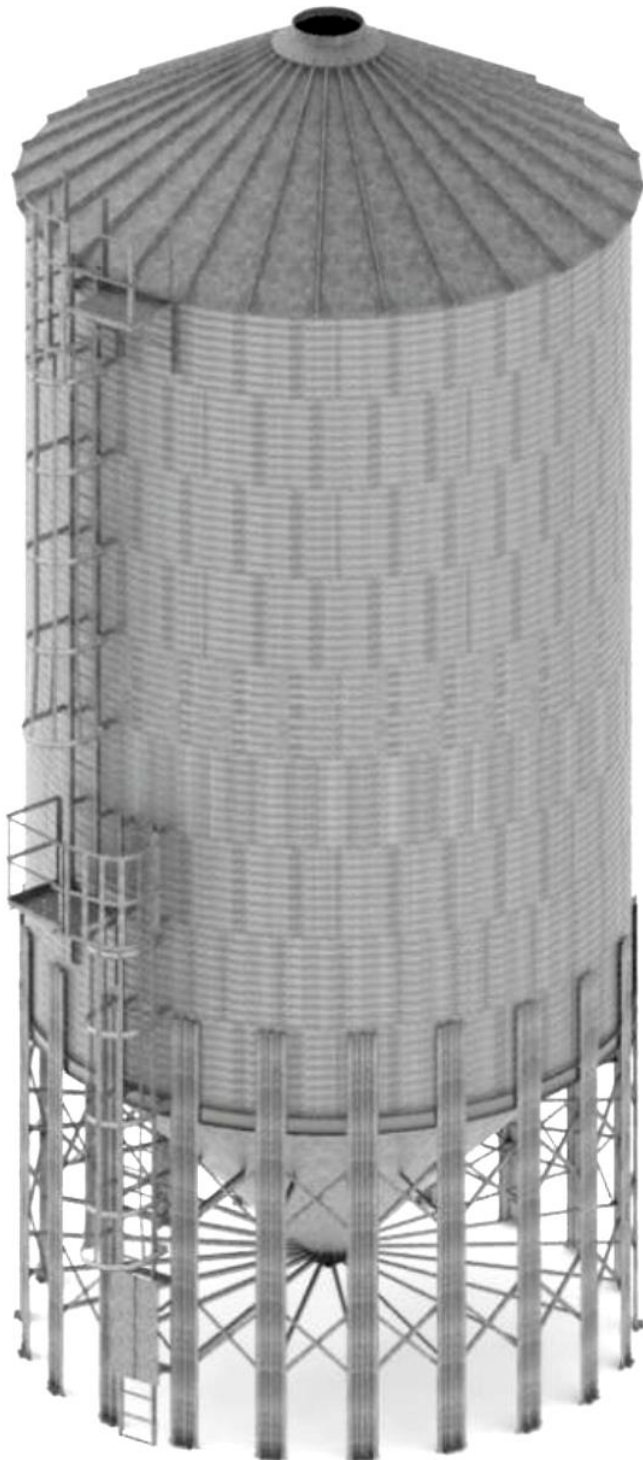


MEDIUM DUTY HOPPER TANK

INSTRUCTION MANUAL



INSTALLATION MANUAL

P/N 361033



Trusted. Tested. True.

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WARNING AND SAFETY STATEMENT



This symbol means “Attention! Be Alert! Your Safety Is at Stake!”

The safety alert symbol identifies safety messages for your storage structure. Ensure you are familiar with the messages identified for you with the safety alert symbol. When you see this symbol, be alert to the possibility of serious injury or death. Follow the safety instructions given in this manual and for your hopper tank.

Danger: Indicates an imminently hazardous situation which, if not avoided, will result in death or serious bodily injury.

Warning: Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury and/or property damage.

Caution: Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.



WARNING: Improper installation, adjustment, alteration, service or maintenance can cause property damage, injury or death. Read the installation, operating and maintenance instructions thoroughly before installing or servicing this equipment.

This manual is for the design, installation, operation and maintenance of Chief Grain Medium Duty Hopper Tanks effective 4/1/2020.

© Chief Industries, Inc.
4400 East 39th Street · PO Box 848
Kearney, NE 68847
Phone 800.359.7600

For more information about Chief Industries, Inc. and additional products or services please visit our website

www.agri.Chiefind.com

MANUAL REVISIONS

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STANDARD LIMITED WARRANTY

Chief Grain Storage Products

1. **Definitions.** The following terms, when they appear in the body of this Standard Limited Warranty for Grain Bin Products in initial capital letters shall have the meaning set forth below:
 - A. Accepted Purchase Order shall mean the Purchase Order identified below.
 - B. Chief shall mean Chief Agri/Industrial, a division of Chief Industries, Inc.
 - C. Original Owner shall mean the original owner identified below.
 - D. Product shall mean the Agri/Industrial Equipment as described in the Accepted Purchase Order.
 - E. Reseller shall mean the authorized Chief Agri/Industrial Equipment dealer identified below.

2. **Limited Product Warranty.** Upon and subject to the terms and conditions set forth below, Chief hereby warrants to the Reseller and, if different, the Original Owner as follows:
 - A. All new Products delivered to the Reseller or the Original Owner by Chief pursuant to the Accepted Purchase Order will, when delivered, conform to the specifications set forth in the Accepted Purchase Order;
 - B. All new Products delivered pursuant to the Accepted Purchase Order will, in normal use and service, be free from defects in materials or workmanship; and
 - C. Upon delivery, Chief will convey good and marketable title to the Products, free and clear of any liens or encumbrances except for, where applicable, a purchase money security interest in favor of Chief.

