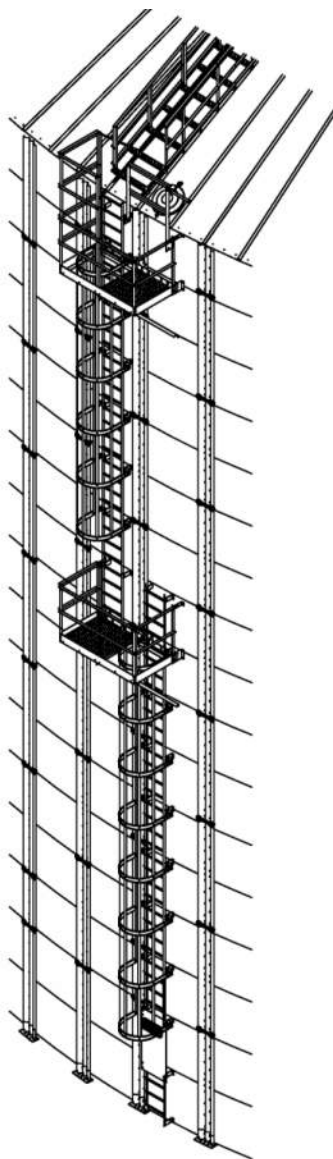




CHIEF INDUSTRIES, INC.
AGRI/INDUSTRIAL DIVISION



GRAIN BIN LADDER INSTALLATION MANUAL

Manual Revisions

	<i>Date:</i>	<i>Revision Made</i>
#341799	12-15-11	Changed standard ladders to extend to base of tank.
#341799	12-15-11	Changed all inside ladders to use all "Long" bracket sections.
#341799	09-18-12	Added Safety Cage to all CHT bottom ladders.

CHIEF INDUSTRIES, INC.

AGRI/INDUSTRIAL DIVISION

STANDARD LIMITED GRAIN BIN WARRANTY

1. WHAT IS COVERED BY THIS STANDARD LIMITED WARRANTY

If you are the original retail purchaser of Chief Manufactured Grain Bins, which includes Bulk Feed Bins and Hopper Tanks, Chief Industries, Inc., expressly warrants to you that the components manufactured by Chief Industries, Inc., were, on the date of delivery to you, free from defects in the composition of material, Chief workmanship, and design.

2. DURATION OF THIS STANDARD LIMITED WARRANTY AND NOTICE REQUIREMENTS

This Standard Limited Warranty is applicable under normal use and service to defects which become evident within a period of five (5) years from date of delivery of your Chief Grain Bin to you and which are reported in writing to Chief Industries within 30 days of discovery of the defect. In any event, Chief's obligations under this Standard Limited Warranty shall expire sixty-one (61) months from the invoice date.

In order to obtain warranty service, simply contact Chief Industries in writing with the following information: (1) Your name; (2) Location of the product; (3) Dealer name; (4) Description of problem; (5) Any pertinent information; (6) Date of purchase. No claim will be processed until all of this information has been received in writing by Chief Industries. For warranty service, contact Chief Industries, Inc., Agri/Industrial Division, Customer Service Department, P. O. Box 848, Kearney, NE 68848.

3. CHIEF'S OBLIGATIONS

By purchasing your Chief Grain Bin subject to this Standard Limited Warranty, you and Chief Industries expressly agree to an allocation of the risks of product failure between you and Chief Industries. This allocation is recognized by both parties and is reflected in the price of the Chief Grain Bin.

4. REMEDIES AVAILABLE FROM CHIEF

If a defect in your Chief Grain Bin is covered by this standard limited warranty, Chief Industries will supply replacement parts F.O.B. Chief Industries, Kearney, Nebraska. In addition, during the first year of the warranty, Chief Industries will supply labor necessary to make repairs in your Chief Grain Bin made necessary by such defect or faults. Chief Industries will request at least two competitive bids for labor, as shall in the judgement of Chief Industries be the most appropriate remedy for the failure covered by this warranty. Of course, Chief Industries reserves the right to reject all such bids and to obtain additional bids. Upon acceptance of a bid by Chief Industries, Chief Industries will authorize the necessary repair.

5. REMEDIES NOT AVAILABLE FROM CHIEF

The obligations stated in the preceding paragraph are the SOLE AND EXCLUSIVE REMEDIES available from Chief Industries in the event of problems with your Chief Grain Bin. Chief Industries will not be liable for the costs of dismantling defective parts or installing replacement parts, including labor costs, after the first year, and Chief Industries will not be liable for any special, incidental or consequential damages based upon breach of warranty, breach of contract, negligence, strict tort, or any other legal theory.

6. WHAT IS NOT COVERED BY THIS STANDARD LIMITED WARRANTY

This Standard Limited Warranty does not cover:

- (a) Chief manufactured product not sold as part of the grain bin.
- (b) Products, components, equipment, accessories, or parts manufactured by someone other than Chief Industries.
- (c) Accessories, Temporary Grain Storage Bins or Bins designed for storage of products other than whole grain storage.
- (d) Damage or loss during shipment of the Chief Grain Bins.
- (e) Damage or loss caused by the acts or omissions of the erector or his agents.

6. WHAT IS NOT COVERED BY THIS STANDARD LIMITED WARRANTY (continued)

- (f) Damage or loss caused, in whole or in part, by inadequate or improper site selection, inadequate or improper site preparation, inadequate or improper foundation, or any other failure to provide a suitable erection or installation environment for or a suitable erection or installation of the Chief Grain Bin, or of any product, component, equipment, accessories, parts used in conjunction with the Chief Grain Bin.
- (g) Damage or loss caused, in whole or in part, by use of the Chief Grain Bin for purposes other than those for which it was designed.
- (h) Damage or loss caused, in whole or in part, by unauthorized attachments, modifications, or alterations of the Chief Grain Bin.
- (i) Damage or loss caused, in whole or in part, by improper or inadequate maintenance, misuse, or abuse of the Chief Grain Bin.

7. NO OTHER WARRANTIES

(1) Complete and Exclusive Agreement: THIS AGREEMENT IS THE COMPLETE AND EXCLUSIVE AGREEMENT BETWEEN YOU AND CHIEF INDUSTRIES, INC., CONCERNING THE ALLOCATION OF THE RISKS OF DAMAGE OR LOSS ARISING FROM MANUFACTURED COMPONENT FAILURE. It supersedes all prior agreements, whether written or oral, and all other communications between you and Chief concerning the allocation of those risks. No employee of Chief Industries, Inc., or any other person, including Authorized Dealers and any other person authorized to sell Chief Grain Bins, has any authority to make any representations, promises, or warranties in addition to those contained herein.

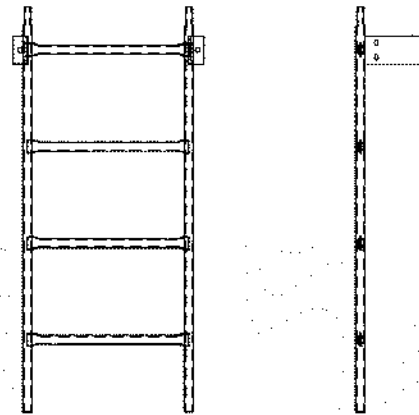
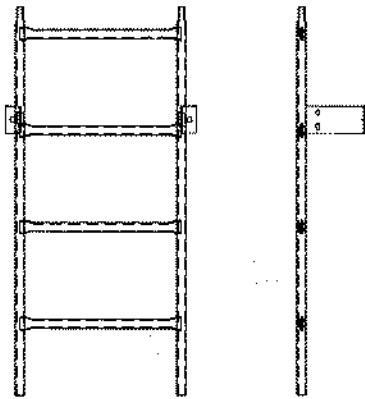
(2) THIS STANDARD LIMITED WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

8. ALLOCATION OF RISKS

THIS AGREEMENT ALLOCATES THE RISKS OF DAMAGE OR LOSS ARISING FROM PRODUCT FAILURE BETWEEN CHIEF INDUSTRIES, INC., AND PURCHASER. THIS ALLOCATION IS RECOGNIZED BY BOTH PARTIES AND WAS REFLECTED IN THE PURCHASE PRICE OF THE GOODS.

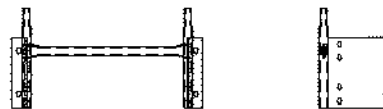
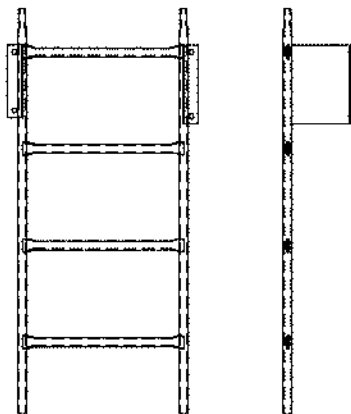
Section 1 – Part Identification

NOTE: SOME PARTS SHOWN MAY NOT BE NEEDED



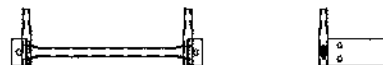
342676 – 1 RING TOP SECTION

342677 – 1 RING SECTION

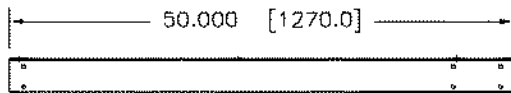


342680 – BOTTOM LONG SECTION

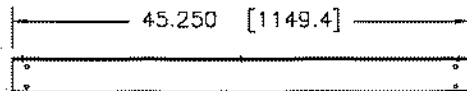
342678 – 1 RING INSIDE SECTION



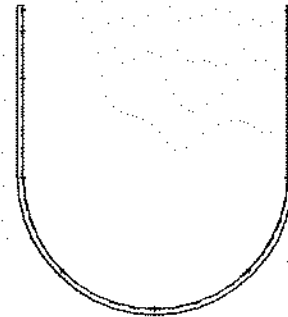
342679 – BOTTOM SECTION



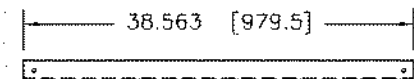
9382530 - EAVE WALL POST



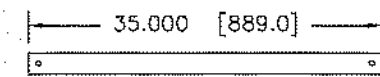
9382526 - EAVE POST



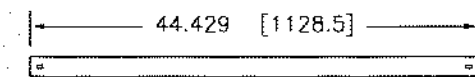
9342605 - SAFETY CAGE HOOP



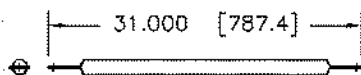
9382527 - EAVE RAIL



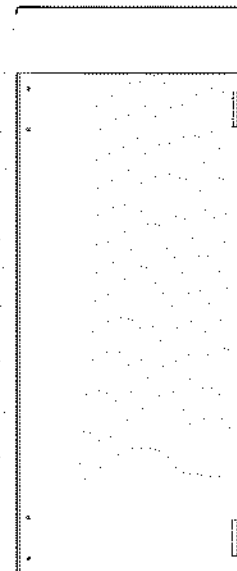
9344503 - CAGE STRAP 35"



9344505 - CAGE STRAP 43"



9382528 - EAVE BRACE



9349664 - ACCESS DOOR COVER



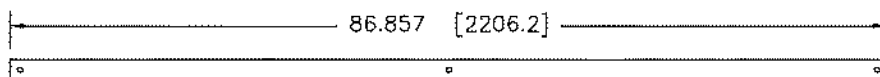
9349662 - ACCESS DOOR BRKT



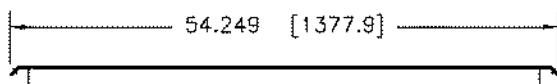
9349663 - ACCESS DOOR HINGE



9342606
SAFETY CAGE
HOOP STANDOFF



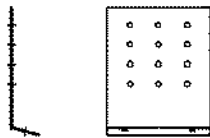
9344504 - CAGE STRAP 85"



