



Dyson

## Intro to Iteration

Matt Franks

Professor, Austin Center for Design

ac4d

“I haven’t failed, I’ve found  
10,000 ways that didn’t work.”

Thomas Edison

## Ethnography

Immersion – gaining understanding of a unique situation and empathy with other people

## Synthesis

The process of making meaning through inference-based sensemaking

## Prototyping

Hypothesis validation through generative form giving and informed trial-and-error



## Ethnography

Immersion – gaining understanding of a unique situation and empathy with other people

## Synthesis

The process of making meaning through inference-based sensemaking

## Prototyping

Hypothesis validation through generative form giving and informed trial-and-error



## Ethnography

Immersion – gaining understanding of a unique situation and empathy with other people

## Synthesis

The process of making meaning through inference-based sensemaking

## Prototyping

Hypothesis validation through generative form giving and informed trial-and-error



## Ethnography

Immersion – gaining understanding of a unique situation and empathy with other people

## Synthesis

The process of making meaning through inference-based sensemaking

## Prototyping

Hypothesis validation through generative form giving and informed trial-and-error



Prototyping is not about  
creating the right idea

Prototyping is about  
creating “an idea”

In design, there are no “right” ideas. There are only ideas.

In design, there are no “right” ideas. There are only ideas.

We have no way of evaluating the relative success of an idea until someone’s had a chance to use it.



As designers, we use prototyping as a means to learn from and pivot off of an ideas degree of “rightness.”



Ethnography

Synthesis

Prototyping



Is a process of Ideation and Iteration.

## Idea Selection

Subjectively narrowing down  
the pool of ideas to find  
which ideas are worth  
further exploration

## Ideate

## Build

## Test

## Idea Selection

Subjectively narrowing down the pool of ideas to find which ideas are worth further exploration

## Ideate

Exploring a variety of ways in which an idea could be implemented and making assumptions about which implementation is best

## Build

## Test

## Idea Selection

Subjectively narrowing down the pool of ideas to find which ideas are worth further exploration

## Ideate

Exploring a variety of ways in which an idea could be implemented and making assumptions about which implementation is best

## Build

Giving form to an idea. Providing enough detail so our assumptions can be tested

## Test

## Idea Selection

Subjectively narrowing down the pool of ideas to find which ideas are worth further exploration

## Ideate

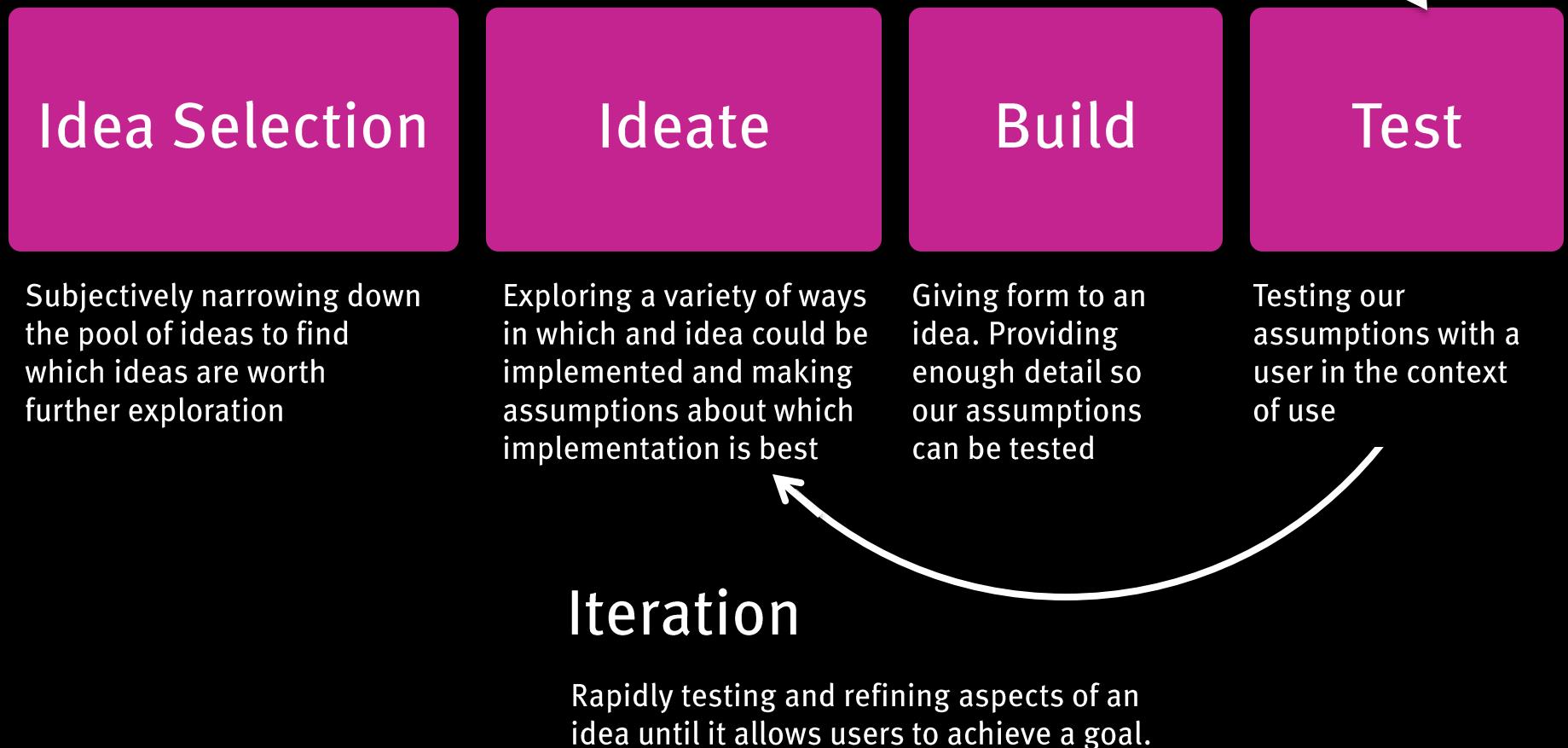
Exploring a variety of ways in which an idea could be implemented and making assumptions about which implementation is best

## Build

Giving form to an idea. Providing enough detail so our assumptions can be tested

## Test

Testing our assumptions with a user in the context of use



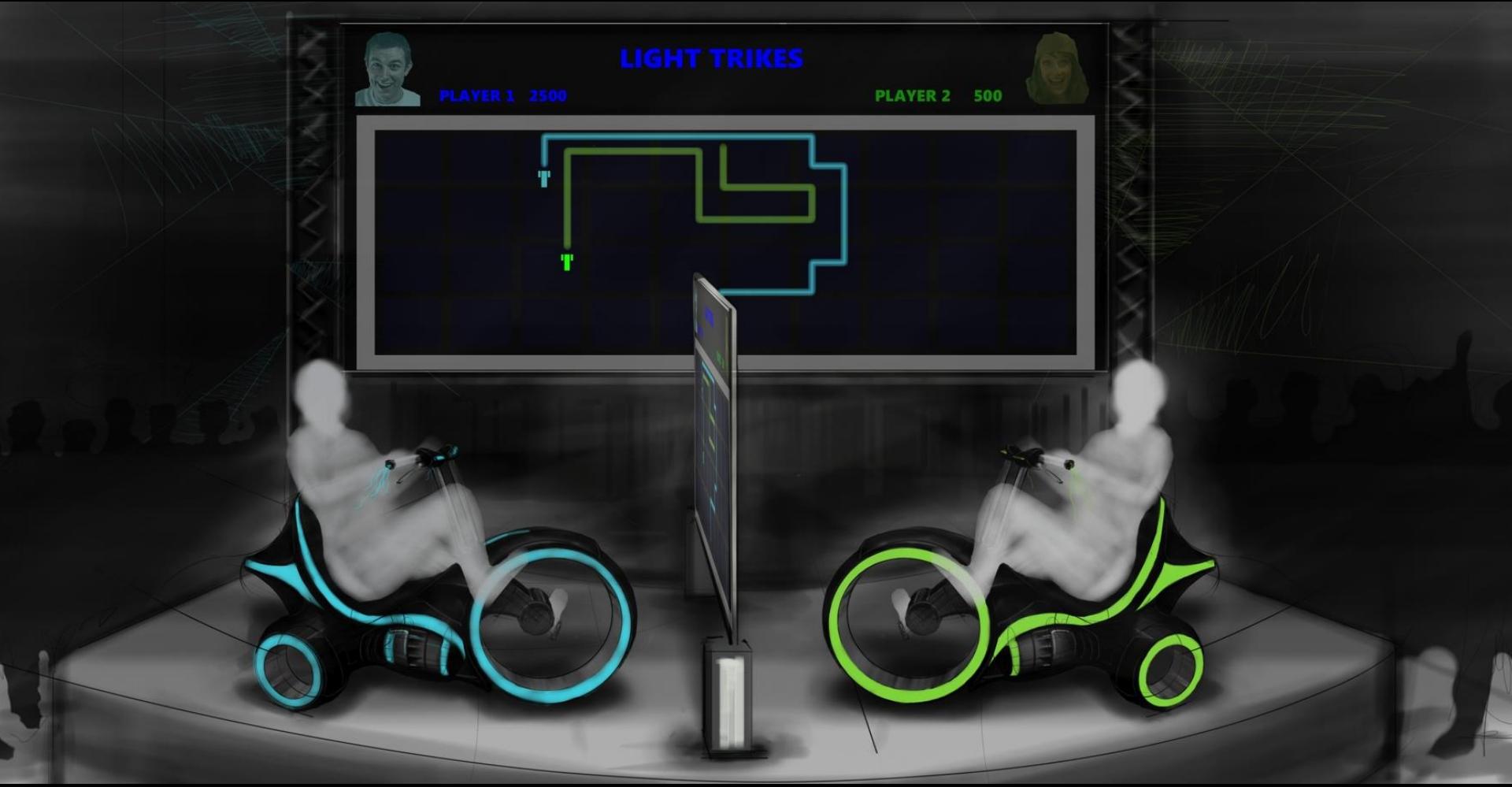
# Prototyping is about failure.

