

MEDNET

Model Exchange & Development of Nursing &
Engineering Technologies



Doorknob Adapter

MEDNET File: Doorknob.zip

Description

The Door Knob Adapter covers a doorknob, converting it into a door handle with a modular design so that the handle piece can be interchanged with a hands free design.

Features

Two pieces that encompass the doorknob are attached to the door knob using velcro and different door handles can be interchanged including a hands free door handle.

Development Information

Materials needed: PLA filament and Velcro striping

Finished dimensions: dimensions will vary depending on the size and shape of the doorknob being used

PLA filament \approx 0.06 of a roll

Velcrow stripping \approx 4 inches

Production time \approx 6 hours

Approximate materials cost: \$1.70

Instructions for Use

Take the two pieces that encompass the doorknob and add velcro to the insides. You will also need to add velcro to the knob so that the model can attach to the knob without slipping. Once the velcro is attached to both the model and the knob, place the model on the knob and now you can slide the handle you choose into the model. It is important to note that this model needs to be fitted to each individual doorknob.

Material Procurement Information

Filament: Hatchbox Filament 1.75mm - \$22.99/roll (prices vary per color)

https://www.amazon.com/HATCHBOX-3D-Filament-Dimensional-Accuracy/dp/B00J0ECR5I/ref=sr_1_4?crid=2GJUX43SIM4TP&dchild=1&keywords=pla+filament+1.75mm&qid=1590077168&prefix=pla+filament%2Caps%2C178&sr=8-4

Velcro stripping: Stronghold ¾ Inch x 5 yard Adhesive Hook and Loop Fastener - \$7.25

https://www.amazon.com/Stronghold-Inch-Yard-Adhesive-Fastener/dp/B07TCKCM9G/ref=sr_1_2?dchild=1&keywords=0.75+inch+adhesive+hook+and+loop&qid=1598463255&sr=8-2

*citations: Liles, J. Doorknob Adapter. MED-NET. Retrieved from uahmednet.org.