

# Q-Tower



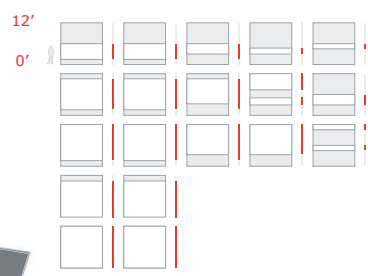
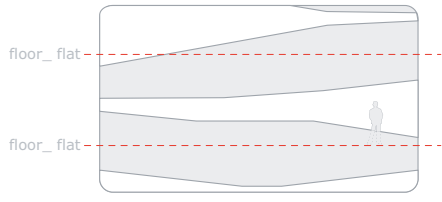
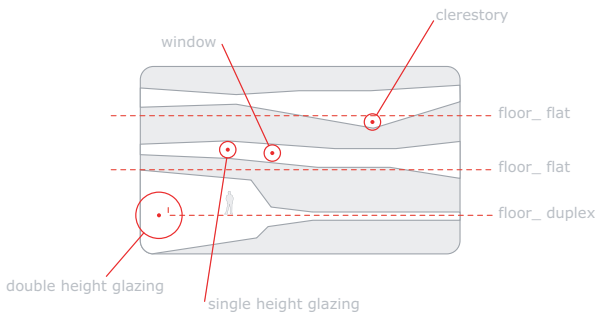
The Q-Tower is a 15 story new residential building with a first floor restaurant planned for Philadelphia's Northern Liberties neighborhood. The building's layout was derived by an algorithmic decision set wherein room types are assigned a desired percentage of glazing depending on type. The transitions between glazing percentages generate the facade patterns, and the resultant transitions feed back into the unit layout so that only effective transitions result. A series of 5 duplex 'penthouses' are scattered throughout the building, allowing for multiple penthouse experiences, not just at the top.

The building structure is a concrete core with a steel frame that follows the form of the building. The facade panels are prefabricated with the alucobond finish and backup stud wall hung as a single, waterproofed and insulated unit. These units are parametrically derived to minimize variants in the number of individual types.

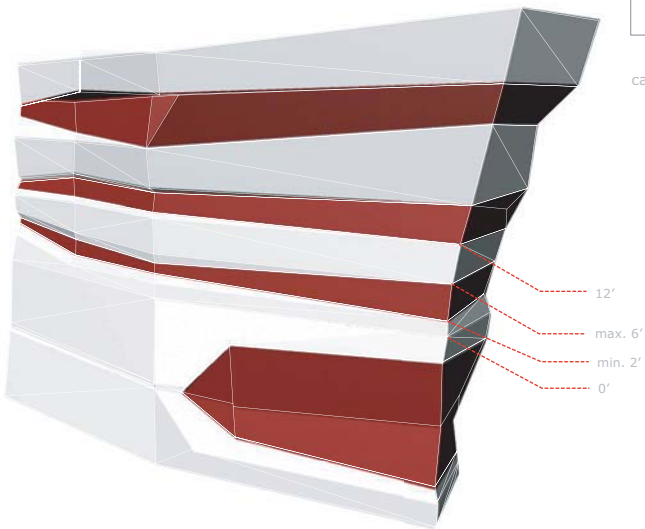
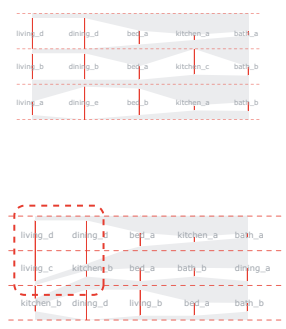


