**SDC 301 CALCULATIONS SC Call** Minutes

December 2nd, 2024 | 1:00 PM – 2:30 PM Eastern

[MEETING RECORDING HERE](https://transcripts.gotomeeting.com/#/s/fb3eec0faf12787dd06bd536a2f335cd6f1ad6590bf27ef5909efe6163c357bf)

**Members Present:** Neal Kruis, Brian Christensen, Philip Fairey, Rob Salcido, Gayathri Vijayakumar, William Ranson

**Others Present**: Richard Porter, Brett Dillon, Dean Gamble, Bob Sullivan, Daniel Herzog, Paul Kinter

**Absent:** Scott Horowitz, Charlie Haack, Nick Sisler

**RESNET Staff Present:** Rick Dixon, Noah Kibbe, Jackie Diaz, Laurel Elam

**Minutes Prepared By:** Jackie Diaz

The meeting was called to order at 12:05PM CT

**Approve agenda**

Brian Christensen moved to accept the agenda and Gayathri Vijayakumar seconded, no objections.

**Approve 11/04 meeting minutes (**[**here**](https://www.dropbox.com/scl/fi/9l6u28bnyfqrnf2h4vxt1/RESNET_SDC301-Calculations-SC-Draft-Meeting-Minutes-11-4-2024.docx?web_open_id=web_open_id-ed63e801f9178ba9&dl=0)**)**

Brian Christensen moved to accept the amended minutes and Gayathri Vijayakumar seconded, no objections.

**Update on MINHERS Addendum 76, 81 & PDS-01 301-2025**

No update was provided.

**MINHERS Addendum on CMU Insulation Inspection & R-Value. May want to read ahead - files attached (Philip)**

Philip explained an issue found in the current standards requiring the inspecting of all enclosure elements for insulation that creates challenges in that if the R-value cannot be determined the manufacturers' data sheets must be used. He pointed out discrepancies in these data sheets, for core-filled concrete block walls, which claim R-values that may not reflect actual field performance. Philip emphasized the importance of using reliable methods to calculate R-values accurately. He proposed updates that standardize evaluation processes, provide tools for calculating R-values, and outline clear documentation steps, ensuring more accurate software representation and reducing reliance on potentially misleading manufacturer data.

Richard explained that the proposed inspection procedures, such as verifying that holes for foam inspection were predrilled and the injected foam visibly expanded out via these holes, would allow insulated CMUs to achieve a Grade I Rating, enabling qualification for ENERGY STAR Homes.

Philip and Brian discussed using nominal versus actual dimensions for CMUs.

Brian wanted to highlight the importance of making sure Raters are informed of the distinction between nominal and actual CMU dimensions and suggested providing clear explanations and educational resources for those who may be less familiar with the difference.

Philip continued on to explain the proposed updates to Normative Appendix A including the addition of ASTM Standard C518 for measuring thermal resistance, new guidelines that require installers to drill inspection holes at the top and bottom of CMU walls to visually confirm proper foam insulation fill, and changes to introduce specific requirements for documenting and inspecting wall systems in alignment with manufacturers' recommendations.

Philip clarified that the addendum accounts for horizontal bond beams.

Neal brought up accounting for mortar's heat transfer path, Philip said it was minor and unnecessary to include due to the complication it would pose.

Philip Fairey motioned that this proposal be recommended to SDC300 for a potential addendum for 301-2019, 2022, and 2025. Rob Salcido seconded. Motion passed by a voice vote.

**Discussion of Garage as Sales Center proposal (Dean Gamble)**

Dean presented that builders often temporarily convert garages in model homes into sales centers or offices, which creates challenges for accurate energy ratings. These spaces are typically conditioned during the model home phase but revert to garages when the home is sold. Usually, Raters assess homes as they are found treating these spaces as conditioned, which can lead to inconsistent Energy Rating Index (ERI) scores.

To address this, a proposal suggests adding a definition for "temporarily converted garage" to standards 301 and 380, allowing these spaces to be excluded from ratings during their conversion phase. This approach aligns with how garages and thermally isolated sunrooms are treated. An infiltration penalty of 140 CFM50 is added for homes with temporarily converted garages, and blower door tests must include temporary sealing to confirm proper air sealing between the house and future garage. Builders would have the flexibility to rate homes either during the sales center phase or after the garage is restored, with guidelines in place to ensure thermal isolation and structural requirements are met.

This change hopes to strike a balance between practicality and fairness in energy ratings. A big question is whether model homes with temporarily converted garages should be certified at the time of inspection or after the space reverts to a garage.

Dean highlighted logistical challenges under the current system, where 18 to 24 months often pass between initial construction and garage reconversion. This approach offers builders flexibility to finalize ratings earlier.

Brett raised concerns about this proposal's potential risks, arguing that certifying homes with temporarily converted garages could lead to inaccurate ratings that don’t reflect the homeowner’s experience. Issues like oversized HVAC systems, air quality problems, and higher energy costs after reconversion are some concerns, while also emphasizing the potential safety risks, such as carbon monoxide exposure.

The proposal addresses some of these concerns by prohibiting single HVAC systems from serving both the home and the converted garage and limiting temporary openings between the garage and the home to 50 square feet.

Brett argues that the flexibility offered to builders could still lead to scenarios where corners are cut, resulting in unsafe or inefficient homes. He emphasizes the importance of maintaining a strict post-conversion inspection requirement to make sure that all aspects of the home meet specifications and adhere to safety and efficiency standards.

Gayathri raised a concern that temporarily converted garages, functioning as commercial spaces like sales offices during their use, may fall outside the scope of standard 301, which focuses on residential dwellings.

Brian acknowledged her point as worth considering, and also mentioned that Dean’s proposal introduces important safety measures that address current risks more effectively than existing practices. He noted that the proposal encourages safer practices during temporary use which protect homeowners after conversion back to residential space.

Given the views seemed equally divided within the subcommittee, Brian suggested this proposal is best assessed via public comment.

Dean will write up an official proposal and send it back and will coordinate with Rick and Gayathri on how to proceed forward to public comment.

**New Business**

Meeting adjourned at 1:37PM CT