

Public Comments on Second Draft Standard

June 4, 2019

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Summary of Comments

Number	Log ID	Name	Section Number	Committee Action
PC501	6380	Susan Gitlin	301.1.1 Non-residential spaces	
PC502	6376	Steven Rosenstock	305.2.5.1 Energy consumption reduction	
PC503	6375	Carl Seville	305.2.5.2 Prescriptive Path	
PC504	6384	Susan Gitlin	503.5 Landscape Plan	
PC505	6388	Susan Gitlin	607.1 Recycling and composting	
PC506	6386	Susan Gitlin	612.2 Sustainable products	
PC507	6377	Steven Rosenstock	702.2.1 ICC IECC analysis	
PC508	6368	Cambria McLeod	802.4 Showerheads	
PC509	6393	Hailee Griesmar	902.3.2 Radon Testing	
PC510	6385	Susan Gitlin	11.503.5 Landscape Plan	
PC511	6389	Susan Gitlin	11.607.1 Recycling and composting	
PC512	6387	Susan Gitlin	11.612.2 Sustainable products	
PC513	6369	Cambria McLeod	11.802.4 Showerheads	
PC514	6378	Steven Rosenstock	1203.11.1 IECC Analysis	
PC515	6381	Susan Gitlin	13.102.1.4, Alternate compliance	
PC516	6396	Hailee Griesmar	13.104.3 Material Selection	
PC517	6397	Hailee Griesmar	13.104.4 Recycling and Composting	
PC518	6398	Hailee Griesmar	13.105.9 Calculation of Heating and Cooling Loads	
PC519	6399	Hailee Griesmar	13.107.3 Product Emissions	

EDITORIAL COMMENTS

Number	Log ID	Name	Section Number
E50	6392	Hailee Griesmar	101.4 Referenced Documents
E51	6401	Tien Peng	611 Product Declarations
E52	6371	Carl Seville	902.3.2 Radon Testing
E53	6370	Carl Seville	1203.7 Air Sealing and Insulation

HELD COMMENTS

Number	Log ID	Name	Section Number
H50	6382	Susan Gitlin	403.7. Wildlife habitat
H51	6383	Susan Gitlin	403.7. Wildlife habitat
H52	6400	Tien Peng	601.2 Material usage
H53	6403	Tien Peng	613 Resilient Construction
H54	6372	Richard Foster	701.4.2.3 Duct system sizing
H55	6373	Carl Seville	11.701.4.6 Fenestration Specifications
H56	6374	Carl Seville	11.703.2.1 UA improvement
H57	6395	Hailee Griesmar	1205.11 MERV Filters

Table of Contents

Chapter 3: Compliance Method.....	2
Chapter 5: Lot Design, Preparation, and Development.....	3
Chapter 6: Resource Efficiency	3
Chapter 7: Energy Efficiency	6
Chapter 8: Water Efficiency	6
Chapter 9: Indoor Environmental Quality	7
Chapter 11: Remodeling	7
Chapter 12: Certified Compliance Path for Single-Family Homes, Townhomes, and Duplexes ..	11
Chapter 13: Commercial Spaces New Construction	11
Editorial	14
Held Comments	16

Chapter 3: Compliance Method

PC501 LogID 6380	301.1.1 Non-residential spaces	<i>Final Formal Action: TBD</i>
Associated PCs:	N/A	
Submitter:	Susan Gitlin, US Environmental Protection Agency	
Suggested Change:	301.1.1 Non-residential spaces. Non-residential spaces in mixed-use buildings shall comply with Chapter 13 (Commercial Spaces/Mix Use Chapter) of this Standard or <u>Section 501.3.7.2</u> and Chapters 6-10 of the ICC International Green Construction Code (IgCC), excluding §6.3.1.	
Reason:	Chapter 13 of NGBS contains bicycle parking requirements. IGCC also contains bicycle parking requirements, but they are located in IGCC Chapter 5. This proposal adds the IGCC bicycle parking requirements in order to achieve a closer equivalency of the environmental benefits achieved through the alternate compliance paths.	
Substantiating Documents:	No	
Staff Note:		
CC Action:		
Modification of Comment:		
CC Reason:		

PC502 LogID 6376	305.2.5.1 Energy Consumption reduction	<i>Final Formal Action: TBD</i>
Associated PCs:	PC026, PC027	
Submitter:	Steven Rosenstock, Self	
Suggested Change:	...estimated annual energy cost savings or <u>site energy savings</u> or source energy savings...	
Reason:	To be consistent with previous versions of the standard and to prevent gaming associated with source energy estimates.	
Substantiating Documents:	No	
Staff Note:	Reversing Approved Consensus Committee Action	
CC Action:		
Modification of Comment:		
CC Reason:		

PC503 LogID 6375	305.2.5.2 Prescriptive Path	<i>Final Formal Action: TBD</i>
Associated PCs:	PC211	
Submitter:	Carl Seville, SK Collaborative	
Suggested Change:	<u>Exception: Projects in Tropical Climate Zones that cannot achieve 30 points in section 11.703 but otherwise meet all criteria of section 11.7 will be assumed to meet the criteria for that section.</u>	
Reason:	Many affordable renovation projects in tropical climates have no air conditioning, dishwashers or clothes washers, and are unable to achieve either the 15% improvement nor the minimum 30 points for certification, however they achieve all practical energy efficiency requirements.	

