

# Mezzanine Installation Guidelines

Included are general guidelines for the installation of our standard mezzanine products. It is recommended installation be done with at least TWO or MORE individuals. A forklift and/or scissor lift are necessary for installation in most cases. ALWAYS refer to the specific installation instructions included with your project.

## Initial Assembly

1. **Closely consult** the provided blueprint to become oriented with the overall layout and positioning of the platform.
2. **Select** a starting point, this will typically be one corner of the mezzanine, usually nearest to an existing wall or structure.
3. **Measure** to find the **location of the first post**. Mark out and stand that post in place *without* anchoring it down.

4. **Continue laying out** and standing the remaining posts in place, ensuring all clearances are considered. ***Don't forget to look up!*** The clearance you perceive from the posts and baseplates may not be the same at the beam level. Measuring the posts **center-to-center** is often the best way to ensure proper spacing between posts. Snapping multiple chalk lines is a good practice to keep the platform square.

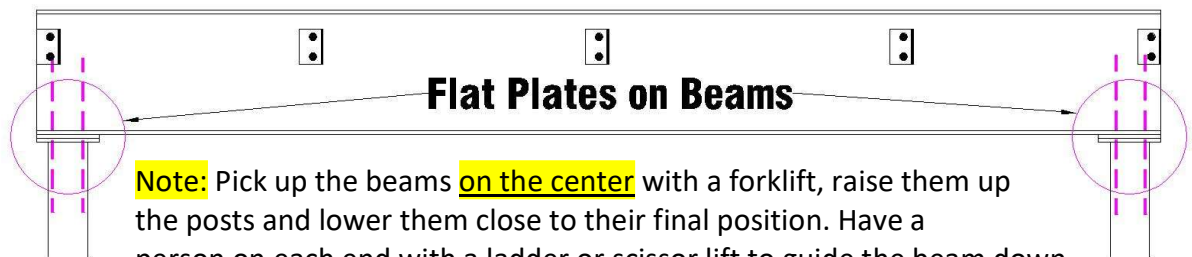
**Always be aware** of the orientation of the posts, things that could be affected are – knee brace brackets, flat **8" x 10"** mounting plates on top of the post and any offset the post may have on its baseplate.

5. **When the posts are all standing** and you are confident your layout is accurate, drill and sink the anchors in all the posts. ***Don't tighten the anchors.***

(TIP: Leaving the anchors untightened leaves the wiggle room you need to easily attach the beams and channels later. Ensure sufficient **drilling depth** for the anchors.)

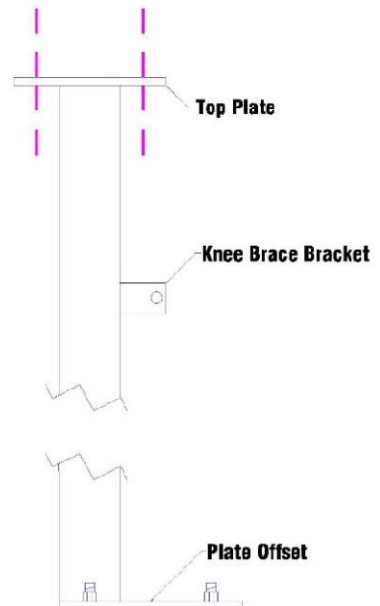
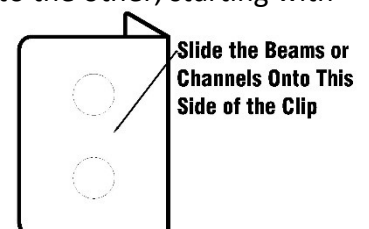
**Note:** You may need to skip one of the next steps depending on the size and scale of your platform.

6. **Begin installing** the main I-beams, these will be clearly marked by flat **8" x 10"** plates on the bottom of the I-beam.



**Note:** Pick up the beams **on the center** with a forklift, raise them up the posts and lower them close to their final position. Have a person on each end with a ladder or scissor lift to guide the beam down and drop the bolts through. Spike wrench is recommended.

