Subject: Would small holes like this print?
Posted by TechyBen on Thu, 06 Sep 2012 22:34:46 GMT
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I'm toying with an idea (no pun intended). But I'm not sure if the detail is too small for a print. I've done my best to scale up the design as much as possible, with the holes now at 1mm diameter. A couple of walls taper off to smaller than 0.7mm, but anything structural stays at 0.7-1.6mm minimum.

Here is a link to an image of the model. http://shpws.me/gTuh

Also, which material would be best for the details (I'm no good with abbreviations, so not sure what SF or FUD is, sorry)?

If need be, the holes could be drilled by a steady hand. But if they can print, it would be great.

Thanks!

Subject: Re: Would small holes like this print?
Posted by stop4stuff on Fri, 07 Sep 2012 08:06:52 GMT
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The holes should be OK and for greatest accuracy use Frosted Ultra Detail (FUD) - With the likes of the Strong & Flexible (SF) range, the accuracy may not be as good and you'd most likely need to poke out support powder and possibly drill out the holes to their correct sizes.

Paul

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Subject: Re: Would small holes like this print?
Posted by TechyBen on Fri, 07 Sep 2012 08:14:53 GMT
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Thank you, as FUD was a sub category, I could only find FD and "SFP" (strong flexible plastics), so the explanations help!

Did not realize FUD went that accurate. It will up the cost, but would be the best for a test print to test the idea works. Then I can downgrade the material to one that meets my requirements, but is

not OTT. I guess Fine Detail and Strong Flexible will not work with this?

It says FUD has low strength, would it be ok for a building block?

Subject: Re: Would small holes like this print?
Posted by stop4stuff on Fri, 07 Sep 2012 08:41:58 GMT
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Yes, FUD is very accurate e.g. my OO scale K2 Telephone box has window bars just 0.3 x 0.5mm and the lettering on the roof is embossed by 0.1mm with ~0.15mm lettering.

Strengthwise, FUD is acrylic so it would depend on the thickness as to durability. The roof of the phonebox is around 1mm thick and is quite sturdy - the only part I've managed to break was one of the window bars when I dropped the model whilst painting it (I think the model landed on a corner and stressed the bar enough to snap it out)

Paul

stop4stuffModeller for hireShapeways ShopTwitterYouTube

Subject: Re: Would small holes like this print?
Posted by TechyBen on Fri, 07 Sep 2012 22:47:33 GMT
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Thanks! I'll keep all that in mind. I might redesign it again for Strong & Flexible as I think I've finally found a connector the size I need! It's not the number of terminals, but I can fudge the design to make it work.

It will also hopefully mean I wont have to be too fiddly with threading in some wire through 1mm holes.