Substantiating Documents:	No
Staff Note:	
CC Action:	
Modification of Comment:	
CC Reason:	

Chapter 5: Lot Design, Preparation, and Development

PC504 LogID 6384	503.5 Landscape Plan	<i>Final Formal Action: TBD</i>
Associated PCs:	PC194	
Submitter:	Susan Gitlin, US Environmental Protection Agency	
Suggested Change:	(3) To improve pollinator habitat, at least 10 percent of planted areas are composed of native or regionally appropriate flowering and nectar producing plant species. Invasive plant species shall not be utilized.	
Reason:	<p>The intent of these credits is to support pollinators, which are known to be in decline. However, as written, there is a good probability that this credit will fail to achieve its intent. Plants need only be “flowering and nectar producing” and “regionally appropriate”. Many pollinators depend on plant parts other than flowers for their food. “Regionally appropriate” is likely to be interpreted as merely having water needs consistent with local rainfall, but such plants are not nearly as likely as native plants to provide the food that pollinators require. For example, while the plant “Butterfly bush” (<i>Buddleia davidii</i>) may have water needs consistent with precipitation levels in a region, and also provides nectar that butterflies enjoy, butterflies’ young (caterpillars) are dependent on leaves from other plants (e.g., monarch caterpillars require the leaves of milkweed plants). This credit could be improved, and the intent much better achieved, by removing the term “regionally appropriate”. The use of native plants, i.e., plants with which local pollinators co-evolved, will maximize the chances that pollinators will benefit from the few plants that are planted for this credit.</p>	
Substantiating Documents:	No	
Staff Note:		
CC Action:		
Modification of Comment:		
CC Reason:		

Chapter 6: Resource Efficiency

PC505 LogID 6388	Section 607.1 Recycling and composting	<i>Final Formal Action: TBD</i>
Associated PCs:	PC086	
Submitter:	Susan Gitlin, US Environmental Protection Agency	
Suggested Change:	Recycling and composting. Recycling and composting by the occupant are facilitated by one or more of the following methods:	

	<p>(1) A readily accessible space(s) for recyclable material containers is provided and identified on the floorplan of the house or dwelling unit and or a readily accessible area(s) outside the living space is provided for recyclable material containers and identified on the site plan for the house or building.</p> <p>The area outside the living space shall accommodate recycling bin(s) for recyclable materials accepted in local recycling programs.</p> <p>(2) A readily accessible space(s) for compostable material containers is provided and identified on the floorplan of the house or dwelling unit and or a readily accessible area(s) outside the living space is provided for compostable material containers and identified on the site plan for the house or building.</p> <p>The area outside the living space shall accommodate composting container(s) for locally accepted materials, or, accommodate a composting container(s) for on-site composting.</p>
Reason:	Use of an "or" would allow project teams to select between providing recycling and composting spaces inside dwelling units or outside. It is impractical to have one space but not the other. For example, having outside space in a building but no inside space could mean that residents would need to remove recyclables from their units as soon as they are generated. (Residents might not be able or motivated to do so.) Similarly, having space inside dwelling units, but not outside, could require residents to accumulate their recyclables inside for a full week between two collections. Moreover, a building operator might need to collect recyclables from each unit in order to prepare for curbside collection. An either/or requirement is not reflective of typical operations and practices, and if implemented literally, could be a barrier to recycling and composting.
Substantiating Documents:	No
Staff Note:	
CC Action:	
Modification of Comment:	
CC Reason:	

PC506 LogID 6386	612.2 Sustainable products	Final Formal Action: TBD
Associated PCs:	PC089, PC199	
Submitter:	Susan Gitlin, US Environmental Protection Agency	
Suggested Change:	<p>612.2 Sustainable products. One or more of the following products are used for at least 30% of the floor or wall area of the entire dwelling unit or the sleeping unit, as applicable. Products are certified by a third-party agency accredited to ISO 17065.</p> <p>1) 50% or more of carpet installed (by square feet) is certified to NSF 140 or <u>applicable standard/ecolabel as identified in EPA's Recommendations of Specifications, Standards, and Ecolabels equivalent.</u></p> <p>2) 50% or more of resilient flooring installed (by square feet) is certified to NSF 332 or <u>applicable standard/ ecolabel as identified in EPA's Recommendations of Specifications, Standards, and Ecolabels equivalent.</u></p> <p>3) 50% or more of the insulation installed (by square feet) is certified to UL 2985 or <u>equivalent applicable standard/ ecolabel as identified in EPA's Recommendations of Specifications, Standards, and Ecolabels.</u></p>	

