



# STEEL GUARD® AND ARMOR GUARD®

ASSEMBLY GUIDE



## Assembly Instructions



Steel King Industries recommends that this product be assembled only by qualified personnel, experienced in assembly of industrial guard rail products, and knowledgeable of all safety regulations and practices. These instructions are intended only for use by qualified individuals using all proper safety equipment.



**WARNING:** The guard rail system is extremely heavy, and if not properly secured during installation and assembly could fall, possibly causing injury or death as well as damage to property.

Contact Steel King Industries or your local Steel King Representative for the name and contact information of a qualified installer. Users of this information agree to indemnify and hold harmless Steel King Industries from any and all liability.



**WARNING:** Instructions for assembly are set forth on these pages. Proper assembly is the responsibility of the purchaser and is not covered by any warranty of the seller. Buyer is cautioned not to substitute parts or hardware. Seller disclaims all liability with respect to any substitution of parts or hardware not approved in writing by seller.

The installation detail drawings that follow are intended as basic guides for installation of the standard components. Depending upon the specifications of the system, there may be limitations regarding the use of these standard components and/or a requirement for special installation techniques. Additional information is found in Steel King price books, published technical documents, comprehensive installation drawings, and other materials.

### Step 1: Check the Material

- A. Check to make certain that all materials have been received. Materials should be checked against the packing lists and Bill of Lading.
- B. Notify the shipper immediately of any shortages or product damage.



## Step 2: Check the Area

- A. Clear the area where the guard rail is to be located.
- B. Check the area for all obstructions such as pipes, building columns, etc., to insure a clear area for the installation of the guard rails.

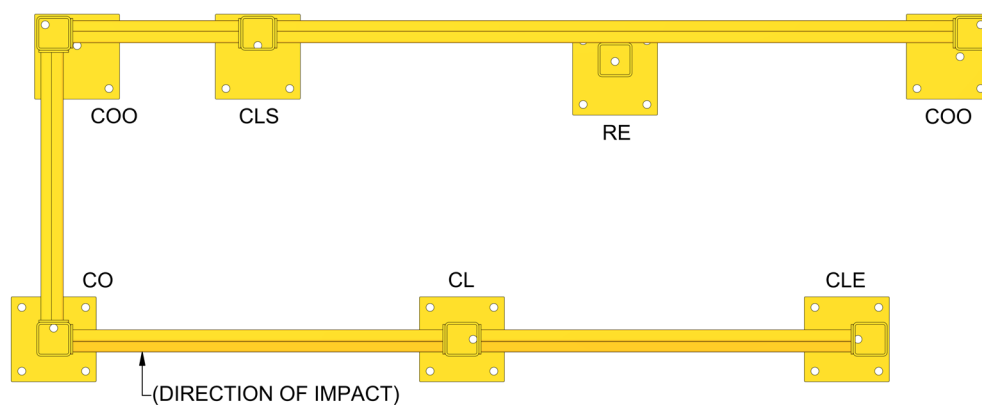
## Step 3: Lay Out Floor

### RECOMMENDED TOOLS:

- Tape Measure
- Chalk Line

- A. Establish the guard rail lay out.

**See figure below.**



EXAMPLE TOP VIEW

CL - Center Post  
CO - Corner Post

LE - Offset End Post  
CLS - Offset Side Post

COO - Offset Corner Post  
RE - Reinforcement Post

- B. Snap a chalk line establishing the front edge of the guard rail posts. The chalk line should run the entire length of the row of guard rail.

