

### Installing the Support Columns

- 1. Use a transit and surveyor's rod to locate high and low areas in the concrete. To maintain the levelness of support columns (7), use shims between the concrete and base plate of the support columns (7).
- 2. After the leveling is completed, place the support columns (7) over the anchor bolts with shim plates underneath the support columns (7).
- 3. Place square washer (11) over the anchor bolts and fasten with nuts and washers.

**NOTE:** Do not tighten the hardware until the hopper panels are installed.

#### Installing the Compression Beams

1. Install the compression beams (1) to the support columns (7) using 5/8" hardware.

NOTE: Do not tighten the hardware until the hopper panels are installed.

## Installing the Horizontal and Diagonal Bracings

- 1. Install the horizontal bracings (10) to the inside and outside of the support columns (7) using 7/8" hardware.
- Similarly, install the diagonal bracings (8) to the inside and outside of the support columns (7) using 7/8" hardware. Place two spacers (9) between each diagonal bracing pair and align with the holes in the diagonal bracings (8).

### **Installing the Hopper Panels**

1. Install two pairs of L.H. top panels (2) and R.H. top panels (3) to the compression beams (1) using 5/8" hardware. Similarly install two pairs of top panels (2 and 3) at three more places around the hopper in opposing directions.

NOTE: Make sure to apply caulk on all the vertical and horizontal seams.

2. Install two pairs L.H. bottom panels (4) and R.H. bottom panels (5) to the top panels (2 and 3) and hopper collar weldment (6) using 5/8" hardware. Similarly, install the bottom panels (4 and 5) at the same locations as the other top panels (2 and 3).

NOTE: Make sure to apply caulk on all the vertical and horizontal seams.

3. Continue to assemble the hopper panels by laying in alternate left and right panels moving around in one direction and lapping all sheets in the same way. Do not tighten the bolts until all hopper panels are attached to each other, the compression beams and discharge collar.

NOTE: Make sure to apply caulk on all the vertical and horizontal seams.

NOTE: Refer to Figure 1 on Page 3 for more details.



#### Installing the Sidewall and Base Boot Weldment

- 1. Start at the bottom of the hopper and tighten all bolts, including anchor bolts, compression beams (1), hopper panels (2, 3, 4 and 5) and hopper collar weldment (6).
- 2. Install the base boot weldment (13) to the support column (7) using 5/8" hardware. Make sure to apply caulk under the base boot weldment (13).
- 3. Select the sidewall sheet (12) with proper gauge and begin assembling the sidewall sheets (12). From the inside of the bin, place the left panel to the inside with the right panel to the outside.

**NOTE:** The rope caulking is installed before each sheet is assembled. Wipe sheet clean where caulking is to be applied.

4. Assemble the sidewall sheets (12) end to end with overlapping in the same direction until the ring is completed. Use appropriate bin bolts to secure the sheets.

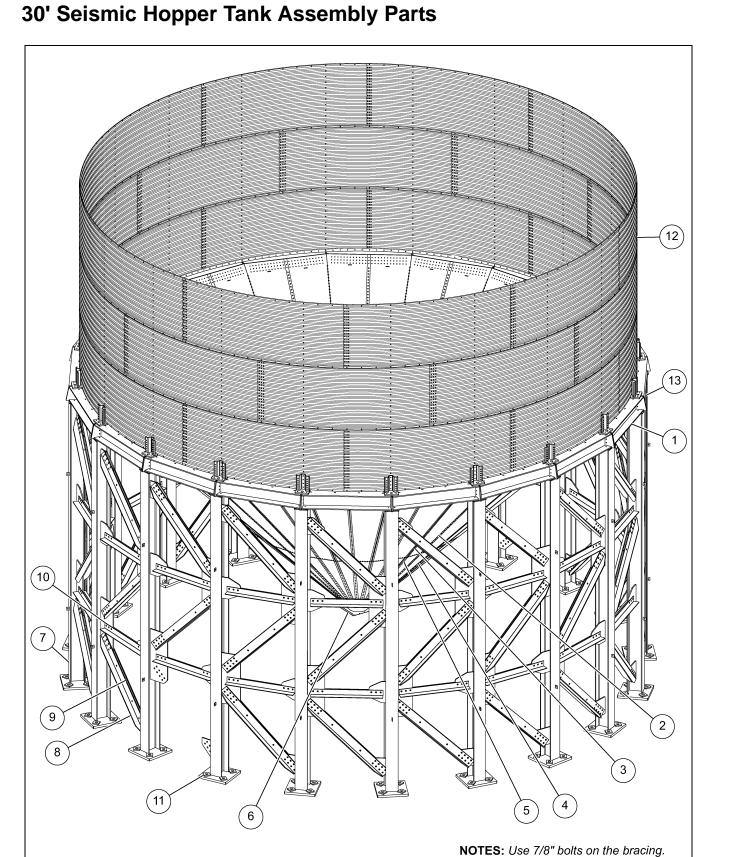
NOTE: Install bin bolts with bolt head on the inside and neoprene washer on the outside.

**NOTE:** Do not tighten the bolts until all sheets are assembled and form a complete ring.

NOTE: Refer to Figure 1 on Page 3 for more details.

Ref #	Part #	Description	Qty
1	CHT-2211	Compress Beam Built-Up 30' Hopper	20
2	CHT-1377	New Style 30' 45° L.H. Top Panel	20
3	CHT-1378	New Style 30' 45° R.H. Top Panel	20
4	CHT-1388	Left Hand Bottom Hopper Panel	20
5	CHT-1389	Right Hand Bottom Hopper Panel	20
6	CHT-1139	30' Hopper Collar Weldment	1
7	CHT-2204	30' Hopper Support Column Weldment	20
8	CHT-2202-BS	Angle, 6" x 4" x 1/2" Thick, Diagonal Brace - Bin Silver	116
9	CHT-2201-BS	Spacer, 6" x 4" x 3/4" Thick, 30' Hopper - Bin Silver	116
10	CHT-2203-BS	Angle, 4" x 4" x 1/4" Thick, Horizontal Brace - Bin Silver	80
11	B-7039-BS	Square Washer for 1-3/4" Anchor Bolt	80
12		Sidewall Sheet	30
13		Stiffener, Base Boot Weldment	20

#### 30' Seismic Hopper Tank Assembly Parts List



# 30' Seismic Hopper Tank Installation

Figure 1 30' Seismic Hopper Tank Assembly Parts

Use 5/8" in all other connections.