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Digital Fabricators

Modular Clamp Rack

Version 1.02

May 25, 2021

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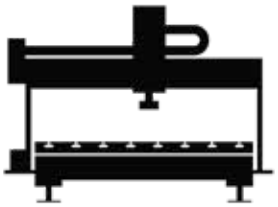

Modular Clamp Rack
Version 1.02

Overview

Thanks for purchasing the plans and files for our Modular Clamp rack. The basic idea is very simple and flexible. This can be made from MDF or plywood. We used 3/4" MDF because that's what we had., could be made from 1/2" as well. There are three parts to this design.

1. Backboard
2. Clamp rack arm
3. Low profile clamp rack arm

The backboard is made from 3/4" MDF and is 24"l x 6"h. It is machined from the back in order to countersink the screws so it can set flush on the wall. It has mounting holes every 1" , this is so the clamp arms are adjustable to whatever size clamps you have. The mounting holes are also used to attach the rack to wall. Reference lines are included in the rear so the arms are easily aligned when attaching with screws. We also made it in 24" segments, so guys with smaller machines can cut it. You can make as many as you need and just put them end to end to make the desired length.

The clamp rack arm is intended for large pipe clamps. It is machined from 3/4" MDF

The low profile clamp arm is intended for small shorter clamps. It is machined from 3/4" MDF.

What is included with purchase

1. Technical drawing packet
2. SVG file
3. EPS file
4. DXF file
5. AI file
6. PDF file
7. CRV file, this is a Vcarve Pro file with tool paths

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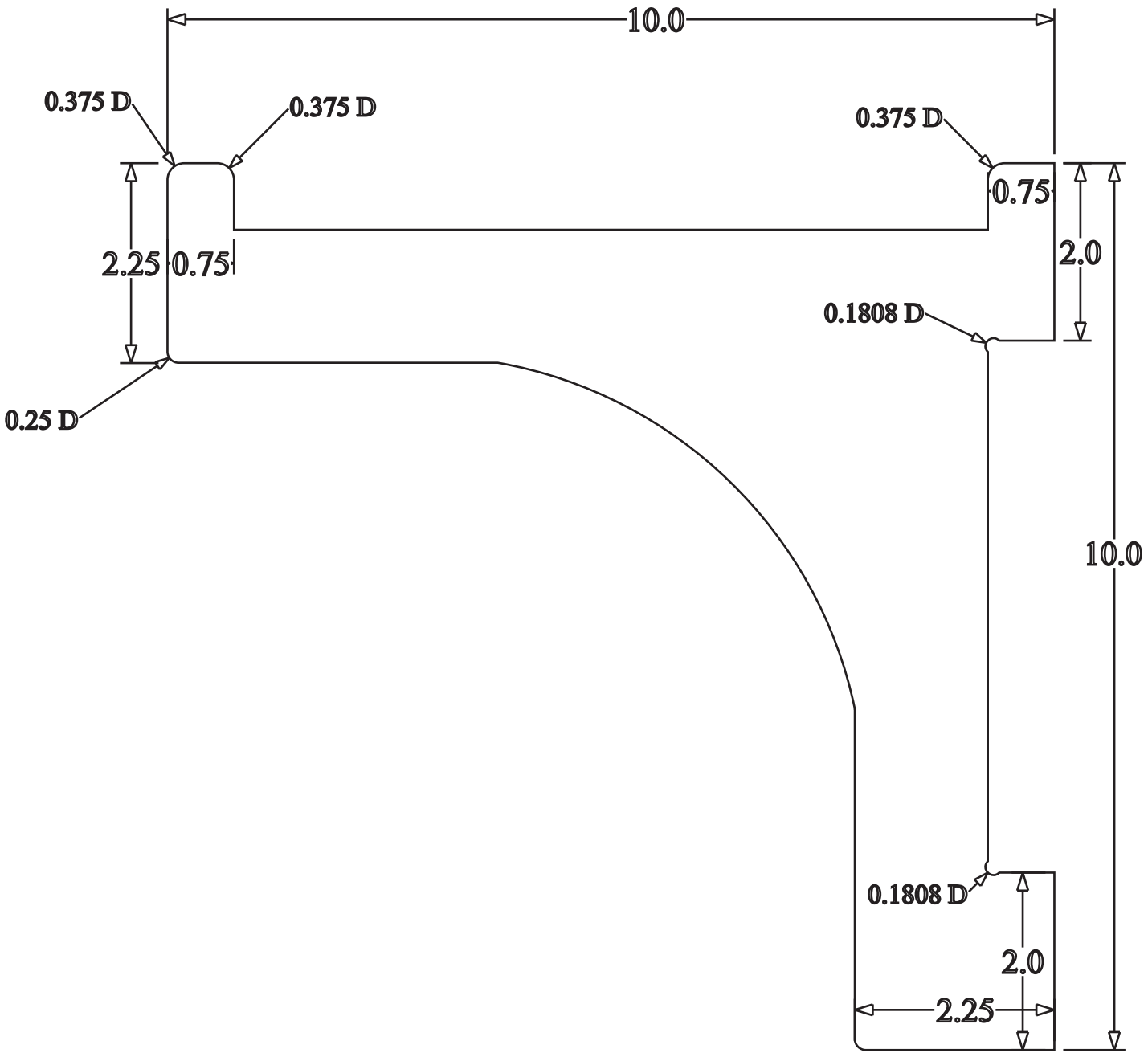

