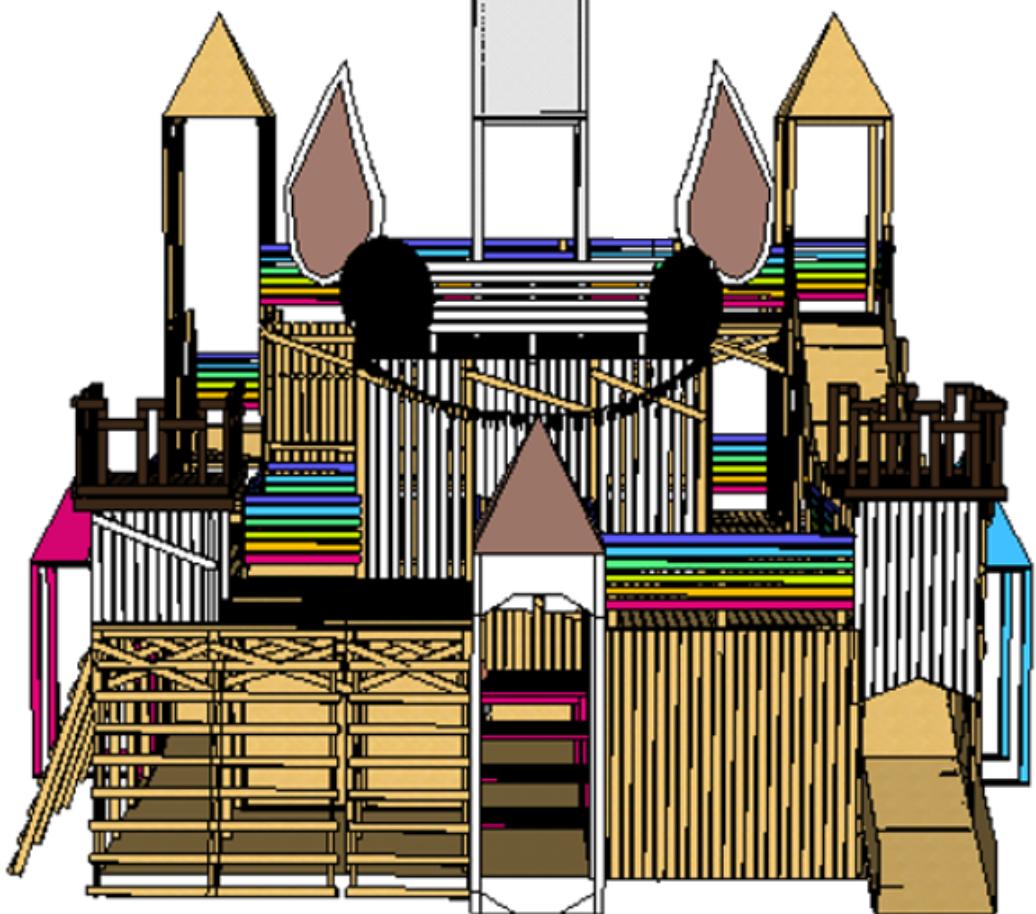


DaFT 2017 Build Book



SephReed.github.io/DaFT_2017/



New DaFTee Training Checklist

Checking Boards

Throughout this manual, there are 2x4's referred to as "#1 2x4", "#2 2x4", and "#3 2x4." These numbers are their ratings in terms of straightness and squareness. Number ones (#1) should be as straight as possible with no large chunks missing, and will be used primarily for the verticle legs which hold up each arch. Number twos (#2) can be warped and chunky, but should not be totally fucked up. Number threes (#3) are just a total mess of a board. Get it together #3's.

To check a board: put your eye on one end and look down the board. Flip it a couple times. After a dozen or so boards, it get's really obvious what's normal.

Safety Gear

- Goggles
- Ear Plugs
- Gloves
- Back brace (if you're worried about your back)
- Closed toe shoes

Chop Saw

- How to mark measurements (reccommended: crowsfeet)
- How to use cutting jigs
- How to line up blade on correct side of mark
- How to catch board
- Chop Safety:
 - Keep hands 6 inches from blade for first few months of learning
 - Keep board firmly against backboard
 - Make sure blade is not touching board when you engage it
 - Don't reach in after cut if still spinning
 - Advised goggles and ear plugs

Drill/Driver

- Different ways to start a screw:
 - Hammer start (use any scrap of wood as hammer)
 - Pre Drill
 - Push really hard
- Safety:
 - Don't have your hand below the driver (next to the screw) while pushing really hard
- Batteries:
 - Check batteries for people's names before grabbing them
 - Return batteries to charger after using

DaFT 2017 Rules

1. Personal Boundaries and Consent

tl;dr : If a person is bothering you, you can set up a boundary to stop them as long as it's reasonable.

People join DaFT for many reasons. Some DaFTies are here for social contact. But, some might just want to build and prefer to be left alone at times, sometimes by specific people, sometimes in specific ways. This rule revolves around the procedure for such cases:

Boundaries - are made on a person-to-person level.

Consent - is something you should ask for. When in doubt as to whether or not what you're planning to do is wanted, ask. For instance: "Are you a hug person?" "Are you busy right now?" "Do you want me to show you how I do that?" "May I take your picture?"

Some examples of boundaries a person might set between themselves and another are:

- Touching
- Photography
- Flirting
- Chit Chat/Joking Around
- Puzzle Ruining - Being told how to do something while figuring it out

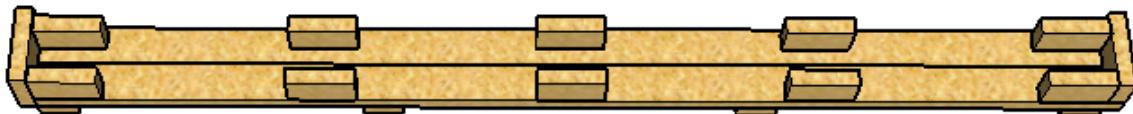
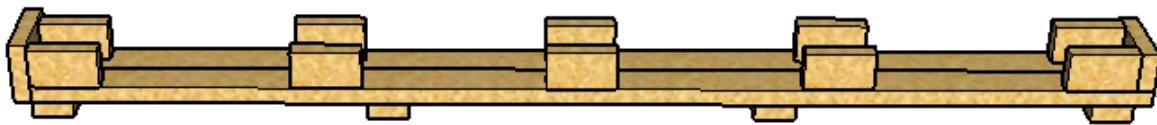
For the most part, it's pretty easy to tell where a person's boundaries are via social cues, but if someone is not recognizing the cues you're giving, please find a clearer way to express them. If they keep bothering you even after you've made it clear that they are, please come talk to us.

2. Booze/Saw Divide

tl;dr : If there is booze in your mouth, be out of reach of your saw.

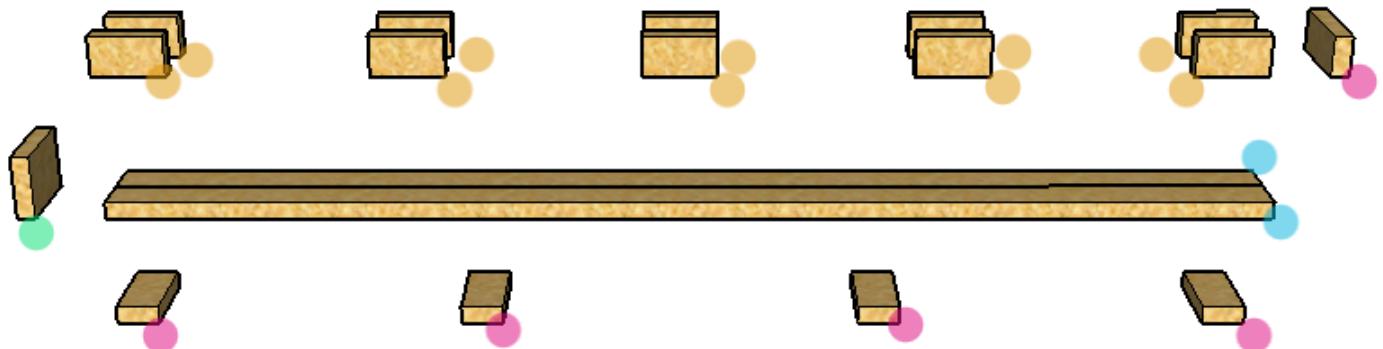
Drinking is totally fine, but please set booze/beer away from you whenever you're operating a saw. We know that many of you have been drinking while cutting for years but figuring out who's safe to do that and who's not would be a constant job. The factors would be how much they've drank and how experienced they are, but keeping track of all that is a task nobody wants. So the rule is to keep a physical divide between drinking and cutting. As in, the saw is not in reach while booze is in mouth.

