# International Energy Conservation Code
# Consensus Committee-Residential

## Draft Meeting Agenda (3/15/23 posting)

Webex Meeting Link

March 16, 2023
2:00 PM EST to 5 PM EST (3 hours)

**Committee Chair:** JC Hudgison, CBO, Assoc. AIA
**Committee Vice Chair:** Bridget Herring & Robin Yochum, LEED Green Associate

1. Call to order.

2. Meeting Conduct.
   a. Identification of Representation/Conflict of Interest
   b. ICC Council Policy 7 Committees: Section 5.1.10 Representation of Interests
   c. ICC Code of Ethics: ICC advocates commitment to a standard of professional behavior that exemplifies the highest ideals and principles of ethical conduct which include integrity, honesty, and fairness. As part of this commitment it is expected that participants shall act with courtesy, competence and respect for others.
   d. ICC Antitrust Compliance Guideline

3. Roll Call.

4. Approve Agenda

5. Approve Minutes-March 9, 2023

6. Administrative issues-staff

7. Action Items
Tabled items from 3/9

| | |
|---|---|
| RED1-114-22(RECs in a minimum code) | Electric approve 7-3 |
| RED1-363-22(Solar zone update) | Electric disapprove 9-1-0 |
| REPCD1-21-22(Solar ready public comment) | |
| RED1-92-22(Construction docs solar-ready system) | Electric disapprove 9-0 |
| RED1-93-22(Solar ready systems) | Electric disapprove 10-0 |
| RED1-94-22(Solar system ready) | Electric as modified 10-0 |
| RED1-215-22(Framing factor steel) | Envelope disapprove 10-2-5 |

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| | |
|---|---|
| RED1-229-22(Common walls) | Envelope as modified 17-0-1 |
| IRCED1-6-22(Common wall sealing) | Envelope disapprove 16-0-0 |
| RED1-246-22(Roof solar reflectance) | Envelope disapprove 15-0-3 |
| RED1-216-22(Basement walls) | Envelope disapprove 10-8-1 |
| RED1-217-22(Basement walls) | Envelope approve 10-8-1 |
| RED1-219-22(Component general requirements) | Envelope approve 10-6-2 |

New items for review

| | |
|---|---|
| RED1-89-22(Renewables contract length) | Modeling as modified 13-1-2 |
| REPCD1-1-22 | |
| RED1-38-22(Annual energy cost performance exception) | Modeling disapproved 11-1-1 |
| RED1-52-22(Simulated performance compliance) | Modeling disapproved 11-1-1 |
| RED1-44-22(R405.2.3 exception) | Modeling disapproved 13-1-2 |
| RED1-39-22(Exception for R405.2) | Modeling disapproved 13-0-0 |
| RED1-48-22(Simulated performance compliance) | Modeling disapproved 12-1-0 |
| RED1-50-22(Simulated performance compliance) | Modeling disapproved 12-1-0 |
| RED1-53-22(Simulated performance compliance) | Modeling disapproved 12-1-0 |
| RED1-45-22(R405.2.3 modification) | Modeling disapproved 12-1-0 |
| RED1-37-22(Annual energy cost performance) | Modeling disapproved 12-1-0 |
| RED1-51-22(Simulated performance compliance) | Modeling disapproved 12-1-0 |
| REPCD1-2-22 | |
| RED1-69-22(ERI path stringency) | Modeling disapproved 10-6-2 |
| RED1-339-22(Ducts in conditioned space) | HVACR as modified 10-0/ Modeling as modified 9-6 |
| RED1-301-22(Ducts in conditioned space) | HVACR disapproved 5-3-1 |
| RED1-60-22(Duct location inside conditioned space) | HVACR disapproved 8-0-1/ Modeling disapproved 7-6-2 |
| RED1-338-22(Duct location edit) | HVACR disapproved 8-0-2/Modeling approved 8-6-1 |
| RED1-32-22(HVAC register boots) | HVACR approve 9-0-0 |
| RED1-279-22 PI & II(Pilot light definitions) | HVACR disapproved 10-0 |
| RED1-283-22(Pilot light definitions) | HVACR approve 7-1-1 |
| RED1-298-22(Pilot reference) | HVACR approved 10-0 |
| RED1-296-22(Continuously burning pilot light) | HVACR as modified 9-0-0 |
| RED1-297-22(Pilot light exception) | HVACR approve 5-0-4 |
| RED1-332-22(Eliminate gas lighting) | HVACR disapprove 8-0-2 |
| IRCED1-11-22(Gas lighting equipment) | HVACR disapproved 9-0-0 |
| RED1-331-22(Gas lighting exception) | HVACR disapproved 8-1-1 |
| RED1-333-22(Gas lighting exception) | HVACR as modified 5-3-1 |
| RED1-288-22 PI & II(Gas fireplace) | HVACR disapproved 10-0-0 |
| RED1-286-22(Consolidate gas fireplace requirements) | HVACR as modified 8-0-1 |
| IRCED1-10-22(Boiler reset) | HVACR approve 8-0-1 |

8. Other business.

9. Upcoming meetings. March 23 at 2 PM EST

10. Adjourn.

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FOR FURTHER IECC Residential INFORMATION BE SURE TO VISIT THE ICC WEBSITE:
IECC Residential Website

**Join by phone**

1-844-740-1264 USA Toll Free

+1-415-655-0003 US Toll

FOR ADDITIONAL INFORMATION, PLEASE CONTACT:

Kristopher Stenger, AIA, CBO
Director of Energy Programs
International Code Council
kstenger@iccsafe.org

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# International Energy Conservation Code
# Code Change Proposal Tracking Sheet

| | |
|---|---|
| Proposal # | RED1-114-22 Renewable Energy Certificate |
| CDP ID # | |
| Code | IECC RE |
| Code Section(s) | Definition |
| Location | |
| Proponent | Residential Electrical, Power, Lighting and Renewables Subcommittee |
| Proposal Status | |
| Subcommittee | RE EPLR |
| Subcommittee Notes | |
| Recommendation | Approve as submitted |
| Vote | 7-3-0 |
| Recommendation Date | 2/17/2023 |
| Next Step | To Subcommittee_____<br>To Advisory Group_____<br>To Consensus Committee___X_____ |
| Consensus Committee | |
| Committee Response | |
| Vote | Affirmative_____ Negative_____ Table_____<br><br>To Subcommittee_____ |
| Date | |

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# International Energy Conservation Code
# Code Change Proposal Tracking Sheet

| | |
|---|---|
| Proposal # | RED1-363-22 On-site renewable energy |
| CDP ID # | |
| Code | IECC RE |
| Code Section(s) | R404.4; Definitions |
| Location | |
| Proponent | Residential Electrical, Power, Lighting and Renewables Subcommittee |
| Proposal Status | |
| Subcommittee | RE EPLR |
| Subcommittee Notes | Requiring solar PV-ready is better as a first step that requiring that a solar PV system be installed. This proposal would likely have little chance of passing the full Consensus Committee. |
| Recommendation | Disapprove |
| Vote | 9-1-0 |
| Recommendation Date | 2/17/2023 |
| Next Step | To Subcommittee_____<br>To Advisory Group_____<br>To Consensus Committee___X_____ |
| Consensus Committee | |
| Committee Response | |
| Vote | Affirmative_____ Negative_____ Table_____<br><br>To Subcommittee_____ |
| Date | |

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# International Energy Conservation Code
# Code Change Proposal Tracking Sheet

| | |
|---|---|
| Proposal # | RED1-92-22 Solar Ready System |
| CDP ID # | |
| Code | IECC RE |
| Code Section(s) | R103.2.2 |
| Location | |
| Proponent | Residential Electrical, Power, Lighting and Renewables Subcommittee |
| Proposal Status | |
| Subcommittee | RE EPLR |
| Subcommittee Notes | This proposal would eliminate the requirement for a solar-ready zone in new construction. |
| Recommendation | Disapprove |
| Vote | 9-0-0 |
| Recommendation Date | 2/17/2023 |
| Next Step | To Subcommittee_____<br>To Advisory Group_____<br>To Consensus Committee___X_____ |
| Consensus Committee | |
| Committee Response | |
| Vote | Affirmative_____ Negative_____ Table_____<br><br>To Subcommittee_____ |
| Date | |

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# International Energy Conservation Code
# Code Change Proposal Tracking Sheet

| | |
|---|---|
| Proposal # | RED1-093-22 Solar-ready systems |
| CDP ID # | 1237 |
| Code | IECC RE |
| Code Section(s) | R103.2.2 |
| Location | base |
| Proponent | Tom Ortiz tortiz@npga.org |
| Proposal Status | SC rev |
| Subcommittee | RE Elec, Light |
| Subcommittee Notes | |
| Recommendation | Based on previous action on RED1-11-22 |
| Vote | Disapprove 12-0 |
| Recommendation Date | 2/17/23 |
| Next Step | To Subcommittee<br>To Advisory Group_____<br>To Consensus Committee_____ |
| Consensus Committee | |
| Committee Response | |
| Vote | Affirmative_____ Negative_____ Table_____<br><br>To Subcommittee_____ |
| Date | |