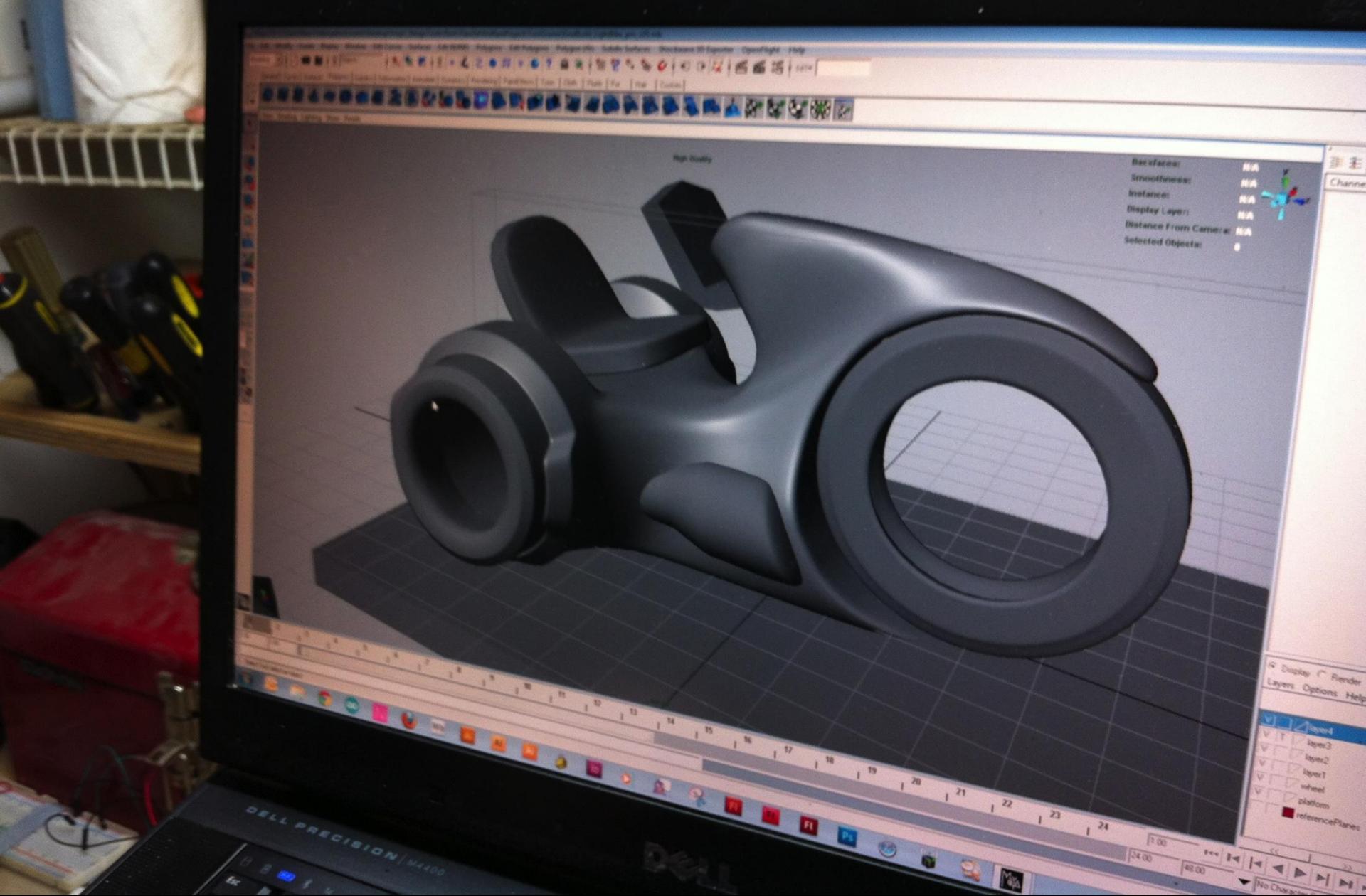


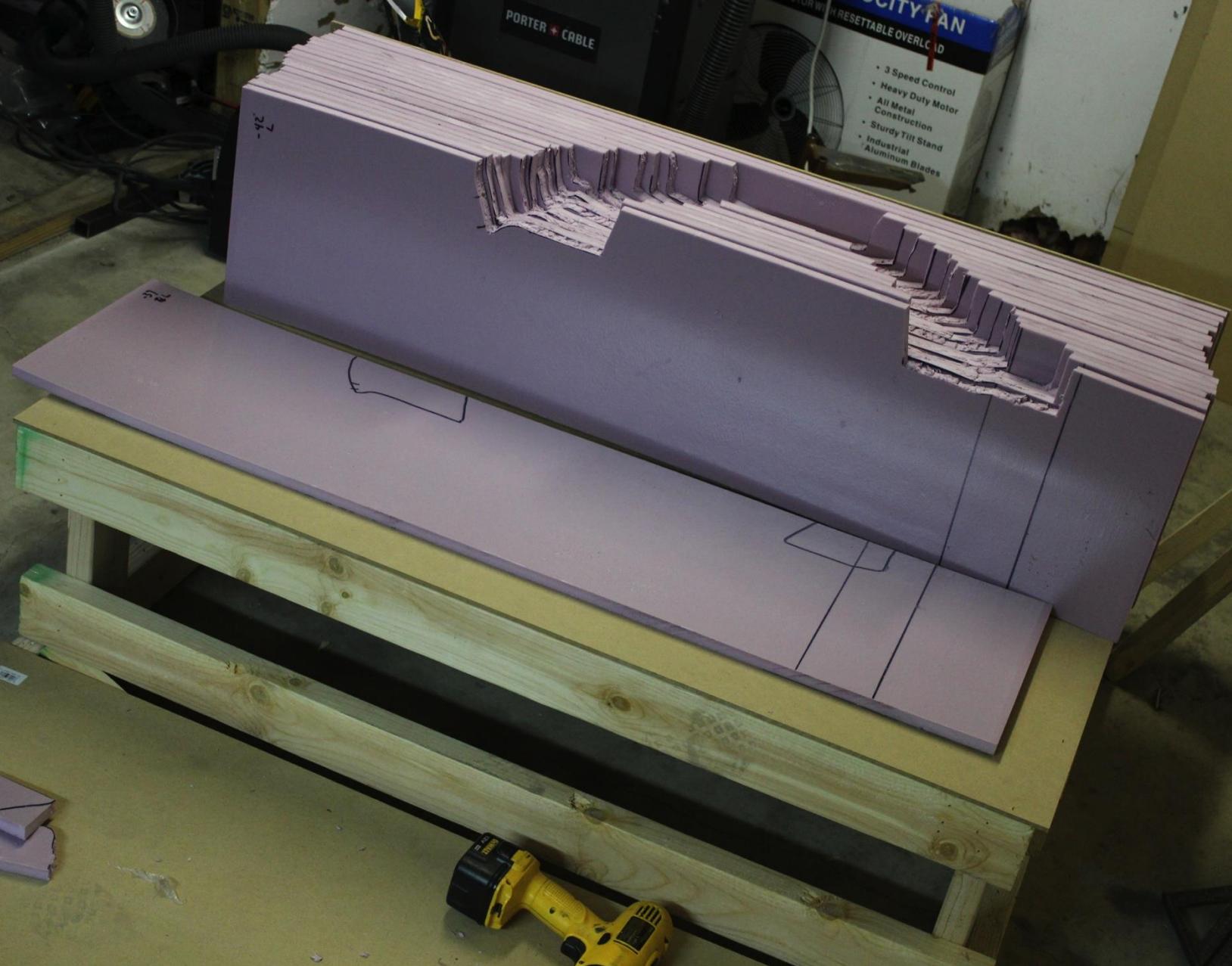
Street Cart Table Wear – Steve Faletti

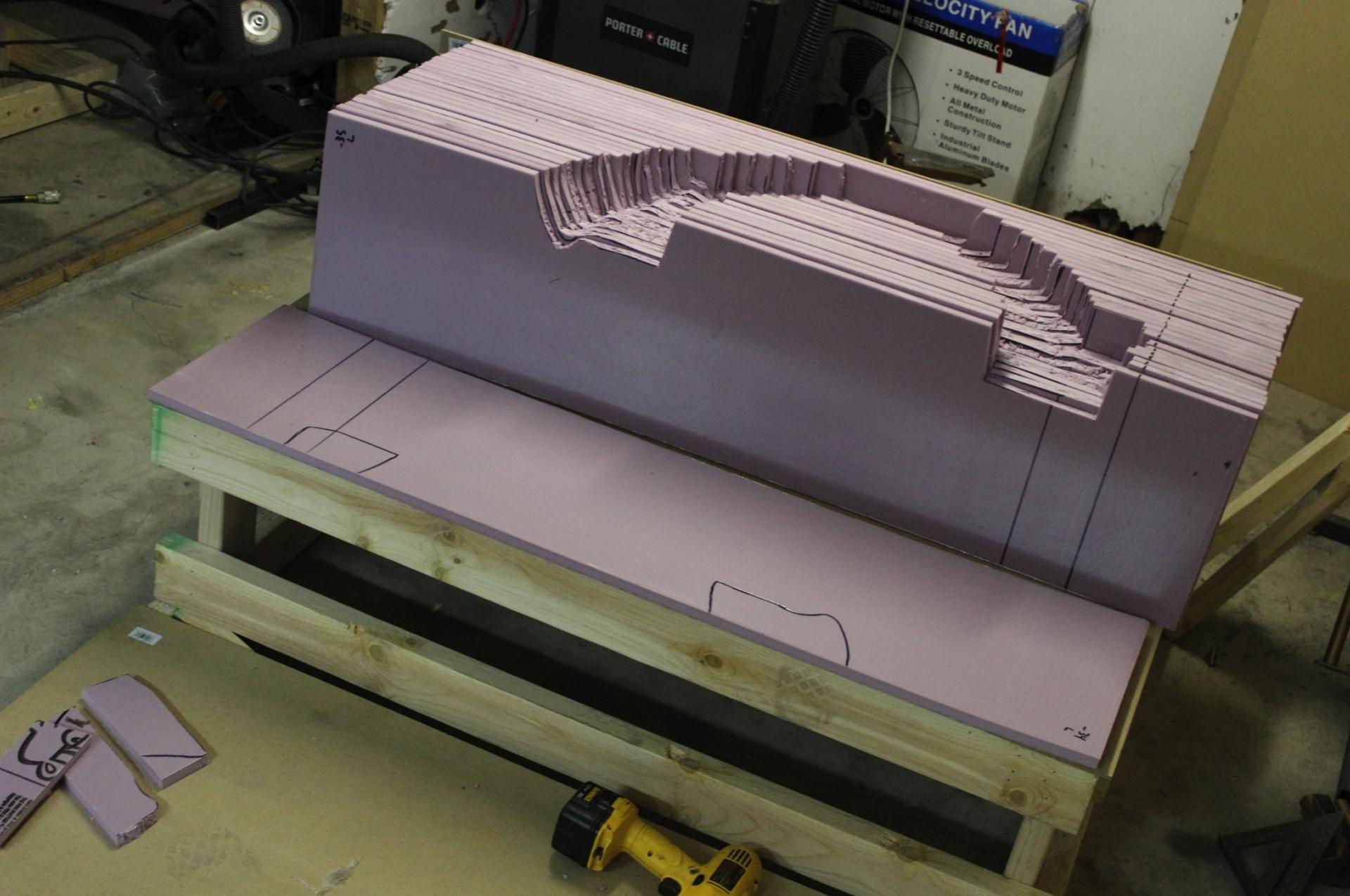
# Prototyping is about failure.

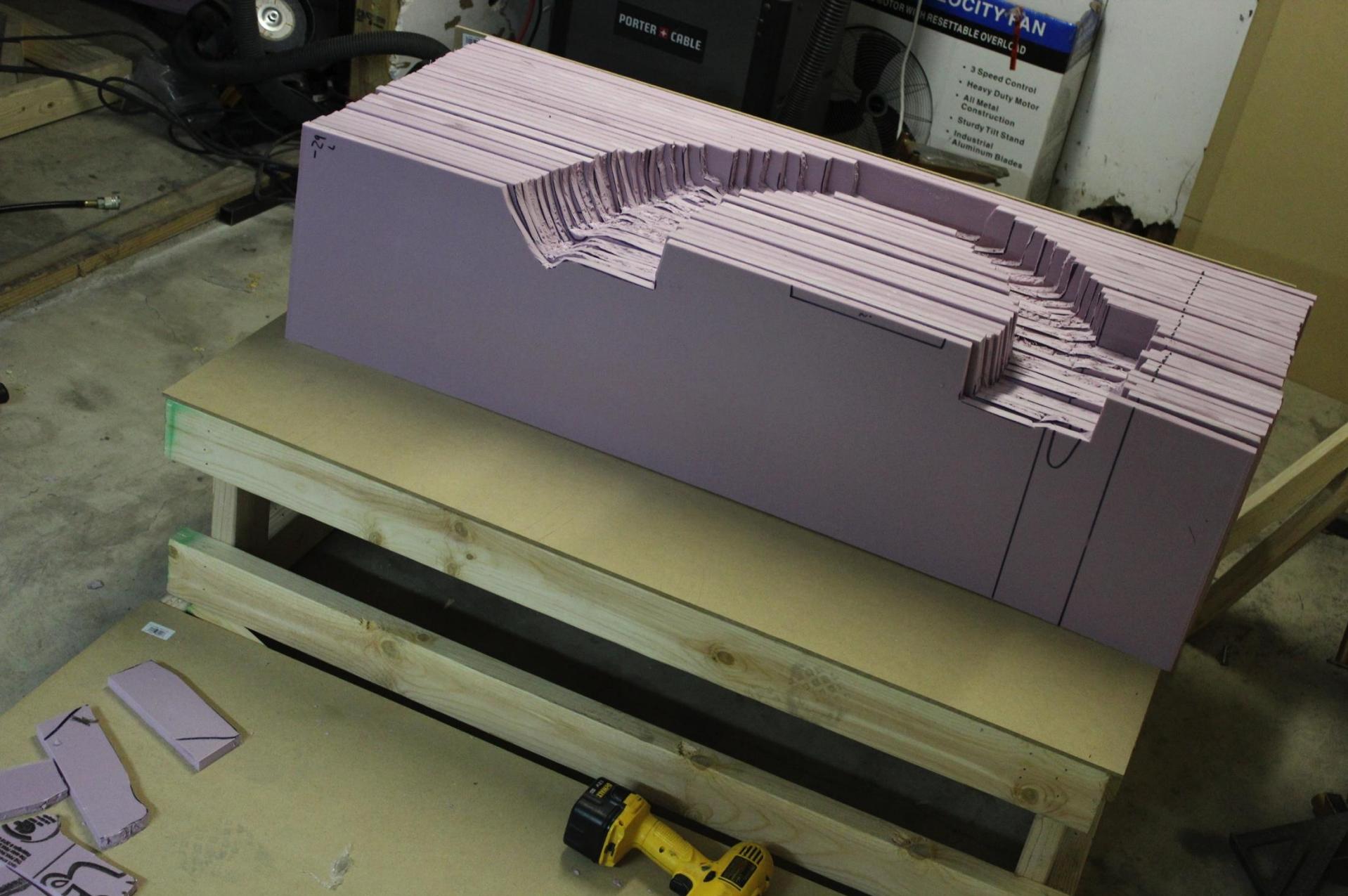
Having the audacity to dream, experiment, and fail - is required.