(1) Leg Jig



- (5) 2x4 x 6.5"
- (10) 2x4 x 6"
- (1) 2x6 x 6.5"
- (2) 2x4 x 8ft

* All (10)[●] and (5)[●] can be cut from one 2x4 x 8ft
* Be careful of bottom [●] getting in the way of [●] screws
* Form around a precise 2x4 x 94.5"

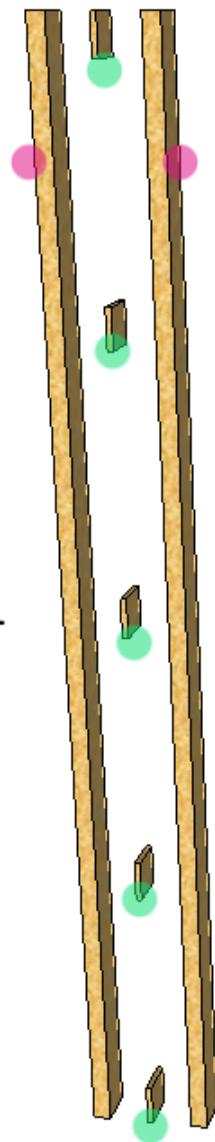


(75) Bottom Floor Leg

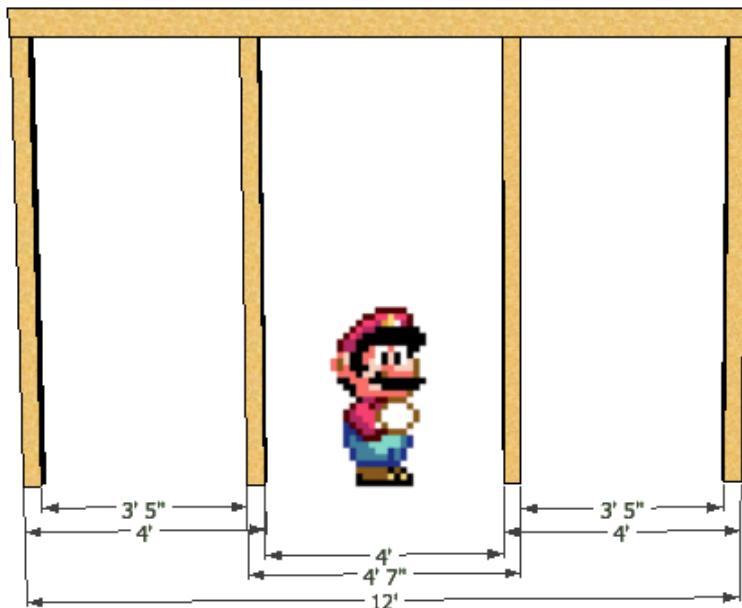
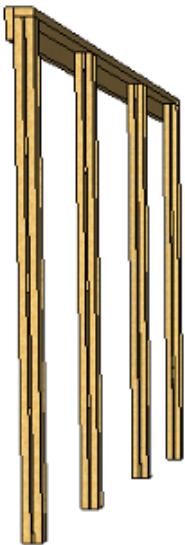


- (2) 2x4 x 94-1/2"
- (5) 3.5x3.5 x 1/2" spacer

*use leg jig for alignment
*glue and nail/screw
*more burnable than a 4x4



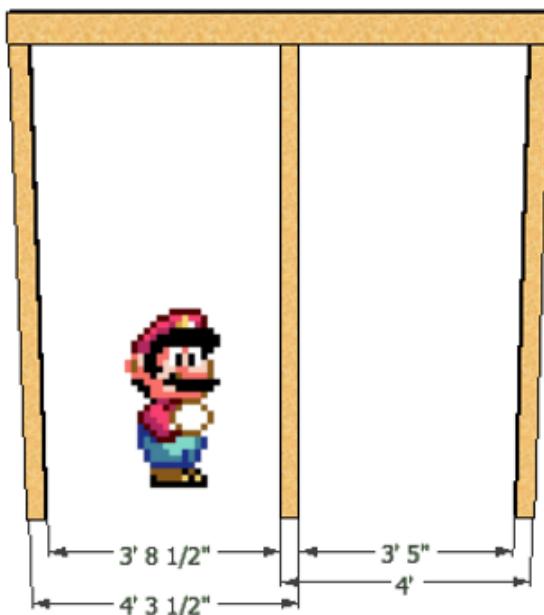
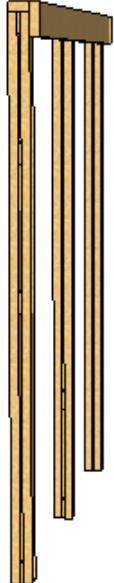
(12) Bottom Floor 12ft Arch



- (4) Bottom Floor Leg
- (1) 2x4 x 12ft
- (1) 2x6 x 12ft

*NOTICE: Wider spacing in center
*Glue and Screw/Nail
*Use spacers and squares for alignment.

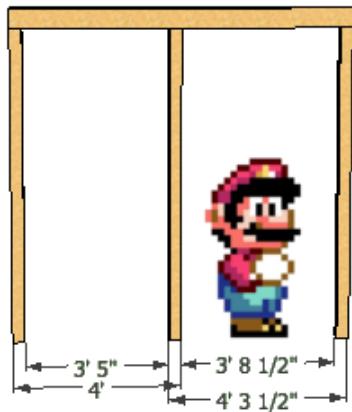
Bottom Floor 8ft Arch



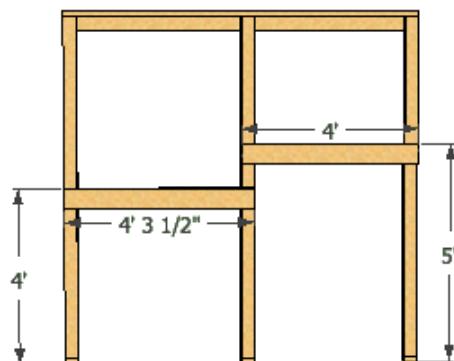
- (4) Bottom Floor Leg
- (1) 2x4 x 8ft
- (1) 2x6 x 8ft

*NOTICE: Wider spacing on left
*Glue and Screw/Nail
*Use arch jig for alignment

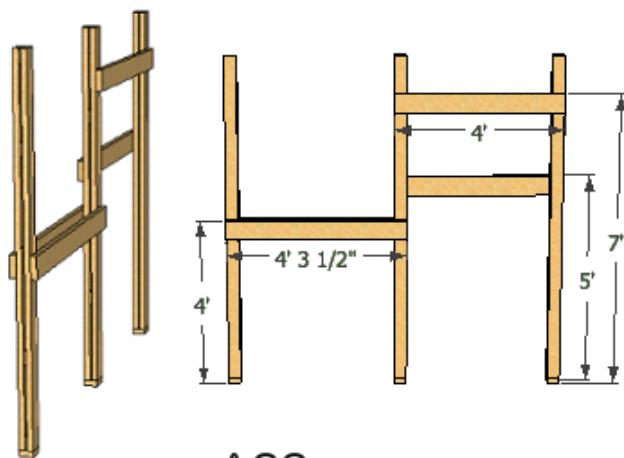
Special 8ft Arches



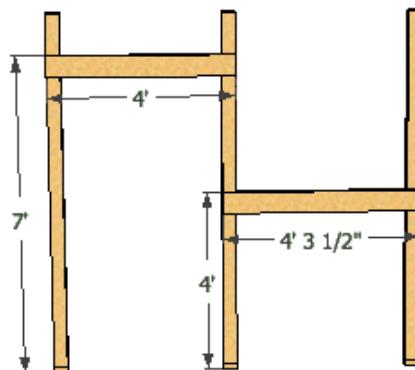
Mirrored
* larger on right
not left



A23
* start with
mirrored



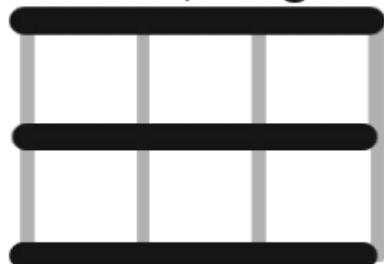
A33
* matches A23
and A24



A43
* matches A33

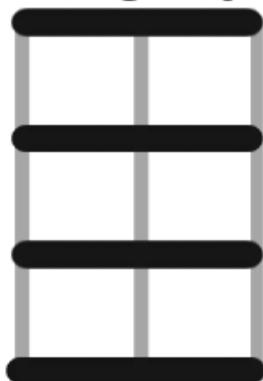
12 by 8 Chunk Types

Default/Regular



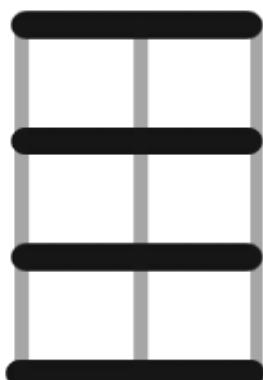
- 12ft arch
- }- 3' 5" space
- Double sided 12ft arch
- }- 3' 8-1/2" space
- 12ft Arch

