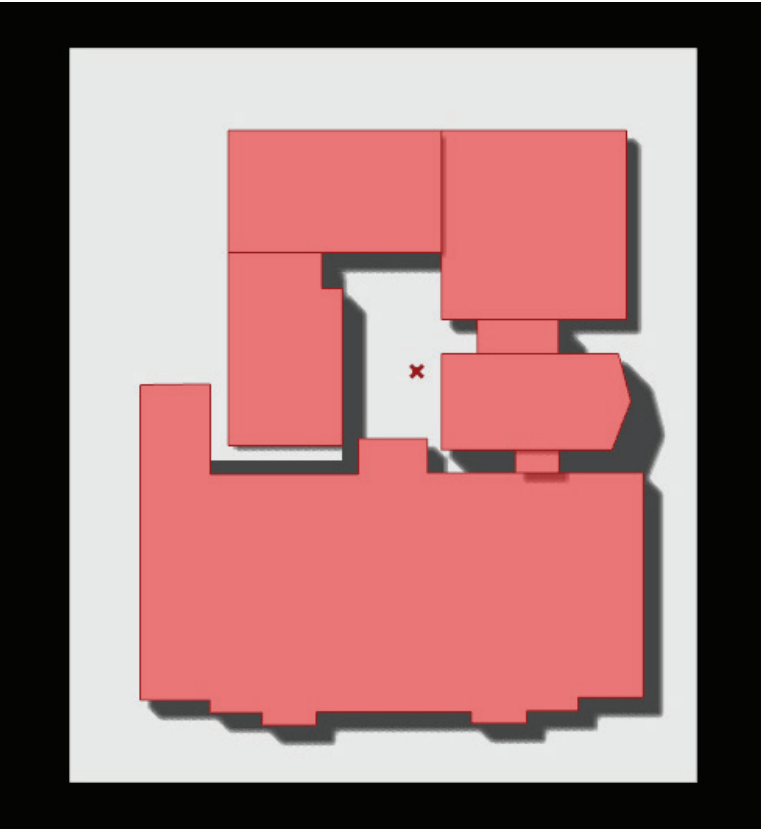
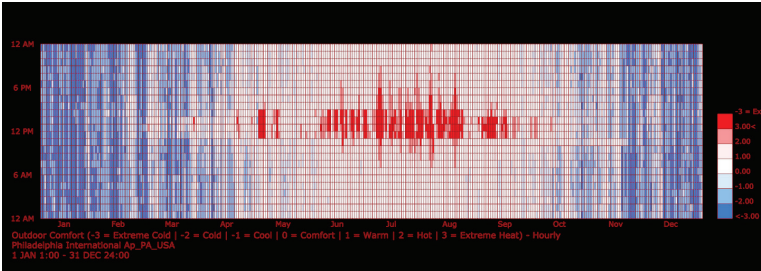


