

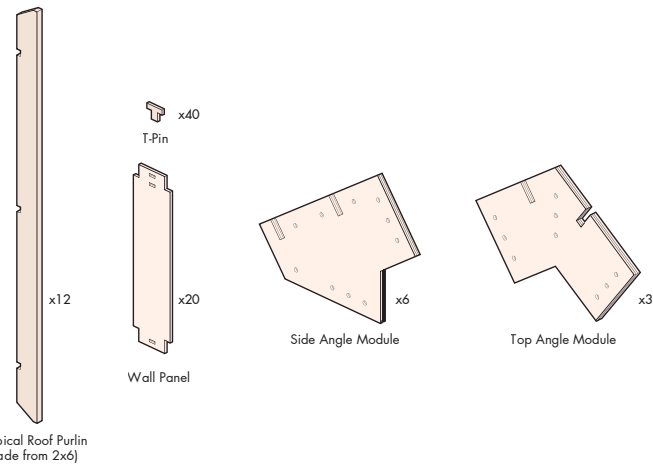
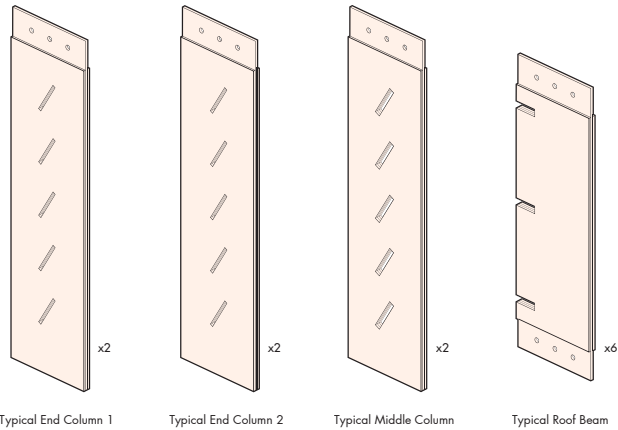


# CONSTRUCTION PLANNING

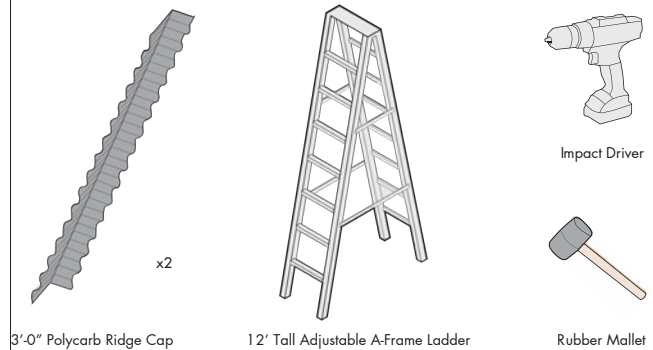
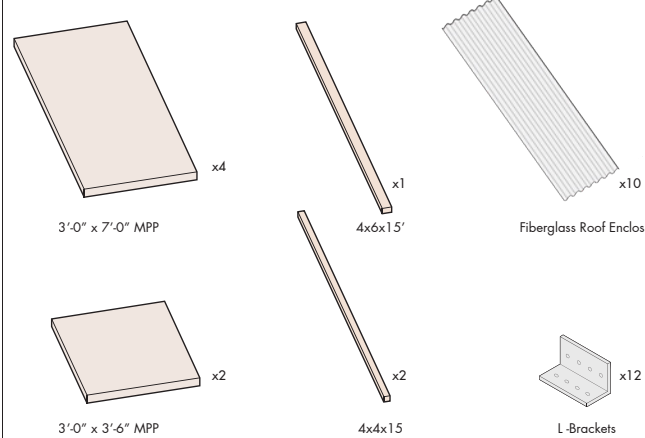
- To prepare the Hatfield Courtyard for our structure, we selected the most flat surface which was towards the southern end of the courtyard. We started by laying down four pieces of solid-sawn lumber (two 4x4x15' members and one 4x6x15' member). Next, we placed six total MPP on top of these members to create a platform for our structure. The sizing of the MPP came out to be four 3'-0"x7'-0" and two 3'-0"x3'-6" panels. We connected these panels together with 32 screws total, screwing diagonally to ensure a strong connection
- Our assembly process was split into four major categories, being **Prefabrication**, **Transportation**, **Site Preparation**, and **Construction**. We prefabricated the walls and frame tops of the structures, carrying them to site by hand using 3-4 people, assembled our foundation platform, then constructed the rest of the structure on site. Our process is further documented with diagrams.