Low profile clamp rack arm
Versi on 1.02
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* All measurements are in inches

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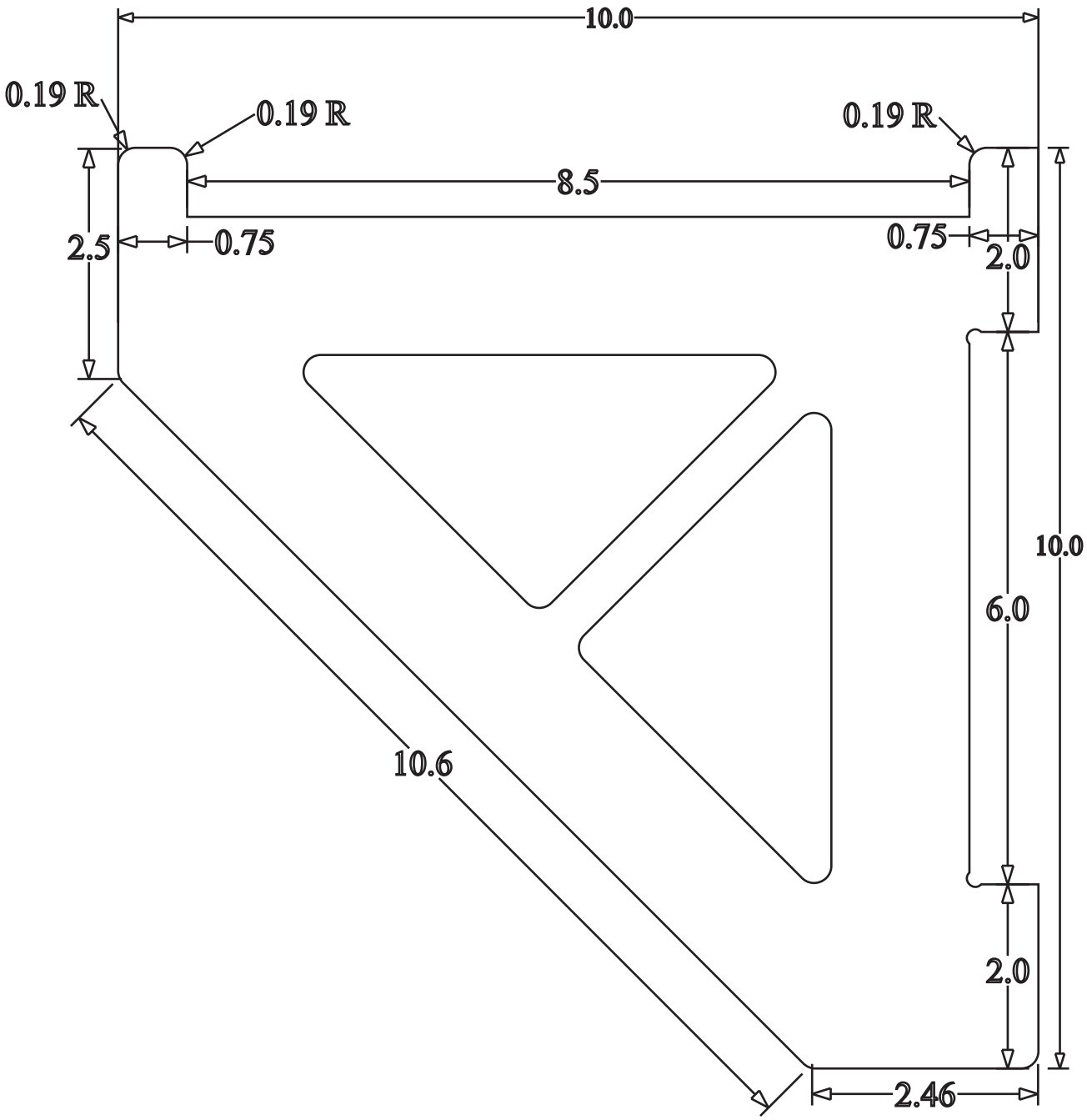

Clamp rack arm
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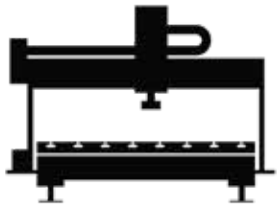