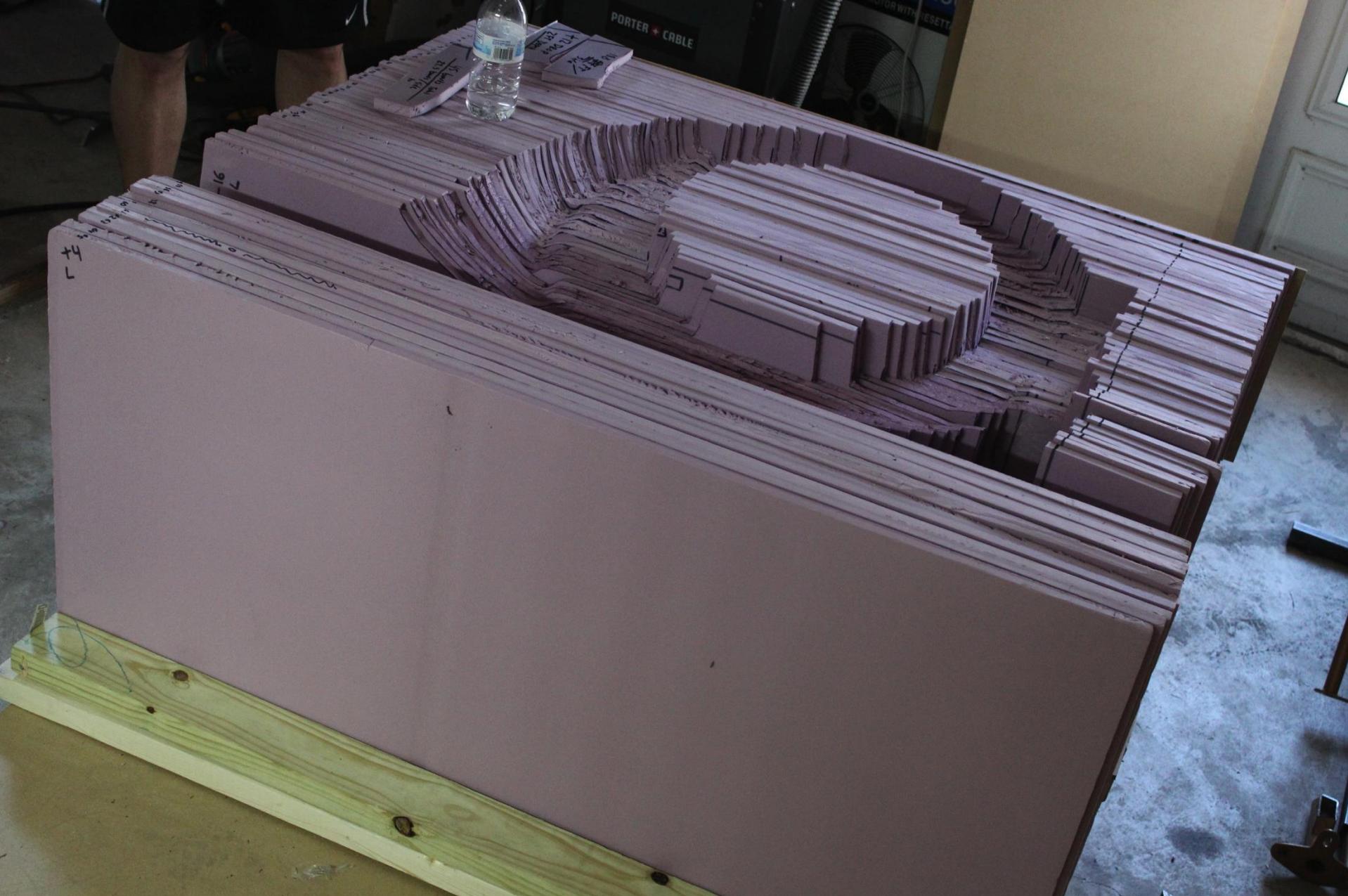




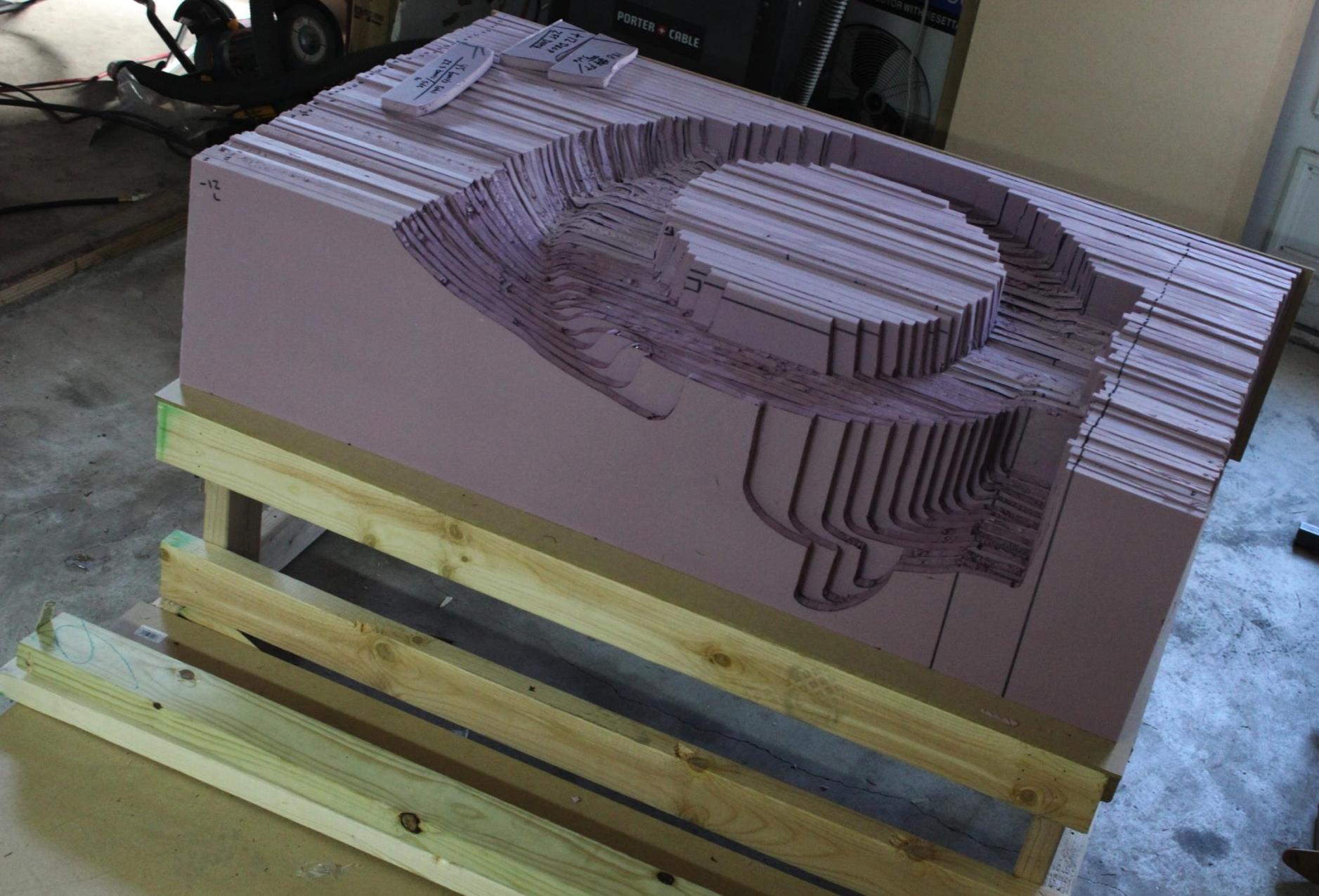


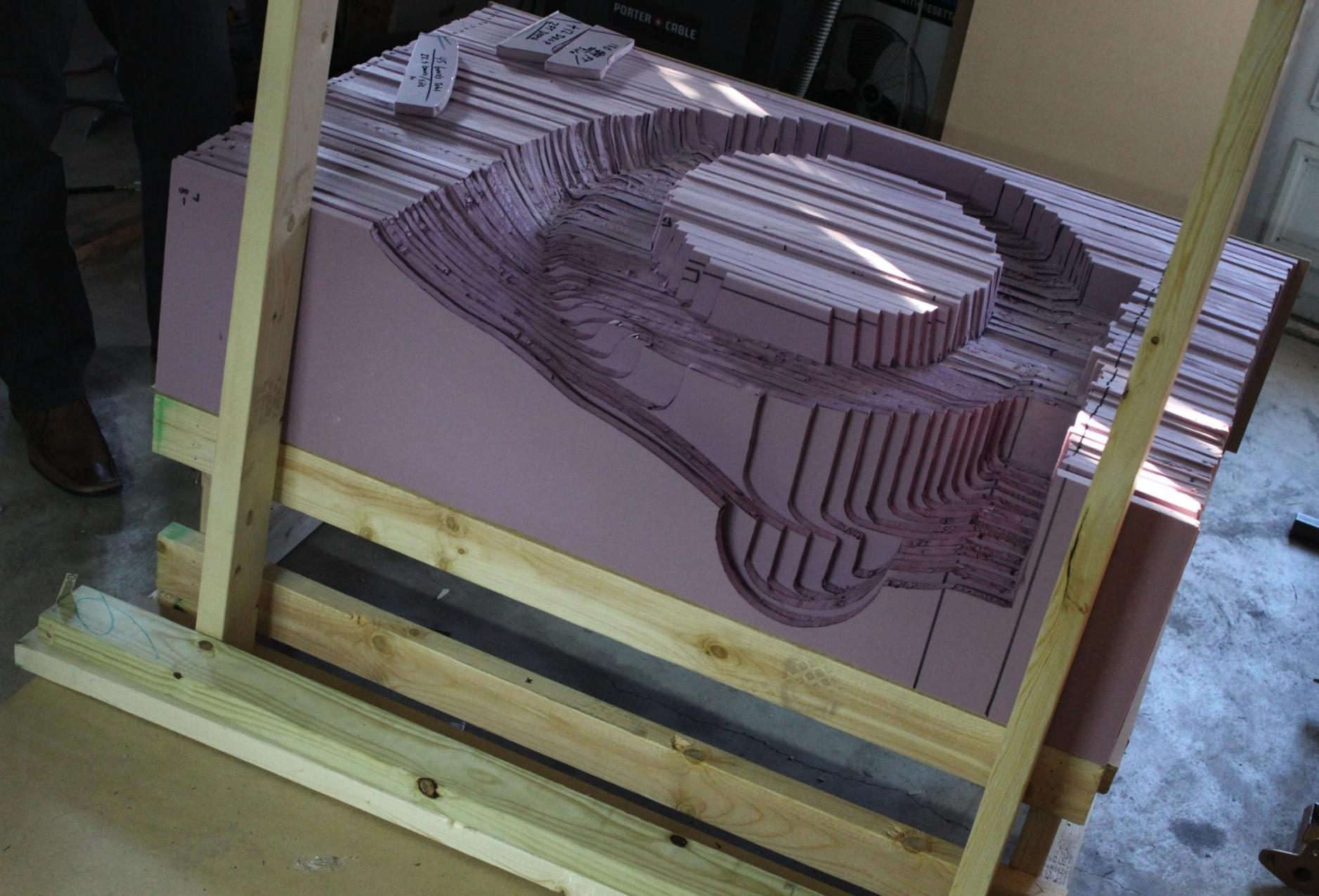


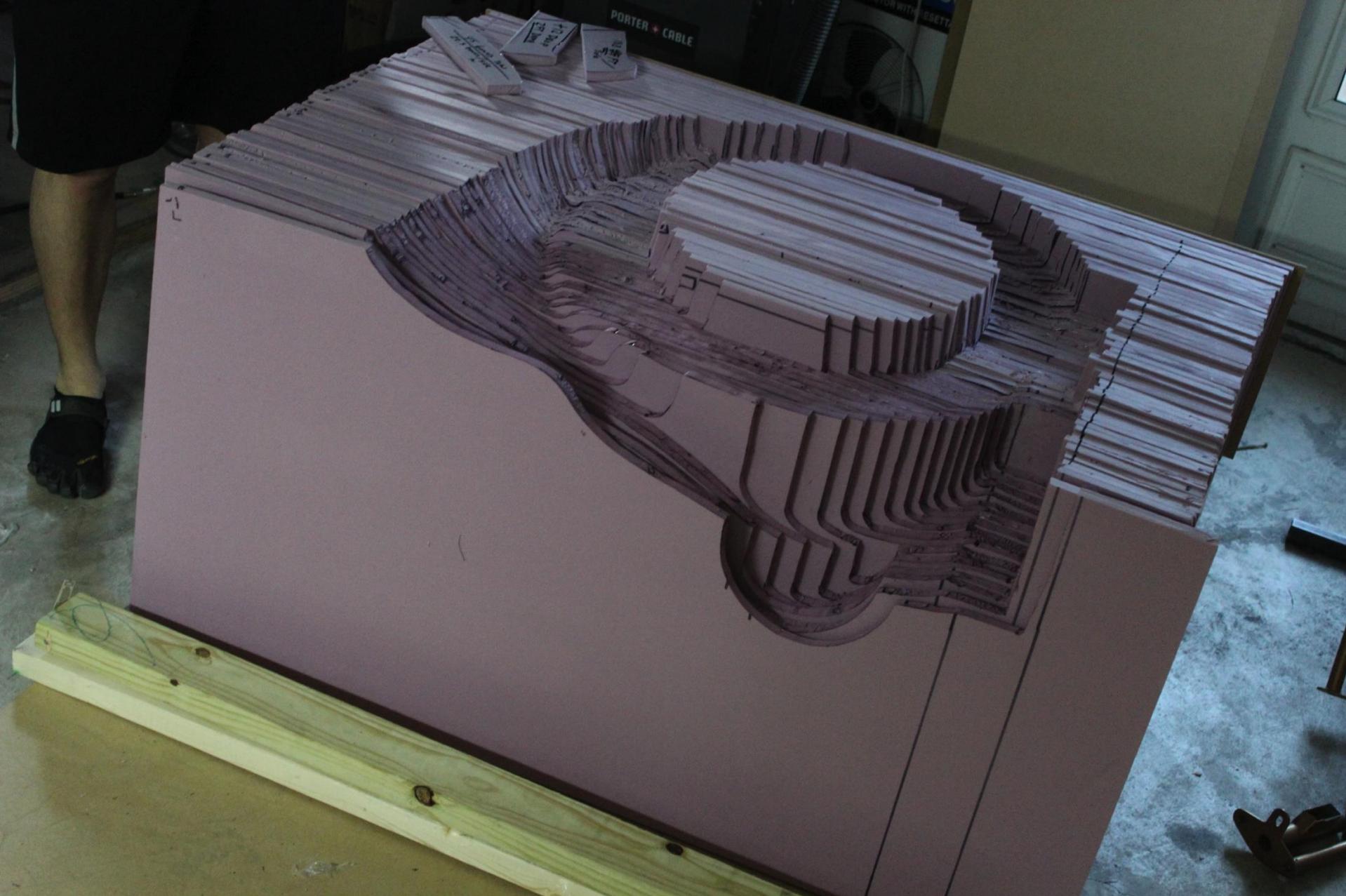


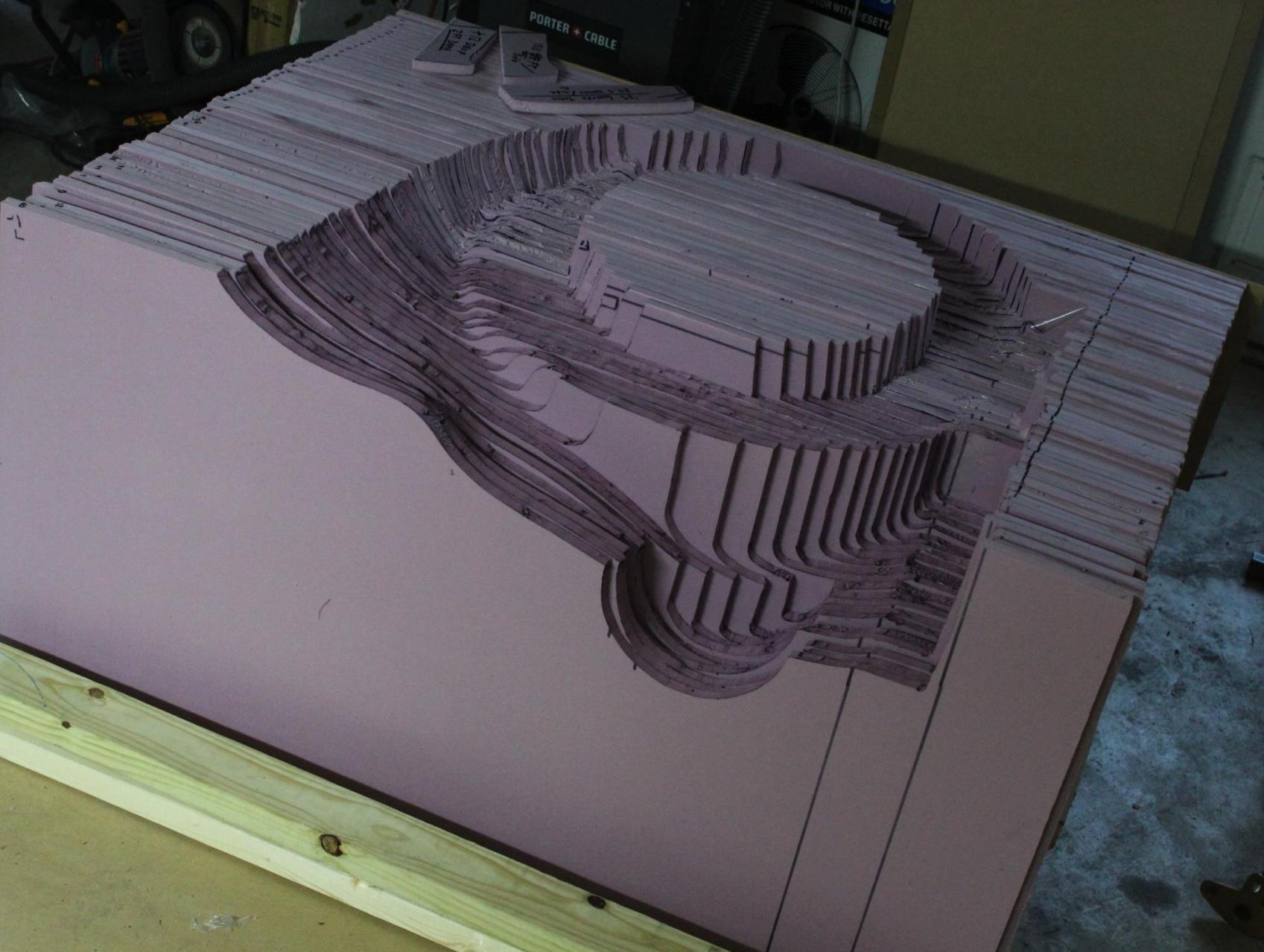