Longways



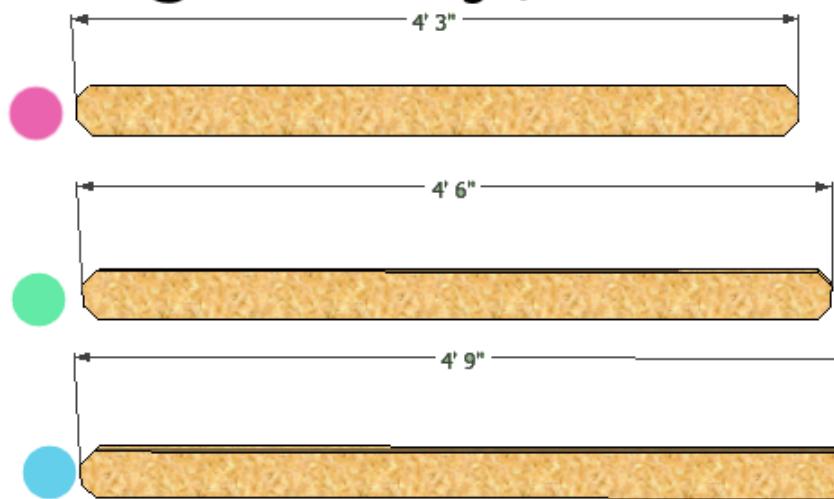
- 8ft Arch
- }- 3' 5" space
- Double Sided 8ft Arch
- }- 4' space
- Double Sided 8ft Arch
- }- 3' 5" space
- Mirrored 8ft Arch

A13



- 8ft Arch
- }- 3' 5" space
- Special A23 8ft Arch
- }- 4' space
- Special A33 8ft Arch
- }- 3' 5" space
- Special A43 8ft Arch

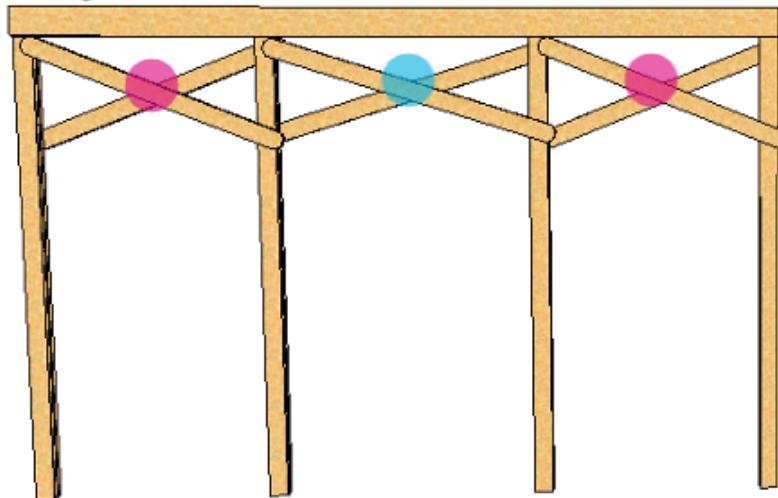
Diagonal Types



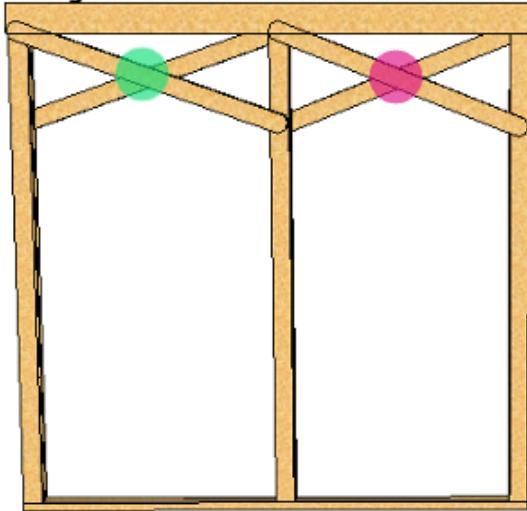
* All diagonals have 1" ears

* Do NOT nail the diagonals which connect separate arches (disassembly)

Any 12ft Side



Any 8ft Side



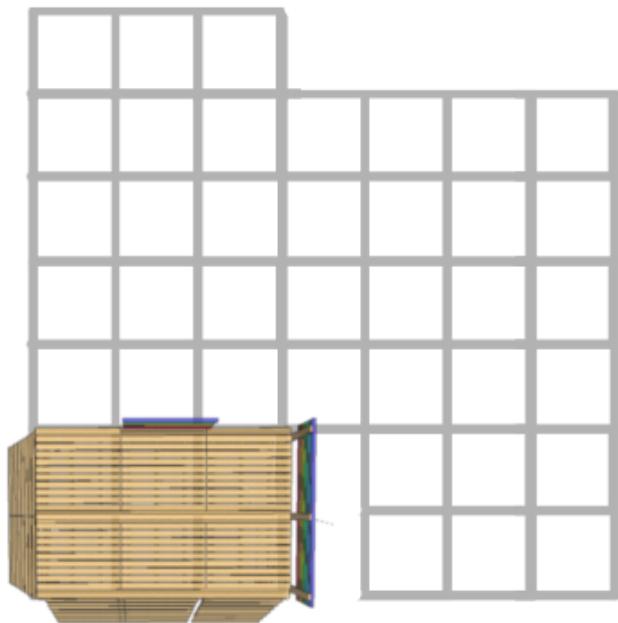
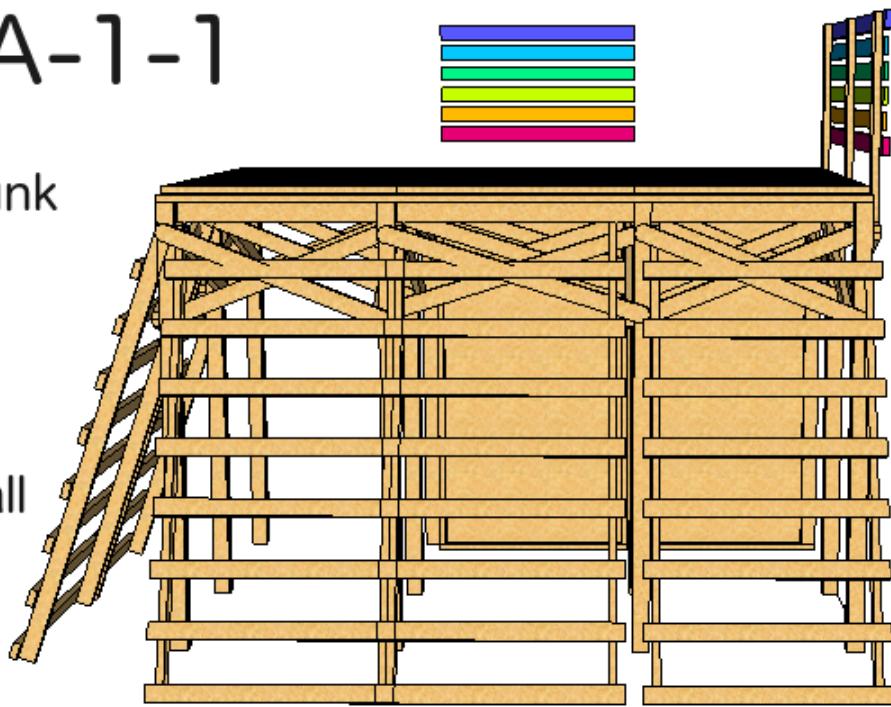
Section A-1-1

(1) 12 by 8 Chunk

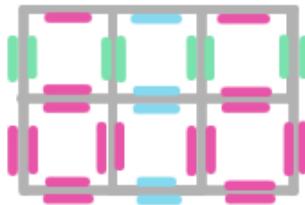
* All ladders exterior

* Blackboard wall

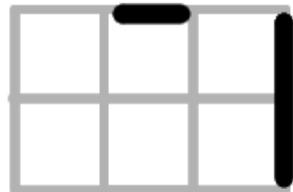
* White greek columns?



