as the other materials.	
TG Recommendation (AS or AM or D):		
Modification of Proposed Change:		
TG Reason:		
TG Vote:		

Proposal ID TBD	LogID 5125	202 Definitions
Submitter:	Robert Hill, Home Innovation Research Labs	
Requested Action:	Revise as follows	
Proposed Change:	NEWCONSTRUCTION. Construction of a new building or construction that completely replaces more than 75 percent of an existing building.	
Reason:	The remodeling chapter can adequately address renovations that replace more than 75% of an existing building. If replacing 75% of an existing building must follow the new construction criteria it imposes significant burdens with regard to meeting mandatory new construction requirements in any portion of the building that is not being replaced (e.g. it would require digging up the foundation to install drain tile and removing all the existing cladding to install WRB). It is not clear how the 75% is calculated - square footage or something else. Is a gut rehab down to the studs for 100% of the building equal to 75% replacement?	
TG Recommendation (AS or AM or D):		
Modification of Proposed Change:		
TG Reason:		
TG Vote:		

Proposal ID TBD	LogID 5126	202 Definitions
Submitter:	Robert Hill, Home Innovation Research Labs	
Requested Action:	Add new as follows	
Proposed Change:	Terrain Adaptive Architecture – Architecture where the design of the building has been specifically adapted to preserve unique features of the terrain.	
Reason:	This term is not typically understood. The definition should be refined by those knowledgeable in lot design. There has also been confusing in distinguishing 503.2(1) from 503.2(4).	
TG Recommendation (AS or AM or D):		
Modification of Proposed Change:		
TG Reason:		
TG Vote:		

Proposal ID TBD	LogID 5263	202 Definitions
Submitter:	Matt Belcher, Verdatek Solutions	
Requested Action:	Add new as follows	
Proposed Change:	<p><u>Section 202 Definitions</u></p> <p><u>FLOOD HAZARD AREA.</u> The greater of the following two areas: 1. The area within a flood plain subject to a 1-percent or greater chance of flooding in any year. 2. The area designated as a flood hazard area on a community's flood hazard map, or otherwise legally designated.</p> <p><u>RESILIENCE.</u> The ability of buildings to take in the shock of natural disasters and better recover from these events.</p>	
Reason:	With the focus on future enhancement of the model codes to provide for enhanced "Resilient" construction, It is an opportunity to include reference in this "above code" standard to incentivise innovative practices and process that will demonstrate best practices for eventual application into the model codes.	
TG Recommendation (AS or AM or D):		
Modification of Proposed Change:		
TG Reason:		
TG Vote:		

Proposal ID TBD	LogID 5290	202 Definitions
Submitter:	Thomas Culp, Birch Point Consulting LLC	
Requested Action:	Add new as follows	
Proposed Change:	<p><u>DYNAMIC GLAZING.</u>Any fenestration product that has the fully reversible ability to change its performance properties, including U-factor, SHGC, or VT.</p>	
Reason:	Add definition for dynamic glazing for use in chapter 7. Definition taken from IECC.	
TG Recommendation (AS or AM or D):		
Modification of Proposed Change:		
TG Reason:		
TG Vote:		

Chapter 3: Compliance Method

Proposal ID TBD	LogID 5313	303.1 Green buildings
Submitter:	Craig Conner, Building Quality	
Requested Action:	Revise as follows	
Proposed Change:	[Adjust the point levels in energy in Table 303 to represent 10%, 20%, 30% and 40% above the IECC.]	
Reason:	This is based on the presumption that the 2015 codes will become the base for the 2015 ICC 700; including the 2015 IECC becoming the base for the energy chapter. Exceeding the 2015 IECC by 50% is a very tall order. At 40% the 2015 NGBS emerald energy level will exceed the 2012 NGBS emerald level by about 5%. It is not clear what the resulting points will become, but they might be 20, 40, 60, and 80.	
TG Recommendation (AS or AM or D):		
Modification of Proposed Change:		
TG Reason:		
TG Vote:		