# banding logic

facade algorithm

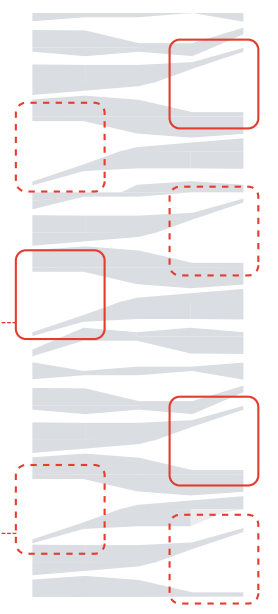


catalog of room types and variations



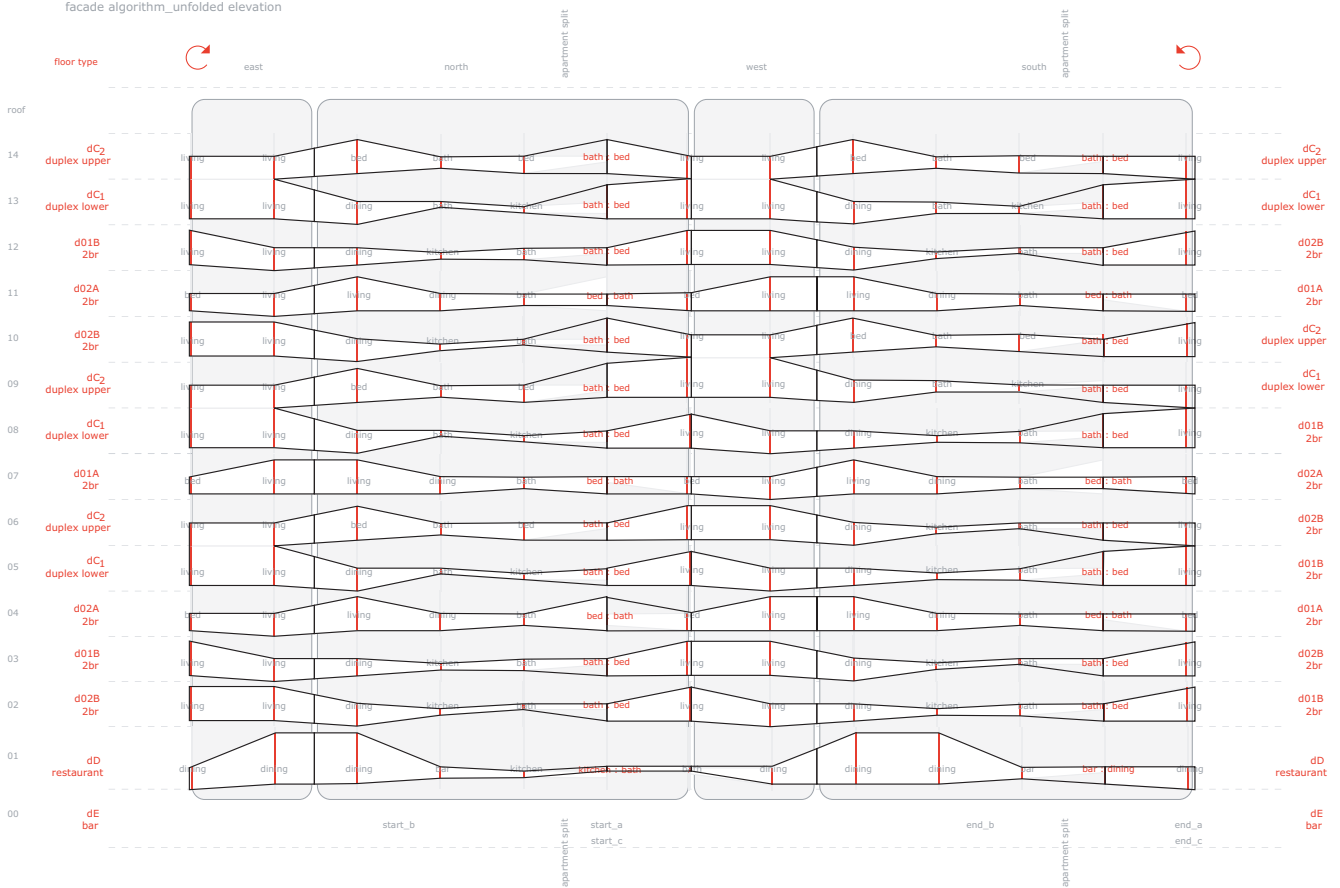