Diagonals Layout



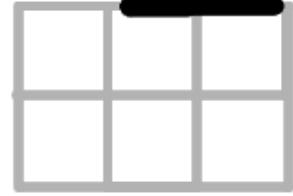
Railing



Ladders



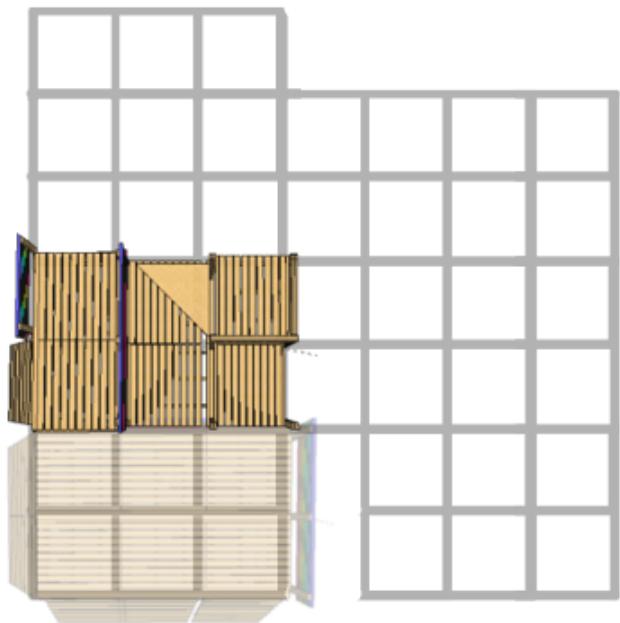
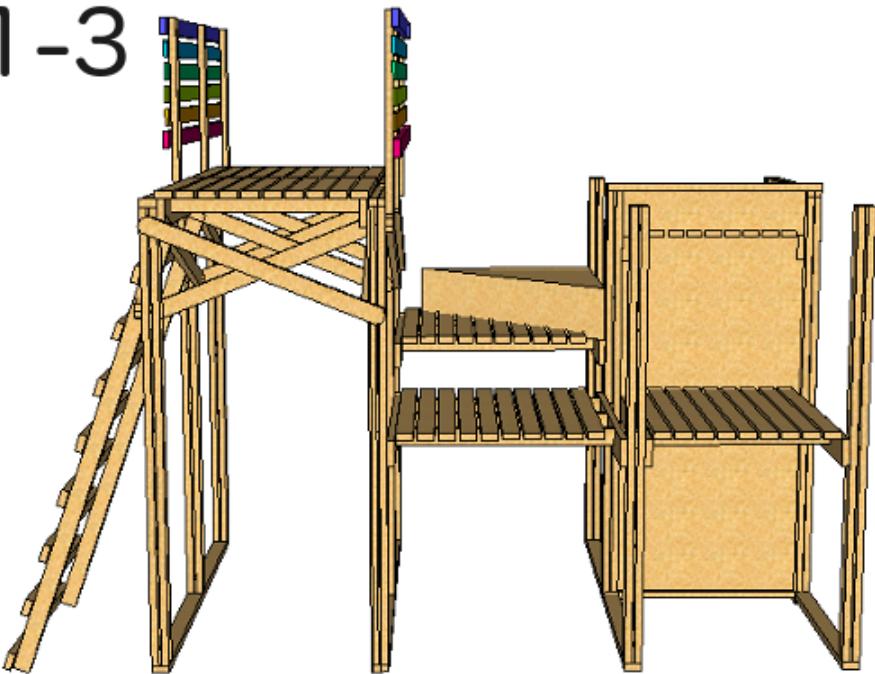
Walls



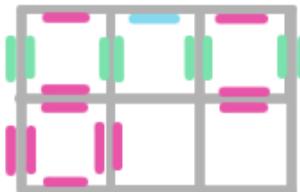
Section A-1-3

(1) Special A13
12 by 8 Chunk

* Tunnel entrance to secret room



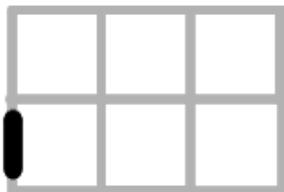
Diagonals Layout



Railing



Ladders

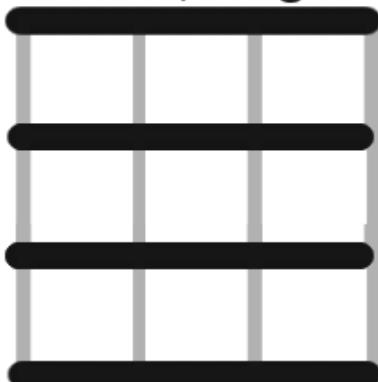


Walls



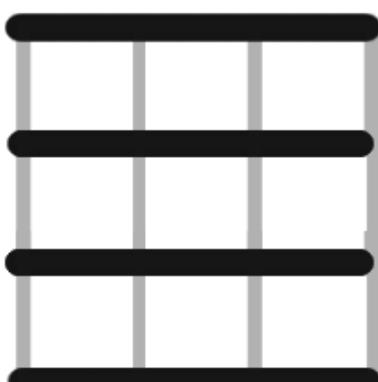
12 by 12 Chunk Types

Default/Regular



- 12ft Arch
- }- 3' 5" space
- Double sided 12ft arch
- }- 4' space
- Double sided 12ft Arch
- }- 3' 5" space
- 12ft Arch

A15

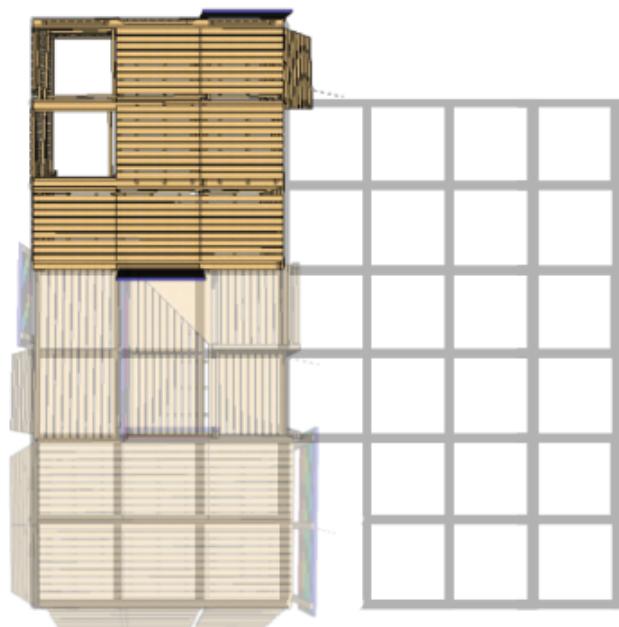
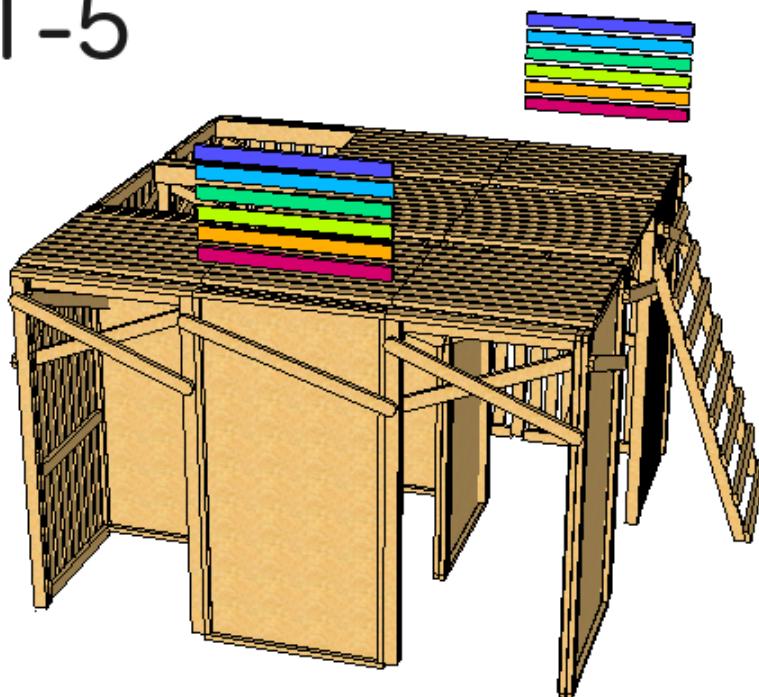