## Step 4: Assemble Guard Rail System

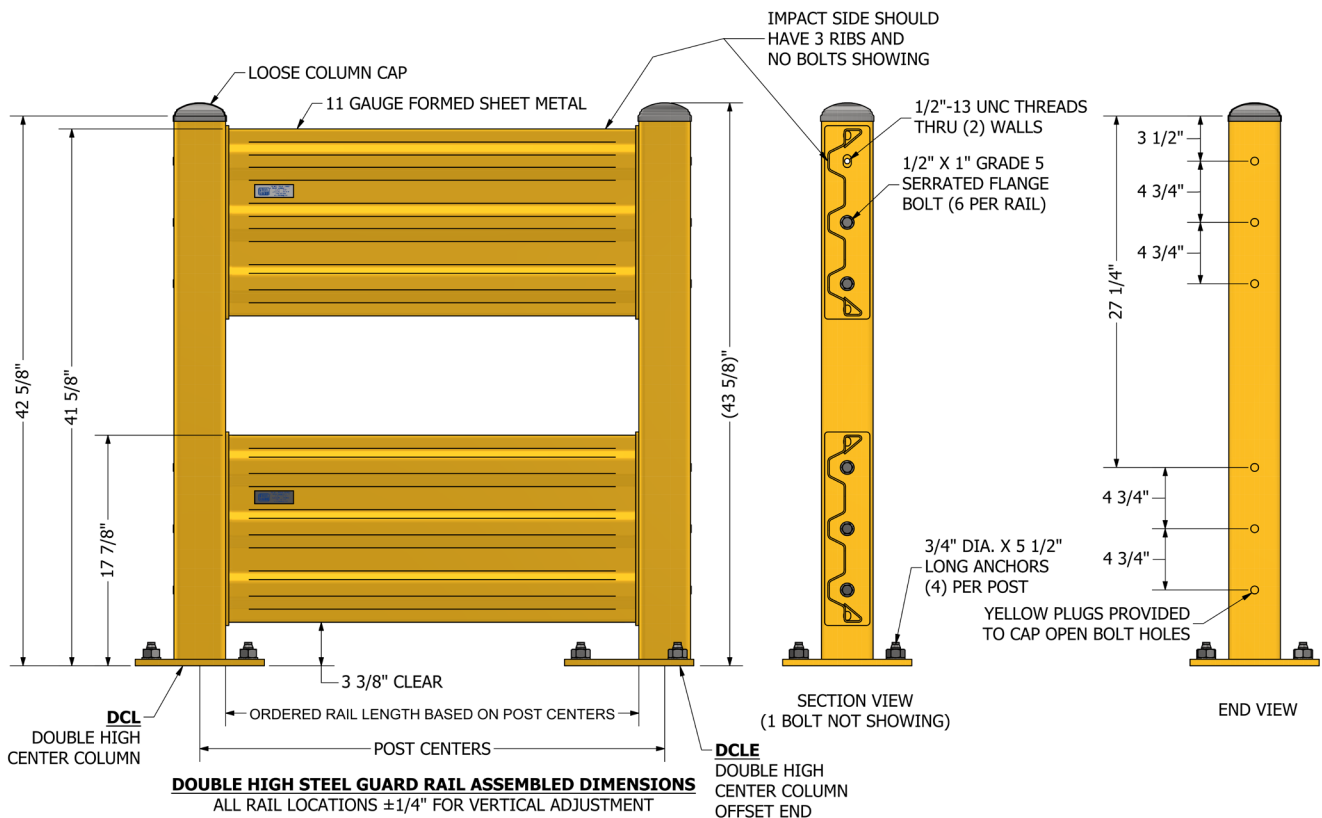
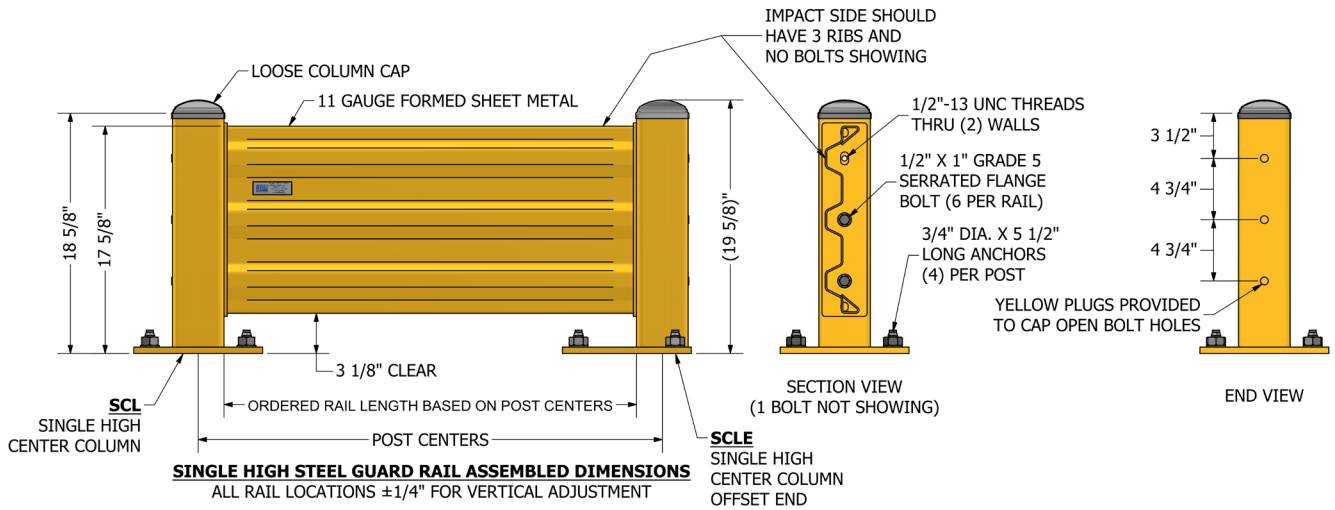
### RECOMMENDED TOOLS:

- Air Compressor
- Torque Wrench
- 3/4" Drive Impacts or Equivalent

- A. Distribute the guard rail posts and rails for assembly near their final installed position.
- B. Bolt the rails to the guard rail posts using the 1/2" diameter x 1" long serrated flange bolts. Torque the bolt to 60 ft-lbs.

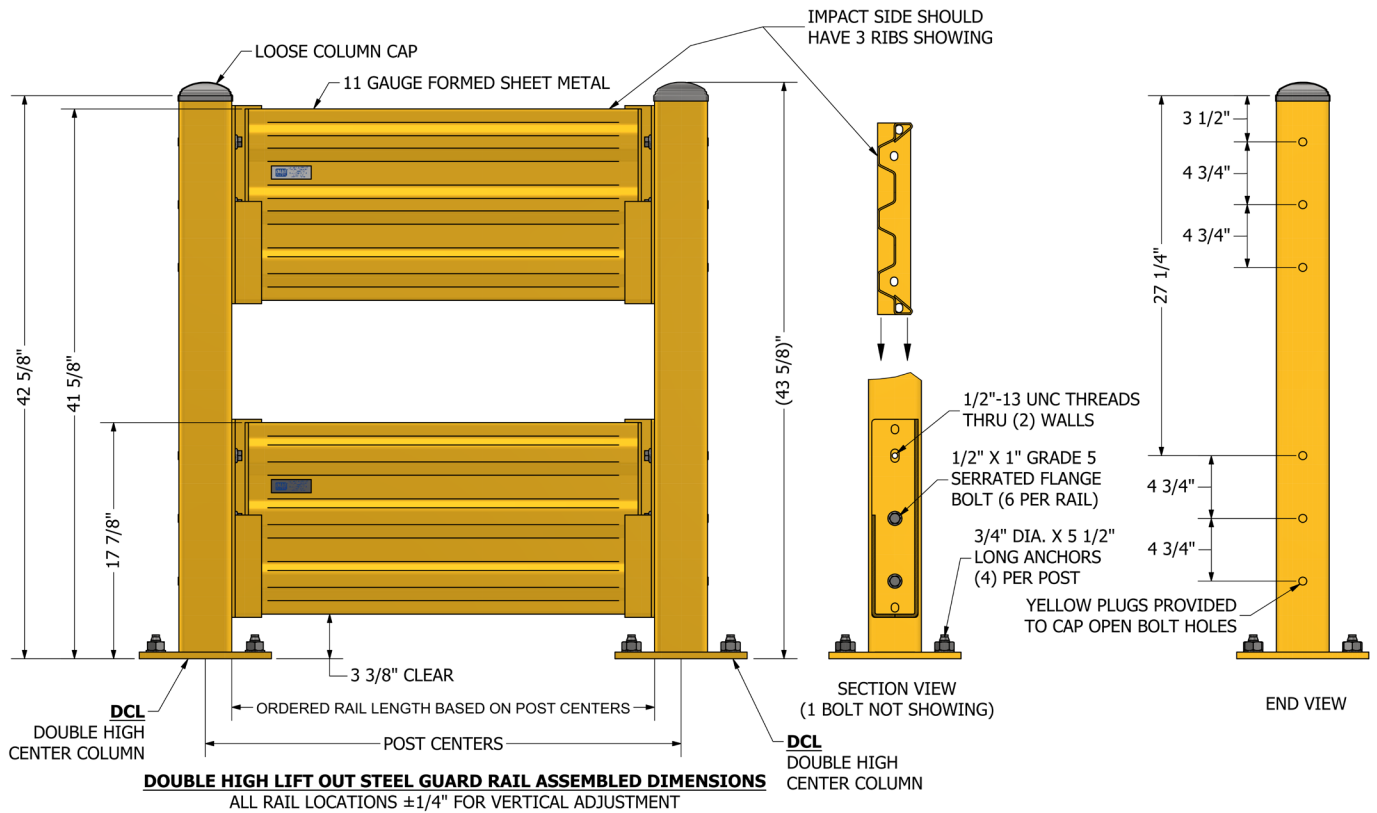
## Step 4: Assemble Guard Rail System (continued)