3. **Duration of Warranty and Notice Requirements.** Subject to the Exceptions, Exclusions and Limitations set forth below, the warranties set forth in Section 2 above shall apply to all covered non-conforming conditions that are discovered within the first sixty (60) months following delivery of the Product to the carrier designated by the Reseller and/or the Original Owner at Chief's manufacturing facility in Kearney, Nebraska (the "Warranty Period") and are reported to Chief as provided in Section 4 below within thirty (30) days following discover (a "Notice Period").

4. **Notice Procedure.** In order to make a valid warranty claim, the Reseller and/or the Original Owner must provide Chief with a written notice of any nonconforming condition discovered during the Warranty Period within the applicable Notice Period specified in Section 3 above. Said notice must be in writing; be addressed to Chief Industries, Inc., Agri/Industrial Division, Customer Service Department, P.O. Box 848, Kearney, NE 68848; and contain the following:
 - A. The Customer's name and address
 - B. The Reseller's name and address
 - C. The make and model of the Product in question
 - D. The current location of the Product
 - E. A brief description of the problem with respect to which warranty coverage is claimed
 - F. The date on which the Product was purchased

5. **Exceptions and Exclusions.** Anything herein to the contrary notwithstanding, the warranties set forth in Section 2 above do NOT cover any of the following, each of which are hereby expressly excluded:
- A. Defects that are not discovered during the applicable Warranty Period
 - B. Defects that are not reported to the Chief Agri/Industrial Division Customer Service Department in conformity with the notice procedure set forth in Section 4 above within the applicable Notice Period specified in Section 3
 - C. Any used or pre-owned Products
 - D. Any Chief manufactured parts that are not furnished as a part of the Accepted Purchase Order
 - E. Any fixtures, equipment, materials, supplies, accessories, parts or components that have been furnished by Chief but are manufactured by a third party
 - F. Any Products which have been removed from the location at which they were originally installed
 - G. Any defect, loss, damage, cost or expense incurred by the Reseller or the Original Owner to the extent the same arise out of, relate to or result, in whole or in part, from any one or more of the following:
 - I. Usual and customary deterioration, wear or tear resulting from normal use, service and exposure;
 - II. Theft, vandalism, accident, war, insurrection, fire or other casualty;
 - III. Any damage, shortages or missing parts which result during shipping or are otherwise caused by the Reseller, the Original Owner and/or any third party;
 - IV. Exposure to marine environments, including frequent or sustained salt or fresh water spray;
 - V. Exposure to corrosive, chemical, ash, smoke, fumes, or the like generated or released either within or outside of the structure on which the Product is installed, regardless of whether or not such facilities are owned or operated by the Reseller, the Original Owner or an unrelated third party;
 - VI. Exposure to or contact with animals, animal waste and/or decomposition;
 - VII. The effect or influence the Product may have on surrounding structures, including, without limitation, any loss, damage or expense caused by drifting snow;
 - VIII. Any Product or portion thereof that has been altered, modified or repaired by the Reseller, the Original Owner or any third party without Chief's prior written consent;
 - IX. Any Product or portion thereof that has been attached to any adjacent structure without Chief's prior written approval;
 - X. Any Product to which any fixtures, equipment, accessories, materials, parts or components which were not provided as a part of the original Accepted Purchase Order have been attached without Chief's prior written approval;
 - XI. The failure on the part of the Reseller, the Original Owner or its or their third party contractors to satisfy the requirements of all applicable statutes, laws, ordinances rules, regulations and codes, (including zoning laws and/or building codes);
 - XII. The use of the Product for any purpose other than the purpose for which it was designed; and/or
 - XIII. The failure of the Reseller, the Original Owner and/or any third party to:

- a) Properly handle, transport and/or store the Product or any component part thereof;
 - b) Properly select and prepare a site that is adequate for the installation and/or operation of the Product or any component part thereof;
 - c) Properly design and construct a foundation that is adequate for the installation and/or operation of the Product or any component part thereof;
 - d) Properly set up, erect, construct or install the Product and/or any component part thereof; and/or
 - e) Properly operate, use, service and/or maintain the Product and each component part thereof.
6. **Resolution of Warranty Claims.** In the event any nonconforming condition is discovered within the Warranty Period and Chief is notified of a warranty claim as required by Section 4 prior to the end of the applicable Notice Period set forth in Section 3 above, Chief shall, with the full cooperation of the Reseller and the Original Owner, immediately undertake an investigation of such claim. To the extent Chief shall determine, in its reasonable discretion, that the warranty claim is covered by the foregoing Limited Product Warranty, the following shall apply:
- A. Warranty Claims with Respect to Covered Non-Conforming Conditions Discovered Within the First Three Hundred Sixty-Five (365) Days and Reported to Chief Within Thirty (30) Days of Discovery. In the case of a warranty claim which relates to a covered non-conforming condition that is discovered during the first three hundred sixty five (365) days of the Warranty Period and is reported to Chief as required by Section 4 within thirty (30) days of discovery as required by Section 3, Chief will, as Chief's sole and exclusive obligation to the Reseller and the Original Owner, and as their sole and exclusive remedy, work in cooperation with the Reseller and the Original Owner to correct such non-conforming condition, and in connection therewith, Chief will ship any required replacement parts to the "ship to address" set forth in the Accepted Purchase Order FOB Chief's facilities in Kearney, Nebraska, and will either provide the labor or reimburse the Reseller or the Original Owner, as may be appropriate in the circumstances, for any out of pocket expense the Original Owner may reasonably and necessarily incur for the labor that is required to correct such non-conforming condition, provided that if work is to be performed by the Reseller or a third party contractor, Chief may require at least two competitive bids to perform the labor required to repair or correct the defect and reserves the right to reject all bids and obtain additional bids. Upon acceptance of a bid by Chief, Chief will authorize the necessary repairs.
 - B. **All Other Warranty Claims.** Except as is otherwise provided in subsection 6A above, in the case of all other warranty claims which relate to covered non-conforming conditions that are discovered during the Warranty Period and are reported to Chief as required by Section 4 within thirty (30) days following discovery, Chief will, as Chief's sole and exclusive obligation to the Reseller and the Original Owner, and as the Reseller's and the Original Owner's sole and exclusive remedy, ship any required replacement parts to the Original Owner at the "ship to address" specified in the Accepted Purchase Order FOB Chief's facilities in Kearney, Nebraska; and **in such event, Chief shall have no responsibility or liability to either the Reseller or the Original Owner for the cost of any labor required to repair or correct the defect.**