- 12ft Arch
- }- 3' 8.5" space
- Double sided 12ft arch
- }- 3' 5" space
- Double sided 12ft Arch
- }- 3' 8.5" space
- 12ft Arch

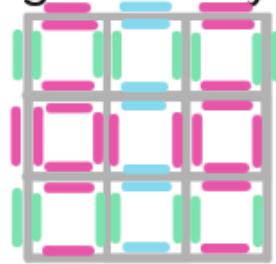
Section A-1-5

(1) Special A15
12 by 12 Chunk

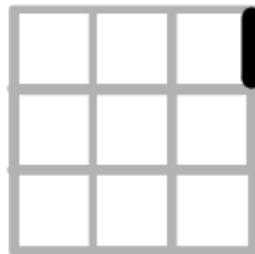
- * Back left corner.
- * Maze beginnning?



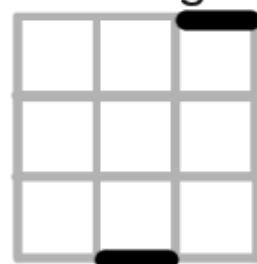
Diagonals Layout



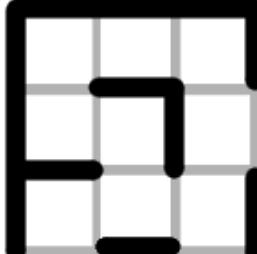
Ladders



Railing



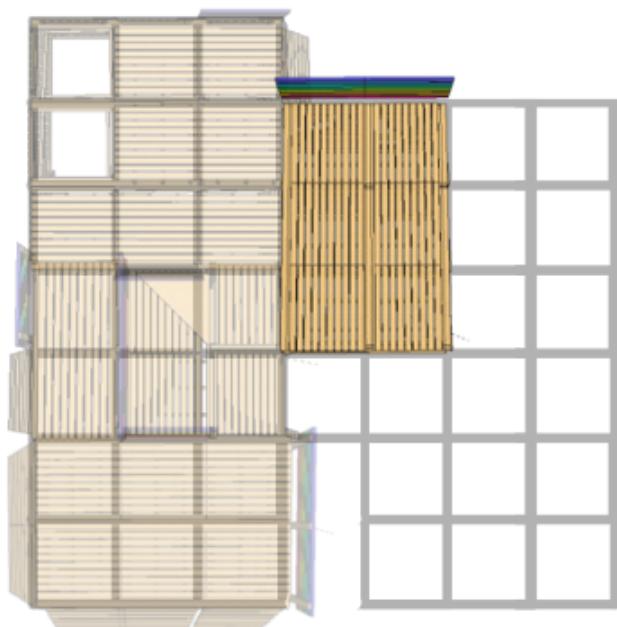
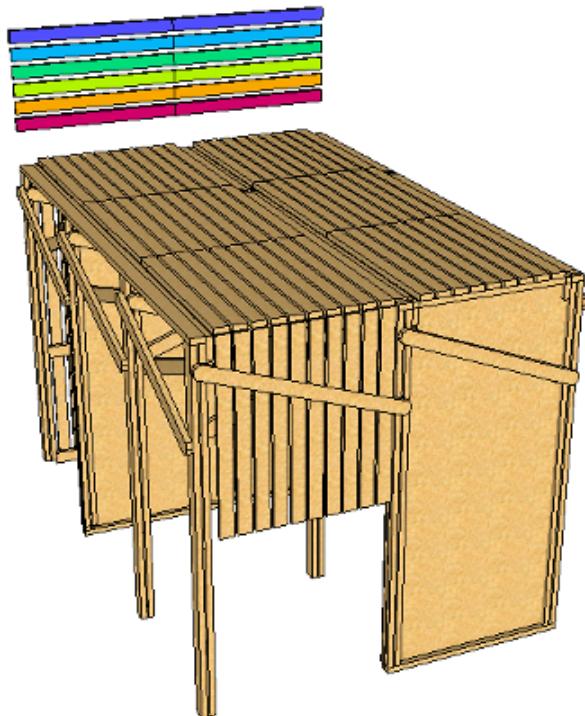
Walls



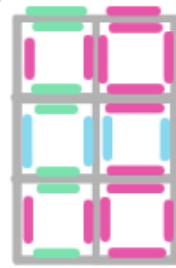
Section A-4-4

(1) 12 by 8 Chunk

* Secret Ball Pit Room



Diagonals Layout



Ladders



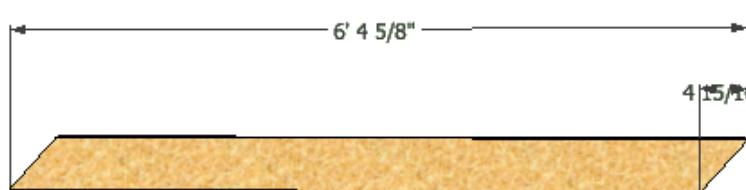
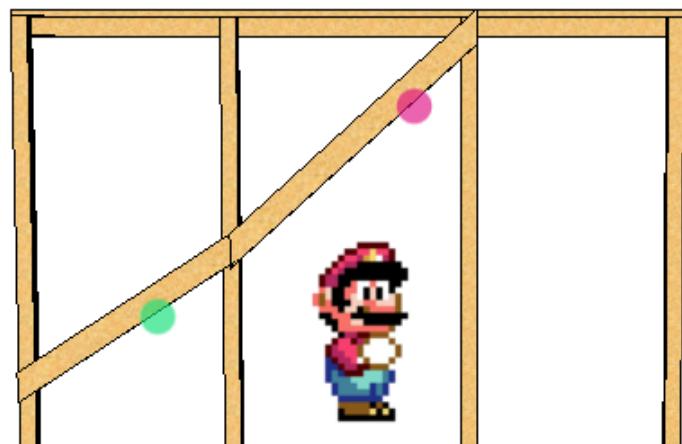
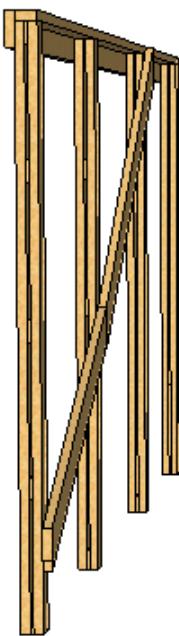
Railing