duplex potential utilized

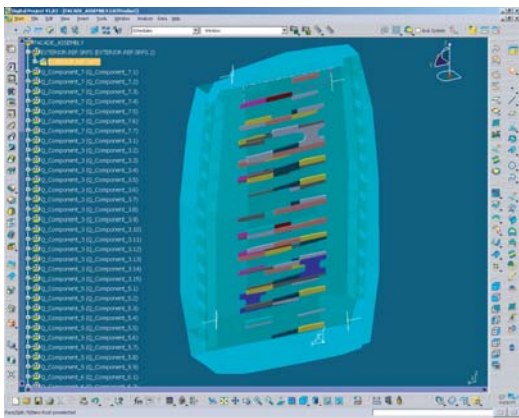
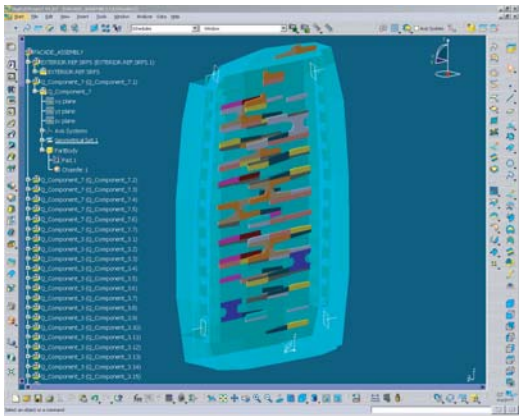
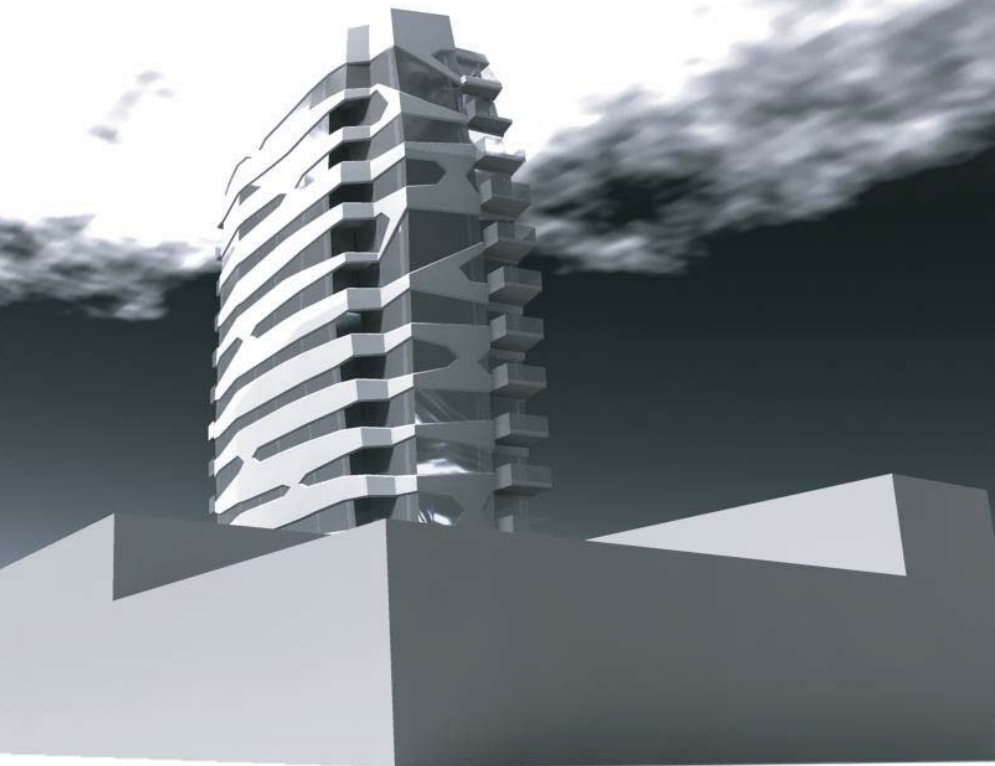
duplex potential unused



