



Modular Wall Mounting System

A AngelR

[VIEW IN BROWSER](#)

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Summary

Modular, easy swap, snap-in wall mounting system with multiple attachments



2.73 hrs



1 pcs



0.15 mm



0.40 mm



PLA



18 g



Other

[Household](#) > [Other House Equipment](#)

Tags: [modular](#) [filamentpoolholder](#) [wallhook](#) [broomholder](#) [drillholder](#)

This modular wall mounting system can be used to easily mount anything from a backpack hook to a filament spool holder. It uses a sturdy snap-in connection, which hides the screws and makes it a breeze to swap attachments. This been tested to hold at least 30 kg with the default hook. Along with the hook, spool holder, broom holder (22mm diameter), and cordless drill holder, the snap-in base file (Solidworks) is included, so you can customize the mount to suit your needs.

For printing quality, at least .15mm layer height is recommended in order to maintain the proper clearances for the snap-in tabs. A brim is also recommended, otherwise there is a risk that the tabs will lean over and

fail. The snap-in portion of each mount can be printed without supports, oriented vertically with the tabs resting on the build plate. Support material may be necessary depending on the actual mount/hook geometry (for instance, the default hook needs support, but the other attachments can be printed without support). The Modular Base should be printed with the largest face on the build plate. All parts were printed using PLA, but PETG is recommended, especially when strength is crucial.

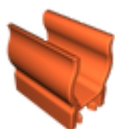
Assembly is simple – mark the holes using the Modular Base, drill the holes (insert drywall anchors if necessary), and screw in the Modular Base. From there, any accessory can be slotted in, and there should be an audible click once it fully aligns. To remove, push the tabs with one finger and slide the attachment out. Should anything get stuck, there is a small hole on the top of the attachment where a small screwdriver can be inserted to free the attachment.

To assemble the filament holder, you will need 2 bearings, mine have an outer diameter of 24mm, inner diameter of 8mm, and are 8mm thick. If bearings are not available, it is possible to 3D print one or simply forgo one altogether, modifying the roller to sit directly on the spool holder. (Yes, bearings are probably overkill, but they look cool and the filament spins effortlessly.) [Snap-in video demo](#)

Happy Printing!

Angel R

Model files



broom-holder.stl

☐ Works best with 22mm diameter handles.



filament-roller.stl

☐ Part 2 of Filament Spool Holder

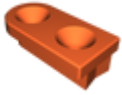


filament-holder.stl

☐ Part 1 of Filament Spool Holder

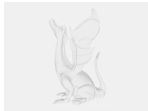


modern-hook.stl



modular-base.stl

☐ This part is screwed into the wall - studs or drywall anchors are recommended for best strength



adaptable-attachment.sldprt

☐ This part can be adapted to mount anything you want!



cordless-drill-hook.stl

Print files



modular-base-5_015mm_pla_i3mega_2h44m.gcode

⚙️ PLA ⚙️ 0.40 mm ⚙️ 0.15 mm ⌚ 2.73 hrs ⚖️ 18 g

☐ Print file for "Default Hook" & "Modular Base" in PLA

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