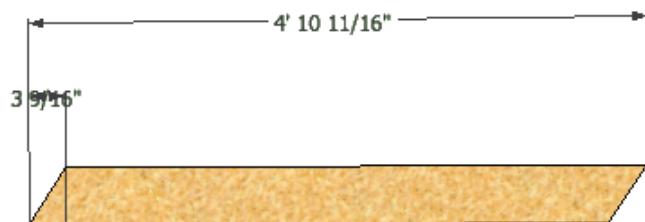
Walls



Bottom Floor Slide Joist



* 6' 4-5/8" board
with 4-15/16" shear



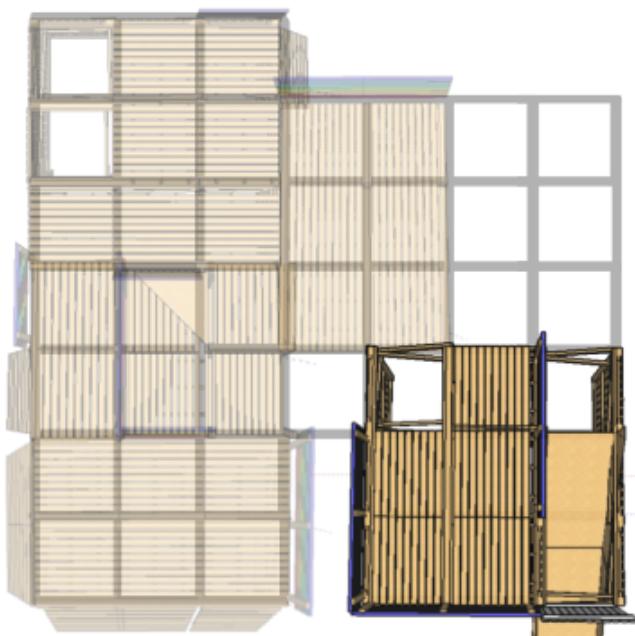
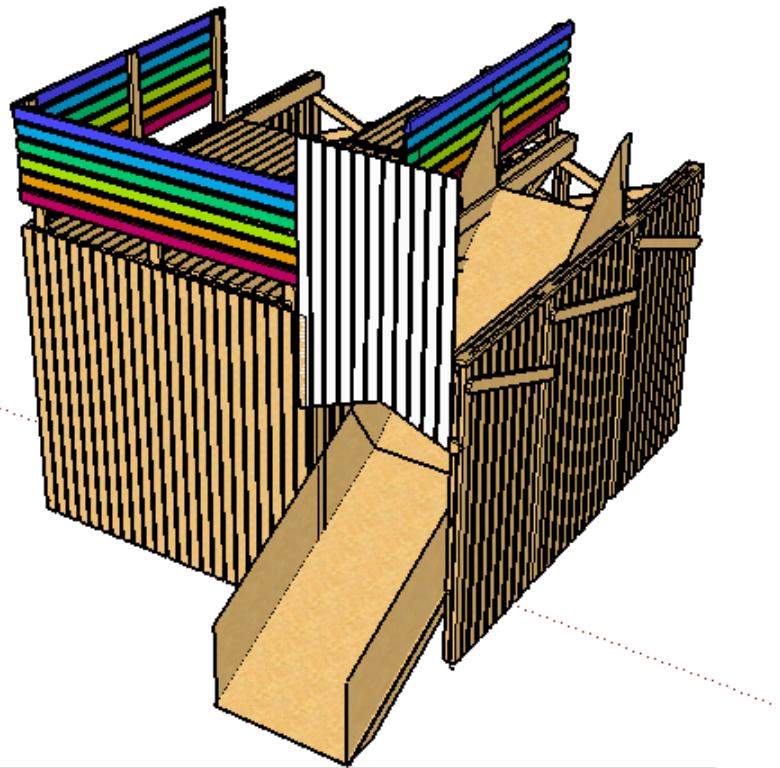
* 4' 10-11/16" board
with 3-9/16" shear

Section A-5-1

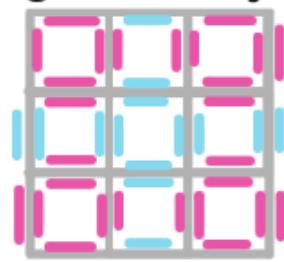
(1) 12 by 12 Chunk
with Slide Joists

* Front right corner

* Cafe and secret
ladder

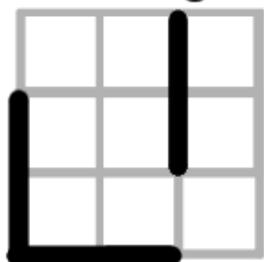


Diagonals Layout

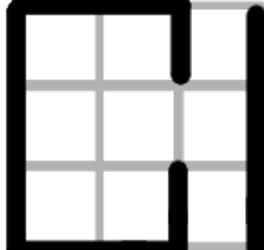
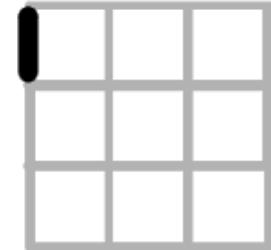


Ladders

Railing



Walls



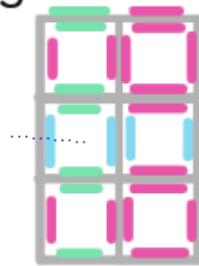
Section A-4-6

(1) Longways 12 by 8
Chunk

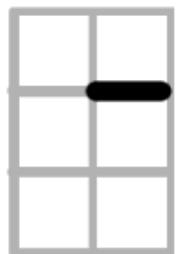
* Plans Unknown



Diagonals Layout



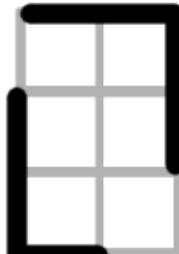
Ladders



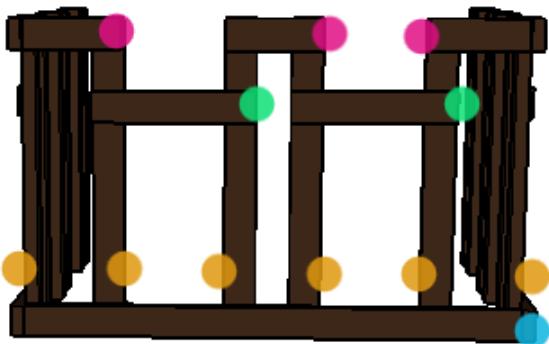
Railing



Walls



(2) Turret (B-1-1 and B-7-1)

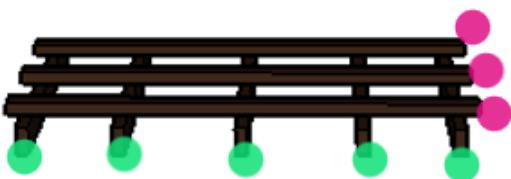


(3) Castle Rails

- (3) 2x4 x 11" Top Rail
- (2) 2x4 x 1'-6.5" Low Top Rail
- (1) 2x4 x 5' Footer Plate
- (6) 2x4 x 32" Verticals

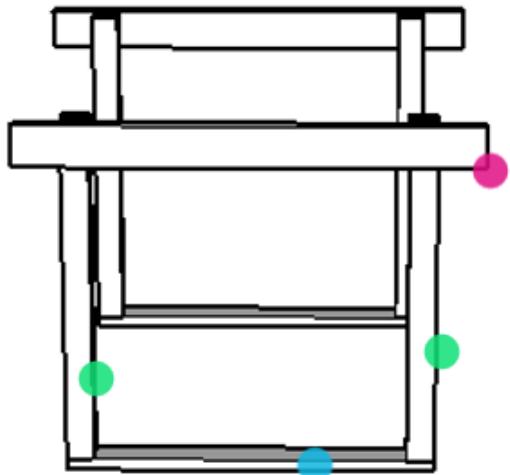
* Step Height difference is 8"
* Sides share a vertical

