


**Description**  
 Tough Resin was designed to simulate ABS, with comparable tensile strength and modulus. It is a sturdy, shatter-resistant material that was developed to withstand high stress and strain. When it yields, it will undergo deformation rather than immediately shattering. It is a great choice for “works-like” prototypes.

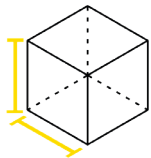
**Uses**  
 Assembly prototyping  
 Fit testing  
 Functional prototyping

**Colors**  


**Material Properties**

Tensile Strength	●●●○○	Flexibility	●●○○○
Brittleness	●○○○○	Durability	●●●○○

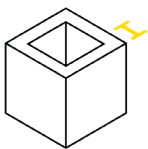
**Maximum Build Volume**



145 mm x 145 mm x 175 mm  
 5.7 in x 5.7 in x 6.9 in

The maximum size we are able to print for this material.

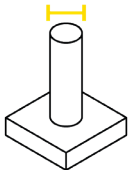
**Minimum Wall Thickness**



0.6 mm  
 0.236 in

The minimum thickness a wall can be printed.

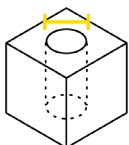
**Minimum Vertical Wire Diameter**



0.3 mm  
 0.01 in

The minimum diameter a pin can be printed at.

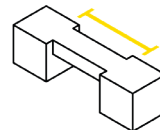
**Minimum Hole Diameter**



0.5 mm  
 0.021 in

The minimum diameter a technology can successfully print a hole.

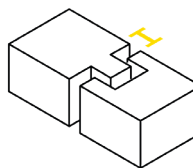
**Max Unsupported Bridge Length**



1 mm  
 0.39 in

The span a material can print without the need for support material.

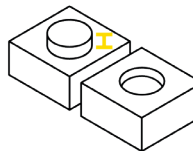
**Minimum Clearance**



0.35 mm  
 0.013 in

The recommended clearance between two moving or connecting parts.

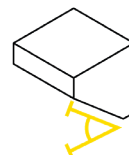
**Minimum Detail**



0.1 mm  
 0.0039 in

The recommended height of details that are raised or recessed below the model surface.

**Maximum Overhang Angle**



19 degrees

The maximum angle a wall can be printed at without requiring support.