

DOCKETED

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ConSol response to TN # 238285

Additional submitted attachment is included below.



June 21st, 2021

California Energy Commission
1516 Ninth Street, Docket Office, MS-4
Sacramento, CA. 95814
docket@energy.ca.gov,

Dear Commissioners,

Re: TN # 238285 on Docket 21-BSTD-01 2022 Energy Code Update Rulemaking

We read with interest Unico's comment to this docket, which makes two points in relation to uninsulated ducts in conditioned space, concerning condensation and thermal losses.

We, like Unico, agree with the analysis carried out for the Energy Commission that condensation may occur on uninsulated ductwork in conditioned space under certain conditions. Where we disagree is on the impact of the small amount of condensation that may be formed (see ConSol's comments in TN # 238140). The minimal volume of water likely to condense on the duct surface, combined with the cyclical nature of the condensation/evaporation process makes it highly unlikely that any structural damage or mold will occur as a result. Without knowing more details, we are unable to comment on the one example given by Unico of problems occurring in a basement installation. This should be considered alongside the comments submitted by seven of the country's largest builders (Beazer Homes, DR Horton, Lennar, Pulte Group, Taylor Morrison, Toll Brothers, and Tri Pointe Homes) noting that they have all used uninsulated ducts in conditioned space throughout the country without issue.

Thermal losses from uninsulated ducts will, as noted, be higher than from insulated ducts. However, with ducts in conditioned space these losses will be to the conditioned space and will therefore not lead to increased loads or wasted energy. Properly designed and balanced systems will account for these losses and ensure that conditioned air is supplied to rooms at appropriate rates.

We believe that, Unico's comments notwithstanding, our original interpretation of the analysis relied on by the Energy Commission is correct and that requirements for insulation on ducts in conditioned space are unnecessary and unduly restrictive.

Once again, I thank the Energy Commission staff for their continued work throughout this code update.

Sincerely,

A handwritten signature in black ink, appearing to read "W. Allen".

William Allen, PhD
Senior Technical Consultant