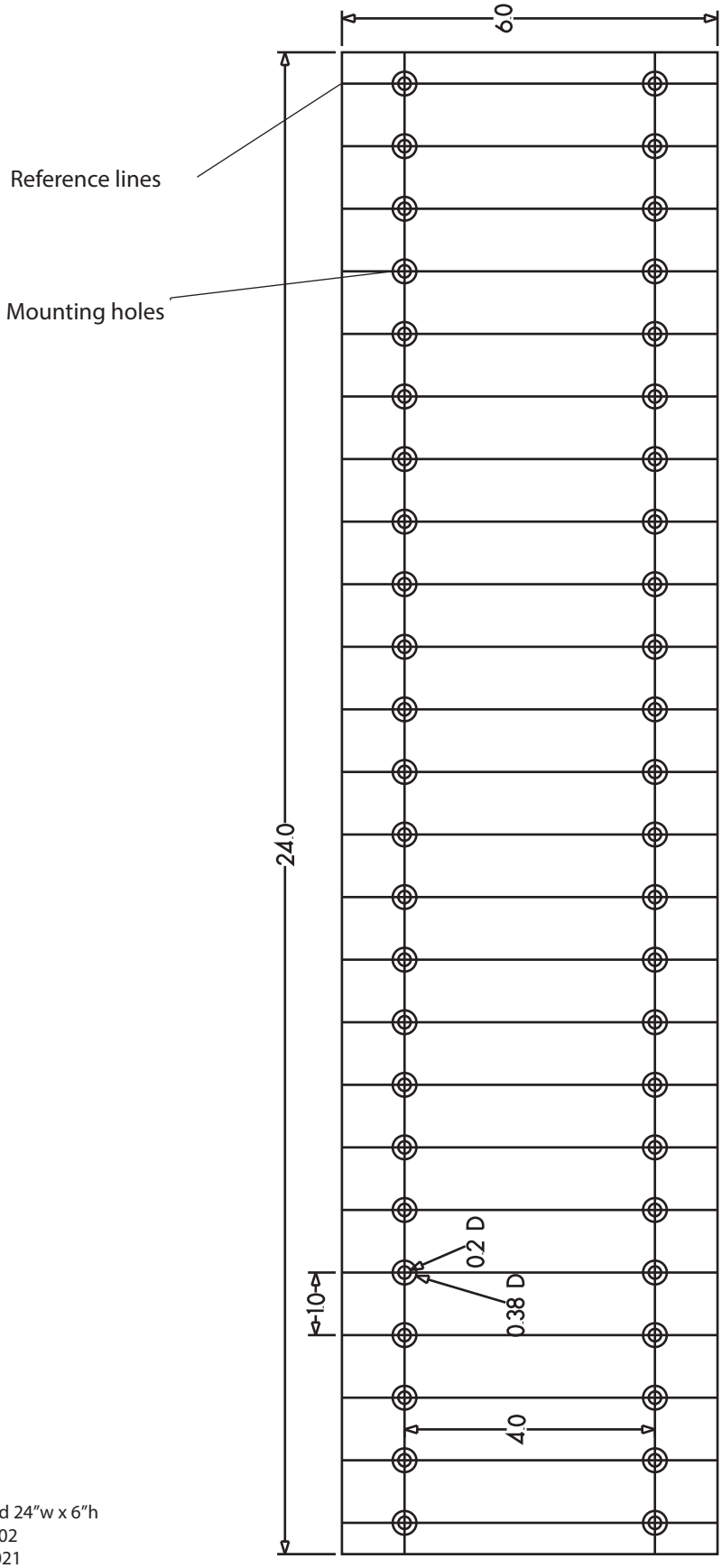

Notes

1. This drawing is from the back of the backboard
2. Machined from the back of backboard
3. All mounting holes are for a #6 Sheetrock screw
4. All mounting holes are counter sunk so the backboard will sit flush on the wall
5. The .38" hole is .2" deep
6. The .2" hole is .76" or all the way through the backboard
7. The mounting holes are cut with a 1/8" bit
8. The reference lines are cut with a 90 degree V-bit at .0156" depth

Mounting backbaord 24"w x 6"h
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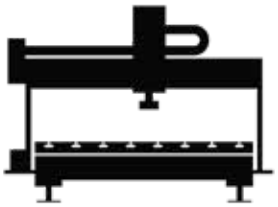

Tool Path Info

- Inner mounting holes on backboard tool path
    1. Profile cut
    2. Depth of cut .76”
    3. 1/8” down cut end mill
        - Feed rate 150 ipm
        - 18,000 RPM
        - 6 cut passes
    4. Machine inside of vector
    5. Climb cut
    6. No ramp in

- Counter sink for screw head on backboard
    1. Profile cut
    2. Depth of cut .2”
    3. 1/8” down cut end mill
        - Feed rate 150 ipm
        - 18,000 RPM
        - 1 cut pass
    4. Machine inside of vector
    5. Climb cut
    6. No ramp in

- Reference line for backboard
    1. Profile cut
    2. Depth of cut .0156”
    3. 1/2” 90 degree V-bit
        - Feed rate 150 ipm
        - 18,000 RPM
        - 1 cut pass
    4. Machine on vector

- Profile cut full depth cut of all parts
    1. Profile cut
    2. Depth of cut .76”
    3. 1/8” down cut end mill
        - Feed rate 150 ipm
        - 18,000 RPM
        - 6 cut passes
    4. Machine outside of vector
    5. Climb cut
    6. 1” ramp in