	<p>4) 50% or more of interior wall coverings installed (by square feet) is certified to NSF 342 or equivalent.</p> <p>5) 50% or more of the gypsum board installed (by square feet) is certified to UL 100 or equivalent.</p> <p>6) 50% or more of the door leafs installed (by number of door leafs) is certified to UL 102 or equivalent.</p> <p>7) 50% or more of the tile installed (by square feet) is certified to TCNA A138.1 Specifications for Sustainable Ceramic Tiles, Glass Tiles and Tile Installation Materials or equivalent <u>applicable standard/ecolabel as identified in EPA's Recommendations of Specifications, Standards, and Ecolabels</u>.</p> <p>To Chapter 14, under EPA references, add the following:</p> <p><u>2016, EPA Recommendations of Specifications, Standards, and Ecolabels</u>, https://www.epa.gov/greenerproducts/recommendations-specifications-standards-and-ecolabels-federal-purchasing, 612.2 and 11.612.1</p>
Reason:	<p>--In most of these product categories, listing one standard is too limiting given the number of effective standards and ecolabels in the marketplace today. Additional flexibility should be given to the users of the NGBS as is provided by the EPA Recommendations of Specifications, Standards, and Ecolabels. -- However, the terms "or equivalent" and "or applicable multi-attribute standard" put the onus on users of this standard to sort through potentially dozens of standards and ecolabels and to make technically complex determinations of equivalency (with regard to a standard/ecolabel's development process, the criteria's effectiveness, the conformity assessment process, etc). Unless NGBS refers to a specific standard or to set of well-vetted standards (such as the EPA Recommendations), we recommend against using those terms. --The EPA Recommendations of Specifications, Standards, and Ecolabels were developed via multi-stakeholder engagement and public comment and have been updated since their release in 2015. --The EPA Recommendations are recognized as a tool to consistently, efficiently, and fairly identify appropriate and effective private sector environmental performance standards and ecolabels to suit a user's needs. -- The EPA Recommendations provide flexibility to accommodate the variety of approaches to and types of standards/ecolabels that exist in the marketplace today. --The EPA Recommendations currently include 41 private sector standards and ecolabels in 22 product categories. --The EPA Recommendations are based on either 1) an assessment per EPA's Guidelines for Environmental Performance Standards and Ecolabels (via a Pilot that ran from March 2015 through December 2016); or 2) analysis and use by other federal agencies. For this second avenue, currently, the recommendations include standards and ecolabels from the Department of Energy's (DOE's) Priority Products List and the General Services Administration's (GSA's) Key Sustainable Products. --In general, the EPA Recommendations give preference to multi-attribute (i.e., life-cycle based) standards and ecolabels for which EPA has been able to confirm the availability of a competent certification body that either: o Is accredited by an accreditation body that is a signatory to the International Accreditation Forum Multilateral Recognition Arrangement (IAF MLA) and has the relevant standard in the scope of its accreditation, or o Otherwise meets Section III of EPA's Guidelines. --An exploratory analysis completed in FY18 estimates that the value of time savings enjoyed by federal agencies from utilizing the EPA Recommendations to meet their sustainability objectives is between \$3.7 million annually (at the lowest end) to \$16.2 million (at the highest end). Other organizations and institutions have indicated time savings, and other benefits, from using the EPA Recommendations, as well. --The previous language was missing a word ("Specifications") in the title of the EPA Recommendations. We correct that here, as well as add a reference to chapter 14 in order to direct users to the correct website. (Confusion about the website url was the basis for comments on these sections during the last public review.) --The EPA Recommendations do not cover gypsum board, wallcoverings, or doors, so we have revised item 5 to only allow for the stated multi-attribute standards.</p>
Substantiating Documents:	No
Staff Note:	Reversing Approved Consensus Committee Action
CC Action:	

Modification of Comment:	
CC Reason:	

Chapter 7: Energy Efficiency

PC507 LogID 6377	702.2.1 ICC IECC analysis	Final Formal Action: TBD
Associated PCs:	PC107 PC109, PC110, PC112, PC113, PC114	
Submitter:	Steven Rosenstock, Self	
Suggested Change:	...achieve energy cost or <u>site energy or</u> source energy performance...	
Reason:	To be consistent with previous versions of the standard and to avoid using the out of date and inaccurate source energy estimates in the 2018 IECC.	
Substantiating Documents:	No	
Staff Note:	Reversing Approved Consensus Committee Action	
CC Action:		
Modification of Comment:		
CC Reason:		

Chapter 8: Water Efficiency

PC508 LogID 6368	802.4 Showerheads	Final Formal Action: TBD
Associated PCs:	PC146	
Submitter:	Cambria McLeod, Kohler	
Suggested Change:	802.4 Showerheads. Showerheads are in accordance with the following: (1) The total maximum combined flow rate of all showerheads in a shower compartment with floor area of 1800 <u>2600</u> square inches or less is equal or less than 2.0 gpm. For each additional 1300 square inches or any portion thereof of shower compartment floor area, an additional 2.0 gpm combined showerhead flow rate is allowed. Showerheads shall comply with ASME A112.18.1/CSA B125.1 and shall meet the performance criteria of the U.S. EPA WaterSense Specification for showerheads. Showerheads shall be served by an automatic compensating valve that complies with ASSE 1016/ASME A112.1016/CSA B125.16 or ASME A112.18.1/CSA B125.1 and specifically designed to provide thermal shock and scald protection at the flow rate of the showerhead.	
Reason:	There was no technical data provided to support the increase to a 2600 sq in area. Supporting a change of dimensions based upon a 'best estimate' is an opinion and does not demonstrate leadership in construction or human factors knowledge; it does not build trust with users of this standard. The International Plumbing Code requires 900 sq in of floor area for showers and the Uniform Plumbing Code requires a 30" circle and 1024 sq in. Per analyses by human factors, we evaluate for the 95th percentile of males, which is a 6'2" tall and 216-pound man. A minimum of 30"x30" of floor space, or 900 sq in, is needed for this 95th percentile user. This is 1700 sq in less than what was proposed. A 30"x30" floor area allows bathers to move about the shower and also provides bathers a safe zone away from the water during temperature fluctuations. Therefore, if 900 sq in is used for the 95th percentile of	

	male users, 1800 is more than adequate for a single user. Anything at or above 1800 sq in (ie 900 + 900) could accommodate two users.
Substantiating Documents:	No
Staff Note:	
CC Action:	
Modification of Comment:	
CC Reason:	