7. **Once the main beams** are mounted, **keep the hardware snug but untightened**. Begin installing the C-channels or I-beams that tie the main beams together. Work from one side to the other, starting with the first tab that's blank face is open toward you. Once all the main structure is assembled, leave the hardware snug but untightened.

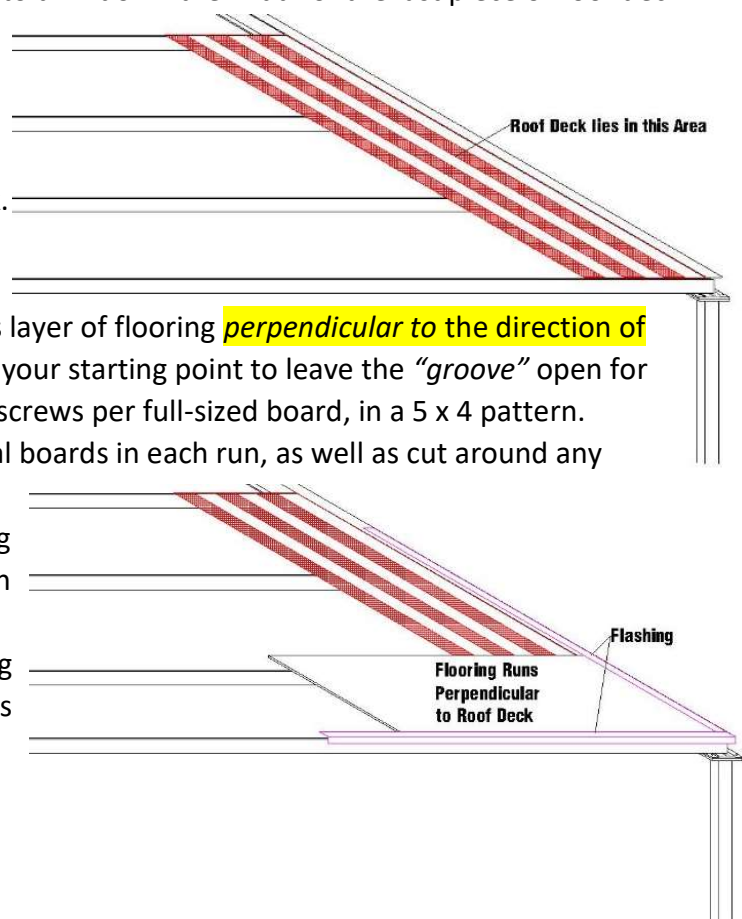


## Tightening & Leveling

1. **Begin by leveling** a post on a corner of the platform, to do this you'll need one or two thin prybars, a hammer, some washers, an impact gun with an **11/16"** impact bit and a level (magnetic level recommended). With the anchors loose, **adjust the height of the baseplate** using the prybars and washers to bring the post into level in both directions. Once level, torque down the anchors with the impact gun.  
Repeat with all the posts.
2. **With all posts levelled**, tighten the entire structure using an impact gun with a **1-1/8"** impact bit. Don't forget to tighten the plates on the top of the posts! **Torque spec:**  
(Note: It is essential you tighten the structure **AFTER** you level the posts, it will be very difficult to adjust the post positioning with the structure itself tightened.)