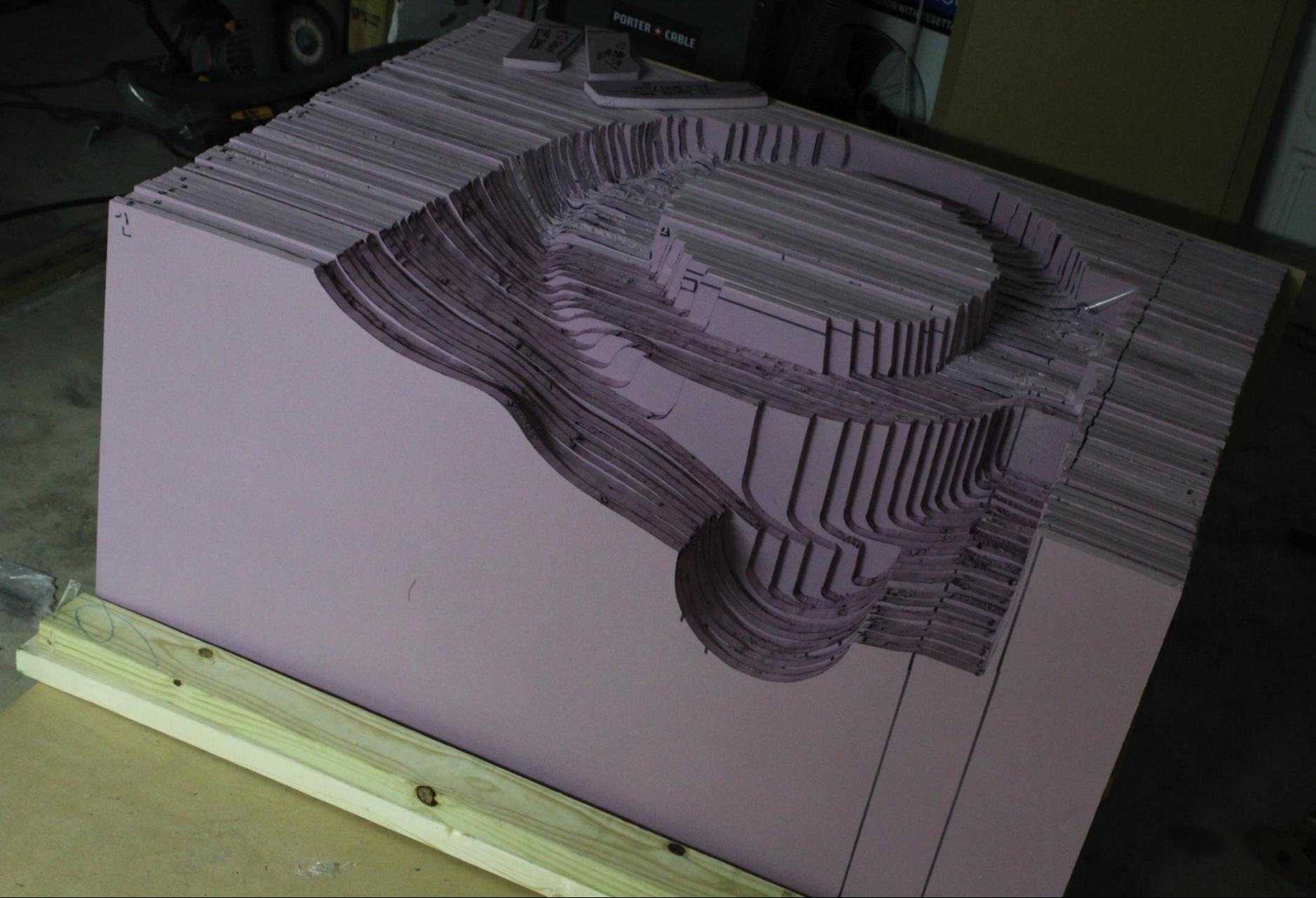


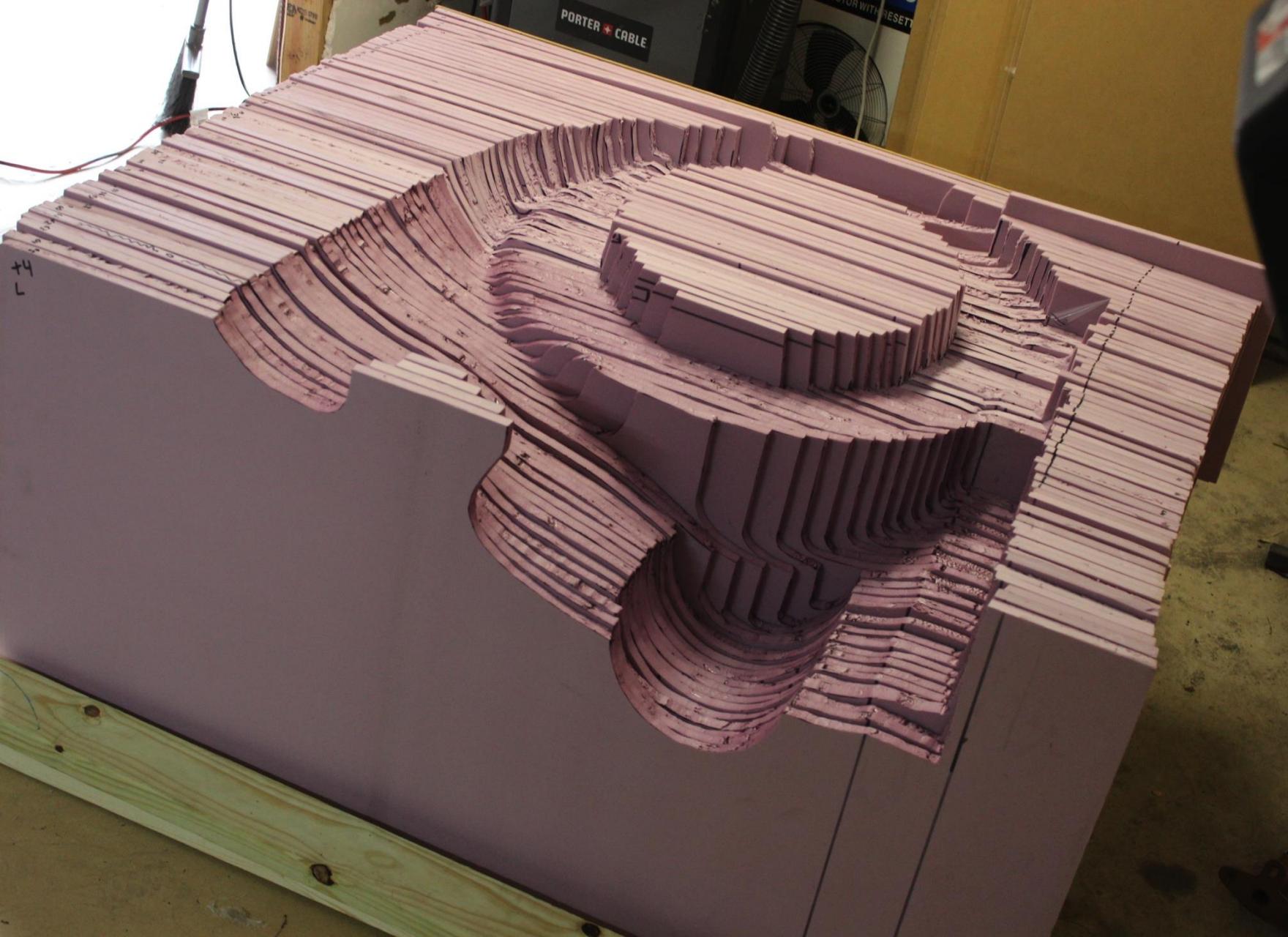


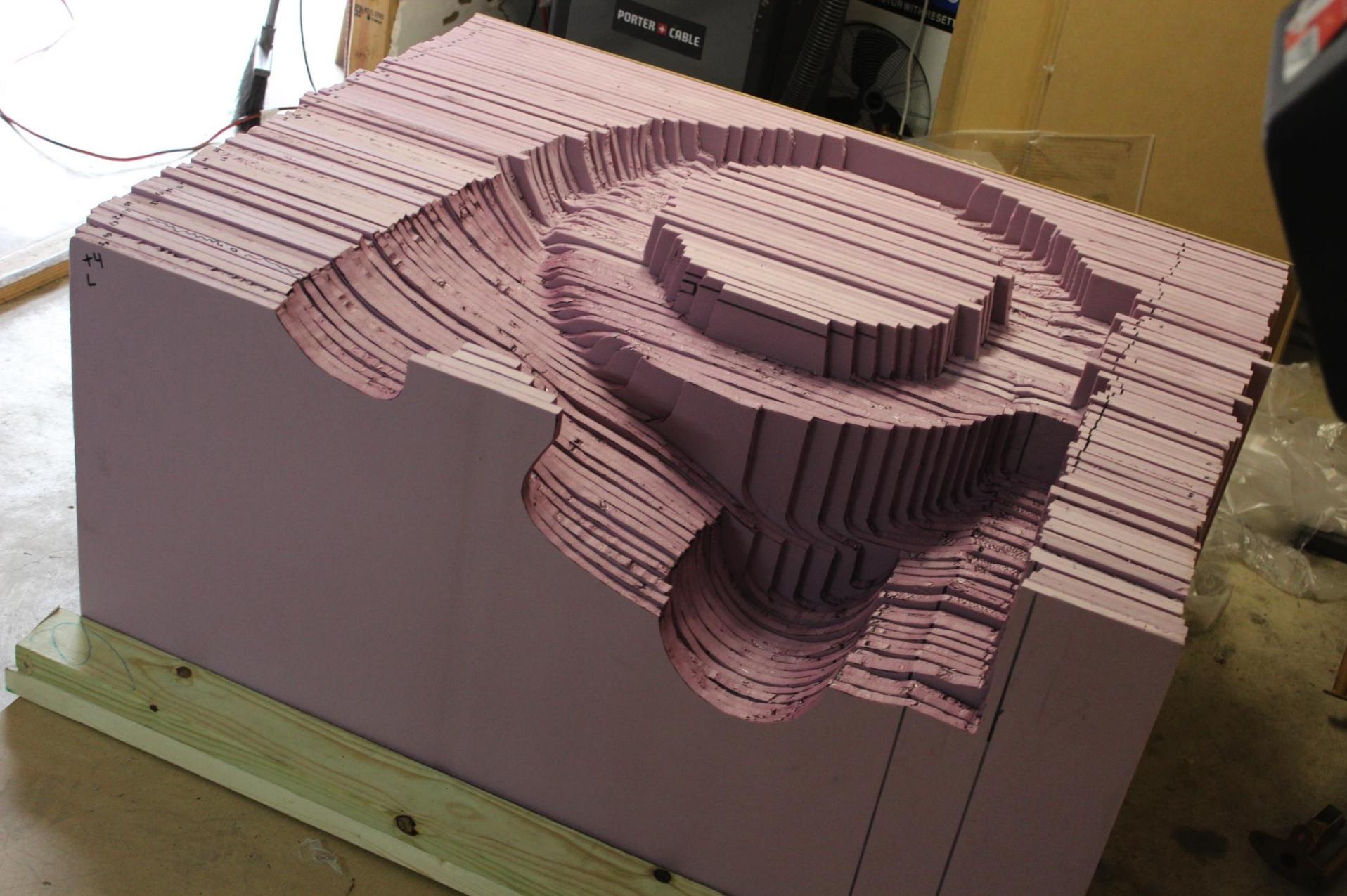


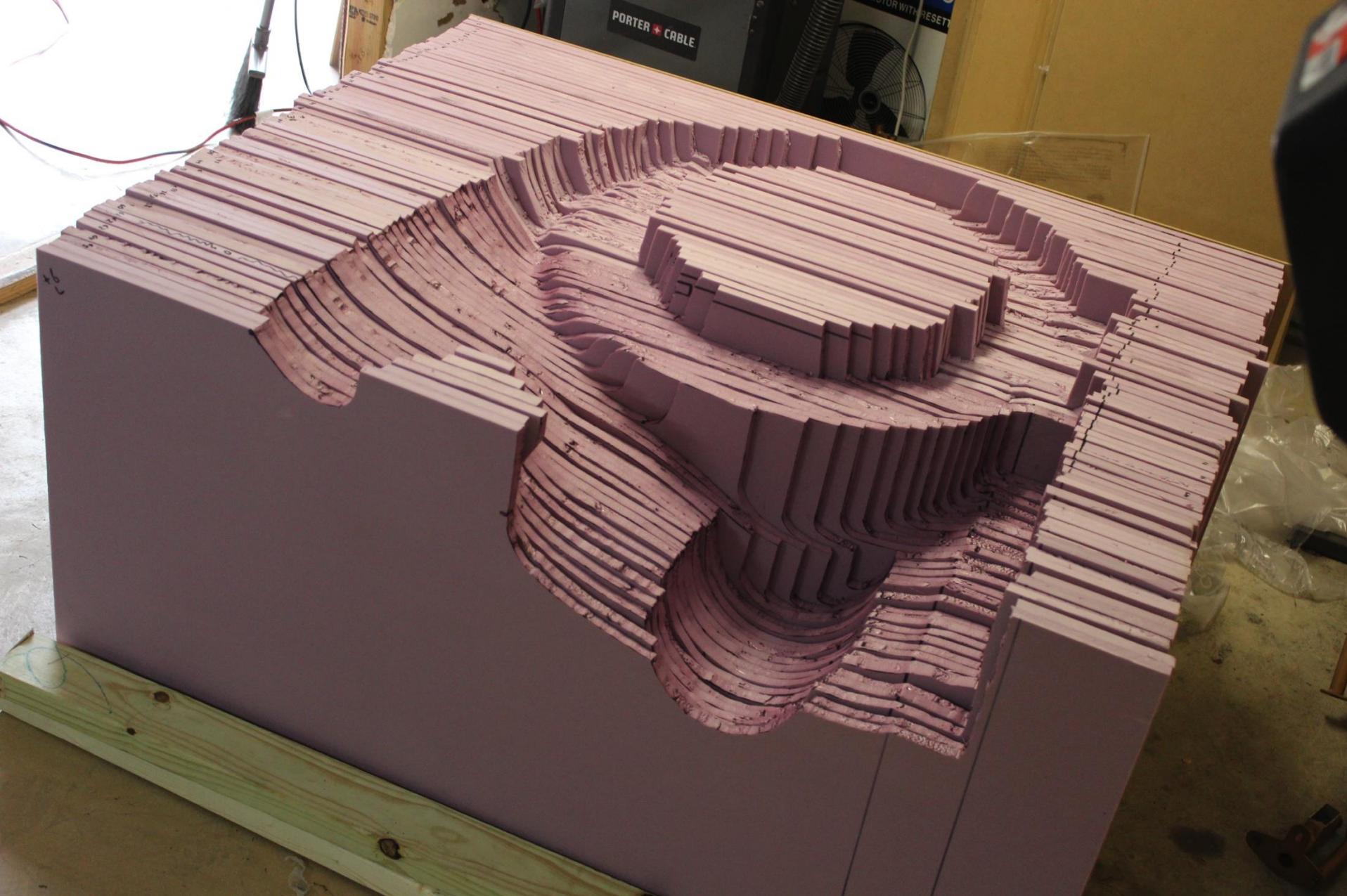


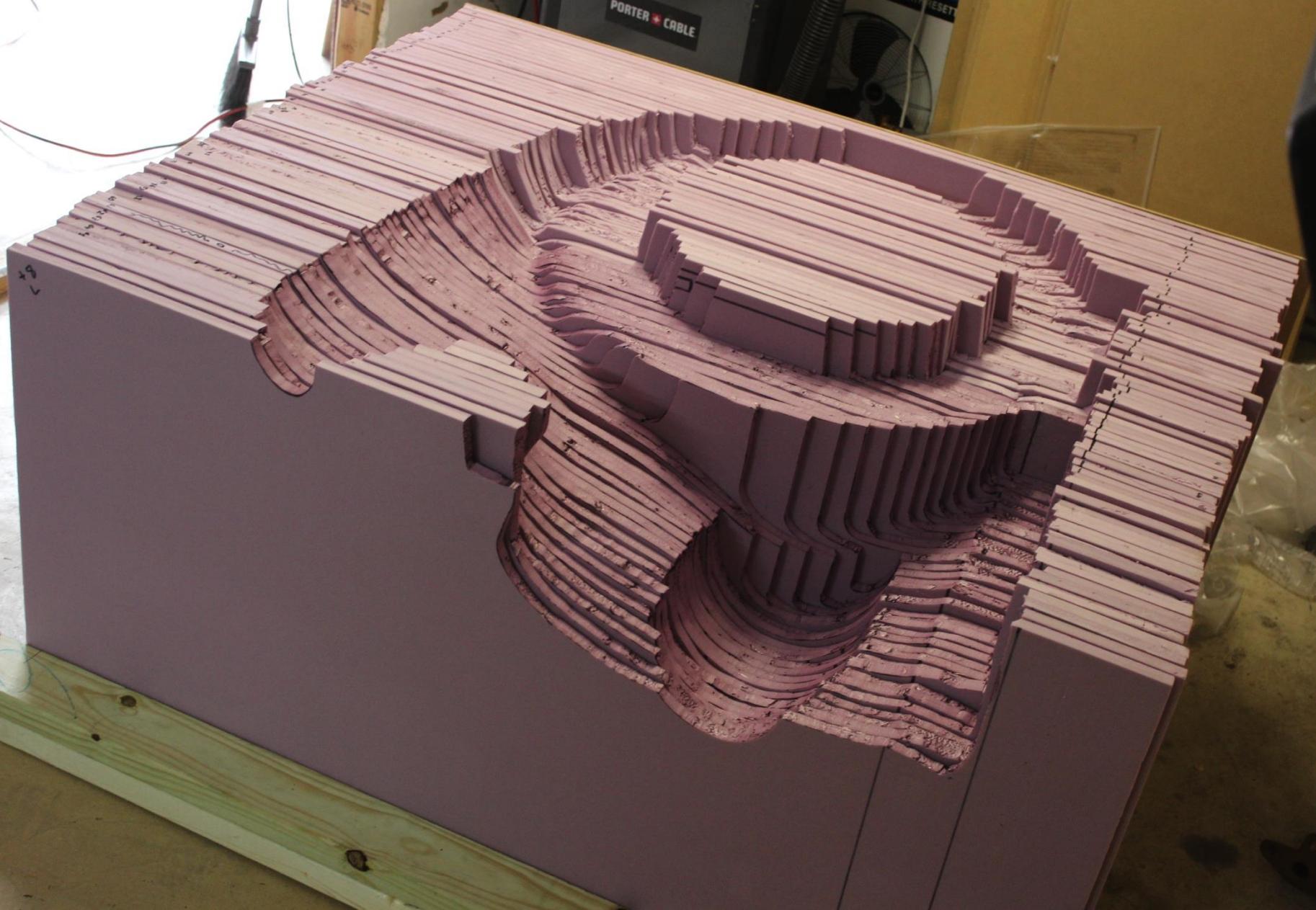


