

# Big Shady Construction Manual Part 1







**GURINDJI**  
ABORIGINAL CORPORATION



**msd**

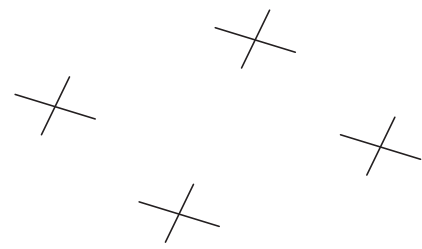
**Melbourne  
School of Design**

# **Big Shady Construction Manual Part 1**

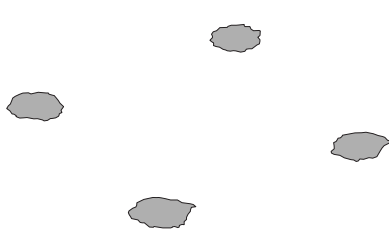
This instruction manual has been developed as a reference tool for the Gurindji Aboriginal Corporation to aid the construction process of a number of shade pavilions to be constructed around the community of Kalkaringi.

Many thanks to the Gurindji Aboriginal Corporation and the Kalkaringi community for the opportunity to work alongside them on this project.

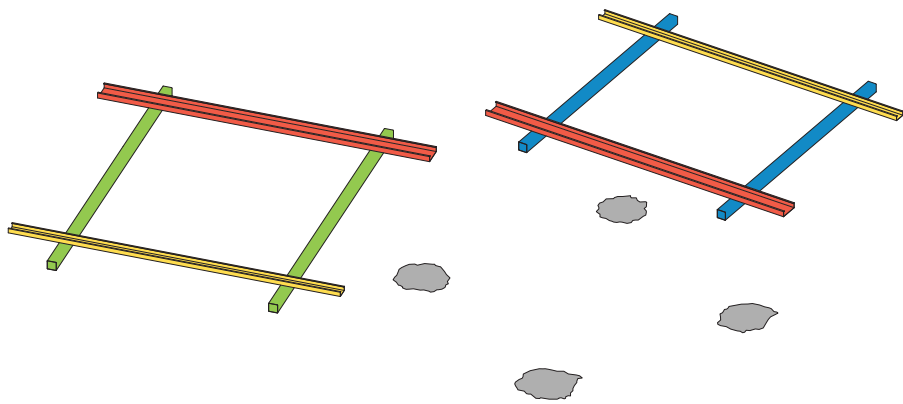
# Overview



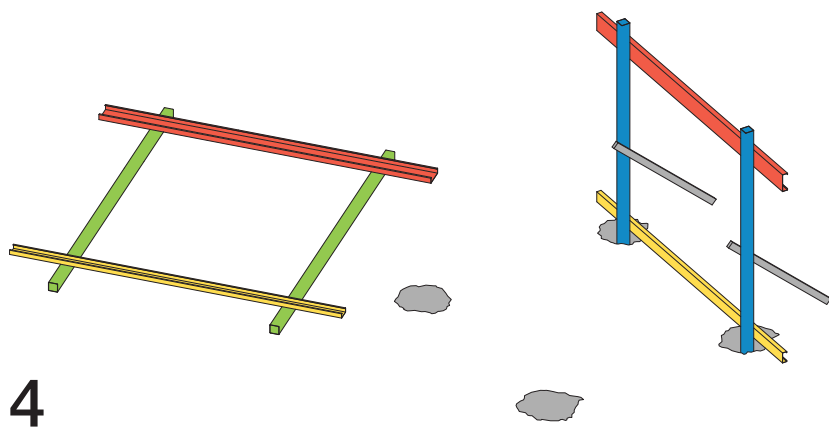
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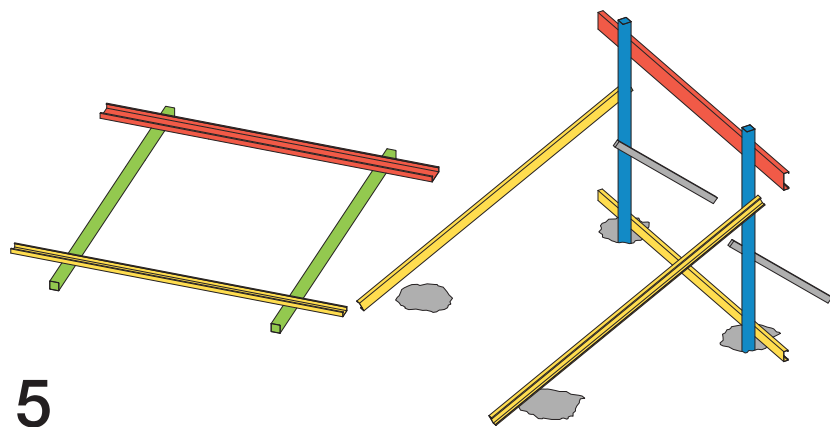
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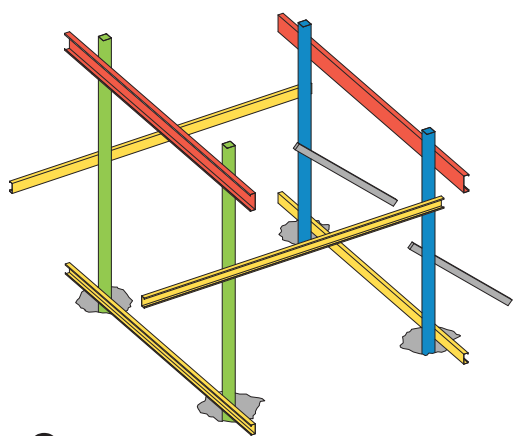
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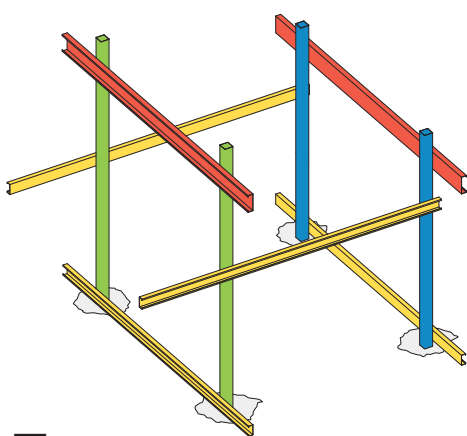
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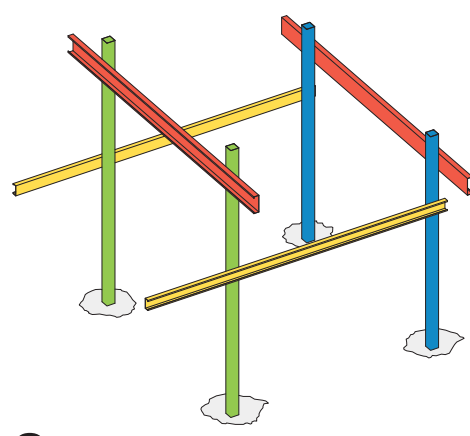
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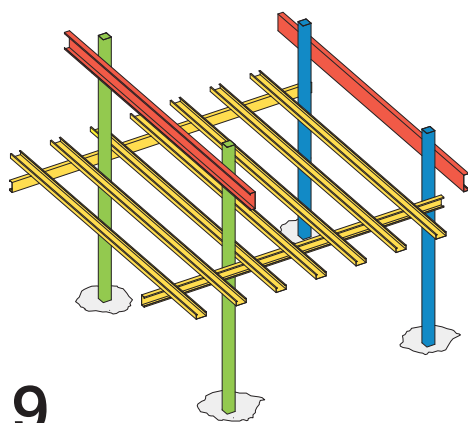
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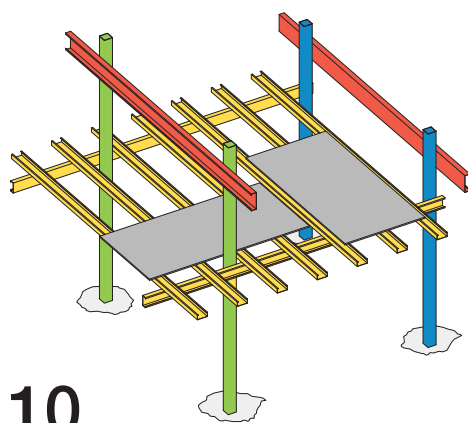
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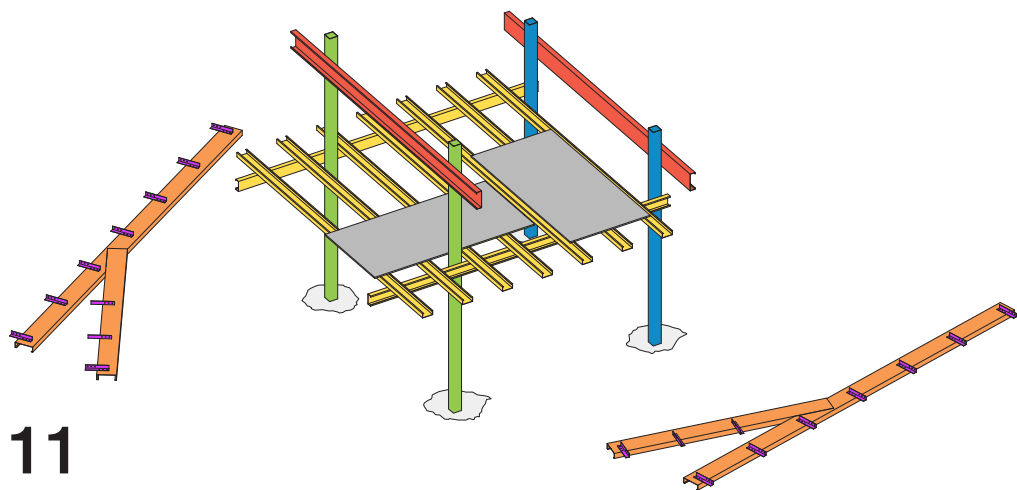
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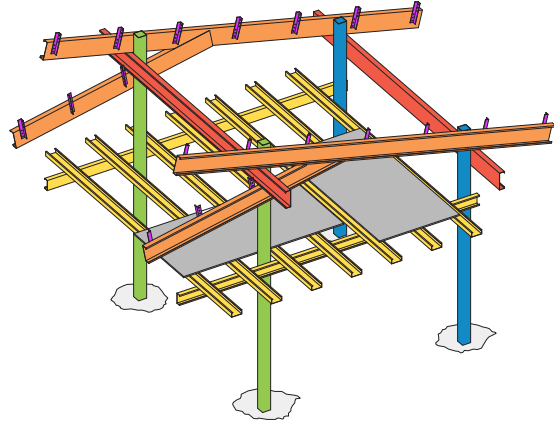
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10



11

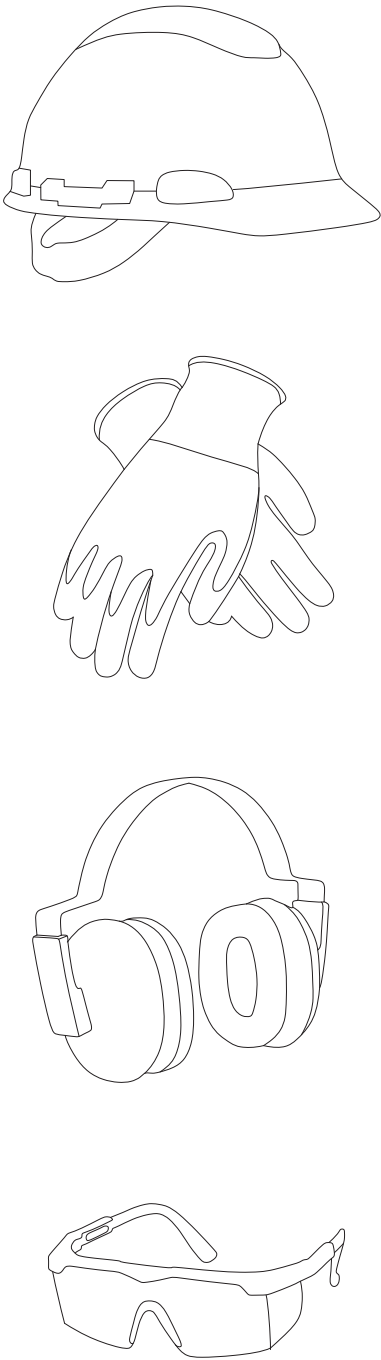
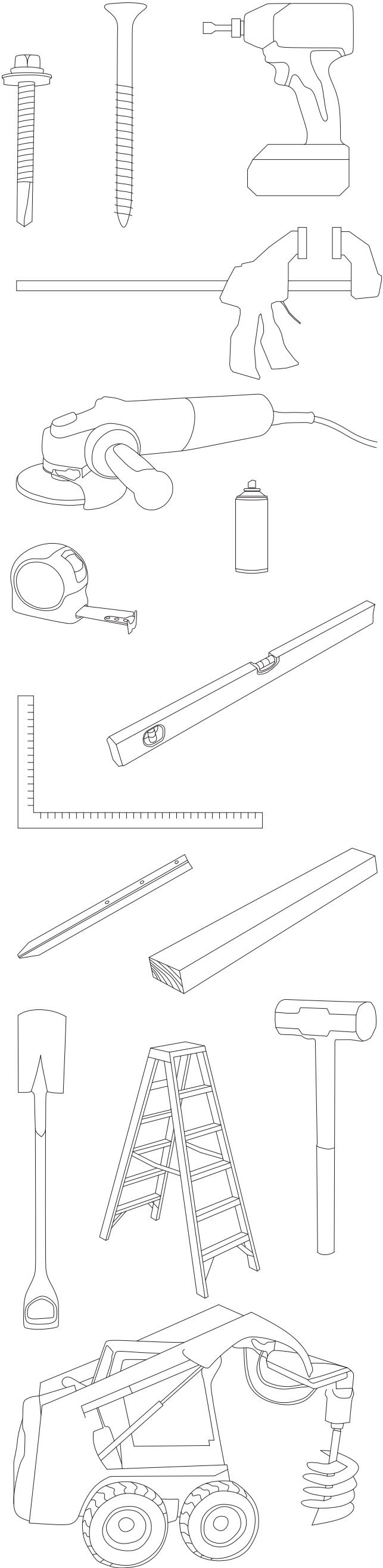
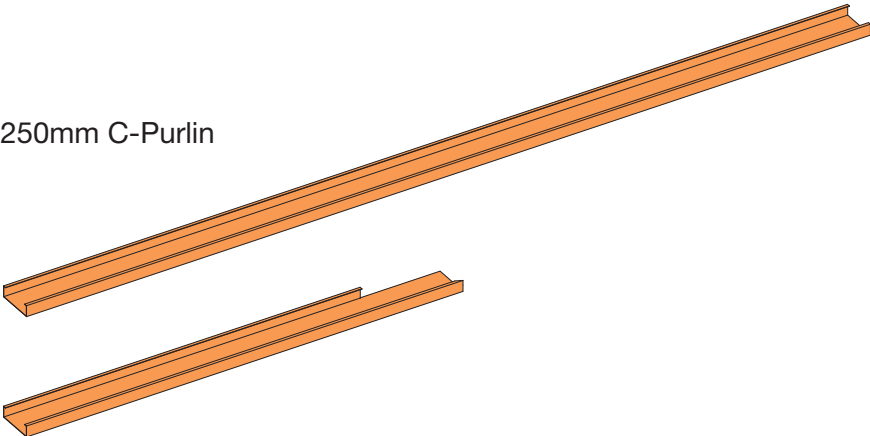
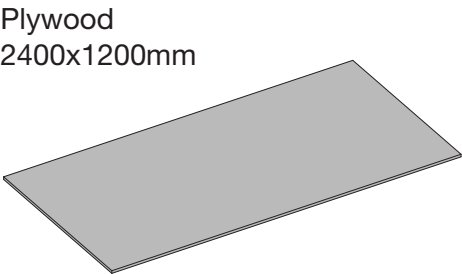
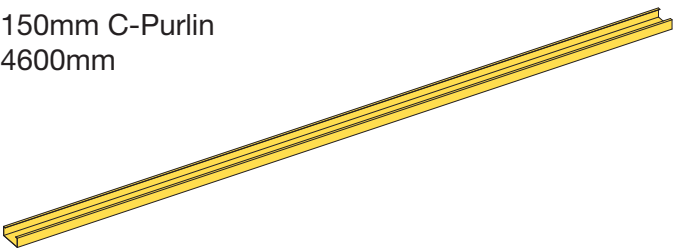
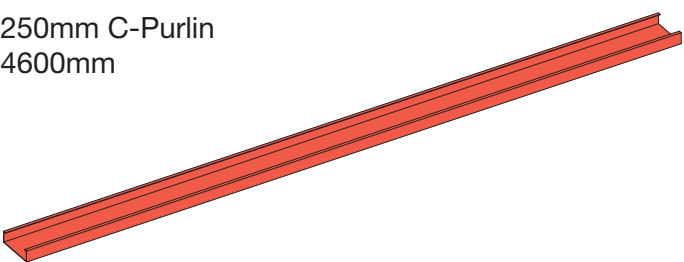
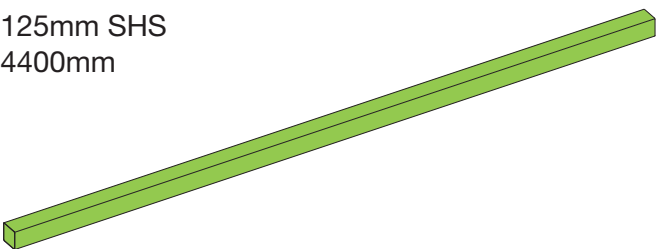
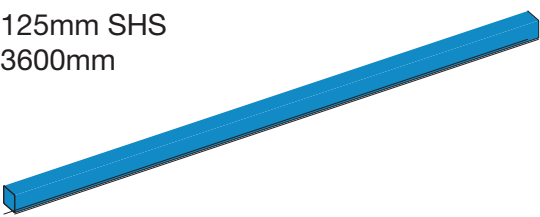


