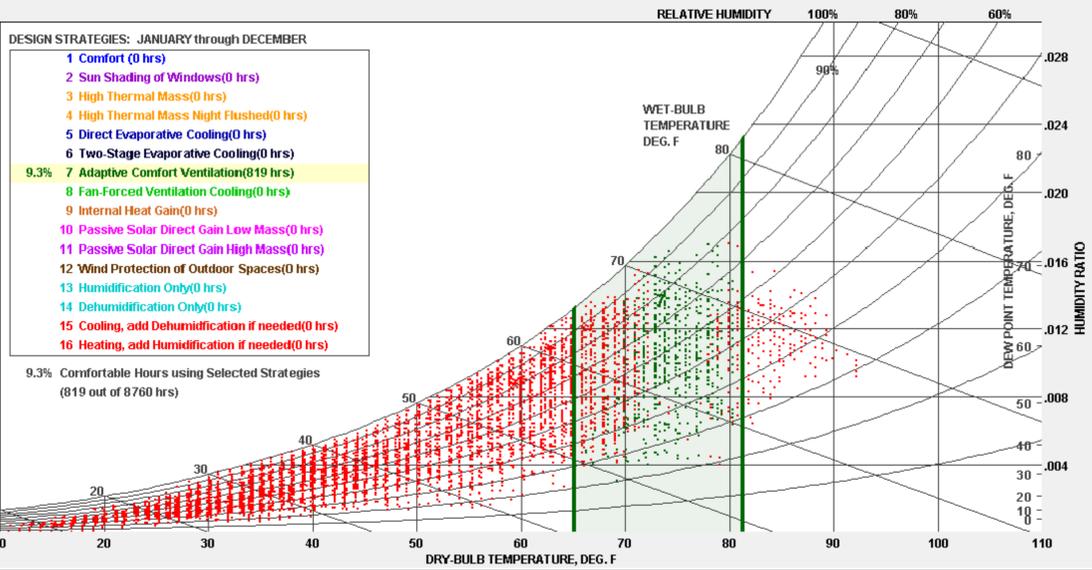


LOCATION: BOSTON, MA, USA
 Latitude/Longitude: 42.37° North, 71.03° West, Time Zone from Greenwich -5
 Data Source: TMY2-14739 725090 WMO Station Number, Elevation 16 ft

DESIGN STRATEGIES: JANUARY through DECEMBER

- 1 Comfort (0 hrs)
- 2 Sun Shading of Windows(0 hrs)
- 3 High Thermal Mass(0 hrs)
- 4 High Thermal Mass Night Flushed(0 hrs)
- 5 Direct Evaporative Cooling(0 hrs)
- 6 Two-Stage Evaporative Cooling(0 hrs)
- 9.3% 7 Adaptive Comfort Ventilation(819 hrs)
- 8 Fan-Forced Ventilation Cooling(0 hrs)
- 9 Internal Heat Gain(0 hrs)
- 10 Passive Solar Direct Gain Low Mass(0 hrs)
- 11 Passive Solar Direct Gain High Mass(0 hrs)
- 12 Wind Protection of Outdoor Spaces(0 hrs)
- 13 Humidification Only(0 hrs)
- 14 Dehumidification Only(0 hrs)
- 15 Cooling, add Dehumidification if needed(0 hrs)
- 16 Heating, add Humidification if needed(0 hrs)

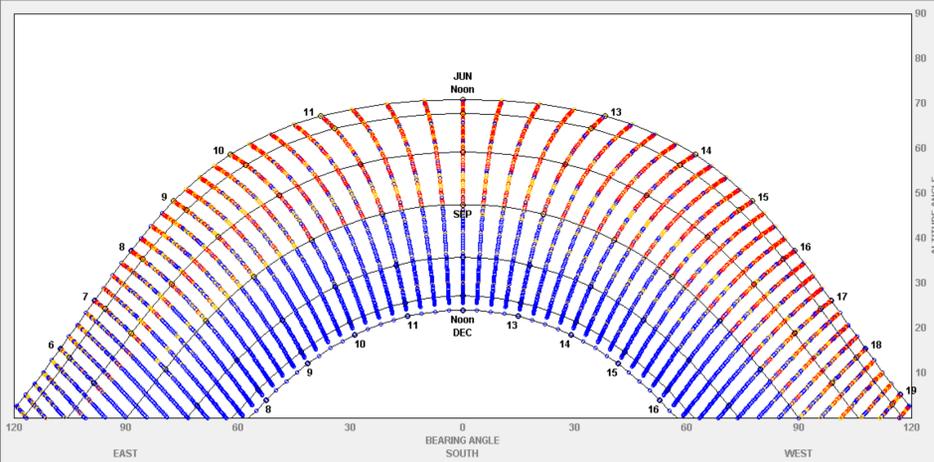
9.3% Comfortable Hours using Selected Strategies
 (819 out of 8760 hrs)



