

# 3D Printing Concrete - Sam Leong

## Pros:

- Reduces manpower and waste while increasing productivity and geometric freedom
- Prefabricated modules assembled on-site
- Large scale (30' x 30')
  - Gantry or robotic arm system



## Cons:

- Traditional concrete clogs the printer nozzle and doesn't adhere to previous layers well
- Companies often use proprietary cement mixes (more expensive)
  - Super-plasticizers to remove water
  - Fibrous materials for strength
  - Some can be cured instantly with UV light
    - Allows for horizontal printing without supports



Source: <https://all3dp.com/1/3d-concrete-printing-guide/>