
Subject: Just how flexible is "Flexible Plastic"?
Posted by [rune_kg](#) on Sun, 19 Aug 2012 11:18:52 GMT
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So, I've finally managed to model a CardHolder using Sketckup. The holes are for an elastic band. The walls at their thickest is 2mm and then narrows down to 0.2mm.

I'm questioning if the walls will be flexible enough to hold about 1cm of bus- and credit cards between them? Do you have any insights about this?

Thanks a lot!!!!!!
Rune

Subject: Re: Just how flexible is "Flexible Plastic"?
Posted by [Youknowwho4eva](#) on Mon, 20 Aug 2012 13:07:52 GMT
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I'd expect that you'd only be able to hold as many cards as is the thickness of your gap. Your design isn't set up to spring or apply any force onto the cards to hold them in. What you need is a clamping shape much like an alligator clip

This will allow you to hold 1 card, up to approx. the width of the gap when full open.

File Attachments

1) [149939_800.jpg](#), downloaded 199 times

Subject: Re: Just how flexible is "Flexible Plastic"?
Posted by [rune_kg](#) on Mon, 20 Aug 2012 14:29:25 GMT
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Hi Michael

Thanks a lot for taking time to reply!

I'm going to use a rubber band to hold the cards in. Are you saying the walls will be too inflexible to extend to about 1cm?

Cool idea with the clamp too!

Subject: Re: Just how flexible is "Flexible Plastic"?
Posted by [Youknowwho4eva](#) on Mon, 20 Aug 2012 14:31:41 GMT
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Ah, I read that part, but forgot about it... How thick is your gap? It would probably still be better to have a radius on the inside to help if flex. A sharp corner could be a sheer point.

Subject: Re: Just how flexible is "Flexible Plastic"?
Posted by [rune_kg](#) on Mon, 20 Aug 2012 14:41:19 GMT
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The gap is 2.2mm

> It would probably still be better to have a radius on the inside to help if flex.

Trying to understand, am a bit new to talking about models. You mean to make the "connection" between the upper and lower part a halfcircle, thus making the connecting part thinner?

> A sharp corner could be a sheer point.

This I don't understand at all. Sorry!

Subject: Re: Just how flexible is "Flexible Plastic"?
Posted by [Youknowwho4eva](#) on Mon, 20 Aug 2012 14:56:52 GMT
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So you want it to flex from 2.2mm to 10mm... I think it would push your cards out. With this design I wouldn't go with more than 3 or 4mm of cards. It would be like an over filled binder. As far as the radius, I've pointed out the location in this image, and explained the sheer point a little. A radius will absorb the flex better.

File Attachments

1) [card holder.jpg](#), downloaded 171 times

Subject: Re: Just how flexible is "Flexible Plastic"?
Posted by [rune_kg](#) on Mon, 20 Aug 2012 15:11:06 GMT

Hi

Thanks for explaining!!! Got it now. Will make the gap larger and use a radius instead as you explained!

Thanks a lot!!!

Rune