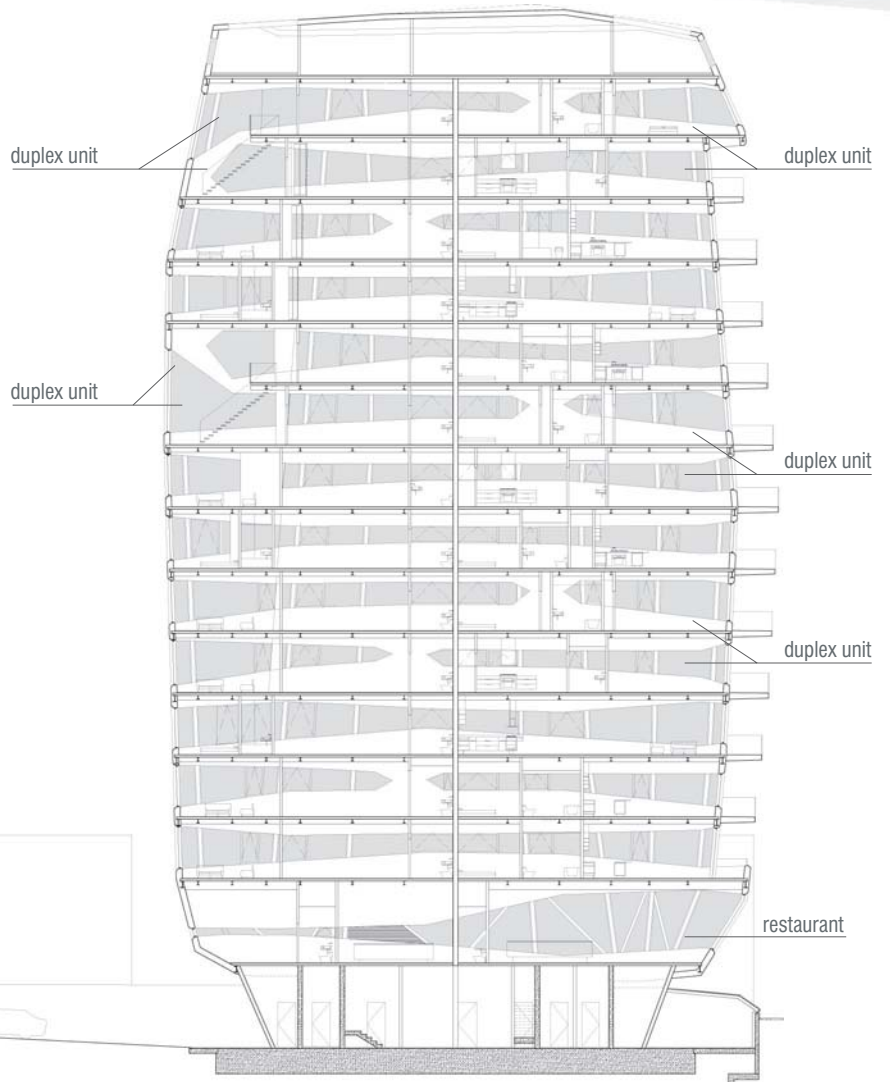
# results\_total

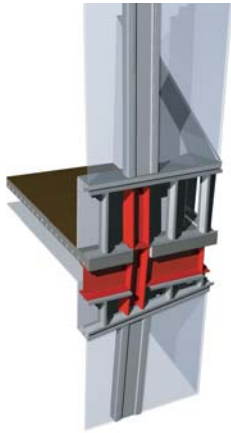
facade algorithm\_unfolded elevation