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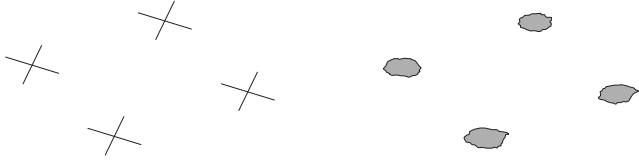
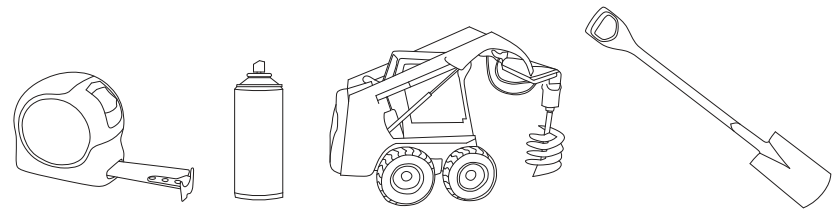
# Materials

# Tools

# Safety



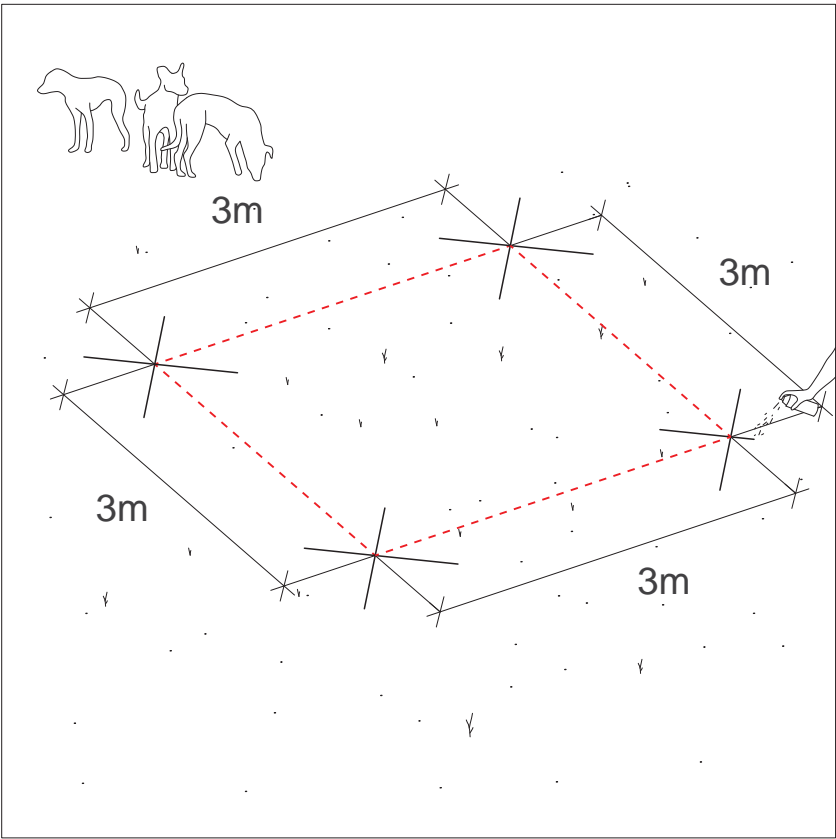
# Step 1 - Prepare Site



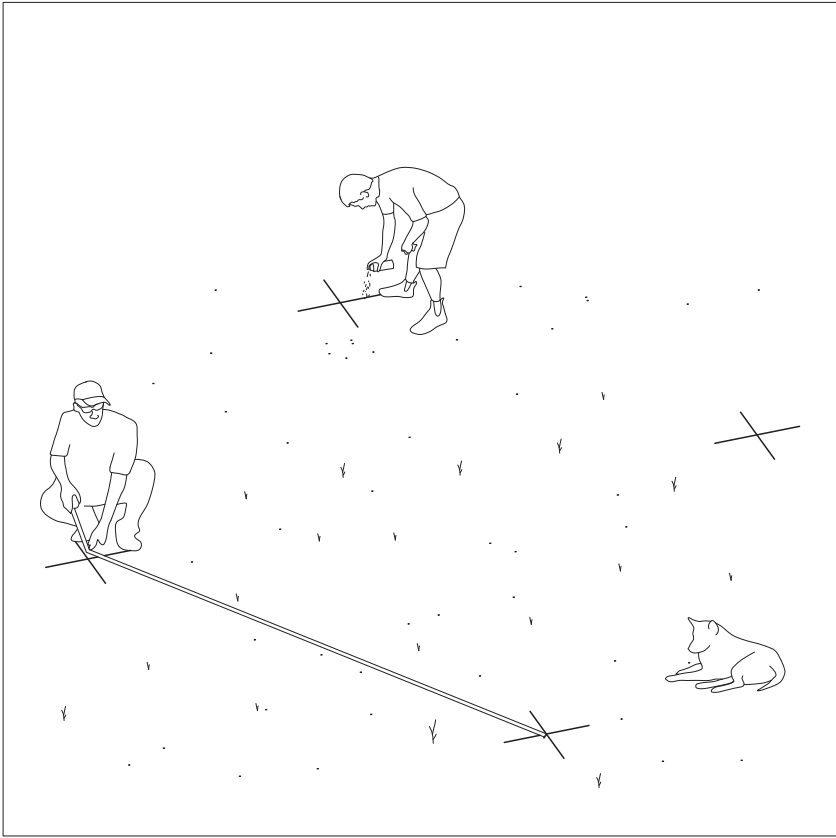
**1**  
Yarn about the best spot for the Big Shady. Is it shading morning or afternoon sun?



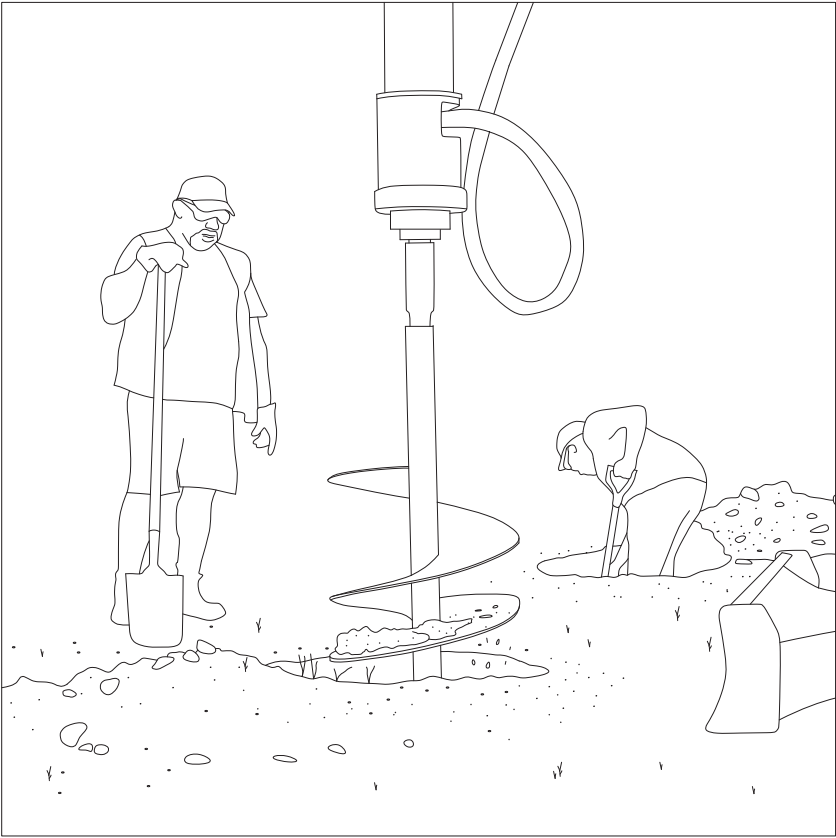
**2**  
Mark a square on the ground, 3m x 3m in size.



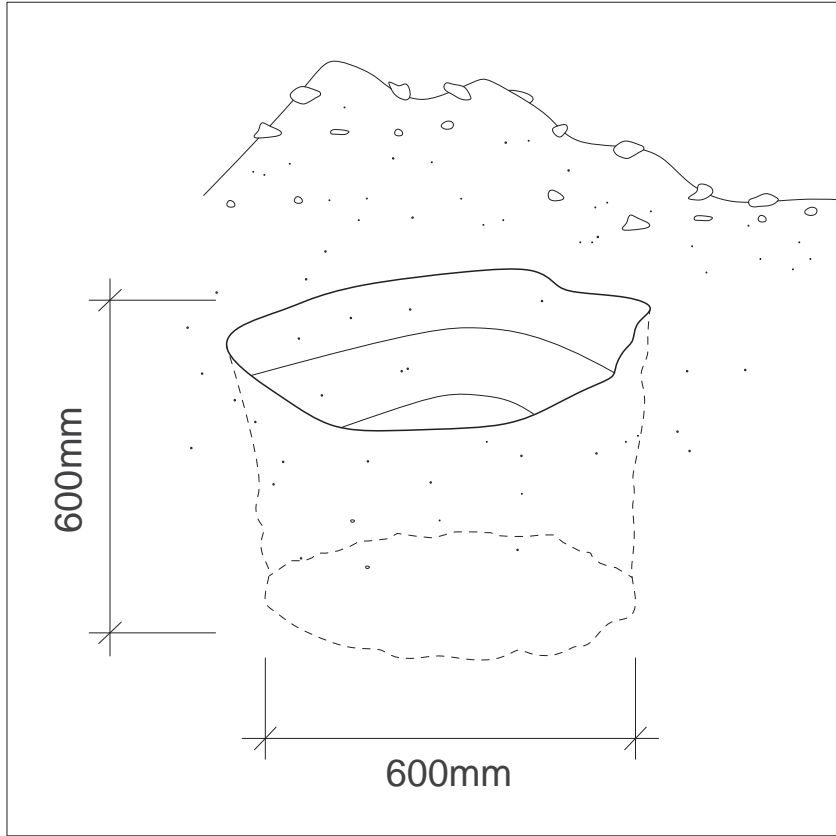
**3**  
Double check the size of the square.



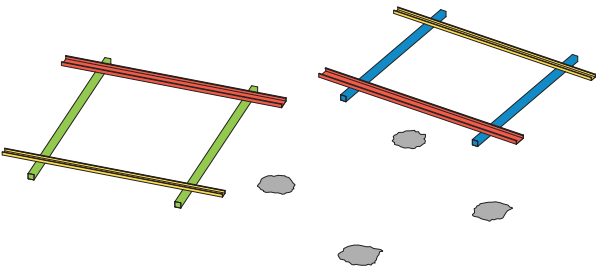
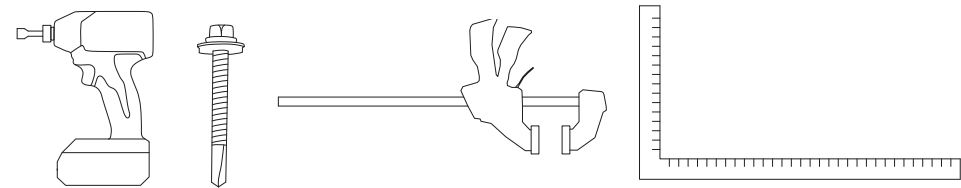
**4**  
Dig the 4 holes!