Chapter 9: Indoor Environmental Quality

PC509	LogID 6393	902.3.2 Radon Testing	Final Formal Action: TBD
Associated PCs:	PC176		
Submitter:	Hailee Griesmar, Lorax Partnerships, LLC		
Suggested Change:	902.3.2 (i) An additional pre-paid test kit shall be provided to for the homeowner to use when they choose. The test kit shall include mailing, or emailing the results from the testing lab to the homeowner		
Reason:	Please advise on how this applies to multifamily projects.		
Substantiating Documents:	No		
Staff Note:			
CC Action:			
Modification of Comment:			
CC Reason:			

Chapter 11: Remodeling

PC510	LogID 6385	11.503.5 Landscape Plan	Final Formal Action: TBD
Associated PCs:	PC194		
Submitter:	Susan Gitlin, US Environmental Protection Agency		
Suggested Change:	(3) To improve pollinator habitat, at least 10 percent of planted areas are composed of native or regionally appropriate flowering and nectar producing plant species. Invasive plant species shall not be utilized.		
Reason:	The intent of these credits is to support pollinators, which are known to be in decline. However, as written, there is a good probability that this credit will fail to achieve its intent. Plants need only be "flowering and nectar producing" and "regionally appropriate". Many pollinators depend on plant parts other than flowers for their food. "Regionally appropriate" is likely to be interpreted as merely having water needs consistent with local rainfall, but such plants are not nearly as likely as native plants to provide the food that pollinators require. For example, while the plant "Butterfly bush" (<i>Buddleia davidii</i>) may have water needs consistent with precipitation levels in a region, and also provides nectar that butterflies enjoy, butterflies' young (caterpillars) are dependent on leaves from other plants (e.g., monarch caterpillars require the leaves of milkweed plants). This credit could be improved, and the intent much better achieved, by removing the term "regionally appropriate". The use of native plants,		

	i.e., plants with which local pollinators co-evolved, will maximize the chances that pollinators will benefit from the few plants that are planted for this credit.
Substantiating Documents:	No
Staff Note:	
CC Action:	
Modification of Comment:	
CC Reason:	

PC511 LogID 6389	11.607.1 Recycling and composting	Final Formal Action: TBD
Associated PCs:	PC086, PC198	
Submitter:	Susan Gitlin, US Environmental Protection Agency	
Suggested Change:	<p>11.607.1 Recycling and composting. Recycling and composting by the occupant are facilitated by one or more of the following methods:</p> <p>(1) A readily accessible space(s) for recyclable material containers is provided and identified on the floorplan of the house or dwelling unit <u>and</u> or a readily accessible area(s) outside the living space is provided for recyclable material containers and identified on the site plan for the house or building.</p> <p>The area outside the living space shall accommodate recycling bin(s) for recyclable materials accepted in local recycling programs.</p> <p>(2) A readily accessible space(s) for compostable material containers is provided and identified on the floorplan of the house or dwelling unit <u>and</u> or a readily accessible area(s) outside the living space is provided for compostable material containers and identified on the site plan for the house or building.</p> <p>The area outside the living space shall accommodate composting container(s) for locally accepted materials, or, accommodate a composting container(s) for on-site composting.</p>	
Reason:	Use of an "or" would allow project teams to select between providing recycling and composting spaces inside dwelling units or outside. It is impractical to have one space but not the other. For example, having outside space in a building but no inside space could mean that residents would need to remove recyclables from their units as soon as they are generated. (Residents might not be able or motivated to do so.) Similarly, having space inside dwelling units, but not outside, could require residents to accumulate their recyclables inside for a full week between two collections. Moreover, a building operator might need to collect recyclables from each unit in order to prepare for curbside collection. An either/or requirement is not reflective of typical operations and practices, and if implemented literally, could be a barrier to recycling and composting.	
Substantiating Documents:	No	
Staff Note:		
CC Action:		
Modification of Comment:		
CC Reason:		