Proposal ID TBD	LogID 5217	303.1 Green buildings
Submitter:	Eric Lacey, RECA	
Requested Action:	Revise as follows	
Proposed Change:	<p>303.1 Green Buildings. The threshold points required for the environmental rating levels for a green building shall be in accordance with Table 303. To qualify for one of these rating levels, all of the following shall be satisfied:</p> <p>(1) The threshold number of points, in accordance with Table 303, shall be achieved as prescribed in Categories 1 through 6 <u>7</u>. The lowest level achieved in any category shall determine the overall rating level achieved for the building.</p> <p>(2) In addition to the threshold number of points in each category, all mandatory provisions of each category shall be implemented.</p> <p>(3) In addition to the threshold number of points prescribed in Categories 1 through 6, the additional points prescribed in Category 7 shall be achieved from any of the categories. Where deemed appropriate by the Adopting Entity based on regional conditions, additional points from Category 7 may be assigned to another category (or categories) to increase the threshold points required for that category (or categories). Points shall not be reduced by the Adopting Entity in any of the six other categories <u>7</u>.</p>	
Reason:	The language of current Section 303.1 is confusing, and it could be misinterpreted in a way that permits code users to satisfy some or all of the energy efficiency points with points from any other category. We do not think this was the intent of this section, so we have submitted the above changes to clarify that regardless of the distribution of points among the ICC-700 chapters, the minimum Chapter 7 point requirement must be met by requirements from Chapter 7. Chapter 7 of ICC-700 contains requirements and options that will yield measurable energy and environmental benefits over the home's useful lifetime – potentially 70 or 100 years. A home that consumes unreasonably high amounts of energy will become a problem not only for the owner of the home, who must either perform an energy efficiency retrofit or pay higher energy costs, but will also become a long-term problem for cities and states struggling to curb increasing demand for energy. Energy conservation must be a primary consideration in any green home, and Section 303.1 should be clarified to ensure the proper application of Chapter 7 points.	
TG Recommendation (AS or AM or D):		
Modification of Proposed Change:		
TG Reason:		
TG Vote:		

Chapter 10: Operation, Maintenance, and Building Owner Education

Proposal ID TBD	LogID 5064	1001.1 Building owner's manual is provided
Submitter:	Robert Hill, Home Innovation Research Labs	
Requested Action:	Add new as follows	
Proposed Change:	(22) Information on the importance and operation of the home's fresh air ventilation system.	
Reason:	Proper ventilation is important especially in tight homes. Most home owners do not understand the importance of this and may turn off the equipment in an attempt to save energy.	
TG Recommendation (AS or AM or D):		
Modification of Proposed Change:		
TG Reason:		
TG Vote:		

Proposal ID TBD	LogID 5173	1001.1 Building owner's manual is provided
Submitter:	Brett VanAkkeren, USEPA	
Requested Action:	Revise as follows	
Proposed Change:	(5) Information on local recycling <u>and composting</u> programs.	
Reason:	Section 1001.1 states that information be included in the owner's manual as available and applicable. Information on composting programs should be referenced in part (5).	
TG Recommendation (AS or AM or D):		
Modification of Proposed Change:		
TG Reason:		
TG Vote:		

Proposal ID TBD	LogID 726	1001.1 Homeowner's Manual
Submitter:	Josh Jacobs, GREENGUARD Environmental Institute	
Requested Action:		
Proposed Change:	<p>(19) Instructions for maintaining gutters and downspouts and importance of diverting water a minimum of 5 feet away from foundation.</p> <p>(20) A narrative detailing the importance of maintenance and operation in retaining the attributes of a green-built building.</p> <p>(21) Where storm water management measures are installed on the lot, information on the location, purpose, and upkeep of these measures.</p> <p>(22) Explanation of and benefits from green cleaning in the home.</p>	
Reason:	This section discusses many things that can contribute to not only the buildings continued 'greenness', but also the sustainable footprint of the people that occupy it. One of the main things that can be detrimental to a home's sustainability following construction is the introduction of unhealthy/unsafe cleaning practices. These can directly impact not only the occupant's health, but also the natural environment around the home and even far afield. We should require information be provided to the homeowner on green cleaning practices.	
TG Recommendation (AS or AM or D):		
Modification of Proposed Change:		
TG Reason:		
TG Vote:		