# CONSTRUCTION SEQUENCING - KIT OF PARTS

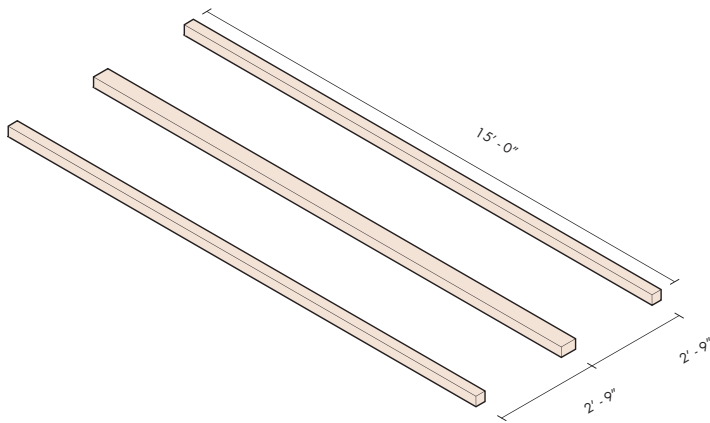
## Fabricated Timber Elements



## Site, Products, and Tools



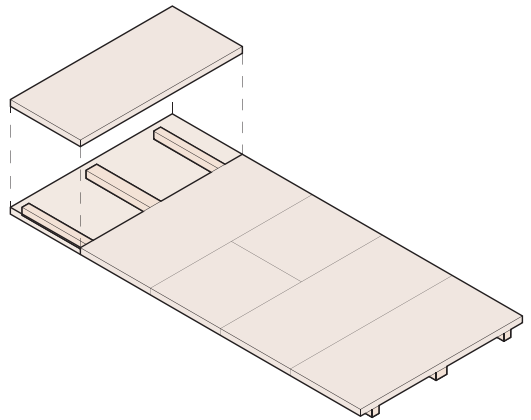
# SITE SELECTION AND PREPARATION



2-4

Lay the two 4x4s on either end of the 4x6 by 2'-9"

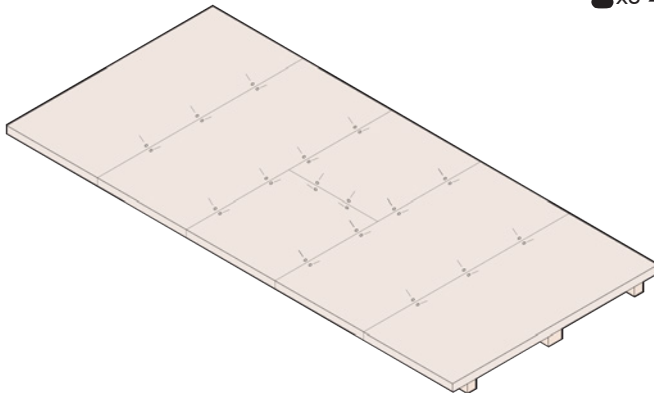
1.



3-4

Lay the four 3'x7' MPP on top of the 4xs with the two 3'x3.5' MPP in the center

2.

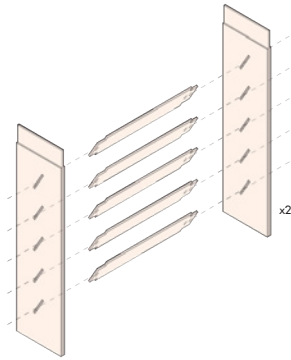


1-4

With 32 screws, screw diagonally into the MPP to secure each panel to one another. Additional people may participate in this step to speed up the process.

