The beauty of this system is… It was designed for minimal install time.

Once the foundations are in: NOTE – we will provide anchor bolt templates in 1/8” thick plate to set the bolts accurately when pouring the foundations.

We will show up with the steel framing and aluminum and by the end of the day the structure will be up.

If needed, The second day they will be squaring up the frames and rails and ready for panels.  If everything goes really well all the panels will be up and secure by the end of the second day. With an experienced hot shot crew, one day for everything thru panelization.

Everything is predrilled and the absolute most important thing is the foundations must be accurate although there is about ¾” adjustment

Equipment recommended:

Small crane (or excavator used as a crane ) or long reach 5000# lift with straps for lifting – heaviest part (post assemblies) will be about 1000 # See typical section for height

If on concrete surface – 2 small scissor lifts

If still dirt, all terrain lifts

workers needed is 3- one good operator and 2 to guide beams into the beam pockets.

Order of work.

1. Get foundations ready by setting bottom washers and nuts on the anchor bolts to same elevation (accurately)
2. Pick off the post assemblies from the trailer and set onto anchor bolts and put top washer and nuts on hand tight (less than 1 hour to do this)
3. Prep the long beams(Stringers) (should be only 6 at about – 2 at 18’ long and 4 at 22’) and put the rail mounting brackets onto the long beams – pick each one and set into the predrilled beam pockets and slide long bolts thru, hand tight
4. Align the posts and long beams (Stringers) and check for square by puling diagonal tapes (need 2 - 100 foot tapes) – Adjust everything for square and tighten anchor bolts and stringer bolts.
5. Put the end caps onto the rails – predrilled and 2 small screws per end cap
6. Lift the aluminum rails into place and secure with 3/8” SST bolts, (4 per rail) – hand tight
7. Set outer 2 rails and pull a string line along lower edge of rails
8. Align all the rails and double check for square – This is why 2 lifts will really help
9. Tighten all bolts
10. Pull out the roll of seals and cut to length – should be done just before installing for temperature and length
11. Pull in with the solar panels on a truck, hand to the lifts and set the first panel and then install the seal on the end of the next panels as you install.  Squish the seal to the ½” gap in that direction and lock the panel down.  We use S-5! Clips with a single set screw on the bottom flange of the panel.  Super fast and can be undone and moved later.
12. Now you can start wiring… We include aluminum hat channels that match for wire management and those go length wise down the array – one included for each row of panels – these are not pre-dilled but go on with self tapping screws – some like to drill those onsite to make it easier.  Again 2 lifts will make this easier.
13. At this point the structure is ready to complete.

At some point in this process it is good to touch up the paint on the structural steel.  We include a gallon or two of the same paint and it is a water base paint for easy cleanup.  We often use a roller for this task and recommended covering all surfaces and any place that might have been scratched. The roller finish softens the look and almost makes it look like wood – some like the smooth car like finish so you can spray if desired but if sprayed suggest doing this before setting the panels.

NOTE: structural steel always has some blemishes from handling and shipping so it will not be perfect like a car.

Once this is all done, the space between the base plate and the concrete will need to be filled with non shrink grout – can be poured or hand packed.

If the foundation is designed below the finished concrete as some like to do, the space still needs to be filled with grout and then pour the finish concrete – be sure to put crack control at the base in the concrete if this is the way it is installed.  I showed a concrete pedestal on this one but can change if desired in final design.

I hope this helped and feel free to have these guys reach out to discuss if desired.

I will be there for the initial installation and will go over all this at that time as well.