

## **272 21st Street, Brooklyn, NY**

### Yin Yang House

The classic diagram for a passive solar house calls for large areas of glazing with overhangs facing south, and limited glazing areas facing north; east and west exposures minimized. This concept was the starting point for this project. The rear of the building faces south, and the front north. The idea of the dark side of the house and the light side of the house finally crystallized into separate black and white facades, and by extension of that idea, into the concept of yin and yang. This has become a guiding principal for playing with mutually interdependent opposites.

Pragmatic concerns guided the form of the building. The zoning envelope and floor area ratio define the limits of the volume. The project is a speculative development in a lower middle class neighborhood, therefore the construction has to be cost effective. The form of the building is a basic box with repeated floor layouts. The structure is masonry bearing walls and brick veneer. However, we are inverting the standard developer construction: the party bearing walls will be exposed on the interior, and the insulation installed on the exterior. By keeping the overall concept as efficient and economical as possible, we are able to pay for the sustainable components and a few indulgences.

In previous projects, we have met Energy Star criteria, which means that the buildings use 30% less than the model energy code. In this building we are attempting to meet the Architecture 2030 challenge, and make the building 60% more energy efficient. Though the building will not be LEED certified, we are following the criteria.

150 words or less...

The project is a 4 story, 4 unit condominium row house development on an infill site. The building is a basic box with repeated floor layouts. By keeping the overall construction as efficient and economical as possible, we are able to pay for sustainable components and a few indulgences.

The classic diagram for a passive solar house calls for large areas of glazing with overhangs facing south, and limited glazing areas facing north. The rear of the building faces south, and the front north. The idea of the dark side of the house and the light side of the house finally crystallized into separate black and white facades, and by extension into the concept of yin and yang. This has become a guiding principal for playing with interdependent opposites throughout.

We are meeting the Architecture 2030 challenge with this building. It will consume 60% less energy than required by code.