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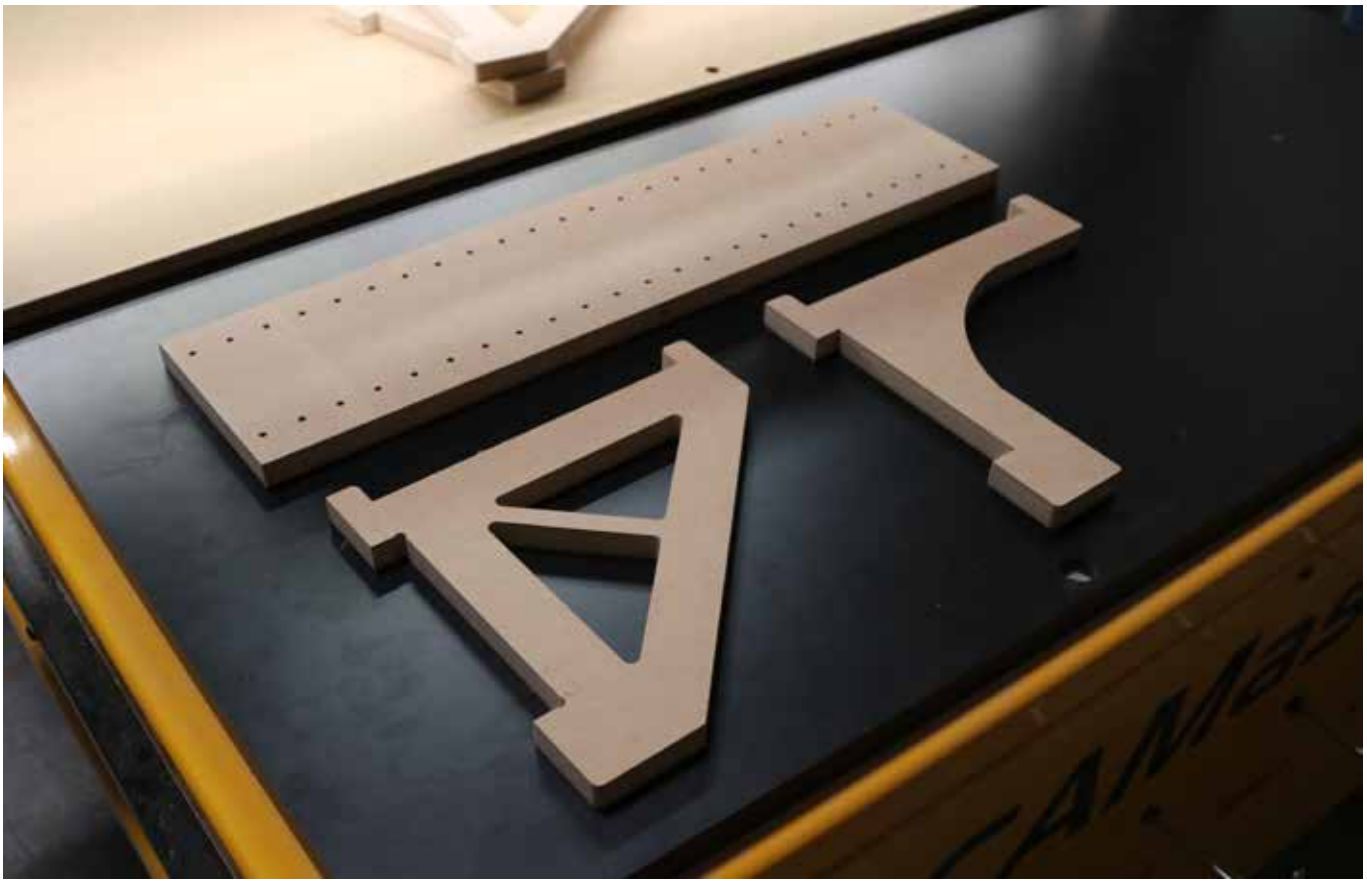