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# International Energy Conservation Code

## Code Change Proposal Tracking Sheet

| | |
|---|---|
| Proposal # | RED1-094-22 Solar-system ready |
| CDP ID # | 972 |
| Code | IECC RE |
| Code Section(s) | R103.2.2 |
| Location | base |
| Proponent | Alex Smith asmith@nahb.org |
| Proposal Status | SC rev |
| Subcommittee | RE Elec, Light |
| Subcommittee Notes | |
| Recommendation | Primarily editorial. Coordinates structural language with IRC.<br><br>Modification<br>**R103.2.2 Solar-ready system.** The construction documents shall ~~provide details for~~ indicate dedicated roof area for a solar-ready zone, ~~structural design for~~ roof dead load, ~~and~~ roof live load, ~~wind loads~~ ground snow load, and routing of conduit or pre-wiring from solar-ready zone to electrical service panel or plumbing from solar-ready zone to service water heating system. |
| Vote | Approve as modified 12-0 |
| Recommendation Date | 2/17/23 |
| Next Step | To Subcommittee<br>To Advisory Group_____<br>To Consensus Committee_____ |
| Consensus Committee | |
| Committee Response | |
| Vote | Affirmative_____ Negative_____ Table_____<br><br>To Subcommittee_____ |
| Date | |

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# International Energy Conservation Code
# Code Change Proposal Tracking Sheet

| | |
|---|---|
| Proposal # | RED1-215-22 Framing factor with steel frame u-factor |
| CDP ID # | 1238 |
| Code | IECC RE |
| Code Section(s) | R402.2.7 |
| Location | base |
| Proponent | Jay Crandell jcrandell@aresconsulting.biz |
| Proposal Status | SC rev |
| Subcommittee | RE Envelope |
| Subcommittee Notes | |
| Recommendation | Proponent states intent is to clarify but provided not substantiation and does not clarify as intended. It also does not provide a cost or energy efficiency substantiation. |
| Vote | 10-2-5 disapproval |
| Recommendation Date | 2/22/23 |
| Next Step | To Subcommittee<br>To Advisory Group_____<br>To Consensus Committee_____ |
| Consensus Committee | |
| Committee Response | |
| Vote | Affirmative_____ Negative_____ Table_____<br><br>To Subcommittee_____ |
| Date | |

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# International Energy Conservation Code
# Code Change Proposal Tracking Sheet

| | |
|---|---|
| Proposal # | RED1-229-22 Common walls |
| CDP ID # | 1041 |
| Code | IECC RE |
| Code Section(s) | R402.5.1.1 table |
| Location | base |
| Proponent | Jeremy Wright jeremy@jwrighthomedesign.com |
| Proposal Status | SC rev |
| Subcommittee | RE Envelope |
| Subcommittee Notes | |
| Recommendation | Resolves potential conflict in draft 1 language for fire-resistance rated wall assemblies and provides more clarity. |
| Vote | 17-0-1 approve as modified |
| Recommendation Date | 2/22/23 |
| Next Step | To Subcommittee<br>To Advisory Group_____<br>To Consensus Committee_X_____ |
| Consensus Committee | |
| Committee Response | |
| Vote | Affirmative_____ Negative_____ Table_____<br><br>To Subcommittee_____ |
| Date | |

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RED1-229 - Modification

**TABLE R402.5.1.1 AIR BARRIER, AIR SEALING AND INSULATION INSTALLATION[a]**

Portions of table not shown remain unchanged.

| COMPONENT | AIR BARRIER CRITERIA | INSULATION INSTALLATION CRITERIA |
|---|---|---|
| Common walls or double walls separating attached single-family dwellings or townhouses | ~~Air sealing materials recognized in a listed fire-resistance rated common wall or double wall design and installed in accordance with the listing, or air sealing materials recognized in an approved design, shall be used.~~<br><br>~~Common walls or double walls shall be considered an exterior wall for the purposes of air barrier and air sealing application of this Table.~~<br><br>An interior air barrier shall be provided. Air sealing at the intersections with building thermal envelope shall be provided.<br><br>Where installed in a fire-resistance rated wall assembly, air sealing materials shall comply with one of the following:<br><br>1. be in accordance with an *approved* design for the fire-resistance rated assembly.<br><br>2. be supported by *approved* data that shows the assembly as installed complies with the required fire-resistance rating. | Insulation materials recognized in the *approved* ~~listed~~ common wall or double-wall design and installed in accordance with the ~~listing, or insulation materials recognized in the approved~~ *approved* design~~,~~ shall be permitted to be used. |

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# International Energy Conservation Code
# Code Change Proposal Tracking Sheet

| | |
|---|---|
| Proposal # | IRCED1-6-22 common wall sealing |
| CDP ID # | 1473 |
| Code | IRC |
| Code Section(s) | N1102.5.1.1 table |
| Location | base |
| Proponent | Rob Brooks rob@rtbrooks.com |
| Proposal Status | SC rev |
| Subcommittee | RE Envelope |
| Subcommittee Notes | |
| Recommendation | Request to disapprove by proponent based on approval (AM) of RED1-239. |
| Vote | 16-0 |
| Recommendation Date | 2/22/23 |
| Next Step | To Subcommittee<br>To Advisory Group_____<br>To Consensus Committee_X_____ |
| Consensus Committee | |
| Committee Response | |
| Vote | Affirmative_____ Negative_____ Table_____<br><br>To Subcommittee_____ |
| Date | |

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# International Energy Conservation Code
# Code Change Proposal Tracking Sheet

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|---|---|
| Proposal # | RED1-246-22 Roof solar reflectance |
| CDP ID # | 1207 |
| Code | IECC RE |
| Code Section(s) | R402.7 |
| Location | base |
| Proponent | Jacob Miller jmiller@smartsurfacescoalition.org |
| Proposal Status | SC rev |
| Subcommittee | RE Envelope |
| Subcommittee Notes | |
| Recommendation | Technical justification provided does not address energy savings. Not cost justified as proposed. |
| Vote | 15-0-3 disapprove |
| Recommendation Date | 2/22/23 |
| Next Step | To Subcommittee<br>To Advisory Group_____<br>To Consensus Committee__X_____ |
| Consensus Committee | |
| Committee Response | |
| Vote | Affirmative_____ Negative_____ Table_____<br><br>To Subcommittee_____ |
| Date | |

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# International Energy Conservation Code
# Code Change Proposal Tracking Sheet

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|---|---|
| Proposal # | RED1-216-22 Basement walls |
| CDP ID # | 1006 |
| Code | IECC RE |
| Code Section(s) | R402.2.9 |
| Location | base |
| Proponent | Robby Schwarz robby@btankinc.com |
| Proposal Status | SC rev |
| Subcommittee | RE Envelope |
| Subcommittee Notes | |
| Recommendation | Fails to add clarity and could potentially cause confusion. Fails to add value. |
| Vote | 10-8-1 disapproval |
| Recommendation Date | 2/22/23 |
| Next Step | To Subcommittee<br>To Advisory Group_____<br>To Consensus Committee_X_____ |
| Consensus Committee | |
| Committee Response | |
| Vote | Affirmative_____ Negative_____ Table_____<br><br>To Subcommittee_____ |
| Date | |

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# RED1-216-22 – Modification not heard by subcommittee

**Proponents:** Robert Schwarz, representing BUILDTank, Inc. (robby@btankinc.com)

**2024 International Energy Conservation Code [RE Project]**

**Revise as follows and as modified in Blue:**

**R402.2.9 Basement walls.** Basement walls shall be insulated in accordance with Table R402.1.3

> **Exception:** Basement walls associated with unconditioned basements where all of the following requirements are met:
>
> 1. The floor overhead, including the underside stairway stringer leading to the basement, is insulated in accordance with ~~Section~~ Table R402.1.3 and ~~applicable provisions of~~ Sections ~~R402.2 and~~ R402.2.8.
>
> 2. There are no uninsulated duct, domestic hot water, or hydronic heating surfaces exposed to the basement.
>
> 3. There are no HVAC supply or return diffusers serving the basement.
>
> 4. The walls surrounding the stairway and adjacent to conditioned space are insulated in accordance with Section R402.1.3 and applicable provisions of Section R402.2.
>
> 5. The door(s) leading to the basement from conditioned spaces are insulated in accordance with Sections R402.1.3 and applicable provisions of Section R402.2,and weather-stripped in accordance with Section R402.5.
>
> 6. The building thermal envelope separating the basement from adjacent conditioned spaces complies with Section R402.5.

