Packing for China - May 2013

We, the students, disassembled the house, packed and loaded the containers all by ourselves within 3 weeks.
Getting Started - June 2013

We finally received our containers after a 2 weeks delay by the Chinese customs. Unloaded our goods into our warehouse and commenced with construction immediately.
Hello BCA Academy - June 2013

BCA Academy tutors and students joined us in constructing the house for a week. We gained invaluable construction knowledge and learnt to work together, taking a step closer to completing the Solar House.

Provided construction training and collaboration opportunities between the two schools
Building Teamwork - June/July 2013

Given the scale and weight of building components, we learnt that a pair of hands is not enough. Lifting, carrying and installing each component required combined efforts of two or more people. Every part of the house can only come together through sheer teamwork.
Live, Work, Play - June/July 2013

In order to complete this major feat, we lived, worked and played at the warehouse.

- Sponsored control logic, keypad and cables for intelligent home systems control
  - CRESTRON

- Sponsored FCU, compressor, ducting and on-site supervision
  - MITSUBISHI

- Sponsored PSM and MPPT for our LVDC system
  - NEXTEK
Fostering Communication and Coordination - July 2013

Once the engineering services have been embedded within the corridor walls, we proceeded to hoist all three parts of the house into one. Constant adjustments through physical pushing were required to correctly align the three blocks.
Show-stopping Traffic - July 2013

We successfully hoisted our three building blocks (North, corridor, South) onto the trailers and moved to our competition site. Due to the height of the house, we had to get onto the scaffolds to prop up the wires to allow the trailers to get through. The transportation of the house was an uphill task that would not have been possible without the involvement of local traffic police.
Working with Constraints - July 2013

We had to manoeuvre each building block using two 25 tonne crane on an 18x18m plot. Albeit the tight site constraints, we managed to steer and piece the three blocks into one whole house. Once the primary structure was in place, we proceeded to install the secondary structure, timber screens and PV panels.
Finishing Touches - July 2013

While the secondary structure was being worked on, major interior works of applying putty and installing built-in cabinets were carried out. After cleaning up, we managed to install the flooring and all the furnitures.

Sponsored skylight, window and door frames

Sponsored architectural glass for skylights, windows and doors
After 13 days of competition assembly period with the students clocking up to 18 hours of work per day, the house was finally completed and ready to receive guests!

Sponsored surface finish paints that reduces heat build up

Sponsored 20 Accoya timber louvers panels as sunscreens
Monitoring Resource Consumption - Aug 2013

The smart house is equipped with a computer that reflects the amount of electricity and water generated and consumed. Quality of filtered water as well as amount of hot water generated by our solar thermal panels are also reflected. This way, home owners are made aware of their lifestyle consumption habits and are able to consciously adjust themselves.

Sponsored structural decking system, roofing and walling profiles

Evorich Holdings
Sponsored High End Resilient Flooring

Sponsored radiant heating system that distributes energy uniformly and efficiently
Sponsored high density glass fibre acoustic ceiling panels with accessories

Sponsored motorised window blinds with efficient light filtration features

Sponsored resource efficient laundry room and kitchen appliances
Flexible Living Spaces - Aug 2013

Designed as a Small Office Home Office (SOHO), it is imperative for the living spaces to be readily converted into conducive work environments.

In the bedroom, the bed can be folded up to allow for the space to be used as a personal office.

In the dining room, the dining table can be extended to accommodate more people for a meeting to be convened.

The kitchen doubles up as a pantry.
Sponsored water efficient sinks, faucets and water closet

Sponsored bathroom shower fixtures with jet selection and thermostat
Sponsored data loggers for systems monitoring

Sponsored greywater and booster pumps

Sponsored electrical distribution boards and cables
Public Tours - Aug 2013

The house was well received by the public with an estimated 20,000 visitors throughout the competition period.