PC512 LogID 6387	11.612.2 Sustainable products <i>Final Formal Action: TBD</i>
Associated PCs:	PC199
Submitter:	Susan Gitlin, US Environmental Protection Agency
Suggested Change:	<p>11.612.2 Sustainable products. One or more of the following products are used for at least 30% of the floor or wall area of the entire dwelling unit or sleeping unit, as applicable. Products are certified by a third-party agency accredited to ISO 17065.</p> <ol style="list-style-type: none"> 1) 50% or more of carpet installed (by square feet) is certified to NSF 140 <u>or applicable standard/ ecolabel as identified in EPA’s Recommendations of Specifications, Standards, and Ecolabels</u> or equivalent. 2) 50% or more of resilient flooring installed (by square feet) is certified to NSF 332 <u>or applicable standard/ ecolabel as identified in EPA’s Recommendations of Specifications, Standards, and Ecolabels</u> equivalent. 3) 50% or more of the insulation installed (by square feet) is certified to UL 2985 or equivalent <u>applicable standard/ ecolabel as identified in EPA’s Recommendations of Specifications, Standards, and Ecolabels.</u> 4) 50% or more of interior wall coverings installed (by square feet) is certified to NSF 342 or equivalent. 5) 50% or more of the gypsum board installed (by square feet) is certified to UL 100 or equivalent. 6) 50% or more of the door leafs installed (by number of door leafs) is certified to UL 102 or equivalent. 7) 50% or more of the tile installed (by square feet) is certified to TCNA A138.1 Specifications for Sustainable Ceramic Tiles, Glass Tiles and Tile Installation Materials or equivalent <u>applicable standard/ ecolabel as identified in EPA’s Recommendations of Specifications, Standards, and Ecolabels.</u> <p>To Chapter 14, under EPA references, add the following: <u>2016, EPA Recommendations of Specifications, Standards, and Ecolabels,</u> https://www.epa.gov/greenerproducts/recommendations-specifications-standards-and-ecolabels-federal-purchasing, 612.2 and 11.612.1</p>
Reason:	<ul style="list-style-type: none"> • In most of these product categories, listing one standard is too limiting given the number of effective standards and ecolabels in the marketplace today. Additional flexibility should be given to the users of the NGBS as is provided by the EPA Recommendations of Specifications, Standards, and Ecolabels. • However, the terms “or equivalent” and “or applicable multi-attribute standard” put the onus on users of this standard to sort through potentially dozens of standards and ecolabels and to make technically complex determinations of equivalency (with regard to a standard/ecolabel’s development process, the criteria’s effectiveness, the conformity assessment process, etc). Unless NGBS refers to a specific standard or to set of well-vetted standards (such as the EPA Recommendations), we recommend against using those terms. • The EPA Recommendations of Specifications, Standards, and Ecolabels were developed via multi-stakeholder engagement and public comment and have been updated since their release in 2015. • The EPA Recommendations are recognized as a tool to consistently, efficiently, and fairly identify appropriate and effective private sector environmental performance standards and ecolabels to suit a user’s needs. • The EPA Recommendations provide flexibility to accommodate the variety of approaches to and types of standards/ecolabels that exist in the marketplace today. • The EPA Recommendations currently include 41 private sector standards and ecolabels in 22 product categories. • The EPA Recommendations are based on either 1) an assessment per EPA’s Guidelines for

	<p>Environmental Performance Standards and Ecolabels (via a Pilot that ran from March 2015 through December 2016); or 2) analysis and use by other federal agencies. For this second avenue, currently, the recommendations include standards and ecolabels from the Department of Energy's (DOE's) Priority Products List and the General Services Administration's (GSA's) Key Sustainable Products. • In general, the EPA Recommendations give preference to multi-attribute (i.e., life-cycle based) standards and ecolabels for which EPA has been able to confirm the availability of a competent certification body that either: o Is accredited by an accreditation body that is a signatory to the International Accreditation Forum Multilateral Recognition Arrangement (IAF MLA) and has the relevant standard in the scope of its accreditation, or o Otherwise meets Section III of EPA's Guidelines. • An exploratory analysis completed in FY18 estimates that the value of time savings enjoyed by federal agencies from utilizing the EPA Recommendations to meet their sustainability objectives is between \$3.7 million annually (at the lowest end) to \$16.2 million (at the highest end). Other organizations and institutions have indicated time savings, and other benefits, from using the EPA Recommendations, as well. • The previous language was missing a word ("Specifications") in the title of the EPA Recommendations. We correct that here, as well as add a reference to chapter 14 in order to direct users to the correct website. (Confusion about the website url was the basis for comments on these sections during the last public review.) • The EPA Recommendations do not cover gypsum board, wallcoverings, or doors, so we have revised item 5 to only allow for the stated multi-attribute standards.</p>
Substantiating Documents:	No
Staff Note:	Reversing Approved Consensus Committee Action
CC Action:	
Modification of Comment:	
CC Reason:	