Parametric panel model - variant families





structurally glazed fixed window

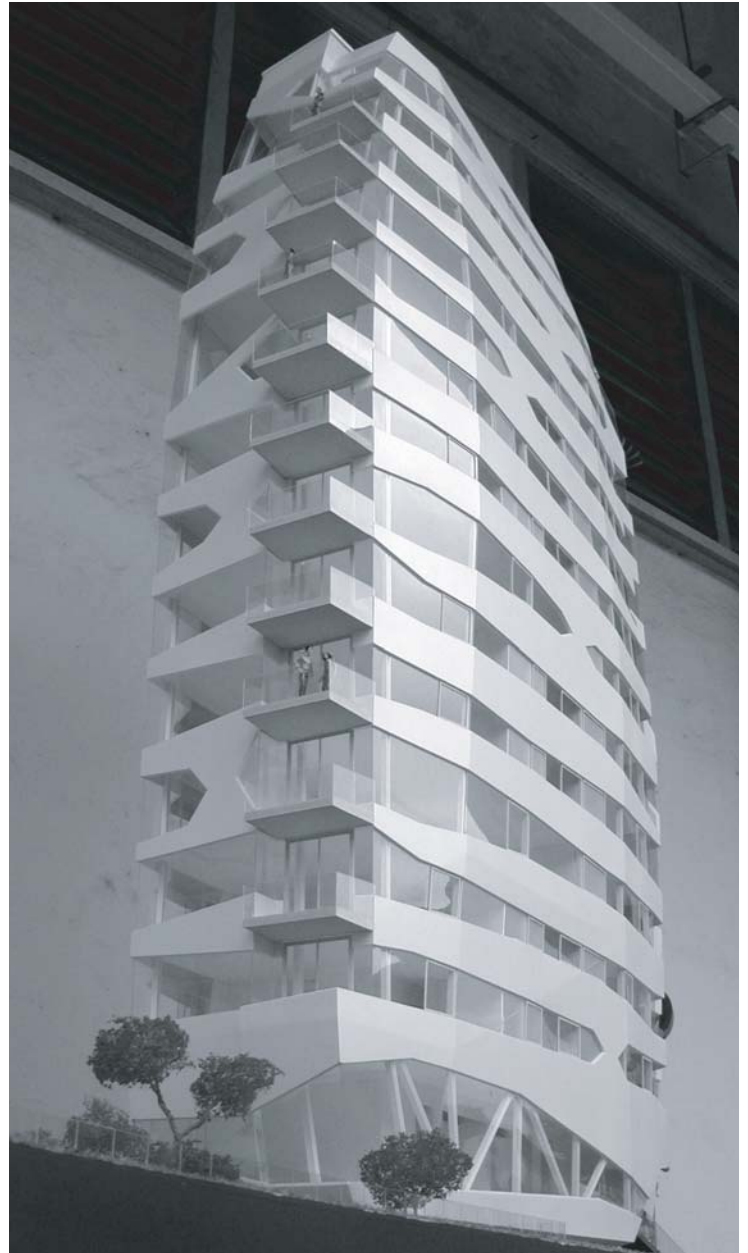
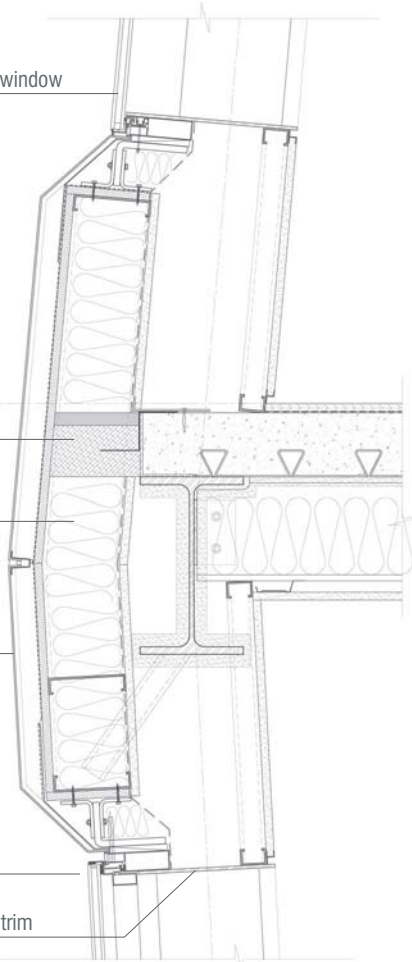
firestopping

