Sections of the Proposed Standards to Which Comment is Relevant	Summary of the Comment	Did the Energy Commission Make the Recommended Changes to the Proposed Standards?	The Commission's Response to the Comment
3/13 transcript 150.0(k)5	George Nesbitt. Pages 77 and 78: Suggests bathrooms be allowed at least one high effiency light and all other lights be on sensors.	No	This is already required in the 45 Day Language, which is supported by the CASE report in the record. No change needed
150.0(k)5	George Nesbitt. Pages 77 and 78: Also suggests requiring at least 50 percent of the installed wattage in a bathroom to be high efficacy, similar to the requirements for residential kitchens	No	The proposed 50% high efficacy lighting power in bathrooms is arbitrary in that no analysis has been presented showing that 50% is a cost-effective threshold. However, the language proposed in 45-Day Language (and ultimately adopted) has been supported by a CASE analysis in the record.
10.113	In regards to Section 10-113, the Labeling Requirements section indicates that CRRC [Cool Roof Rating Council] has an improved accelerated aged solar reflectance; to our knowledge, CRRC has not developed any plans to begin certifying accelerated aging. Can you provide clarification to that?	N/A	The Commission added the Cool Roof Rating Council (CRRC) accelerated aged solar reflectance certification because currently the National Laboratories are working on an accelerated aged testing program. If this program is accepted by the CRRC, the Commission may consider incorporating it into the standards.
100.1	Mr. Nesbitt stated that in the definition of an addition it should say, "floor area and volume," not, "floor area or volume," as it does currently.	yes	The Commission changed the "or" to an "and" in the definition of an addition.
110.8(e)3	Mr. Cottrell representing NAIMA, wants to make sure that insulation above a drop ceiling is permitted for accoustic purposes.	yes	Yes, this is permissible, but it may not be able to be considered a thermal barrier.
150.0(c)	Mr. Nesbitt has concerns about the mandatory insulation requirement in section 150.0(c), and beleives the word "continuous" confuses the intent of the requirement.	yes	The Commission rewrote section 150.0(c), removing the word "continuous."
150.1(c)1A	The California Building Industry Association opposes the roof deck insulation requirement. This should be a compliance option and not a prescriptive requirement. This is an area which lots of builders are not familiar with; moisture may become a concern. Also, why has the radiant barrier requirement been removed?		The roof deck insulation has been removed from the prescriptive requirement and is now a compliance option. A study was done on moisture which showed there is no issue with it. This will be revisited at the next code cycle and in the meantime industry leaders will educate installers on how to apply roof deck insulation. The radiant barrier requirement has been added back to the requirements.

	In response to clarification from Martha Brook, explaining how the prescriptive package requirements are used to set the baseline energy budget for the performance approach, and that the performance approach does not require that prescriptive measures be installed, the prescriptive package measures should, nevertheless, be representative of construction practice.	NA	The prescriptive package measures are representative of construction practice.
150.1(c)1A	The roof deck insulation requirement should be a compliance option and not a prescriptive requirement. There would also be ventilation issues.	yes	Roof deck insulation has been removed from the prescriptive requirement and is now a compliance option
150.1(c)1A	Both glass fiber and polyisocyanurate insulation are used extensively in both residential and nonresidential envelopes and insulating piping. The comment supports the Commission's energy efficiency efforts generally, and for envelope in particular makes the following specific comments: (1) More stringent R-values and U-factors in Table 150.1A (Component Package) are cost-effective and can be met with off-the-shelf products; (2) the Commission should continue to allow builders and contractors flexibility to work with manufacturers to identify innovative and cost-effective solutions to achieve the performance that is necessary, by emphasizing U-factor over R-values; (3) builders should receive credit for enhanced energy efficiency; (4) higher R-values/U-factors should be required for walls, particularly exterior insulated sheathing which reduces sound and air infiltration while increasing the thermal integrity of the wall system; (5) the comment describes some of the ways more stringent R-values and U-factors can be met.	no	(1), (4) & (5): The Energy Commission did not adopt more stringent R-values and U-factors in Table 150.1A, as the adopted measures are cost-effective, technologically feasible, and represent a consensus among all building industry stakeholders. The Energy Commission recognizes that other measures may also be cost effective and readily available but the adopted measures to improve envelope measures are a first step toward helping the Energy Commission meet its future goals of zero net energy. (2) The Commission has retained U-factors, which will provide builders and contractors flexibility to determine the best performance approach. (3) This comment does not address the regulations or the process by which they were adopted, and therefore no response is required.
150.1(c)1A	BSG responds to the Building Industry Association comment that the analysis used to develop early versions of the 2013 Standards assumed an additional [nailing] layer over above deck insulation.		No staff action required.