SUN SHADING CHART

LOCATION: BOSTON, MA, USA
 Latitude/Longitude: 42.37° North, 71.03° West, Time Zone from Greenwich -5
 Data Source: TMY2-14739 725090 WMO Station Number, Elevation 16 ft

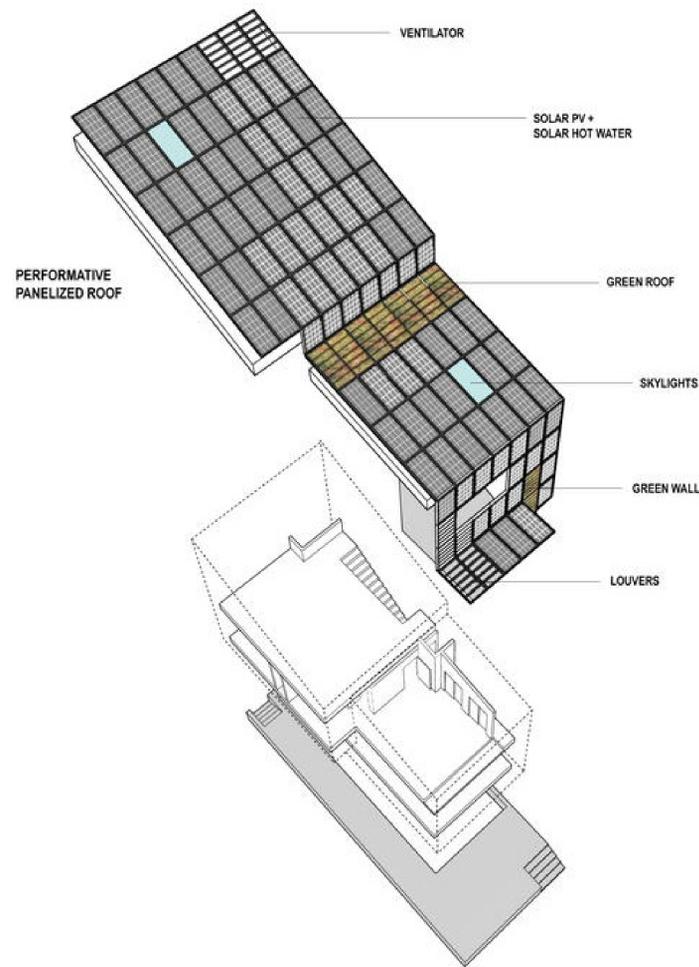
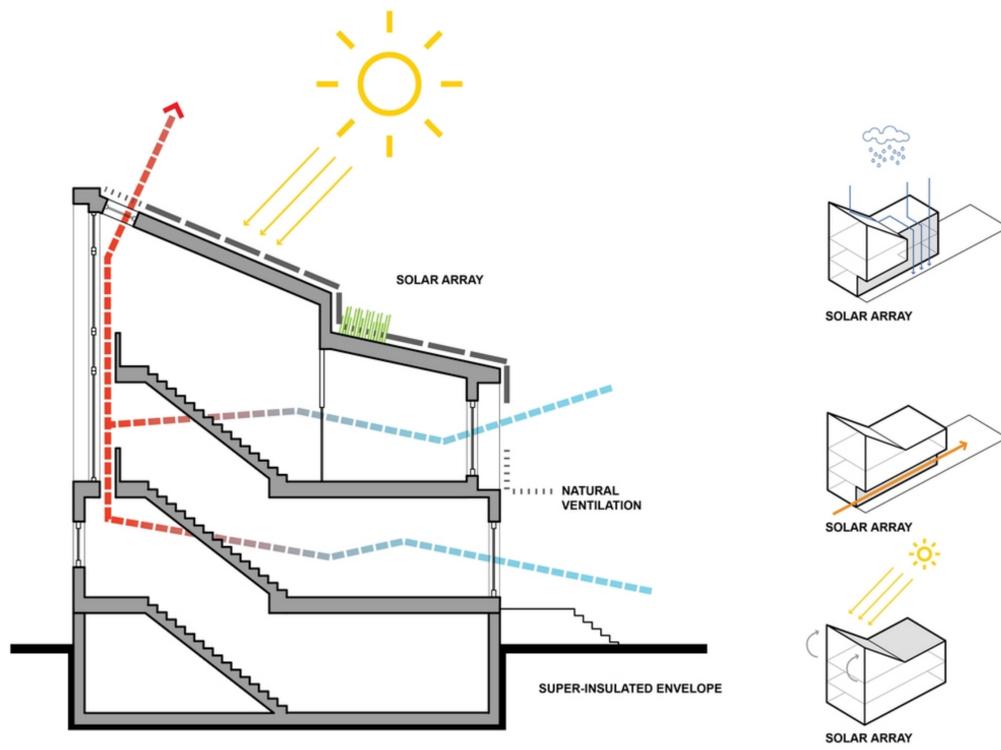
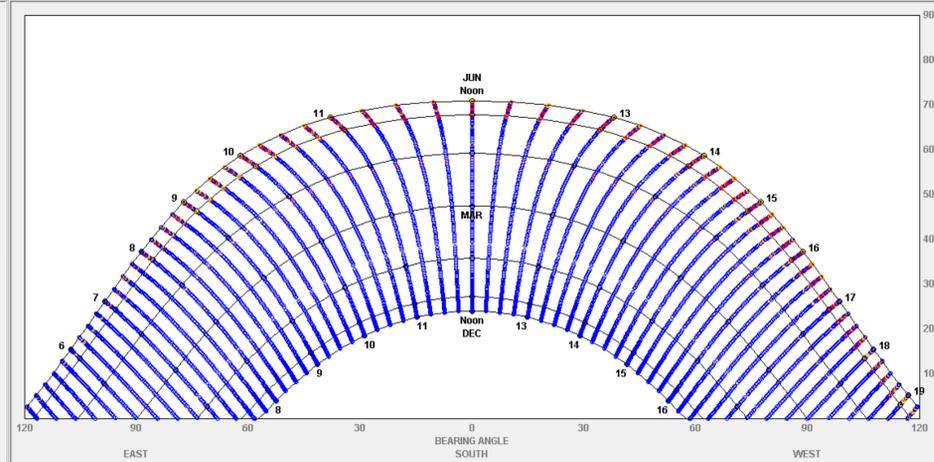
- LEGEND
- WARMHOT > 75°F (SHADE NEEDED) 605 Hours Exposed 0 Hours Shaded
 - COMFORT > 68°F (SHADE HELPS) 524 Hours Exposed 0 Hours Shaded
 - COOLCOLD < 68°F (SUN NEEDED) 1471 Hours Exposed 0 Hours Shaded