**R402.2.9.1 Basement wall insulation installation**

Where *basement walls* enclosing conditioned basements are insulated, the insulation shall ~~be installed from the top of the *basement wall* down to 10 feet (3048 mm) below grade or to the basement floor, whichever is less.~~ comply with the following, or shall be installed in accordance with the proposed design, as applicable.

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1. Where exterior basement wall insulation is installed, it shall be permanently attached to the wall and extend downward from the sill plate to not less than the base of the foundation wall ~~footing~~ or 10 feet, whichever is less.

2. Where interior basement wall insulation is installed, it shall be permanently attached to the foundation wall and extend downward from the sill plate at the top of the foundation wall to the finished floor below.

Reason Statement:

This proposal was disapproved by a very close vote off 10/8 after significant discussion that provided guidance for the modifications made above in blue. The modification is made addresses three points that were made.

1. Some of the language was modified to mirror language in R402.2.11.1 Crawl space wall insulation installation which also breaks out the installation of insulation on the interior and exterior of the foundation wall.
2. It was pointed out that using the word footing was unclear since one might not know where on the footing to stop the installation of the exterior insulation. To create better alignment with the new crawl space foundation wall insulation section footing has been removed and replaced with "base of the foundation wall" since foundation walls may or may not be poured on a footing.
3. The charging language if R402.2.9.1 was modified in recognition that performance approaches for code compliance may allow only partial coverage of the foundation wall with insulation,

Section R402.2.9.1 Basement wall insulation installation is specific to *basement walls* enclosing conditioned basements because the proceeding section exception is specific to Basement walls associated with unconditioned basements. The language needs to be clear that R402.2.9.1 is defining the building thermal envelope to include the basement as part of the conditioned space.

Modifications have been made to section R402.2.9.1 per guidance from the envelope subcommittee to align the basement insulation installation requirements with the crawl space wall insulation installation that was approved by the subcommittee unanimously.

In section R402.2.9 Basement Walls the exception defines an unconditioned basement and refers to a section of code that is actually a table and then should point directly to floor insulation installation to separate the unconditioned basement from the conditioned living space above. The proposal fixes this confusion.

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Foundation walls that define a conditioned basement can and often are insulated from the exterior. The language has been changed in this proposal to provide requirements for installation for not only interior application but also exterior insulation installation. Both installs require full coverage from the sill plate downward as was done with the stricken language to ensure full coverage.

Cost

This proposal does not impact the cost of construction. Instead, it provides greater flexibility in how basement assemblies can be insulated. It also better defines unconditioned basements and how to insulate from the interior or exterior.

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# International Energy Conservation Code
# Code Change Proposal Tracking Sheet

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|---|---|
| Proposal # | RED1-217-22 Basement walls |
| CDP ID # | 1016 |
| Code | IECC RE |
| Code Section(s) | R402.2.9.1 |
| Location | base |
| Proponent | Alex Smith asmith@nahb.org |
| Proposal Status | SC rev |
| Subcommittee | RE Envelope |
| Subcommittee Notes | Motion to disapprove failed |
| Recommendation | Clarifies the relationship between the prescriptive path and both performance paths regarding basement walls. |
| Vote | 10-8-1 approval |
| Recommendation Date | 2/22/23 |
| Next Step | To Subcommittee<br>To Advisory Group_____<br>To Consensus Committee__X_____ |
| Consensus Committee | |
| Committee Response | |
| Vote | Affirmative_____ Negative_____ Table_____<br><br>To Subcommittee_____ |
| Date | |

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# RED1-217-22 – Modification not heard by subcommitee

**Proponents:** Alex Smith, representing NAHB (asmith@nahb.org)

## 2024 International Energy Conservation Code [RE Project]

**Revise as follows:**

**R402.2.9.1 Basement wall insulation installation.** Where basement walls are insulated, the insulation shall be installed from the top of the basement wall down to 10 feet (3048 mm) below grade or to the basement floor, whichever is less, or in accordance with the *proposed design*, as applicable.

*The remainder of the proposal is removed because it's errata per ICC staff.*

**Reason for the modification:**

- Reconciles with errata for Tables R405.2 and R406.2.
- It is proposed to italicize the term "proposed design" at the request of the subcommittee because it's a defined term. However, the term "proposed design" is not always italicized throughout the code and a coordination effort may be needed in the future.
- The term "proposed design" is used in a similar manner in Section R402.2.10.1 Slab-on-grade.

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# International Energy Conservation Code
# Code Change Proposal Tracking Sheet

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|---|---|
| Proposal # | RED1-219-22 Component general requirements |
| CDP ID # | 1011 |
| Code | IECC RE |
| Code Section(s) | R402.4.1.1 table |
| Location | base |
| Proponent | Robby Schwarz robby@btankinc.com |
| Proposal Status | SC rev |
| Subcommittee | RE Envelope |
| Subcommittee Notes | Motion to disapprove failed |
| Recommendation | Provides needed clarity to commonly misunderstood building envelope insulation and air barrier installation requirements. |
| Vote | 10-6-2 for approval |
| Recommendation Date | 2/22/23 |
| Next Step | To Subcommittee<br>To Advisory Group_____<br>To Consensus Committee__X_____ |
| Consensus Committee | |
| Committee Response | |
| Vote | Affirmative_____ Negative_____ Table_____<br><br>To Subcommittee_____ |
| Date | |

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# International Energy Conservation Code
# Code Change Proposal Tracking Sheet

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|---|---|
| Proposal # | RED1-089-22 Renewables contract length |
| CDP ID # | 1072 |
| Code | IECC RE |
| Code Section(s) | RC103.3 |
| Location | appendix |
| Proponent | Diana Burk diana@newbuildings.org |
| Proposal Status | SC rev |
| Subcommittee | RE Econ, Model, Metric |
| Subcommittee Notes | RECPI-089-22 was submitted by Diana Burk modifying Power Purchase Agreement to Renewable energy contract with a duration of not less than 15 years. |
| Recommendation | Approve As Modified<br>Motion: Jay Crandell<br>Second: Shilpa Surana<br>Reason Statement: Consistent with duration of purchased power in other parts of code and simplify requirement to avoid equation of original proposal. |
| Vote | Approve 13-1 [2 Abstain, 5 Not Present] |
| Recommendation Date | 02/28/2023 |
| Next Step | To Subcommittee<br>To Advisory Group_____<br>To Consensus Committee_____ |
| Consensus Committee | |
| Committee Response | |
| Vote | Affirmative_____ Negative_____ Table_____<br><br>To Subcommittee_____ |
| Date | |

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# International Energy Conservation Code
# Code Change Proposal Tracking Sheet

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|---|---|
| Proposal # | RED1-038-22 Annual Energy Cost performance Exception |
| CDP ID # | 1170 |
| Code | IECC RE |
| Code Section(s) | R405.2 |
| Location | appendix |
| Proponent | Eric Tate eric.tate@atmosenergy.com |
| Proposal Status | SC rev |
| Subcommittee | RE Econ, Model, Metric |
| Subcommittee Notes | RECPI-038-22 was submitted by Eric Tate removing all K tables and providing a simple reference to ASHRAE Standard 105. RED1-038,044, 052 combined for voting. |
| Recommendation | Disapprove As Modified<br>Motion: Brain Shanks<br>Second: Aaron Gary<br>Reason Statement: The proposal lacks information to provide guidance to the modelers. |
| Vote | Disapprove 11-1 [1 Abstain,8 Not Present] |
| Recommendation Date | 02/28/2023 |
| Next Step | To Subcommittee<br>To Advisory Group_____<br>To Consensus Committee_____ |
| Consensus Committee | |
| Committee Response | |
| Vote | Affirmative_____ Negative_____ Table_____<br><br>To Subcommittee_____ |
| Date | |

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# International Energy Conservation Code
# Code Change Proposal Tracking Sheet

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|---|---|
| Proposal # | RED1-052-22 Simulated performance compliance |
| CDP ID # | 1410 |
| Code | IECC RE |
| Code Section(s) | R405.2 |
| Location | base |
| Proponent | Ted Williams ngdllc@outlook.com |
| Proposal Status | SC rev |
| Subcommittee | RE Econ, Model, Metric |
| Subcommittee Notes | RECPI-052-22 was submitted by Subcommittee member Ted Williams removing all K tables and providing a simple reference to ASHRAE Standard 105. RED1-038,044, 052 combined for voting. |
| Recommendation | Disapprove As Modified<br>Motion: Brain Shanks<br>Second: Aaron Gary<br>Reason Statement: The proposal lacks information to provide guidance to the modelers. |
| Vote | Disapprove 11-1 [1 Abstain,8 Not Present] |
| Recommendation Date | 02/28/2023 |
| Next Step | To Subcommittee<br>To Advisory Group_____<br>To Consensus Committee_____ |
| Consensus Committee | |
| Committee Response | |
| Vote | Affirmative_____ Negative_____ Table_____<br><br>To Subcommittee_____ |
| Date | |