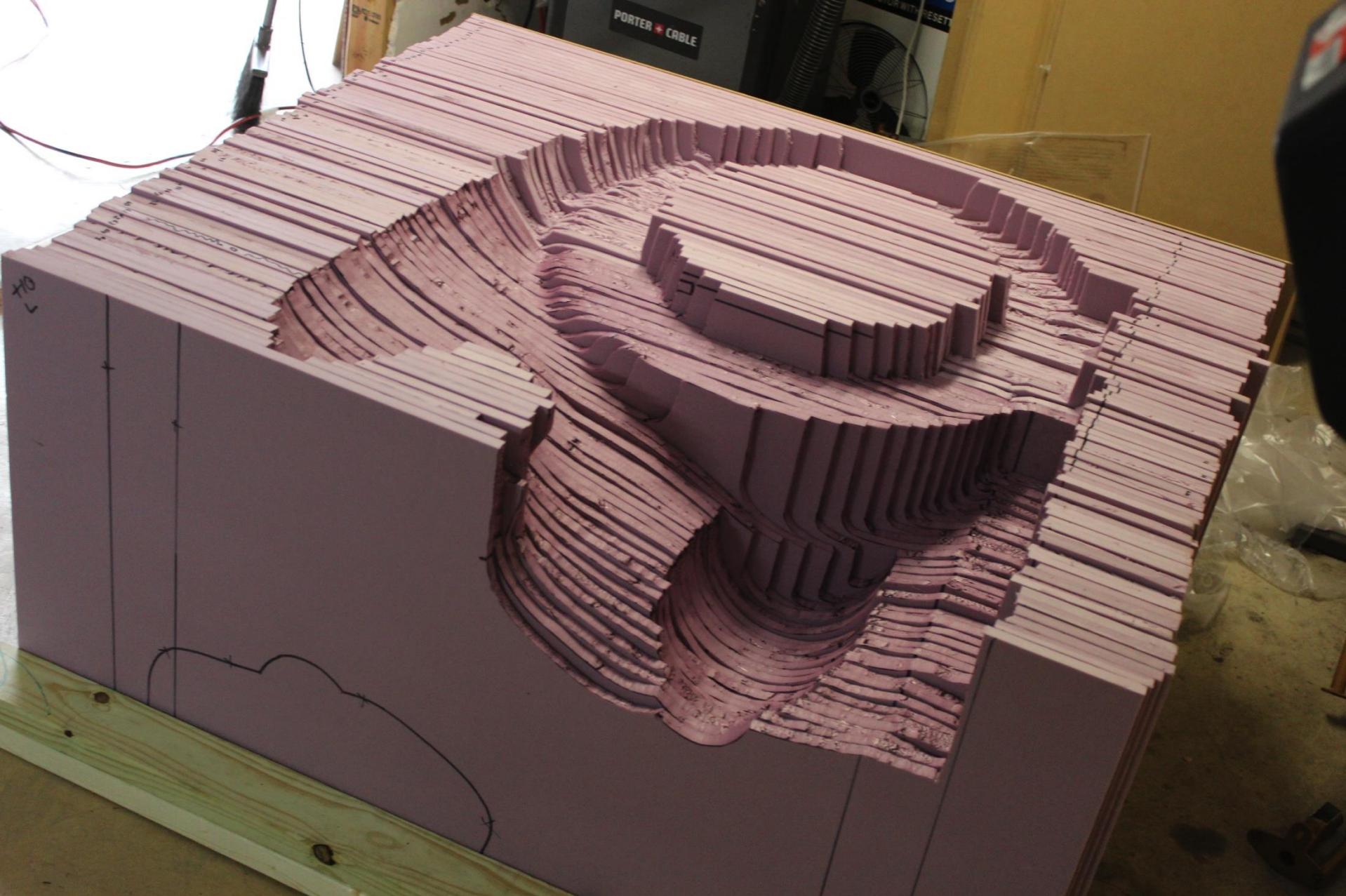


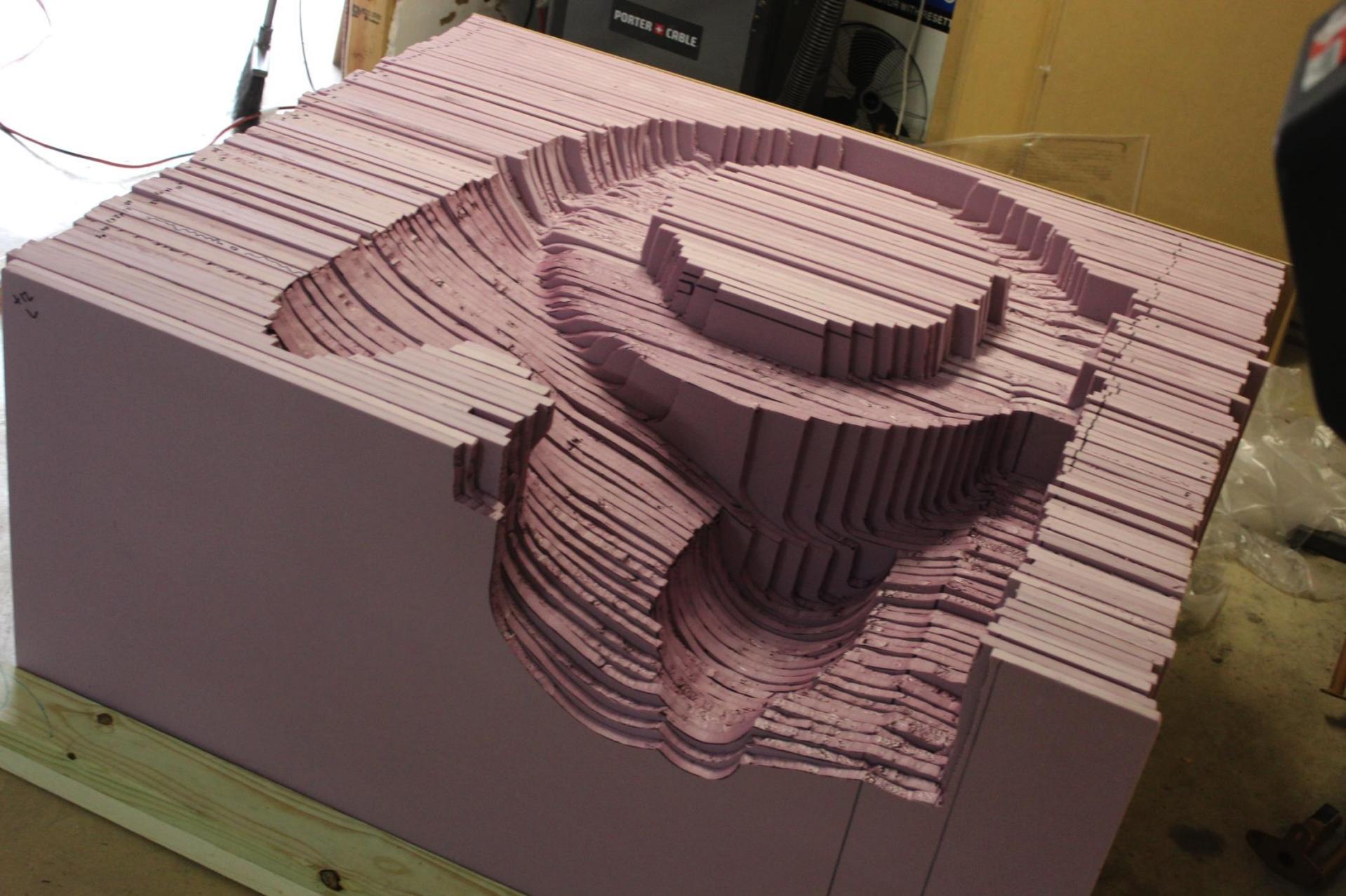


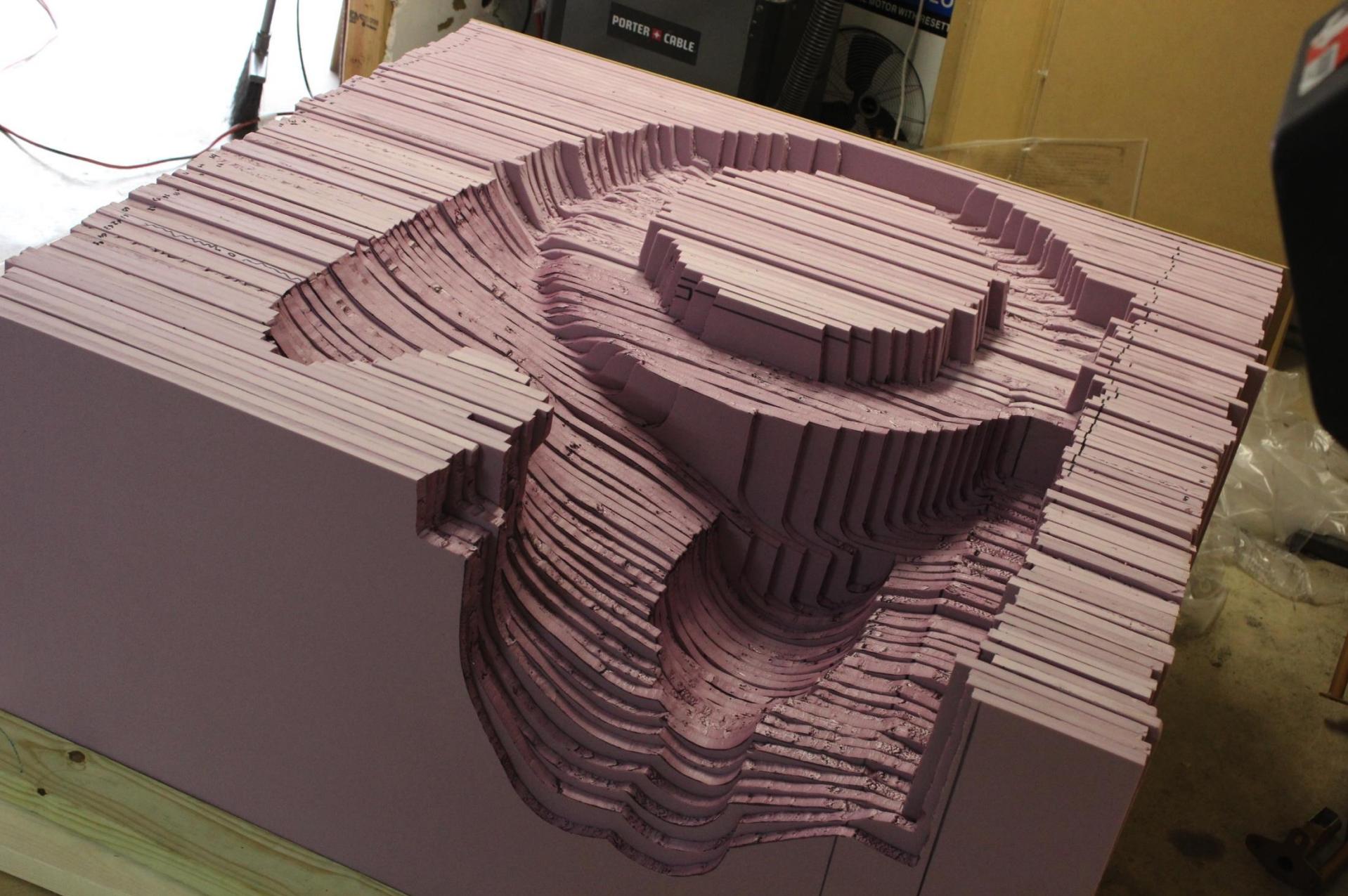


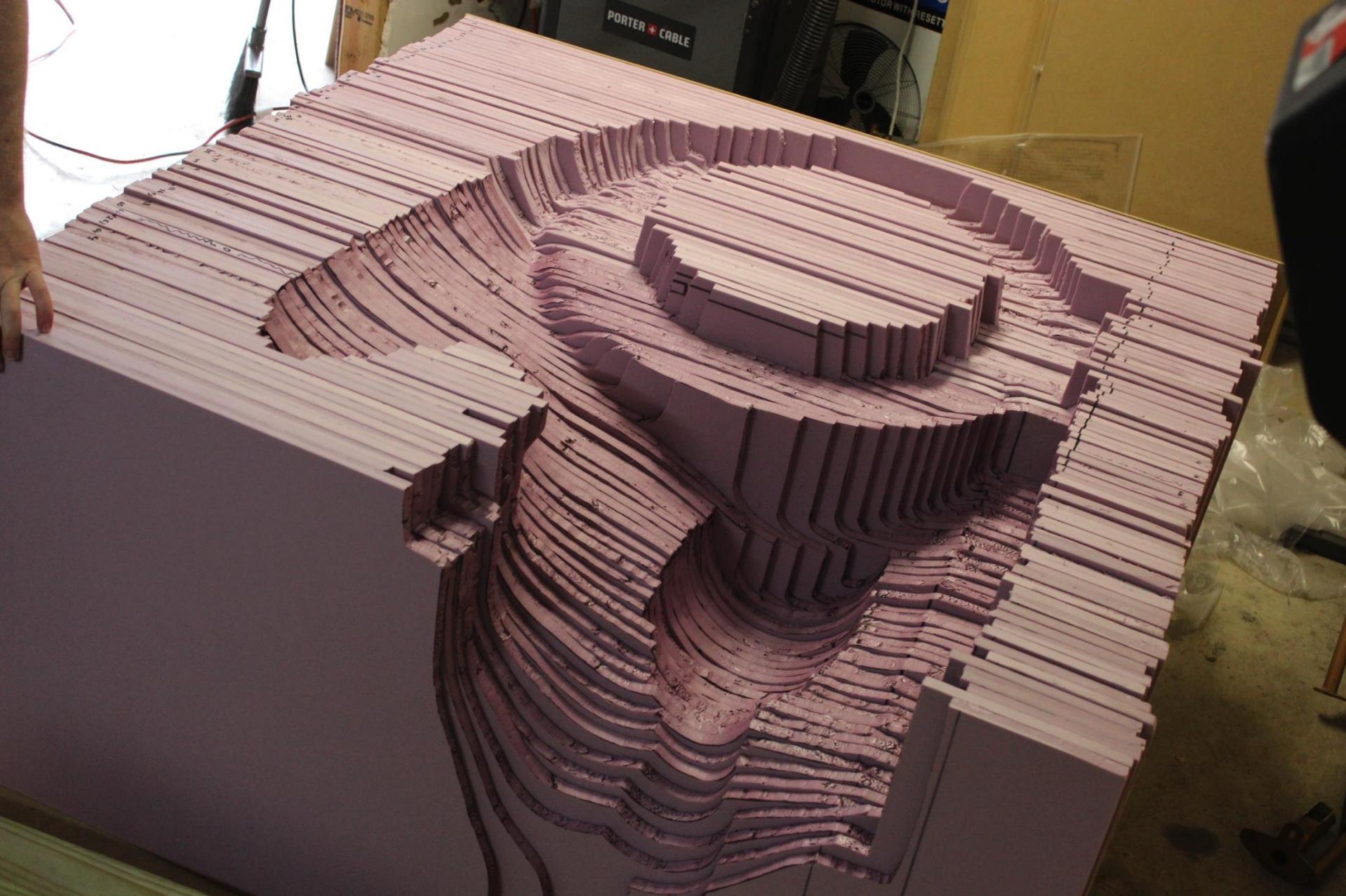


