

Project Conclusions:

- **Passive solar strategies must have access to the sun path to be effective.**
- **The market place contains patterns of opportunities for this type of water wall installation.**
 - Second levels facing south
 - Backyards facing south
 - Ground level walls facing south with neighbors that have only one story
- **Direct Gain performance:**
 - Direct gain produces too much heat loss at times thermal retention is desired.
 - Direct gain overheats at times cooler temperatures are desired.
 - Lack of solar radiation on cloudy days has a greater negative effect on interior temperatures with the direct gain strategy than the water wall strategy.
- **The Water Wall performance:**
 - Once the Water Wall was installed, it uses little maintenance to operate.
 - The water wall provides longer periods of comfort zone temperatures than the direct gain strategy.
 - Less mechanical assistance would be necessary to achieve comfortable temperatures.
- **The Direct Gain performance was inferior to the Water Wall performance.**
- **The simulation model has the potential to be useful in future projects designing with the implementation of passive solar strategies.**
- **If water walls were master planned into the design of our future communities, there would be a significant reduction in energy consumption, greenhouse gas emissions, global warming, and dangerous climate conditions.**
- **Designing with the implementation of passive solar strategies will provide free renewable energy on a regular basis in the right climates.**