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# International Energy Conservation Code
# Code Change Proposal Tracking Sheet

| | |
|---|---|
| Proposal # | RED1-044-22 R405.2.3 exception correction |
| CDP ID # | 1111 |
| Code | IECC RE |
| Code Section(s) | R405.2 |
| Location | base |
| Proponent | Gary Heikkinen gary.heikkinen@nwnatural.com |
| Proposal Status | SC rev |
| Subcommittee | RE Econ, Model, Metric |
| Subcommittee Notes | RECPI-044-22 was submitted by Gary Heikkinen including Table K6 with other tables in ASHRAE Std 105-2021 . RED1-038,044, 052 combined for voting. |
| Recommendation | Disapprove As Modified<br>Motion: Ted Williams<br>Second: Vladimir Kochkin<br>Reason Statement: The proposal lacks information to provide guidance to the modelers. |
| Vote | Approve 1-13 [1 Abstain,6 Not Present] |
| Recommendation Date | 02/28/2023 |
| Next Step | To Subcommittee<br>To Advisory Group_____<br>To Consensus Committee_____ |
| Consensus Committee | |
| Committee Response | |
| Vote | Affirmative_____ Negative_____ Table_____<br><br>To Subcommittee_____ |
| Date | |

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# International Energy Conservation Code
# Code Change Proposal Tracking Sheet

| | |
|---|---|
| Proposal # | RED1-039-22 Exception for R405.2 |
| CDP ID # | 1065 |
| Code | IECC RE |
| Code Section(s) | R405.2 |
| Location | base |
| Proponent | Steven Rosenstock srosenstock@eei.org |
| Proposal Status | SC rev |
| Subcommittee | RE Econ, Model, Metric |
| Subcommittee Notes | RECPI-039-22 was submitted by Steve Rosenstock proposing to use site energy as the basis of comparison. |
| Recommendation | Disapprove As Modified<br>Motion: Gayathri Vijayakumar<br>Second: Ted Williams<br>Reason Statement: SC voted to Disapprove the addition of a new exception because it added complexity to the code and a simpler solution to avoiding the use of a 0.0 source energy multiplier would be preferred. It was not clear why an exception to use site energy savings for all-electric buildings was needed, given that the energy cost savings would yield the same results. |
| Vote | Disapprove 13-0 [0 Abstain,8 Not Present] |
| Recommendation Date | 02/28/2023 |
| Next Step | To Subcommittee<br>To Advisory Group_____<br>To Consensus Committee_____ |
| Consensus Committee | |
| Committee Response | |
| Vote | Affirmative_____ Negative_____ Table_____<br><br>To Subcommittee_____ |

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| Date | |

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# International Energy Conservation Code
# Code Change Proposal Tracking Sheet

| | |
|---|---|
| Proposal # | RED1-048-22 Simulated Building performance |
| CDP ID # | 1382 |
| Code | IECC RE |
| Code Section(s) | R405.2 |
| Location | base |
| Proponent | Kevin Duell kevin.duell@nwnatural.com |
| Proposal Status | SC rev |
| Subcommittee | RE Econ, Model, Metric |
| Subcommittee Notes | RECPI-048-22 was submitted by Kevin Duell revising Part 3 and Exception 1 |
| Recommendation | Disapprove As Modified<br>Motion: Gayathri Viajayakumar<br>Second: Aaron Gary<br>Reason Statement: SC voted to Disapprove based on prior Disapproval on RED1-38, 52, and 44 which also contained edits related to the ASHRAE Std 105 tables. Based on the discussion, the SC was not convinced to add references to new tables from the Appendix but also not convinced to delete the current tables that were previously approved by the Main Committee. The other changes contained in RED1-48 and 50 related to the energy cost savings requirement are similar to RED1-53 and the SC agreed to vote on that change in the context of RED1-53. |
| Vote | Disapprove 12-1 [0 Abstain,8 Not Present] |
| Recommendation Date | 02/28/2023 |
| Next Step | To Subcommittee<br>To Advisory Group_____<br>To Consensus Committee_____ |
| Consensus Committee | |
| Committee Response | |

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| Vote | Affirmative_____ Negative_____ Table_____<br><br>To Subcommittee_____ |
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# International Energy Conservation Code
# Code Change Proposal Tracking Sheet

| | |
|---|---|
| Proposal # | RED1-050-22 Simulated performance compliance |
| CDP ID # | 1383 |
| Code | IECC RE |
| Code Section(s) | R405.2 |
| Location | base |
| Proponent | Ian Casey ian.casey@nwnatural.com |
| Proposal Status | SC rev |
| Subcommittee | RE Econ, Model, Metric |
| Subcommittee Notes | RECPI-050-22 was submitted by Ian Casey suggesting to use Table K2 and K6 to avoid unnecessary cost burden. |
| Recommendation | Disapprove As Modified<br>Motion: Gayathri Vijayakumar<br>Second: Aaron Gary<br>Reason Statement: SC voted to Disapprove based on prior Disapproval on RED1-38, 52, and 44 which also contained edits related to the ASHRAE Std 105 tables. Based on the discussion, the SC was not convinced to add references to new tables from the Appendix but also not convinced to delete the current tables that were previously approved by the Main Committee. The other changes contained in RED1-48 and 50 related to the energy cost savings requirement are similar to RED1-53 and the SC agreed to vote on that change in the context of RED1-53. |
| Vote | Disapprove 12-1 [0 Abstain,8 Not Present] |
| Recommendation Date | 02/28/2023 |
| Next Step | To Subcommittee<br>To Advisory Group_____<br>To Consensus Committee_____ |
| Consensus Committee | |
| Committee Response | |

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|---|---|
| Vote | Affirmative_____ Negative_____ Table_____<br><br>To Subcommittee_____ |
| Date | |

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# International Energy Conservation Code
# Code Change Proposal Tracking Sheet

| | |
|---|---|
| Proposal # | RED1-053-22 Simulated performance compliance |
| CDP ID # | 1491 |
| Code | IECC RE |
| Code Section(s) | R405.2 |
| Location | base |
| Proponent | Renee Lani rlani@apga.org |
| Proposal Status | SC rev |
| Subcommittee | RE Econ, Model, Metric |
| Subcommittee Notes | RECPI-053-22 was submitted by Renee Lani proposing homes with fuel-burningfuel burning appliances should be the same |
| Recommendation | Disapprove As Modified<br>Motion: Gayathri Vijayakumar<br>Second: Vladimir Kochkin<br>Reason Statement: SC voted to Disapprove given that the current multipliers (85 and 80) were proposed when introducing equipment efficiency to R405 and were evaluated by PNNL. Based on previous discussions, to allow equipment efficiency to be modeled required an increase in the amount of savings required and also a decision of the type/efficiency of equipment that is modeled in the Standard Reference Design. Based on those discussions and the analysis by PNNL, the SC was not convinced to decrease the required savings from 80% to 85% for homes with fuel burning appliances without modeled data to support the change. |
| Vote | Disapprove 12-1 [0 Abstain,8 Not Present] |
| Recommendation Date | 02/28/2023 |
| Next Step | To Subcommittee<br>To Advisory Group_____<br>To Consensus Committee_____ |
| Consensus Committee | |
| Committee Response | |

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|---|---|
| Vote | Affirmative_____ Negative_____ Table_____<br><br>To Subcommittee_____ |
| Date | |

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# International Energy Conservation Code

# Code Change Proposal Tracking Sheet

| | |
|---|---|
| Proposal # | RED1-045-22 R405.2.3 modification |
| CDP ID # | 1105 |
| Code | IECC RE |
| Code Section(s) | R405.2 |
| Location | base |
| Proponent | Gary Heikkinen gary.heikkinen@nwnatural.com |
| Proposal Status | SC rev |
| Subcommittee | RE Econ, Model, Metric |
| Subcommittee Notes | RECPI-045-22 was submitted by Gary Heikkinen proposing the proposed design is less than or equal to the better performance standard of 80% of the annual energy cost of the standard design for all buildings. |
| Recommendation | Disapprove As Modified<br>Motion: Gayathri Vijayakumar<br>Second: Alamelu Brooks<br>Reason Statement: SC voted to Disapprove given that the current multipliers (85 and 80) were proposed when introducing equipment efficiency to R405 and were evaluated by PNNL. Based on previous discussions, to allow equipment efficiency to be modeled required an increase in the amount of savings required and also a decision of the type/efficiency of equipment that is modeled in the Standard Reference Design. Based on those discussions and the analysis by PNNL, the SC was not convinced to increase the required savings from 85% to 80% for homes without fuel burning appliances without modeled data to support the change. |
| Vote | Disapprove 12-1 [0 Abstain,8 Not Present] |
| Recommendation Date | 02/28/2023 |
| Next Step | To Subcommittee<br>To Advisory Group_____<br>To Consensus Committee_____ |
| Consensus Committee | |