Proposal ID TBD	LogID 742	1001.1 Homeowner's Manual
Submitter:	Susan Gitlin, US Environmental Protection Agency	
Requested Action:		
Proposed Change:	UUU	
Reason:	We are glad to see that this section includes information on local recycling programs. The section should also specify information identifying local governments, utilities, retailers and manufacturers who offer proper disposal of refrigerators and freezers in partnership with EPA's Responsible Appliance Disposal (RAD) Program. RAD is an EPA partnership program that protects the ozone layer and reduces emissions of greenhouse gases (http://www.epa.gov/ozone/partnerships/rad/). The requirements of the RAD program include ensuring that: 1) refrigerant from appliances is recovered and either reclaimed or destroyed; 2) appliances' insulating foam, which contains harmful foam-blowing agents, is recovered and destroyed, or the blowing agent is recovered and reclaimed; 3) metals, plastic and glass are recycled; and 4) PCBs, mercury and used oil are recovered and properly disposed of.	
TG Recommendation (AS or AM or D):		
Modification of Proposed Change:		
TG Reason:		
TG Vote:		

Proposal ID TBD	LogID 5174	1002.1 Training of building owners (one- and two-family dwellings)
Submitter:	Brett VanAkkeren, USEPA	
Requested Action:	Revise as follows	
Proposed Change:	(7) recycling <u>and composting</u> practices	
Reason:	Training on composting practices should be included in the training dealing with recycling and waste management.	
TG Recommendation (AS or AM or D):		
Modification of Proposed Change:		
TG Reason:		
TG Vote:		

Proposal ID TBD	LogID 5096	1002.1 Training of building owners (one- and two-family dwellings)
Submitter:	Donald Prather, ACCA	
Requested Action:	Add new as follows	
Proposed Change:	<i><u>(8) Documentation and training as required in QI-5 2010</u></i>	
Reason:	QI-5 2010 designates documentation and owner training based on the type of equipment installed. Relisting every combination in this standard would be duplicative. By adding the QI-5 requirement all HVAC system types would be covered.	
TG Recommendation (AS or AM or D):		
Modification of Proposed Change:		
TG Reason:		
TG Vote:		

Proposal ID TBD	LogID 5175	1003.1 Building construction manual
Submitter:	Brett VanAkkeren, USEPA	
Requested Action:	Add new as follows	
Proposed Change:	<u>(9) A Disassembly Plan with as-built drawings and the chemical and mechanical inventory yielding information about the method of disassembly of building systems and the properties of major materials and components.</u>	
Reason:	A disassembly plan should be provided to the owner to facilitate deconstruction and disassembly of the home to maximize reuse and salvaging of materials during renovation or at the end of the building's useful life.	
TG Recommendation (AS or AM or D):		
Modification of Proposed Change:		
TG Reason:		
TG Vote:		

Proposal ID TBD	LogID 5097	1003.2 Operations manual
Submitter:	Donald Prather, ACCA	
Requested Action:	Add new as follows	
Proposed Change:	<i>(10) Documentation and OEM manuals as required in QI-5 2010</i>	
Reason:	QI-5 2010 designates documentation and how to highlight it for ease of usage based on the type of equipment installed. Relisting every combination in this standard would be duplicative. By adding the QI-5 requirement all HVAC system types would be covered.	
TG Recommendation (AS or AM or D):		
Modification of Proposed Change:		
TG Reason:		
TG Vote:		

Proposal ID TBD	LogID 5065	1003.2 Operations manual
Submitter:	Robert Hill, Home Innovation Research Labs	
Requested Action:	Add new as follows	
Proposed Change:	(11) Information on the importance and operation of the building's fresh air ventilation system.	
Reason:	Proper ventilation is important especially for tight buildings. Including this information in the operations manual is appropriate.	
TG Recommendation (AS or AM or D):		
Modification of Proposed Change:		
TG Reason:		
TG Vote:		

Proposal ID TBD	LogID 744	1003.2 Operations Manuals
Submitter:	Susan Gitlin, US Environmental Protection Agency	
Requested Action:		
Proposed Change:	.	
Reason:	a) We are glad to see that this section includes information on local and on-site recycling and hazardous waste disposal programs. The section should specifically mention local recycling of refrigerators and freezers, which contain hazardous materials subject to proper management and storage requirements under Subtitle C of the Resource Conservation and Recovery Act. These materials include mercury, used oil, and PCBs (see 40 CFR Parts 273, 279 and 761). b) We are glad to see that this section includes a list of practices to conserve water and energy (e.g., turning off lights when not in use, switching the rotation of ceiling fans in changing seasons, purchasing ENERGY STAR appliances and electronics). The example of "purchasing ENERGY STAR® appliances and electronics" should be modified to state "replacing older, inefficient appliances and electronics with ENERGY STAR appliances and electronics" so as to capture the additional benefit associated with removing older appliances from the grid.	
TG Recommendation (AS or AM or D):		
Modification of Proposed Change:		
TG Reason:		
TG Vote:		