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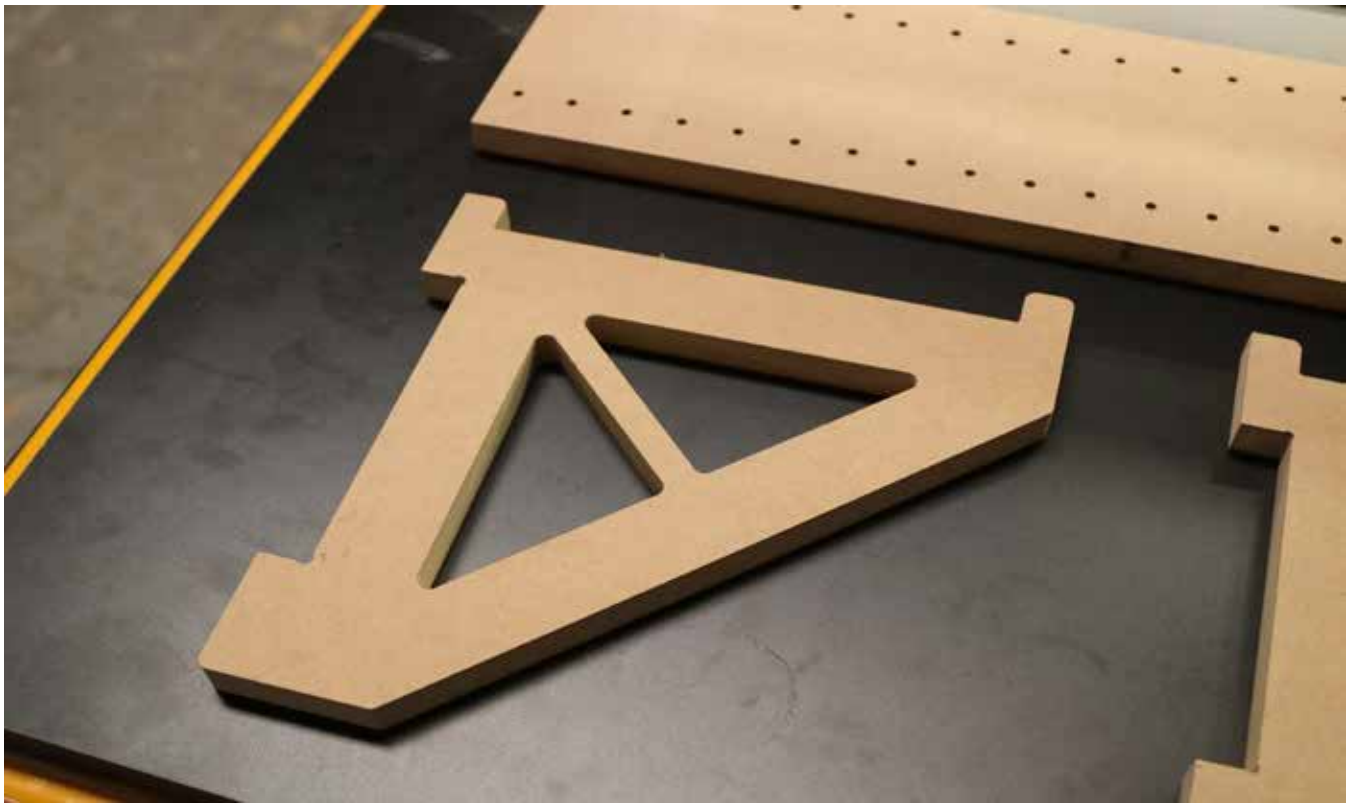