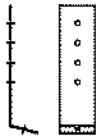
9382537 - BOTTOM BRACE



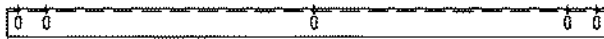
9382529 - EAVE WALL BRKT



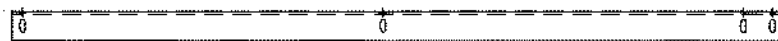
9320818 - BOLTING CLIP 1



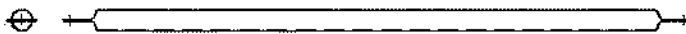
9320907 - BOLTING CLIP 2



9382531 - BOTTOM POST



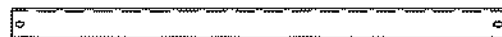
9382532 - TOP POST



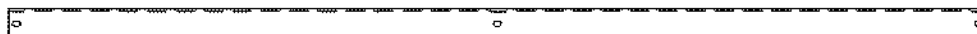
9382533 - TOP BRACE



9382534 - SIDE RAIL

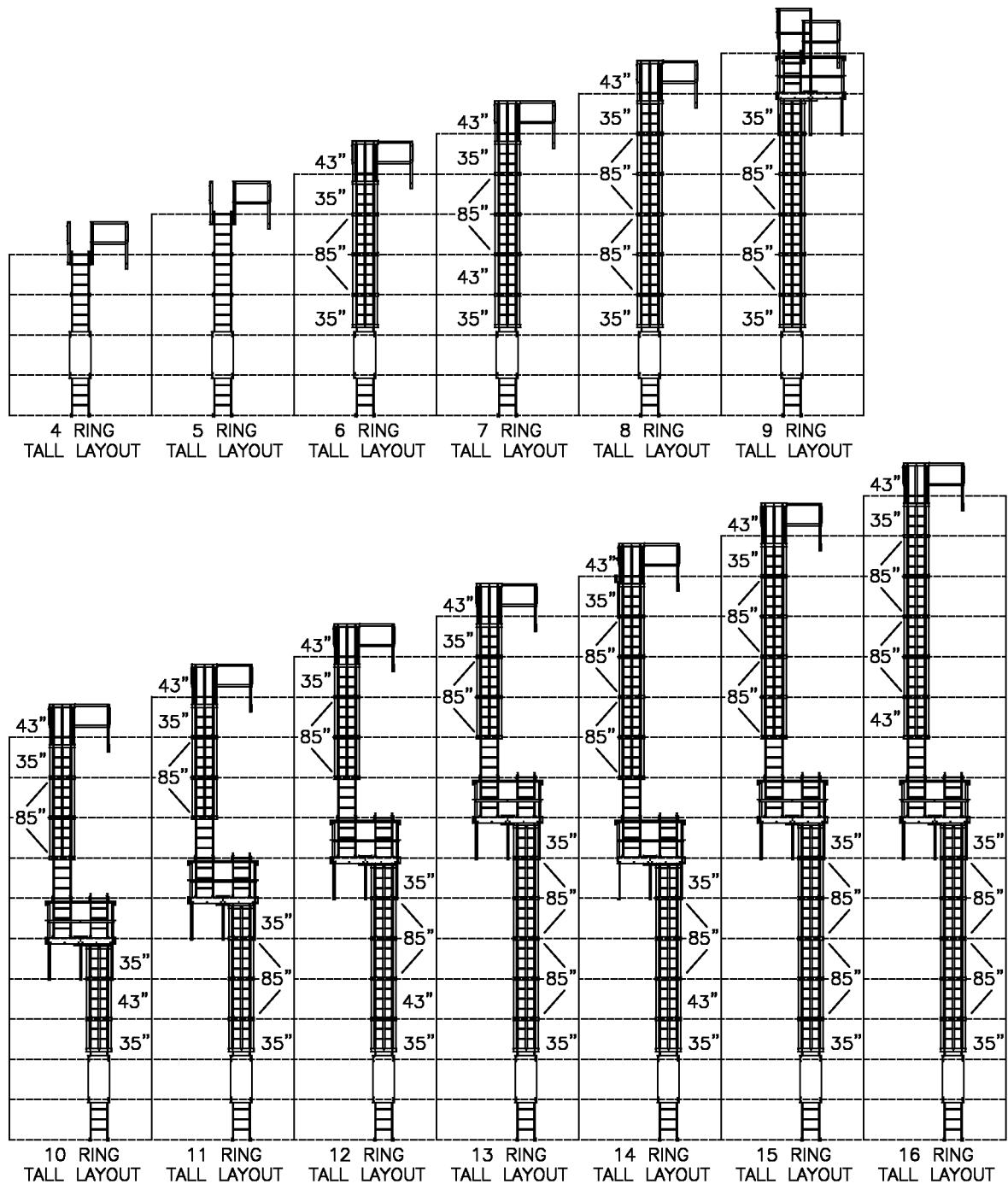


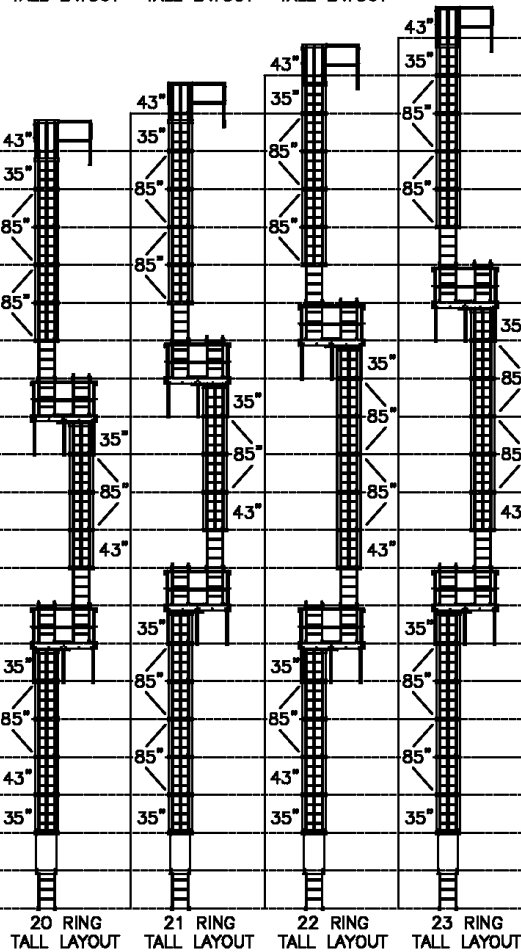
9382535 - TOP FRONT RAIL



9382536 - FRONT RAIL

Section 2 – Outside Ladder Installation

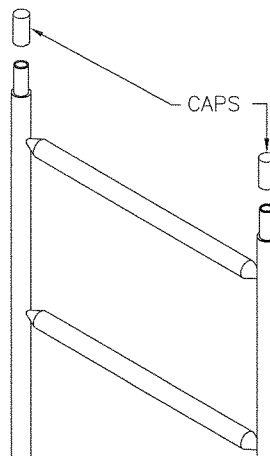
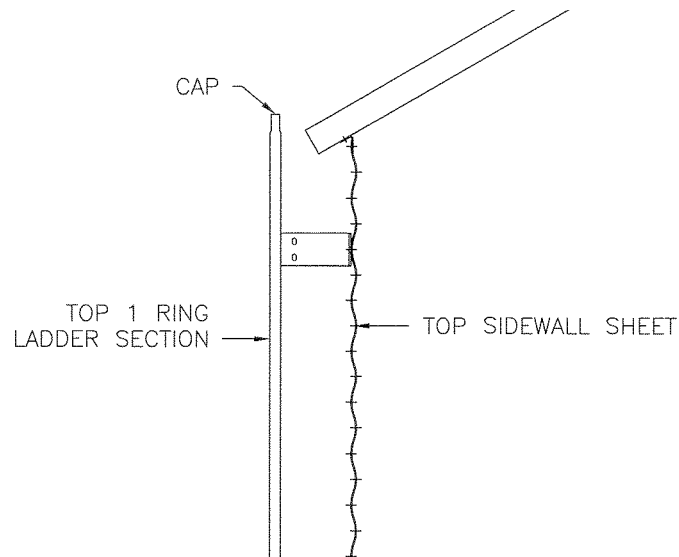






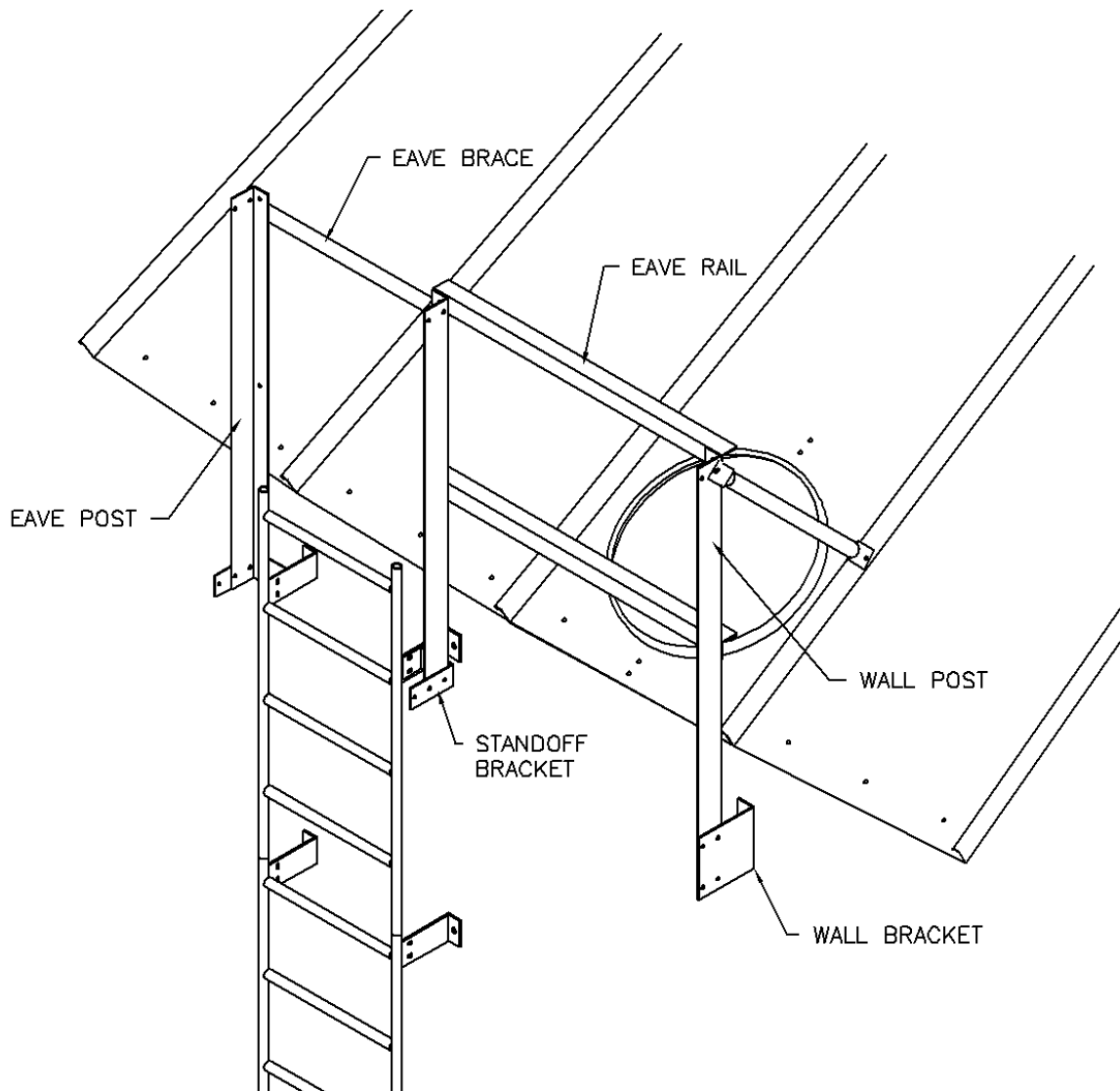
A. Exterior Ladders and Safety Cage

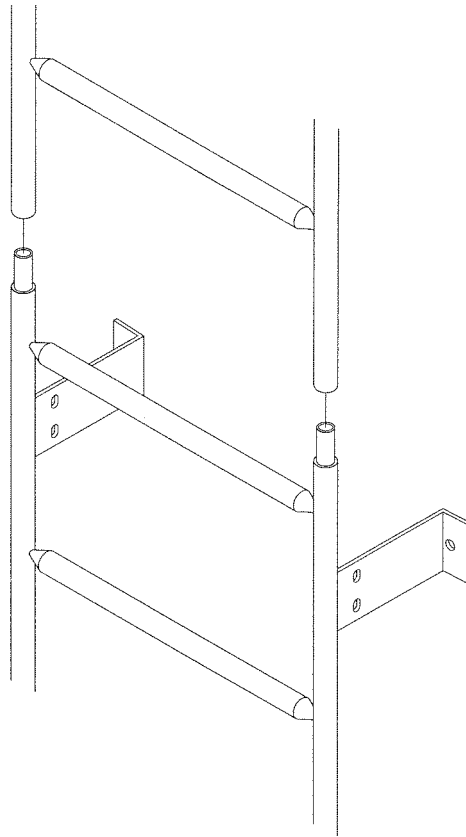
- 1) Both inside and outside wall ladders should be installed as the bin is being raised.
- 2) All ladders start with a Top 1 Ring Ladder Section and continue down the tank with typical 1 ring ladder sections. (Note: Top ladder section brackets will need field drilled into the top sidewall sheet)



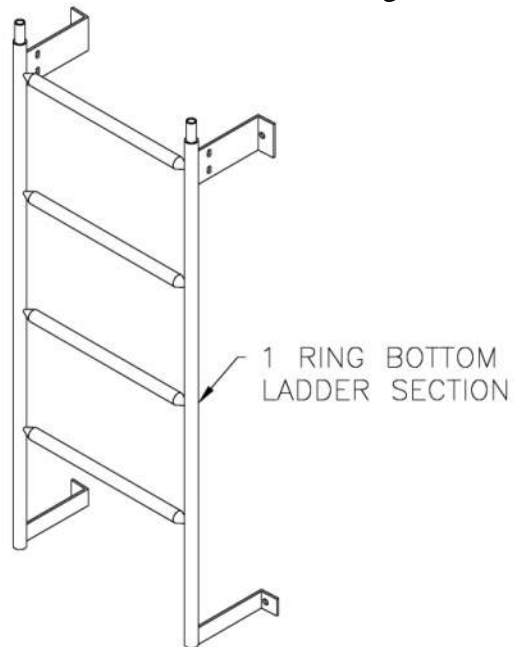
Place vinyl caps over top of top ladder section, and when starting new ladder sections at platforms. The caps are used to prevent moisture from getting into the ladder rails and causing rust.

- 3) Attach standoff brackets to top ladder section, then attached post to standoff bracket. Field drill holes into the sidewall sheet to attach wall bracket, then attach post to wall bracket. Attach two eave rails to the two posts in front of manhole. Attach eave braces to the top of the two outside post and field drill roof sheets to attach braces to roof panels. Tighten all bolts. All connections are 5/16" x 3/4" bolts.



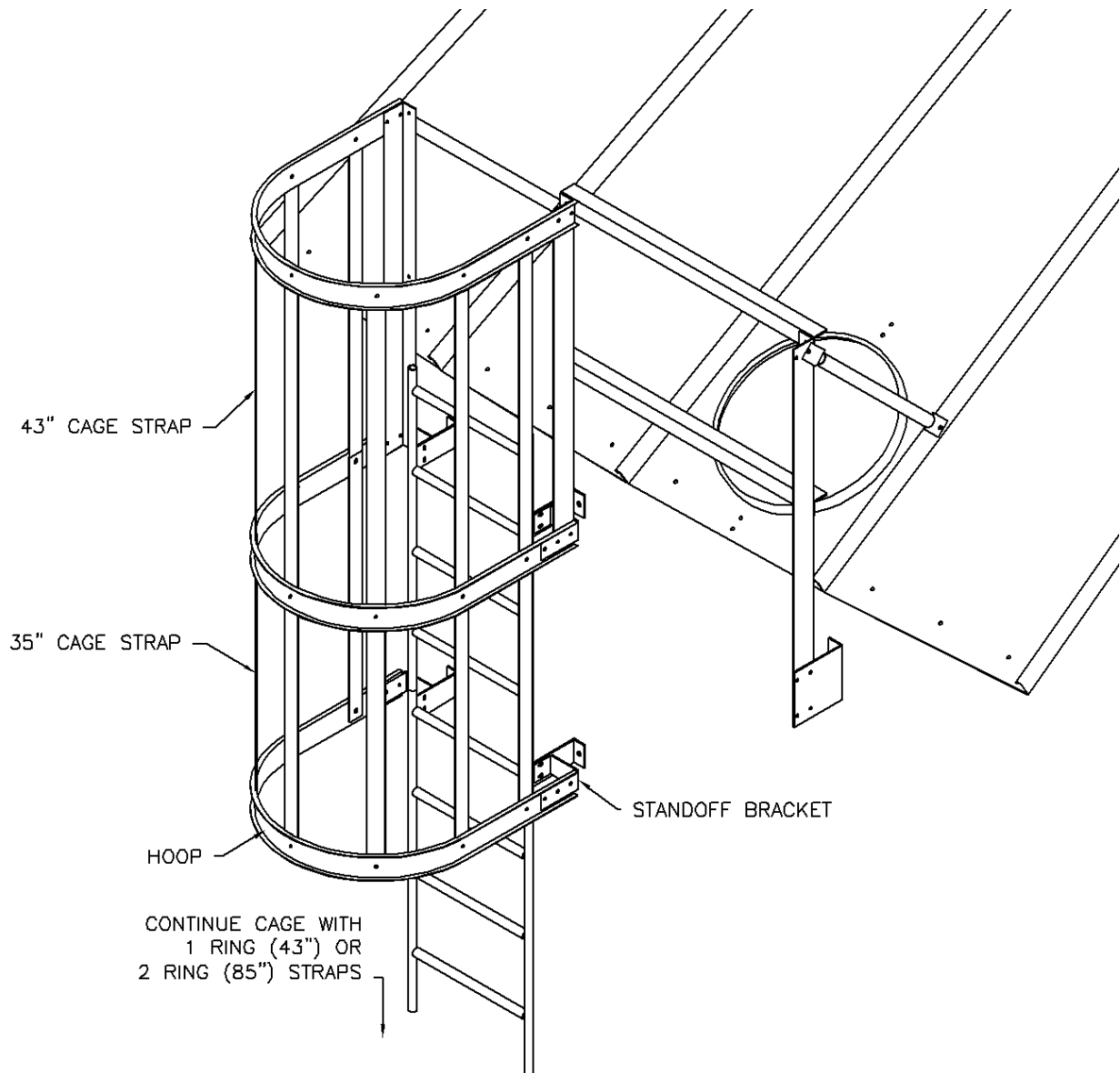


- 4) As the tank is being raised, bolt the next ladder section to the sidewall at the horizontal seam and attach the ladder sections together, as shown.