**5**  
Ensure the holes are 600mm wide, and 600mm deep.

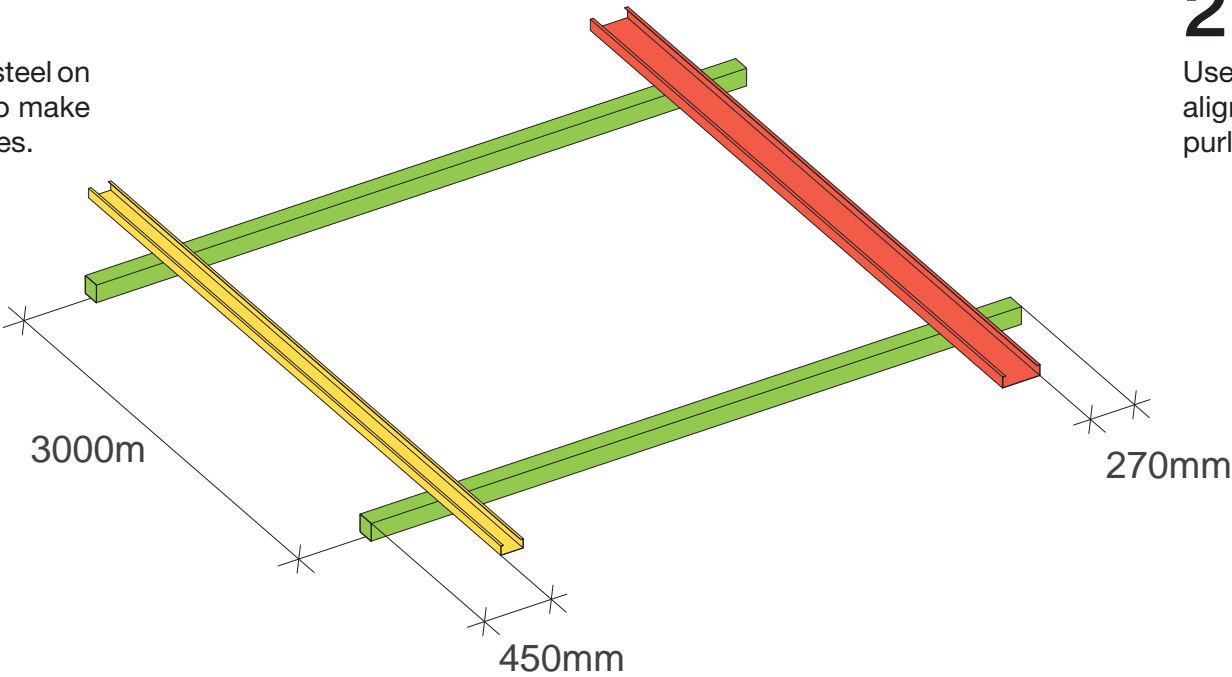


# Step 2 - Make Staples



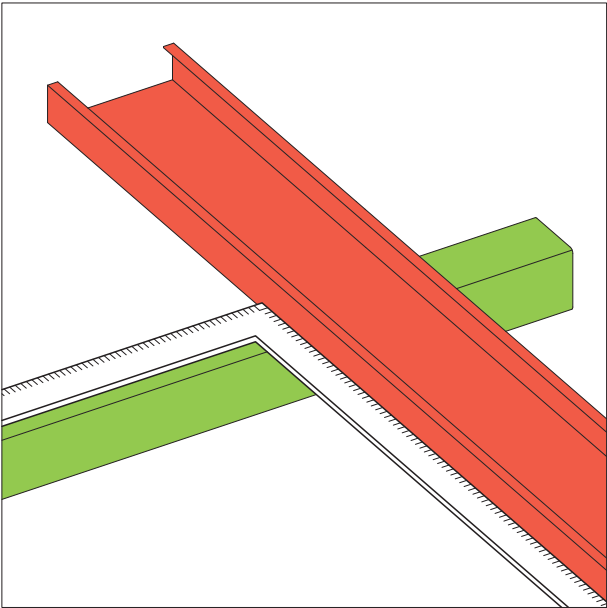
1

Arrange steel on ground to make the staples.



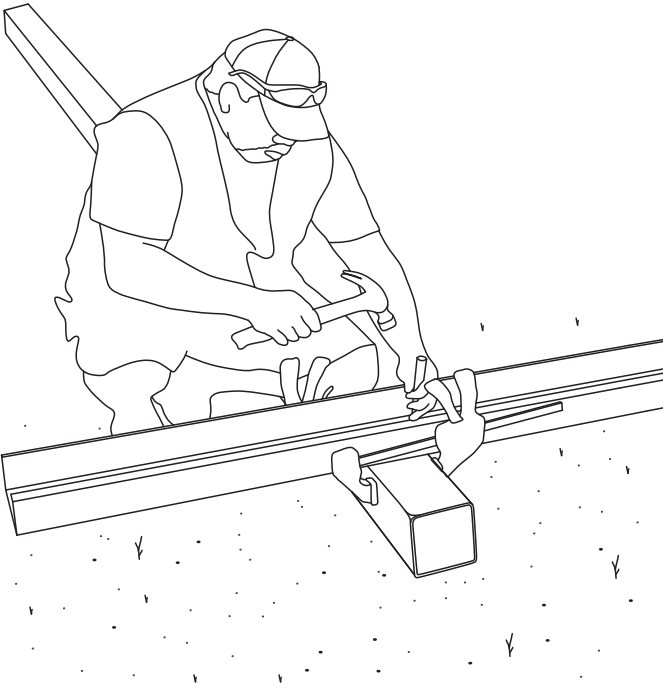
2

Use square to align posts and purlins.



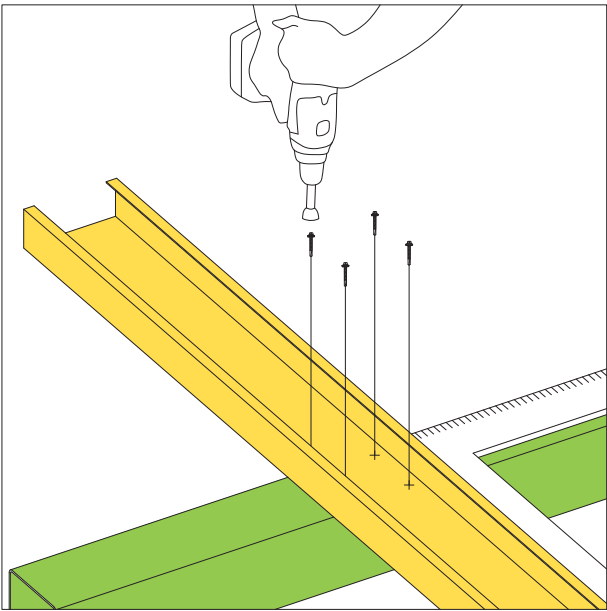
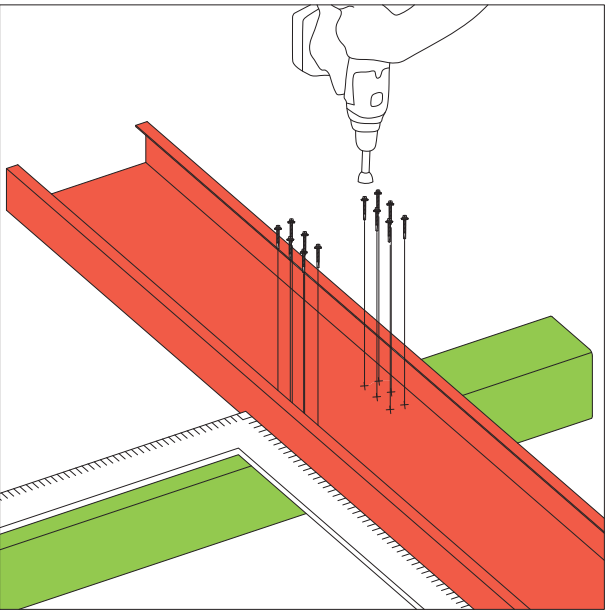
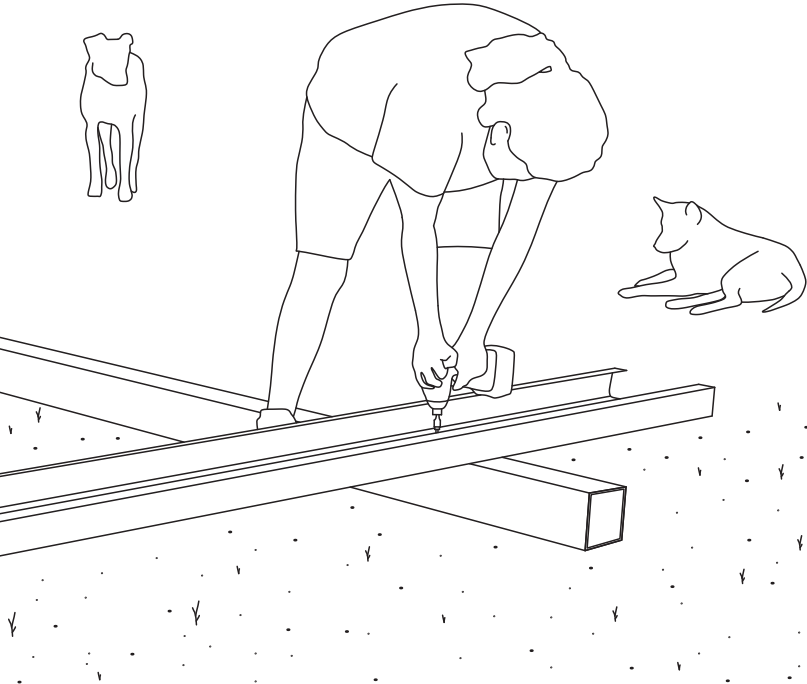
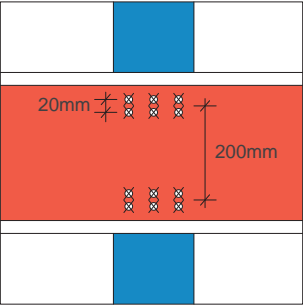
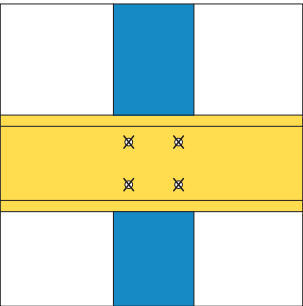
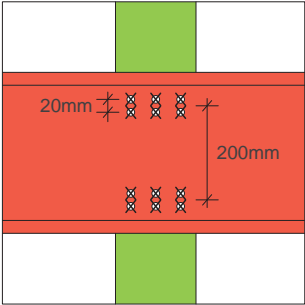
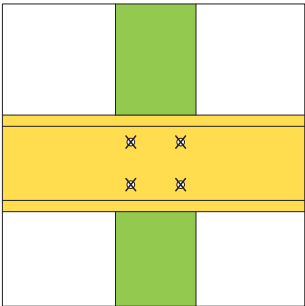
3

Clamp steel together and mark spots for screws using a steel punch.



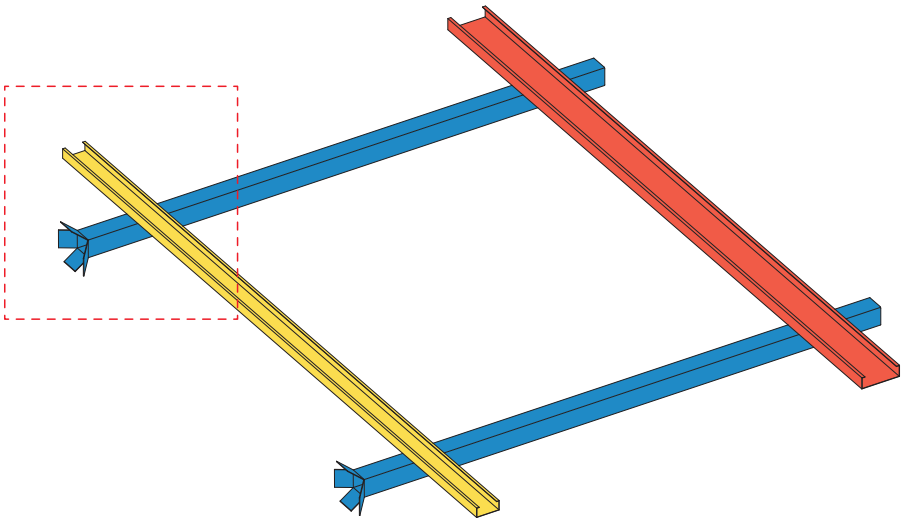
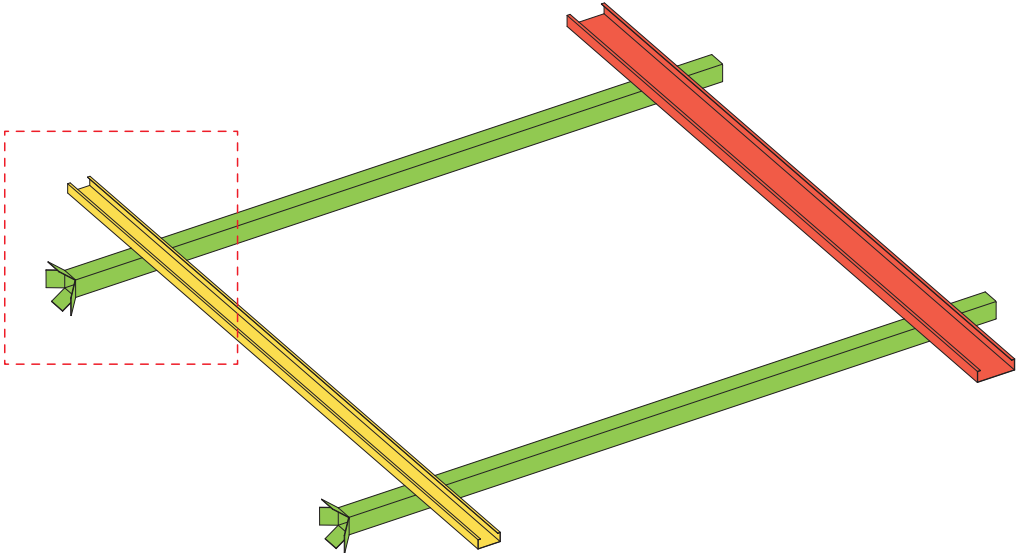
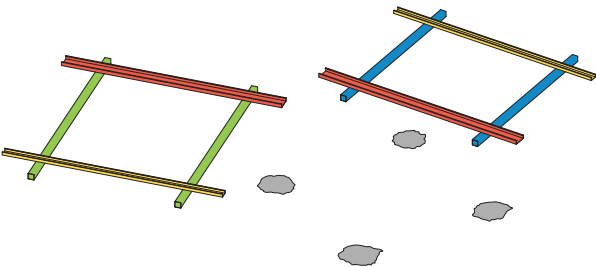
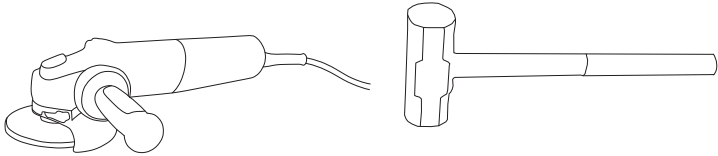
4

Double check staples are square, then screw together.