Outdoor Comfort Simulation

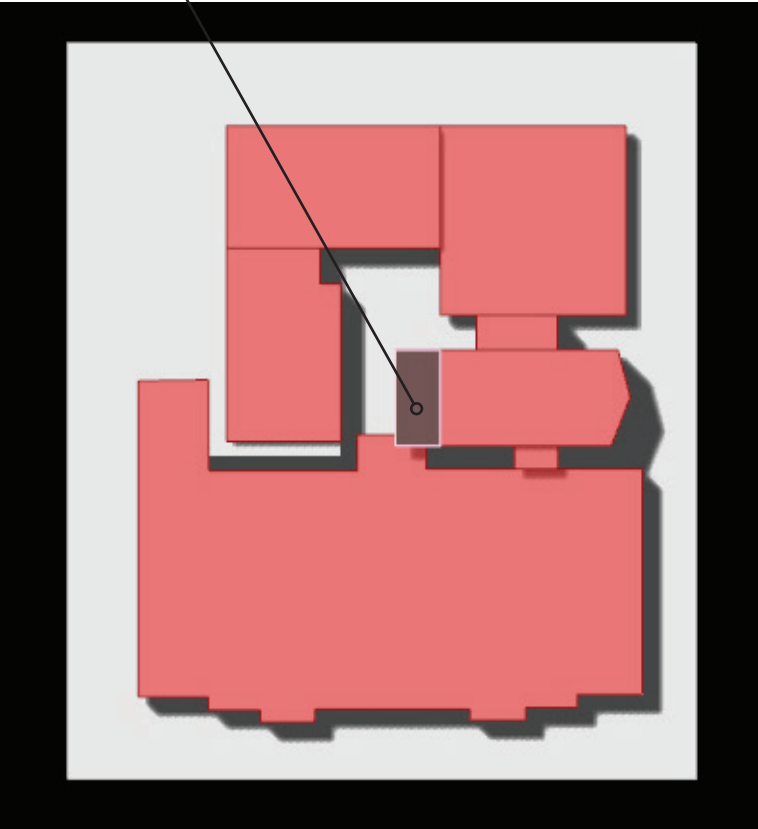
Site: Quain Courtyard



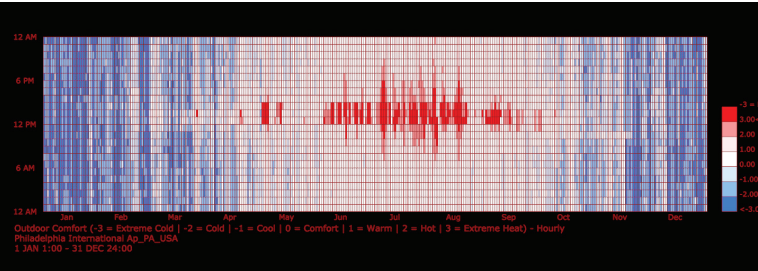
Percentage of Comfortable Hours: 39.47
Percentage Comfortable for Short Period: 5.53