PC513 LogID 6369	11.802.4 Showerheads	<i>Final Formal Action: TBD</i>
Associated PCs:	PC146	
Submitter:	Cambria McLeod, Kohler	
Suggested Change:	<p>11.802.4 Showerheads. Showerheads are in accordance with the following:</p> <p>(1) The total maximum combined flow rate of all showerheads in a shower compartment with floor area of 18002600 square inches or less is equal or less than 2.0 gpm. For each additional 1300 square inches or any portion thereof of shower compartment floor area, an additional 2.0 gpm combined showerhead flow rate is allowed. Showerheads shall comply with ASME A112.18.1/CSA B125.1 and shall meet the performance criteria of the U.S. EPA WaterSense Specification for showerheads. Showerheads shall be served by an automatic compensating valve that complies with ASSE 1016/ASME A112.1016/CSA B125.16 or ASME A112.18.1/CSA B125.1 and specifically designed to provide thermal shock and scald protection at the flowrate of the showerhead.</p>	
Reason:	<p>There was no technical data provided to support the increase to a 2600 sq in area. Supporting a change of dimensions based upon a 'best estimate' is an opinion and does not demonstrate leadership in construction or human factors knowledge; it does not build trust with users of this standard. The International Plumbing Code requires 900 sq in of floor area for showers and the Uniform Plumbing Code requires a 30" circle and 1024 sq in. Per analyses by human factors, we evaluate for the 95th percentile of males, which is a 6'2" tall and 216-pound man. A minimum of 30"x30" of floor space, or 900 sq in, is needed for this 95th percentile user. This is 1700 sq in less than what was proposed. A 30"x30" floor area allows bathers to move about the shower and also provides bathers a safe zone away from the water during temperature fluctuations. Therefore, if 900 sq in is used for the 95th percentile of male users, 1800 is more than adequate for a single user. Anything at or above 1800 sq in (ie 900 + 900) could accommodate two users.</p>	

Substantiating Documents:	No
Staff Note:	
CC Action:	
Modification of Comment:	
CC Reason:	

Chapter 12: Certified Compliance Path for Single-Family Homes, Townhomes, and Duplexes

PC514 LogID 6378	1203.11.1 IECC Analysis	Final Formal Action: TBD
Associated PCs:	PC251	
Submitter:	Steven Rosenstock, Self	
Suggested Change:	...achieve energy cost or <u>site energy</u> or source energy performance that exceeds the IECC...	
Reason:	To be consistent with previous versions of the standard and to avoid the gaming of estimates associated with source energy. Estimates in the 2018 IECC are inaccurate and out of date.	
Substantiating Documents:	No	
Staff Note:	Reversing Approved Consensus Committee Action	
CC Action:		
Modification of Comment:		
CC Reason:		

Chapter 13: Commercial Spaces New Construction

PC515 LogID 6381	13.102.1.4, Alternate compliance	Final Formal Action: TBD
Associated PCs:	N/A	
Submitter:	Susan Gitlin, US Environmental Protection Agency	
Suggested Change:	13.102.1.4 Alternate compliance. Non-residential portions of a building shall comply with <u>Section 501.3.7.2</u> and Chapters 6 through 10 of the International Green Construction Code (IgCC). Exception: Section 6.3.1 of the IgCC.	
Reason:	Chapter 13 of NGBS contains bicycle parking requirements. IGCC also contains bicycle parking requirements, but they are located in IGCC Chapter 5. This proposal adds the IGCC bicycle parking requirements in order to achieve a closer equivalency of the environmental benefits achieved through the alternate compliance paths.	
Substantiating Documents:	No	
Staff Note:		
CC Action:		

Modification of Comment:	
CC Reason:	

PC516 LogID 6396	13.104.3 Material Selection	Final Formal Action: TBD
Associated PCs:	PC283	
Submitter:	Hailee Griesmar, Lorax Partnerships, LLC	
Suggested Change:	13.104.3.1 Material Selection. At least six of these sections must be met from the following, Clarify "met". There are different point thresholds for some of these options and it is unclear what the requirements are to consider a specific practice met.	
Reason:	Needs clarification to ensure proper compliance	
Substantiating Documents:	No	
Staff Note:		
CC Action:		
Modification of Comment:		
CC Reason:		

PC517 LogID 6397	13.104.4 Recycling and Composting	Final Formal Action: TBD
Associated PCs:	PC281	
Submitter:	Hailee Griesmar, Lorax Partnerships, LLC	
Suggested Change:	13.104.4 Recycling and composting. A readily accessible space(s) adequate to accommodate the recycling and composting containers for materials accepted in local recycling/composting programs is provided and identified on the floorplan.	
Reason:	The requirement to have composting containers should only apply for projects where there is a local composting program. Suggested wording modification should address this need to not have compost containers when programs are not available.	
Substantiating Documents:	No	
Staff Note:		
CC Action:		
Modification of Comment:		
CC Reason:		

PC518 LogID 6398	13.105.9 Calculation of Heating and Cooling Loads	Final Formal Action: TBD
Associated PCs:	None	
Submitter:	Hailee Griesmar, Lorax Partnerships, LLC	
Suggested Change:	<p>Calculation of heating and cooling loads.</p> <p>Design loads associated with heating, ventilating and air conditioning of the building shall be determined in accordance with ANSI/ASHRAE/ACCA Standard 183 or by an approved equivalent computational procedure and using the design parameters specified in Chapter 3 of the ICC IECC. Heating and cooling loads shall be adjusted to account for load reductions that are achieved where</p>	

	energy recovery systems are utilized in the HVAC system in accordance with the ASHRAE HVAC Systems and Equipment Handbook or an approved equivalent computational procedure.
Reason:	As verifiers what will we be expected to review/approve? Clarify how compliance should be proved.
Substantiating Documents:	No
Staff Note:	
CC Action:	
Modification of Comment:	
CC Reason:	

