



SLA® Build Specifications

## Fused Deposition Modeling

**Fused Deposition Modeling (FDM®)** is an additive process that utilizes a plastic filament unwound from a coil to supply material to an extrusion nozzle. This extrusion nozzle is heated and melts the material as it passes through the nozzle to be deposited layer by layer. The nozzle not only regulates the flow of material but also moves both horizontally and vertically and is guided by computer aided design (CAD) software. The model is built layer by layer as the material hardens immediately after extrusion from the nozzle. FDM® models can be produced from various thermoplastic materials in a variety of colors.

### FDM® Build Specifications

**Maximum Build:** 24x20x24in  
**Layer Thickness:** .010”  
**Minimum Wall Thickness:** .020”  
**Tolerances:** +/- .005” for the first 2”,  
+/- .002” for each additional inch

	<b>ABS</b>	<b>Polycarbonate</b>	<b>ABSi</b>	<b>PC/ABS</b>	<b>ABS-M30</b>
<b>Features</b>	<ul style="list-style-type: none"> <li>• Durable</li> <li>• Impact Resistant</li> <li>• Dimensionally Stable</li> </ul>	<ul style="list-style-type: none"> <li>• Light Gray in Color</li> <li>• High Impact Strength</li> <li>• Durable</li> <li>• Superior Mechanical Properties Over ABS</li> </ul>	<ul style="list-style-type: none"> <li>• Translucent in Color</li> <li>• Increased Strength Over ABS</li> <li>• High Impact Strength</li> <li>• Good Dimensional Accuracy</li> <li>• Good Shape Retention</li> </ul>	<ul style="list-style-type: none"> <li>• Black in Color</li> <li>• Heat Resistant</li> <li>• Superior Strength</li> <li>• Rigid</li> <li>• Superior Mechanical Properties</li> <li>• Durable</li> </ul>	<ul style="list-style-type: none"> <li>• Durable</li> <li>• 25%-70% Stronger than ABS</li> <li>• Great Feature Detail</li> </ul>
<b>Applications</b>	<ul style="list-style-type: none"> <li>• Concept Designs</li> <li>• Visualization Models</li> <li>• Flow Models</li> </ul>	<ul style="list-style-type: none"> <li>• Automotive Applications</li> <li>• Aerospace Applications</li> <li>• Medical Applications</li> </ul>	<ul style="list-style-type: none"> <li>• Flow Models</li> <li>• Medical Models</li> <li>• Automotive Applications</li> </ul>	<ul style="list-style-type: none"> <li>• Automotive Applications</li> <li>• Aerospace Applications</li> <li>• Telecommunications Applications</li> </ul>	<ul style="list-style-type: none"> <li>• Conceptual Models</li> <li>• Design Verification</li> <li>• Functional Testing</li> <li>• Low Volume Production</li> </ul>
<b>Finish Options</b>	<ul style="list-style-type: none"> <li>• Standard</li> <li>• Available in White and Red</li> </ul>	<ul style="list-style-type: none"> <li>• Standard</li> </ul>	<ul style="list-style-type: none"> <li>• Standard</li> </ul>	<ul style="list-style-type: none"> <li>• Standard</li> </ul>	<ul style="list-style-type: none"> <li>• Standard</li> <li>• Available in Natural, Black, Dark Gray, Blue and Red</li> </ul>