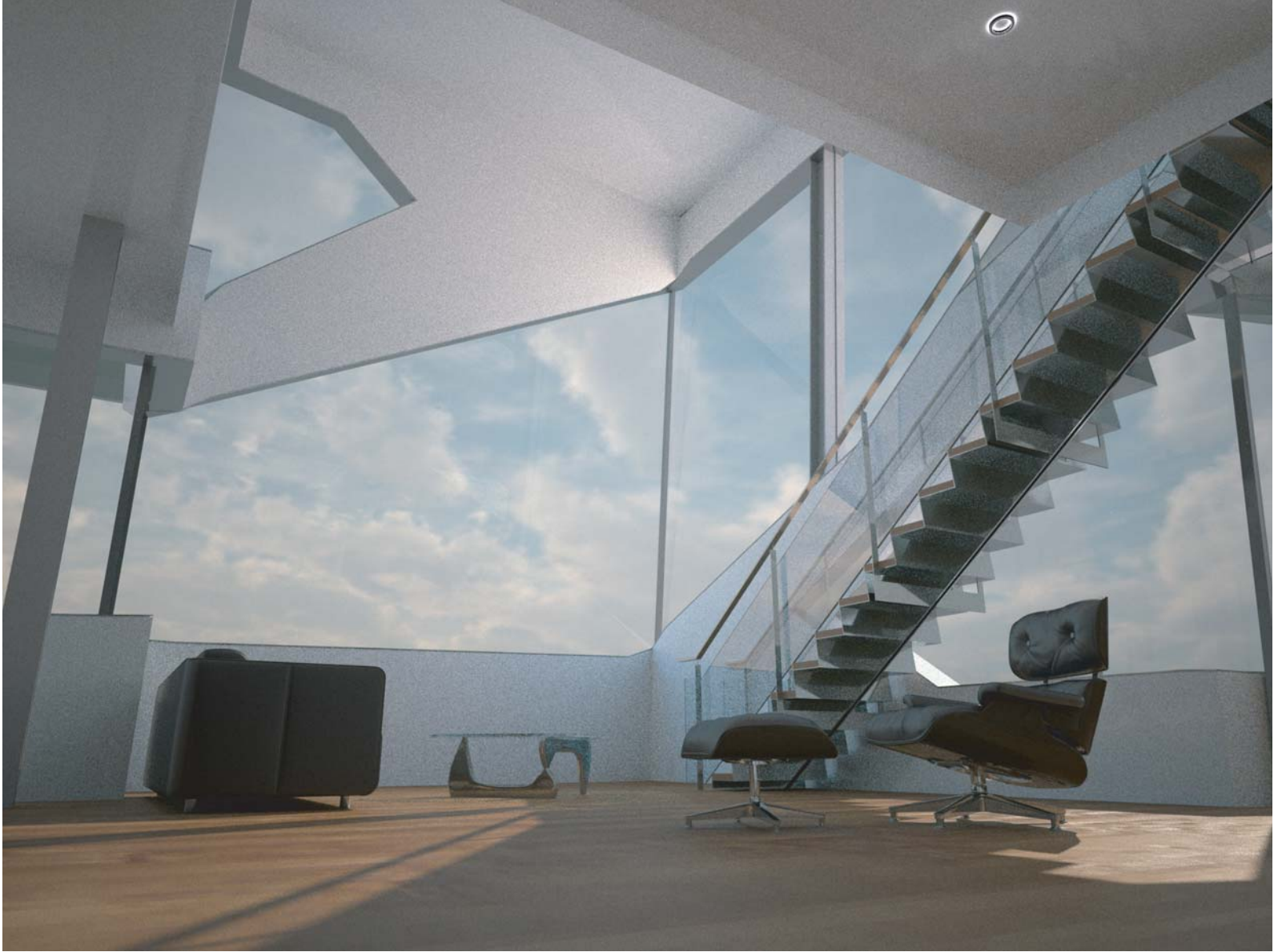
pre-fab metal stud panel  
anchored to slab edge