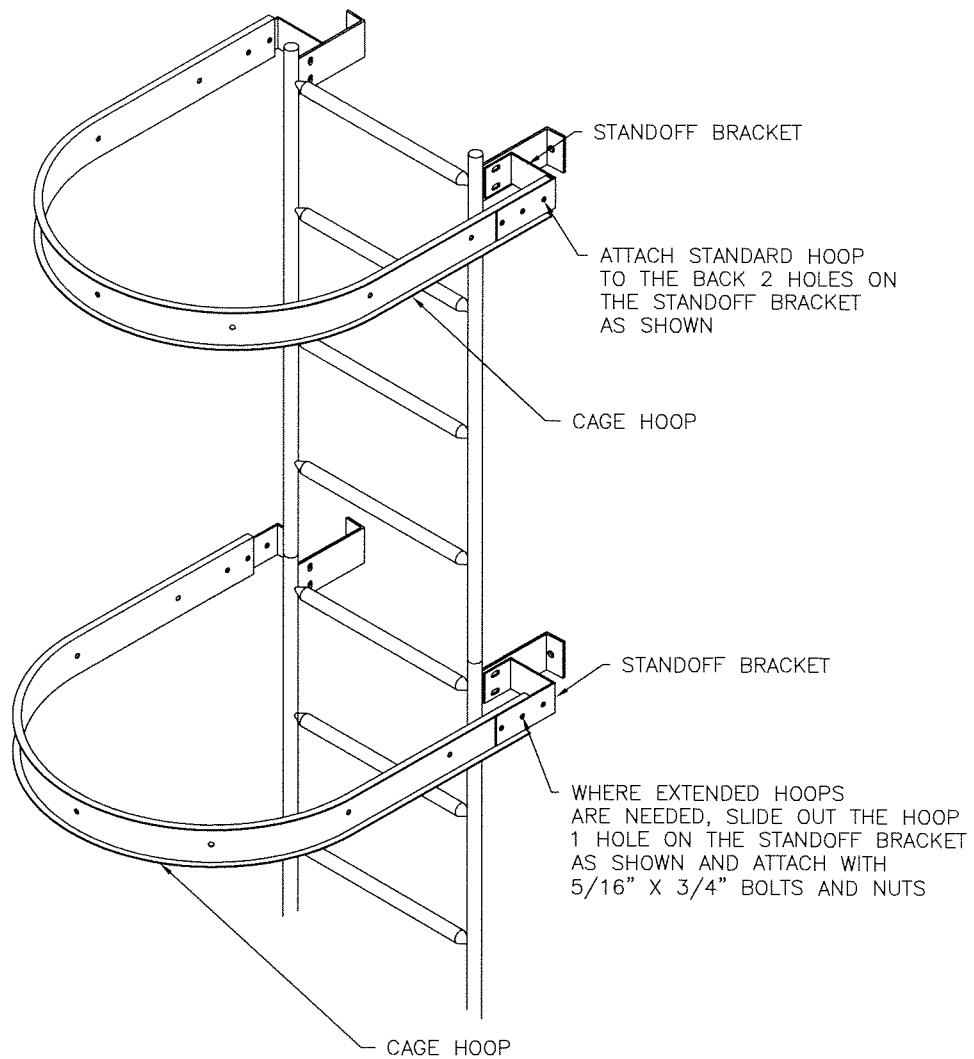
- 5) All ladders extend to the base of the tank; use 1 ring bottom ladder section at base of the tank.

- 6) Attach standoff brackets to ladder sections and hoops to standoff brackets. Attach straps as shown to hoops.



For bins with Inspection Platforms see section on Inspection Section installation for cage installation at eave.

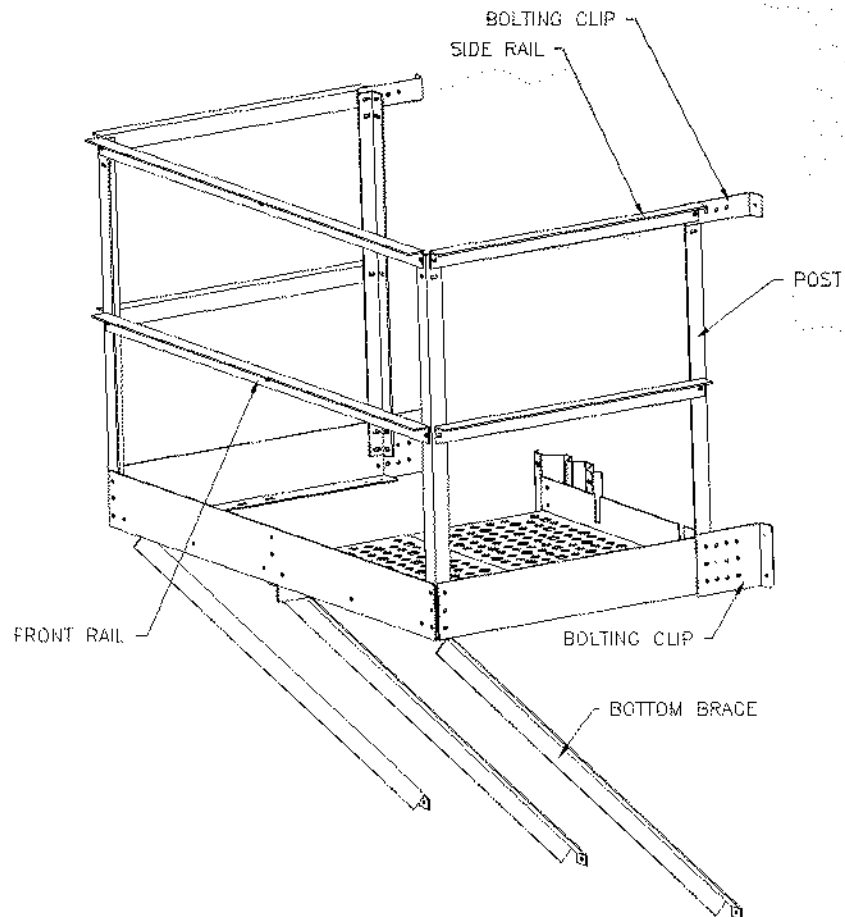
- 7) Safety cages end 2 rings above the rest platforms, and 2 ring from the base of the tank. Extend the hoop at the bottom of safety cage sections as shown.



B. Rest Platform

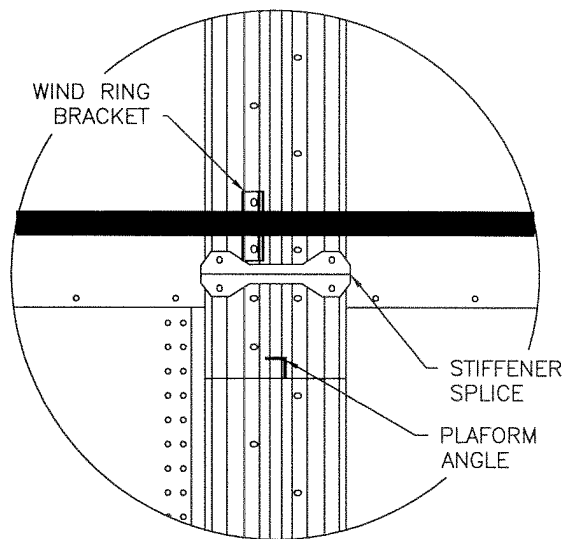
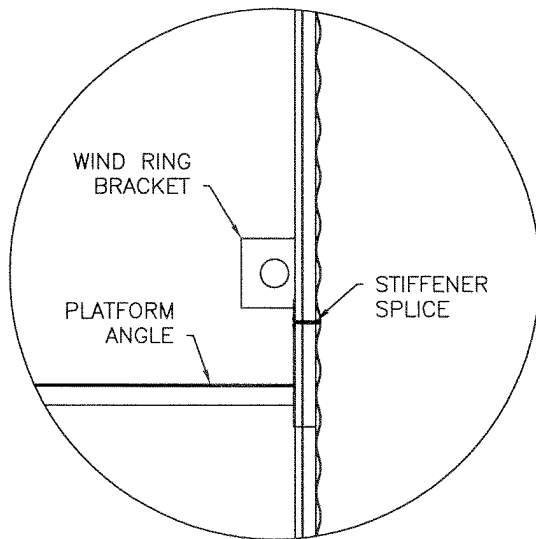
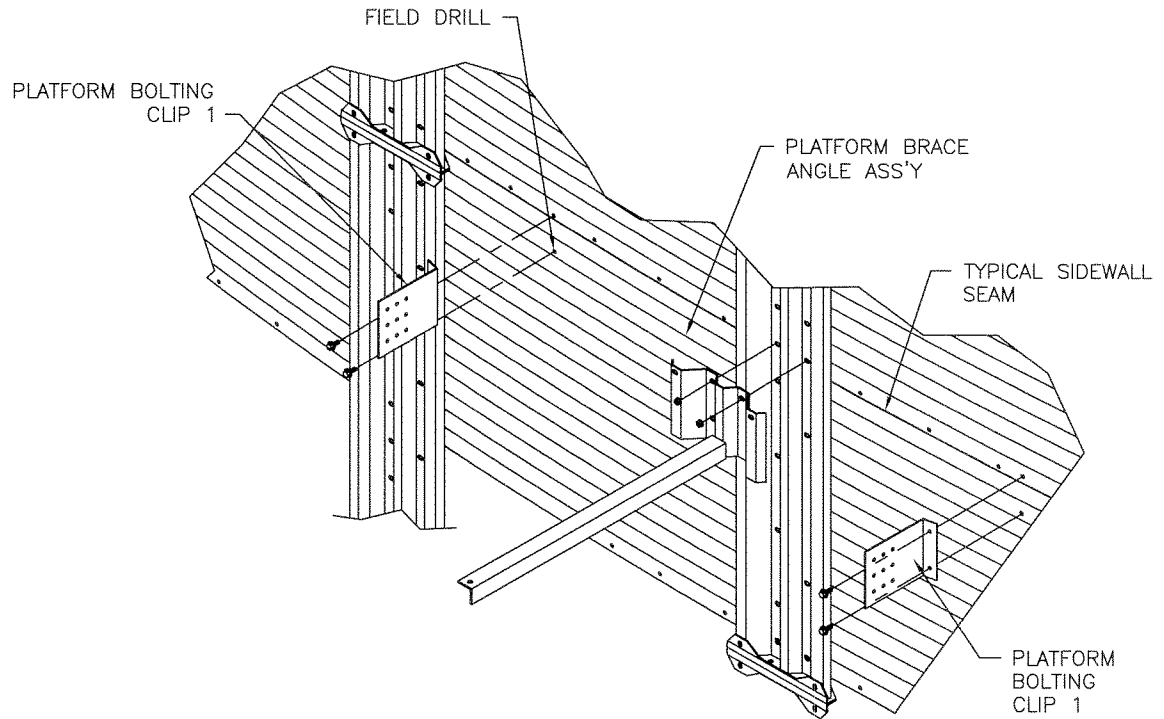
The rest platform must be located in a position so that when a person steps off the ladder and onto the platform he could climb the next section of ladder.

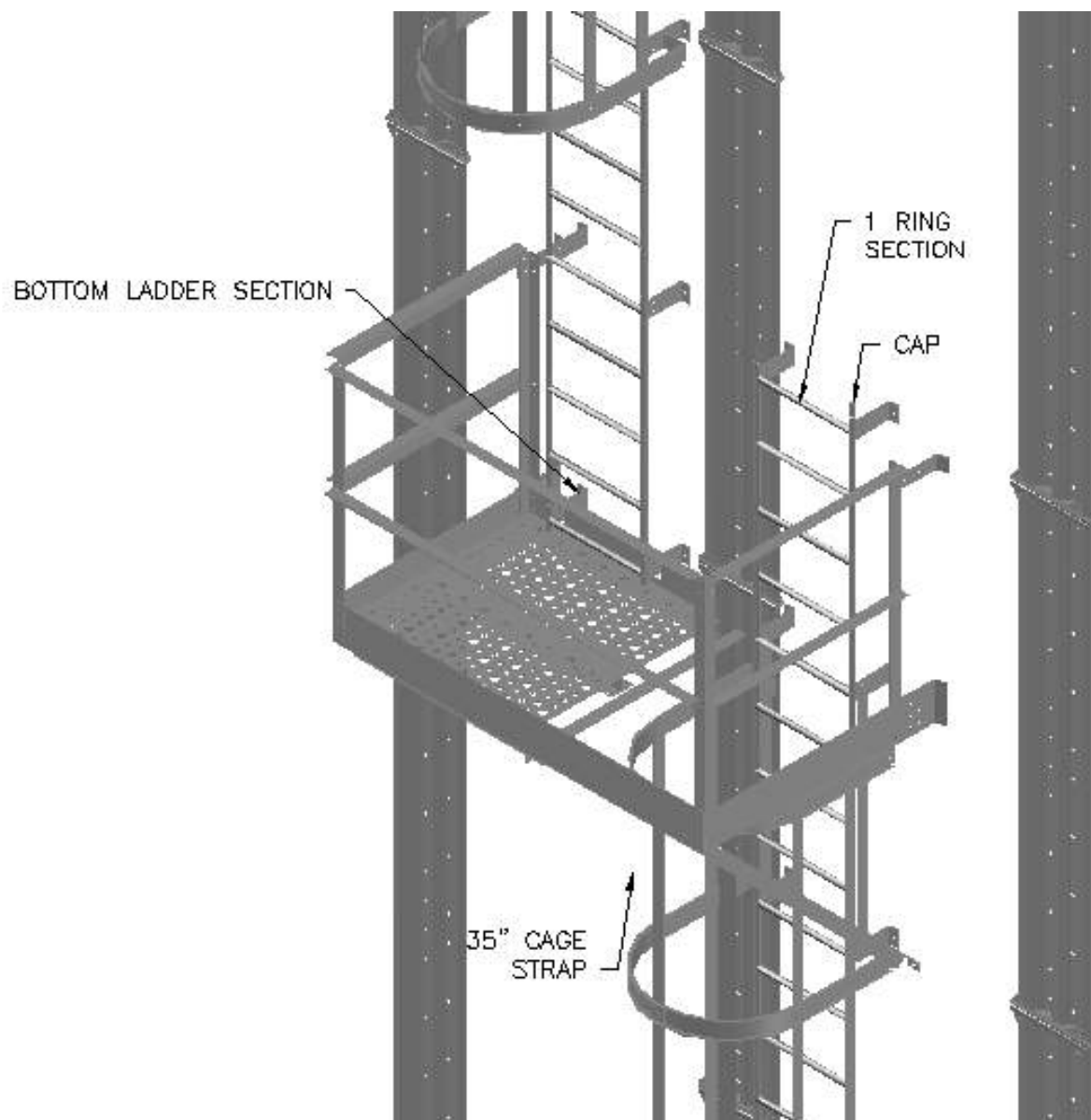
Attach post to platform and rails to post as shown with 5/16" x 3/4" bolts. Attach bolting clips and bottom brace to platform with 5/16" x 3/4" bolts.

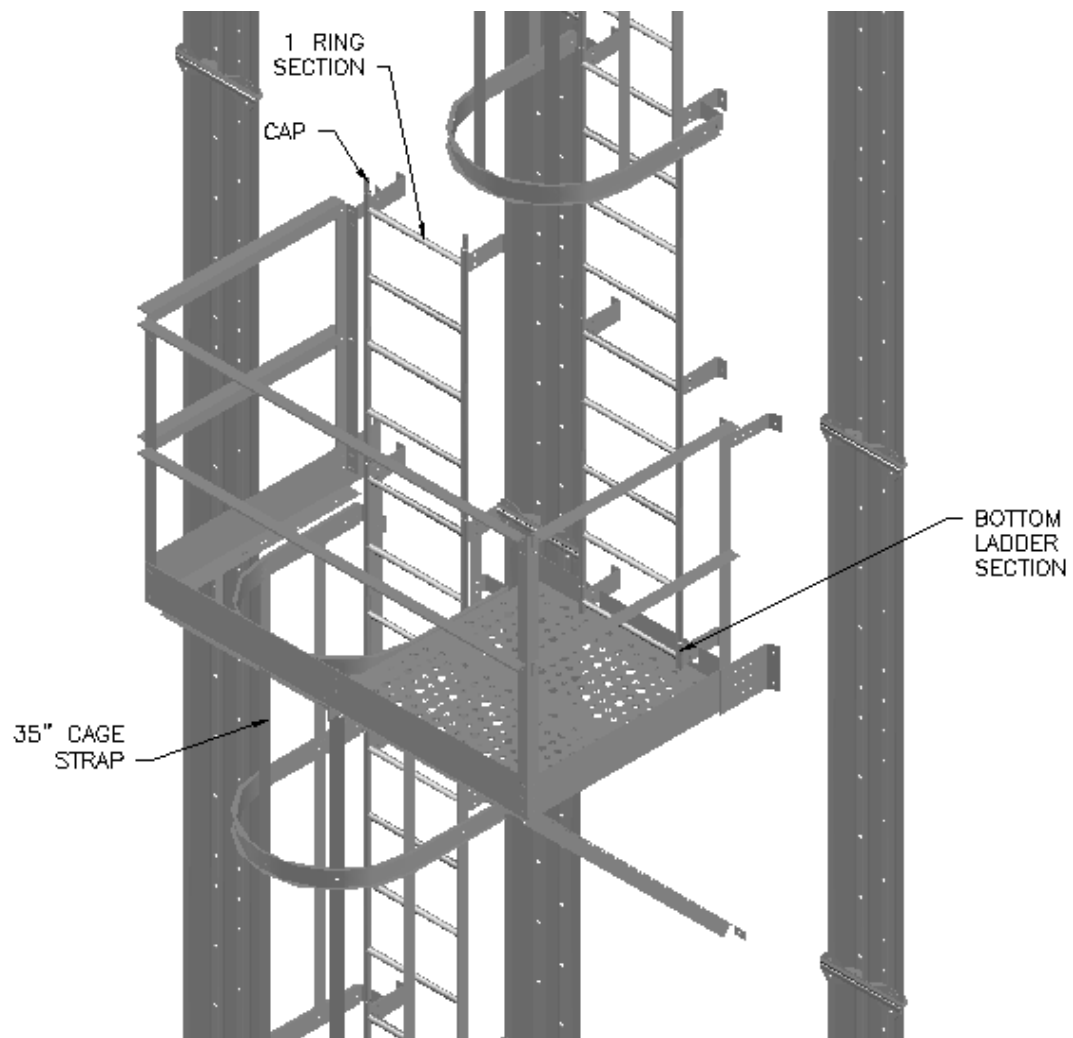


Note: Grating can be changed to left or right side depending on where landing is used.