PC519 LogID 6399	13.107.3 Product Emissions	<i>Final Formal Action: TBD</i>
Associated PCs:	PC289, PC290	
Submitter:	Hailee Griesmar, Lorax Partnerships, LLC	
Suggested Change:	13.107.3 Product Emissions. At least five <u>four</u> types of the following product categories must meet their respective section of the Standard referenced below:	
Reason:	Some of these categories are very difficult to achieve for certain project types and are not mandatory in other similar rating systems all are not necessarily readily achievable for all projects. Compliance with four categories would still create a degree of difficulty for projects but would cause undue burden on projects.	
Substantiating Documents:	No	
Staff Note:		
CC Action:		
Modification of Comment:		
CC Reason:		

Editorial

E50	LogID 6392	101.4 Referenced Documents	<i>Final Formal Action: TBD</i>
Associated PCs:	N/A		
Submitter:	Hailee Griesmar, Lorax Partnerships, LLC		
Suggested Change:	101.4 Referenced documents. The codes, standards, and other documents referenced in this Standard shall be considered part of the requirements of this Standard to the prescribed extent of each such reference. The edition of the code, standard, or other referenced document shall be the edition referenced in Chapter 14 13 .		
Reason:	Chapter 14 contains referenced code editions.		
Substantiating Documents:	No		
Staff Note:	Editorial		
CC Action:			
Modification of Comment:			
CC Reason:			

E51	LogID 6401	611 Product Declarations	<i>Final Formal Action: TBD</i>
Associated PCs:	None		
Submitter:	Tien Peng, NRMCA		
Suggested Change:	Each product complying with Section 611.4.1 shall be counted as one product for compliance with Section 611.4 .		
Reason:	The section says "(Each product complying with Section 611.4.1 shall be counted as one product for compliance with Section 611.4.) There is no Section 611.4 so don't see how to achieve points with EPDs.		
Substantiating Documents:	No		
Staff Note:	Editorial		
CC Action:			
Modification of Comment:			
CC Reason:			

E52	LogID 6371	902.3.2 Radon Testing	<i>Final Formal Action: TBD</i>
Associated PCs:	PC176		
Submitter:	Carl Seville, SK Collaborative		
Suggested Change:	Testing is performed as specified in (a) through (k). <u>Testing of a representative sample shall be permitted for multifamily buildings only.</u>		
Reason:	Underlined text was added in PC 176, but it is missing from the current draft.		
Substantiating Documents:	No		
Staff Note:	Editorial		
CC Action:			

Modification of Comment:	
CC Reason:	

E53	LogID 6370	1203.7 Air Sealing and Insulation	<i>Final Formal Action: TBD</i>
Associated PCs:	None		
Submitter:	Carl Seville, SK Collaborative		
Suggested Change:	Table 701.4.3.2(2) somehow has been misaligned so that Air barrier Criteria and Insulation Installation Criteria are not in the correct rows for several items including Windows, Skylights and Doors; Rim Joists; Shaft, penetrations; Garage Separations; Recessed lighting, Plumbing and Wiring; Shower/Tub on exterior wall. This table should be reviewed thoroughly and all criteria assigned to correct components.		
Reason:	Numerous items in the table are incorrect.		
Substantiating Documents:	No		
Staff Note:	Editorial		
CC Action:			
Modification of Comment:			
CC Reason:			

Held Comments

H50	LogID 6382	403.7. Wildlife habitat	Final Formal Action: TBD
Associated PCs:	None		
Submitter:	Susan Gitlin, US Environmental Protection Agency		
Suggested Change:	(2) The site is adjacent to a wildlife corridor, fish and game park, or preserved areas and is designed with regard for this relationship and is there is no site disturbance within 100 feet of that corridor, park, or preserved area.		
Reason:	The current language offers no guidance to builders or certifiers as to what types of protections should be encouraged and rewarded. In fact, as written, three points might be rewarded if the builder installed a bench so that the home owner could watch wildlife on the adjacent property, even though that does not protect the wildlife habitat. This proposed language is a compromise between the protections included in IGCC 2018 and 2015. (IGCC 2018 requires that there be no site disturbance within 150 feet of a conservation area. IGCC 2015 called for a 50-foot area of no disturbance.)		
Substantiating Documents:	No		
Staff Note:	Held – Not directly applicable to a proposed revision open for public comment. It's noted that the underlined text shown in Section 403.7 in the Second Draft is an error due to formatting in MS Word. There was no change approved by the Consensus Committee in this section of the Second Draft.		
CC Action:			
Modification of Comment:			
CC Reason:			

H51	LogID 6383	403.7. Wildlife habitat	Final Formal Action: TBD
Associated PCs:	None		
Submitter:	Susan Gitlin, US Environmental Protection Agency		
Suggested Change:	(3) Outdoor lighting techniques are utilized with regard for wildlife <u>that minimize uplighting</u> .		
Reason:	The current language is overly vague and absent of specifics. One could argue that a bug zapper qualifies for these three points, when the actual intent is to protect, not kill, wildlife. This simple change in this proposal is to clarify that the points are intended to reward for dark sky approaches. For the convenience of builders and certifiers, the committee may want to consider referencing dark sky guidance such as that developed by the Illuminating Engineering Society and the International Dark Sky Association at https://www.ies.org/product/model-lighting-ordinance-mlo-with-users-guide/ .		
Substantiating Documents:	No		
Staff Note:	Held – Not directly applicable to a proposed revision open for public comment. It's noted that the underlined text shown in Section 403.7 in the Second Draft is an error due to formatting in MS Word. There was no change approved by the Consensus Committee in this section of the Second Draft.		
CC Action:			
Modification of Comment:			
CC Reason:			