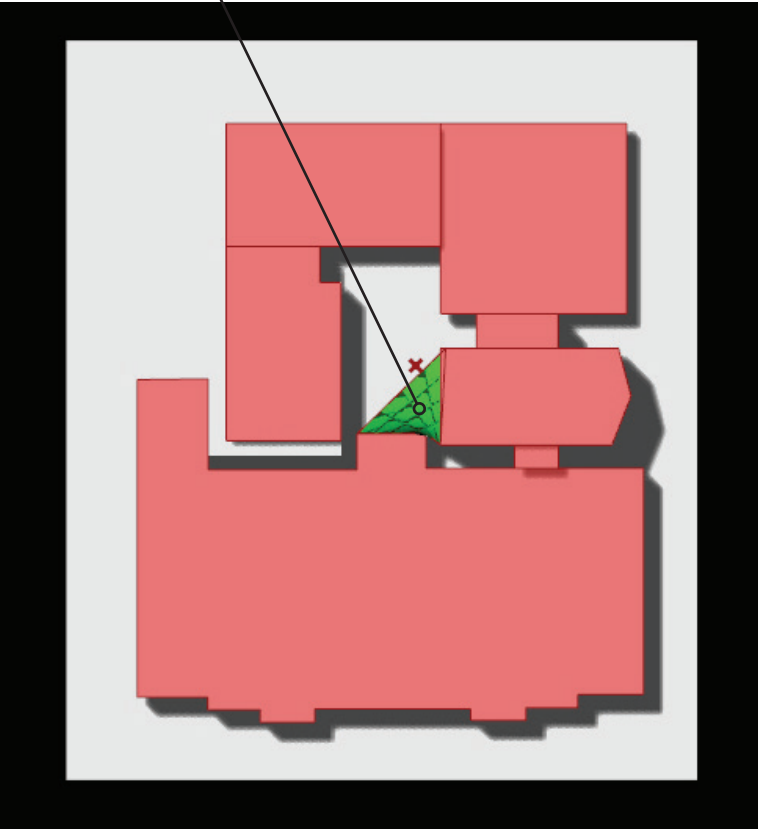
Strategy 1: Horizontal Sun Shade



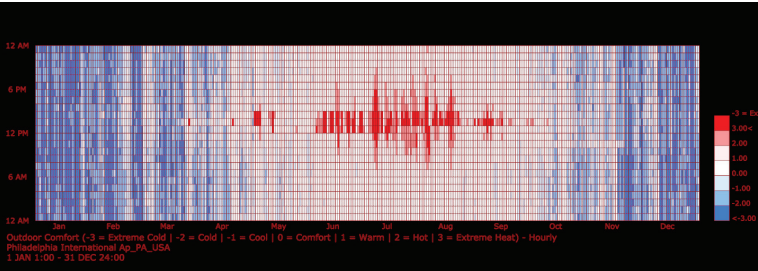
Percentage of Comfortable Hours: 39.95
Percentage Comfortable for Short Period: 4.91



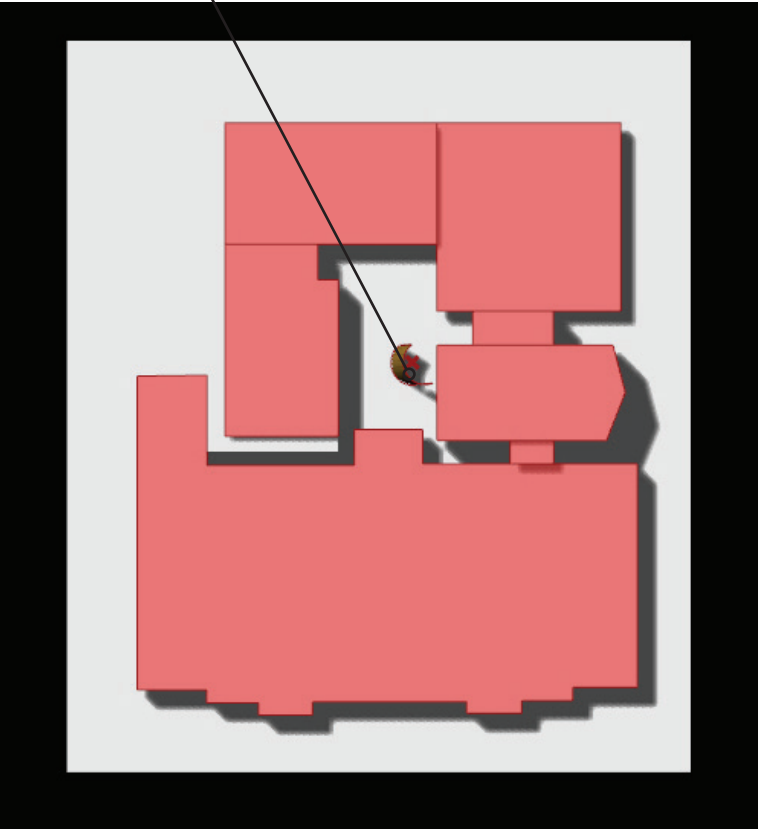
Strategy 1: Canopy



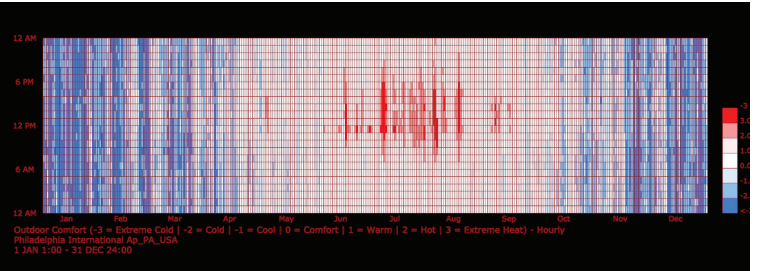
Percentage of Comfortable Hours: 40.01
Percentage Comfortable for Short Period: 4.46



Strategy 1: Pavilion



Percentage of Comfortable Hours: 40.92
Percentage Comfortable for Short Period: 3.16



According to our measurements and to the comfort maps, the main issue with this space is not summer heat but winter chill. Methods of shading counteract the majority of heat gain in the summer but do nothing to affect the comfortability of the space during the winter. The highest percentage of comfortable hours I could attain was about 41%.