Attach platform brace angle to stiffener at sidewall seam as shown, with 7/16" bin bolts. Platform is always bolted below stiffener splices as shown. Field drill holes into sidewall and attach bolting clips to sidewall.



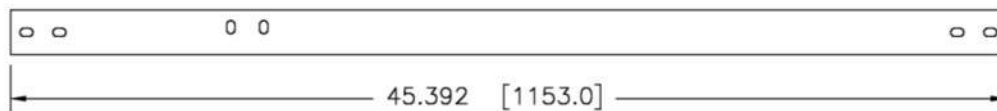
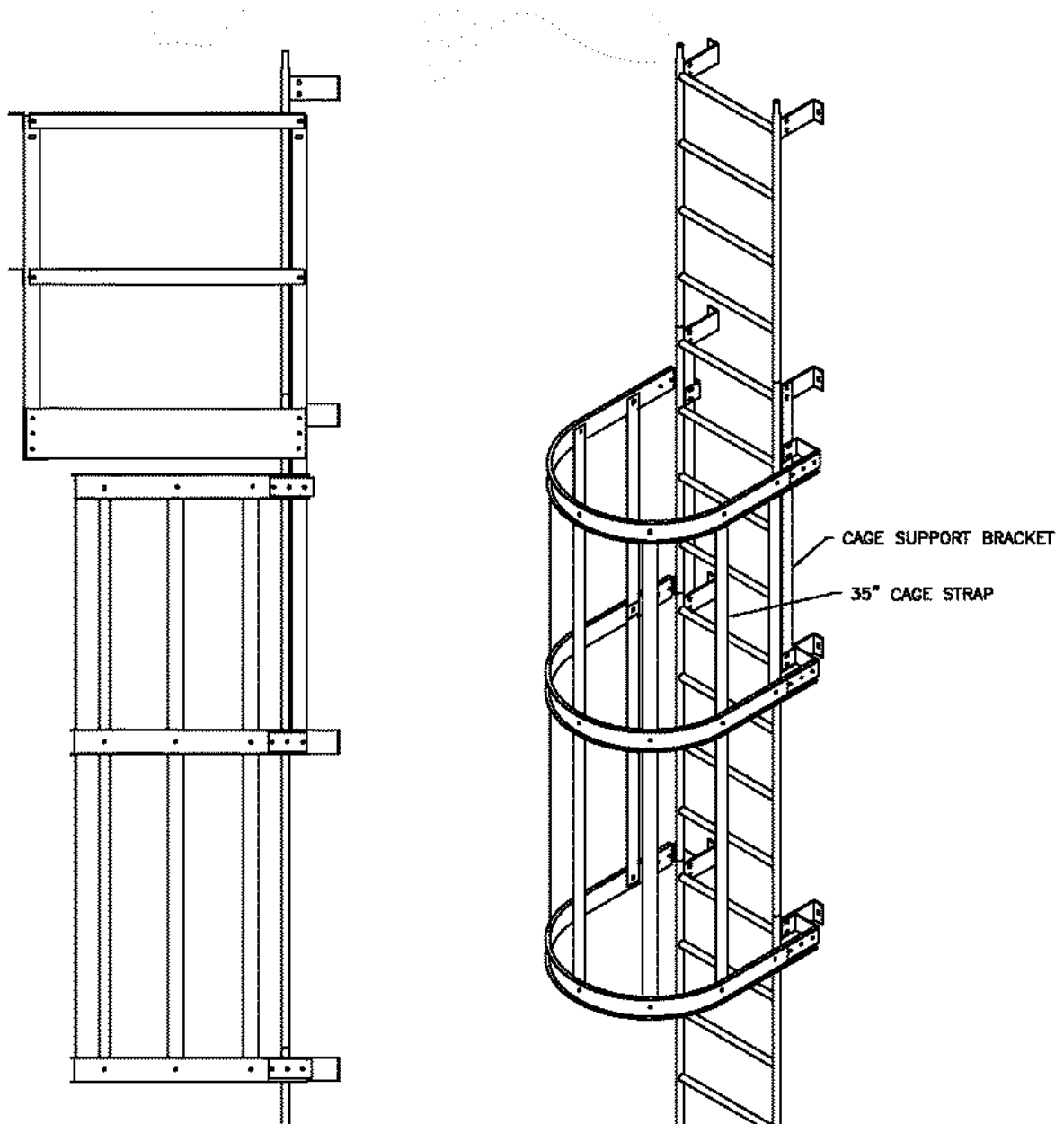




Use bottom ladder sections at the rest platforms as shown.

Ladder sections extend one ring past the opening in the rest platform. Continue down with the next section of safety cage at the horizontal seam that the rest platform is bolted to.

At platforms, attach cage support bracket to hoop standoffs, then attach hoop to support bracket. *Installation is the same for below Rest Platforms and Inspection Platforms.*

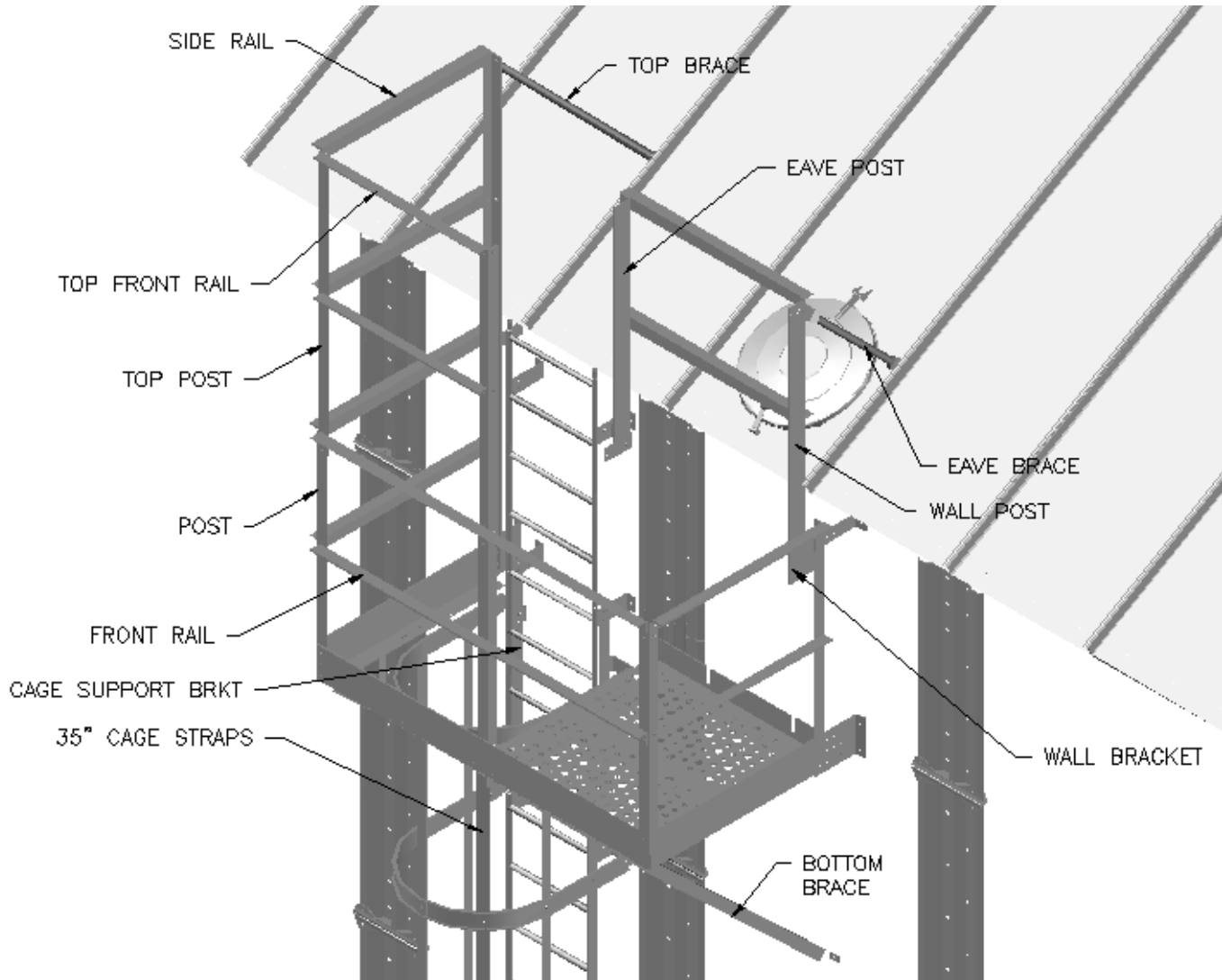


CAGE,STRAP,SUPPORT,BRACKET #9387155

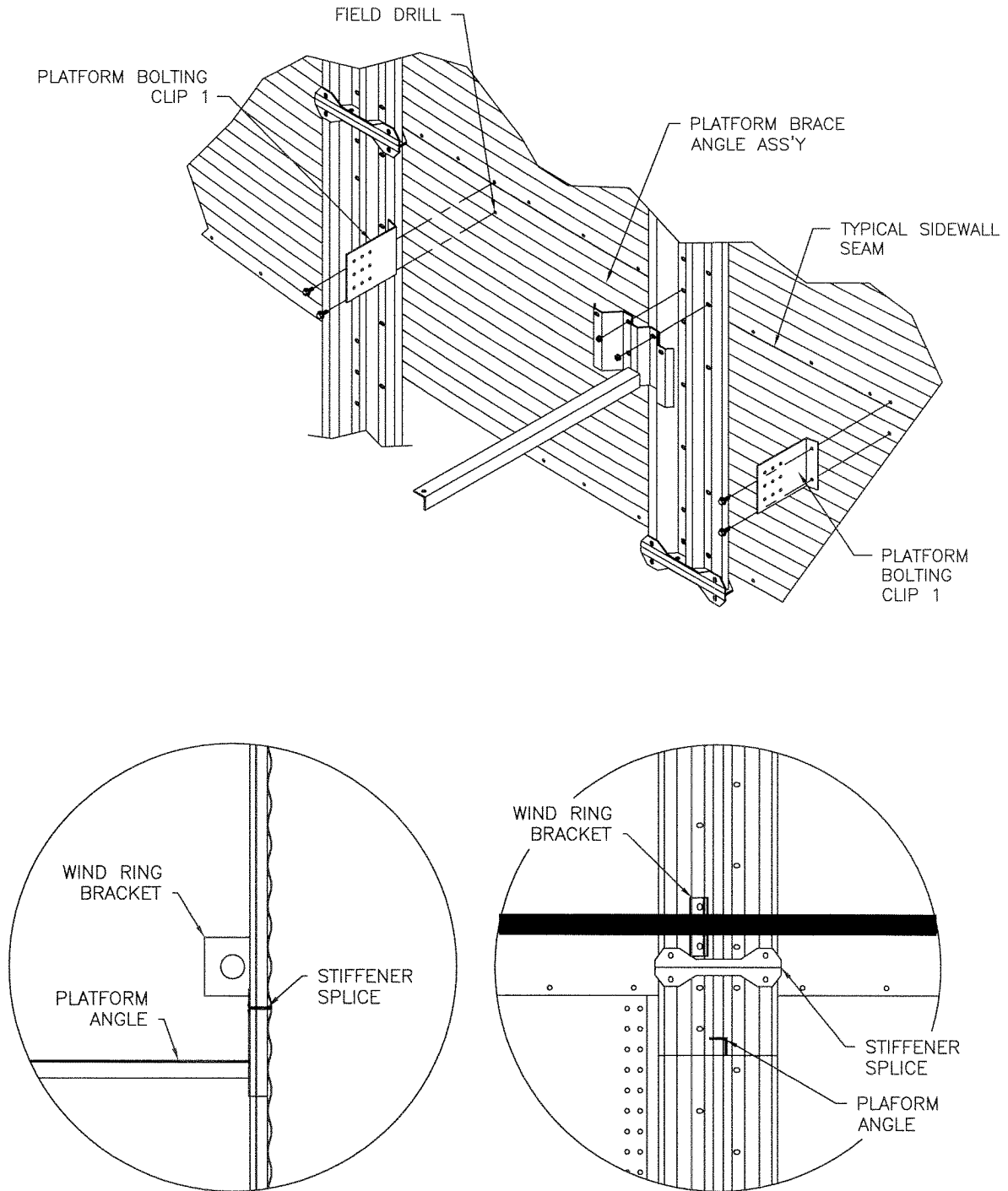
C. Inspection Platform (Optional)

Inspection Platforms are standard on 9,17, and 25 ring tall exterior ladder packages

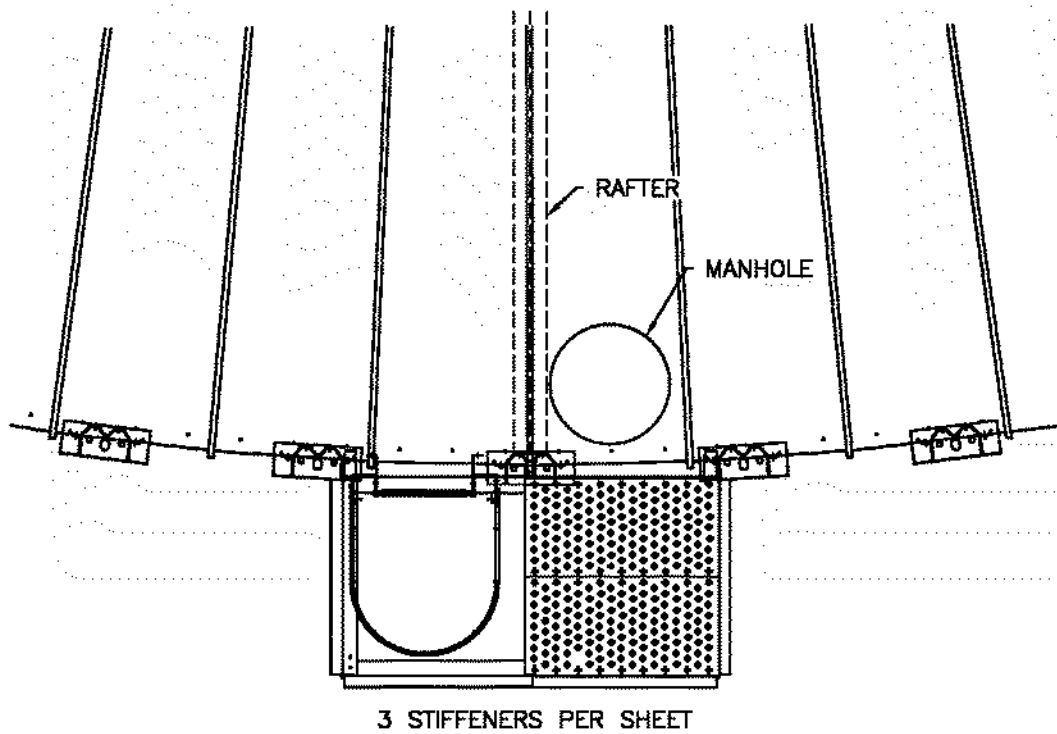
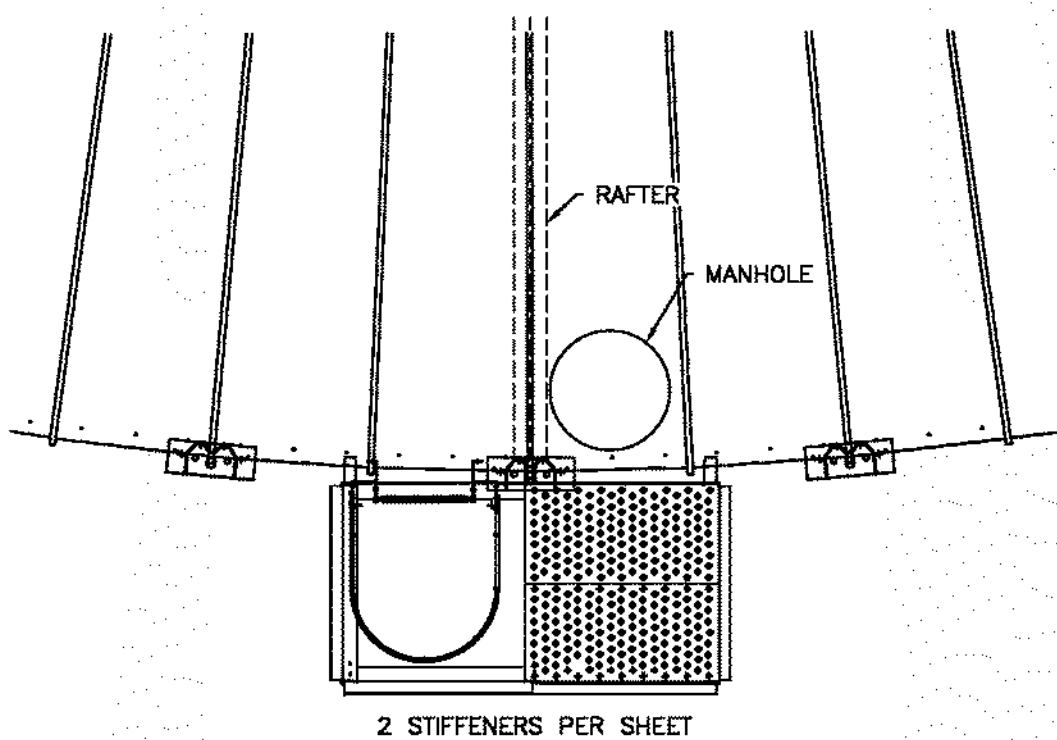
The inspection platform must be located in a position so that when a person steps off the ladder and onto the platform he could look directly into the tank through the manhole.