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|---|---|
| Committee Response | |
| Vote | Affirmative_____ Negative_____ Table_____<br><br>To Subcommittee_____ |
| Date | |

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# International Energy Conservation Code
# Code Change Proposal Tracking Sheet

| | |
|---|---|
| Proposal # | RED1-037-22 Annual Energy Cost Performance |
| CDP ID # | 1454 |
| Code | IECC RE |
| Code Section(s) | R405.2 |
| Location | base |
| Proponent | Eric Tate eric.tate@atmosenergy.com |
| Proposal Status | SC rev |
| Subcommittee | RE Econ, Model, Metric |
| Subcommittee Notes | RECPI-037-22 was submitted by Eric Tate proposing to eliminate larger increment of cost energy reduction for fuel burning space and water heating appliances. |
| Recommendation | Disapprove As Modified<br>Motion: Gayathri Vijayakumar<br>Second: Alamelu Brooks<br>Reason Statement: SC voted to Disapprove given that the current multipliers (85 and 80) were proposed when introducing equipment efficiency to R405 and were evaluated by PNNL. Based on previous discussions, to allow equipment efficiency to be modeled required an increase in the amount of savings required and also a decision of the type/efficiency of equipment that is modeled in the Standard Reference Design. Based on those discussions and the analysis by PNNL, the SC was not convinced to increase the required savings from 85% to 80% for homes without fuel burning appliances without modeled data to support the change. |
| Vote | Disapprove 12-1 [0 Abstain,8 Not Present] |
| Recommendation Date | 02/28/2023 |
| Next Step | To Subcommittee<br>To Advisory Group_____<br>To Consensus Committee_____ |
| Consensus Committee | |

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|---|---|
| Committee Response | |
| Vote | Affirmative_____ Negative_____ Table_____<br><br>To Subcommittee_____ |
| Date | |

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# International Energy Conservation Code
# Code Change Proposal Tracking Sheet

| | |
|---|---|
| Proposal # | RED1-051-22 Simulated Performance Compliance |
| CDP ID # | 1406 |
| Code | IECC RE |
| Code Section(s) | R405.2 |
| Location | base |
| Proponent | Ted Williams eric.tate@atmosenergy.com |
| Proposal Status | SC rev |
| Subcommittee | RE Econ, Model, Metric |
| Subcommittee Notes | RECPI-051-22 was submitted by Econ Subcommitee member Ted Williams proposing to eliminate the bias in favor of electric space heating and water heating is likely to increase carbon emissions |
| Recommendation | Disapprove As Modified<br>Motion: Gayathri Vijakumar<br>Second: Alamelu Brooks<br>Reason Statement: SC voted to Disapprove given that the current multipliers (85 and 80) were proposed when introducing equipment efficiency to R405 and were evaluated by PNNL. Based on previous discussions, to allow equipment efficiency to be modeled required an increase in the amount of savings required and also a decision of the type/efficiency of equipment that is modeled in the Standard Reference Design. Based on those discussions and the analysis by PNNL, the SC was not convinced to increase the required savings from 85% to 80% for homes without fuel burning appliances without modeled data to support the change. |
| Vote | Disapprove 12-1 [0 Abstain,8 Not Present] |
| Recommendation Date | 02/28/2023 |
| Next Step | To Subcommittee<br>To Advisory Group_____<br>To Consensus Committee_____ |
| Consensus Committee | |
| Committee Response | |

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|---|---|
| Vote | Affirmative_____ Negative_____ Table_____<br><br>To Subcommittee_____ |
| Date | |

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# International Energy Conservation Code
# Code Change Proposal Tracking Sheet

| | |
|---|---|
| Proposal # | RED1-069-22 ERI path stringency |
| CDP ID # | 1349 |
| Code | IECC RE |
| Code Section(s) | R406.5 table |
| Location | base |
| Proponent | Amy Boyce amy.boyce@imt.org |
| Proposal Status | SC rev |
| Subcommittee | RE Econ, Model, Metric |
| Subcommittee Notes | RECPI-069-22 was submitted by Amy Boyce making more stringent Energy Rating Index with OPP column values based on climate zones |
| Recommendation | Disapprove As Modified<br>Motion: Amy Boyce<br>Second: Rob Salcido<br>Reason Statement: The purpose of this proposal is to maintain the same ERI targets required in the 2021 IECC, in order to help ensure that the ERI path is no less efficient in the 2024 IECC. Table R406.5 of the 2021 IECC establishes maximum ERI targets, and Section R401.2.5 applies a 5% improvement to the scores in this table. This improvement was adopted as part of a 5% efficiency improvement for prescriptive, performance, and ERI compliance paths and was overwhelmingly approved by Governmental Member Voting Representatives in RE209-19. In the current update cycle, the supporters of REPI-21 argued that the 5% improvement to the ERI scores belonged in Table R406.5, and not in R401.2.5, but when broad changes were adopted into the ERI in proposal REPI-126, the updated ERI targets did not include the full 5% improvement. We believe an additional 5% improvement (beyond the scores above) is warranted, since the target for the 2024 IECC prescriptive path is roughly a 5% improvement as well. |
| Vote | Approve 6-10 [1 Abstain,4 Not Present] |
| Recommendation Date | 02/28/2023 |
| Next Step | To Subcommittee<br>To Advisory Group_____<br>To Consensus Committee_____ |
| Consensus Committee | |

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|---|---|
| Committee Response | |
| Vote | Affirmative_____ Negative_____ Table_____<br><br>To Subcommittee_____ |
| Date | |

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# International Energy Conservation Code
# Code Change Proposal Tracking Sheet

| | |
|---|---|
| Proposal # | RED1-339-22 Ducts in conditioned space |
| CDP ID # | 1477 |
| Code | IECC RE |
| Code Section(s) | R405.4.2(1) Table |
| Location | base |
| Proponent | Jeremy Williams jeremy.williams@ee.doe.gov |
| Proposal Status | SC rev |
| Subcommittee | RE HVACR & WH |
| Subcommittee Notes | |
| Recommendation | Approve as modified 10-0-0 |
| Vote | HVACR Approve as modified 10-0-0/Modeling as modified 9-6 |
| Recommendation Date | 3/13/23 |
| Next Step | To Subcommittee<br>To Advisory Group_____<br>To Consensus Committee_____ |
| Consensus Committee | |
| Committee Response | |
| Vote | Affirmative_____ Negative_____ Table_____<br><br>To Subcommittee_____ |
| Date | |

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# RED1-339-22 MODIFICATION

**Replace RED1-339-22 with the following, which contains just the red edits to the Duct Location row of the Thermal Distribution Systems section and is shown in legislative format vs IECC 2024 PCD1-UPDATED w ERRATA:**

## TABLE R405.4.2(1) SPECIFICATIONS FOR THE STANDARD REFERENCE AND PROPOSED DESIGNS

<table>
<tr><th>BUILDING COMPONENT</th><th>STANDARD REFERENCE DESIGN</th><th>PROPOSED DESIGN</th></tr>
<tr><td>Thermal distribution systems</td><td>Duct location: ~~same as proposed design.~~
<table>
<tr><th>Foundation Type</th><th>Slab on grade</th><th>Unconditioned crawlspace</th><th>Basement or conditioned crawlspace</th></tr>
<tr><td>Duct location (supply and return)</td><td>One-story building: 100% in unconditioned attic<br><br>All other: 75% in unconditioned attic and 25% inside conditioned space</td><td>One-story building: 100% in unconditioned crawlspace<br><br>All other: 75% in unconditioned crawlspace and 25% inside conditioned space</td><td>75~~50~~% inside conditioned space<br><br>25~~50~~% unconditioned attic</td></tr>
</table></td><td>Duct location: as proposed.</td></tr>
</table>

