



## Benefits of 3d Printing Technique

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### DIGITAL

- The process is **DIGITAL** printing, exactly like a personal printer (ink jet printer).
  - The printer combines 4 main colors (blue, yellow, black, brown) to create the colors in the design.
  - The digital print process is different from rotocolor in that it does not touch the surface of the tile...the ink is "sprayed" on in a very controlled manner, allowing for intricate designs.
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### DESIGN

- The **DESIGNS** are practically limitless.
  - The process allows us to scan in virtually any image, and reproduce that image on tile, just like scanning and printing a picture.
  - We have the ability to scan over 100 different pieces of 12x12 stone and recreate them exactly on the production line, *at the maximum resolution*.
  - The degree of resolution determines the number of unique faces we *begin* with; at a lower resolution we can *begin* with more unique faces.
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### DEFINITION

- The **DEFINITION** achieved through this process is much higher than the typical rotocolor technology.
- Digital printing is measured by "dots per inch" or "dpi". Higher "dpi" typically means better resolution. In this case, it can also be related to the number of unique faces of tile. The higher resolution, the fewer unique faces.
- If we print approximately 100 12x12 tiles at the maximum 360 dpi, we will fill the memory. If we choose to lower the "dpi", we can print a higher quantity of square footage without a repeat.
- The technology allows the design to be printed in all the grooves and indentations.
- Synchronizing patterns is not an issue.
- Will print to the edges, no more framing effect.

## Drawbacks to 3d Printing Technique

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- Digital print technology is very expensive.
- Ink is expensive...think of the costly ink cartridges for a home printer.
- The higher the "dpi" the more ink we use, just like pictures on the printer in your home, and we're printing at the highest "dpi" possible.
- Color limitations - cannot print reds.
- Limited capacity for production. The sensitive heads on the printer can easily become worn out, so we are limited to number of square feet run per day.