Energy Efficient
Design of Low-Rise Residential Buildings


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Addendum d adds basic indoor environmental quality requirements for lighting systems to align with existing Section 7.3, “Indoor Environmental Quality,” requirements applicable to mechanical systems.

Note: In this addendum, changes to the current standard are indicated in the text by underlining (for additions) and strikethrough (for deletions) unless the instructions specifically mention some other means of indicating the changes.

Addendum d to Standard 90.2-2018

Add the following new definitions to Section 3.1 (I-P and SI units).

3.1 Definitions

dim-to-warm (warm dim): a light source capable of simultaneously decreasing its correlated color temperature as its light output decreases, typically resembling the change in color temperature of an incandescent lamp as it dims.

tunable white: a light source capable of adjusting its correlated color temperature while maintaining its relative light output and capable of adjusting its light output while maintaining its correlated color temperature.

color tunable: a light source capable of emitting highly saturated light of varying hues, as well as white light, for example by varying the relative intensity of individual emitters within the light source.

habitable space: a space in a building for living, sleeping, eating, or cooking, excluding bathrooms, toilets, hallways, storage areas, closets, utility rooms, and similar areas.

Modify Section 7.3.3 as shown (I-P and SI units).

7.3.3 Buildings shall be illuminated in accordance with Section 7.5. All lighting in habitable spaces shall be continuously dimmable to at least 10% of full output and shall meet at least one of the following:

a. Complies with CA Title 24 JA8
b. Contains dim-to-warm, tunable white, or color tunable light sources

Add the following new reference to Section 10 (I-P and SI units).

10. NORMATIVE REFERENCES

California Energy Commission
1516 Ninth Street
Sacramento, CA 95814
2019 CA Title 24 Part 6 JA8 2019 Building Energy Efficiency Standards Joint Appendix 8
ASHRAE is concerned with the impact of its members’ activities on both the indoor and outdoor environment. ASHRAE’s members will strive to minimize any possible deleterious effect on the indoor and outdoor environment of the systems and components in their responsibility while maximizing the beneficial effects these systems provide, consistent with accepted Standards and the practical state of the art.

ASHRAE’s short-range goal is to ensure that the systems and components within its scope do not impact the indoor and outdoor environment to a greater extent than specified by the Standards and Guidelines as established by itself and other responsible bodies.

As an ongoing goal, ASHRAE will, through its Standards Committee and extensive Technical Committee structure, continue to generate up-to-date Standards and Guidelines where appropriate and adopt, recommend, and promote those new and revised Standards developed by other responsible organizations.

Through its Handbook, appropriate chapters will contain up-to-date Standards and design considerations as the material is systematically revised.

ASHRAE will take the lead with respect to dissemination of environmental information of its primary interest and will seek out and disseminate information from other responsible organizations that is pertinent, as guides to updating Standards and Guidelines.

The effects of the design and selection of equipment and systems will be considered within the scope of the system’s intended use and expected misuse. The disposal of hazardous materials, if any, will also be considered.

ASHRAE’s primary concern for environmental impact will be at the site where equipment within ASHRAE’s scope operates. However, energy source selection and the possible environmental impact due to the energy source and energy transportation will be considered where possible. Recommendations concerning energy source selection should be made by its members.
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