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# International Energy Conservation Code
# Code Change Proposal Tracking Sheet

| | |
|---|---|
| Proposal # | RED1-301-22 Ducts in conditioned space |
| CDP ID # | 1476 |
| Code | IECC RE |
| Code Section(s) | R403.3 |
| Location | base |
| Proponent | Jeremy Williams jeremy.williams@ee.doe.gov |
| Proposal Status | SC rev |
| Subcommittee | RE HVACR & WH |
| Subcommittee Notes | Discussion started with a motion and a second to approve. Subcommittee members and interested parties spoke in favor of the proposal but 50 percent of the members and interested parties spoke against the proposal.<br>Highlighted comments that stand out:<br>Against: studies by field validated by field study must be conducted before this proposal is ready.<br>For: DOE explained that PNNL confident of energy savings with modeling<br>For: Multiple studies to positive impact of approving proposal. Some states adopt ducts required in conditioned space.<br>Against: 301 missing some steps and it is better to conduct more work and move this proposal to the 2027 IECC.<br>Against: The proposal covers all climate zones- recommend only for climate zones 4 and up.<br>After 45 minutes of discussion a member of the subcommittee request CALL THE QUESTION. Motion to approve vote 3,5,1 Motioned failed Motion and a second to DISAPPROVE- A bit more discussion but in the end the motion carried with a vote of 5,3,1 |
| Recommendation | Subcommittee recommendation is Disapproval |
| Vote | 5/3/1 |
| Recommendation Date | 2/27/2023 |

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|---|---|
| Next Step | To Subcommittee<br>To Advisory Group_____<br>To Consensus Committee__x_____ |
| Consensus Committee | |
| Committee Response | |
| Vote | Affirmative_____ Negative_____ Table_____<br><br>To Subcommittee_____ |
| Date | |

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# International Energy Conservation Code
# Code Change Proposal Tracking Sheet

| | |
|---|---|
| Proposal # | RED1-60-22 Duct location inside conditioned space |
| CDP ID # | 1315 |
| Code | IECC RE |
| Code Section(s) | R405.4.2(1) Table |
| Location | base |
| Proponent | Amy Boyce amy.boyce@imt.org |
| Proposal Status | SC rev |
| Subcommittee | RE HVACR & WH |
| Subcommittee Notes | |
| Recommendation | Disapproved based on committee recommendation on RED1-339-22 |
| Vote | HVACR Disapproved 8-0-1/ Modeling Disapproved 7-6-2 |
| Recommendation Date | 3/13/23 |
| Next Step | To Subcommittee<br>To Advisory Group_____<br>To Consensus Committee_____ |
| Consensus Committee | |
| Committee Response | |
| Vote | Affirmative_____ Negative_____ Table_____<br><br>To Subcommittee_____ |
| Date | |

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# International Energy Conservation Code
# Code Change Proposal Tracking Sheet

| | |
|---|---|
| Proposal # | RED1-338-22 Duct location edit |
| CDP ID # | 1343 |
| Code | IECC RE |
| Code Section(s) | R405.4.2(1) Table |
| Location | base |
| Proponent | Amy Boyce amy.boyce@imt.org |
| Proposal Status | SC rev |
| Subcommittee | RE HVACR & WH |
| Subcommittee Notes | |
| Recommendation | Disapproved based on committee recommendation on RED1-339-22<br><br>Modeling reason: restores baseline to "as proposed" as a no-harm solution to avoid encouraging moving ducts inside condition space and then trade-off the condition space it was moved inside of. Also, avoids somewhat arbitrary assumptions on baseline conditions for ductwork location and practices. |
| Vote | HVACR Disapproved 8-0-2/ Modeling Approved 8-6-1 |
| Recommendation Date | 3/13/23 |
| Next Step | To Subcommittee<br>To Advisory Group_____<br>To Consensus Committee_____ |
| Consensus Committee | |
| Committee Response | |
| Vote | Affirmative_____ Negative_____ Table_____<br><br>To Subcommittee_____ |
| Date | |

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# International Energy Conservation Code
# Code Change Proposal Tracking Sheet

| | |
|---|---|
| Proposal # | RED1-32-22 HVAC register boots errata |
| CDP ID # | 1012 |
| Code | IECC RE |
| Code Section(s) | R402.4.1.1 table |
| Location | base |
| Proponent | Robby Schwarz robby@btankinc.com |
| Proposal Status | SC rev |
| Subcommittee | RE HVACR & WH |
| Subcommittee Notes | Motion and a second opened the proposal to discussion. Interested party stated during the first round a similar proposal passed REPI-050). Comments were positive and there was not much discussion. |
| Recommendation | Subcommittee proposal is to approve |
| Vote | 9/0/0 |
| Recommendation Date | 2/27/2023 |
| Next Step | To Subcommittee<br>To Advisory Group_____<br>To Consensus Committee___x_____ |
| Consensus Committee | |
| Committee Response | |
| Vote | Affirmative_____ Negative_____ Table_____<br><br>To Subcommittee_____ |
| Date | |

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# International Energy Conservation Code
# Code Change Proposal Tracking Sheet

| | |
|---|---|
| Proposal # | RED1-279-22 PI & II Pilot light definitions |
| CDP ID # | 1155 |
| Code | IRC |
| Code Section(s) | N1101.6 |
| Location | base |
| Proponent | Fredric Zwerg fredric.zwerg@swgas.com |
| Proposal Status | SC rev |
| Subcommittee | RE HVACR & WH |
| Subcommittee Notes | Motion and a second to disapprove and defer to Proposal 283 and 298. |
| Recommendation | Motion to disapprove |
| Vote | 10/0/0 |
| Recommendation Date | 2/13/2023 |
| Next Step | To Subcommittee<br>To Advisory Group_____<br>To Consensus Committee_x _____ |
| Consensus Committee | |
| Committee Response | |
| Vote | Affirmative_____ Negative_____ Table_____<br><br>To Subcommittee_____ |
| Date | |

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# International Energy Conservation Code
# Code Change Proposal Tracking Sheet

| | |
|---|---|
| Proposal # | RED1-283-22 Pilot light definitions |
| CDP ID # | 1270 |
| Code | IECC RE |
| Code Section(s) | R202 |
| Location | base |
| Proponent | Shannon Corcoran SCorcoran@aga.org |
| Proposal Status | SC rev |
| Subcommittee | RE HVACR & WH |
| Subcommittee Notes | Motion to approve with a second. Discussion positive with Proponent Shannon Corcoran providing code sections before the Proposal is heard by consensus |
| Recommendation | Motion to approve |
| Vote | 7/1/1 |
| Recommendation Date | 2/13/2023 |
| Next Step | To Subcommittee<br>To Advisory Group_____<br>To Consensus Committee___x_____ |
| Consensus Committee | |
| Committee Response | |
| Vote | Affirmative_____ Negative_____ Table_____<br><br>To Subcommittee_____ |
| Date | |

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|---|---|
| Vote | Affirmative_____ Negative_____ Table_____<br><br>To Subcommittee_____ |
| Date | |

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# International Energy Conservation Code

# Code Change Proposal Tracking Sheet

| | |
|---|---|
| Proposal # | RED1-298-22 Pilot reference |
| CDP ID # | 1294 |
| Code | IECC RE |
| Code Section(s) | R403.1.3 |
| Location | base |
| Proponent | Shannon Corcoran SCorcoran@aga.org |
| Proposal Status | SC rev |
| Subcommittee | RE HVACR & WH |
| Subcommittee Notes | Motion to approve with a second. Much discussion. Proponent Shannon Corcoran agree to add sections of the code before the proposal is heard by Main |
| Recommendation | Motion to approve |
| Vote | 10/0/0 |
| Recommendation Date | 2/13/2023 |
| Next Step | To Subcommittee<br>To Advisory Group_____<br>To Consensus Committee____x _____ |
| Consensus Committee | |
| Committee Response | |
| Vote | Affirmative_____ Negative_____ Table_____<br><br>To Subcommittee_____ |
| Date | |

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# International Energy Conservation Code
# Code Change Proposal Tracking Sheet

| | |
|---|---|
| Proposal # | RED1-296-22 Continuously burning pilot light |
| CDP ID # | 1441 |
| Code | IECC RE |
| Code Section(s) | R403.1.3 |
| Location | base |
| Proponent | Eric Tate eric.tate@atmosenergy.com |
| Proposal Status | SC rev |
| Subcommittee | RE HVACR & WH |
| Subcommittee Notes | Discussion started with a motion to approve and a second. Little discussion. There was a comment about the proponent considering withdrawal as 297 is close to identical |
| Recommendation | Subcommittee recommendation to approve “as modified” |
| Vote | 9/0/0 |
| Recommendation Date | 2/27/2023 |
| Next Step | To Subcommittee<br>To Advisory Group_____<br>To Consensus Committee_x_____ |
| Consensus Committee | |
| Committee Response | |
| Vote | Affirmative_____ Negative_____ Table_____<br><br>To Subcommittee_____ |
| Date | |

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# RED1-296-22

IECC: R403.1.3

**Proponents:**
**Eric Tate, representing Atmos Energy (eric.tate@atmosenergy.com)**

2024 International Energy Conservation Code [RE Project]

Revise as follows:

R403.1.3 Continuously burning pilot light.