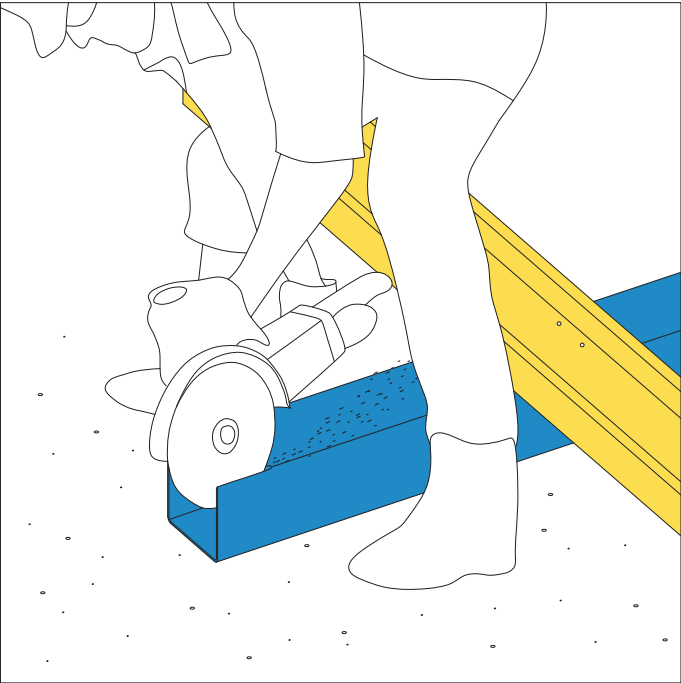


# Step 3 - Cut & Bend Posts



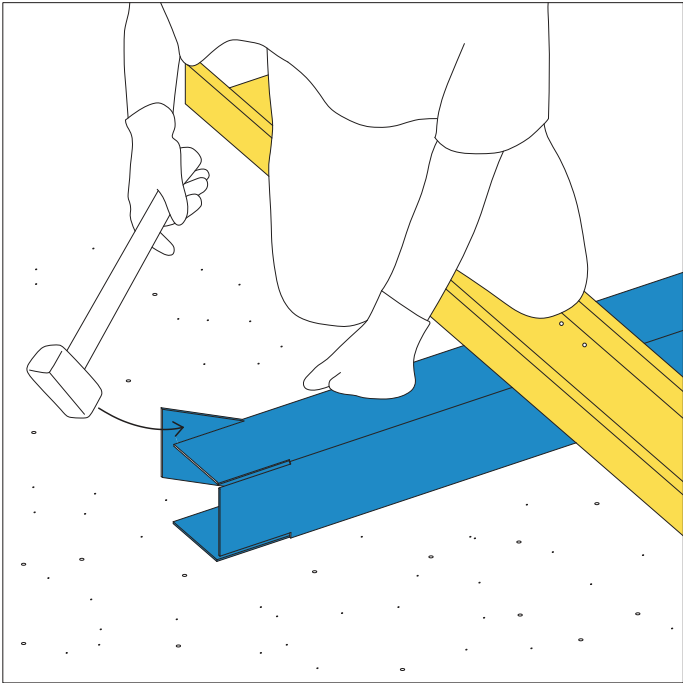
1

Grind corners.



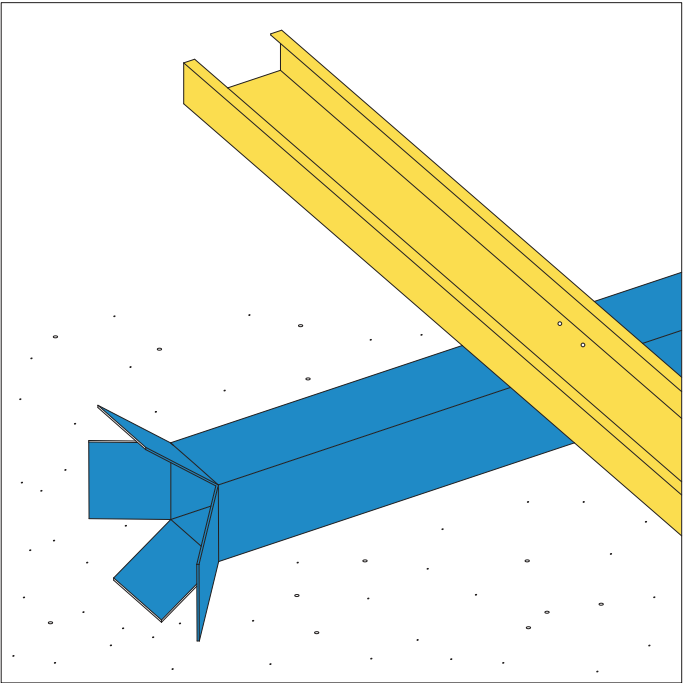
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Use a mallet to bend the steel 45 degrees.



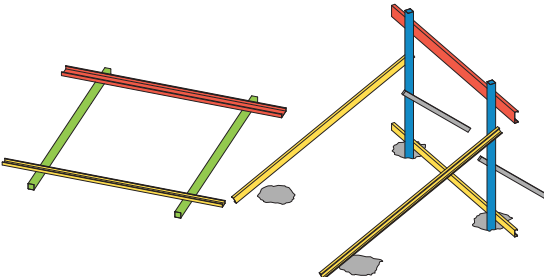
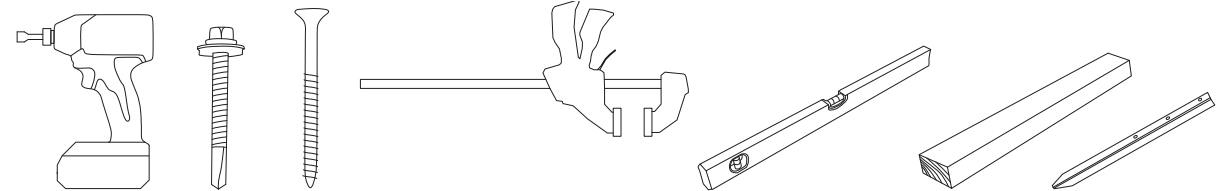
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Repeat for all sides.

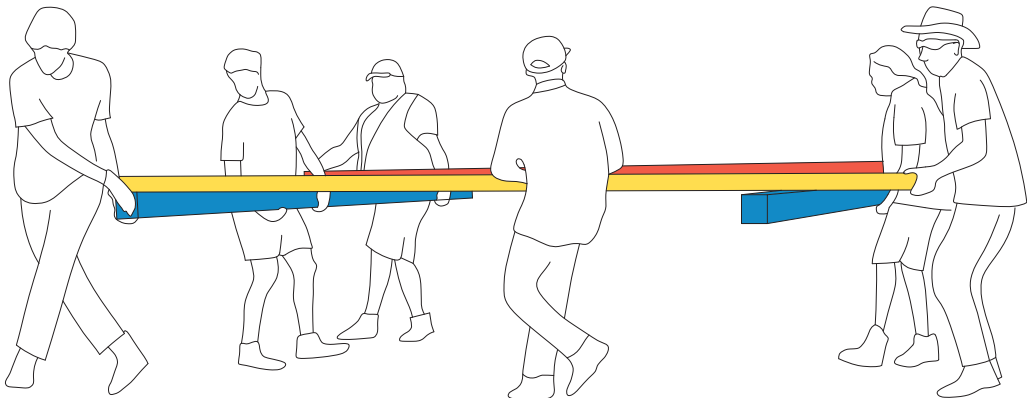




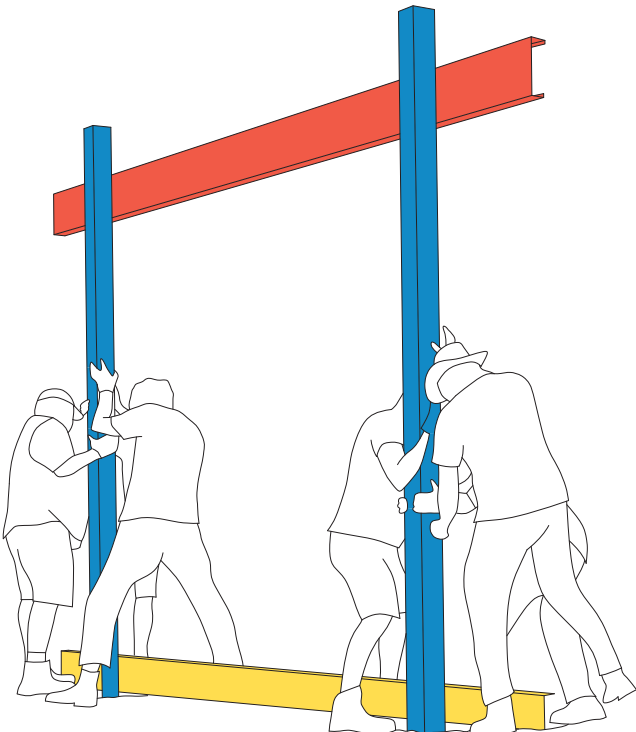
# Step 4 - Lift Staple



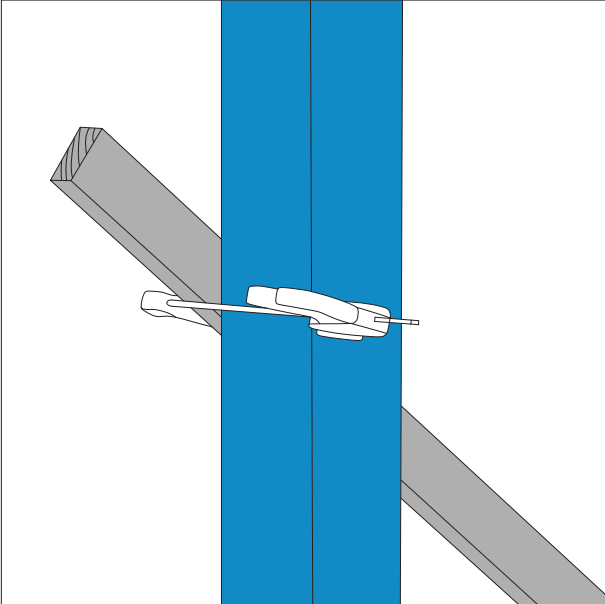
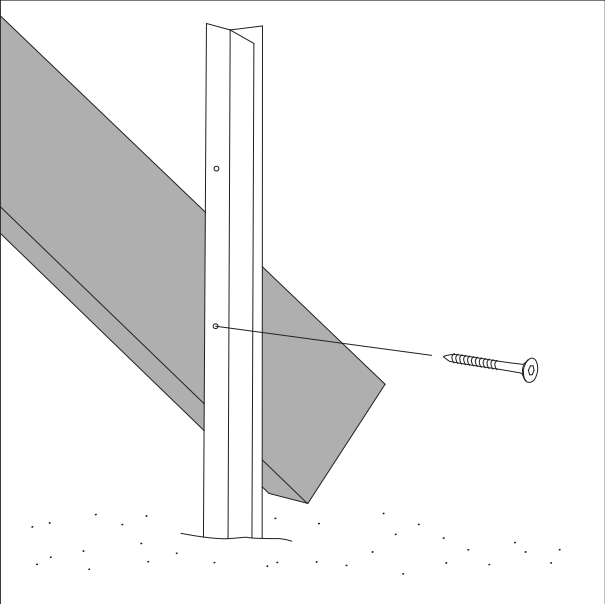
**1**  
Carry staple into position.



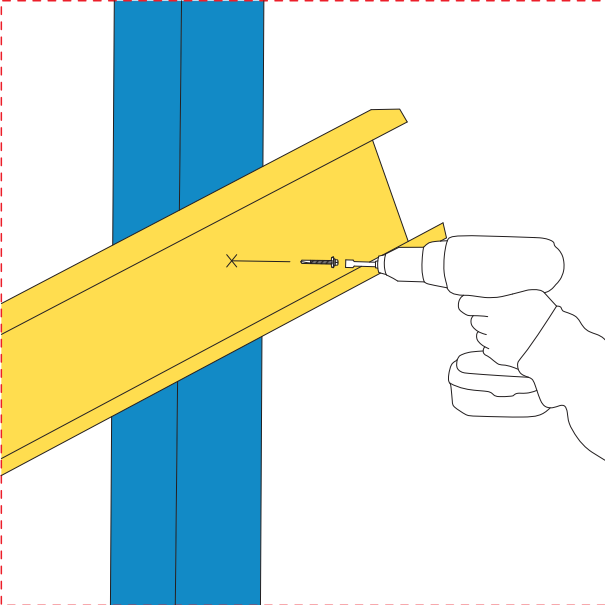
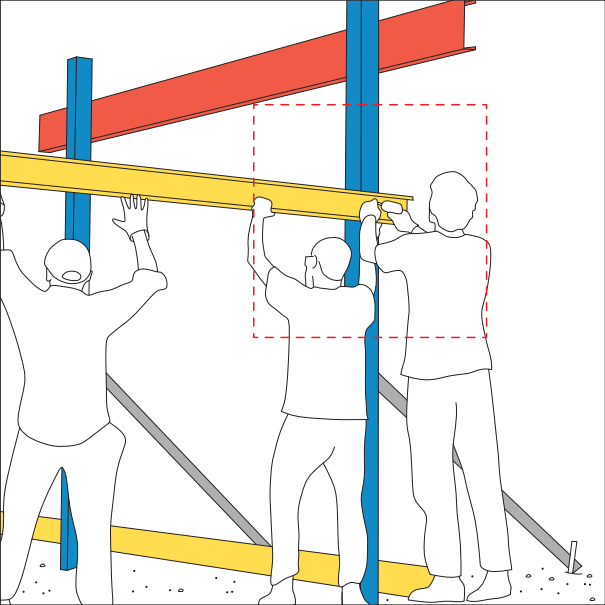
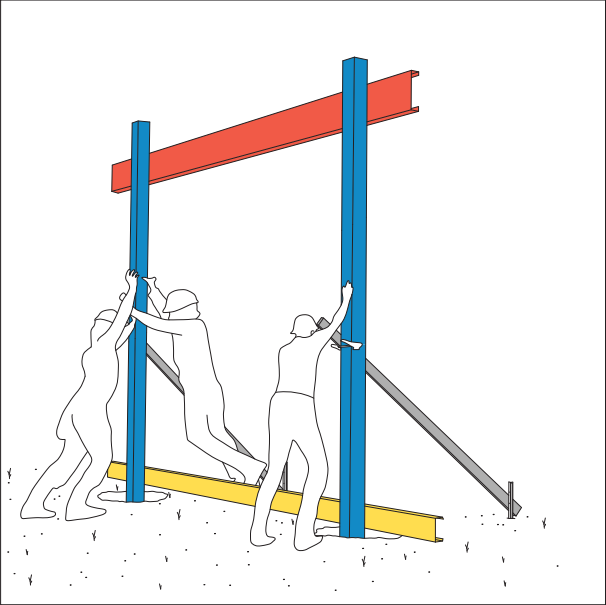
**2**  
Place over holes.



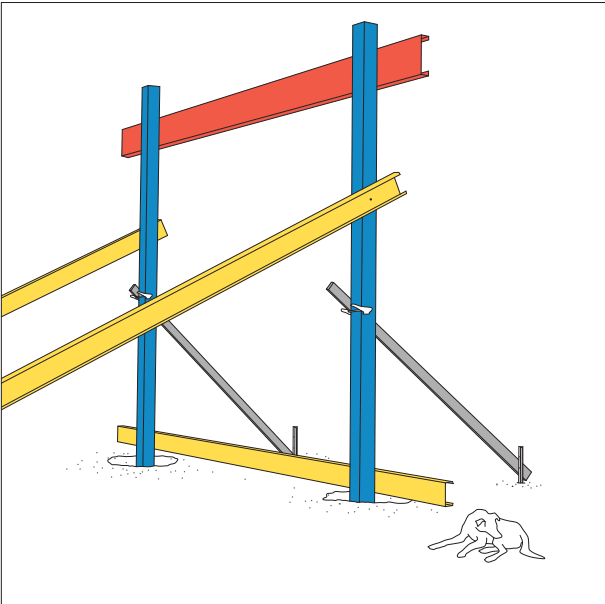
**3**  
Make timber brace & clamp in place.



