

Indoor Environmental Quality (EQ)

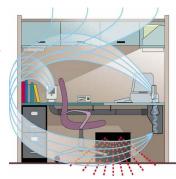


To promote occupants' productivity, comfort, and well-being by providing quality thermal comfort, the **Thermal Comfort** *credit* requirements to meet compliance addresses both thermal comfort *design* and thermal comfort *control*.

Thermal comfort design

The HVAC systems and the building envelope must be designed to meet the requirements of **ASHRAE Standard 55–2010** OR the HVAC systems and the building envelope must meet the requirements of the applicable standard ISO 7730:2005 and CEN Standard EN 15251:2007.

Thermal comfort control requires individual controls be provided for at least 50% of individual occupant spaces. Provide group thermal comfort controls for all shared multi-occupant spaces, and for any individual occupant spaces without individual controls. Thermal comfort controls allow occupants, whether in individual spaces or shared multi-occupant spaces, to adjust either the air temperature, radiant temperature, air velocity, or humidity.



Lighting

In general, there are two major lighting problems that arise in open-plan offices. *Glare* is often caused because the partitions (partial-height screens) do not block light coming from distant fixtures. Open-plan offices may also have non-uniform lighting because the system was designed for an empty room; the addition of partitions and modular furniture can block light, create shadows, and create bright spots due to different surface reflectance.

To promote occupants' productivity, comfort, and well-being by providing high-quality lighting, the **Interior Lighting** *credit* offers two options: *lighting control* and *lighting quality*.

Lighting control

Requires at least 90% of *individual occupant spaces* be provided with individual lighting controls that enable occupants to adjust the lighting to suit their individual tasks and preferences, with at least three lighting levels or scenes (on, off, midlevel). Midlevel is 30% to 70% of the maximum illumination level (not including daylight contributions).



- Requires all *shared multi-occupant spaces* meet all of the following requirements:
 - Have in place multizone control systems that enable occupants to adjust the lighting to meet group needs and preferences, with at least three lighting levels or scenes (on, off, midlevel).
 - Lighting for any presentation or projection wall must be separately controlled.
 - Switches or manual controls must be located in the same space as the controlled luminaires. A person operating the controls must have a direct line of sight to the controlled luminaires.