150.1(c)1A	Continuous insulation of R-4 is now required on the wall that separates the garage from the rest of the house. There is less insulation under the AC platform but the stndard does not define how that needs to be calculated or what the minimum insulation should be.	yes/no	The Commission changed the standard to exempt the wall between the garage and the living space to be required to have continuous insulation. The Commission also attempted to capture the issue about the insulation under the AC platform being less than the surrounding. More clarifications will be made in the residential standards.
150.2(b)1H	Builders will need to properly build the AC platform to get proper amount of insulation underneath. Roof Deck insulation makes a lot of difference.		Insulation under the platform is captured when doing a UA calculation; Commission tried to clarify that in the standard.
150.2(b)	The Standards should specify that the Executive Director must determine what the third-party verification requirements, or qualifications, are, since the Commission does not seem to have committed to HERS Raters.	no	The Energy Commission did not change the language, as third-party verification requirements will be addressed in the Residential Compliance Manual.
150.2(b)1H	Batten needs to be defined better.	yes	The language of the standards were changed to avoid the need to define batten.
gen	(1) What procedures or steps the CEC might take when there is a mistake in the standards or it is inconsistent with the compliance manuals or when new things come along after the Standards become effective. (2) Additions and alterations use the vintage table for a starting place of performance but these still require verification for change-outs. (3) Third-party HERS raters should verify performance requirements.		(1) The Commission's rigorous rulemaking process minimizes any mistakes in the standards. The Commission relies on commenters to point out any parts of the proposed Standards that are not clear or in error. With regard to new developments, the Standards allow for approval of new compliance options. (2) and (3) These comments are observations that do not request changes to the standards, and therefore do not request a response.
150.2(b)1H	What was the justification for eliminating the ventilation alternatives [1:150, for attic ventilation versus cool roofs trade offs in climate zones 10, 12, and 13]?	N/A	The Commission removed the ventilation alternatives because there was no way to measure air movement for purposes of verifying compliance.
Section 140.3(a)1Ai & 141.0(B)Bi	The analyses supporting the standards did not consider cleaning cost and did not adequately estimate costs.	NO	CEC looks at CRRC to get the information of aged solar reflection. CRRC does have a protocol for aging. Staff has provided a insulation tradeoff for cool roofs. AEC use the tool industry (ARMA) used to gather cost, and no additional cost data was provided by stakeholders and affected industry. No evidence was provided undermining the cost-effective analysis or conclusions.