Gas fireplace systems ~~are~~ shall not ~~permitted to~~ be equipped with a continuously burning pilot light.

**Exceptions:**
**1. Any fireplace equipped with an on-demand, intermittent or interrupted ignition pilot light (as defined in ANSI Z21.20) is not considered to have a continuously burning pilot light.**
**2.Gas-fired appliances using pilots within a listed combustion safety device.**

**Reason:**
**Appliances such as space heaters use continuously burning pilots in oxygen depletion sensors (ODS) as a means of shutting off the appliance in the event that room oxygen is reduced to 18% by volume and as a correlated indoor air quality accumulation of carbon monoxide (CO). Disruption of the stability of the continuously burning pilot within the ODS, caused by oxygen depletion, closes the gas valve shutting of the appliance. Banning continuously burning pilots, *per se*, would disqualify use of ODS systems despite its listing and incorporation in the gas appliance. Changes to alternate means of achieving gas shut off are not currently recognized in standards for safety for gas appliances.**

**Cost Impact:**
**The code change proposal will neither increase nor decrease the cost of construction.**
**The proposed language will not affect cost of construction.**

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# International Energy Conservation Code
# Code Change Proposal Tracking Sheet

| | |
|---|---|
| Proposal # | RED1-297-22 Pilot light exception |
| CDP ID # | 1392 |
| Code | IECC RE |
| Code Section(s) | R403.1.3 |
| Location | base |
| Proponent | Ted Williams ngdllc@outlook.com |
| Proposal Status | SC rev |
| Subcommittee | RE HVACR & WH |
| Subcommittee Notes | |
| Recommendation | approve |
| Vote | 5-0-4 |
| Recommendation Date | 2/27/23 |
| Next Step | To Subcommittee<br>To Advisory Group_____<br>To Consensus Committee_____ |
| Consensus Committee | |
| Committee Response | |
| Vote | Affirmative_____ Negative_____ Table_____<br><br>To Subcommittee_____ |
| Date | |

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# International Energy Conservation Code
# Code Change Proposal Tracking Sheet

| | |
|---|---|
| Proposal # | RED1-332-22 Eliminate gas lighting |
| CDP ID # | 1322 |
| Code | IECC RE |
| Code Section(s) | R404.1.5 |
| Location | base |
| Proponent | Adam Berry adam.berry@state.co.us |
| Proposal Status | SC rev |
| Subcommittee | RE HVACR & WH |
| Subcommittee Notes | Proponent presented on 1/30/2023. Motion to approve failed with a lot of discussion generally negative. After a long discussion David Bixby made a motion to call the question. An additional proposal to table the proposal was accepted with a vote of 6/2/1 Table and bring back up combining this proposal with 331 and 333. Meeting 2/13/2023 Motion and a second ti disapprove |
| Recommendation | Recommendation is to disapprove |
| Vote | 8/0/2 |
| Recommendation Date | 2/13/2023 |
| Next Step | To Subcommittee<br>To Advisory Group_____<br>To Consensus Committee__x _____ |
| Consensus Committee | |
| Committee Response | |
| Vote | Affirmative_____ Negative_____ Table_____<br><br>To Subcommittee_____ |
| Date | |

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# International Energy Conservation Code
# Code Change Proposal Tracking Sheet

| | |
|---|---|
| Proposal # | IRCED1-11-22 gas lighting equipment |
| CDP ID # | 1162 |
| Code | IRC |
| Code Section(s) | N1104.1.5 |
| Location | base |
| Proponent | Fredric Zwerg fredric.zwerg@swgas.com |
| Proposal Status | SC rev |
| Subcommittee | RE HVACR & WH |
| Subcommittee Notes | Discussion started with a motion to disapprove. The reason for the motion is because the overall feeling is propsed change is not needed |
| Recommendation | The subcommittee having considered the proposal and the vote is to disapprove |
| Vote | 9/0/0 |
| Recommendation Date | 2/27/2023 |
| Next Step | To Subcommittee<br>To Advisory Group_____<br>To Consensus Committee__x_____ |
| Consensus Committee | |
| Committee Response | |
| Vote | Affirmative_____ Negative_____ Table_____<br><br>To Subcommittee_____ |
| Date | |

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# International Energy Conservation Code
# Code Change Proposal Tracking Sheet

| | |
|---|---|
| Proposal # | RED1-331-22 Gas lighting exception |
| CDP ID # | 1444 |
| Code | IECC RE |
| Code Section(s) | R404.1.4 |
| Location | base |
| Proponent | Eric Tate eric.tate@atmosenergy.com |
| Proposal Status | SC rev |
| Subcommittee | RE HVACR & WH |
| Subcommittee Notes | Motion and a second to disapprove |
| Recommendation | Recommendation from the subcommittee is to disapprove |
| Vote | 8/1/1 |
| Recommendation Date | 2/13/2023 |
| Next Step | To Subcommittee<br>To Advisory Group_____<br>To Consensus Committee___x_____ |
| Consensus Committee | |
| Committee Response | |
| Vote | Affirmative_____ Negative_____ Table_____<br><br>To Subcommittee_____ |
| Date | |

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# International Energy Conservation Code
# Code Change Proposal Tracking Sheet

| | |
|---|---|
| Proposal # | RED1-333-22 Gas lighting exception |
| CDP ID # | 1484 |
| Code | IECC RE |
| Code Section(s) | R404.1.5 |
| Location | base |
| Proponent | Ted Williams ngdllc@outlook.com |
| Proposal Status | SC rev |
| Subcommittee | RE HVACR & WH |
| Subcommittee Notes | |
| Recommendation | approved as modified |
| Vote | 5-3-1 |
| Recommendation Date | |
| Next Step | To Subcommittee<br>To Advisory Group_____<br>To Consensus Committee_____ |
| Consensus Committee | |
| Committee Response | |
| Vote | Affirmative_____ Negative_____ Table_____<br><br>To Subcommittee_____ |
| Date | |

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# RED1-333-22

IECC: R404.1.5

**Proponents:**
**Ted Williams, representing ONE Gas (ngdllc@outlook.com)**

2024 International Energy Conservation Code [RE Project]

Revise as follows:

R404.1.5 Gas lighting.

**Gas-fired lighting appliances shall not be equipped with a *continuous pilot* ~~continuously burning pilot ignition systems. Any gas light~~ and shall be equipped with an *on-demand pilot*, *intermittent ignition* or *interrupted ignition* (as defined in ANSI Z21.20).**

Exceptions:

~~1. Any gas light equipped with an on-demand, intermittent or interrupted ignition (as defined in ANSI Z21.20).~~

~~2.~~ Gas lights serving historical buildings.

Reason:

**Exception 1 resolves issues of continuously-burning pilots and associated energy use by requiring ignition only when lighting service is required. Exception 2 addresses historical buildings where gas lighting is important to the ambience of the structure.**

**Cost Impact:**
**The code change proposal will neither increase nor decrease the cost of construction.**
**The proposed exceptions would not affect cost of construction.**

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# International Energy Conservation Code

# Code Change Proposal Tracking Sheet

| | |
|---|---|
| Proposal # | RED1-288-22 PI & II Gas fireplace |
| CDP ID # | 1116 |
| Code | IECC RE |
| Code Section(s) | R402.5.2.1 |
| Location | base |
| Proponent | Fredric Zwerg fredric.zwerg@swgas.com |
| Proposal Status | SC rev |
| Subcommittee | RE HVACR & WH |
| Subcommittee Notes | Motion to disapprove with a second. Not needed |
| Recommendation | Motion and a second to disapprove |
| Vote | 10/0/0 |
| Recommendation Date | 2/13/2023 |
| Next Step | To Subcommittee<br>To Advisory Group_____<br>To Consensus Committee___x_____ |
| Consensus Committee | |
| Committee Response | |
| Vote | Affirmative_____ Negative_____ Table_____<br><br>To Subcommittee_____ |
| Date | |

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# International Energy Conservation Code
# Code Change Proposal Tracking Sheet

| | |
|---|---|
| Proposal # | RED1-286-22 Consolidate gas fireplace requirements |
| CDP ID # | 1104 |
| Code | IECC RE |
| Code Section(s) | R402.5.2 |
| Location | base |
| Proponent | Gayathri Vijayakumar gayathri@swinter.com |
| Proposal Status | SC rev |
| Subcommittee | RE HVACR & WH |
| Subcommittee Notes | Motion to table until the next meeting of the subcommittee on 2/27/2023 - Discussion opened on 2/27/2023 with a motion and second to approve. Not a lot of discussion. Very well explained by the proponent and the subcommittee agreed. |
| Recommendation | Subcommittees recommendation is to approve “as modified” |
| Vote | 8/0/1 |
| Recommendation Date | 2/27/2023 |
| Next Step | To Subcommittee<br>To Advisory Group_____<br>To Consensus Committee___x _____ |
| Consensus Committee | |
| Committee Response | |
| Vote | Affirmative_____ Negative_____ Table_____<br><br>To Subcommittee_____ |
| Date | |

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# RED1-286-22 AS MODIFIED (after RECONSIDER vote)

**Proponents:** Gayathri Vijayakumar, representing Steven Winter Associates, Inc. (gvijayakumar@swinter.com)

## 2024 International Energy Conservation Code [RE Project]

### SECTION R402

### BUILDING THERMAL ENVELOPE

**R402.5.1 Building thermal envelope.** The *building thermal envelope* shall comply with Sections R402.5.1.1 through R402.5.1.3. The sealing methods between dissimilar materials shall allow for differential expansion and contraction.