3.

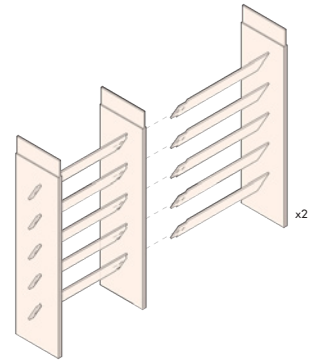
# PREFABRICATION



1.

👤x3-4

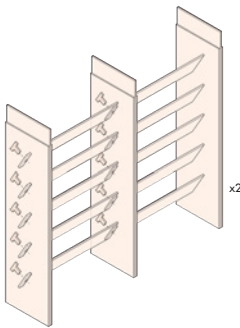
Slide five wall panels into a typical edge column 1 and a typical middle column. Two people should hold the columns in place while another slides the panels into place



2.

👤x3-4

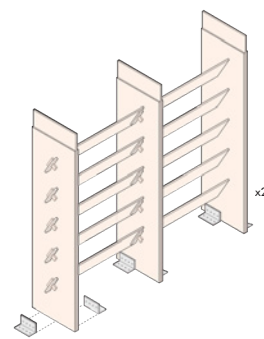
Slide a wall panel connected to a typical edge column 2 into a completed partial wall from step 1



3.

👤x1-2

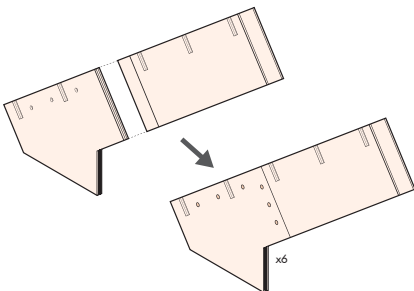
Slide twenty T-pins into each of the wall panel holes to secure them in place



4.

👤x2-3

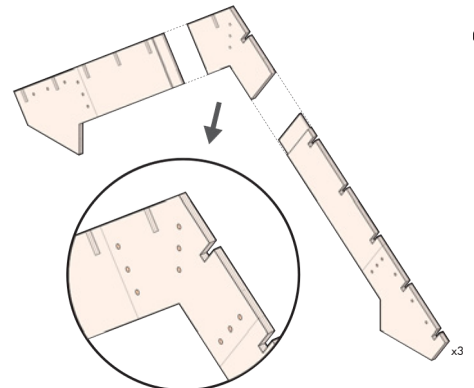
Slide twenty T-pins into each of the wall panel holes to secure them in place. 1-2 People should hold the walls in place while a third bolts the brackets in



5.

👤x3-4

Slide a typical column into a side angle module.  
Drill 1" holes once connected and secure with dowels hammered into place

