Case Study House 29

The Print Age

Designing a case study house in relation to an era from seven years ago (mid 20th century) in the exam of the vast differences in lifestyle within the time Case Study House 29 (CSHH) houses on the differences in technology. Many things have changed with the case study house emphasis in the evolution of new experimental model of design and construct; the largest opportunity of technology. In the 1950s the case study houses were designed for built and replicate anywhere in the United States, leaving out site relationships and regional climate that are key to making architecture work well. CSHH does not focus on the duplication of the site or water system. Can either the technology that is used to create. With today's technology 3D printing, algorithms and parametric design; the new case study house allows for individual performances based on duplication of construction approach. Since the 40's construction of residential structures has changed little. The first case study house in post war America utilized the wide use of steel, glass, aluminum, resilient materials and open spaces for material design.

CSHH strives to lead a new era of materiality and constructability. With labor, material and energy costing being a better relative must be built. CSHH focuses on research from MIT and Loughborough University studying 3D printing of concrete and recyclable material. CSHH is a duplicable construction method using large format 3D printers and the output of recycled Lightweight Concrete developed in Germany. The idea stems from the ability to quickly make building units from an easily transportable 3D printer created in asia that can easily be loaded by one of two workers. The units work in composition like a historic stone or arc, compounding against one another to create our structure. After ejected it is fed together with post processing by cables fibbing through the units to allow for connections and large spans. The construction method becomes the structure, the shear forces for mechanics and electric, the gaskets for tight and even the final frame. Each unit is unique as a sprocket, once again they are individual performances that are capable of duplication, no two units exist, however they share the duplication method. The units form and shape are generated by structure light and vary the size construction, each unit has an R/C tag on its corner. Through GPS the 3D printer can make adjustments in realtime as construction is happening (light modifications are needed).

Case Study House 29 is the new era where the methods is duplicating, the project is individual and a greater relationship through technology is established through the Architecture and relationship of site.

1. Made it 3D print truck; partnered with conventional concrete truck
2. Direct comparable to conduct construction
3. Fast time adjustments to project through GPS and R/C large panel in each unit corner
4. Recycled content into Lightweight Concrete onto easy to raise/sun without special equipment
5. Unit assembly is able to be moved on purposeful spectacles allow the structure to support load as an anchor or dome
6. Once finished in place the units are post treated with simple hand tools
7. Unit walls are used for insulation, mechanical - electrical chases and light openings

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