general	Extruded Polystyrene Submitted written comments to provide additional assemblies information for rigid foam insulation into Reference Joint Appendices JA4.	No.	The written comments provide clarity but are not essential to adoption of the standards. Rather, the Commission will address the comments through the residential and nonresidential compliance manuals. During that process, the Commission will develop a computer program, EZ Frame 2013, which can address the written comments on the assemblies.
Section 140.3(a)1Ai & 141.0(B)Bi	Support of the standard.		Staff accommodated his concerns when it came to cool Roof and Insulation.
Section 140.3(a)1Ai & 141.0(B)Bi	Opposition and a complaint that Energy Commission staff did not work cooperatively with the industry members.	NO	As described in detail by staff and Commissioner Douglas at the hearing at which the Standards were adopted, staff worked extensively with all known stakeholders and made many changes to the proposed standards to address legitimate concerns.
Section 140.3(a)1Ai & 141.0(B)Bi	The data gathered in support of the standards is not statistically valid.	NO	The data supporting the standards consistently demonstrates they are cost-effective. The record does not establish minimum requirements for the size of data sets to support the analyses, and there is no legal requirement for a certain sample size.
Section 140.3(a)1Ai & 141.0(B)Bi	AEC staff explaining how he obtained the cost information and explained the assumptions.		This is not a comment directed at the regulations or the process by which they were adopted; it is a comment supporting the standards and responding to other comments opposing the standards.
120.7(B)1	The Steel Framing Alliance disagrees with the Section 120.7(B)(1) which requires wall to have a equivalent U-factor to wood framed wall with insulation between the framing.	NO	The U-factor can be met by using the Joint Appendix 4 Tables or by using EZ frame 2013 computer program that will be developed as part of the residential and nonresidential compliance manuals. Metal is a conductor as it is - it may not be as easy to meet the required U-factor so continuous insulation will need to be installed.
Title 24, Part 6	CEC transcript of public meeting of March 13, 1012: Revisions to Residential ACM Approval Manual.	NA	No action required.
10-102, 10-103(a)1, 3, 4, and 5.	Recommendation that the Commission add a definition for "responsible person" in 10-102.	NO	The definition for "responsible person" is already included in the sections where the term appears.
10-102, 10-103(a)1, 3, 4, and 5.	The definition of a documentation author is ambiguous.	n/a	The definition of Documentation Author is broad to apply in the various instances where it is used.

RA3.3	Future Title 24 rulemaking should consider use of total external static pressure measurement to determine system airflow rate instead of the proposed methods in Reference Residential Appendix RA3.	n/a	This is not a comment directed at the regulations or the process by which they were adopted
150.0(m) Table 150.0(C) or (D)	Request to clarify the underlying assumptions for Tables 150.0(c) and (d), but he did not request changes.	n/a	No action required
150(m)12D	Request for clarification about whether the air filter label is to be placed on the filter itself or on the packaging the filter comes in.	n/a	The Energy Commission's Title 20 Appliance regulations rulemaking for air filer labeling are expected to determine the specifics for what the label looks like and where the label will need to be placed.
n/a	Commends the Commission for reinstating the use of traditional flow hoods in the 15-day language for use for residential air conditioning system airflow measurement. Described diagnostic tests performed in the field and that could be incorporated into the Standards.	n/a	Expresses support for the standards. No action required.
3/13 transcript NR8	Requesting rows be added to Table 110.6-B for window fill defaults.	YES	Added the requested rows as part of the default tables.
3/13 transcript NR8	MR. PENNINGTTON agrees with CONSOL; however, finding the appropriate language.	YES	Added the requested text as part of the default tables.
3/13 transcript NR8	Disagrees with keeping Joint Appendix NA6 and to use the traditional default values.	NO	Energy Commission maintained JA NA6 as is; however, a reduction of 10,000 square feet to 1,000 square feet was changed.

3/13 transcript NR8	Is there a definition of what is tinted?	NO	Definition is not necessary but guidance will be provided in the Residential and Nonresidential Compliance Manual.
3/13 transcript NR8	Is there a definitiof what is a triple pane window?	NO	The Commission is not able to add a triple pane definition since we do not reference this in the standards. The Commission can clarify triple pane in the Residential and Nonresidential Compliance Manual.
3/13 transcript NR8	Why the SHGC values are high efficient on the coastal climate zones.	NO	At this time the Residential Window Efficiency CASE study analysis showed that it is practical and feasible to require High SHGC for the coastal climates.
3/13 transcript NR8	Request to ensure overhangs are not used with Dynamic Glazing.	YES	The intent is not to use overhangs over dynamic glazing. Language is already clarified in Section 150.1(c)(4).
3/13 transcript NR8	Remove exemption in Section 150.1(c)(3) regarding exempt area for skylights.	YES	Already stricken out.
3/13 transcript NR8	Remove exemption in Section 150.1(c)(3) regarding exempt area for skylights.	YES	Already stricken out.
3/13 transcript NR8	The Commission should not be using best values for Dynamic Glazing.	NO	Energy Commission matched IECC language except that the Commission added automatic controls to get the best values; otherwise, default to prescriptive fenestration values.
3/13 transcript NR8	Would like to see skylights listed on the prescriptive Table 150.1-A, like fenestration.	NO	Originally skylights was listed as a new change for 2013, but it was brought up that skylights are not part of the base case house component. No analysis was made prior and therefore sky lights were removed from table until the next cycle. A proposal will be made to change the base case house.