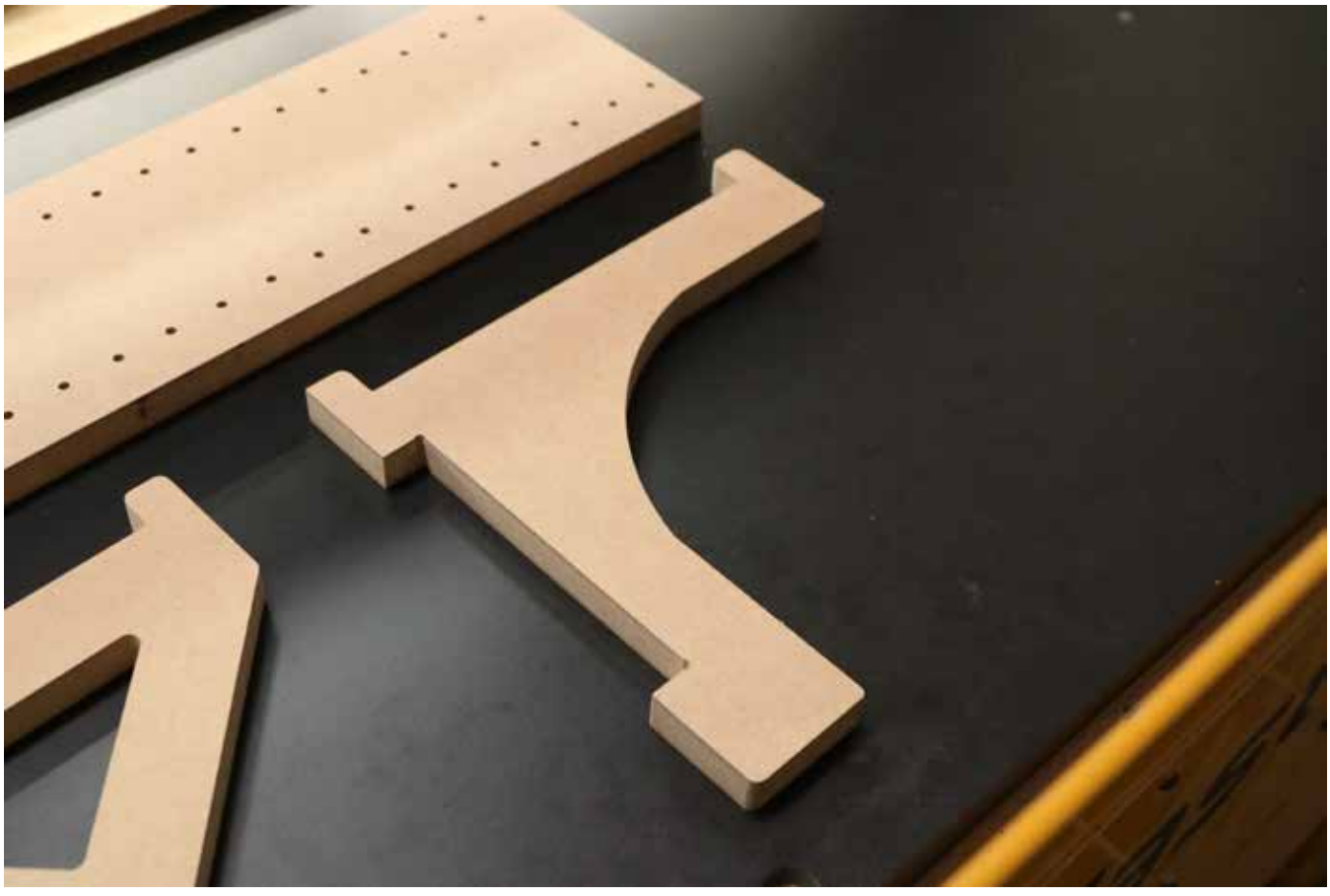

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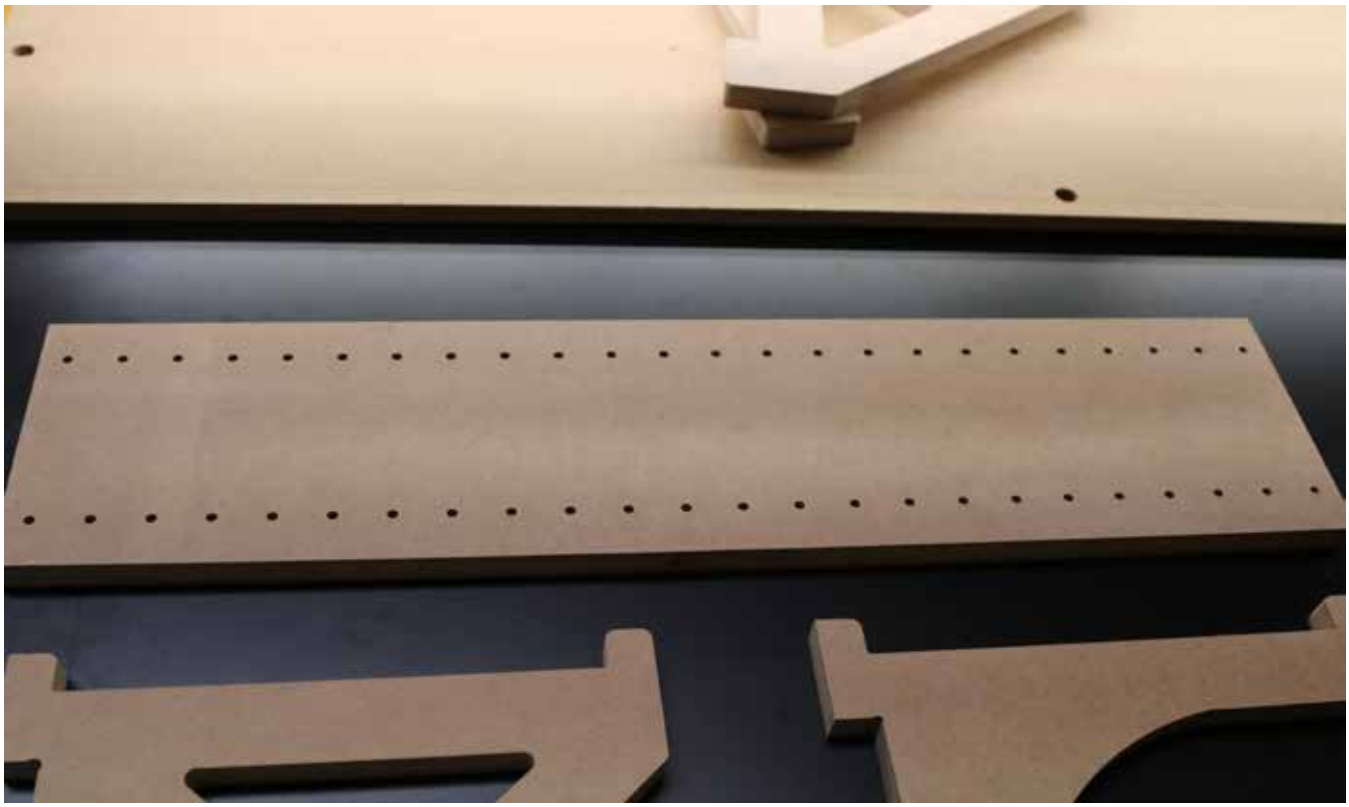