## Flooring

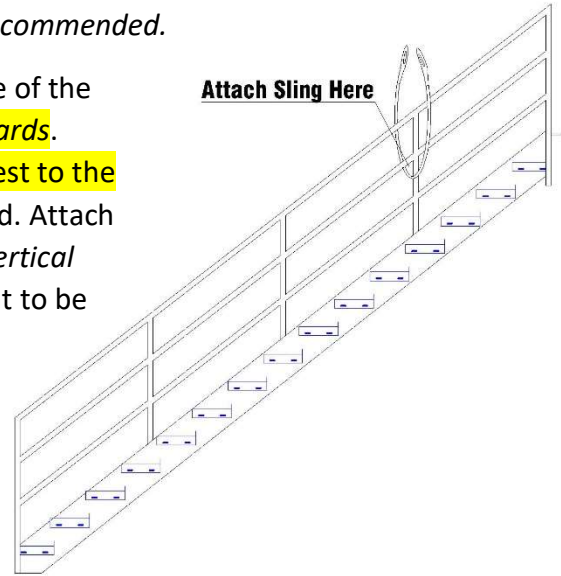
1. **First** spread out all the roof deck, this will lie in between the main I-beams on top of the joining I-beams or C-channels. Pay close attention to the **"tongue" and "groove" of the roof deck**, as you lay it down you want to be able to lay the tongue side on top of the groove as you work away from your start point.  
(Note: Here you may need a *nibbler* to make cuts around any building columns or installations on any surrounding walls. *Shears* will usually be needed to trim down the width of the last piece of roof deck in each section of the platform.)
2. **Screw down** all the roof deck with self-tapping hex screws on **each channel or beam the roof deck rests on**, you want to run a line of screws, putting one in **every other valley** of the roof deck.
3. **With the roof deck complete**, you can begin laying down the finished flooring surface.  
(e.g. Plywood, resin deck, checker plate). Lay this layer of flooring **perpendicular to the direction of the roof decking**. Always have the **"tongue"** face your starting point to leave the **"groove"** open for the next line of boards. Generally, aim to put 20 screws per full-sized board, in a 5 x 4 pattern.  
(Note: You will need a **circular saw** to cut the final boards in each run, as well as cut around any obstacles.)
4. **Cap off** all the edges of the platform with flashing by laying it along the edge and putting a screw on each end.  
(Note: Use self-tapping tek screws when screwing the flashing in above a main I-beam as the steel is thicker here.)



## Stairs

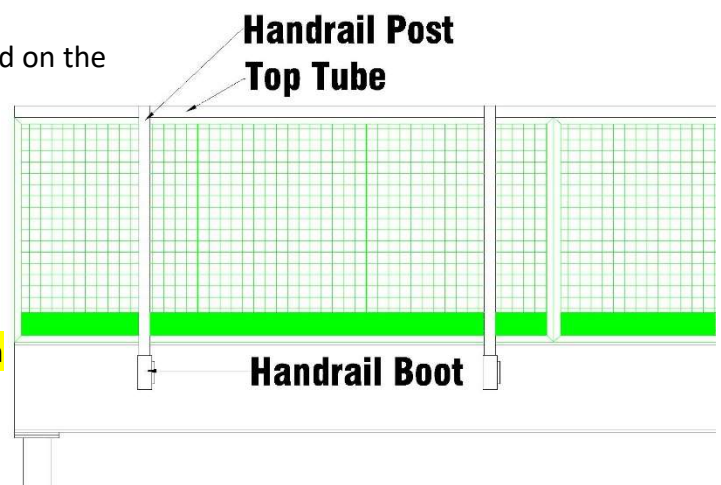
*Installation of stair stringers can be challenging in a crowded workspace; ensure you have a clear work area without any hindrance. Use of a forklift with a sling/choke is recommended.*

1. **Begin by** orienting the stair stringers correctly, the open side of the bottom C-channel on each stringer should be pointing **outwards**.
2. **Install the first stringer.** It is best to install the stringer **nearest to the platform** first so you can tie it off while you install the second. Attach the sling from the forklift to the stringer *below the second vertical tube* from the top end of the stringer. (This allows the weight to be offset to keep the bottom end low, while not requiring the forklift to go too high.) Have **one person on the platform** above the stringer to receive it, and **one person below** keeping the stringer upright and stable. Lift and place the stringer so the flat tab at the top rests on the surface of the floor. Tie off the first stringer or have someone hold it in place while you install the second one.
3. **Repeat installation** with the second stringer. Once both are up in place, have the person at the top **keep both stringers stable**, keeping them roughly **3' apart** (this can vary depending on stair tread size). The person below can now **mount one stair** tread onto the stringers to keep them stable.
4. **Install all the stair treads.** Once all are installed, ensure the stringers are running straight, then tighten the treads.  
(Note: as you tighten the treads, begin at the bottom - as you work your way up, give each tread a kick inward to ensure all are set at the same distances before you tighten.)  
(Note: the bottom tread has *different sized bolts* on the front, use **2-1/2"** long bolts here.)
5. **Anchor** the bottom of the stairs using **5/8"** wedge anchors. Screw in the top of the steps with a wood or steel screw depending on the floor surface.