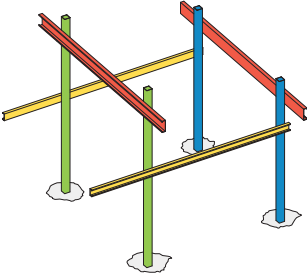
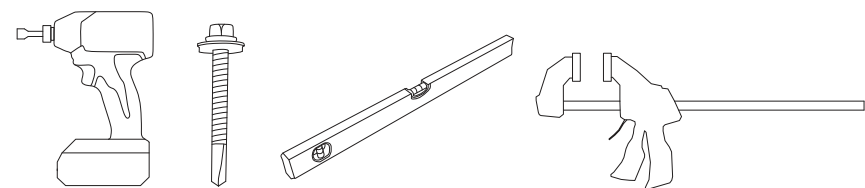
**4**  
Lift steel brace & screw in place.



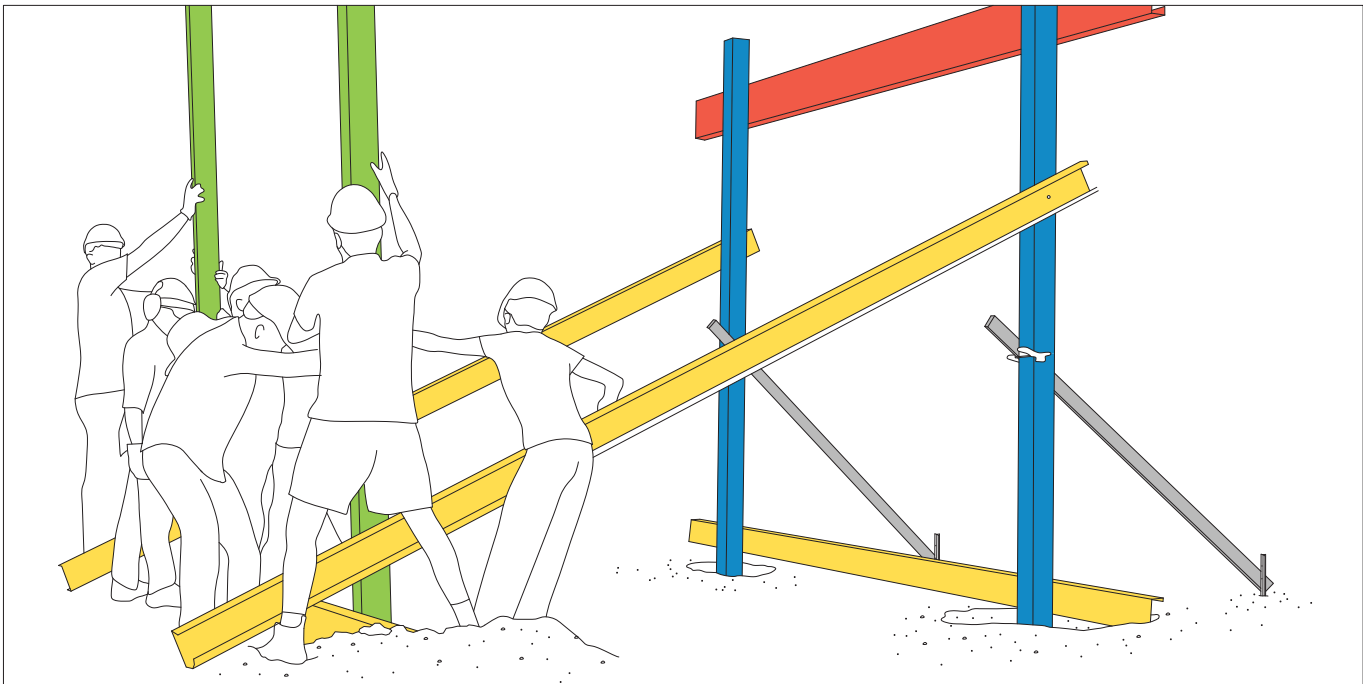
**!!!**  
Double check steel is braced properly.



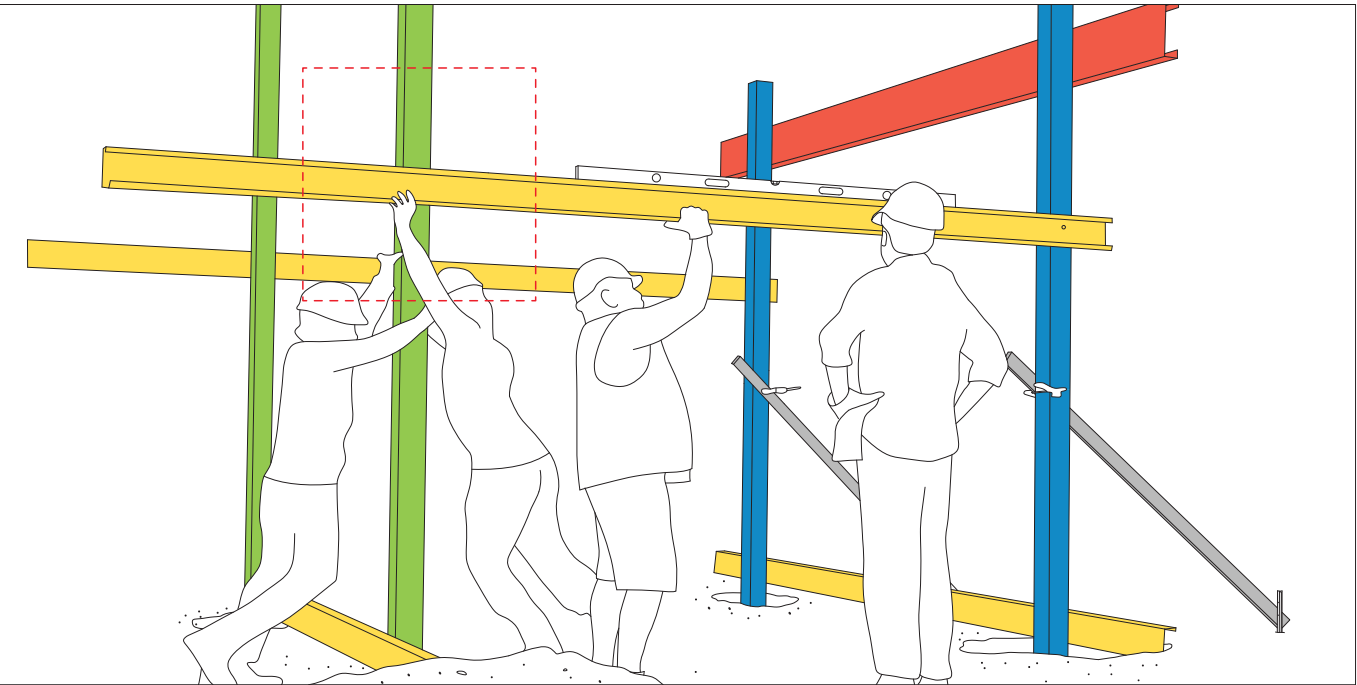
# Step 5 - Lift Staple 2



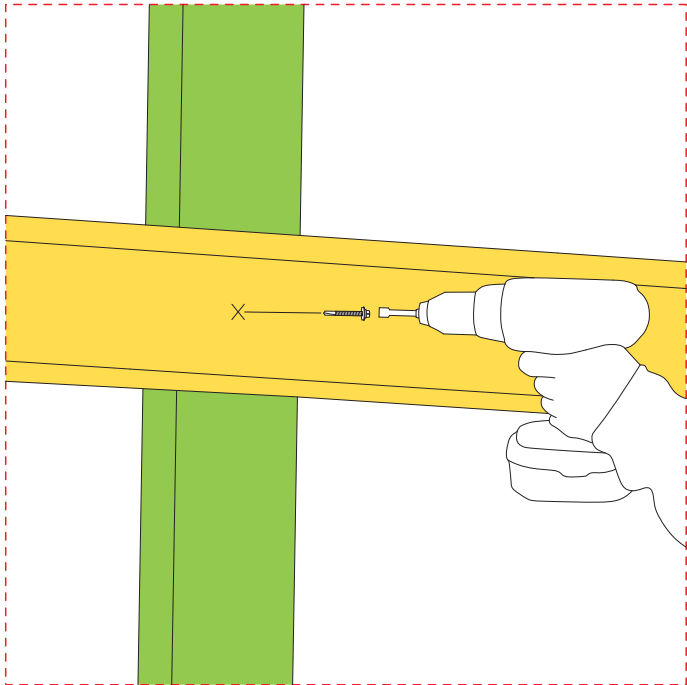
**1** Carry second staple into position. Place over holes.



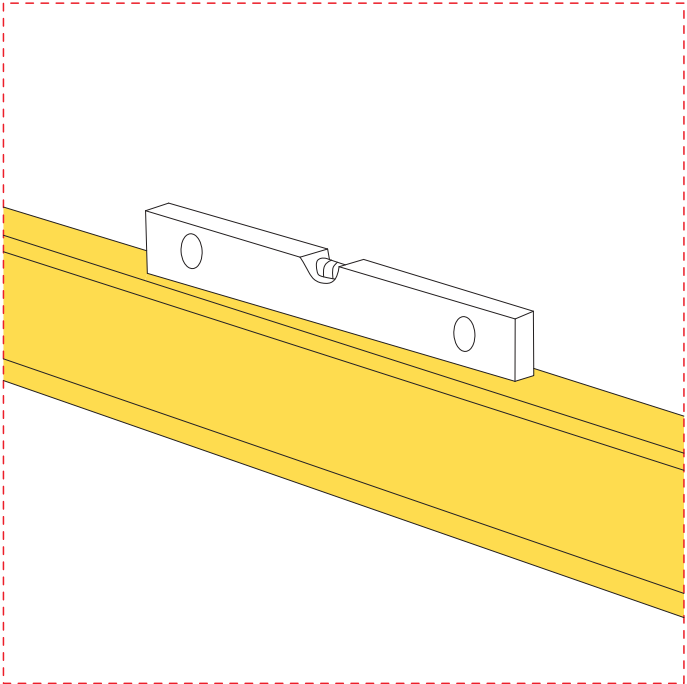
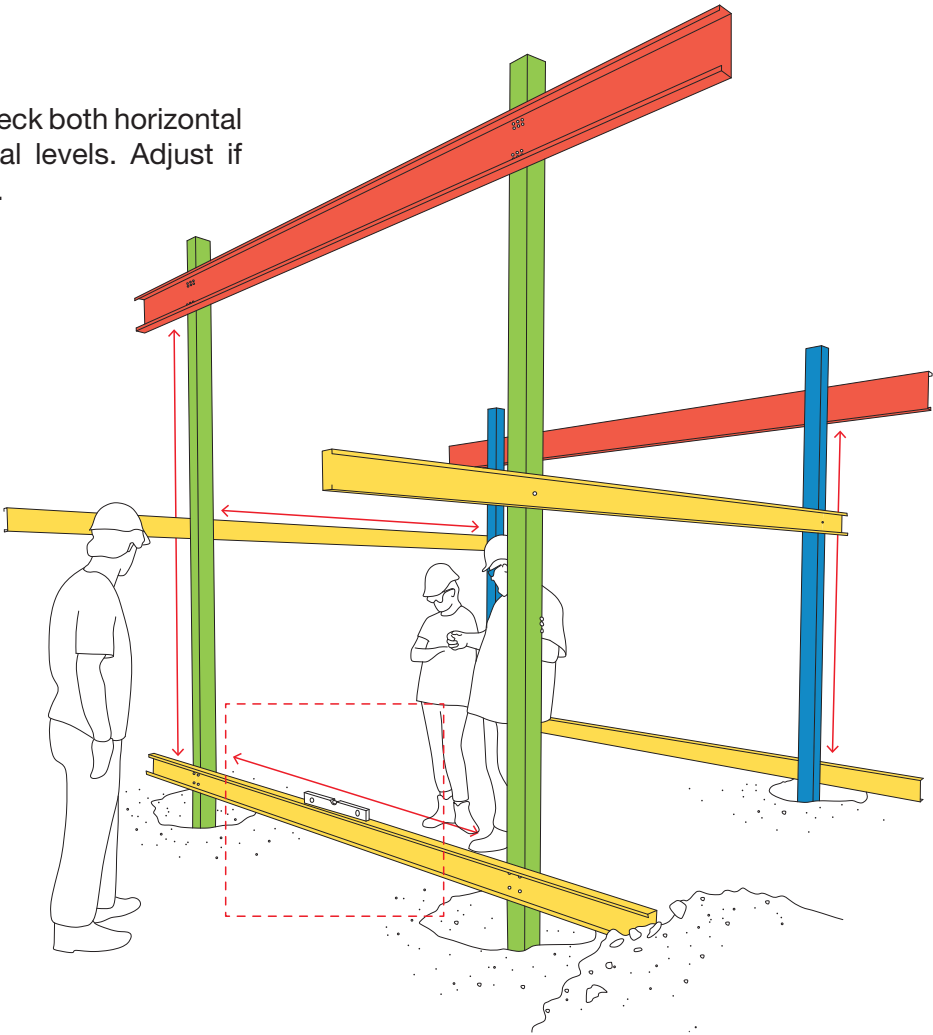
**2** Make sure posts are straight. Check levels.



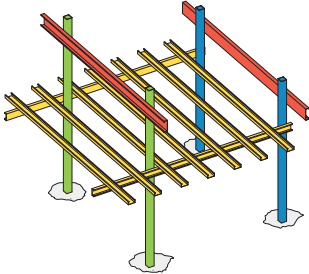
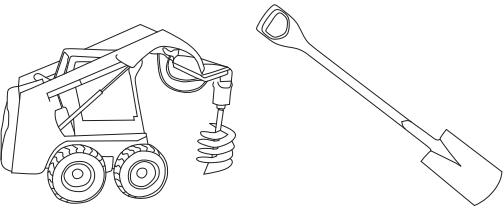
**3** Once staples are level, fix brace with one screw.



