
Subject: Square Fabric is back

Posted by [Magic](#) on Wed, 15 Jan 2014 12:02:31 GMT

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In March 2011, I designed my first Square Fabric. In the same period, Stop4Stuff designed his Square Maille - Flat N sampler and both models had a similar design: something flat made of square basic shapes.

So last December, when I was contacted by a journalist about this Square Fabric, I could not prevent myself from revisiting this design.

First I decided to make a new version with smaller links and smaller clearances. The previous version had a wire of 2mm with a clearance of 1mm. This time, the wire is 1.5mm and the clearance 0.5mm.

The result is the Square Fabric v2.

I also ask Stop4Stuff the permission to design a new fabric with a link directly inspired from his own design but with a more round feeling (without going into particulars, I work with cylinders intersections).

The result is the Square Fabric v3.

I really like how those fabrics react when you touch them.

The next step would be to take a scanned part of body, say a hand, transform it into a model made of squares and then replace each square by such a square link, in order to make a glove.

Subject: Re: Square Fabric is back

Posted by [Wahtah](#) on Thu, 16 Jan 2014 15:29:56 GMT

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If you can make the model with reasonably square squares all of about the same size, I can help you make the glove :)

This shows a somewhat similar fabric that is triangle based, but either of your square fabrics can be used as well.

File Attachments

- 1) [heart.jpg](#), downloaded 362 times
 - 2) [674x501_1160016_1153611_1374498768.jpeg](#), downloaded 34 times
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Subject: Re: Square Fabric is back
Posted by [Magic](#) on Thu, 16 Jan 2014 16:33:22 GMT
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Wow, very nice heart indeed. I have also seen your woven glove.
I'd like to see a mix between the shape of the hand and the square links.
I suspect the Square Fabric v3 would also work with triangles in addition to squares. This would be a big help, because most of the time you get models made of triangles rather than squares.

Subject: Re: Square Fabric is back
Posted by [Wahtah](#) on Fri, 17 Jan 2014 08:54:07 GMT
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That's right, v3 will work with squares and triangles, even with a combination of the two. I was wrong about v2 though, it can't be used because it doesn't have four fold rotational symmetry. That won't work in places like the corner of a cube where three links meet.

I don't have something like v3 programmed in yet, but that's the easy bit. The hard part is getting the input model all nice and isotropic...

Subject: Re: Square Fabric is back
Posted by [Magic](#) on Tue, 28 Jan 2014 23:18:41 GMT
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In the meantime, please check this video: <http://youtu.be/IOI2wLmDL4A>
You can see successively the original Square Fabric, the v2 and the v3.

Subject: Re: Square Fabric is back
Posted by [Magic](#) on Wed, 29 Jan 2014 19:20:49 GMT
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In my original post I mentioned being contacted by a journalist.
The article of Home and Textiles Today featuring Shapeways and the original square fabric is here:

http://www.homeandtextilestoday.com/article/570808-3D_Printing_Redesigns_Housewares_Design.php

Even more interesting, you can also check the entire magazine, and in particular from page 34 to page 40 (skip the two pages of ads :))

http://progressivebusinessmedia.com/hometextiles/flip/HTT_01_01_14/HTT_01_01_14.html#p=34

Subject: Re: Square Fabric is back

Posted by [seriaforma](#) on Wed, 29 Jan 2014 21:02:54 GMT

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This stuff is really cool.

Subject: Re: Square Fabric is back

Posted by [Magic](#) on Wed, 27 Aug 2014 18:02:40 GMT

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Hi there,

Here are two other concepts of Fabric Swatch.

The first one, that I received time ago, but for some reasons, I did not post a message about it. It is called Double-Eight Fabric, because of its basic link shape.

And the second one I received recently, the Hexa Fabric (nearly the same concept but with a 3-fold symmetry instead of a 2-fold, and two basic links):

Both are very flexible and react very nicely.

File Attachments

1) [IMG_7080.JPG](#), downloaded 107 times

2) [IMG_7165.JPG](#), downloaded 102 times