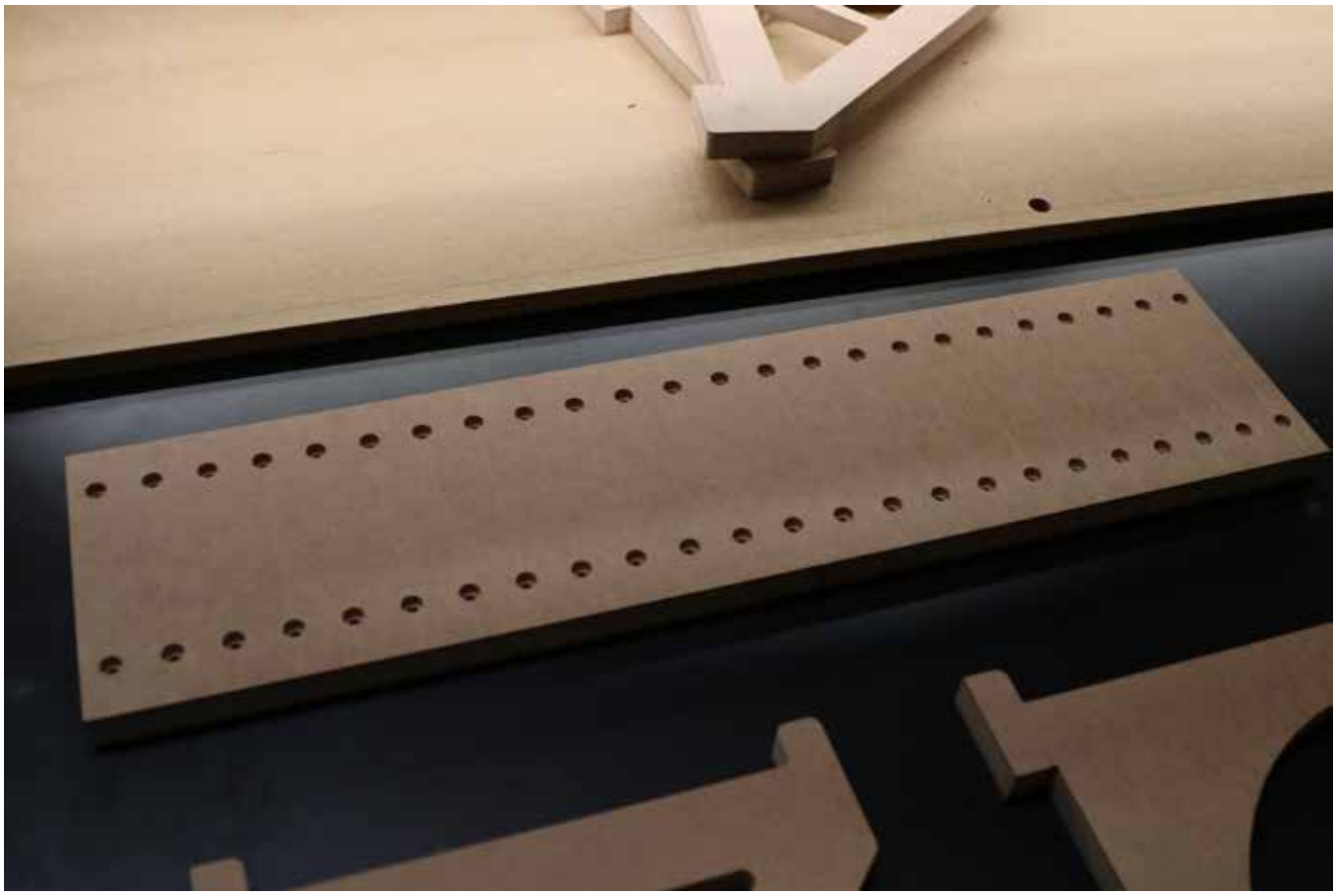

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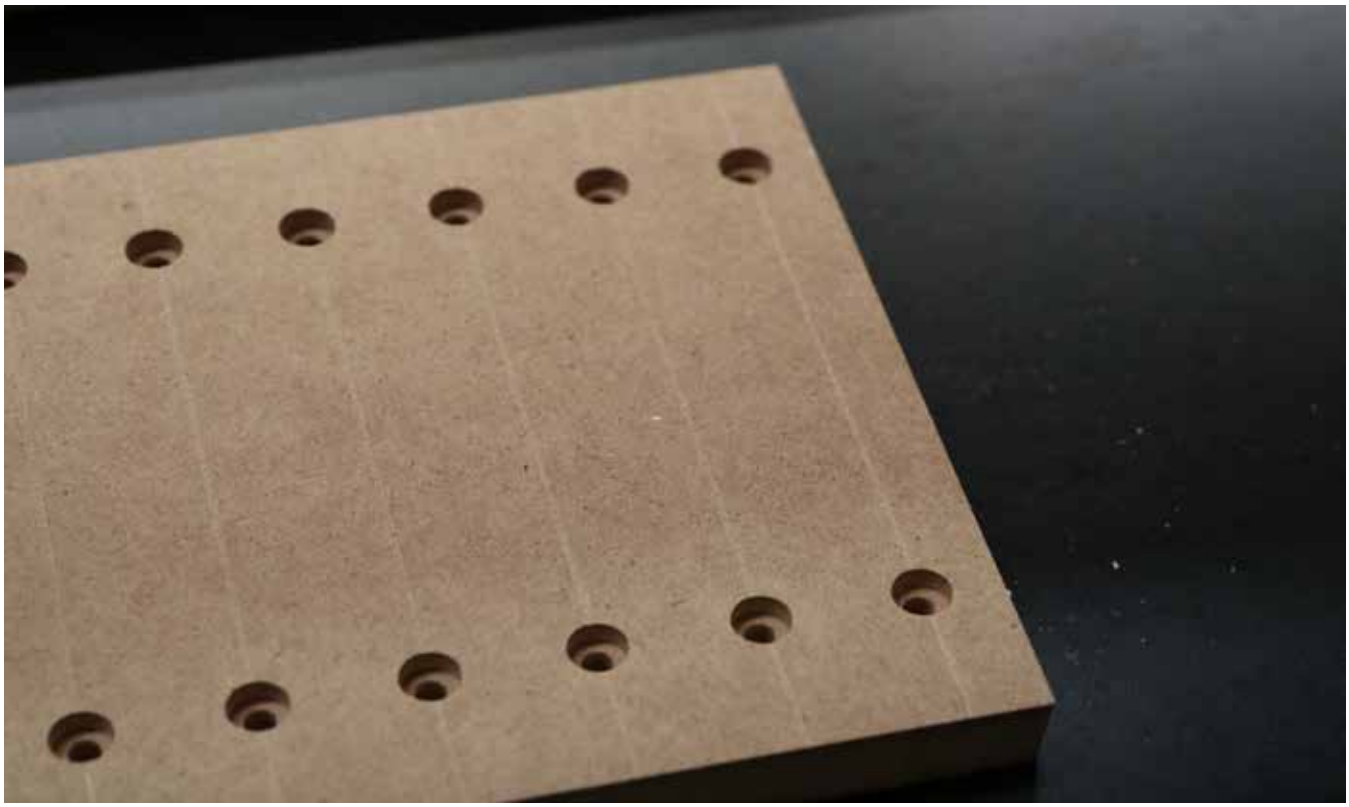

