
Subject: Checking if a Model is Solid in Sketchup?

Posted by [commandercup](#) on Sat, 11 Jun 2011 15:15:26 GMT

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Is there a way to test if a model is solid in Sketchup? I created this model: which is 76.55 x 14mm x 15mm and is mostly hollow as pictured below. Does \$10.38 seem like a fitting cost if the item is solid?

File Attachments

1) [screenshot.png](#), downloaded 425 times

Subject: Re: Checking if a Model is Solid in Sketchup?

Posted by [denali3ddesign](#) on Sat, 11 Jun 2011 19:09:46 GMT

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If the items is what Sketchup calls 'Solid' (which is just another way of saying Manifold), the Entity Info window will tell you the volume. You can multiply that by \$1.50/cu cm (from the WSF Material page) to get a close estimate of what Shapeways will charge.

Does that help?

Subject: Re: Checking if a Model is Solid in Sketchup?

Posted by [commandercup](#) on Sat, 11 Jun 2011 19:18:45 GMT

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That does help, although it introduces a new problem for me.

My model does not show up as a solid. That said, I did create a hollowed out rectangle of a similar size (guesstimated) and got a cheaper price than the uploaded model, so is it possible that Shapeways automatically made the model solid? Or, could 3Dtext cause any problems with SketchUp registering the model as solid?

Also, is there an easy way to troubleshoot why my model is not solid?

Thanks for the help!

Subject: Re: Checking if a Model is Solid in Sketchup?
Posted by [denali3ddesign](#) on Sat, 11 Jun 2011 19:33:10 GMT
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Have you seen this video? <http://www.youtube.com/watch?v=TAS1EVOvDMo>

The 3D text could cause a problem if you make it at a tiny scale - Sketchup doesn't do well with faces less than 1 mm. The workaround is to make the text at a larger scale (say 10x larger) then scale down and Sketchup will keep the faces.

If that doesn't help, you could upload the model here and I'll check it for you if you want a quick answer.

If you plan to make more models, I suggest using this excellent free Solid Inspector plugin.

Subject: Re: Checking if a Model is Solid in Sketchup?
Posted by [commandercup](#) on Sat, 11 Jun 2011 19:57:48 GMT
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Thank you so much for your help! That plugin is incredible. I found both of my problems, and fixed them.

I uploaded the corrected model to shapeways and found that the price is the exact same as the previous model. I'm guessing that shapeways automatically ironed out my problems, right? Should I try and cancel my order (submitted early this morning around ~2 AM) or do you think that it will be fine if the material costs are exactly the same?

The problems were simply:

One of the holes on the bottom of the model was extended too far
A "b" from the 3Dtext had a stray line going through it on a small section of it

Subject: Re: Checking if a Model is Solid in Sketchup?
Posted by [denali3ddesign](#) on Sat, 11 Jun 2011 20:12:48 GMT
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You're welcome...I'd look at the 3D model on the order page to see if there are visible problems...I'm guessing Shapeways automatically fixed it though and the original order will be

fine.

Yeah, that plugin is a lifesaver...be sure to tell the author (Thomthom) thanks in the plugin thread