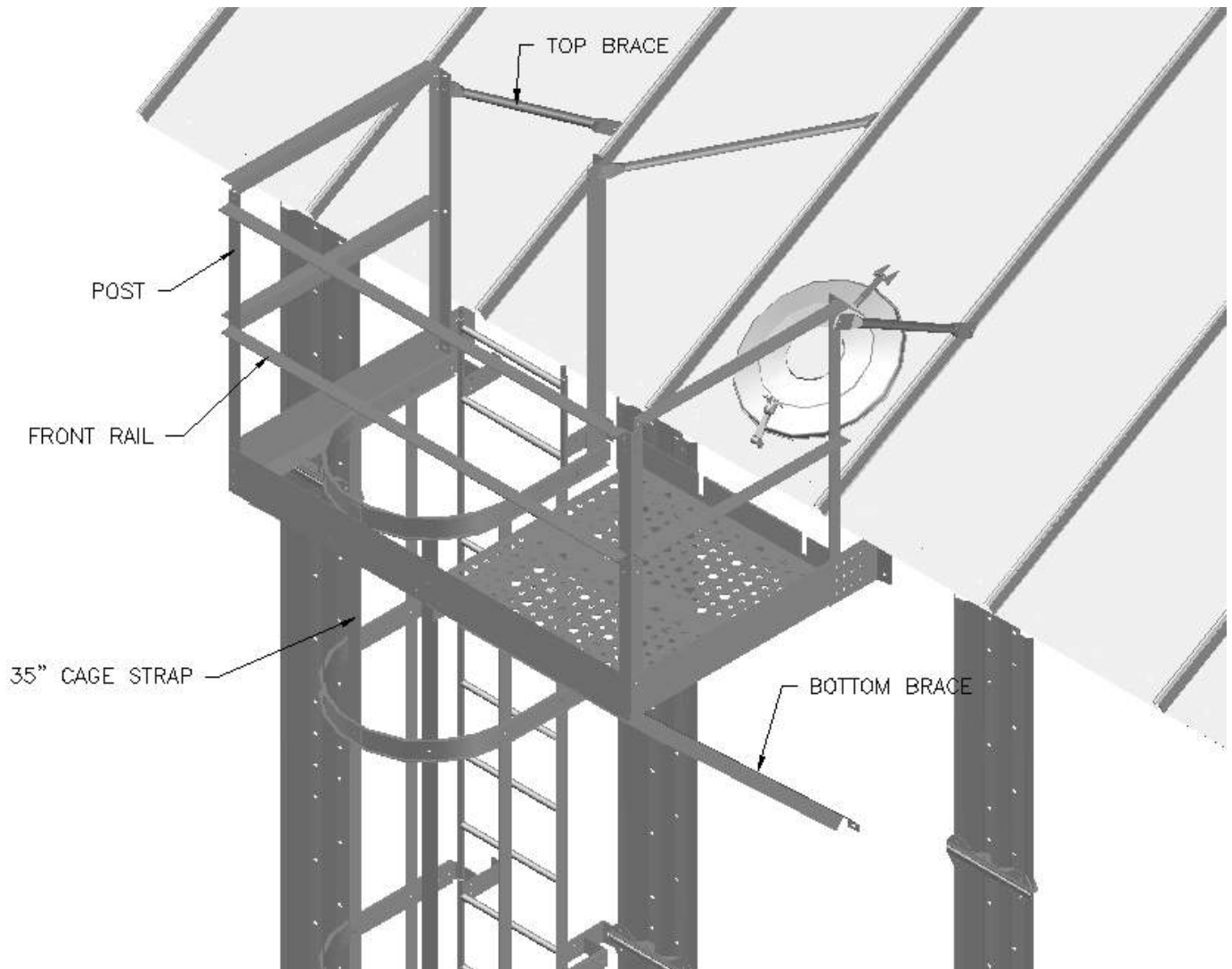
Attach platform brace to stiffener at sidewall seam as shown, with 7/16" bin bolts. Platform is always bolted below stiffener splices as shown. Field drill holes into sidewall and attach bolting clips to sidewall.



Located Inspection Platform as shown.

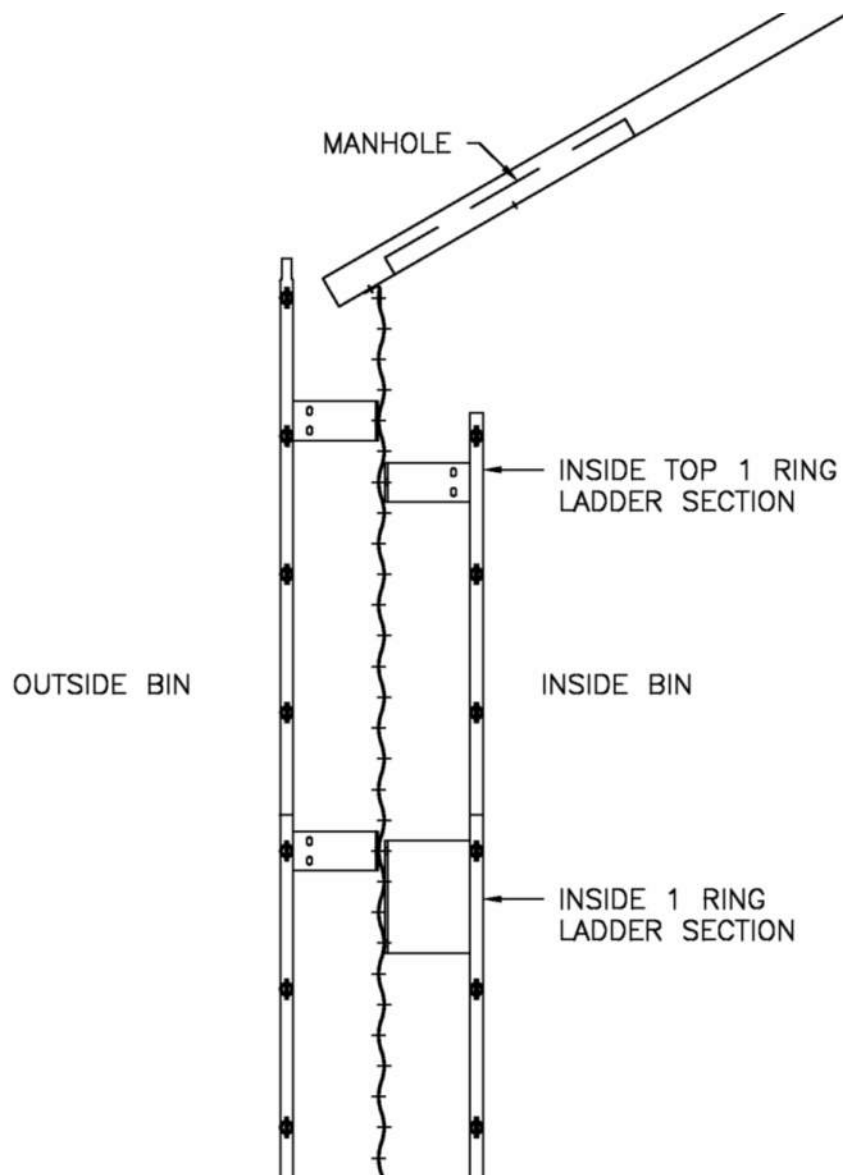


The inspection platform may also be located below the eave as shown.

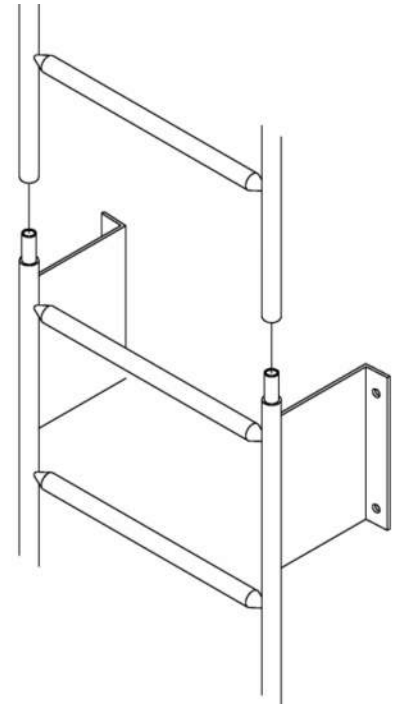
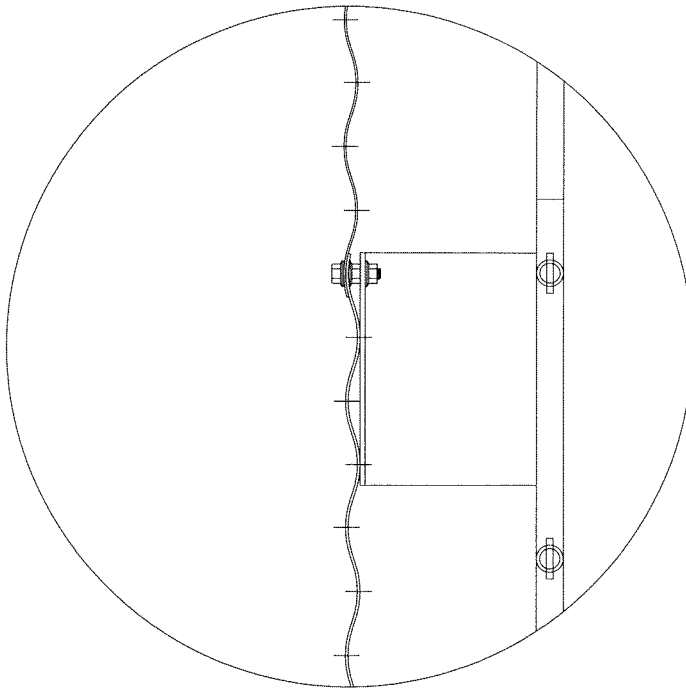


Section 3 – Inside Ladder Installation

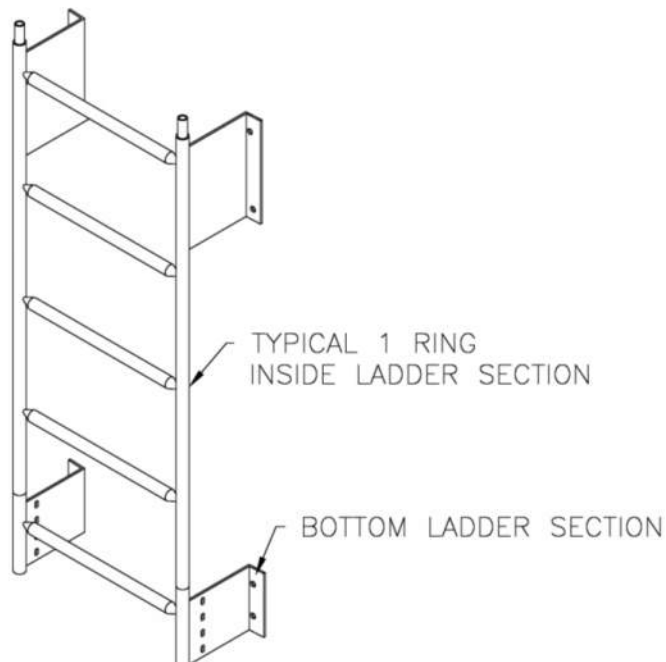
1. Locate inside ladder directly below the manhole opening on the roof.
2. Install the inside ladder as the tank is being raised, all inside ladder start with a top ladder section on the first ring of the bin. Field drill holes into the sidewall to attach the top section of ladder to the sidewall.



3. Continue down the bin with 1 ring inside ladder sections, attach the ladders together as shown and bolt to the sidewall sheet seams as shown with a double nut.

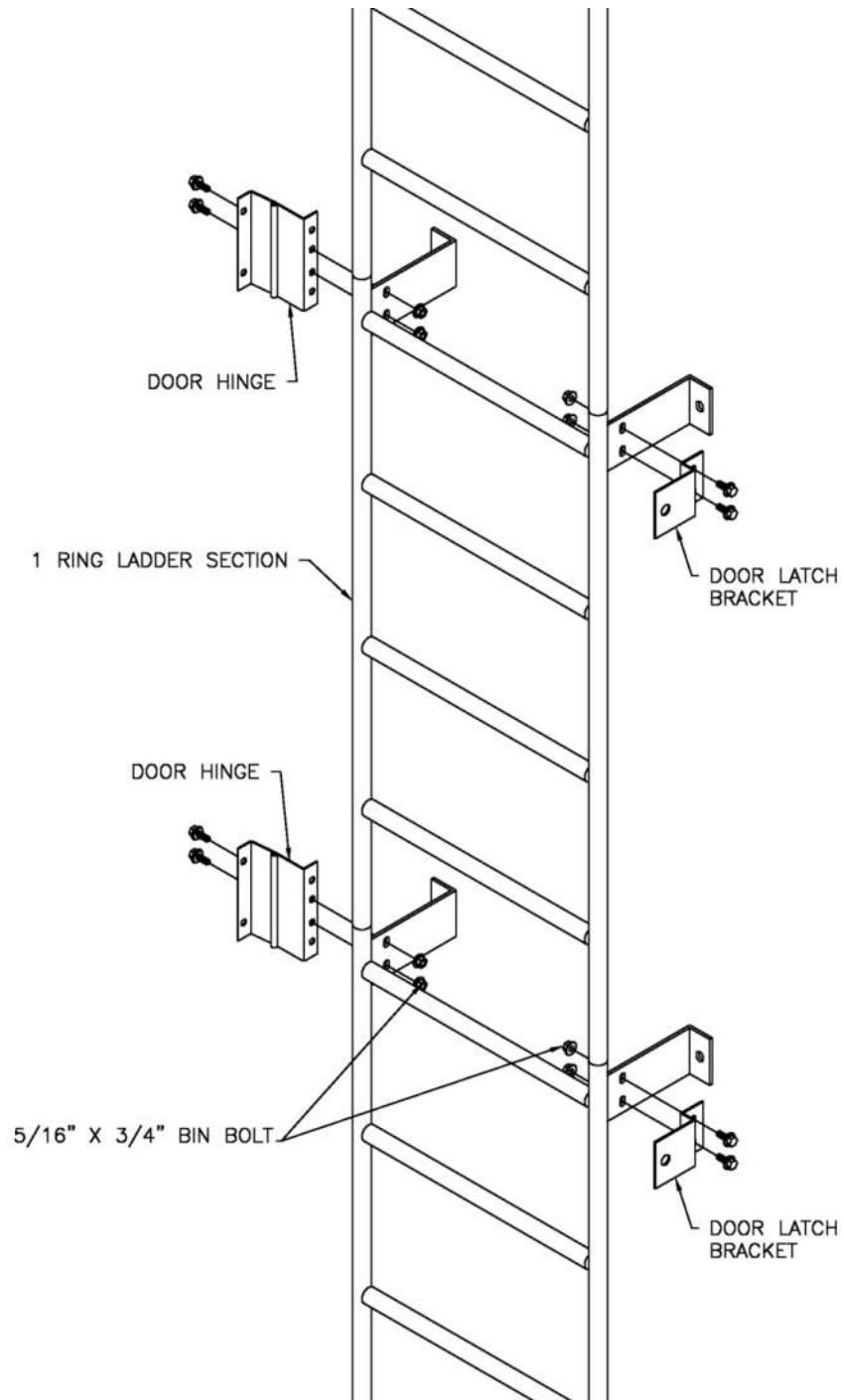


4. All inside ladder end with a bottom ladder section 1 ring above the base of the tank. Attach bottom ladder section to sidewall with bin bolts in sidewall sheet seam.