**4** Double check both horizontal and vertical levels. Adjust if necessary.



# Step 4 - Mix & Pour Concrete



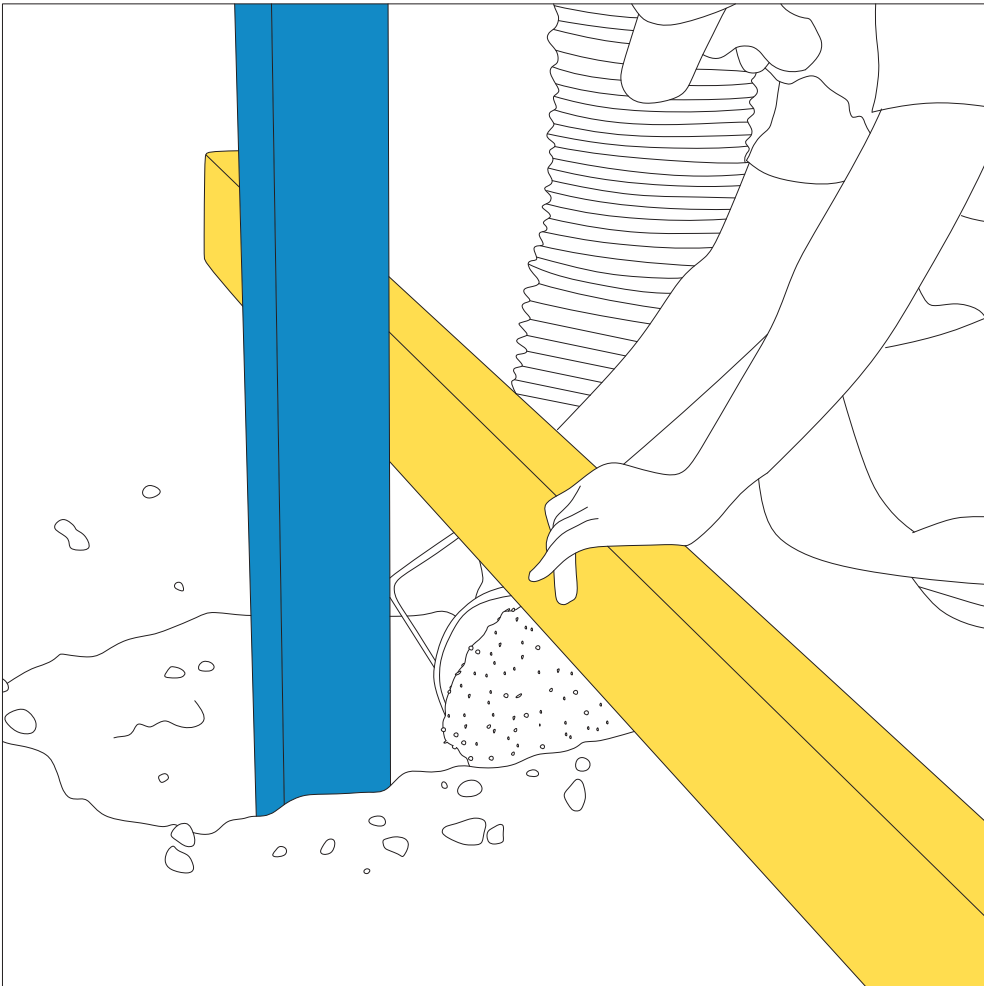
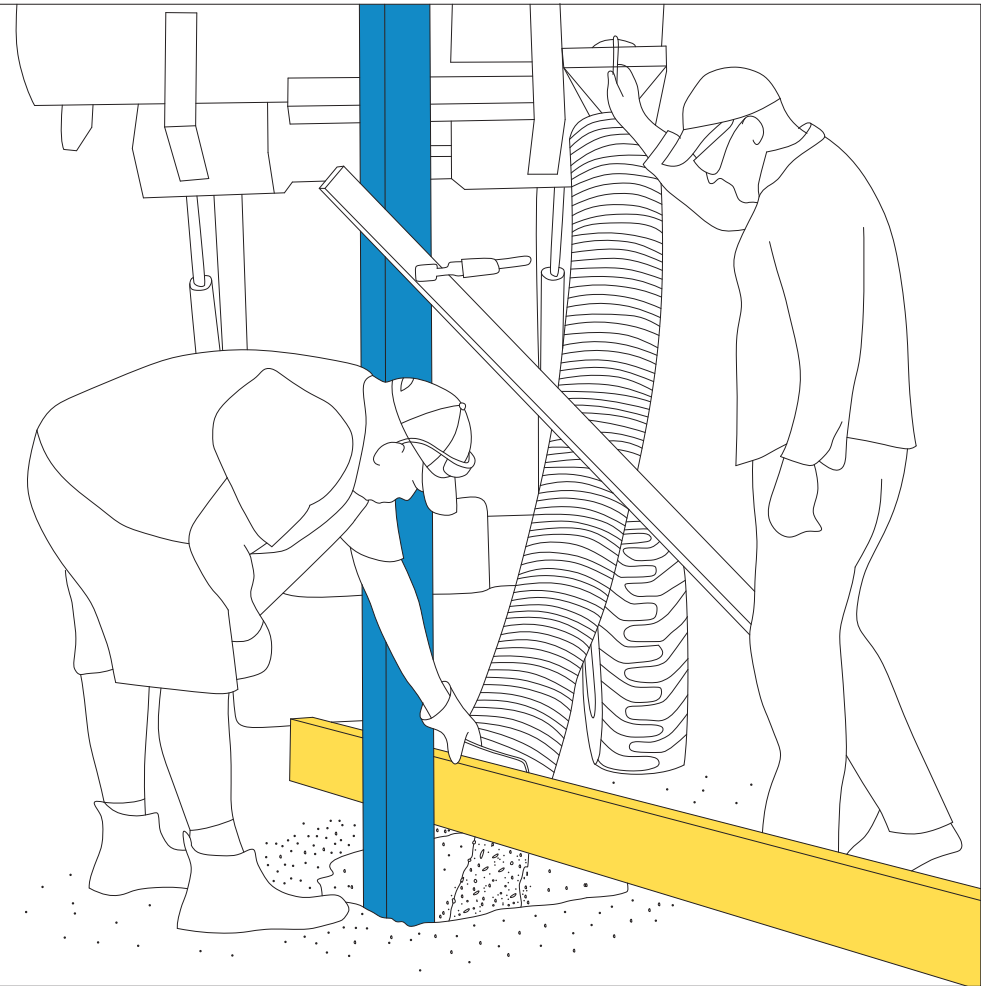
1

Mix the concrete and fill the holes.



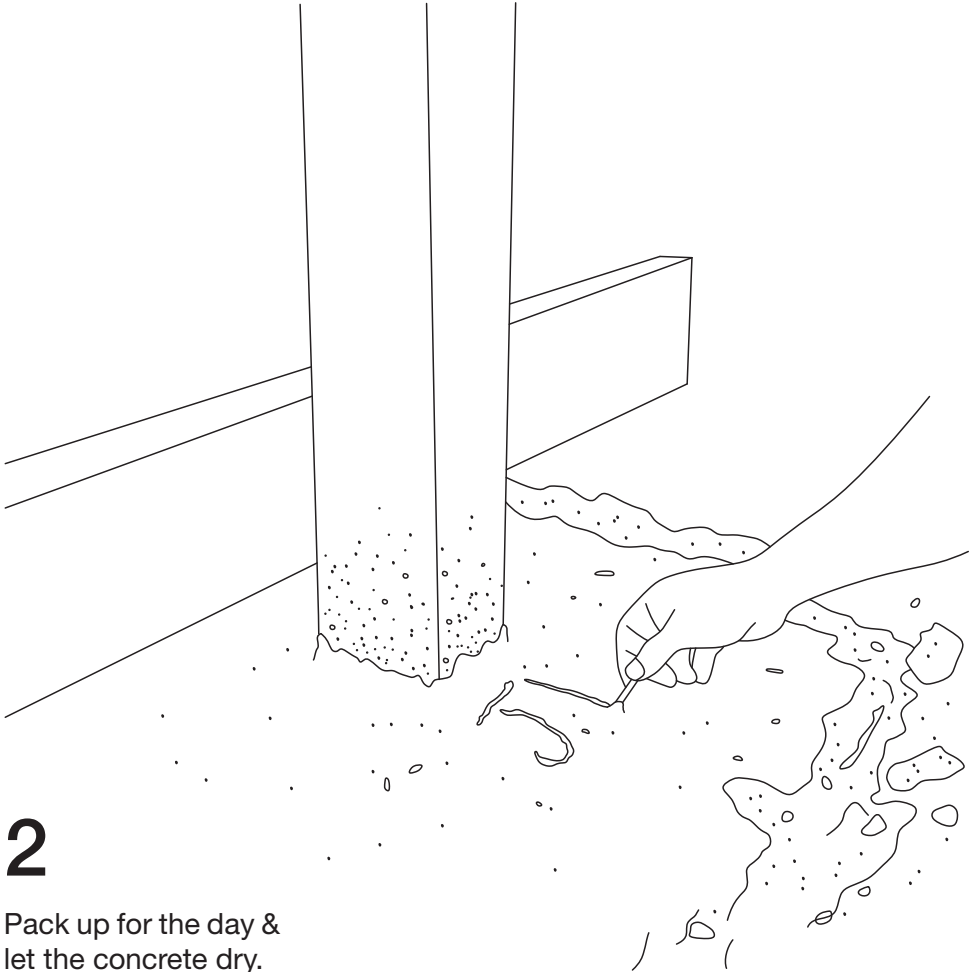
!!!

Be careful not to move the staples when filling the holes with concrete.



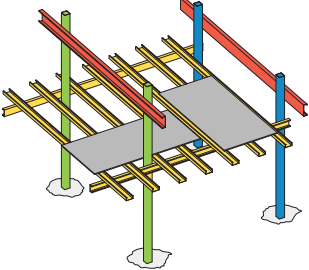
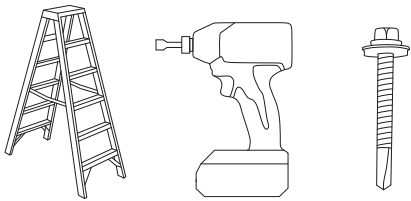
2

Pack up for the day & let the concrete dry.