Joist System



- (3) 2x4 x 5' Sub Deck Board
- (5) 2x4 x 4' Joist

* Decking not shown



(2) Short Arches

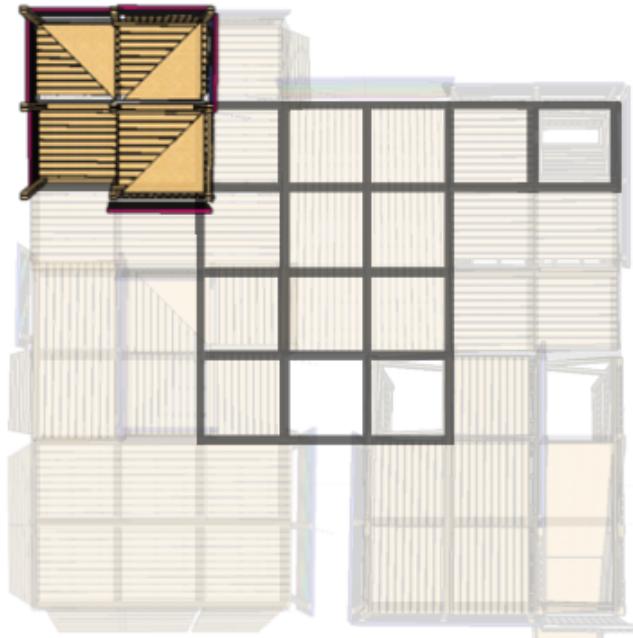
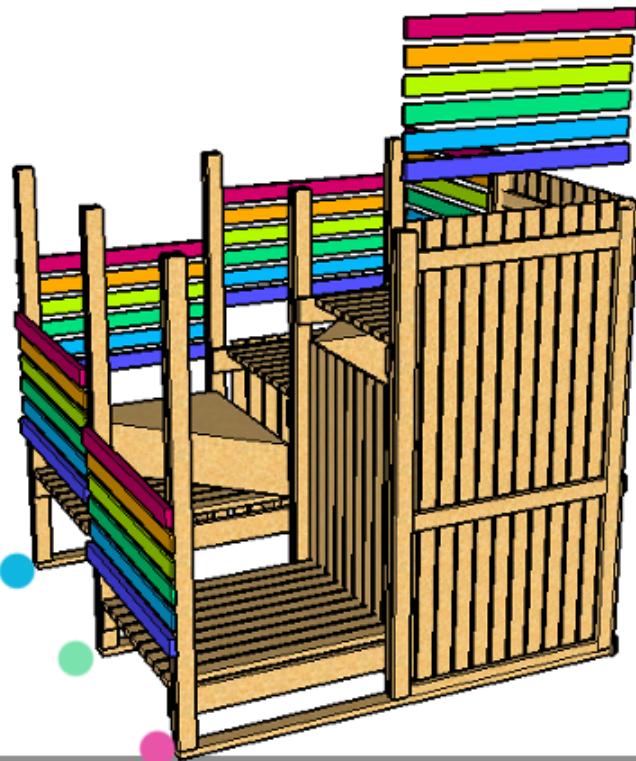
- (1) 2x6 x 5' Header
- (2) 3'-10.5" Leg
- (1) 2x4 x 4' Footer Plate

* Use special 5'-3" diagonals

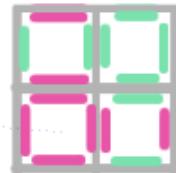
Section B-1-6

- (3) Top Floor 8ft Arches
 - #1 Small side on right (right in jig)
6ft (@top) hanger (med side)
1ft (@top) hanger (small side)
 - #2 Mirror of #1 and #3
 - #3 Small side on left (left in jig)
2ft (@top) hanger (small side)
4ft (@top) hanger (med side)

* Hangers are 2x6's
* To mirror, flip which side of the jig you're on (left vs right), while using the same placement (med vs small)



Diagonals Layout



Railing



Ladders

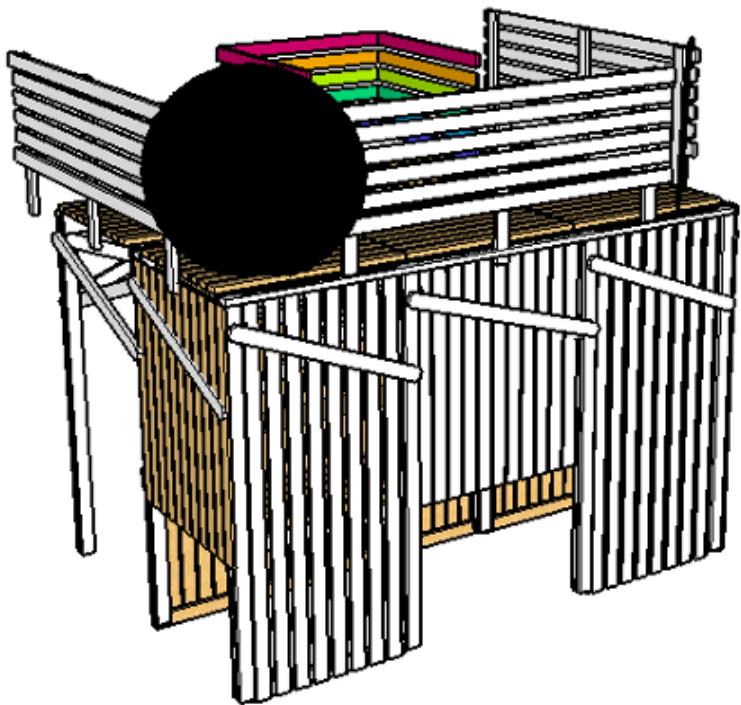


Walls

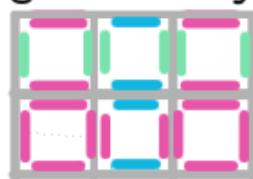


Section B-3-3

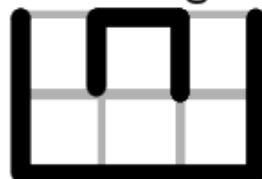
- * Secret DaFT couch
- * Top center ladder
- * Unicorn Face



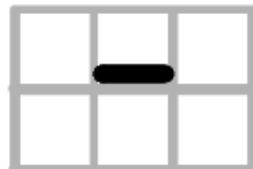
Diagonals Layout



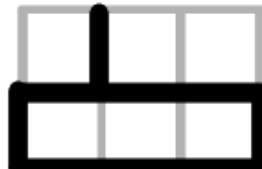
Railing



Ladders



Walls

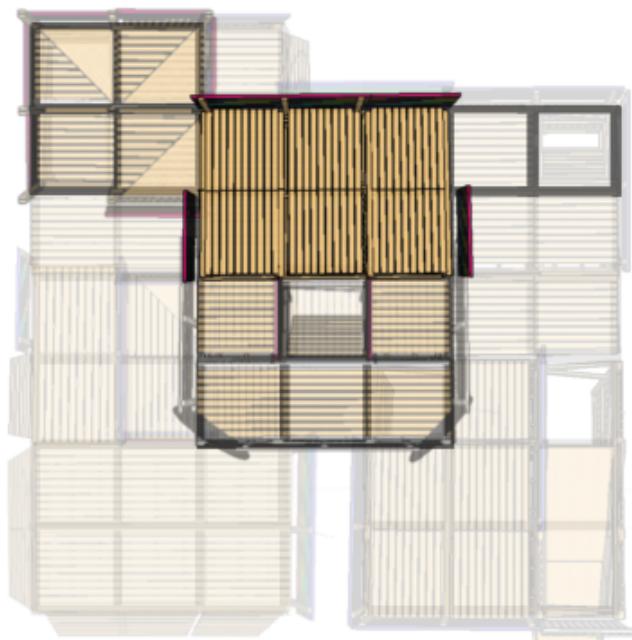
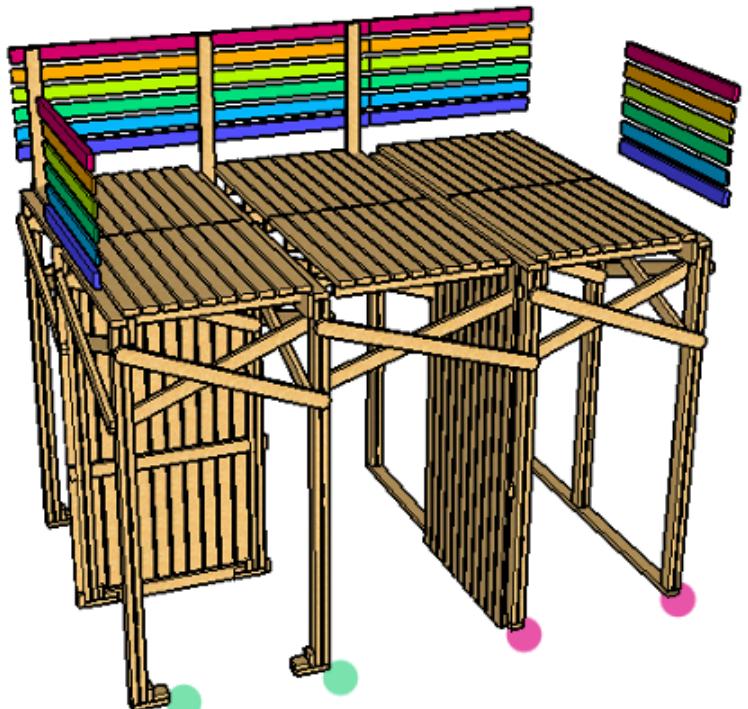