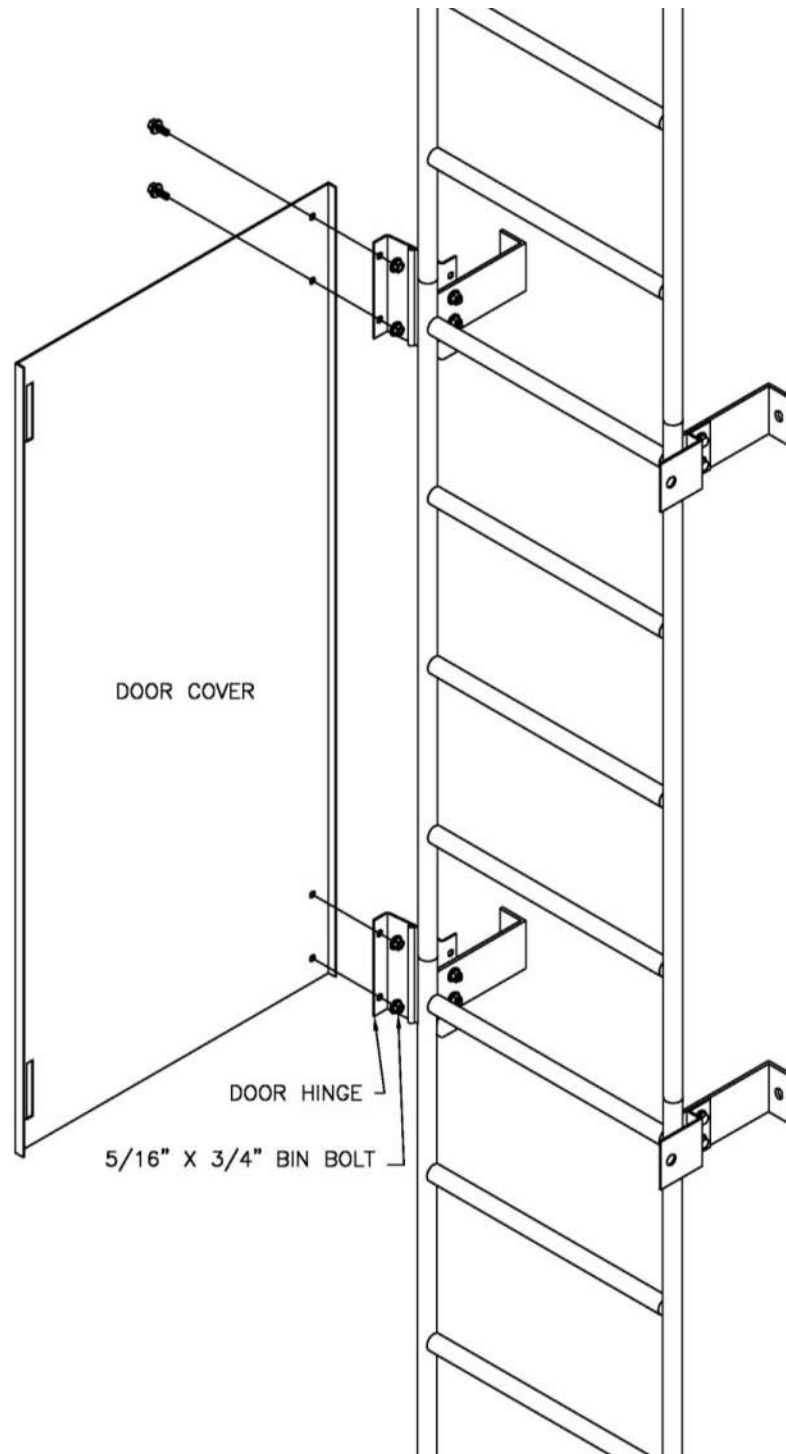


Section 4 – Ladder Access Door

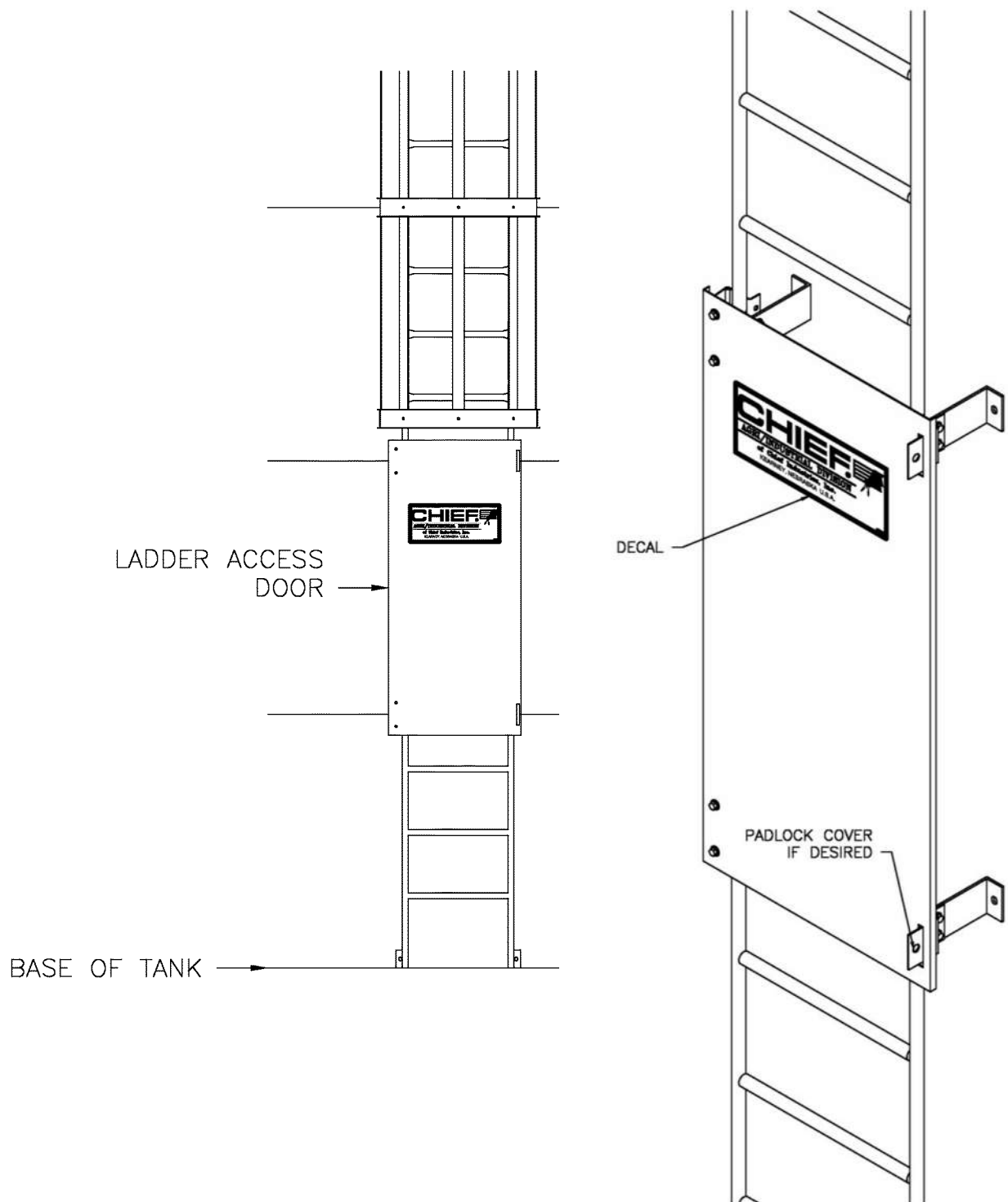
Attach door hinges and latch brackets to outside ladder brackets as shown, with 5/16" x 3/4" bin bolts.



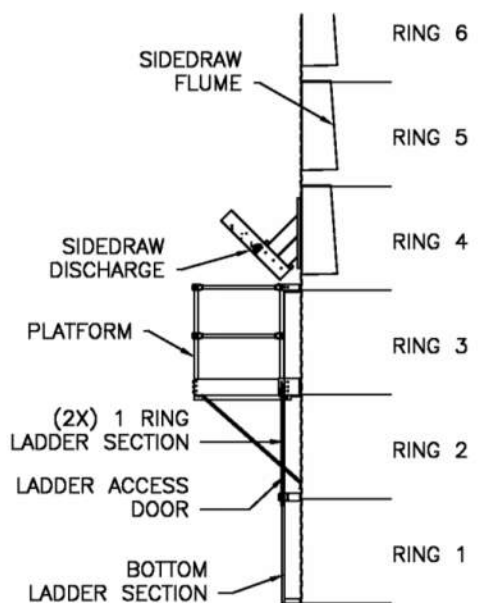
Attach cover to hinges with 5/16" x 3/4" bin bolts.



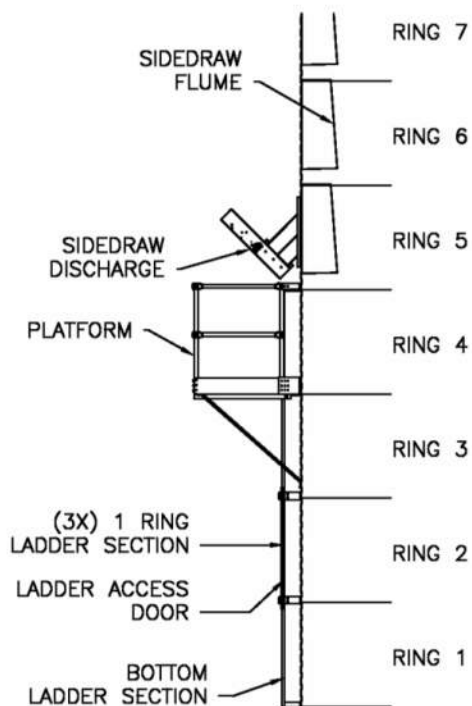
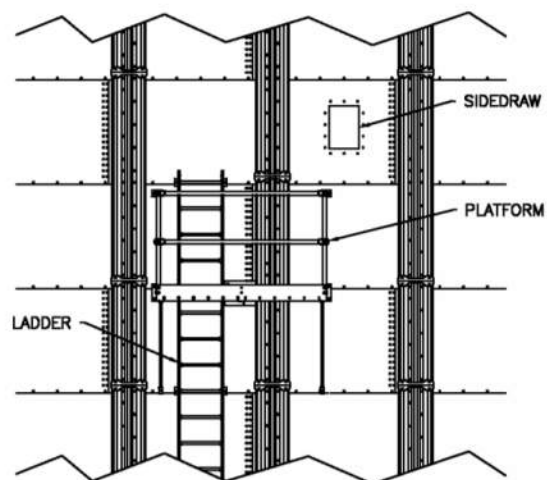
Apply Decal to cover of door. Door can be padlocked is desired, to prevent unauthorized access to the bin sidewall ladder.



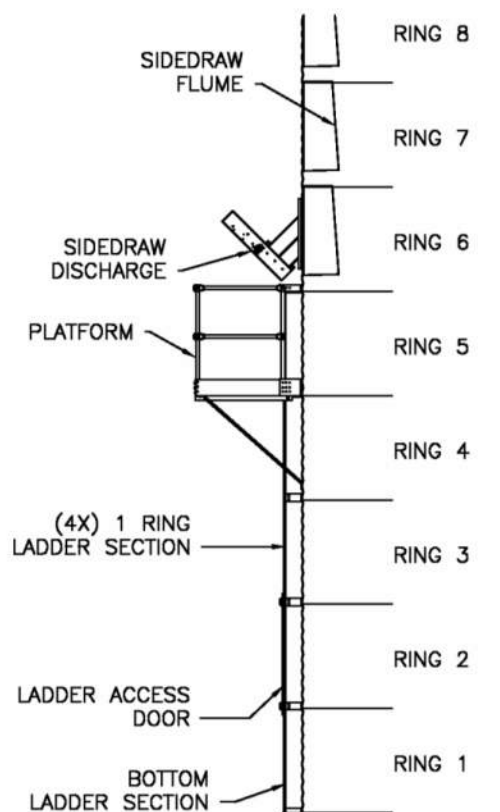
Section 5 – Sidedraw Access Platform



4 RING SIDEDRAW LADDER AND PLATFORM



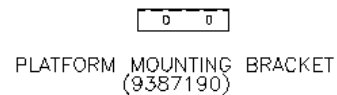
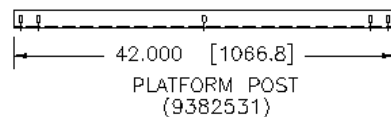
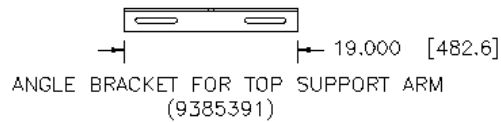
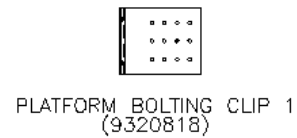
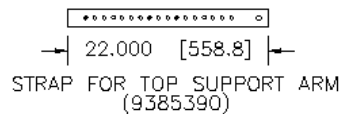
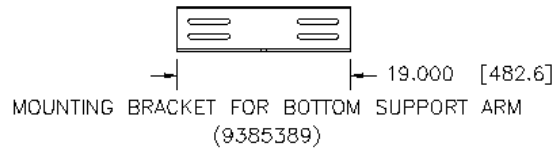
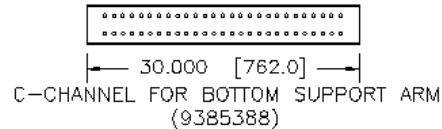
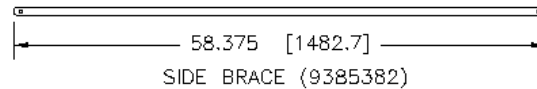
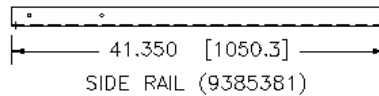
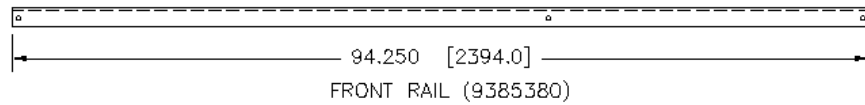
5 RING SIDEDRAW LADDER AND PLATFORM