formed  
alucobond panel

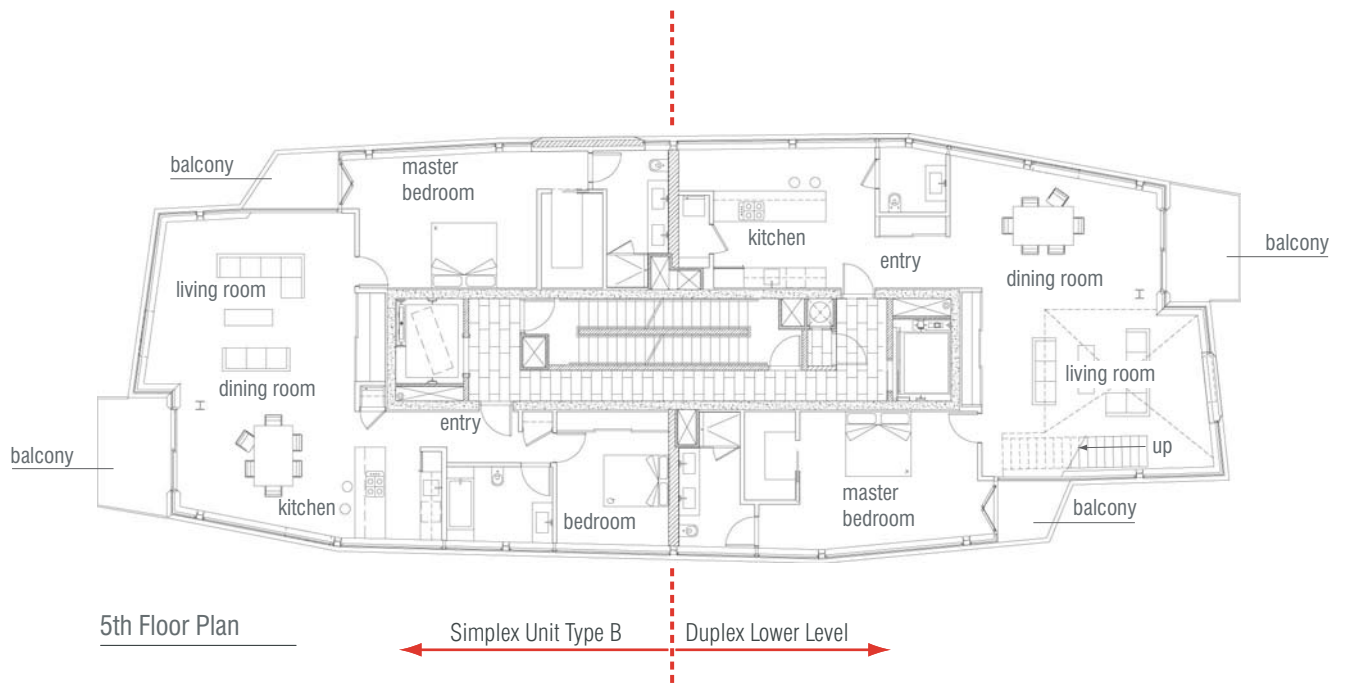
structurally glazed  
outswinging vent

aluminum plate window trim



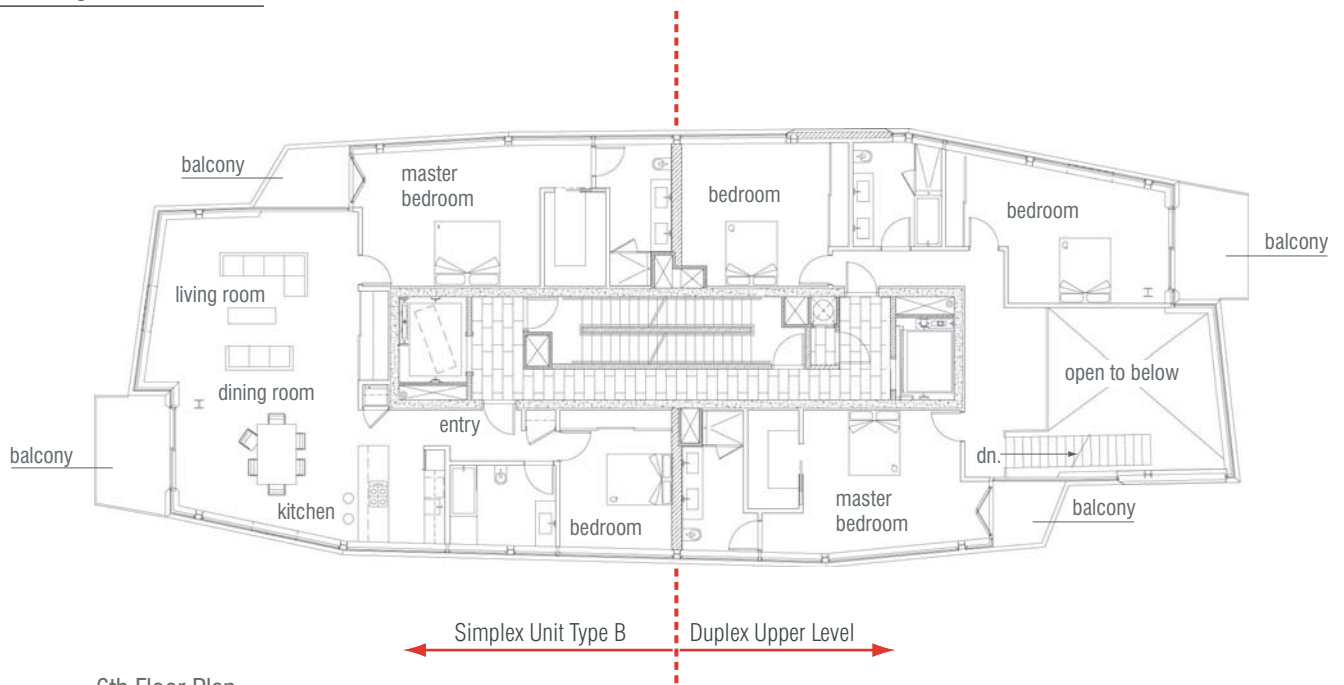


Duplex Living Room View





Duplex Living Room View



6th Floor Plan