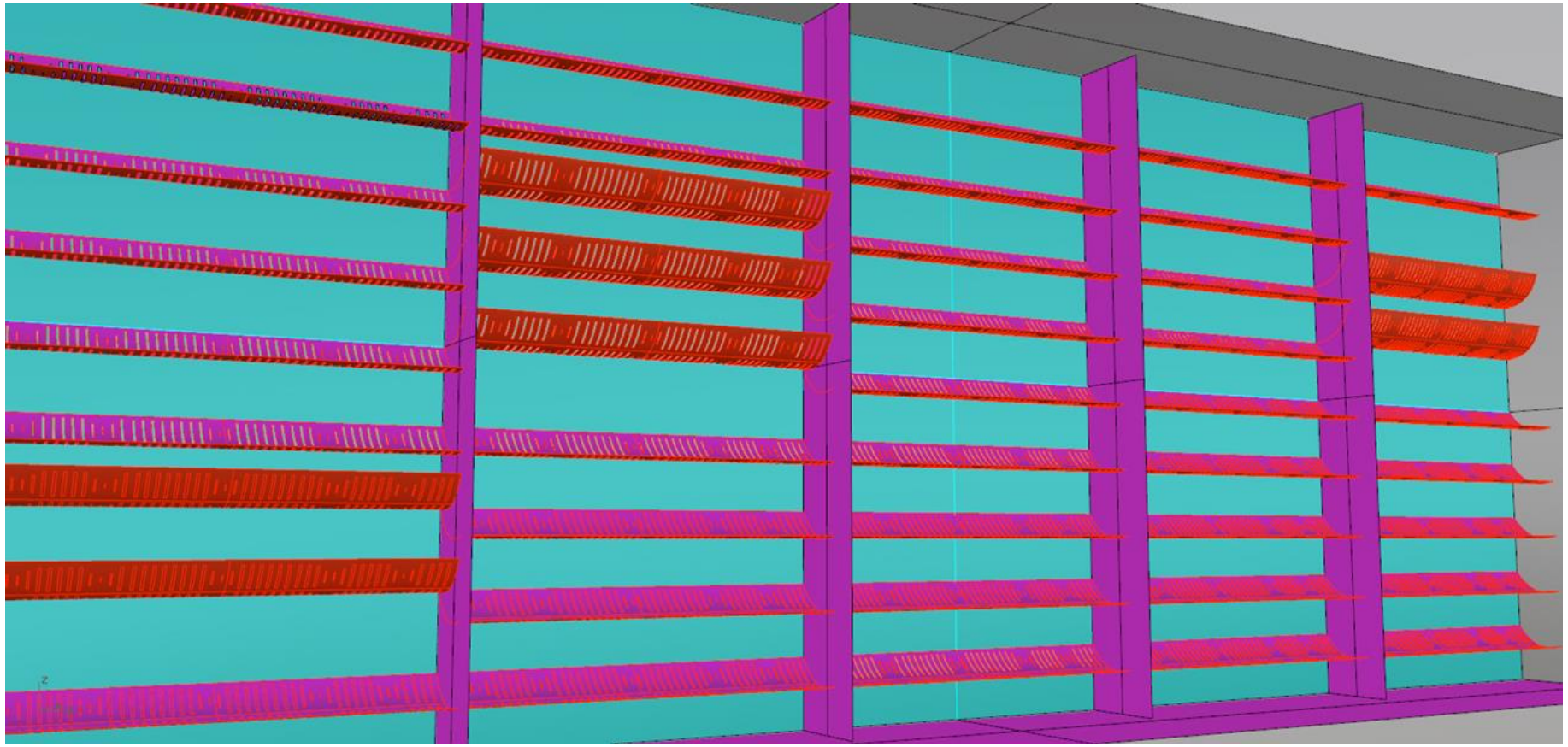

Building Performance Simulation

Energy Simulation I

Heating Loads

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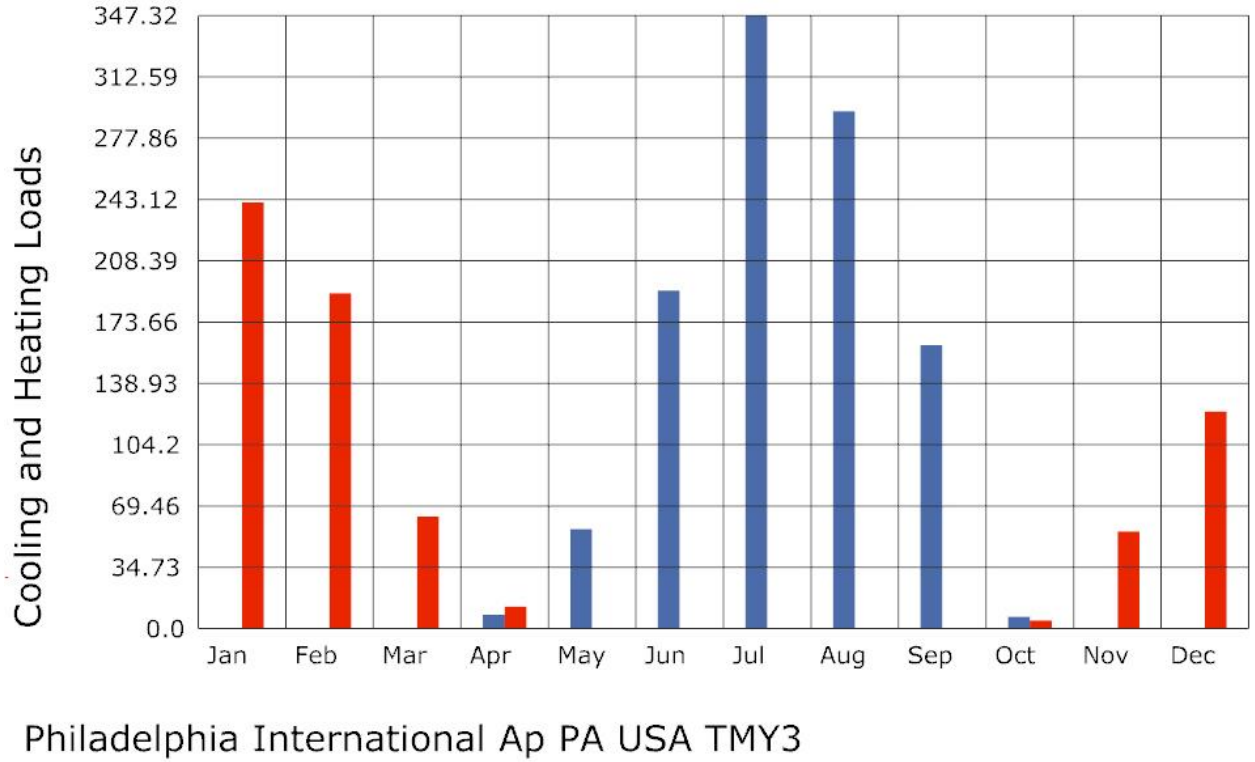
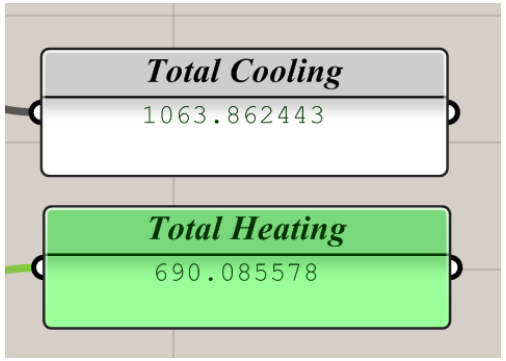
Cooling Loads

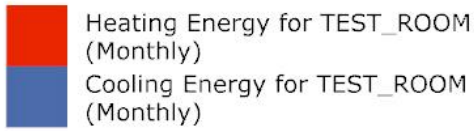
The design intends to create enough sunshading during the summer time while provide enough sunlight during winter time. Before design, analyze the sunlight angle in March, June, Sempt, Dec. Then, according to the sunlight angle to change the direction of the louvers and the depth of the vertical and horizontal shading.

Yuntian Wan

Energy Simulation I







Heating Loads

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Cooling Loads

Compared with best case, the results shows the heating load is too high. This shows if using louvers for whole facade, it is very easy to lose heat during winter. Glass itself is easy to conduct heat between inner environment and outside environment. If reducing the glass part, the heating loading will decrease during winter.

Energy Simulation Analysis Results