Permanent Housing in the Bahamas

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Background
- Around 50% of the Bahamas economy is tourism
- Most of the insured properties in the Bahamas are big hotels and businesses, not individually owned homes
- The Bahamian government set up a trust fund that grants up to $10,000 to those affected
- About 90% of Bahamians live in low elevation zones primed for flooding

The octagonal shape of the design allows wind to be diverted in multiple directions. 4’ stilts will protect against severe flooding. Wind proof sheathing used for the roof.

The Challenge
- Hurricanes pass by the Bahamas once every 2 years, and are directly hit once every 4 years
- Structural integrity of homes in the Bahamas
  - Boxy
  - Non-elevated
  - Non-impact resistant windows
- August 24, 2019 Hurricane Dorian hit the Bahamas
- 70,000 are left homeless
- $1.5+ Billion in damages

Construction Methods
- 3D printed using Enhanced Concreitious Composite (ECC)
- Connected to the framing via roof clips
- Hurricane proof windows an extra layer of protection when storms hit

350 square foot 3D printed house costing only $4000