H52	LogID 6400	601.2 Material usage	Final Formal Action: TBD
Associated PCs:	None		
Submitter:	Tien Peng, NRMCA		
Suggested Change:	<ol style="list-style-type: none"> 1. Minimum structural member or element sizes necessary for strength and stiffness in accordance with advance framing techniques or structural design standards are selected. 2. Higher grade or higher strength of the same materials than commonly specified for structural elements and components in the building are used 3. Performance-based structural design is used to optimize lateral force-resisting systems based on ASCE 41 and Design for Immediate Occupancy. 		
Reason:	1. "Structural design standards" is just standard practice. 2. "Higher grade" or "higher strength" materials does not necessarily mean more resource efficient. Can be a poor design. 3. This is reasonable but unless there is a guideline or standard for optimization, this is essentially meaningless. A design can simply meet code.		
Substantiating Documents:	No		
Staff Note:	Held – Not directly applicable to a proposed revision open for public comment.		
CC Action:			
Modification of Comment:			
CC Reason:			

H53	LogID 6403	613 Resilient Construction	Final Formal Action: TBD
Associated PCs:	None		
Submitter:	Tien Peng, NRMCA		
Suggested Change:	10% reduction in down time above base design expressed as time required to return to functionality.		
Reason:	10% above what base? The design load? Resilience has to have a real meaning. Usually expressed as time to return to full functionality. Quantifying resilience requires estimating the time required to return to functionality after an event of a given magnitude. The time frame involved may range from zero (no loss in functionality) through various recover periods. In these terms a 10% reduction in down time might mean something.		
Substantiating Documents:	Yes		
Staff Note:	Held – Not directly applicable to a proposed revision open for public comment.		
CC Action:			
Modification of Comment:			
CC Reason:			

H54	LogID 6372	701.4.2.3 Duct system sizing	Final Formal Action: TBD
Associated PCs:	None		
Submitter:	Richard Foster, Self		
Suggested Change:	Duct and HVAC Zone Control system sizing. Duct and HVAC Zoning system is sized and designed in accordance with ACCA Manual D and Zr or equivalent.		
Reason:	Duct systems without zone dampers continually condition all rooms whether occupied or not. Installing Zone Controls and zone dampers that only condition zones needing air or are occupied have proven to		

	save up to 30% over single zone systems. See attached chart from Canadian study on cooling KWH savings of zoned vs single zone homes. A green building standard must include zoning to make the most efficient use of heating and cooling vs. wasting it conditioning unused rooms/zones. Zoning solve the age old problem of rooms that are Too HOT or Too Cold which wastes energy also.
Substantiating Documents:	Yes
Staff Note:	Held – Not directly applicable to a proposed revision open for public comment.
CC Action:	
Modification of Comment:	
CC Reason:	

H55	LogID 6373	11.701.4.6 Fenestration Specifications	Final Formal Action: TBD
Associated PCs:	None		
Submitter:	Carl Seville, SK Collaborative		
Suggested Change:	Exception: For Tropical Zones only, Jalousie windows are permitted to be used as a conditioned space boundary and shall not be required to meet U factor and SHGC in table 703.2.5.1		
Reason:	Jalousie windows are allowed in Tropical Zones per 11.701.4.3.4 and they do not meet U and SHGC values, therefore they should be exempted from these requirements. If they are not, then no projects will be able to use them.		
Substantiating Documents:	No		
Staff Note:	Held – Not directly applicable to a proposed revision open for public comment.		
CC Action:			
Modification of Comment:			
CC Reason:			

H56	LogID 6374	11.703.2.1 UA improvement	Final Formal Action: TBD
Associated PCs:	None		
Submitter:	Carl Seville, SK Collaborative		
Suggested Change:	<u>Exception: Section 11.703.2.1 is not required for Tropical Climate Zone</u>		
Reason:	Projects pursuing the Tropical Climate Zone exemption will not be able to meet the UA improvement as most will have no insulation and windows will likely not meet baseline requirements.		
Substantiating Documents:	No		
Staff Note:	Held – Not directly applicable to a proposed revision open for public comment.		
CC Action:			
Modification of Comment:			
CC Reason:			

E57	LogID 6395	1205.11 MERV Filters	<i>Final Formal Action: TBD</i>
Associated PCs:	None		
Submitter:	Hailee Griesmar, Lorax Partnerships, LLC		
Suggested Change:	1205.11 MERV Filters. Minimum 8 13 MERV filters shall be installed on central forced air systems and are accessible.		
Reason:	MERV 13 filters are required in order to remove 90%+ of PM2.5. PM2.5 particulate matter is the indoor air pollutant with the greatest negative impact on human health according to a 2011 study by Lawrence Berkeley National Laboratory (Logue, Price, Sherman, & Singer 2011).		
Substantiating Documents:	No		
Staff Note:	Held – Not directly applicable to a proposed revision open for public comment.		
CC Action:			
Modification of Comment:			
CC Reason:			