SUN SHADING CHART

LOCATION: BOSTON, MA, USA
 Latitude/Longitude: 42.37° North, 71.03° West, Time Zone from Greenwich -5
 Data Source: TMY2-14739 725090 WMO Station Number, Elevation 16 ft

- LEGEND
- WARMHOT > 75°F (SHADE NEEDED) 186 Hours Exposed 0 Hours Shaded
 - COMFORT > 68°F (SHADE HELPS) 169 Hours Exposed 0 Hours Shaded
 - COOLCOLD < 68°F (SUN NEEDED) 2155 Hours Exposed 0 Hours Shaded



PROPOSED PERFORMATIVE COMPONENTS

Roxbury E+

-Roxbury E+ is featuring solar panels to improve energy efficiency of the building. Also the thick envelope of the building and the minimal windows offer the ability for energy saving.

-The building has no flaws as it comes to the efficiency because the building has designed from the beginning as energy friendly.

-Even though that the building is using solar panels there are some spaces on the roof that are dedicated for sky light. That can help the energy saving even better as it is less the use of the electricity.

-The building is designed for year-round occupancy because of its thick envelope that can work as a blocker from the outside temperature.

-The building produce its own energy and that's why it make it more environmental friendly. Actually it produce more energy than it's needed.

-The windows are designed for efficiency and energy saving. Not all of the are opening and most of the are working just to let the sky light get inside. The building has only few windows.

-The envelope of the building is super-insulated for the purpose of not let the outside temperature go inside.