7. **Warranty Not Transferable.** This Warranty applies only to the Reseller and the Original Owner and is **not transferable**. As such, this Warranty does **NOT** cover any Product that is sold or otherwise transferred to any third party following its delivery to the Original Owner.

8. **Limitation on Warranties, Liabilities and Damages.** The Reseller and the Original Owner expressly agree that the allocation of the risk, liability, loss, damage, cost and expense arising from any Product that does not conform to the limited warranty given in Section 2 above are fair and reasonable and acknowledge that such allocation was expressly negotiated by the parties and was reflected in the Purchase Price of the Product. Accordingly, the Reseller and the Original Owner expressly agree as follows:
 - A. **Disclaimer of Implied Warranties.** EXCEPT AS IS OTHERWISE EXPRESSLY SET FORTH HEREIN, CHIEF MAKES NO OTHER REPRESENTATIONS OR WARRANTIES OF ANY KIND WHATSOEVER, WHETHER EXPRESS OR IMPLIED, BY OPERATION OF LAW, COURSE OF DEALING OR OTHERWISE WITH RESPECT TO THE PRODUCT, ANY COMPONENT PART THEREOF OR ANY OTHER GOODS OR SERVICES THAT CHIEF MANUFACTURES, FABRICATES, PRODUCES, SELLS OR PROVIDES TO THE DEALER OR THE ORIGINAL OWNER PURSUANT TO THE TERMS OF ANY ACCEPTED PURCHASE ORDER, INCLUDING WITHOUT LIMITATION ANY REPRESENTATION OR WARRANTY WITH RESPECT TO DESIGN, CONDITION, MERCHANTABILITY OR FITNESS OF THE PRODUCT OR ANY OTHER GOODS OR SERVICES FOR ANY PARTICULAR PURPOSE OR USE.
 - B. **Limitation on Liability.** EXCEPT AS IS OTHERWISE EXPRESSLY SET FORTH IN SECTION 6 ABOVE, CHIEF'S LIABILITY TO THE DEALER AND/OR THE ORIGINAL OWNER WITH RESPECT TO ANY DEFECTS IN ANY PRODUCTS OR FOR ANY OTHER GOODS OR SERVICES WHICH DO NOT CONFORM TO THE WARRANTIES SET FORTH ABOVE SHALL NOT, IN ANY EVENT, EXCEED THE ACTUAL COST OF SUCH NON-CONFORMING PRODUCT, GOODS OR SERVICES AS DETERMINED PURSUANT TO THE ACCEPTED PURCHASE ORDER; AND
 - C. **Limitation on the Nature of Damages.** EXCEPT AS EXPRESSLY PROVIDED IN SECTION 6 ABOVE, CHIEF SHALL NOT, UNDER ANY CIRCUMSTANCES, BE LIABLE TO THE DEALER, THE ORIGINAL OWNER OR ANY THIRD PARTY FOR ATTORNEY FEES COURT COSTS OR ANY OTHER SPECIAL, INDIRECT, INCIDENTAL, CONSEQUENTIAL, LIQUIDATED OR PUNITIVE DAMAGES OF ANY NAME, NATURE OR DESCRIPTION AS A RESULT OF THE FAILURE OF ANY PRODUCT OR ANY OTHER GOODS OR SERVICES PURCHASED BY THE DEALER OR THE ORIGINAL OWNER FROM CHIEF PURSUANT TO THE ACCEPTED PURCHASE ORDER TO CONFORM TO THE LIMITED WARRANTIES SET FORTH IN SECTION 2 ABOVE.

9. **Applicable Law.** This Limited Product Warranty has been issued, accepted and entered into by the Reseller, the Original Owner and Chief in the State of Nebraska and shall be governed by, and construed in accordance with, the internal laws of the State of Nebraska. Any legal action or proceeding with respect to any goods or services furnished to the Original Owner by Chief in connection herewith, or any document related hereto shall be brought only in the district courts of Nebraska, or the United States District Court for the District of Nebraska, and, by execution and delivery of this Limited Product Warranty, the undersigned Original Owner hereby accept

for themselves and with respect to their property, generally and unconditionally, the jurisdiction of the aforesaid courts. Further, the undersigned Original Owner hereby irrevocably waives any objection, including, without limitation, any forum non conveniens, which it may now or hereafter have to the bringing of such action or proceeding in such respective jurisdictions.

