

Modify emittance definition (1585)

IECC RE: SECTION 202

Proponents:

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2024 International Energy Code [RE] [RE Project] R3

Revise as follows:

IECC2024D3RERE_RE_Ch02_SecR202_DefEMITTANCE EMITTANCE. The ratio of the radiant heat flux emitted by a specimen measured on a scale from 0 to 1, where a value of 1 indicates perfect release of thermal radiation~~emission~~.

Reason:

When changing the definition of "emittance" during the last round of public comments, potential confusion was introduced. The word "emission" is frequently used to describe pollutants. However, in this case, we are referring to the property of a material that is related to the release of thermal radiation (or heat). The edit included in this code change proposal corrects the definition for technical accuracy related to the property of "emittance."

Bibliography:

U.S. Environmental Protection Agency. 2008. "Reducing urban heat islands: Compendium of strategies." Draft. <https://www.epa.gov/heat-islands/heat-island-compendium>. (see Section 2.2, Properties of Urban Materials)

VanGeem, M. G., and A. E. Fiorato. 1983. "Thermal Properties of Masonry Materials for Passive Solar Design – A State-of-the-Art Review." U.S. Department of Energy Report No. DOE/CE/30739. Also PCA R&D Serial No. 0888, Portland Cement Association. http://www.vangeemconsulting.com/SN_888_Thermal_Properties_of_Masonry_Materials_VanGeem_Fiorato.pdf

Cost Impact:

The code change proposal will neither increase nor decrease the cost of construction.

This CCP only clarifies a definition; it does not change any requirements.