IEQ CREDIT 7.1: THERMAL COMFORT - DESIGN

All fields and uploads are required unless otherwise noted.

THRESHOLD ATTEMPTED

Points Attempted: 1

TIP: *A general HVAC summary as well as a summary table listing usage type(s) for each regularly occupied space are required general submittals. Be sure to consider contextual overlaps when documenting compliance with IEQc6.1.*

Select all that apply to the project building:

- [x] The project building is mechanically ventilated, in part or in whole.
- [ ] The project building is naturally ventilated, in part or in whole.

Table. Assumptions for personal factors in each space type category & season

Space Type	Clothing Level (CLO)				Metabolic Rate (MET)
	Spring	Summer	Fall	Winter	
Office/Classroom	0.5	0.5	0.9	0.9	1

Add Row | Delete Row

Select one of the following:

- ( ) All natatorium spaces included in the project building and associated grounds are in compliance with the "Typical Natatorium Design Conditions" defined in Chapter 4 (Places of Assembly) of the ASHRAE HVAC Applications Handbook, 2003 edition.
- (•) The project does not contain any natatorium spaces.

MECHANICALLY VENTILATED SPACES

The Systems Manual, O&M Manual, or similar for the project building has been provided to the owner and includes:
1) General and specific instructions on the maintenance and operation of automatic and manually adjustable controls
2) Seasonal settings and/or changeovers
3) Limits in the adjustment of manual controls
4) Maintenance and inspection schedule for all thermal and other environmental-condition related building systems.

REQUIRED DECLARANT
Initial Here : bc
CONTRACTOR

Signatory: Brad Cady; N/A; November 19, 2010

List the source(s) of weather data used for design calculations. ASHRAE Standard 90.1-2007/MA Bui

Weather design conditions used for peak load calculations.(0.5%, 1%, median of extremes, etc)

Cooling: 7

Heating: 87

Hours per typical year that outdoor temperature exceeds design conditions.

Cooling: 0 hrs

Heating: 1 hrs

Table. Cooling Mode

Space Type	Design Operative Temperature (degF)*				Maximum Design Humidity (RH)				Design Air Speed (ft/min)			
	Spring	Summer	Fall	Winter	Spring	Summer	Fall	Winter	Spring	Summer	Fall	Winter
Office/Class	75	75	75	75	50	50	50	50	200	200	200	200

Add Row Delete Row

** Operative temperature includes radiant effects. See Standard 55.*

Table. Heating Mode

Space Type	Design Operative Temperature (degF)*				Maximum Design Humidity (RH)				Design Air Speed (ft/min)			
	Spring	Summer	Fall	Winter	Spring	Summer	Fall	Winter	Spring	Summer	Fall	Winter
Office/Class	72	72	72	72	30	30	30	30	200	200	200	200

Add Row Delete Row

** Operative temperature includes radiant effects. See Standard 55.*

☒ The combinations of assumed personal factors, operative temperature, air speed, and humidity above are predicted to limit the percentage of dissatisfied people to less than 10% per Standard 55.

Upload supporting documentation with PMV/PPD calculation, ASHRAE comfort tool results, and/or psychrometric comfort zone chart from Standard 55). Upload *Files:* 1

LOCAL DISCOMFORT EFFECTS

☒ Local discomfort effects have been considered and are not likely to exceed Standard 55 limits. When local discomfort effects are likely to occur, calculations were performed to demonstrate that local discomfort effects are predicted to result in less than 10% dissatisfied occupants.

Table. Local Discomfort Effects

Local Discomfort Effect	Not Likely	Calculations Performed
Radiant temperature asymmetry:	☒	☐
Vertical air temperature difference:	☒	☐
Floor surface temperature:	☒	☐
Draft:	☒	☐

ADDITIONAL DETAILS

☐ Special circumstances preclude documentation of credit compliance with the submittal requirements outlined in this form.

☐ The project team is using an alternative compliance approach in lieu of standard submittal paths.

SUMMARY

IEQ Credit 7.1: Thermal Comfort - Design Points Documented:	1