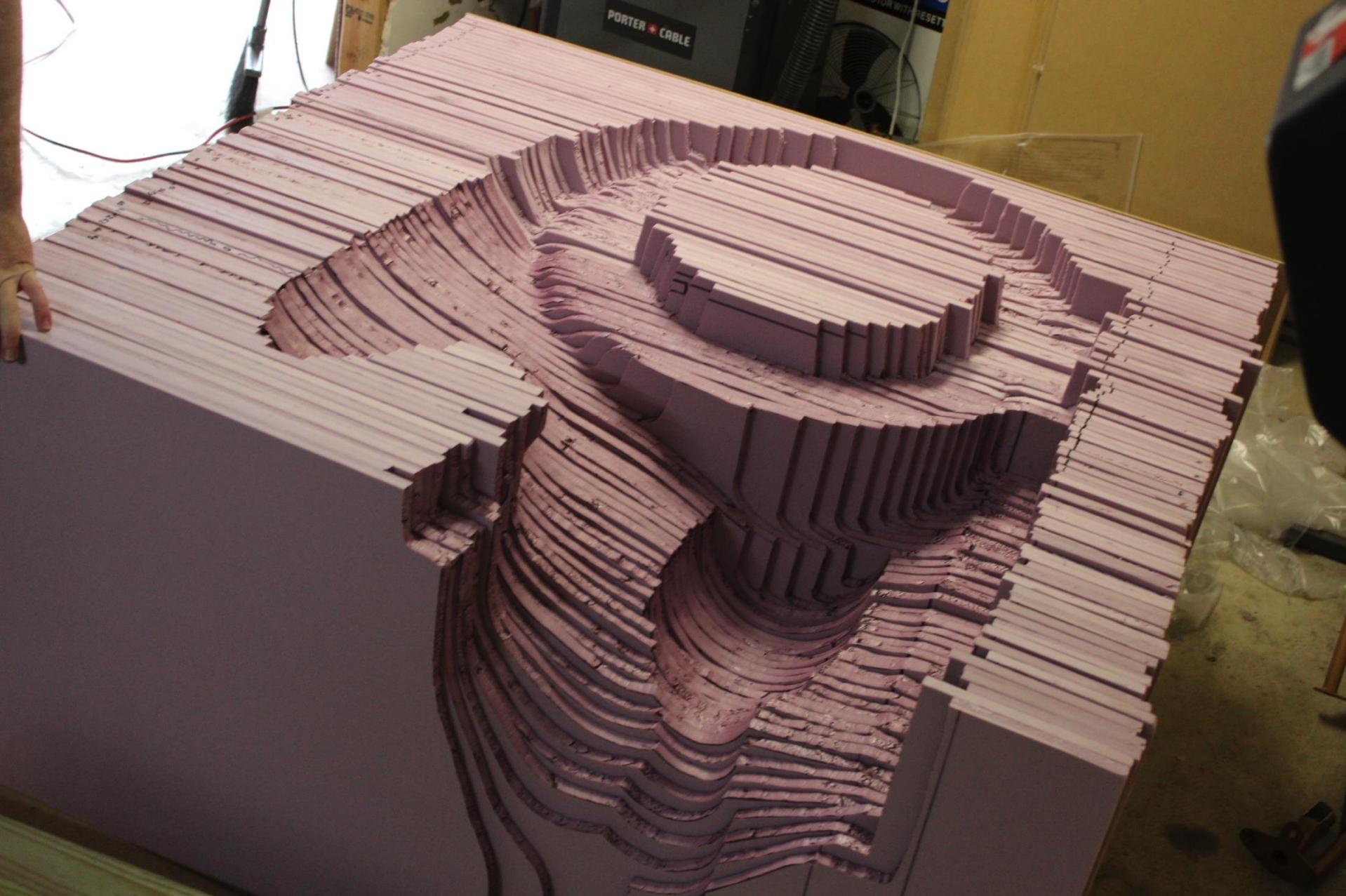


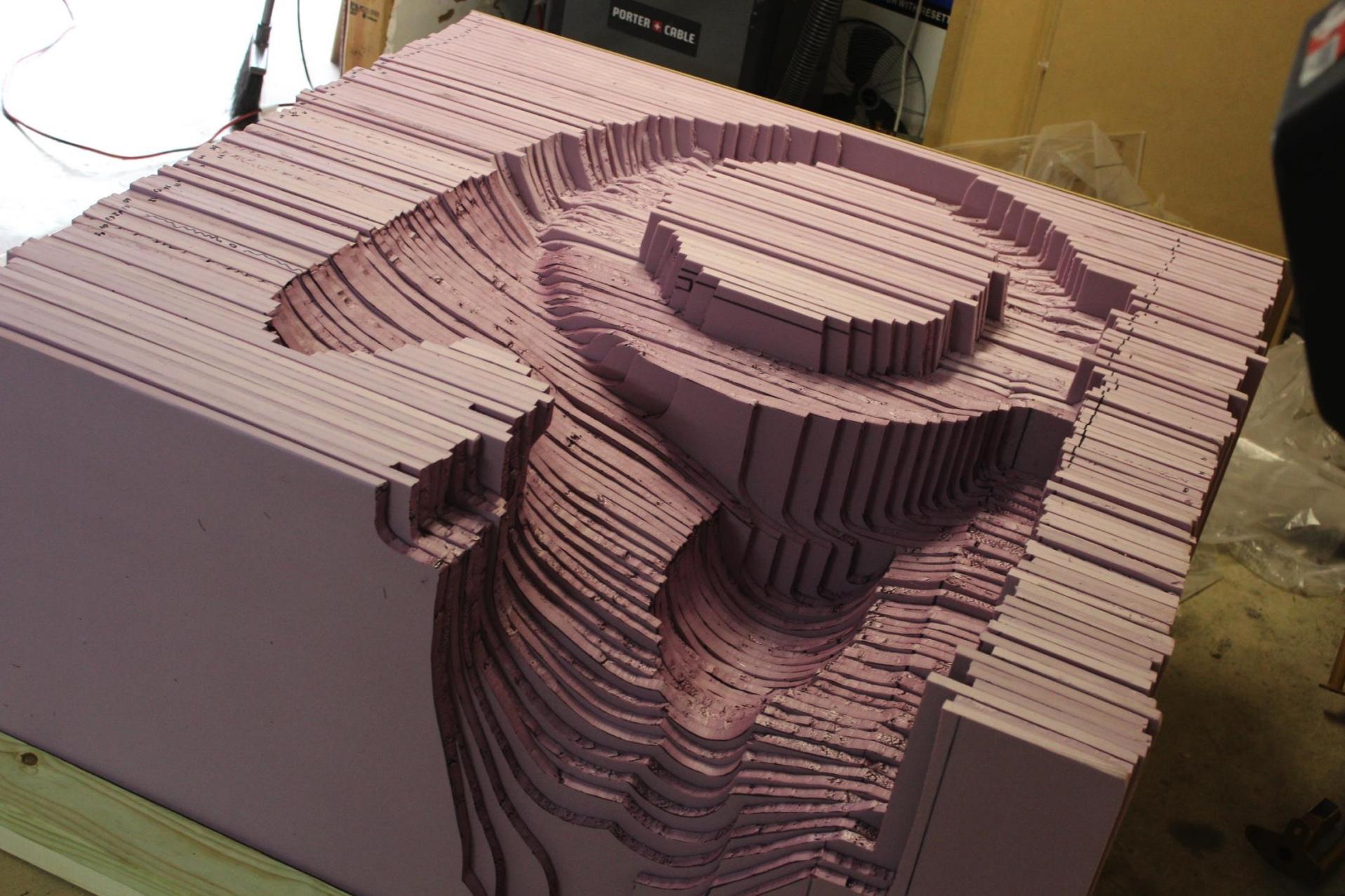


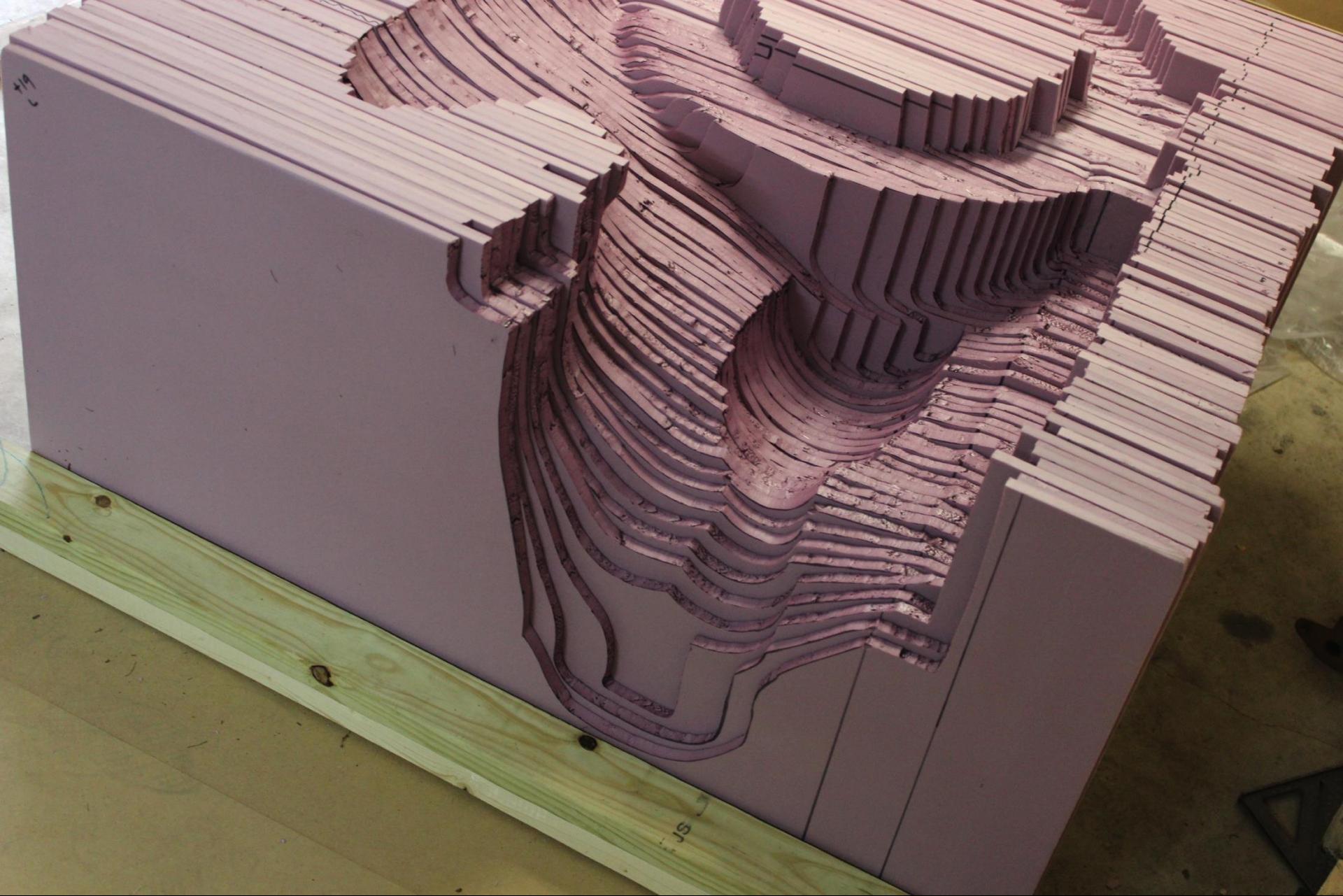


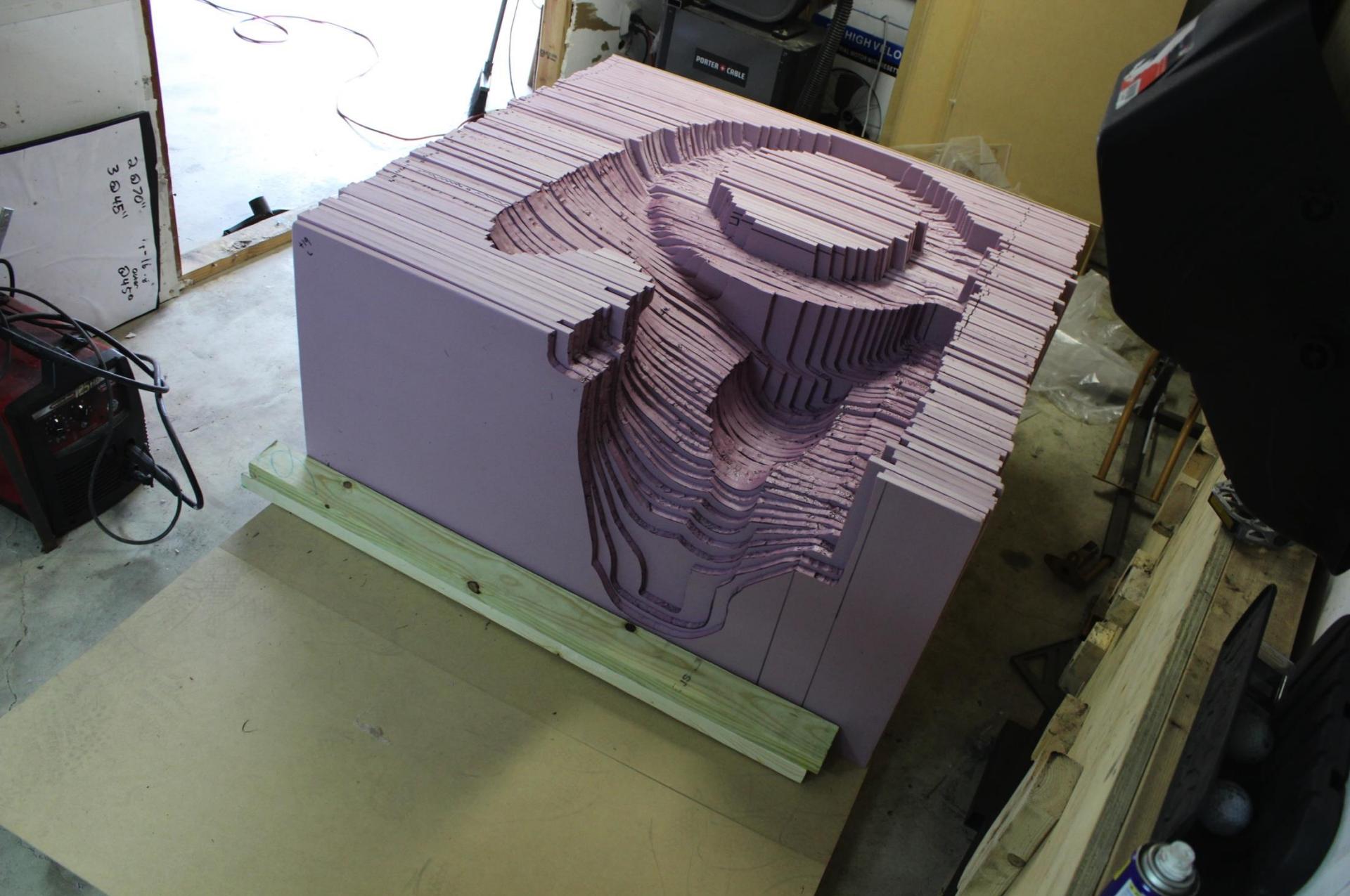




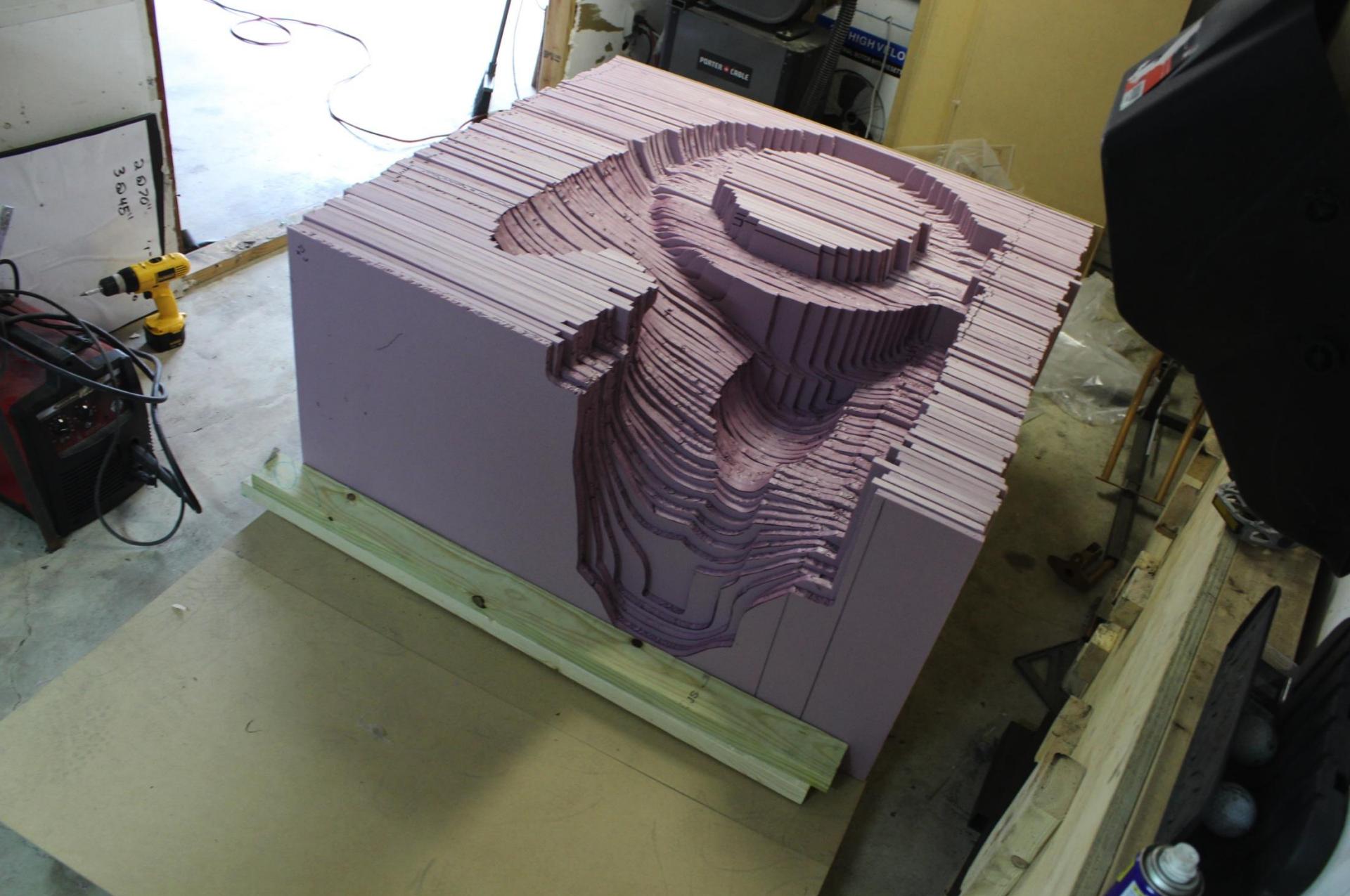