### STEEL GUARD - SINGLE & DOUBLE HIGH, BOLT TOGETHER SCHEMATICS

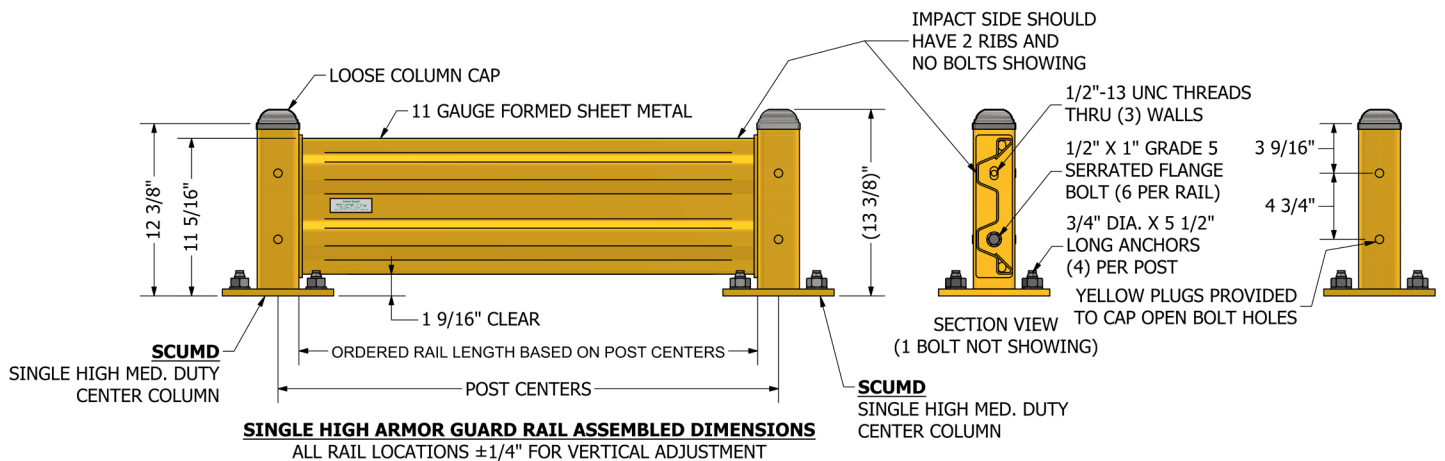


## Step 4: Assemble Guard Rail System (continued)

### STEEL GUARD - LIFT OUT RAIL SCHEMATIC

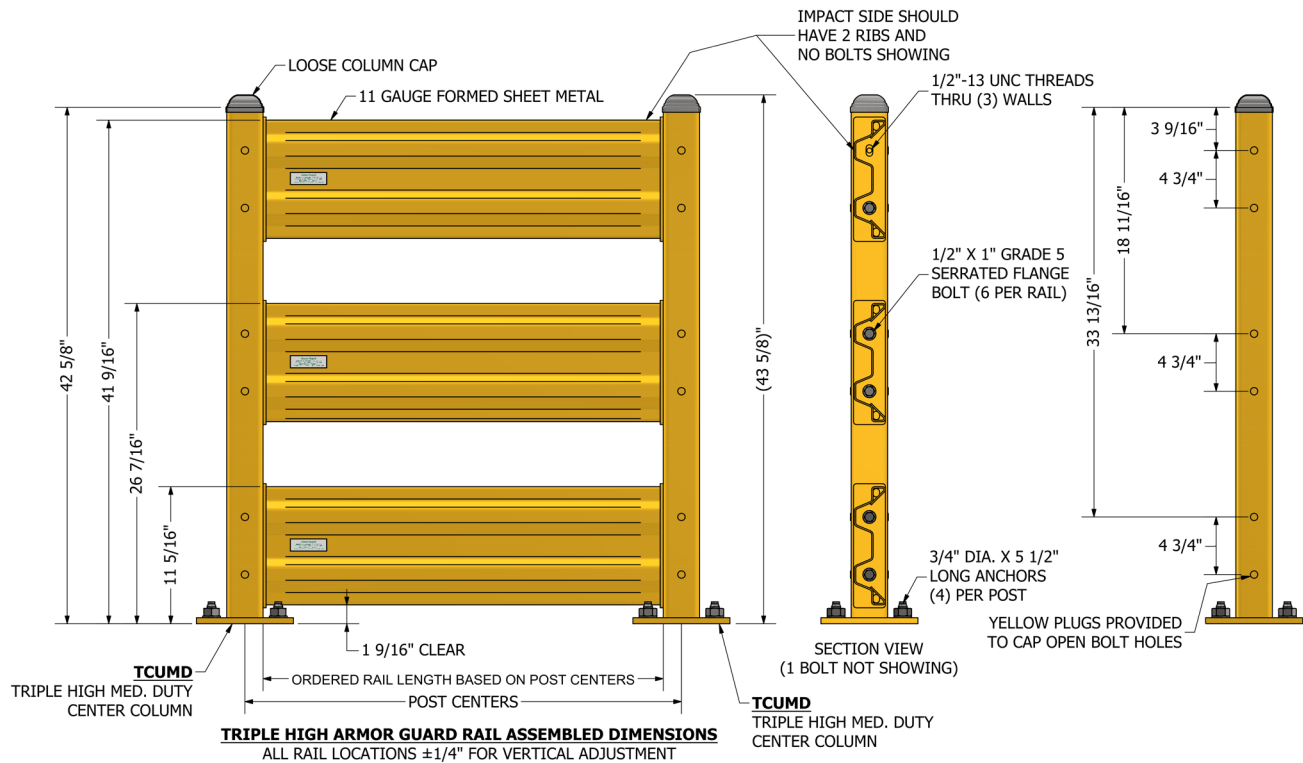


### ARMOR GUARD - SINGLE HIGH, BOLT TOGETHER SCHEMATIC



## Step 4: Assemble Guard Rail System (continued)

### ARMOR GUARD - TRIPLE HIGH, BOLT TOGETHER SCHEMATIC



## Step 5: Square, Plum, Shim, and Anchor

- Square, plumb to the posts on the chalk lines.
- Anchor the posts using 3/4" x 5-1/2" anchors. Torque anchors to 150 foot pounds.

**Anchoring Note:** The use of handheld and stand-mounted drills, impact and rotary hammer drills, and similar tools used to drill holes in concrete, masonry, or other silica containing materials can generate respirable crystalline silica dust. Read this OSHA Fact Sheet to learn how to minimize the amount of airborne dust when using handheld and stand-mounted drills. [https://www.osha.gov/sites/default/files/publications/OSHA\\_FS-3630.pdf](https://www.osha.gov/sites/default/files/publications/OSHA_FS-3630.pdf)

- Tighten all remaining bolts.
- Install guard rail post caps.

## Step 6: Clean-up

- Vacuum all dust and debris associated with setting anchors.
- Dispose of all dunnage, strapping and debris.





*If you have any further questions, contact your local Steel King Representative for customer assistance or contact Steel King Industries directly at (800) 826-0203.*

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- > Pick Module Racks
- > Specialty Racks
- > Portable Racks
- > Custom Shipping Racks
- > Support Structures / Work Platforms

## Safety Products

Steel King's safety products extend the life of your facility and have been setting industry standards in safety, protecting your people, product, and plant.

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- > Safety Gates
- > Pallet Load Stops and Supports
- > Lift-Out Rails
- > Rub Rails

## Containers

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