6 RING SIDEDRAW LADDER AND PLATFORM

Section 6 – Commercial Hopper Tank Base Ladders

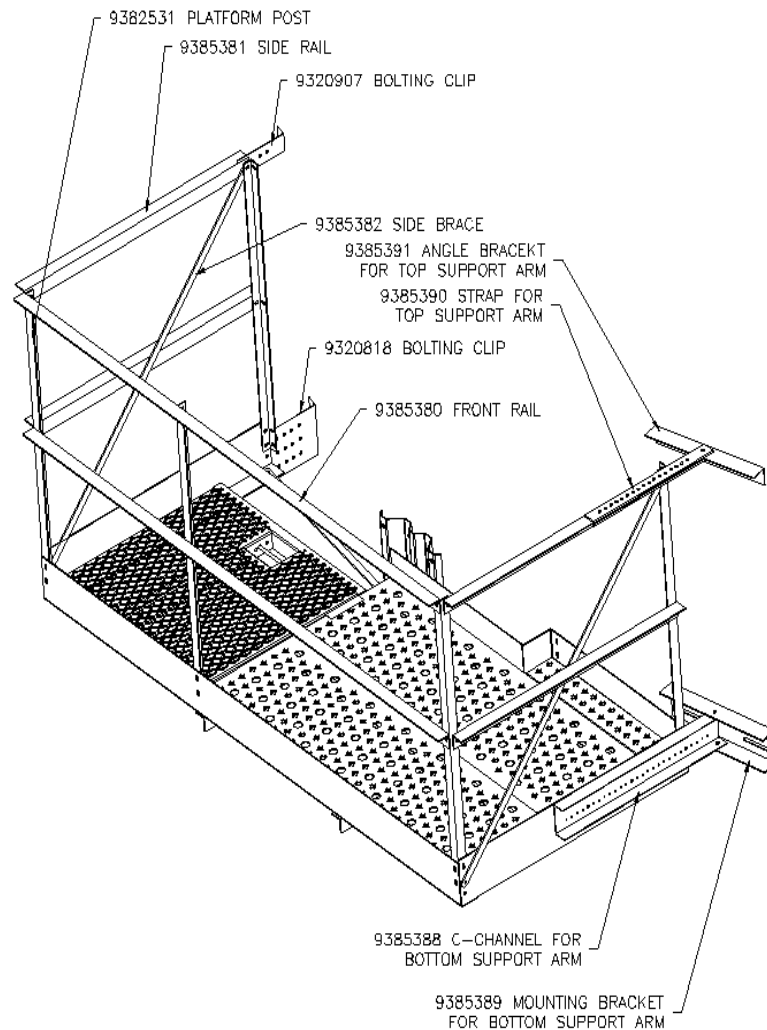
Part Identification:



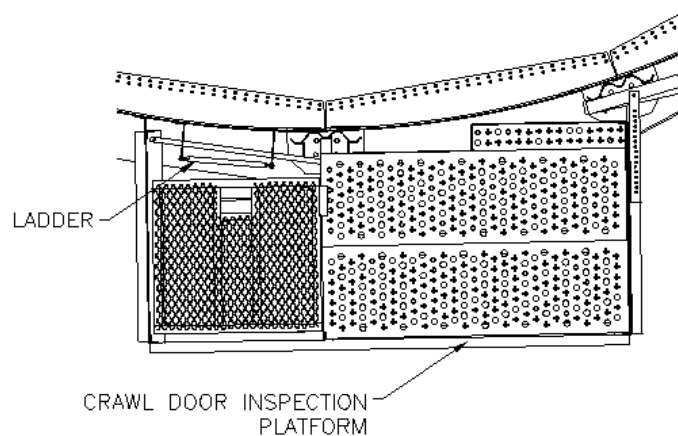
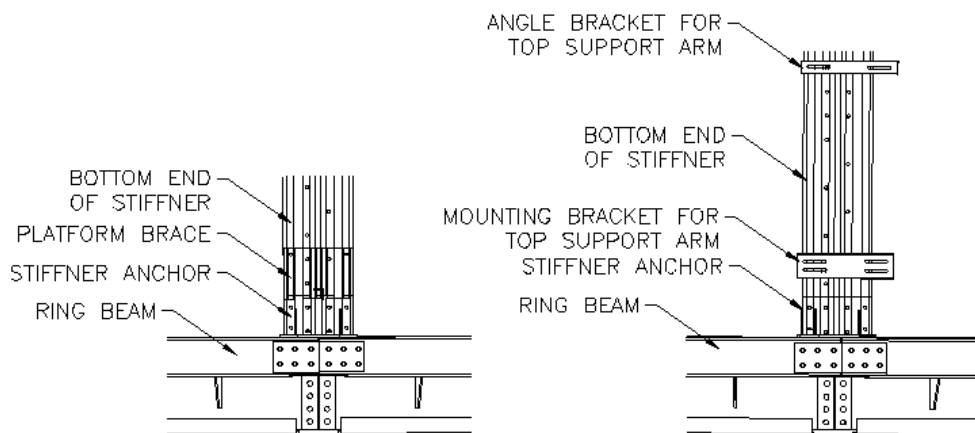
Base Platform Assembly:

Attach posts to platform base with 5/16" X 3/4" bin bolts.

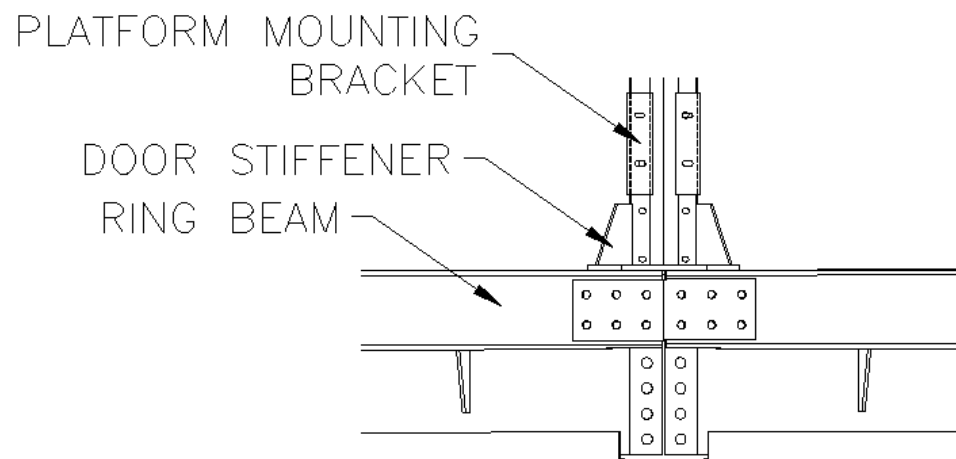
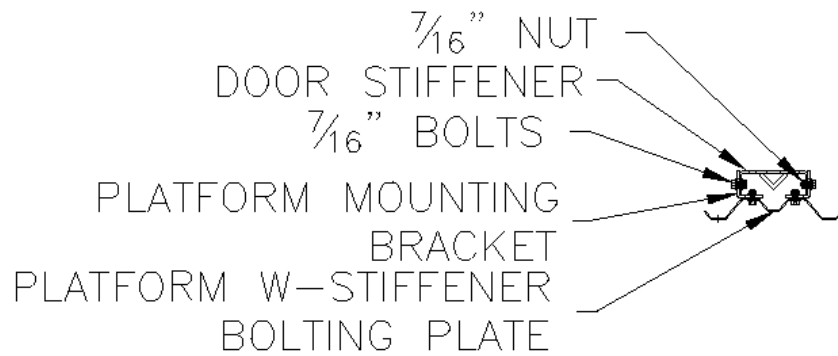
Attach hand rails and top braces to posts with 5/16" X 3/4" bin bolts. Field drill hole and attach trap door tie back assembly to post. Tighten all bolts in platform.



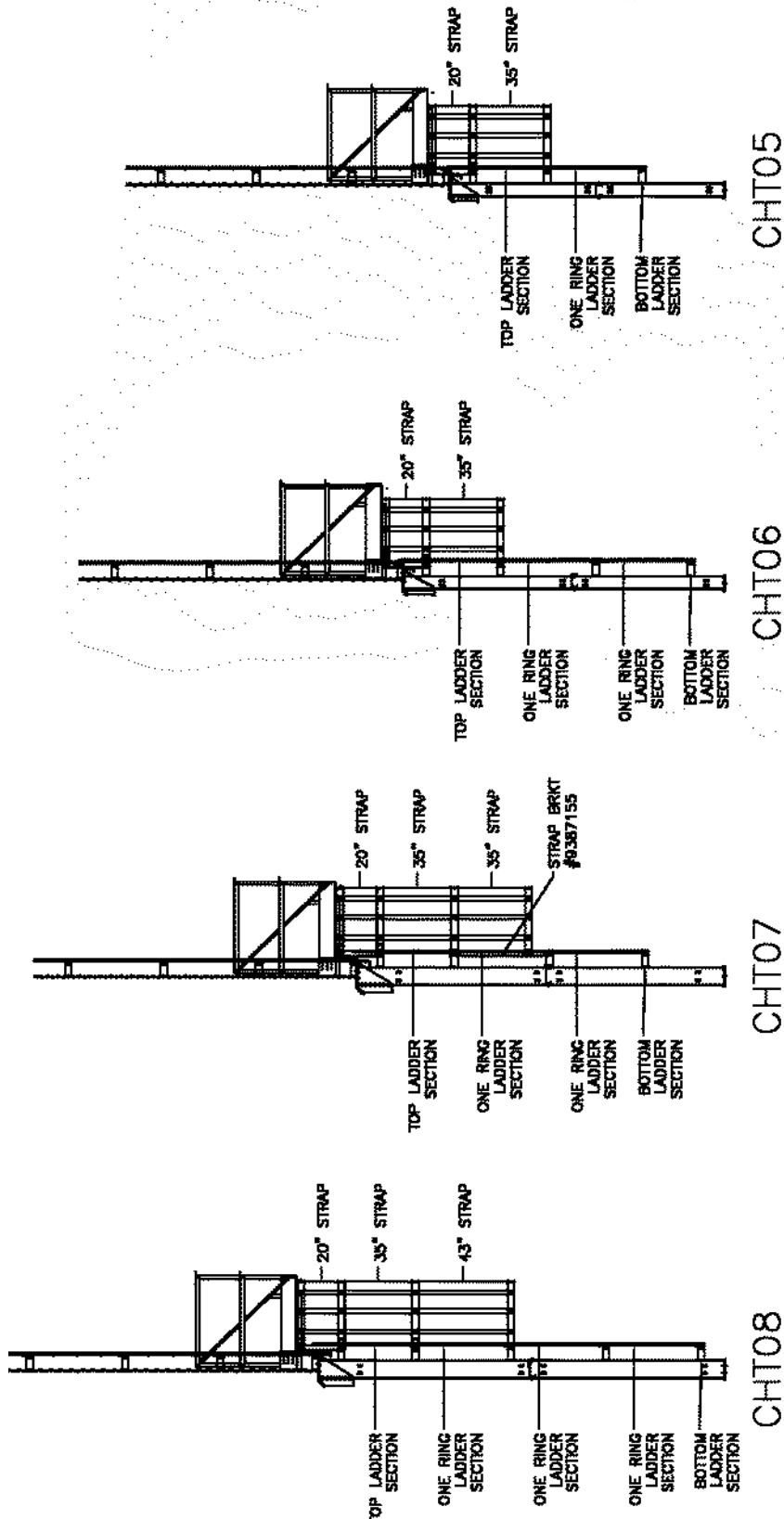
Attach platform to bottom stiffener as shown with 7/16" bin bolts. Field drill holes and attach platform bolting clips and support tube to bin sidewall.

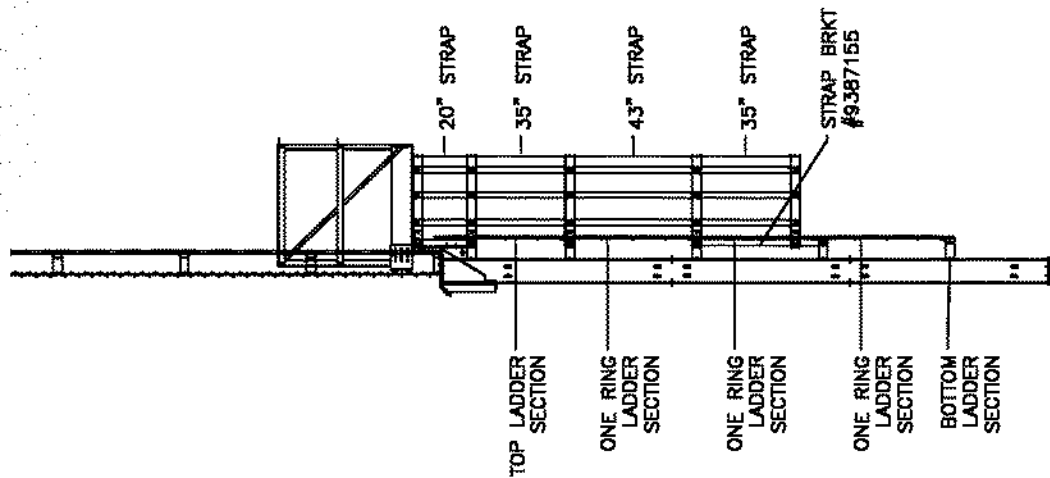


If hopper tank has a door stiffener, use platform mounting brackets as shown below.

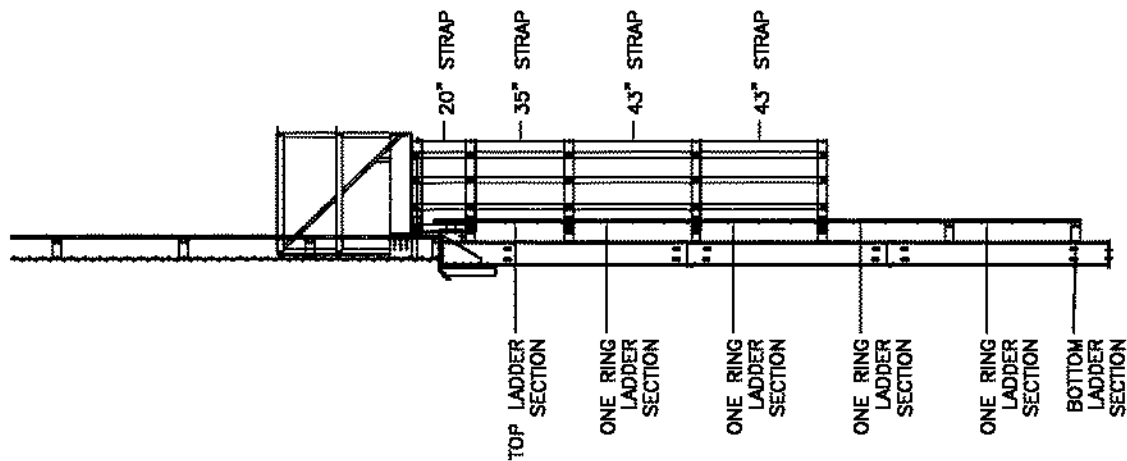


Commercial Hopper Tank Bottom Ladder Layout:

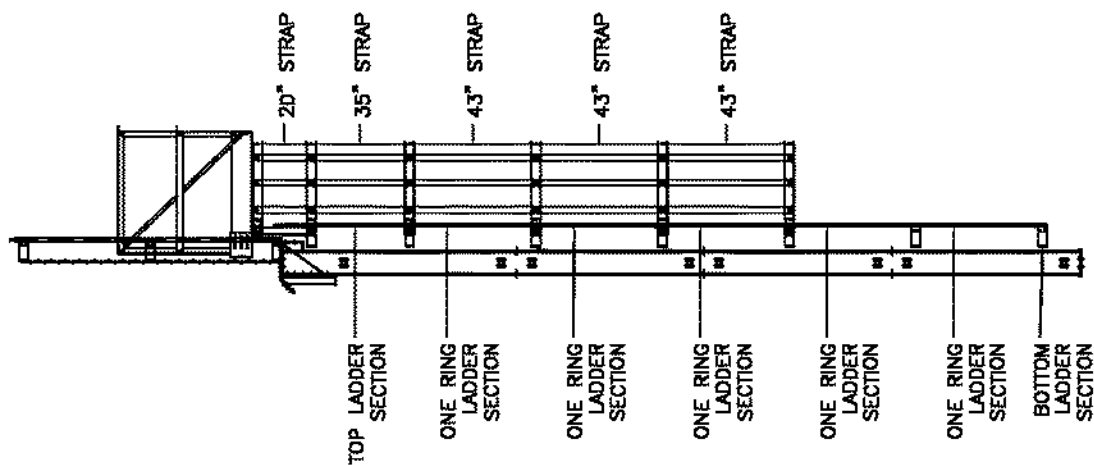




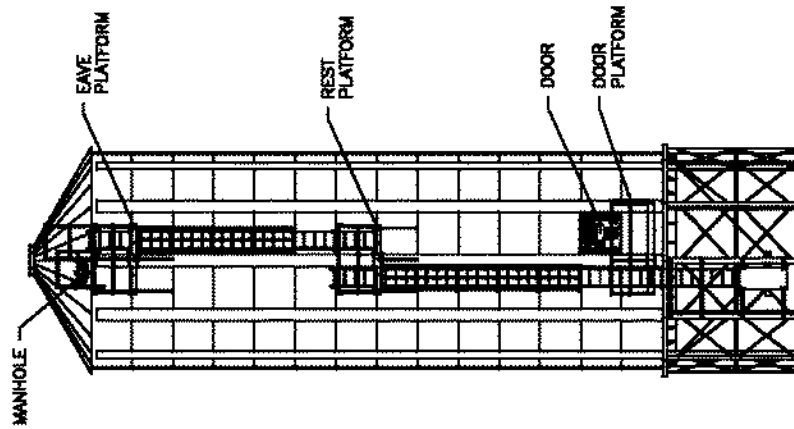
CHT09



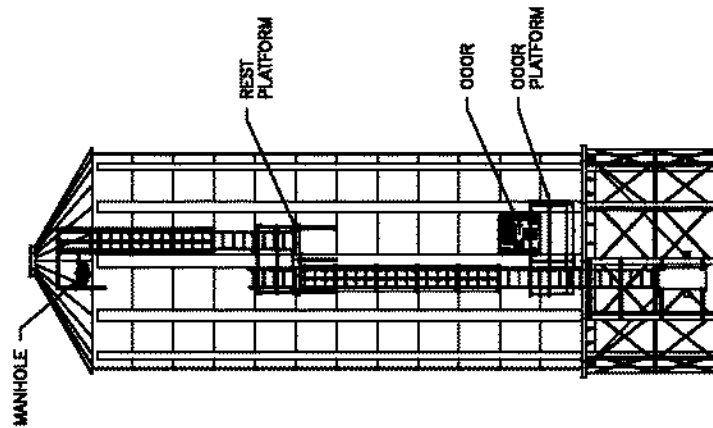
CHT10



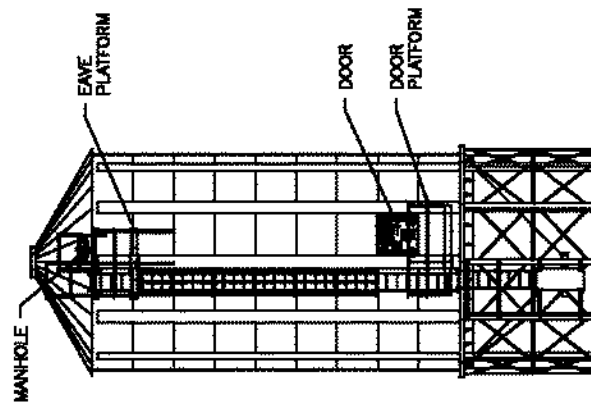
CHT12



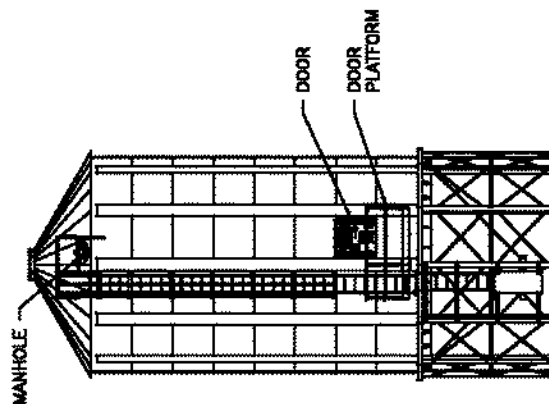
GENERIC LAYOUT WITH
DOOR PLATFORM, AND
REST PLATFORM, AND
EAVE PLATFORM



GENERIC LAYOUT WITH
DOOR PLATFORM AND
REST PLATFORM

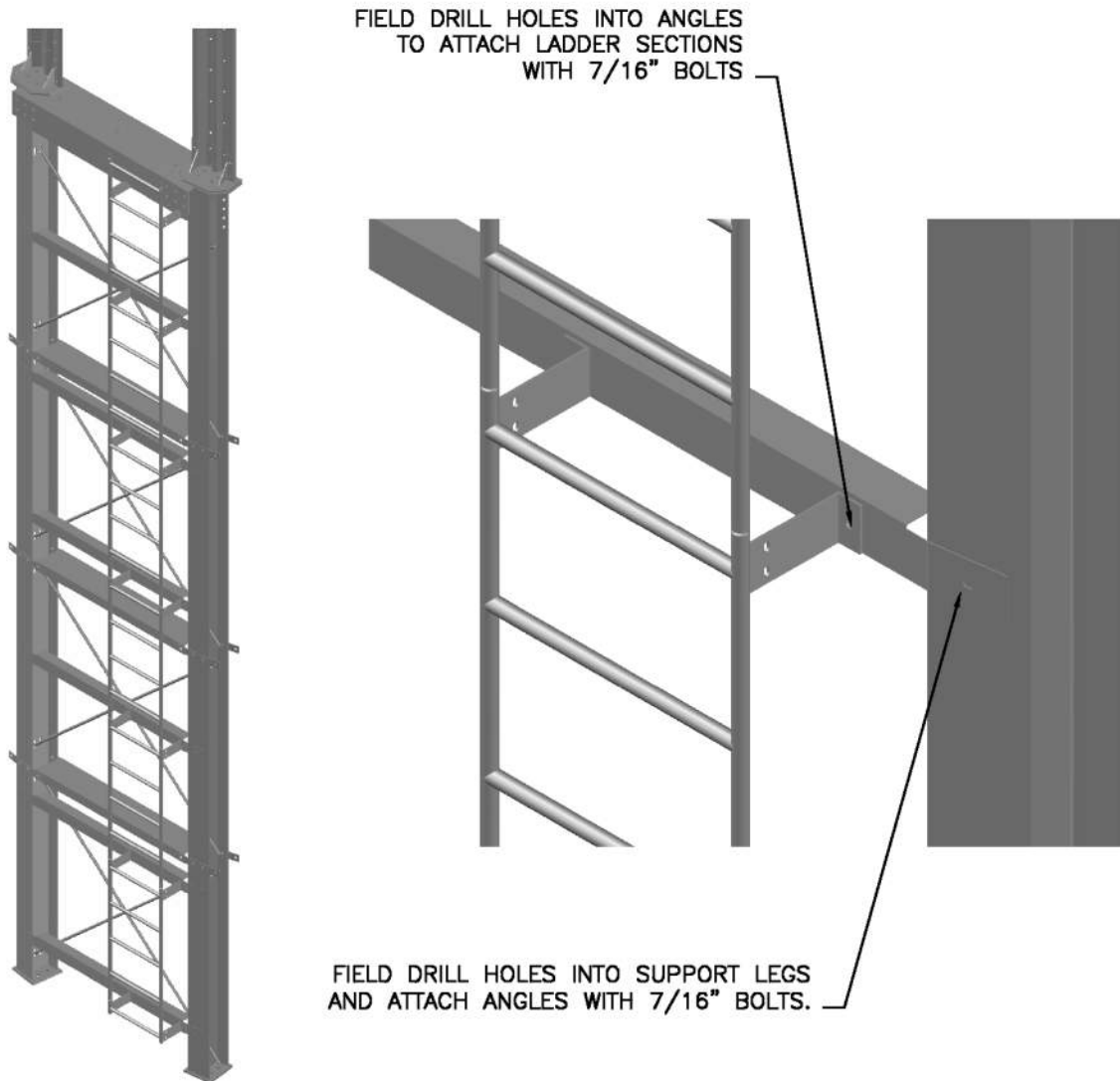


GENERIC LAYOUT WITH
DOOR PLATFORM AND
EAVE PLATFORM



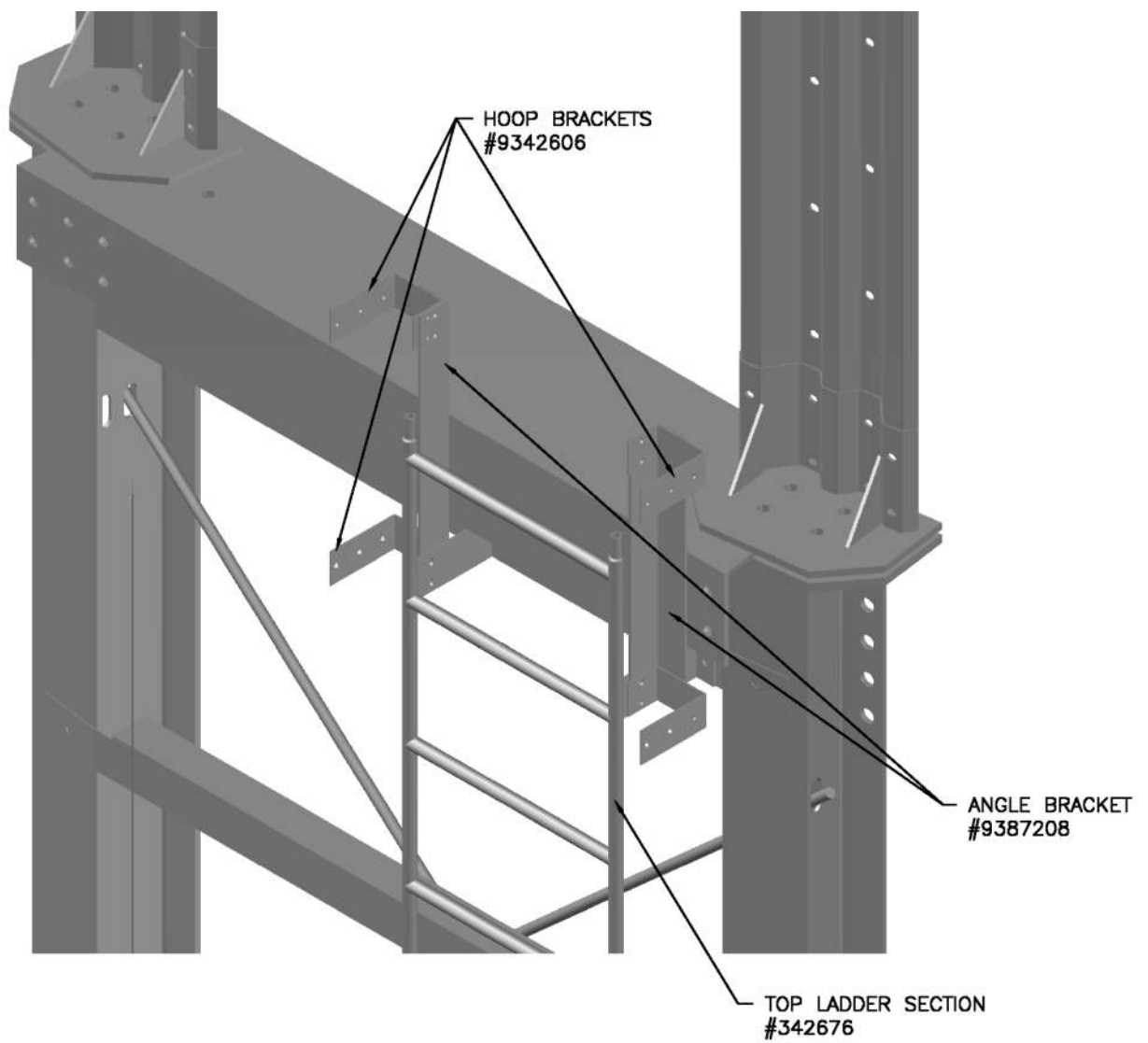
GENERIC LAYOUT WITH
DOOR PLATFORM ONLY

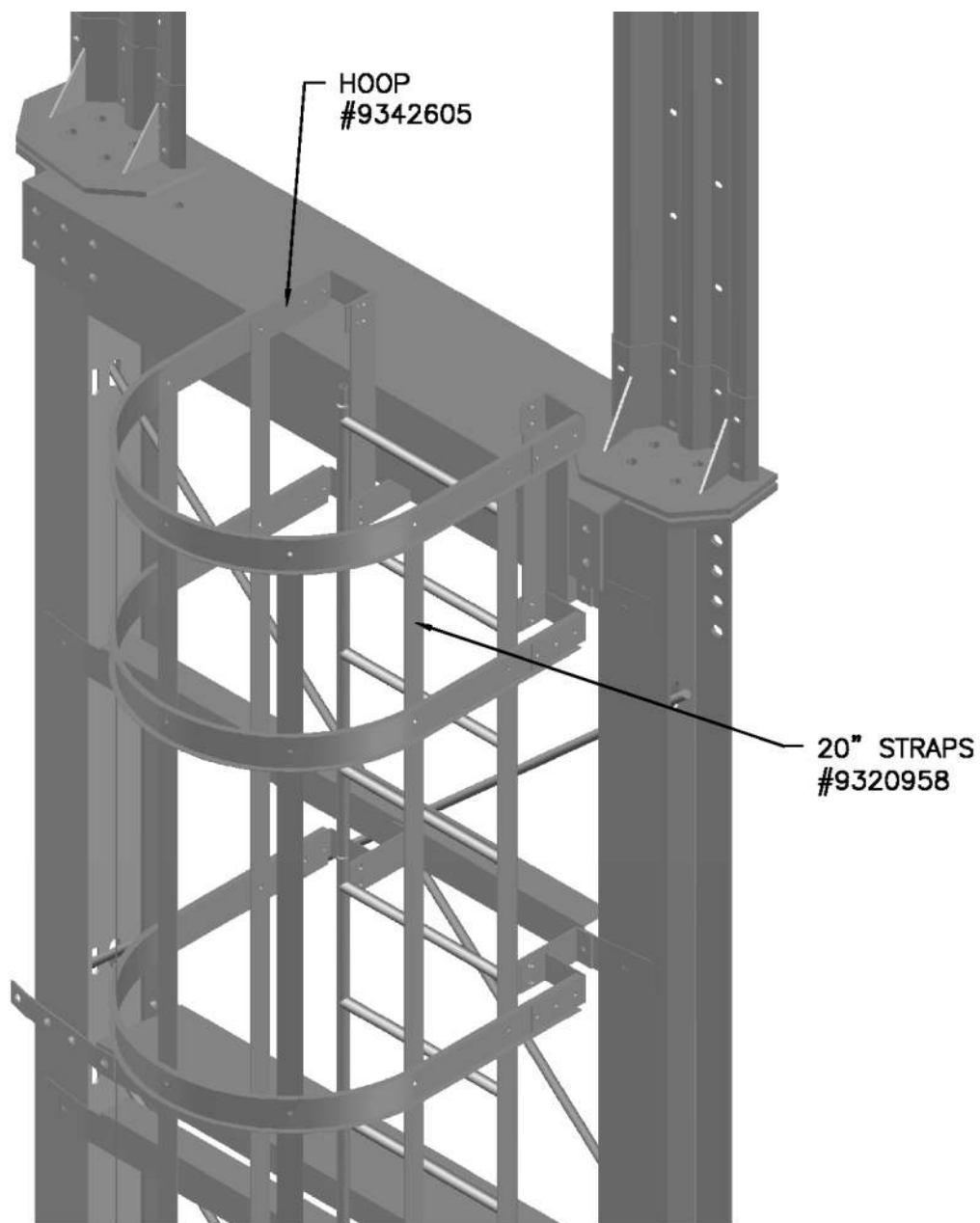
Attach ladder support angles to hopper legs and ladders to their supports by field drilling holes and using 7/16" bin bolts.



Cage for CHT bottom ladders.

9387208 CAGE SUPPORT
ANGLE BRACKET







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