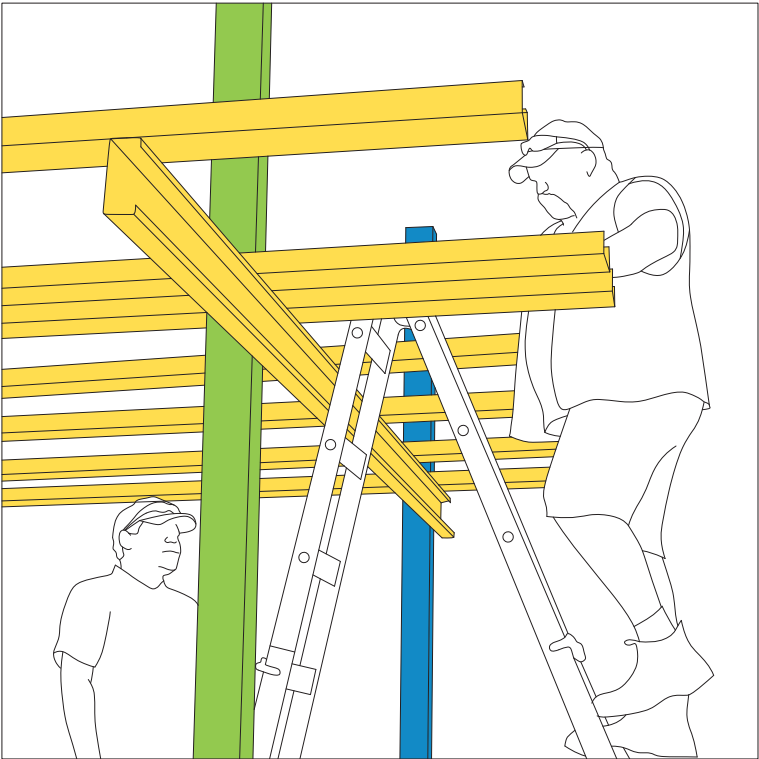


# Step 7 - Make Scaffold



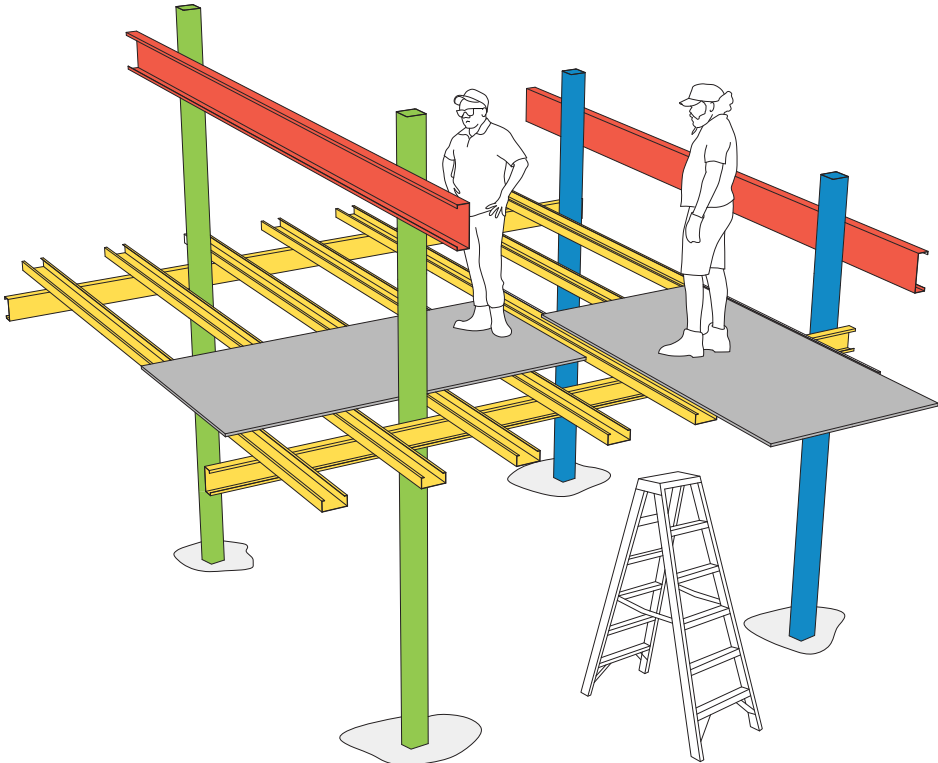
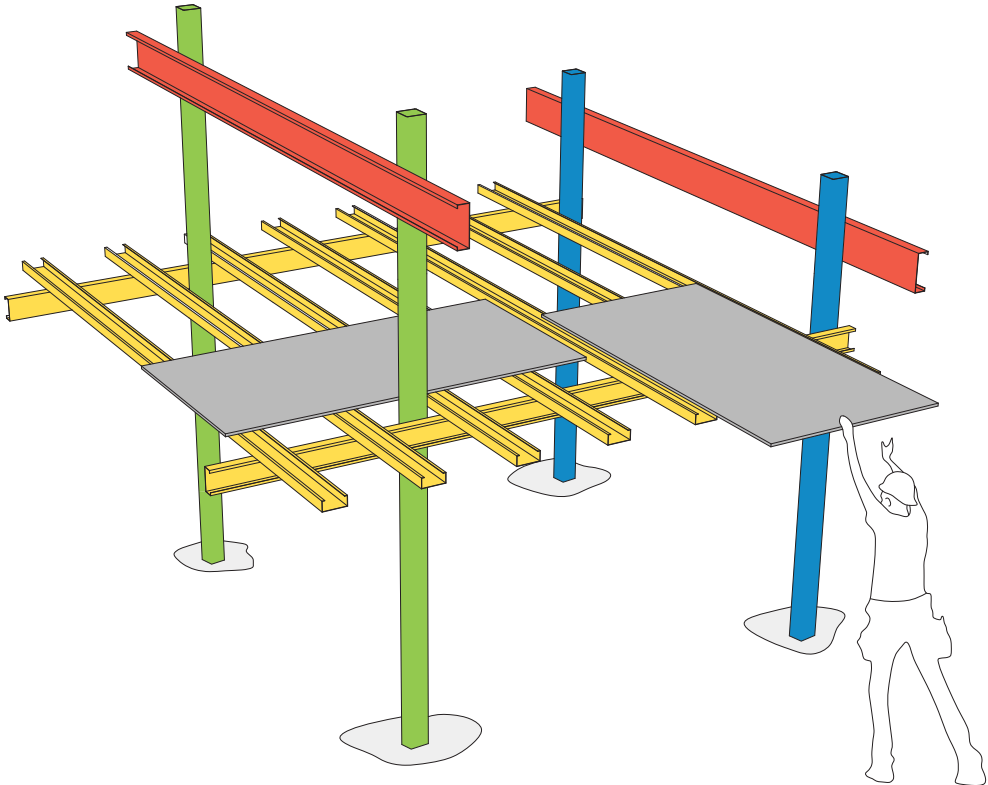
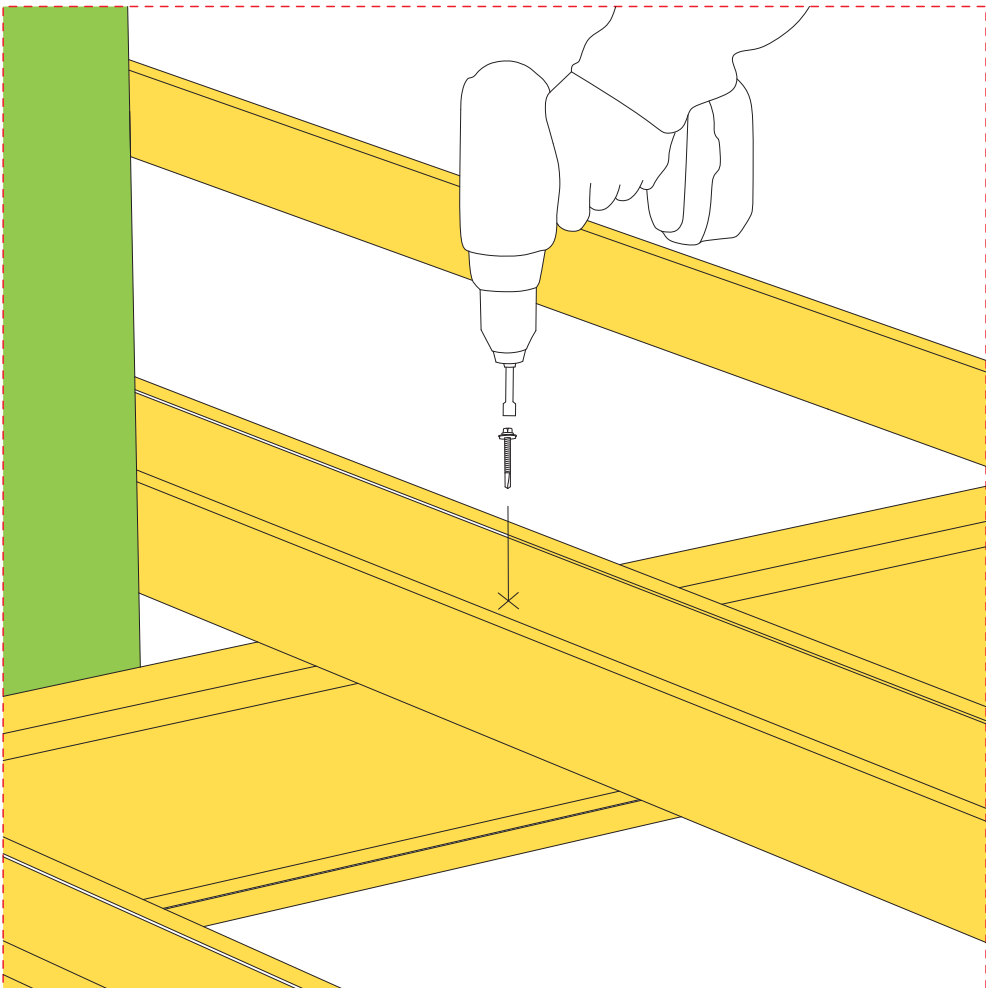
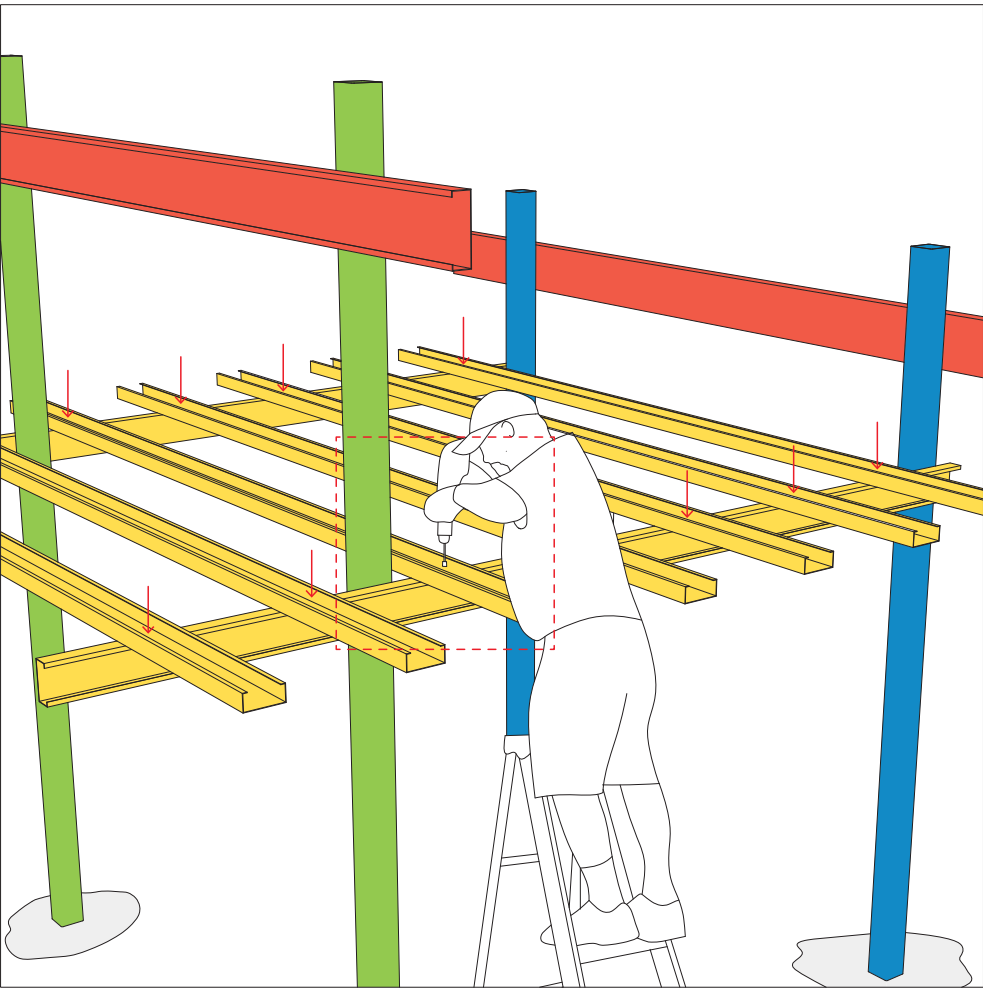
1

Place purlins on top of the brace made in Step 5.

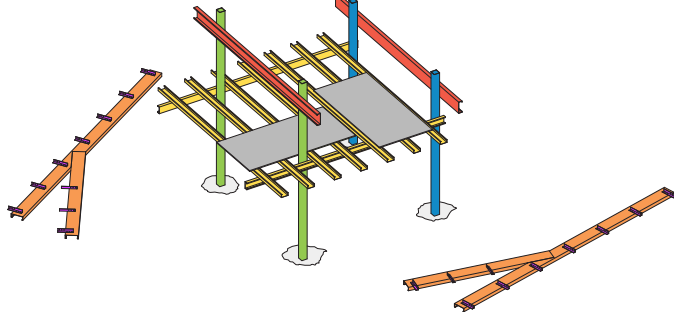
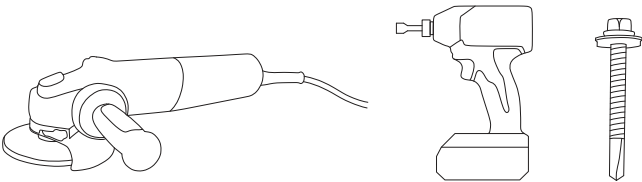


2

Screw down every purlin at both ends with one screw.

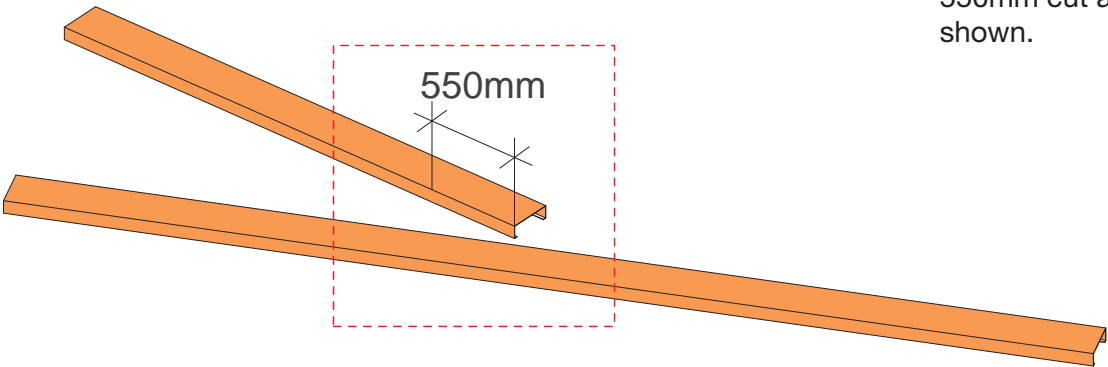


# Step 8 - Make Big Y



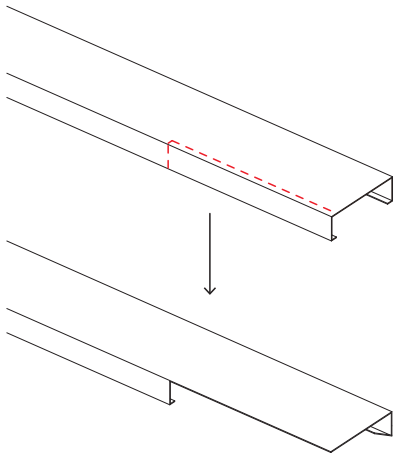
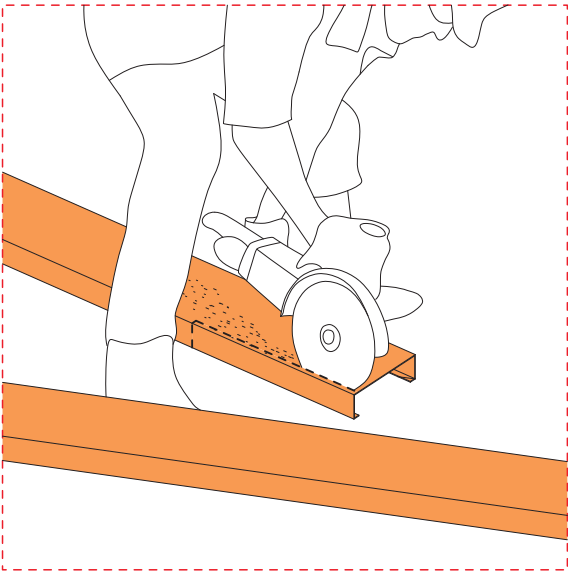
1

Arrange the first Y on the ground.



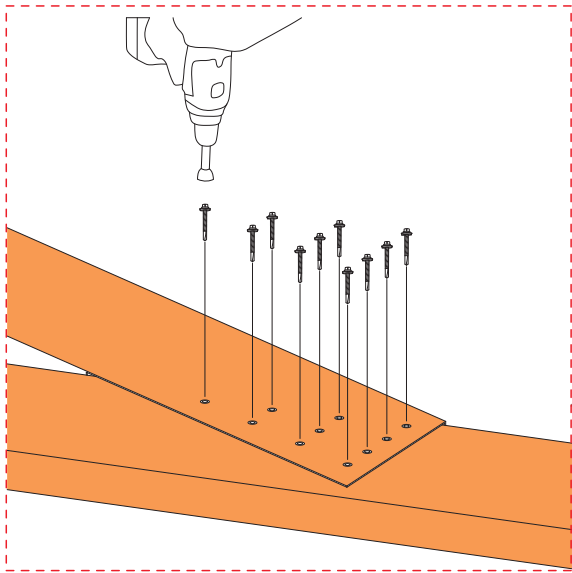
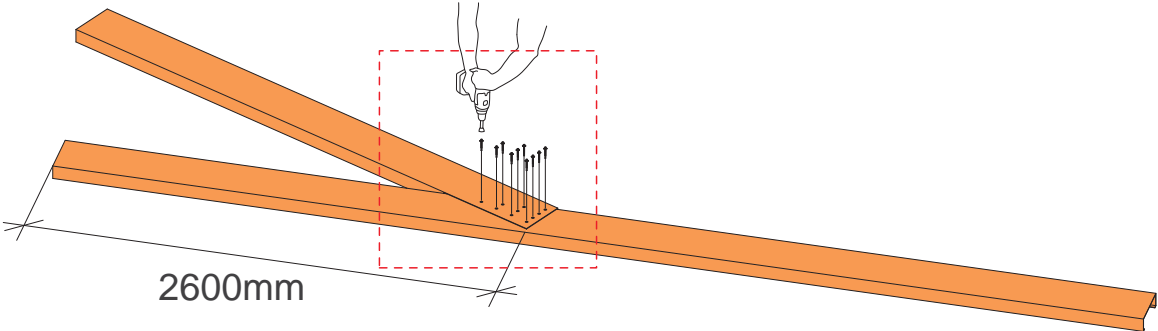
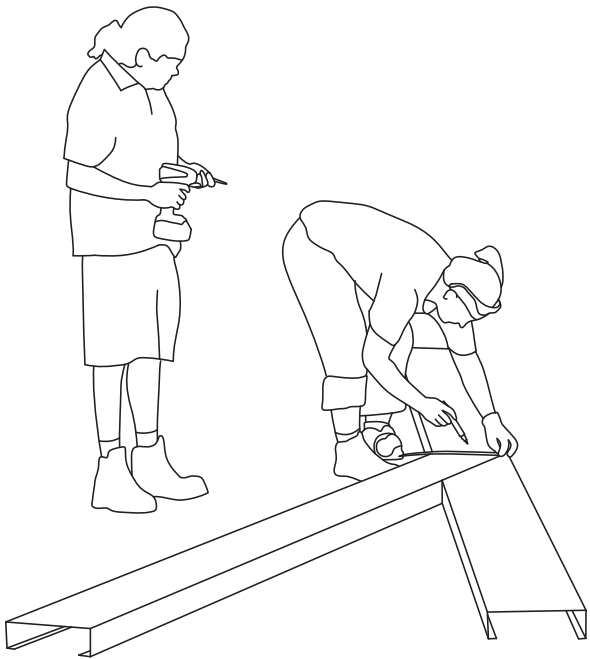
2

Use a grinder to make the 550mm cut as shown.