**R402.5.2 Fireplaces**. New wood-burning fireplaces shall have tight-fitting flue dampers or doors, and outdoor combustion air. Where using tight-fitting doors on factory-built fireplaces *listed* and *labeled* in accordance with UL 127, the doors shall be tested and *listed* for the fireplace.

**Delete without substitution:**

~~**R402.5.2.1 Gas fireplace efficiency.** All gas fireplace heaters rated to ANSI Z21.88 shall be listed and labeled with a fireplace efficiency (FE) rating of 50 percent or greater in accordance with CSA P.4.1. Vented gas fireplaces (decorative appliances) certified to ANSI Z21.50 shall be listed and labeled, including their FE ratings, in accordance with CSA P.4.1.~~

### SECTION R403

### SYSTEMS

**R403.1 Controls**

**R403.1.1 Programmable thermostat**

**R403.1.2 Heat pump supplementary heat**

**Delete without substitution:**

~~**R403.1.3 Continuously burning pilot light.** Gas fireplace systems are not permitted to be equipped with a continuously burning pilot light.~~

~~**Exception:** Any fireplace equipped with an on-demand, intermittent or interrupted ignition pilot light (as defined in ANSI Z21.20) is not considered to have a continuously burning pilot light.~~

**Add new section:**

**R403.14 Gas fireplaces.** Gas fireplace systems shall ~~are~~ not ~~permitted to~~ be equipped with a *continuous~~ly burning~~ pilot ~~light~~* and shall be equipped with an *on-demand pilot*, *intermittent ignition*, or *interrupted ignition* (as defined by ANSI Z21.20).

**Exception~~s~~:**

1. ~~Any fireplace equipped with an *on-demand pilot*, *intermittent ignition* or *interrupted ignition* pilot light (as defined in ANSI Z21.20) is not considered to have a *continuously burning pilot light*.~~

~~2.~~ Gas-fired appliances using pilots within a listed combustion safety device.

**R403.14.1 Gas fireplace efficiency.** ~~All~~ Vented gas fireplace heaters shall have a fireplace efficiency (FE) rating not less than 50 percent as determined in accordance with CSA P.4.1, and shall be *listed* and *labeled* in accordance with ~~rated to~~ CSA/ANSI Z21.88 ◦ CSA 2.33~~shall be listed and labeled with a fireplace efficiency (FE) rating of 50 percent or greater in accordance with CSA P.4.1~~. Vented gas fireplaces (decorative appliances) shall be *listed* and *labeled* in accordance with ~~certified to~~ CSA/ANSI Z21.50 ◦ CSA 2.22 ~~shall be listed and labeled, including their FE ratings, in accordance with CSA P.4.1~~.

**How this new Section R403.14 would appear in the next PC draft, if 286 is approved:**

**R403.14 Gas fireplaces.** Gas fireplace systems shall not be equipped with a *continuous pilot* and shall be equipped with an *on-demand pilot*, *intermittent ignition*, or *interrupted ignition* (as defined by ANSI Z21.20).

**Exception:**

1. Gas-fired appliances using pilots within a listed combustion safety device.

**R403.14.1 Gas fireplace efficiency.** Vented gas fireplace heaters shall have a fireplace efficiency (FE) rating not less than 50 percent as determined in accordance with CSA P.4.1, and shall be *listed* and *labeled* in accordance with CSA/ANSI Z21.88 ◦ CSA 2.33. Vented gas fireplaces (decorative appliances) shall be *listed* and *labeled* in accordance with CSA/ANSI Z21.50 ◦ CSA 2.22.

**R404.1.5 Gas Lighting.** Gas-fired lighting appliances shall not be equipped with a *continuous pilot* ~~continuously burning pilot ignition systems~~ and shall be equipped with an *on-demand pilot*, *intermittent ignition*, or *interrupted ignition* (as defined by ANSI Z21.20).

**Exception:**

1. Gas lights serving *historic buildings* ~~historical buildings~~.

**SECTION R405**

**SIMULATED BUILDING PERFORMANCE**

**Revise as follows:**

**TABLE R405.2 REQUIREMENTS FOR SIMULATED BUILDING PERFORMANCE**

**Portions of table not shown remain unchanged.**

| SECTION[a] | TITLE |
|---|---|
| **Mechanical** | |
| R403.1 | Controls |
| R403.2 | Hot water boiler temperature reset |
| R403.3 | Duct systems |
| R403.4 | Mechanical system piping insulation |
| R403.5 except Section R403.5.2 | Service hot water system |
| R403.5.2 | Hot water pipe insulation |
| R403.6 | Mechanical ventilation |
| R403.7, except Section R403.7.1 | Equipment sizing and efficiency rating |
| R403.8 | Systems serving multiple dwelling units |
| R403.9 | Snow melt and ice system controls |
| R403.11 | Energy consumption of pools and spas |
| R403.12 | Portable spas |
| R403.13 | Residential pools and permanent residential spas |
| R403.14 | Gas fireplaces |

a. Reference to a code section includes all the relative subsections except as indicated in the table.

## SECTION R406

## ENERGY RATING INDEX COMPLIANCE ALTERNATIVE

**Revise as follows:**

**TABLE R406.2 REQUIREMENTS FOR ENERGY RATING INDEX**

**Portions of table not shown remain unchanged.**

| SECTION[a] | TITLE |
|---|---|
| **Mechanical** | |
| R403.1 | Controls |
| R403.2 | Hot water boiler temperature reset |
| R403.3 | Duct systems |
| R403.4 | Mechanical system piping insulation |
| R403.5 except Section R403.5.2 | Service hot water systems |
| R403.5.2 | Hot water pipe insulation |
| R403.6 | Mechanical ventilation |
| R403.7, except Section R403.7.1 | Equipment sizing and efficiency rating |
| R403.8 | Systems serving multiple dwelling units |
| R403.9 | Snow melt and ice system controls |
| R403.11 | Energy consumption of pools and spas |
| R403.12 | Portable spas |
| R403.13 | Residential pools and permanent residential spas |
| R403.14 | Gas fireplaces |

a. Reference to a code section includes all of the relative subsections except as indicated in the table.

# CHAPTER 6 [RE]

# REFERENCED STANDARDS

**Revise as follows:**

## CSA

CSA Group

8501 East Pleasant Valley Road

Cleveland, OH 44131-5516

P.4.1-2021 Testing method for measuring fireplace efficiency

R403.14.1

## ANSI

American National Standards Institute

25 West 43rd Street, 4th Floor

New York, NY 10036

ANSI Z21.20-2005 (R2016) Automatic Gas Ignition Systems And Components

R403.14

Z21-50-2019/CSA 2.22-19 Vented Decorative Gas Appli~~c~~ances

R403.14.1

Z21.88-2019/CSA 2.23-19 Vented Gas Fireplace Heaters

R403.14.1

# International Energy Conservation Code

# Code Change Proposal Tracking Sheet

| | |
|---|---|
| Proposal # | IRCED1-10-22 Boiler reset |
| CDP ID # | 960 |
| Code | IRC |
| Code Section(s) | N1103.2 |
| Location | base |
| Proponent | Robert Obrien robrien@noraweb.org |
| Proposal Status | SC rev |
| Subcommittee | RE HVACR & WH |
| Subcommittee Notes | Vote to approve on 1/13/2023 - but subcommittee members and interested parties asked to hear this proposal when 127 and 361 are heard |
| Recommendation | |
| Vote | |
| Recommendation Date | |
| Next Step | To Subcommittee<br>To Advisory Group_____<br>To Consensus Committee_____ |
| Consensus Committee | |
| Committee Response | |
| Vote | Affirmative_____ Negative_____ Table_____<br><br>To Subcommittee_____ |
| Date | |

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