



People have been talking about 3D printing for years; we first showed Contour Crafting's models in 2007. When WinSun Decoration Design Engineering Co. showed off their 3D printed houses in April many couldn't believe it and thought it was a fraud. Here was a Chinese company squirting out fiber reinforced cement made from waste materials and construction debris, into complex concrete trusses that were tilted up into buildings! Amazing stuff, even if they didn't look particularly handsome.

Well that didn't take long. Just eight months later, they are squirting out cement chateaux and five storey apartment buildings, everyone is so shocked and confused they have forgotten how to count and keep calling it six storeys.



In the earlier houses, the trusses were printed flat and tilted up, which made a huge amount of structural sense; you can't print out a truss vertically. Of course, purists complained because that wasn't what they thought 3D printing should be, which is like every little 3D printer. Purists will complain again here because in fact this is not a 3D printed wall; it is really 3D printed formwork. After the printer finishes, reinforcing steel is added and it's filled with concrete. Then floors appear to be formed and poured conventionally; you can see markings of conventional formwork in the slab BELOW

The construction methods, according to the company, are able to SAVE 60 percent of the materials typically needed to construct a home, and can be printed in a time span which equates to just 30 percent of that of traditional construction. In total, 80 percent less labor is needed, meaning more affordable construction, and less risk of injury to contractors. Without a doubt, this is probably one of the the most exciting accomplishments within the 3D printing space we have covered.

Source [Lloyd Alter, TreeHugger](#)