



# SIERRA CLUB

## LONE STAR CHAPTER

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Re: Comments on proposed Suite of 2021 Codes in Dallas

From: Cyrus Reed, Conservation Director, Lone Star Chapter, Sierra Club

Along with our local regional groups, the Sierra Club, Lone Star Chapter has been a frequent participant and stakeholder around adoption and implementation of building codes for decades, including in Dallas.

We are in basic support of the proposed adoption of the suite of 2021 codes for the City of Dallas. Specifically, we support the adoption of the 2021 Plumbing Code, the 2021 International Energy Conservation Code, the 2021 Mechanical Code and the 2021 International Building Code and 2021 International Residential Code.

Recently, at the state level, we submitted comments to the State Energy Conservation Office in support of statewide adoption of the 2021 IECC, and in Austin, San Antonio, Dallas and Houston we have been supporting efforts to adopt the 2021 IECC, IBC and IPC, among other standards, as well as additional efforts to incorporate solar-ready, EV-ready and electric-ready provisions. The state has chosen to delay adoption of the 2021 IECC due to a statutory issue that should be resolved during 2023, but this does not prevent the City of Dallas from moving forward. As an example, we have recently worked to adopt solar-ready provisions in both Austin and Houston, and are currently working with Austin Energy staff on potential adoption of EV-ready and electric-ready provisions in a future code cycle. Austin has already adopted the suite of 2021 codes, including solar-ready provisions.

In San Antonio, we are having discussions with their Development Services Department about adding some modest EV-ready and Solar-Ready provisions as part of the adoption of the 2021 suite of codes that the San Antonio City Council is scheduled to consider in November or early December.

In the Dallas area, we have previously supported efforts to adopt the 2015 IECC, and green codes, and recently participated in discussions at the North Central Texas Council of Governments, about the potential to consider both solar-ready and EV-ready provisions in codes, as well as adoption of the 2021 IECC. We found those conversations to be fruitful, though as we shall make clear, we think the codes being considered in Dallas would benefit in some improvements in the Energy Codes, and in adopting solar-ready provisions either as part of the overall codes of the IECC.

### **General Support for Moving Forward on 2021 I-Codes.**

**We support moving forward on adoption of the 2021 codes, and in particular the 2021 IECC and 2021 IRC, IPC and IBC.**

As has been shown both by the DOE analysis conducted by the Pacific Northwest Laboratory (PNL), and a separate Texas-based analysis by the Energy Systems Laboratory (ESL), adoption of the 2021 IECC will benefit cities by lowering peak demand and overall energy use, which in turn will have air quality benefits. Consumers living in those homes, apartments or working in those buildings will enjoy lower energy and water costs and a better quality of life. Those analyses show the slight addition in costs will be made up for in utility savings.

We also believe the improvements made in the proposed plumbing code will have similar benefits, particularly lowering of the gallons per flush requirements and other water conservation provisions that are included in the Dallas provisions.

In terms of the proposed amendments to the 2021 IECC, ***one proposed change which we disagree with within the text of the proposed IECC, is the proposal to only adopt a ceiling insulation R-value of 42***, as opposed to requiring that an R-value meet a 49 value. While we understand that the actual efficiency gain comparing 42 to 49 may be relatively small, or

even 38 to 49 as a builder goes from the 2018 to the 2021 code, given Texas's electric grid issues, even a small one percent gain can be important. Because builders can choose several paths to comply with the code - the ERI, the prescriptive path or the performance path or even meeting another above-code program (Energy Star, LEED, etc), having R49 as the base for ceiling insulation is important. It would encourage developers to build more efficient homes. Thus, we would support keeping the R-value at 49, which really just means adding three inches of insulation in roof spaces, though as stated we understand the concerns about the increasing costs of insulation. We do appreciate the requirement that ducts meet strict R-value insulation levels, as well as the additional requirements on duct testing in multi-family buildings.

Secondly, we also disagree with the removal of the five-percent energy efficiency packages that are required of residential developers as part of the 2021 IECC. By removing this requirement, in essence the City of Dallas would be lowering efficiency improvements in the code, and lowering the benefits to future homeowners. We understand that the decision to not include the efficiency add-on package was due to an interpretation of state statutes, which states that local and state governments should not pick specific product requirements, but the efficiency add-ons allow developers to choose among several options, and we do not believe it is in conflict with state statutes. If the City of Dallas does not want to include the efficiency add-ons as a requirement, then at least it should include it in the code as a voluntary above-code option.

**Sierra Club supports the EV-Ready Provisions Contained in the proposed Residential and Overall Building Codes but believes that Solar-Ready codes should also be added.**

We were very pleased that the overall International Building and International Residential codes being discussed do include some modest but important EV-ready requirements for residential and commercial buildings. We believe that the City of Dallas is wise to take advantage of this opportunity to fully incorporate EV technologies if the proposal goes forward. That being said we were disappointed that the proposal does not seem to include any solar-ready provisions.

The 2021 IECC (and previous versions) include a voluntary solar-ready code for both residential and commercial property. Both Austin and Houston have adopted slightly modified versions of these provisions. In particular, we believe Austin has come up with a flexible requirement on new development that encourages buildings to be ready for future solar, but does so in a way that is flexible and does not require a structural roof load calculation. A copy of that ordinance is available here <https://www.austintexas.gov/edims/document.cfm?id=279788>

Dallas could also adopt the existing ordinances for solar-ready known as Appendix RB - <https://codes.iccsafe.org/content/IECC2021P1/appendix-rb-solar-ready-provisions-detached-one-and-two-family-dwellings-and-townhouses> that is a voluntary part of the 2021 IECC, while Appendix CB is for commercial development and can be found here - <https://codes.iccsafe.org/content/IECC2021P1/appendix-cb-solar-ready-zone-commercial>.

The Sierra Club supports adding a required solar-ready component to the Dallas 2021 IECC codes.

## **EV-Ready**

As part of the 2024 ICC process, a committee has already developed proposed language for residential and commercial EV-ready provisions. We support the City of Dallas's proposal to consider adopting some modest EV-Ready provisions, and we are supportive of the proposals contained in the proposed IBC and IRC. Specifically the proposals would include some basic EV-Ready components for residential buildings, including a 40 Amp plug, as well as some EV-Ready and EV-Capable parking spaces for multi-family and commercial buildings.

In summary, the Sierra Club supports the adoption of the 2021 suite of I-codes and is in strong support of most of the proposals. Nevertheless, we call on the City of Dallas to require R-49 in ceiling insulation, remove the elimination of the five-percent energy efficiency packages required in the 2021 IECC, and consider adopting solar-ready provisions.

In terms of solar-ready, we strongly encourage the City of Dallas to consider a requirement to identify a solar-ready roof zone, similar to the proposal adopted in Austin, and include a requirement for space on the electrical panel for future solar. Having a dedicated panel space for future solar is a good first

step, while making sure homes and other buildings are built to reserve roof space for future solar is key to making the systems work.

The Lone Star Chapter of the Sierra Club looks forward to working with the City of Dallas on adopting and implementing the suite of 2021 ICC codes, and hopes you will consider our proposals to improve insulation, require the reinstatement of the five-percent efficiency add-ons, and include some basic EV-ready and solar-ready provisions.

Sincerely,

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