3/13 transcript NR8	MR. Nitller previously mentioned before the same topic regarding not counting area for skylights, ultimately they should be counted in Section 150.1(c)3A.	Yes	The Energy Commission agrees with Mr Nittler. Language has already been stricken out of the regulations.
3/13 transcript NR8	MR. LEBRUN comments better built skylights can improve whole house energy.	N/A	The Energy Commission agrees.
3/13 transcript NR8	Gary Klein comments on cold climate pipe insulation requirement for Special situation--Obstructions should apply to all climate zone and its inconsistent with other pipe insulation language.	Yes	The Commission agrees with Mr. Klein and will make the appropriate changes to include all climate zones.
3/13 transcript NR8	Gary Klein comments pipe insulation language in RA4.4.1 is not identical to Standard.	Yes	The Commission has worked with Mr. Klein to rewrite the pipe insulation language in the Reference Residential Appendix (RA) for clarity and consistency with the Standard.
3/13 transcript NR8	Gary Klein comments the demand recirculation system language should be the same for Res and Nonres for consistency.	Yes	The Commission has worked with Mr. Klein to rewrite the recirculation language in the Reference Residential Apendix (RA) to be more specific and consistent.
3/13 transcript NR8	Gary Klein comments that the definition for occupancy sensor controls and motion sensor for lighting should not be confused with demand recirculation control for hot water.	No	Definition in the Joint Appendix for occupancy senor controls and motion sensor is clearly intended for lighting only.
3/13 transcript NR8	Gary Klein comments that pipe insulation requirement in kitchen is missing.	Yes	The language was in the Reference Residential Appendix (RA), but it is now explicitly stated in 150(j)2 as a requirement.
3/13 transcript NR8	Gary Klein comments that the HERS verification for pump is inconsistent for recirculation systems.	Yes	The Commission has worked with Mr. Klein to rewrite the recirculation language in the Reference Residential Appendix (RA) to be more specific and consistent.
3/13 transcript NR8	Gary Klein comments that the language for sensor in RA4.9.4 is too broad and needs to be more specific.	Yes	The Commission has worked with Mr. Klein to rewrite the recirculation language in the Reference Residential Appendix (RA) to be more specific and consistent.
3/13 transcript NR8	Gary Klein comments that optional HERS verified parallel piping should be changed since parallel piping is no longer allowed.	No	This is not a correct statement - parallel piping is still allowed in the Standard, and therefore no change is necessary.

3/13 transcript NR8	Gary Klein recommends clarification for shower head language.	NA	No longer relevant since showerhead language has been taken out of the regulations.
3/13 transcript NR8	Robert Mowris recommends various issues related to the shower head requirement.	NA	No longer relevant since showerhead language has been taken out.
110.1	Mr. Shoemaker expresses same concern as from 3/12/2012 that for nonresidential buildings, the required solar zone of 40% of roof area is not compatible with skylights and other roof mounted equipment.	Yes	For nonresidential buildings the solar zone requirement was altered to be 15% of the roof area.
110.1	Ms. Hardy Pierce expresses concern about the use of the term "flat roof" and about the azimuth requirements for the solar zone.	Yes	Section 110.10(b)2 was altered to clearly indicate that the azimuth requirements apply only to steep-sloped roofs. The term "flat roof" was eliminated.
110.1	Mr. Kintner inquires about the inclusion of community scale renewable energy strategies in the solar ready requirements.	No	Current utility tariffs and interconnection policies result in a high degree of uncertainty for the viability of community scale renewable energy (CSRE) strategies. Because of the high degree of uncertainty, it was determined that CSRE strategies were not appropriate for inclusion in the solar ready requirements at this time.
3/13 transcript 150.0(k)5	Transcript of March 13 Hearing George Nesbitt. Pages 77 and 78: Suggests bathrooms be allowed at least one high efficacy lighting and all other lights be on sensors.	No	This was already required in the 45-Day Language, as supported by the CASE report in the record. No change needed