

Escuela Técnico Maya Design + Construction Update

August 2 - 15, 2010

- BBC World Challenge filming - site cleaned and organized.
- Workshop 3 roof poured, new glass bottle design. Thin-shell concrete consists of small gravel, cement, sand and water. The formwork is created by metal mesh, rebar, and bent plywood sheets - supported from the inside by wood. Metal mesh is also cast into the concrete, along with the glass bottles. Small concrete spacers lift the metal mesh off the plywood to ensure it is cast in the middle of the concrete. The glass bottles are tied into the metal mesh with tie wire to ensure they make a tight connection with the plywood, and no concrete can get underneath. Electrical conduit is also laid into the wire mesh.
- The concrete is made in a mixer and bucketed up to the roof, where it is applied by hand with trowels and floats. Two small windows are cut into the concrete on the back dome with a template, while it is still wet and can be removed. Three ribs are cast onto the roof for added structural support. A thin layer of yellow sand is applied to the entire roof once the concrete has been poured.
- After one week the formwork is pulled from the inside and forming the next roof begins.
- Glass bottle facade at Workshop 2 completed, form to be pulled.
- Waterproofing material applied to completed roofs.
- Interior wiring completed in Workshop 1 and connected to post at entrance.
- Discussed overall site drainage plans with Phuc of EWB-N.Texas

1 roof form; 2 tying in glass bottles; 3 applying concrete; 4 Workshop 2 bottle facade



Plans for next two weeks . . .

- Form and pour Workshop 4 roof
- Move tool and material storage to Workshop 3, make temporary door, fix Workshop 2 door
- Patio roof, Site drainage, Waste management
- Dry-composting latrine