Section B-3-5

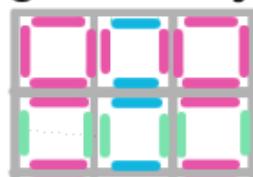
- (2) Top Floor 8ft Arches

- (2) Booted 8ft Arches

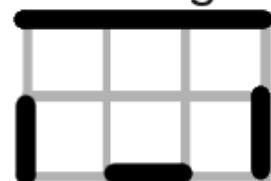
*Med space towards front, Small space towards back



Diagonals Layout



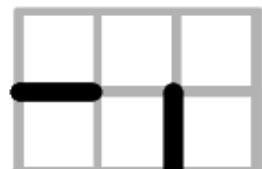
Railing

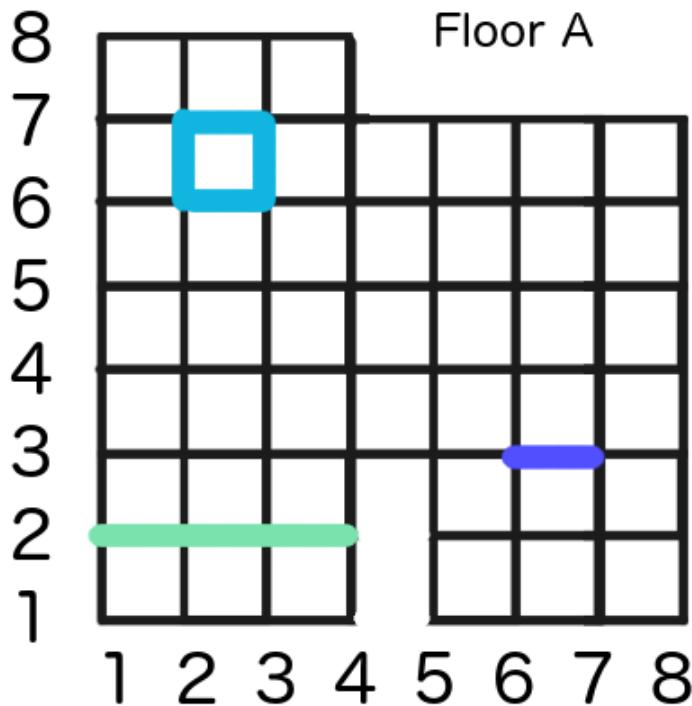


Ladders



Walls



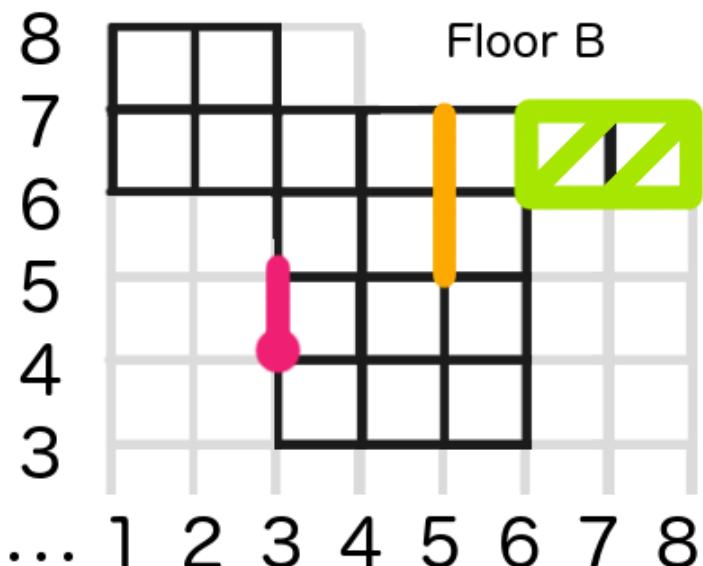


Quick Reference:

- Floor [A|B]
- Lowest X Coordinate [1-8]
- Lowest Y Coordinate [1-8]

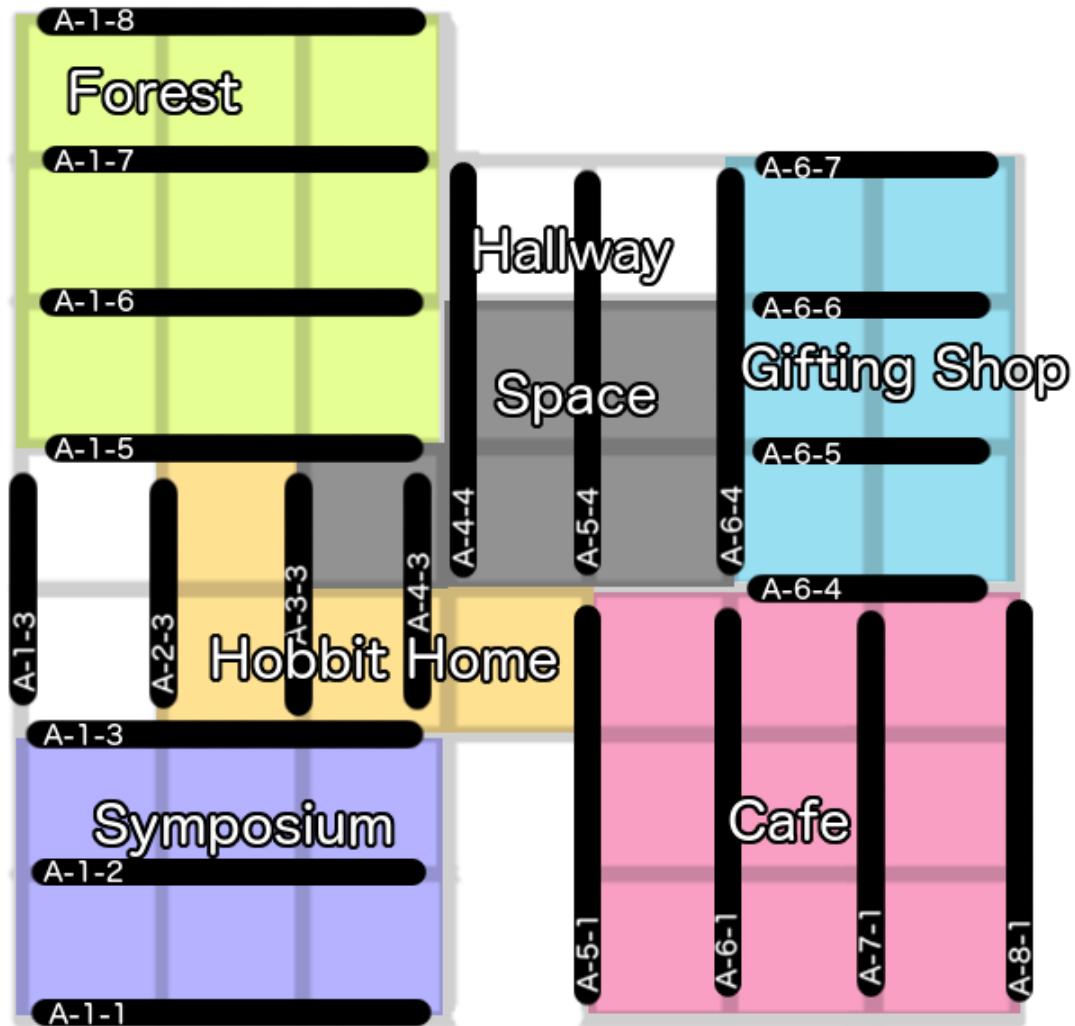
Examples:

- B-3-4
- A-6-3
- B-5-5
- A-1-2
- A-2-6
- B-6-6



* The labeling system uses the legs as coordinates

* Every piece will be labeled with the floor it starts on, the coordinate of the lowest numbered (bottom left in image below) leg it touches, and (if necessary) which direction (up/down vs. left/right) it faces.



1. Measure two dots (back left and front right corners) at 39ft 7-3/16 inches
2. Measure arcs of 28ft distance from both points. The intersections are the other two corners. Check that they are the same distance apart as above
3. Connect the four corners with a series of dots at 4ft increments
4. Fill in the 4ft grid twice, once left to right, once top to bottom. Average the dots.
5. Find the highest elevation dots. Choose to either dig those down, or call them baseline.
6. Build simple self supporting chunk. Legs will fall close to dots, but need not be exactly on them.
7. Fill in chunks arches and diagonals, level constantly.
8. Add decking, create shade.
9. Continue expansion, add walls to previous chunk.
10. Finish first floor