4843-5948-9057, v. 1

Warning



Water Sensitive Materials - Read this notice carefully

Items must be inspected and carrier advised immediately if damage is noted. White rust is a corrosion attack of the zinc coating resulting from the presence of water. Anywhere rust is found will result in a reduction of the life of the galvanized steel.

If water has entered a bundle or if condensation has formed between items, the package must be opened, the items separated and all surfaces dried.

If items are to be installed within 10 days:

Store bundled items off the ground high enough to allow air circulation beneath bundle and to prevent water from entering. Store 1 end at least 8" (20.32cm) higher than the opposite end. Support long bundles in the center. Prevent rain from entering the bundle by covering with a tarpaulin, making provision for air circulation between the draped edges and the ground.

DO NOT wrap in plastic.

If items are not to be installed within 10 days:

Provide inside dry storage. Storage beyond 6 months is not recommended. If white rust is apparent upon receipt of shipment, notify Chief immediately. Damage to items, resulting from improper storage, is the responsibility of the receiver.

BEFORE YOU BEGIN

Read this manual thoroughly before using this grain storage unit. Keep this manual in a location for quick access and reference.

The installation of the Medium Duty Hopper Tank may require field fastening for some components. When using a cutting torch or welding galvanized material, the possibility of developing toxic fumes will exist. Provide adequate ventilation and respiratory protection when using this type of equipment during installation.

Special Service Note: If you are unable to remedy any service problem after thoroughly studying this manual, contact the dealer from whom you purchased the unit. Your dealer is your first line of service. The following information is required for service:

1. Bin Model Number: _____
2. Diameter & Eave Height: _____
3. Grain Depth: _____
4. Type of Grain: _____
5. Dealer Purchased from: _____
6. Dealer Address & Phone: _____
7. Date Purchased: _____
8. Service Contractor:
 - a. Name: _____
 - b. Address: _____
 - c. Phone: _____

INTRODUCTION

Thank you for purchasing a Chief grain bin. Proper installation and operation will ensure you the best overall experience with your storage unit and guarantee smooth operation.

This proprietary information is loaned with the expressed agreement that the drawings and information therein contained are the property of Chief Industries, Inc. and will not be reproduced, copied, or otherwise disposed of, directly or indirectly, and will not be used in whole or in part to assist in making or to furnish any information for the making of drawings, prints or other reproduction hereof, or for the making of additional products or equipment except upon written permission of Chief Industries, Inc. first obtained and specific as to each case. The acceptance of this material will be construed as an acceptance of the foregoing agreement.

The technical data contained herein is the most recent available at the time of publication and is subject to modification without notice. Chief Industries, Inc. reserves the right to modify the construction and method of operation of their products at any time without any obligation on their part to modify any equipment previously sold and deliver

SAFETY AND PRECAUTIONS

Your safety and the safety of others is a primary concern to Chief Industries, Inc. This manual was written to assist in the safe installation and operation of the grain bin.

It is your responsibility as the owner, builder, operator, or supervisor to know what specific requirements, precautions and hazards exist and to make these known to all personnel working with equipment or on the jobsite so that they can observe any necessary safety precautions.

All personnel, including the installation crew, must read and understand the information contained in this manual before starting construction. Chief Industries, Inc. is not responsible or liable for the misuse of equipment or operation of personnel or equipment in an unsafe manner.

Chief Industries, Inc. assumes no liability with respect to proper construction and inspection, assembly, or use of its products established under applicable laws, all of which is the sole responsibility of the purchaser and those authorized for the installation.

Follow all local and federal safety laws and regulations. Verify that all equipment and personnel conform to any applicable jurisdiction regulations.

WORK AREA SAFETY STATEMENT

To ensure the safety of all individuals in the work area, only authorized and trained persons shall install, and maintain the Medium Duty Hopper Tank assembly.

Under no circumstances should unauthorized individuals be allowed to trespass or be present in the work area.

It shall be the duty of all operators to ensure that the work area is clean, organized and kept free of all debris and tools that might cause an accidental tripping or falling hazard.

Special care should be taken when working from unsafe heights. Common sense dictates that when conditions such as rain or wind prohibit the safe use of equipment, the installation be discontinued.

Chief Industries, Inc. strongly recommends that equipment meeting the current specifications be used, whether the individual operator is required by law to do so or not. Proper climbing equipment and a secured safety harness should be used at all times when performing operations work, installation or maintenance.

Field modifications without the authorization of the manufacturer may present unknown dangers to the operator and must be avoided.

AUXILIARY EQUIPMENT SAFETY

You may decide to purchase and install “auxiliary equipment” made by other manufacturers. Chief Industries, Inc. has no control over the design and manufacture of this equipment. In view of this, at a minimum, we suggest you do the following:

1. Obtain, read and understand the instructions and safety cautions of the auxiliary equipment manufacturer. Be certain that all equipment is installed in agreement with those instructions.
2. Check with Chief Industries, Inc. to verify that your system is designed to support any additional loads supplied by the auxiliary equipment.
3. Obtain any applicable safety decals from the manufacturer and make certain they are displayed in a visible location.
4. Make certain that all electrical equipment is properly installed and grounded by a qualified electrician.
5. Check availability and operation of electrical lock out and emergency stop systems.
6. Be certain that all guards and shields are securely in place.
7. Store all operation / maintenance manuals in a safe place for future use.

