

ASHRAE Technical FAQ

ID 12

Question What is the recommended humidity level for occupied spaces?

[ASHRAE Standard 62.1-2016](#), "Ventilation for Acceptable Indoor Air Quality", plus [ASHRAE BOD approved addenda](#), requires that relative humidity levels be designed to be limited to 65% or less for mechanical systems with dehumidification capability. For other mechanical system types or where spaces are not served by mechanical systems, Standard 62.1 has no humidity limitations.

Answer

[ASHRAE Standard 55-2017](#), "Thermal Environmental Conditions for Human Occupancy", plus [ASHRAE BOD approved addenda](#), relates reported human comfort to temperature and humidity levels, and establishes a range of temperatures and humidity levels that are considered comfortable by 80% or more of the test subjects. The Standard requires that systems designed to control humidity must be able to maintain a dew-point temperature of 16.8°C (62.2°F). There are no established lower humidity limits for thermal comfort; consequently, Standard 55 does not specify a minimum humidity level. However, non-thermal comfort factors, such as skin drying, irritation of mucus membranes, dryness of the eyes, and static electricity generation, may place limits on the acceptability of very low humidity environments.

The [2015 ASHRAE Handbook – HVAC Applications](#) recommends specific design relative humidities for specific applications. The handbook and standards may be purchased and/or individual chapters of the handbook may be purchased and downloaded on-line at our website, www.ashrae.org/ or by calling 1-800-527-4723 in the USA and Canada or 1-404-636-8400 worldwide.

[ACGIH](#)- American Conference of Governmental Industrial Hygienists, (www.acgih.org)

[AIHA](#) - American Industrial Hygiene Association, (www.aiha.org)

[ASHRAE Standard 62.1-2016](#), plus [ASHRAE BOD approved addenda](#).

ASHRAE Pubs [ASHRAE Standard 55-2017](#) plus [ASHRAE BOD approved addenda](#).

[2015 ASHRAE Handbook – HVAC Applications](#)

Topic References humidity, comfort, microbe, mold, mildew, moisture, dry, humid, mucous membrane

	Cognizant ASHRAE Committees	Refer to Organization
1	TC 4.3	ACGIH
2	TC 2.1	AIHA
3	SSPC 62.1	
4		
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