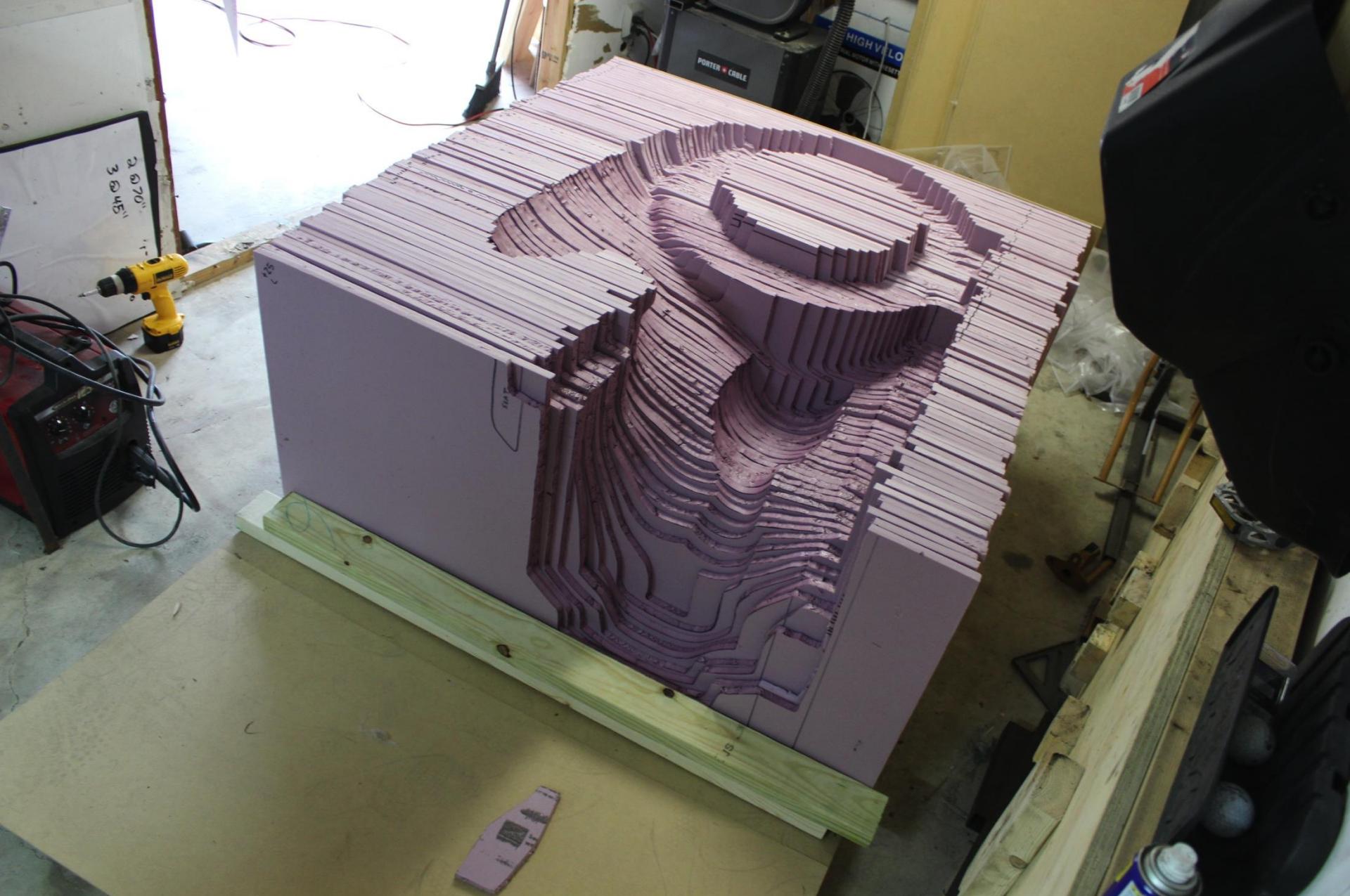




3  
36545  
35701

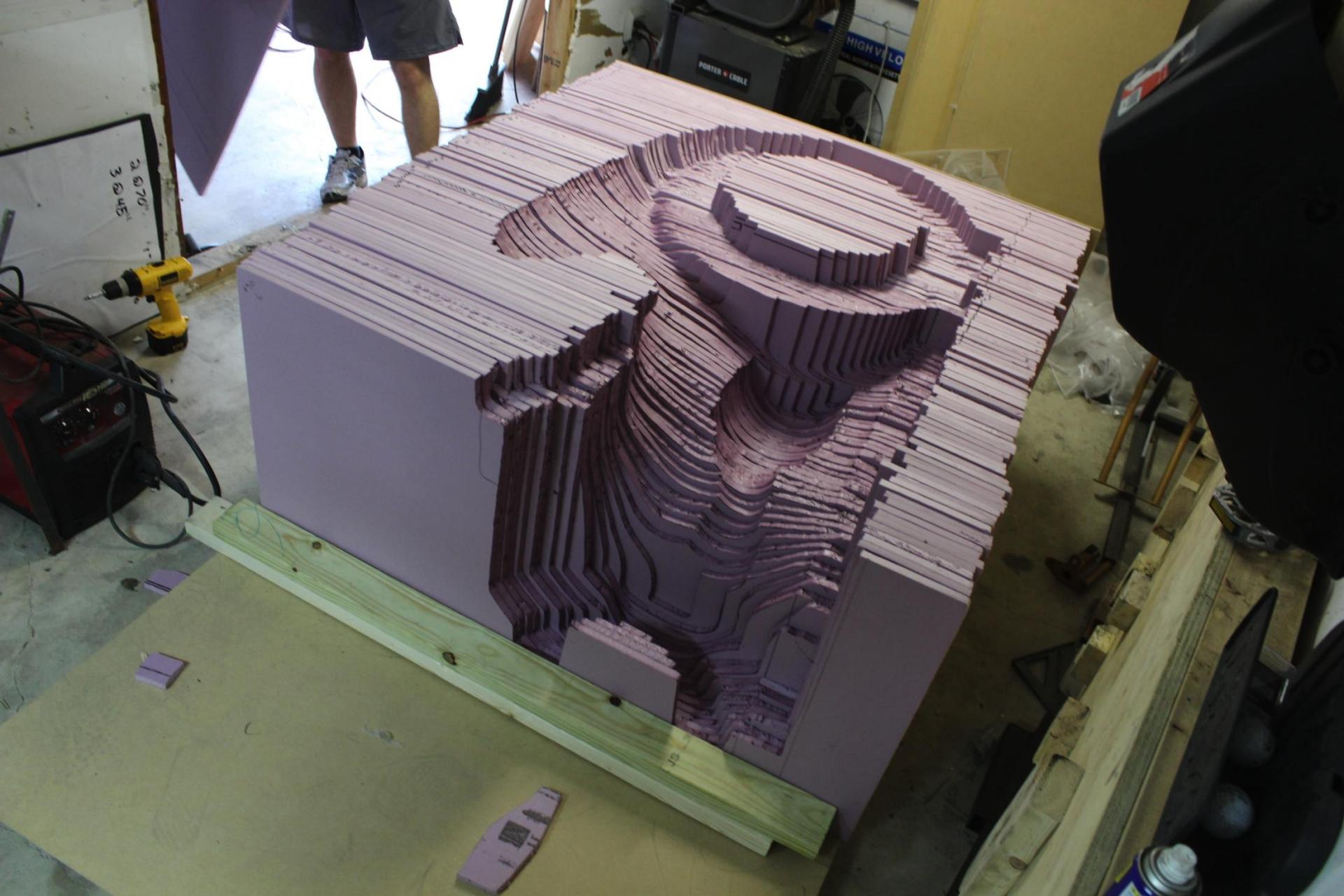


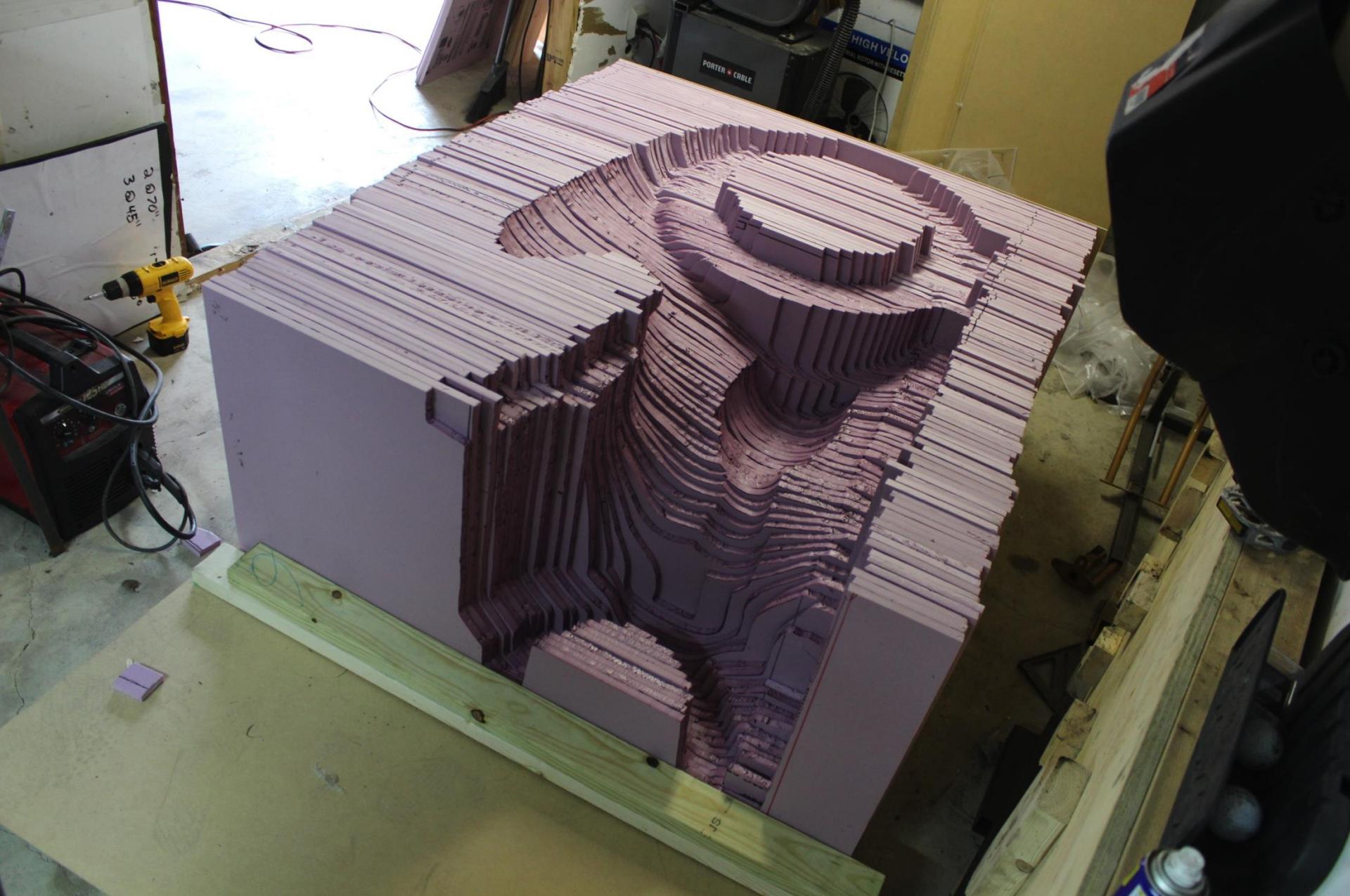




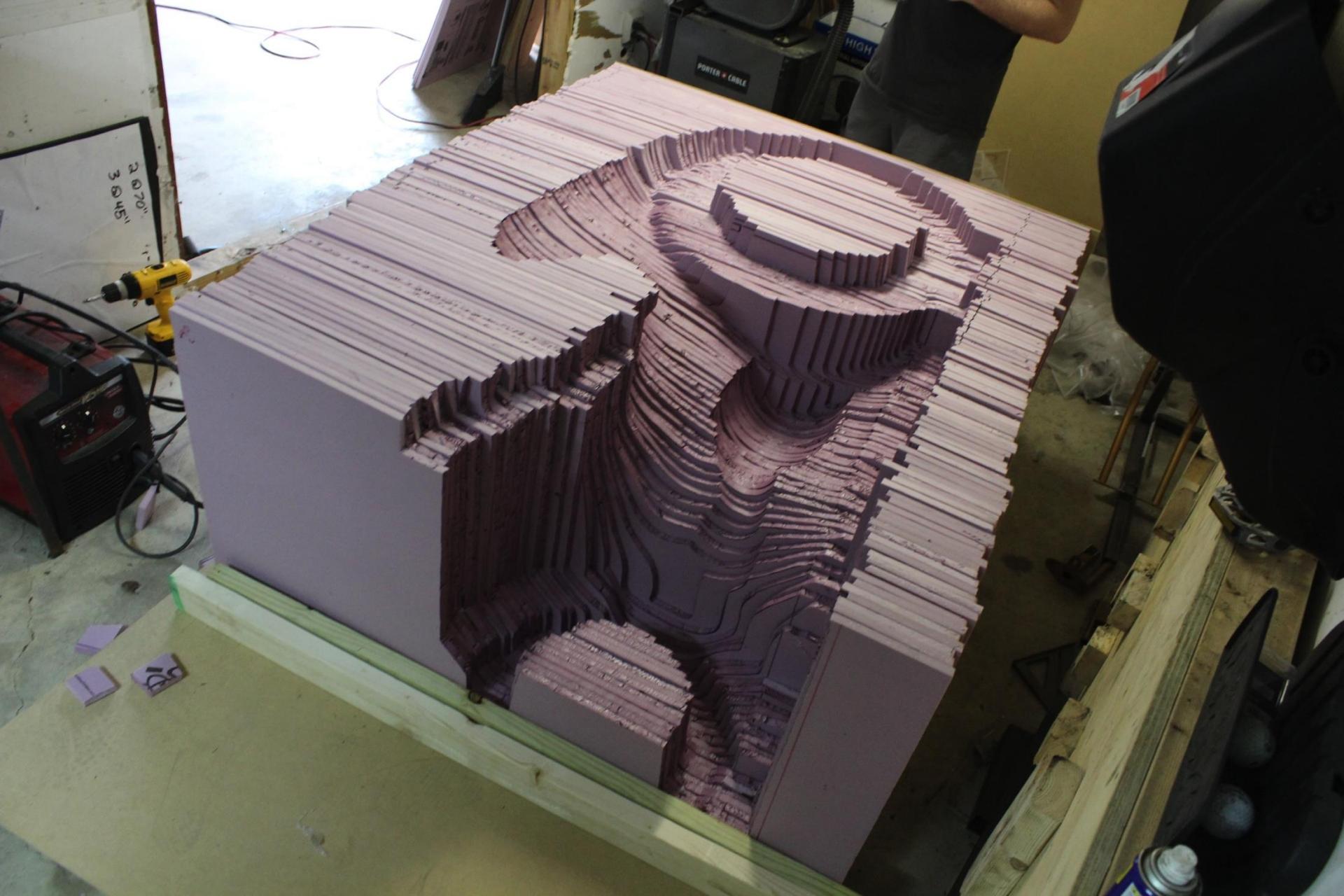
2 @ 70"  
3 @ 45"