## Handrail

1. **Insert** all handrail posts into the sleeves mounted on the side of the platform.  
(Note: The flat side of the angle tab at the top of the post should be facing the platform.)
2. **Attach** the handrail panels to the handrail posts. Do this by leaning the panel against the posts flush with the floor and **inserting a tek screw through the panel in the top and bottom of each post**. Always start from a corner where two panels will meet or against a wall for a straight line of handrail.



3. **Lay the top tube** on the handrail panels, attach it by putting **screws through the angle tab** at the top of the handrail posts. Then screw up through the panel into the tube for added strength. *Cut any remaining tube to size* to complete the entire perimeter of the handrail.
4. **Level** the handrail by **screwing through the handrail post boots into the posts**. By using the two holes on each boot you can bring the handrail into level.
5. **Insert** all the post caps into the ends of the handrail and the tops of the posts.  
(Note: The post caps for the top of the posts are a different size than the ones in the tube.)

### **REQUIRED SAFETY EQUIPMENT:**

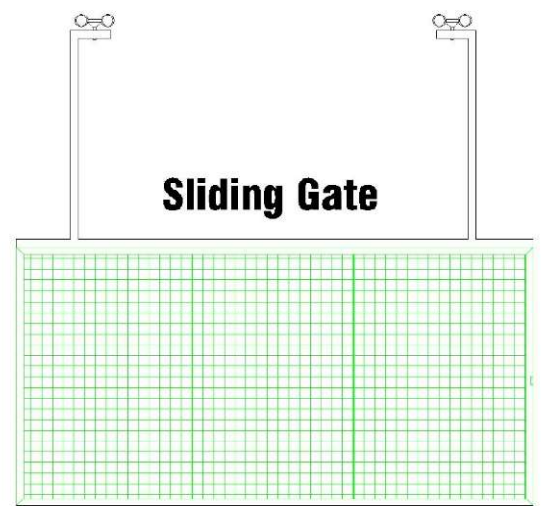
- Hard hat
- Steel-toed boots
- Safety glasses
- Abrasion resistant gloves
- Hearing protection
- High-visibility vest

### **REQUIRED TOOLS:**

- Cordless Impact Drill
- Hammer Drill
- Sockets: 1/2", 9/16, 15/16", 1 1/4"
- Bits: 3/8" Impact Nut Driver, 5/16" Impact Nut Driver #2 Robertson, Impact Driver,
- 5/8" Concrete Drill Bit
- Spike Wrench (x 2)
- Chalk Line
- Ladder(s)
- Shop-Vac for cleanup
- Level
- Adjustable Wrench
- Hammer
- **Fork-lift/genie lift**

### **Additional Notes:**

- **Sliding Gates:** For complete instructions on installing sliding gates, refer to the "Fencing Installation Guidelines". The only notable difference is the parts used on a mezzanine are slightly different, noted in the image beside.
- **Teeter Gates:** Note additional diagrams for installation.



