Mechanical Design Guideline

Building Type	Indoor Design Temperature, Occupied °F[1]	Noise Max NC	Humidity Range Relative Humidity	Base System Type[3]	Coil Design Heating Entering Water Temp.: °F	Coil Design (actual) Chilled Water Entering Temp: °F (Δ T.) [4]	Prefilter / Final Filter Merv	Outdoor Design Temperatures °F
Academic Classrooms	72° F +/- 2°	27	As required by project	Custom AHU	140°	45° (16°)	8/13	Summer: 95°DB/78°WB Winter: -15° DB
Administration Offices	72° F +/- 2°	30	As required by project	Custom AHU	140°	45° (16°)	8/13	Summer: 95°DB/78°WB Winter: -15° DB
Research Laboratory	72° F +/- 2°	35[2]	Summer: 55 Max. Winter: 30 Min. (as required by project)	Custom AHU	140°	45° (16°)	8/13	Summer: 95°DB/78°WB Winter: -15° DB
Residential Dorms	72° F +/- 2°	30	As required by project	Fan Coil Units	140°	45° (8°)	8	Summer: 95°DB/78°WB Winter: -15° DB
Athletic	72° F +/- 2°	45	As required by project	Custom AHU	140°	45° (16°)	8/13	Summer: 95°DB/78°WB Winter: -15° DB
Assembly (theater, food service, religious)	72° F +/- 2°	35	As required by project	Custom AHU	140°	45° (16°)	8/13	Summer: 95°DB/78°WB Winter: -15° DB
Commercial	72° F +/- 2°	35[2]	As required by project	Modular AHU	140°	45° (16°)	8/13	Summer: 95°DB/78°WB Winter: -15° DB
Museum, Library	72° F +/- 2°	30	Summer: 55 Max. Winter: 40 Min. (as required by project)	Custom AHU	140°	45° (16°)	8/13	Summer: 95°DB/78°WB Winter: -15° DB
Support (shops, storage, parking garages)	80° F Summer 65° F Winter +/- 5°	45	As required by project	Modular AHU	140°	45° (16°)	8	Summer: 95°DB/78°WB Winter: -15° DB
Utility Plant (chilled water, steam plants)	80° F Summer 65° F Winter +/- 5°	< 80	As required by project	Modular AHU	140°	45° (16°)	8	Summer: 95°DB/78°WB Winter: -15° DB

Notes:

1. Adjust guideline to suite individual projects per BOD/ASHREA/LEED requirements.
2. Decision to connect to campus utilities should be based on feasibility, potential long term operational cost savings, and man power savings.

Footnotes:

[1] Controls shall allow for unoccupied temperature settings

[2] Noise not to exceed 40 dB at fume hood locations; dB to be as low as achievable.

[3] Provide custom AHU up to 8,000 CFM

[4] Actual operation can be 45° +/- 3-5°