Proposal ID TBD	LogID 5081	1003.3 Maintenance manual
Submitter:	Josh Jacobs, UL	
Requested Action:	Add new as follows	
Proposed Change:	<u>(10) A green cleaning plan which shall include guidance on sustainable cleaning products.</u>	
Reason:	Cleaning can have a negative impact on the indoor environmental quality that a builder and occupant have tried to ensure. By providing an understanding of a green cleaning plan to the owners and occupants, you can minimize this potential risk.	
TG Recommendation (AS or AM or D):		
Modification of Proposed Change:		
TG Reason:		
TG Vote:		

Proposal ID TBD	LogID 5098	1003.3 Maintenance manual
Submitter:	Donald Prather, ACCA	
Requested Action:	Add new as follows	
Proposed Change:	<u>(10) OEM Maintenance requirements as required in QI-5 2010</u>	
Reason:	QI-5 2010 designates information that is needed by owners with regards to maintenance. Relisting every combination in this standard would be duplicative. By adding the QI-5 requirement all HVAC system types would be covered.	
TG Recommendation (AS or AM or D):		
Modification of Proposed Change:		
TG Reason:		
TG Vote:		

Proposal ID TBD	LogID 5154	1004.1 Reserved - To Be Determined
Submitter:	Stephen J Holzer, eM8s, LLC	
Requested Action:	Delete and substitute as follows	
Proposed Change:	1004.1 Building Information Modeling (BIM). Multifamilybuilding owner uses BIM as primary means to cooperate and maintain a more efficient building.	
Reason:	Building Information Modeling (BIM) is a computer generated model based process that simulates planning, design, construction and operations for buildings. It is a single repository for both three-dimensional, two-dimensional, and material properties information that allows data interoperability of all stakeholders to better inform design and construction decisions with the goal of producing the best product possible. This information technology will increase design and construction efficiencies and decrease costs for builders and end users. BIM may also facilitate better communication, collaboration and coordination among building industry professionals and trades working on the same project. Credit should be given to Builders utilizing the open industry standards as defined in the National Building Information Modeling Standard.	
TG Recommendation (AS or AM or D):		
Modification of Proposed Change:		
TG Reason:		
TG Vote:		

Appendix E: Accessory Structures

Proposal ID TBD	LogID 5314	E202 Conformance criteria
Submitter:	Craig Conner, Building Quality	
Requested Action:	Add new as follows	
Proposed Change:	Add a new appendix that specifies procedures and guidelines for approving alternative programs that may or may not look or be formatted like NGBS or IECC, but are verified to achieve their overall energy efficiency goals.	
Reason:	<p>This new appendix specifies procedures and guideline for approving alternative programs that may or may not look or be formatted like NGBS or IECC, but are verified to achieve their overall energy efficiency goals. There are many good programs that have achieved local, state and national success. NGBS users, the NGBS support organization, or others should have the ability to recognize a variety of accomplished programs. Due to the size of the submittal, it is being sent in as a separate file.</p> <p>[SEE ATTACHMENTS TO PUBLIC COMMENTS FOR ADDITIONAL INFORMATION]</p>	
TG Recommendation (AS or AM or D):		
Modification of Proposed Change:		
TG Reason:		
TG Vote:		

Proposal ID TBD	LogID 5315	E202 Conformance criteria
Submitter:	Craig Conner, Building Quality	
Requested Action:	Add new as follows	
Proposed Change:	Add appendix specifies prescriptive packages that comply with the energy efficiency goals of the 10%, 20%, 30% and 40% levels in the energy chapter.	
Reason:	<p>This appendix specifies prescriptive packages that comply with the energy efficiency goals of the 10%, 20%, 30% and 40% levels in the energy chapter. The user can select any number of choices. This provides a simpler, mostly prescriptive option that allows freedom have wider variation of choices, but does not require a simulation. The “Trades and Adds” table specifies how much a change to a component affects the total. Some “Trades and Adds” will have a negative %. “Trades and Adds” also adds additional specific options. Any combination shall be permitted provided the “Trades and Adds” yields at least the “Extra” required.</p> <p>[SEE ATTACHMENTS TO PUBLIC COMMENTS FOR ADDITIONAL INFORMATION]</p>	
TG Recommendation (AS or AM or D):		
Modification of Proposed Change:		
TG Reason:		
TG Vote:		