Printed Wallet - Modular Card Holder + Cash!

ray of sunshine

VIEW IN BROWSER

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Summary

Simplify your life and make something that you will use everyday. A modular printed wallet for cards and cash.

Fashion > Other Fashion Accessories

Tags: creditcardwallet wallet

Do you have a problem where you are trying to minimize the crap that you carry around with you all the time? Something that may help is a modular wallet! Nothing makes it easier to not carry additional crap then not having a place to put it. No business cards, no receipts. Driver's license, cards, and cash.

I have had several slim wallets over the years. A classic money clip. I used a Storus Smart Clip for many years, but I needed to hold just one more card. My most recent try was a Gerber Barbill, which was effective, but it was annoying to get to the correct card. At least it was a lot cheaper experiment than a Ridge wallet would have been.

I have always been a wallet-in-the-front-pocket guy and a slim wallet keeps from ruining the beautiful lines of my legs. So slim-as-slim-can-be was the order of the day. This design DELIVERS!

You can add or subtract layers as needed (though your screw length will change, see screw length sizing information below).

Both of the "Top" designs allows for additional height to have an sheet of 0.5-mm single side textured (texture facing out) polycarbonate sheet to protect your driver's license from being scratched by other items in your pocket.

All card holders are equipped with generously sized poke-out holes so you can easily use one finger to bend the card and get it over the card retaining bump for easy card removal.

The “Costco” version adds a rectangular hole aligned with the barcode so you can scan your barcode without removing it.

These are really thin when you print them. They don't feel like they will survive, but when you get a card in them, they firm up and are really pretty tough. My first version was PETG and it worked ok for several months. The new thinner ASA version is quite a bit more robust.

The best feature of this is that it is easy to access the right card, whenever you need it. Rotate it out and take it out for chip or swipe, or just tap to pay!

The WalletMoneyHolders are intended for use with US paper currency folded in to 1⁄3. You can fit about 6 bills inside, so you can carry from $0 to $60,000 in cash.

The version pictured is built with (from top to bottom):

WalletTop1p5_FlatHead_Support

WalletMiddle1p0_Support (quantity 3)

WalletCostco1p0_Support

WalletMoneyHolder_HeatSetNut

The M3 flat-head screw goes through the front of the wallet and screws in to the heat-set nut. The total thickness is just over 15-mm. I am using a stainless M3X14 socket flat-head screw for a classy look.

WalletMoneyHolder_HeatSetNut is designed to use this heat-set nut: M3 3-mm X 5-mm.

Material shown is Sunlu black ASA. Layer height is 0.1-mm with a 0.1-mm first layer height. Fill percentage does not matter, other than in the WalletMoneyHolder_HeatSetNut. Mine is printed with 70% fill. Support is required. Using a Prusa i3 Mk2S to print with default ASA settings.

You need to use blue thread lock on the screw to keep it from loosening when moving the cards around.

HARDWARE SIZING

Here are the thicknesses of the parts to use to determine the length of screw you will need.

WalletTop1p5_FlatHead_Support - 3.8-mm

WalletMiddle1p0_Support / WalletCostco1p0_Support - 1.8-mm

WalletMoneyHolder_HeatSetNut - 3.0-mm + 0.4-mm for the money cover

So for mine that is 3.8-mm + 4*1.8-mm + 0.4-mm + 3.0-mm = 14.4-mm, so a 14-mm screw works fine. You want the screw length to be less than the total stack height so it does not stick out of the end of the heat-set nut. The 3-mm of thread engagement on the insert gives some flexibility on the length of the screw.

The other option - Nylock Nut:

WalletTop1p5_Support for the top layer

<middle layers of your choice>

WalletMoneyHolder for the bottom layer

This would be held together with a flat-head screw from the bottom and a nylock M3 nut with a washer on top. This works very well (this was my first version) and is great if you want to add and remove layers often. No messing with thread lock! The trade off is that the nylock nut is a bump on the front face of the wallet. Not going to kill you, but not optimal either.

To determine the length of screw you will need.

WalletTop1p5_Support - 2.3-mm

WalletMiddle1p0_Support / WalletCostco1p0_Support - 1.8-mm

WalletMoneyHolder - 3.0-mm + 0.4-mm for the money cover

To build a duplicate of mine that is 4.7-mm for the nylock nut and the washer + 2.3-mm + 4*1.8-mm + 0.4-mm + 3.0-mm = 17.6-mm. You want the screw length to be right at the total stack height so it does not stick out of the end of the nut. This means that in general you are likely to have to cut down a longer screw to the right length or have bare screw sticking out of the nut which can be hard on your pockets.

How about a third option:

WalletTop1p5_Support for the top layer

<middle layers of your choice>

WalletMoneyHolder_HeatSetNut for the bottom layer

This would be held together with a pan-head screw from the top with a heat-set M3 nutin the money holder.

To determine the length of screw you will need.

WalletTop1p5_Support - 2.3-mm

WalletMiddle1p0_Support / WalletCostco1p0_Support - 1.8-mm

WalletMoneyHolder_HeatSetNut - 3.0-mm + 0.4-mm for the money cover

To build a duplicate of mine that is 2.3-mm + 4*1.8-mm + 0.4-mm + 3.0-mm = 12.9-mm. In this case a 12-mm pan-head screw would work well. You want the screw length to be less than the total stack height so it does not stick out of the end of the heat-set nut. The 3-mm of thread engagement on the insert gives some flexibility on the length of the screw.

Model files

walletmoneyholder_heatsetnut.stl

wallettop1p5_flathead_support.stl

walletmoneyholder.stl

wallettop1p5_support.stl

walletmiddle1p0_support.stl

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walletcostco1p0_support.stl

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