Grain Storage Safety



Grain Storage Safety

**DANGER**

		
Rotating flighting will kill or dismember.	Flowing material will trap and suffocate.	Crusted material will collapse and suffocate.

**Keep clear of all augers.
DO NOT ENTER this bin!**

If you must enter the bin:

1. Shut off and lock out all power.
2. Use a safety harness and safety line.
3. Station another person outside the bin.
4. Avoid the center of the bin.
5. Wear proper breathing equipment or respirator.

Failure to heed these warnings will result in serious injury or death.

DC-GBC-1A

GENERAL DESIGN INFORMATION

All Chief grain bins are designed for storage and handling of the following densities of grain:

- 49.5 PCF (793 kg/m³) free flowing grain
- 52.5 PCF (841 kg/m³) compacted grain @ 6%

Note: Grain fill level shall not exceed a height of 1.0" (2.54cm) below the roof eave.

Storage of products other than grain, products heavier than 49.5 PCF (793 kg/m³), products having unusual flow characteristics, or products with unusual corrosive properties must be approved by Chief Industries Inc. engineering department prior to quoting. Storage of non-flowing products such as soybean meal or meat scraps in a standard designed bin will void the warranty.

For the grain bin, each individual sidewall ring has been designed to accommodate the vertical and horizontal wall loads imposed by the stored grain. Sidewall sheeting gauge and design strength for each ring is individually analyzed for all bin sizes. Sidewall stiffener gauges and design strength is individually determined for the full sidewall height range. All steel materials are purchased in accordance with the applicable ASTM Standard.

All bolted connections are designed using high strength bolts which meet the specifications of the applicable ASTM or SAE standard.

All grain bins must be filled uniformly at the center and unloaded through the center discharge only, until grain no longer flows by gravity. Grain bins filled or emptied off-center will void the warranty; with the exception of approved side draw unload systems.

All galvanized steel used for storage and drying bins conform to ASTM specification A653 with the galvanized coating to ASTM specification A924.

Galvanized coating type G-115 specifies galvanization of 1.15 oz/ft² (Z350; 350 gm/m²) total for both sides in the following materials:

- 22 Gage thickness & lighter = Commercial Steel Type A, 33ksi min yield (grade 230)
- 18 & 20 Gage thickness = Structural Steel Grade 40, Class I; 40ksi min yield (grade 275)
- 17 Gage thickness & heavier = Structural Steel Grade 55, Class I; 55ksi min yield (grade 340)

ROOF DESIGN INFORMATION

All Chief Industries grain bin roof structures are designed to withstand normally anticipated environmental and service conditions per the specified UBC design code.

Important Note: Roof peak loads in excess of the specified rating can cause structural damage and will void all warranties.

Important Note: Do not allow excessive snow and ice to accumulate on any portion of the roof, potentially causing excessive roof loading and structural damage.

Important Note: Roof peak overloading can cause structural damage to the bin roof. Roof loads in excess of the specified peak rating will void the warranty.

MODEL NUMBER INTERPRETATION

The model nomenclature distinguishes the size and application of the storage system. This information includes a designation of the applicable structure diameter, eave height, roof design and design criteria utilized.

The definition of the Medium Duty Model Nomenclature is as follows:

Example: MDHT05-06 30DEG V-RIB 45DEG HPR 16IN DISC

MDHT = Medium Duty Hopper Tank

05 = Tank Diameter of 5 sheets

-06 = Tank height of 6 sheets

30DEG = 30° Roof pitch

V-Rib = Designates a Chief's V-Rib Roof Design

45DEG HPR = Designates a 45° Sloped Hopper

(60° Hopper available in 05 diameter tanks ONLY)

16IN DISC = Designates a 16" Standard Discharge Collar

ACCESSORY EQUIPMENT

Accessory equipment can be installed with the Medium Duty Hopper Tank; however certain limitations and special considerations must be followed in order to maintain the warranty.

All accessory equipment should be installed and maintained in accordance with each individual supplier's installation and operation instructions. However, if any sidewall penetrations or other modifications to the Chief standard design are required, contact Chief for special recommendations.

Note: Do not modify the storage structure design without Chief approval. It is the responsibility of the general contractor to verify that all equipment is properly installed and that the equipment is compatible with the intended use. A qualified electrician should be contracted to complete all electrical wiring and servicing.

GENERAL CONTRACTOR RESPONSIBILITIES

It is the responsibility of the general contractor to verify that the complete storage structure system is constructed in a quality workmanship manner and that all equipment is installed per the respective manufacturer's instructions. This includes the following:

- Bin
- Foundation
- Base sealing
- Grain transport equipment
- Aeration equipment
- Accessory equipment

In addition, the general contractor is responsible for the fitness of use of any system which he constructs. All accessory equipment incorporated into the system, from each respective equipment manufacturer, should be approved for the intended use.

FIELD MODIFICATIONS AND INSTALLATION DEFECTS

Chief Industries, Inc. assumes no responsibility for field modifications or installation defects which result in structural damage or storage quality problems. If any field modifications are necessary which are not specifically covered by the contents of the installation manual, contact Chief for approval. Any unauthorized modification or installation defect which affects the structural integrity of the grain bin will void the warranty.

CONCRETE DESIGN AND CONSTRUCTION

The suggested foundation designs shown in the installation manuals are simple models to assist with the assembly and construction of the hopper bin apparatus. A professional engineer will need to be retained by the installation contractor to design the foundation and floor slab accordingly.

