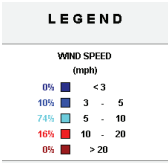
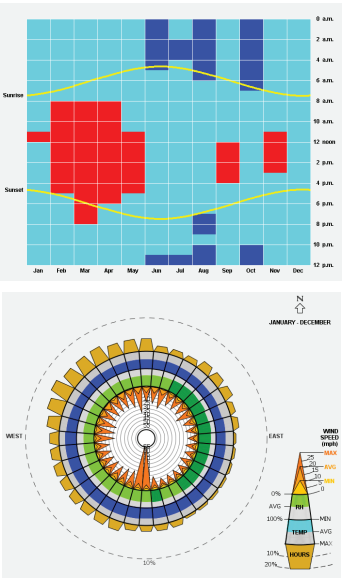


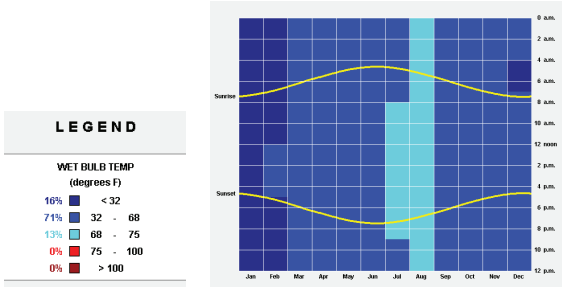
Weather report  
Philadelphia, PA 2017



Wind Speed and Direction

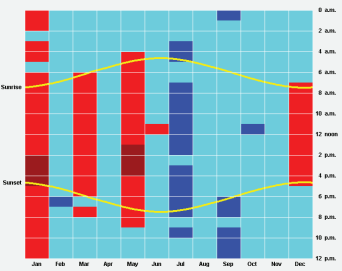
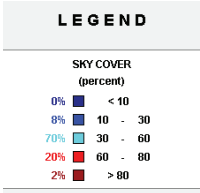


Temperature



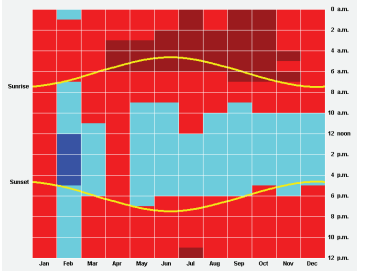
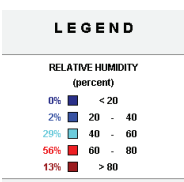
Courtesy of Wet Bulb temperature, 32-68 F is the most prevalent/common across the whole year. However, during July and August, it goes warmer to 68-75F average. In winter time of December to February, the wet bulb temperature goes under 32F but get back to 32-68F in March.

Sky Cover



Overall, Philadelphia's sky is covered around 30-60 % in a year.

Relative Humidity



Passive Design  
Strategies

Passive Heating/Cooling

Using a well-insulated envelope of the building, it captures the internal heat gains. In opposition, using stacked windows or nocturnal cooling allows passive cooling.

Passive Ventilation

Introducing outdoor air into the indoor space with use of air temperature difference and air pressure difference through the spaces. Good space planning and openings to corridors will operate.

Daylighting

High ceilings and tall windows give depths of the space which allows natural lights diffused through a building's interior. (Clerestories operate too)