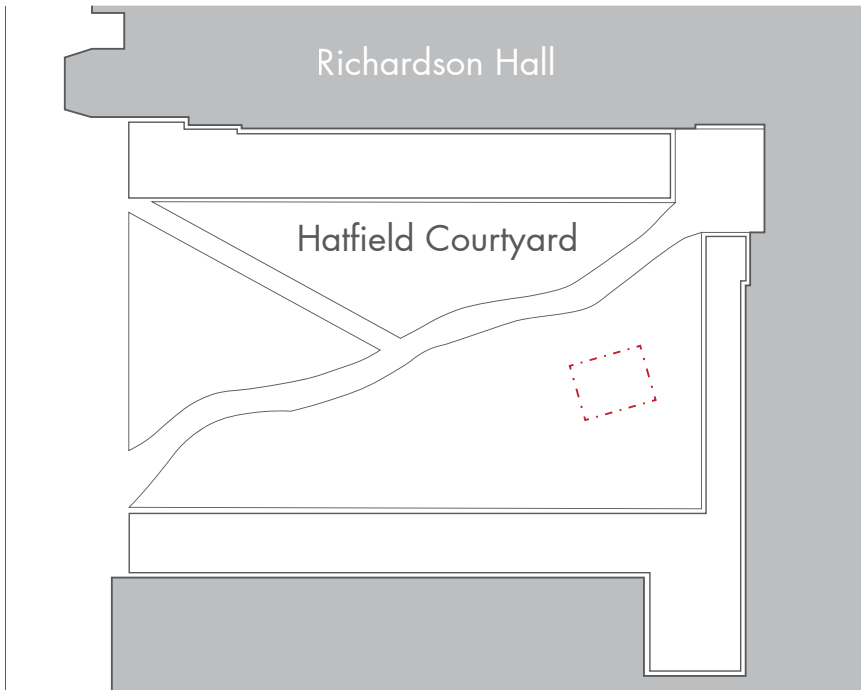
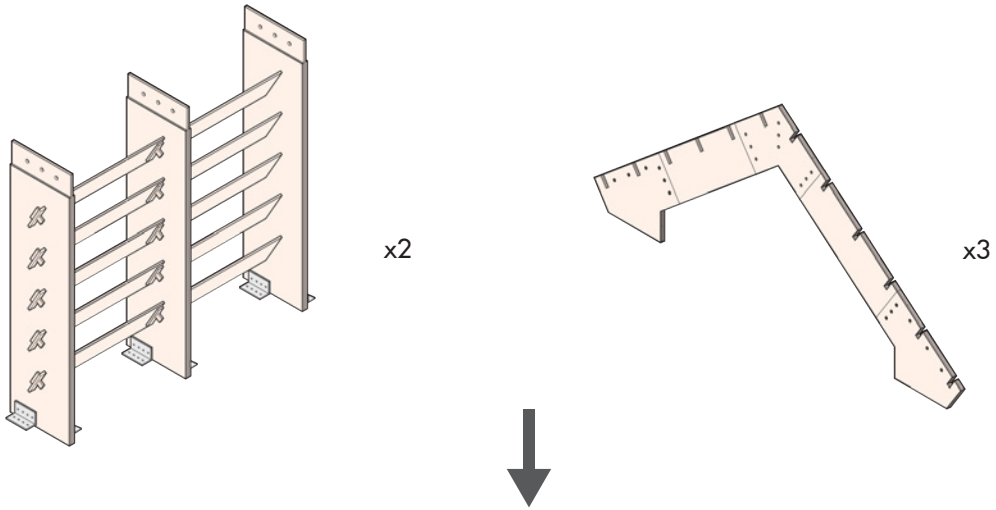


6.

👤x3-4

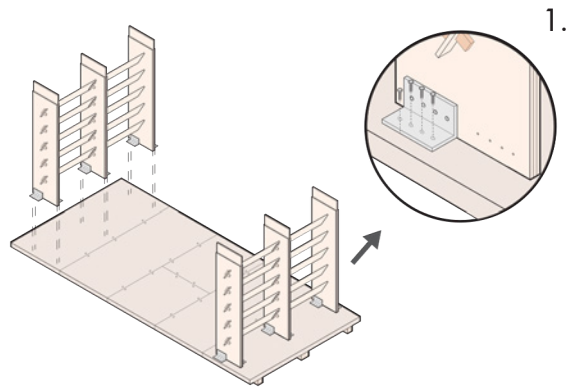
Slide two modules constructed from step 5 into a top angle module.  
Drill 1" holes once connected and secure with dowels hammered into place

# TRANSPORTATION

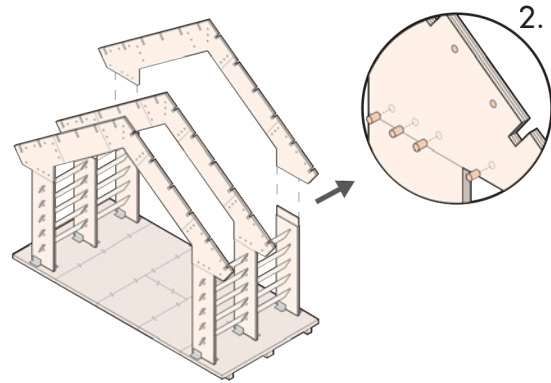


Transport the prefabricated walls and frame tops to site. Each prefabricated element can be carried by 3-4 people

# ON-SITE CONSTRUCTION



1.