All suggested foundation designs must be approved by a licensed engineer in order to meet local governing building codes and local soil and weather conditions. Wall loads and floor pressure for Chief Medium Duty Hopper Tanks are available from Chief Industries, Inc., upon request.

Concrete and reinforcing bar requirements must be determined by a certified professional engineer. The design must consider soil bearing capacity, soil consolidation, footing requirements, tunnel requirements and the interaction of all foundation components under loaded condition. Non-uniform settlement of the foundation can cause severe structural damage to the storage structure and foundation. An improperly designed or constructed foundation will void all aspects of the warranty. It is the responsibility of the general contractor to verify that an adequate foundation is provided for the grain storage unit.

PRE-ASSEMBLY

Chief does not assume any responsibility from parts damaged due to faulty or improper installation procedures.

CHECKING SHIPMENT

For your convenience steel components will be color coded, individual items labeled with an appropriate part number and packages labeled. Hardware, including bolts, nuts, screws and other small clips or brackets may be divided into smaller packages for ease of use and identification.

Check your shipment at the time of delivery against the packing list provided with the shipment. If any items are missing or any damaged material is evident, note such shortage or damage on the freight bill before you sign the shipment paperwork.

Claims of shortages will not be honored after 30 days from receipt of shipment. Parts that are missing or damaged are the responsibility of the delivering carrier, not the manufacturer or dealer.

It is advisable to reorder damaged or missing parts immediately so that there will be no delay in the bin installation. After receiving the invoice for the reordered material, file a claim with the delivering carrier immediately.

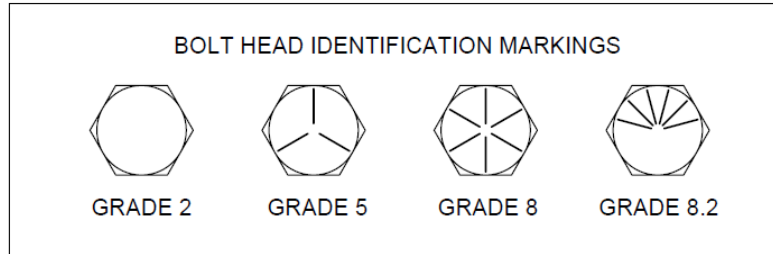
KNOW YOUR COLOR CODES

Chief grain bin components are color coded based upon gauge thickness.

GAUGE THICKNESS	COLOR CODE
20	WHITE
18	ORANGE
17	LIGHT BLUE
16	GREEN
14	YELLOW
14 TRANSITION	YELLOW/BLACK
13	BROWN
12	DARK BLUE
11	PINK
10	BLACK
9	LIGHT GREEN
8	RED

HARDWARE TORQUE

All components are assembled using SAE grade bolts with corresponding washers and nuts. Bolts are marked with radial lines on the bolt head as shown in the following illustration.

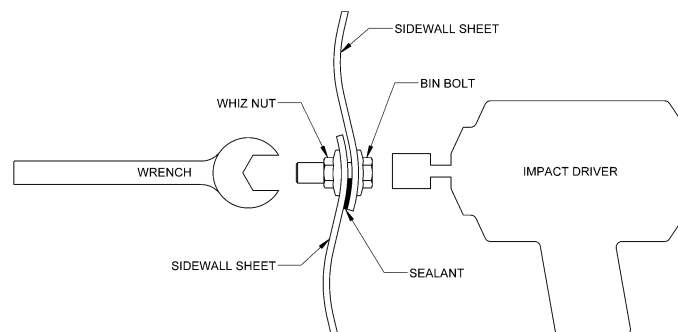


Do not substitute any other bolt type or grade. Use only the bolts supplied by Chief. The substitution of bolts from other sources is not permitted and will void the warranty.

When installing hardware, the minimum and maximum torque values shown below must be followed. All hardware must seat tight against the corresponding bin component.

Bolt Diameter	Minimum Torque	Maximum Torque
5/16"	22 ft.-lbs.	28 ft.-lbs.
7/16"	60 ft.-lbs.	75 ft.-lbs.