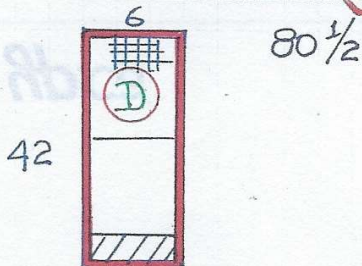
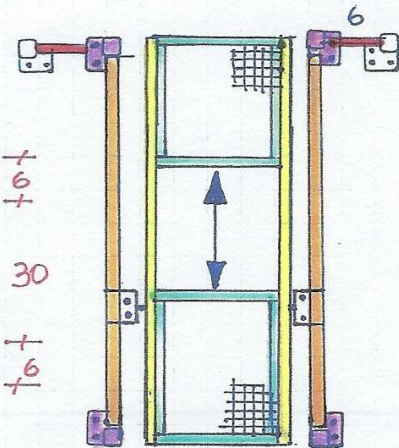
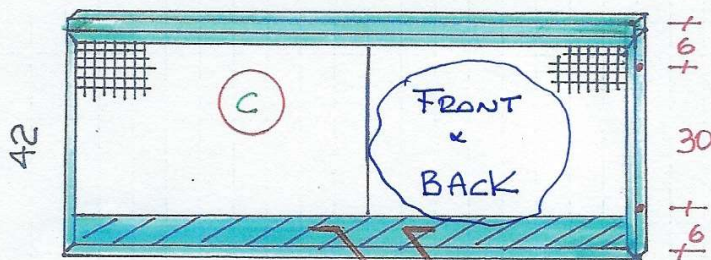
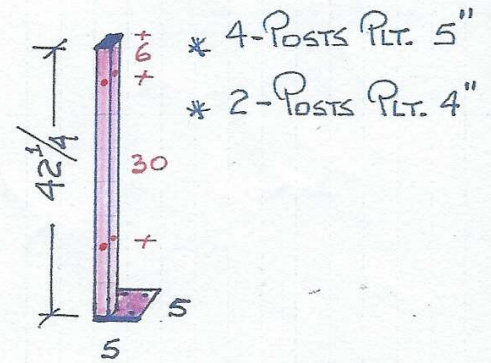
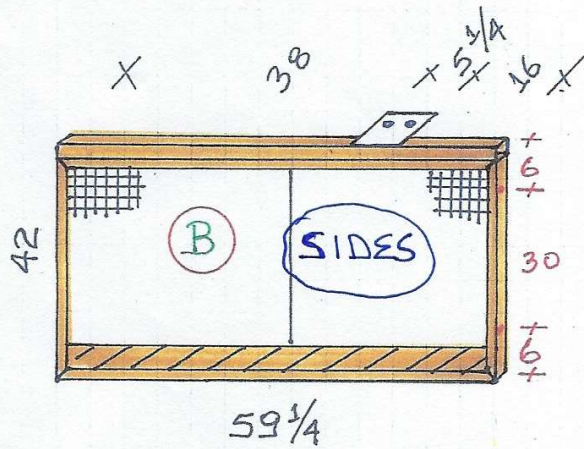
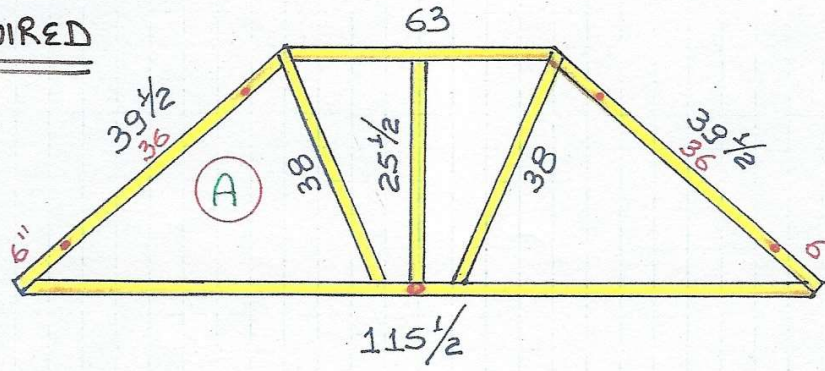
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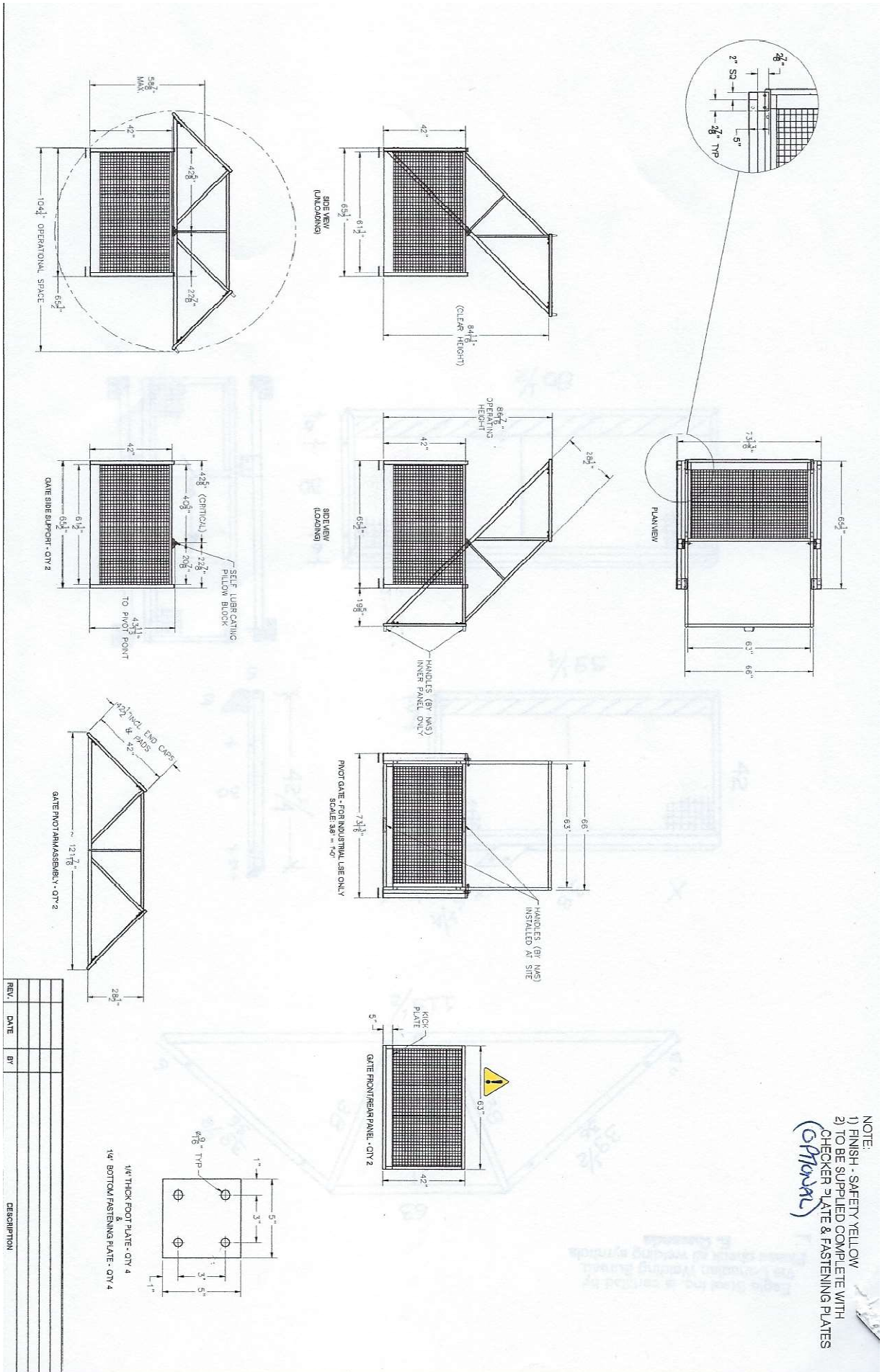
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E. Quesada

# TEETER GATE 7'H.

## MAT. REQUIRED

- \* 2 - A
- \* 2 - B
- \* 2 - C
- \* 2 - D
- \* 6 - Posts





NOTE:  
 1) FINISH - SAFETY YELLOW  
 2) TO BE SUPPLIED COMPLETE WITH CHECKER PLATE & FASTENING PLATES  
 (Optional)

Reference Photos:



*Completed 2-Tier Mezzanine with Stairs and Teeter Gates*



*Teeter Gate Installed (Open Position)*



*Side View of Installed Stairs*



*Barn Doors With Stabilizing Top Angle*