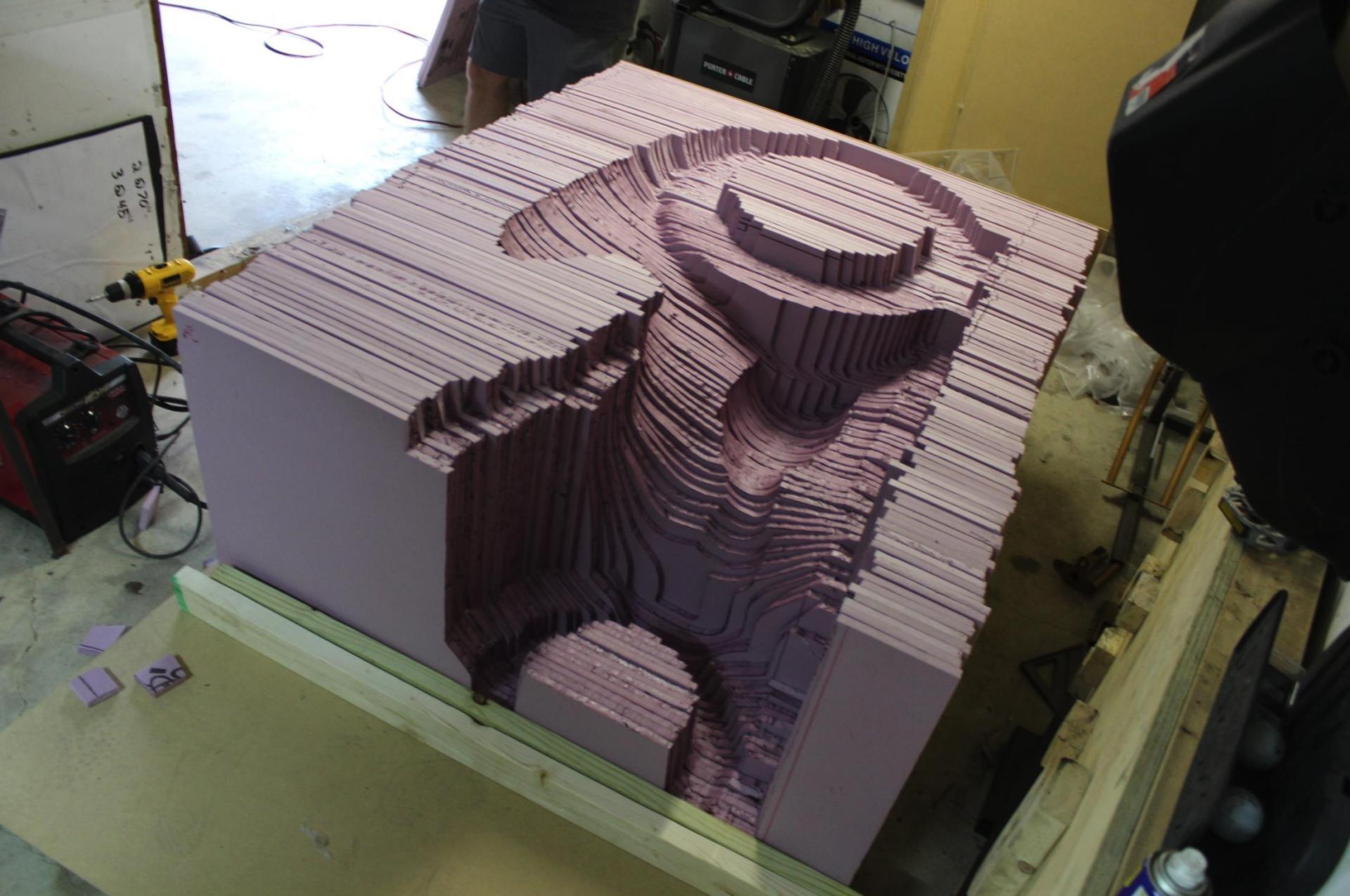


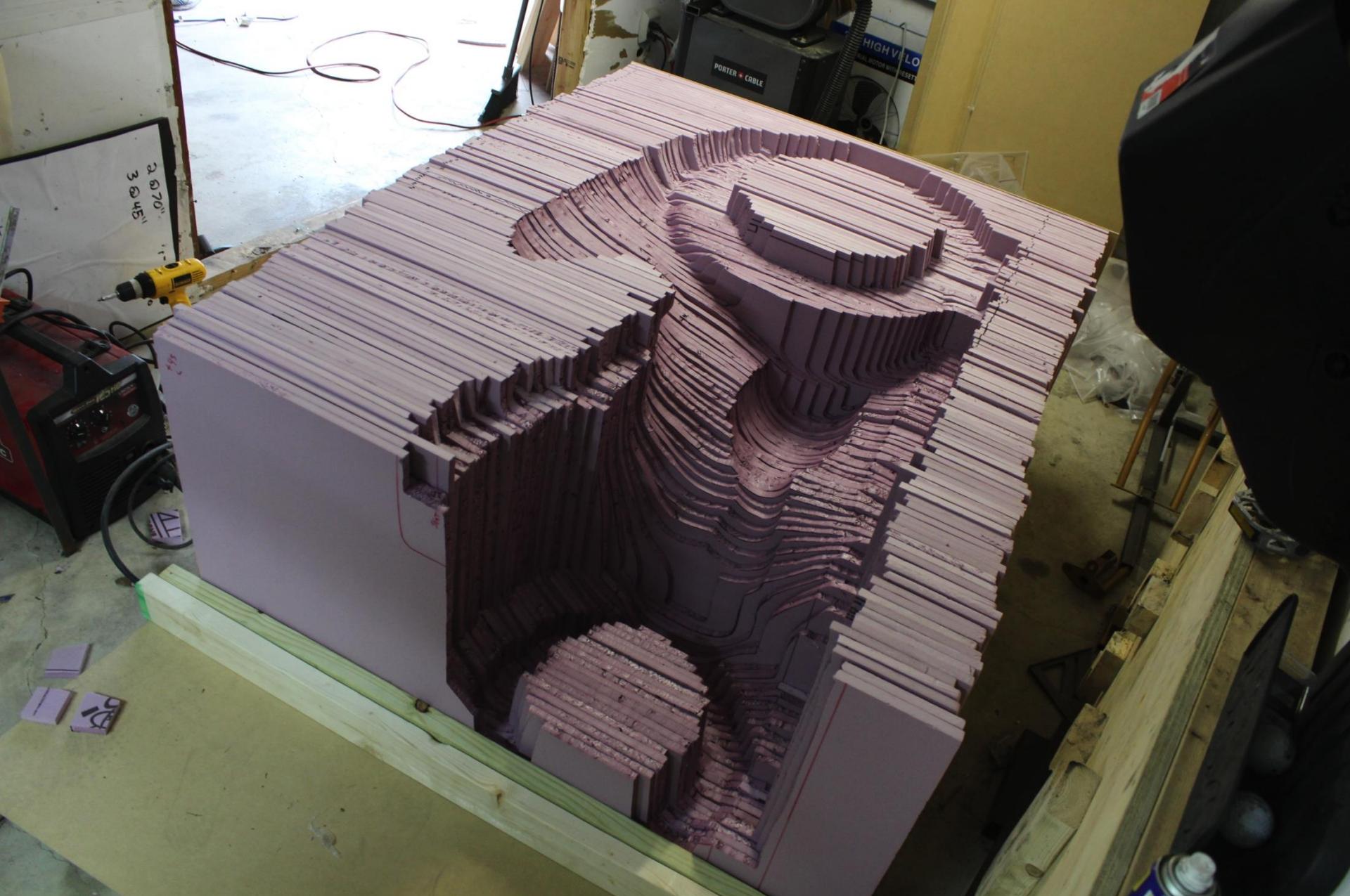


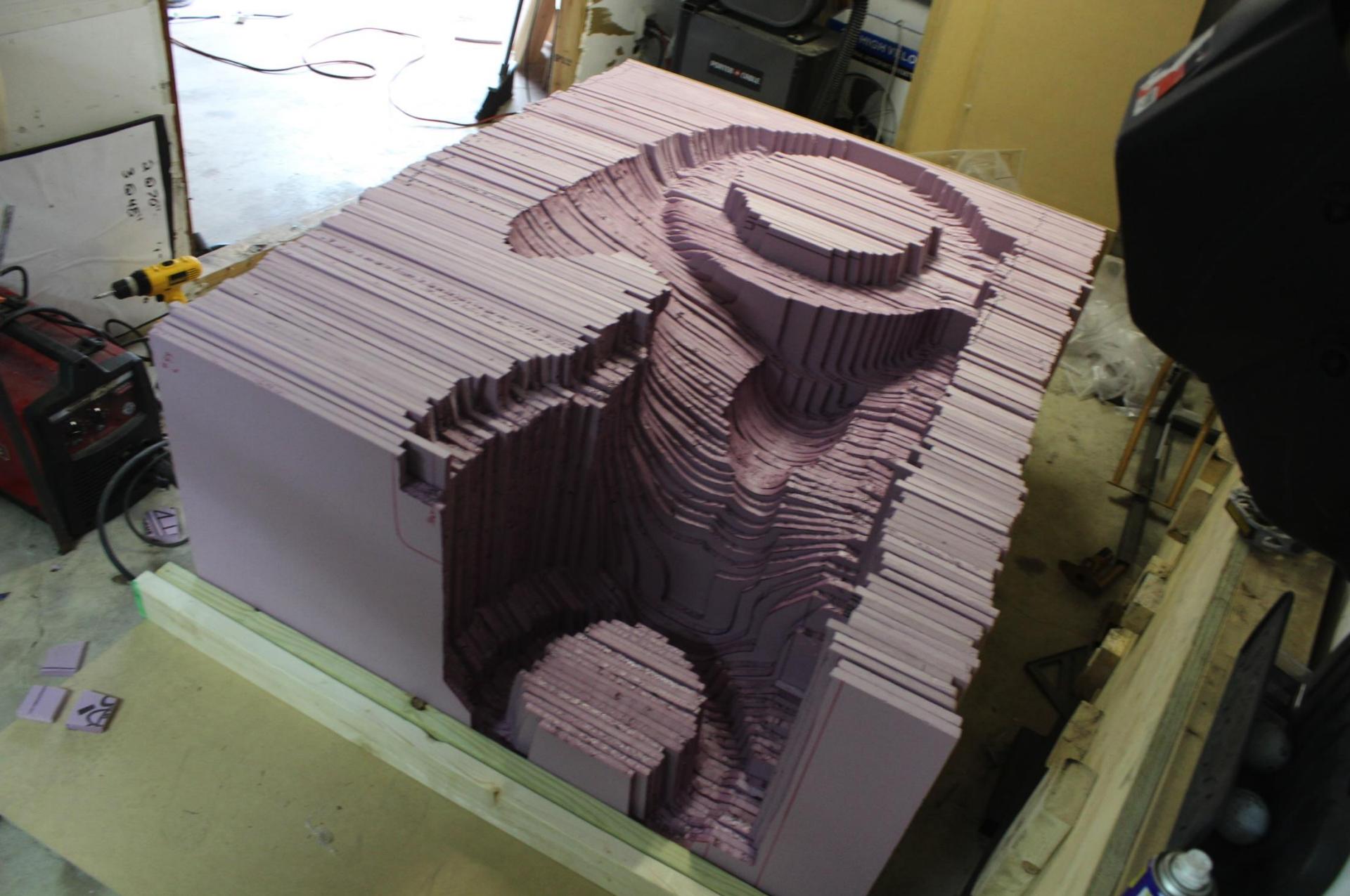








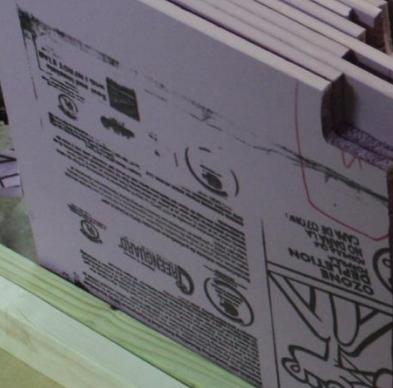




2 670"  
3 645"

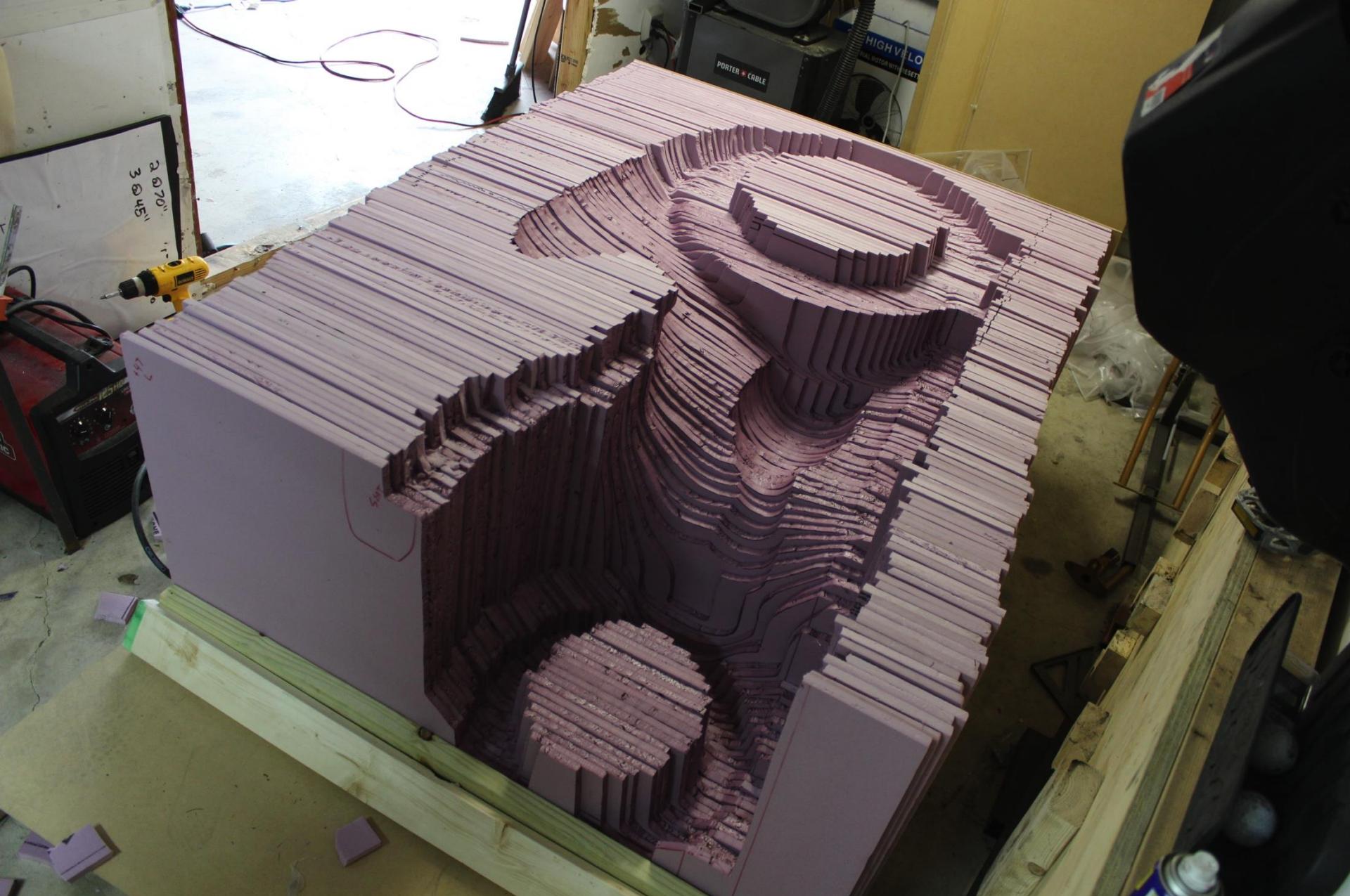


746  
L

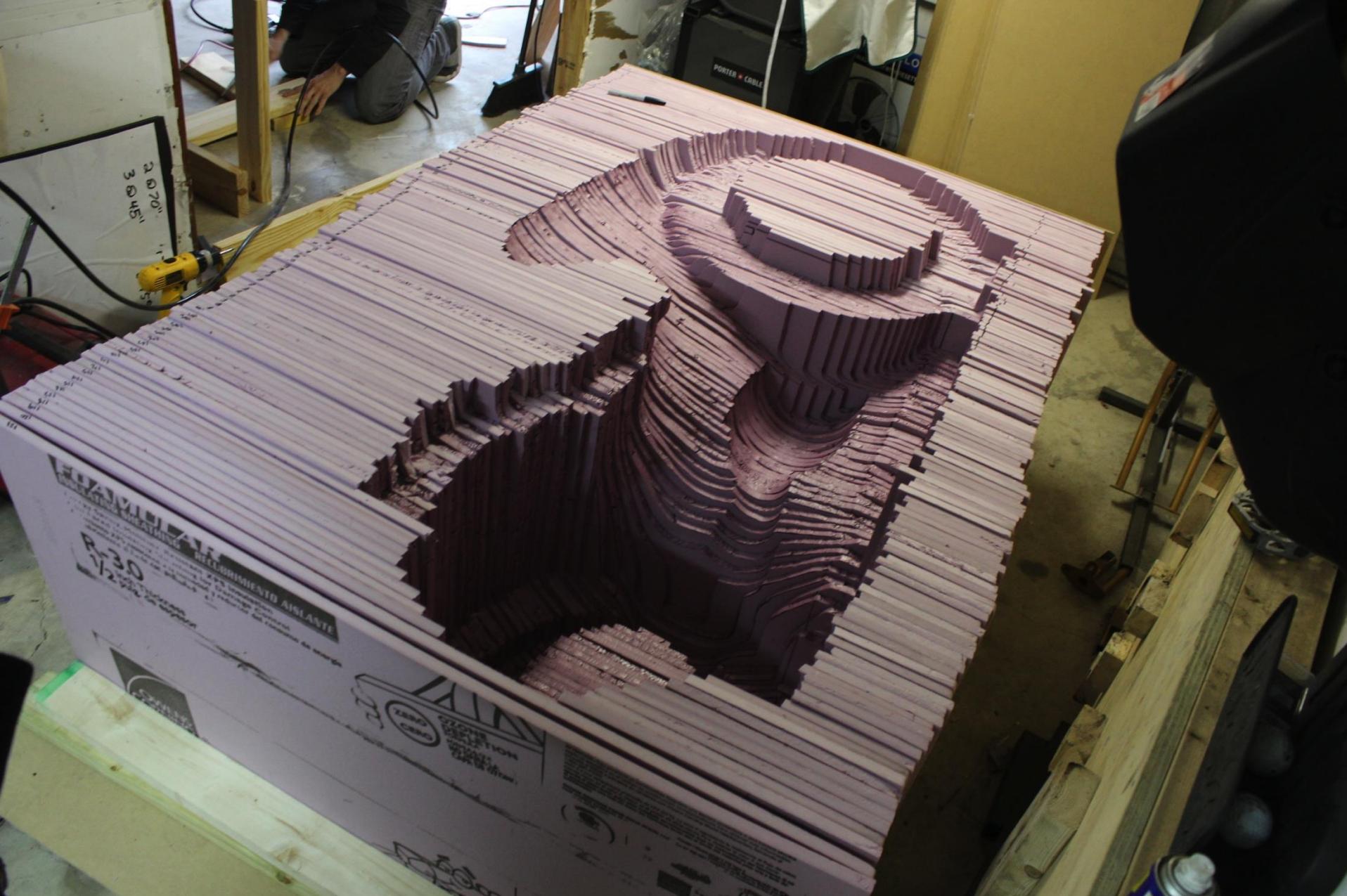


PORTER CABLE

HIGH VELO  
SPECIAL POSITION VACUUM SYSTEM

















ac4d

67







Having a culture that supports  
these dreamers, experimenters  
and failures is absolutely critical.

“Early failures are important because they generate systematic learning about where opportunities are (and are not) and how to address them, and they quickly free up people, capital, and ideas for more-promising projects.”

Daniel Isenberg – Harvard Business Review

# Give yourself and your team permission to be creative:

- Permission to try something new
- Permission to avoid cultural rules and established pecking orders
- Permission to embarrass yourself
- Permission to have and explore crazy ideas

So, fail often and fail early...

# ac4d

Matt Franks  
Professor, Austin Center for Design  
[Mfranks@ac4d.com](mailto:Mfranks@ac4d.com)

---

Download our free book,  
Wicked Problems: Problems Worth Solving,  
at <http://www.wickedproblems.com>