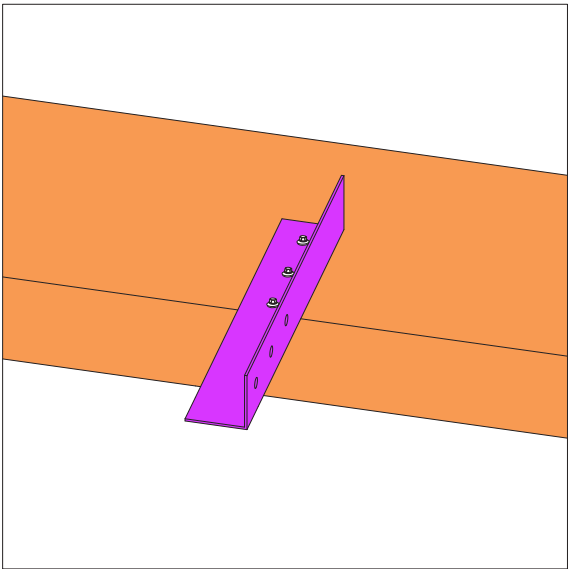
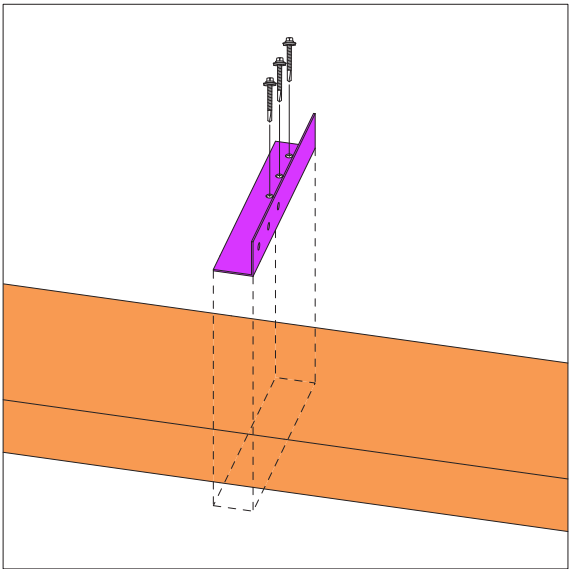
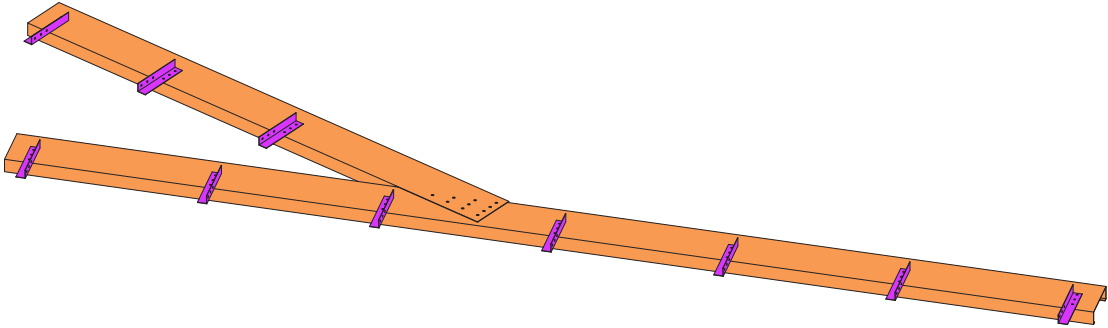
3

Join the two parts of the Big Y and screw together.



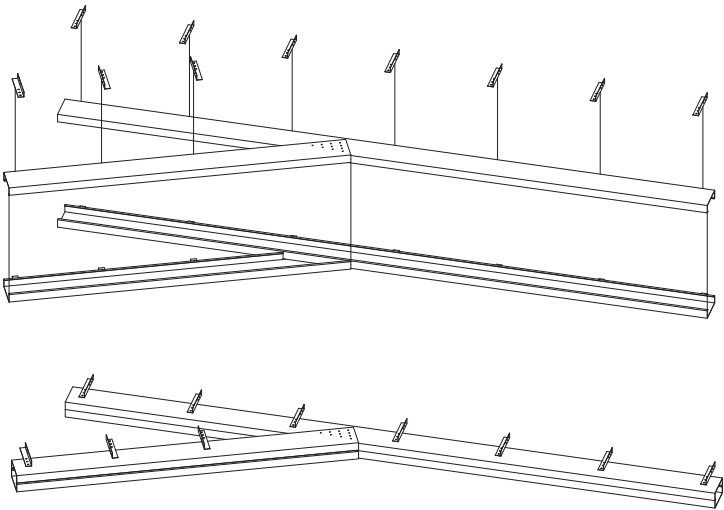
4

Align purlin brackets and screw to the Big Y.

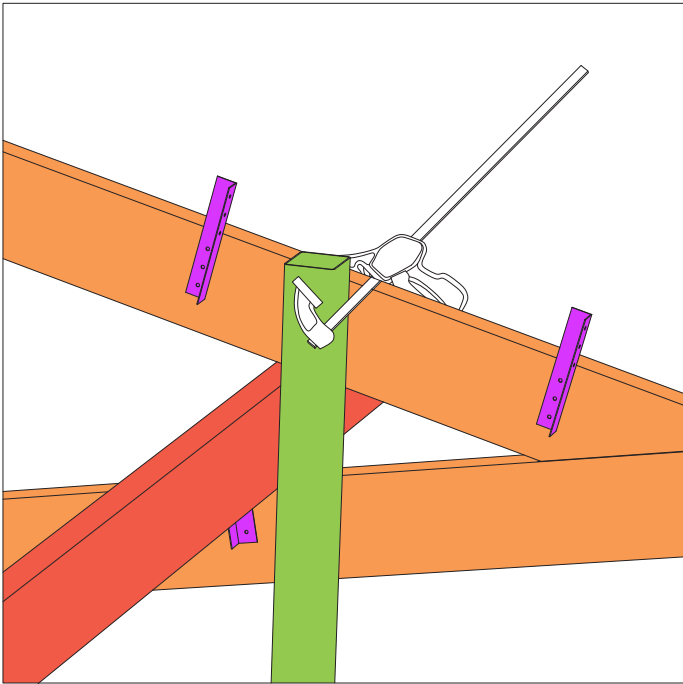
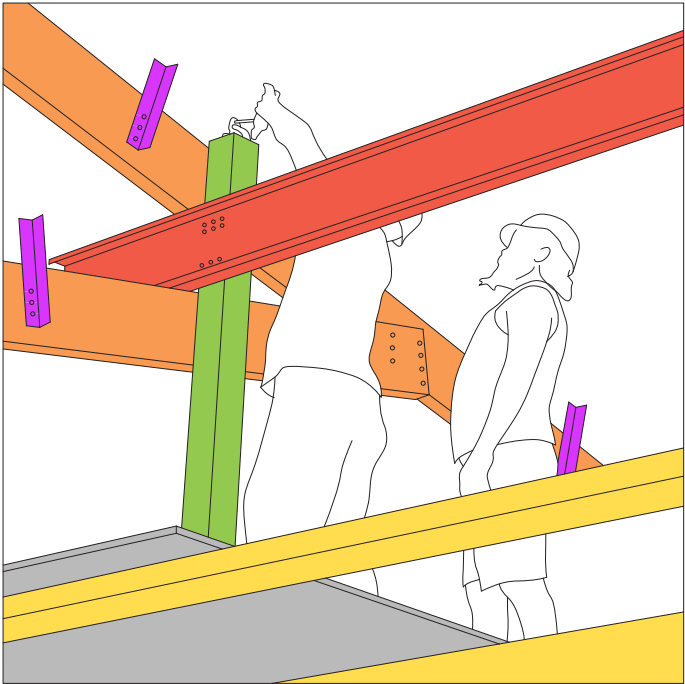
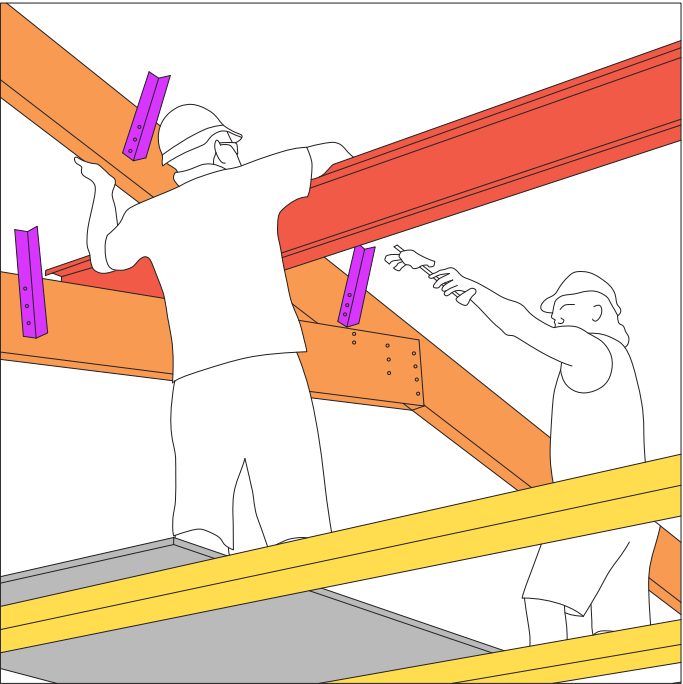
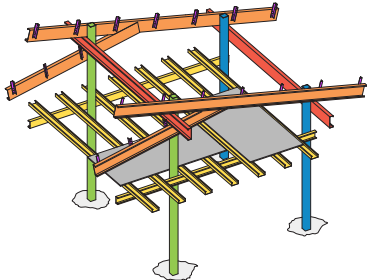
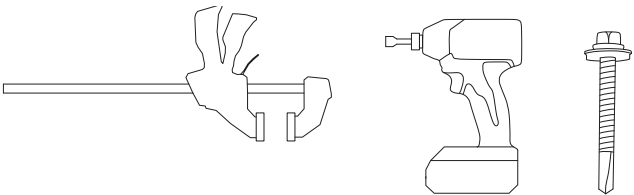


5

Flip the Big Y to use as a template. Repeat Steps 1-4 to make the second Big Y.

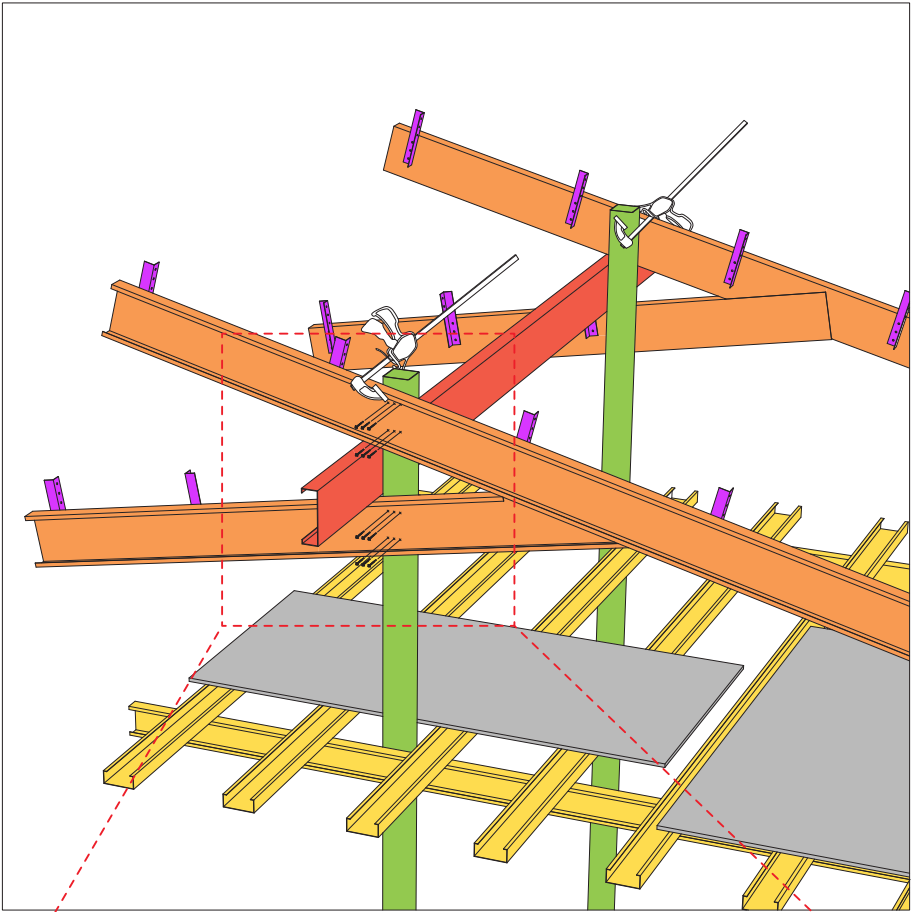


# Step 9 - Attach Big Y's



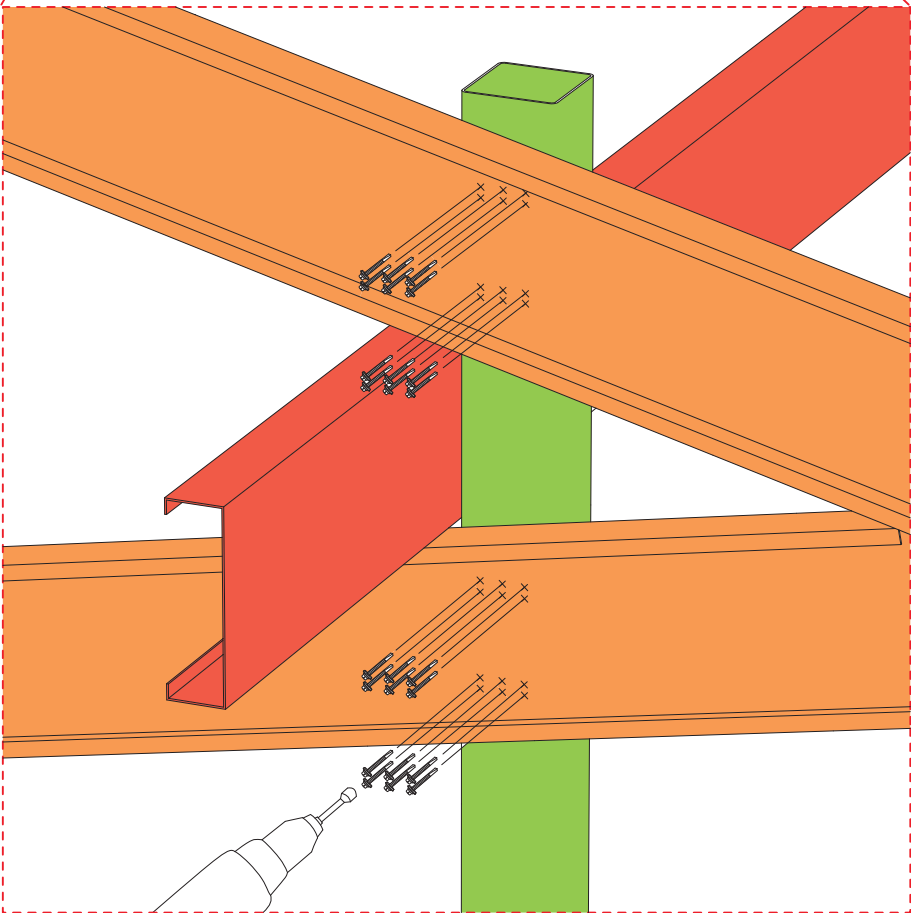
1

Lift Y's onto the scaffold and clamp in place.



2

Using 12 screws, fix each Y to the post using the method shown.





# Part 1 Complete

## Ready for the Roof!