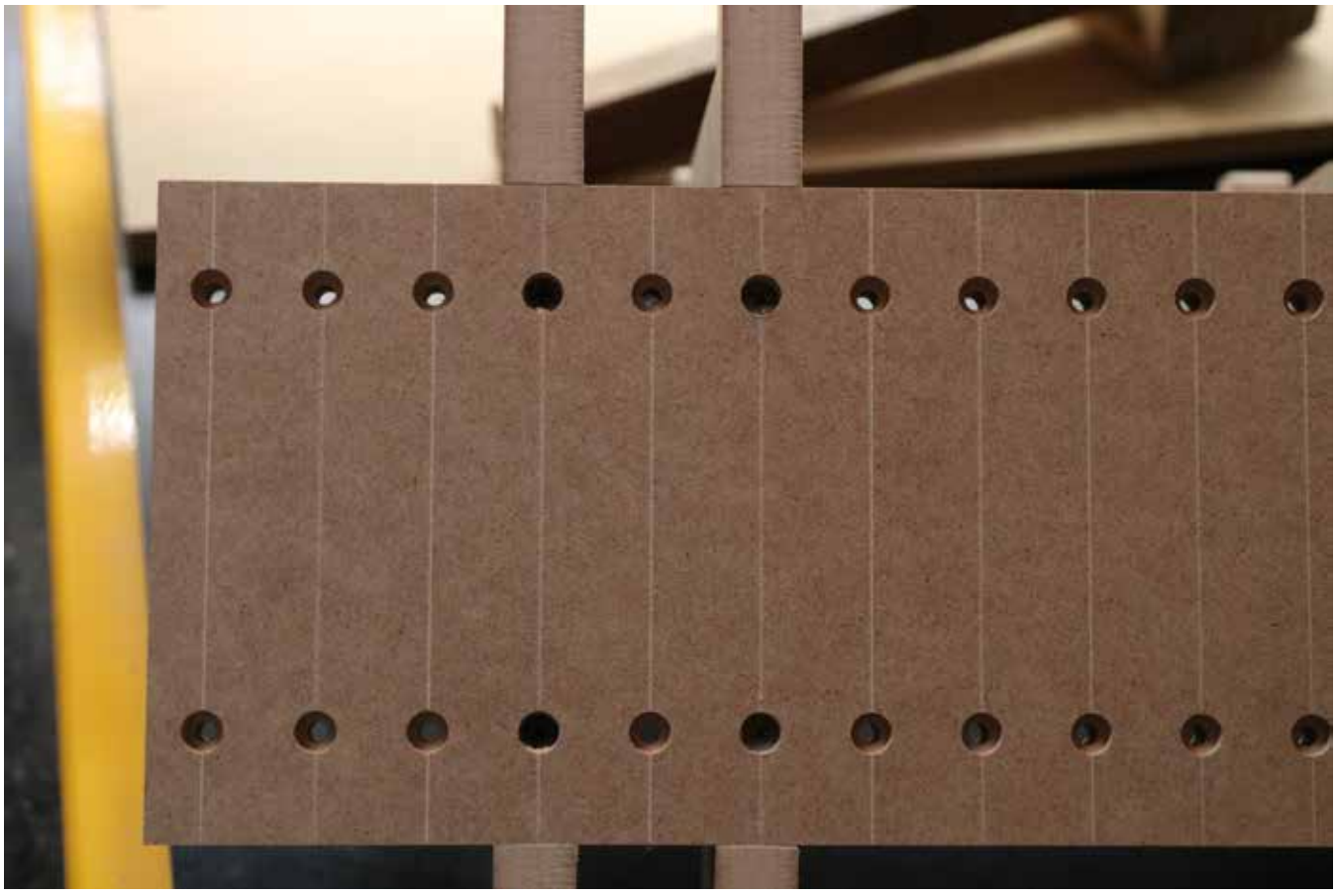

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