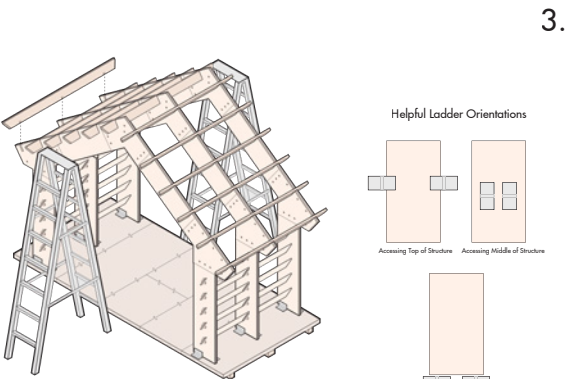
2.

👤x3-4

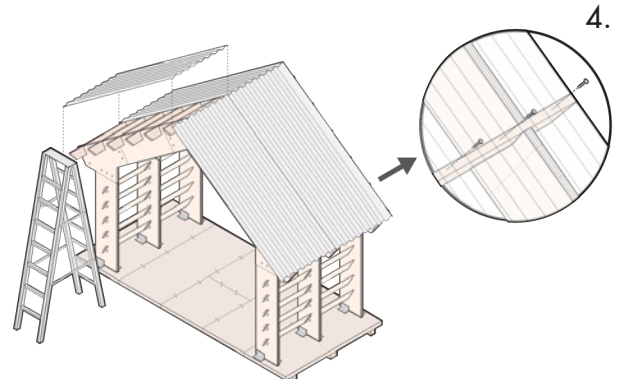
Place the prefabricated wall modules centered on the MPP foundation.  
Secure each column with eight bolts through the L-Brackets

👤x4-5

Place each of the frame tops on the columns.  
Drill 1" holes once connected and secure with dowels hammered into place



3.



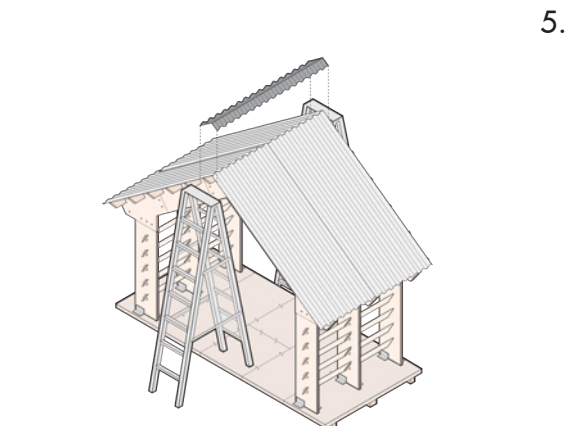
4.

👤x3-4

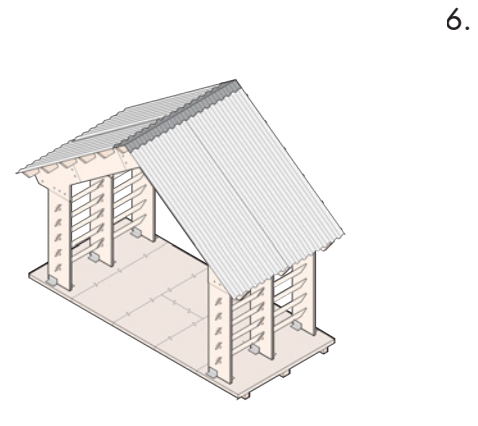
Hammer in place the twelve 2x6 purlins into the gaps in the frames.  
Use A-Frame Ladders and locations highlighted to achieve the different heights of the structure

👤x3-4

Screw Fiberglass roof panels into the purlins at each "hill" of the fiberglass.  
Use A-Frame Ladders and locations highlighted in step 13 to achieve the different heights of the structure



5.



6.

👤x2-3

Screw ridge cap through the fiberglass into the tops of the frames.  
Use A-Frame Ladders and location highlighted in step 13 to access the top of the structure