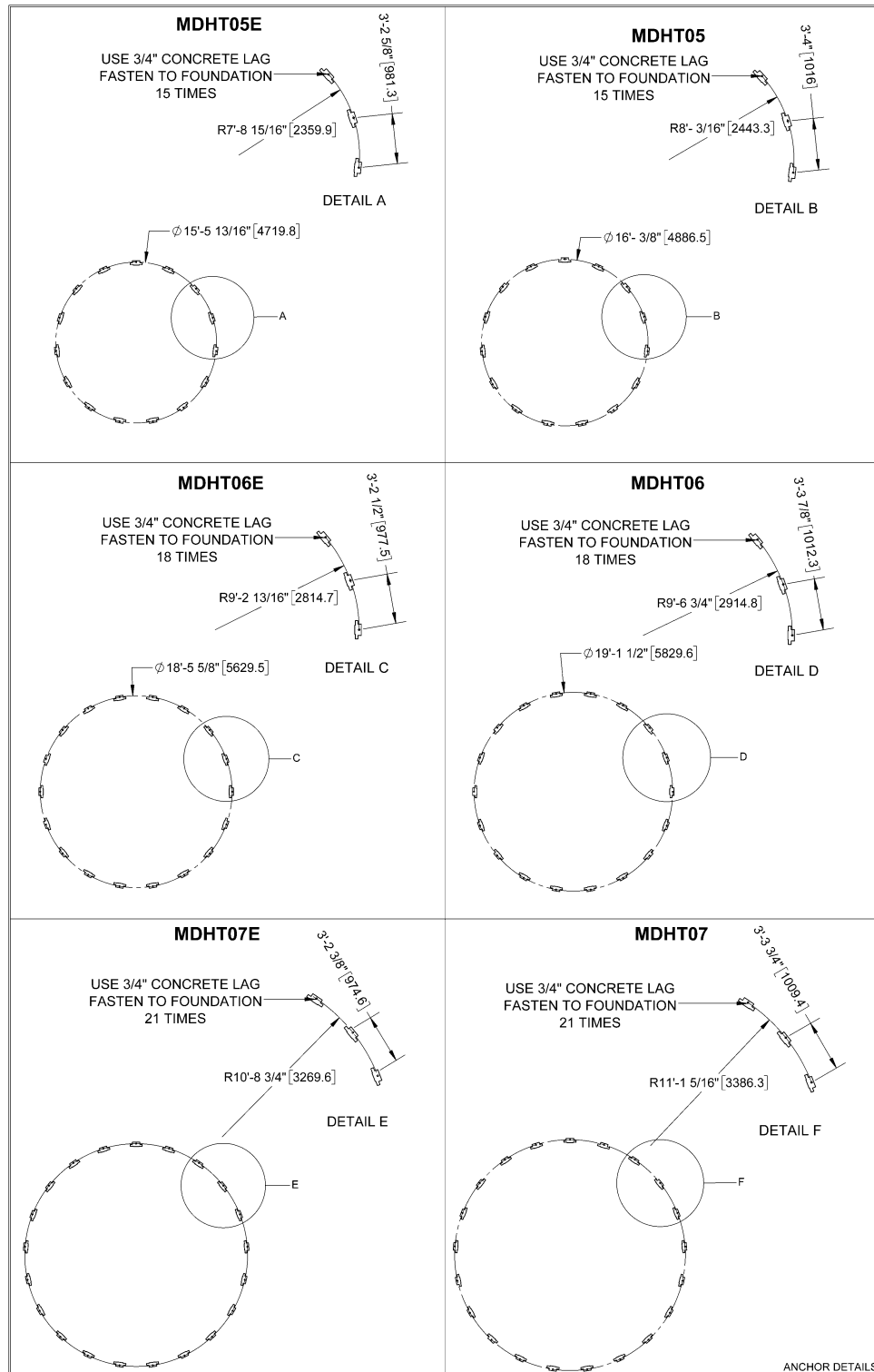
Please note the following wrench / socket size to be used on the corresponding hardware:



SWS TO SWS W/ TOOLS

Bolt Size	Head Size	Nut Size
5/16"	1/2" wrench	1/2" wrench
7/16"	5/8" wrench	11/16" wrench
1/2"	3/4" wrench	3/4" wrench
5/8"	15/16" wrench	15/16" wrench

LEG ANCHOR DETAILS



MEDIUM DUTY HOPPER TANK DIMENSION & CAPACITY

NOTE:

A = PEAK HEIGHT

B = EAVE HEIGHT

C = HOPPER HEIGHT

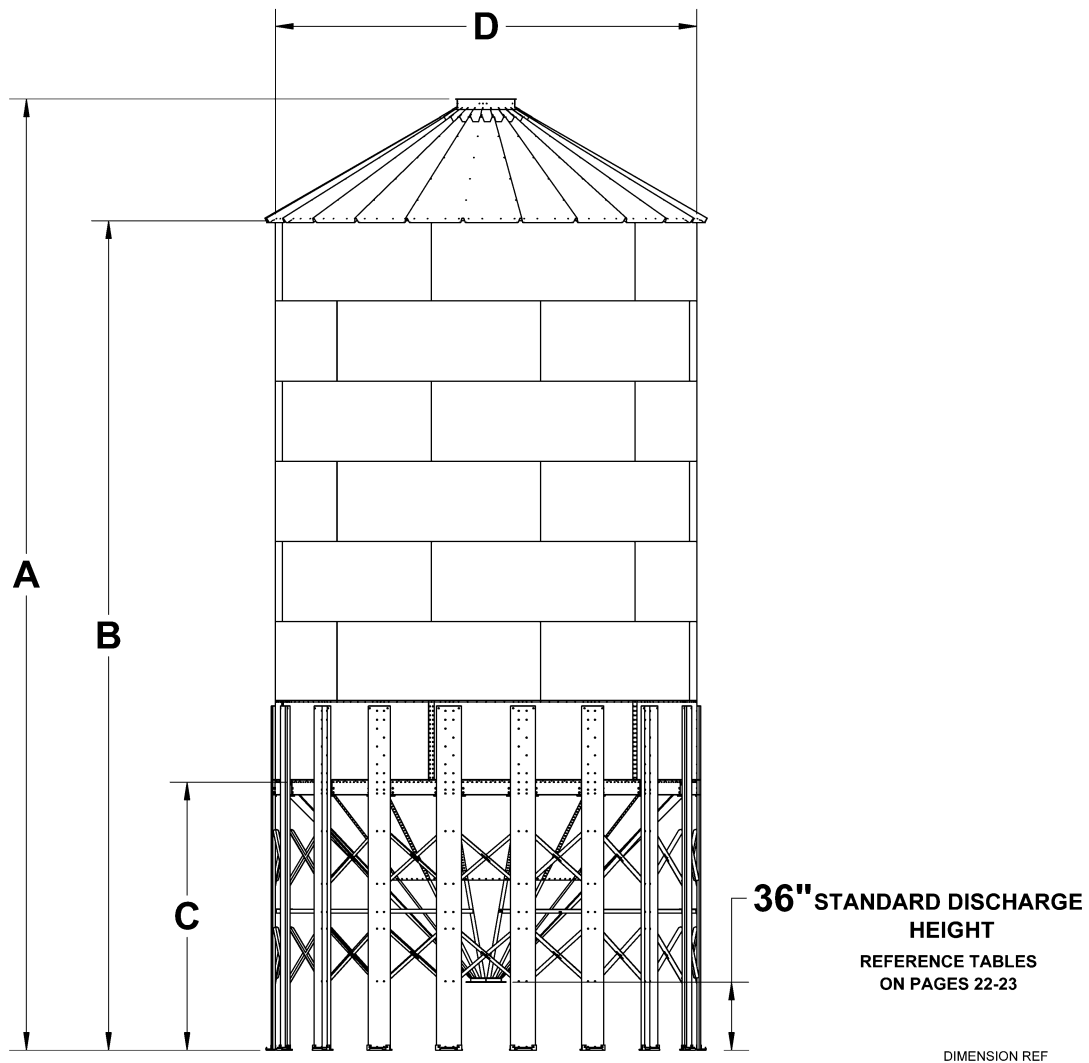
D = TANK DIAMETER

PEAK HEIGHT = BASE OF LEG TO TOP OF ROOF RING

EAVE HEIGHT = BASE OF LEG TO TOP OF RING #1

HOPPER HEIGHT = BASE OF LEG TO HOPPER PANEL CONNECTION

(ALL DIMENSIONS ARE APPROXIMATE)



GENERAL DIMENSION CHARTS

MDHT05 45° AND 60° HOPPERS

TANK SIZE		A	B	C	D
MDHT05-02	45DEG	21'-4"	16'-11"	10'-3"	15'-6"
MDHT05-03	45DEG	24'-10"	20'-6"	10'-3"	15'-6"
MDHT05-04	45DEG	28'-4"	24'	10'-3"	15'-6"
MDHT05-05	45DEG	31'-11"	27'-7"	10'-3"	15'-6"
MDHT05-06	45DEG	35'-5"	31'-1"	10'-3"	15'-6"
MDHT05-07	45DEG	39'	34'-8"	10'-3"	15'-6"
MDHT05-08	45DEG	42'-11"	38'-7"	10'-3"	15'-6"
MDHT05-09	45DEG	46'-5"	42'-1"	10'-3"	15'-6"
MDHT05E-02	45DEG	20'-10"	16'-8"	10'-0"	15'
MDHT05E-03	45DEG	24'-5"	20'-3"	10'-0"	15'
MDHT05E-04	45DEG	27'-11"	23'-9"	10'-0"	15'
MDHT05E-05	45DEG	31'-6"	27'-3"	10'-0"	15'
MDHT05E-06	45DEG	35'	30'-10"	10'-0"	15'
MDHT05E-07	45DEG	38'-7"	34'-4"	10'-0"	15'
MDHT05E-08	45DEG	42'-6"	38'-3"	10'-0"	15'
MDHT05E-09	45DEG	46'	41'-10"	10'-0"	15'

TANK SIZE		A	B	C	D
MDHT05-02	60 DEG	26'-6"	22'-2"	15'-5"	15'-6"
MDHT05-03	60 DEG	30'	25'-8"	15'-5"	15'-6"
MDHT05-04	60 DEG	33'-7"	29'-2"	15'-5"	15'-6"
MDHT05-05	60 DEG	37'-1"	32'-9"	15'-5"	15'-6"
MDHT05-06	60 DEG	40'-7"	36'-3"	15'-5"	15'-6"
MDHT05-07	60 DEG	44'-2"	39'-10"	15'-5"	15'-6"
MDHT05-08	60 DEG	48'-1"	43'-9"	15'-5"	15'-6"
MDHT05-09	60 DEG	51'-7"	47'-3"	15'-5"	15'-6"
MDHT05E-02	60 DEG	25'-10"	21'-8"	15'	15'
MDHT05E-03	60 DEG	29'-5"	25'-2"	15'	15'
MDHT05E-04	60 DEG	32'-11"	28'-9"	15'	15'
MDHT05E-05	60 DEG	36'-5"	32'-3"	15'	15'
MDHT05E-06	60 DEG	40'	35'-10"	15'	15'
MDHT05E-07	60 DEG	43'-6"	39'-4"	15'	15'
MDHT05E-08	60 DEG	47'-5"	43'-3"	15'	15'
MDHT05E-09	60 DEG	51'	46'-10"	15'	15'

MDHT06 & MDHT07 45° HOPPERS

TANK SIZE		A	B	C	D
MDHT06-02	45DEG	23'-9"	18'-6"	11'-10"	18'-7"
MDHT06-03	45DEG	27'-3"	22'	11'-10"	18'-7"
MDHT06-04	45DEG	30'-10"	25'-7"	11'-10"	18'-7"
MDHT06-05	45DEG	34'-4"	29'-1"	11'-10"	18'-7"
MDHT06-06	45DEG	37'-11"	32'-8"	11'-10"	18'-7"
MDHT06-07	45DEG	41'-10"	36'-7"	11'-10"	18'-7"
MDHT06-08	45DEG	45'-4"	40'-1"	11'-10"	18'-7"
MDHT06-09	45DEG	48'-11"	43'-8"	11'-10"	18'-7"
MDHT06E-02	45DEG	23'-3"	18'-2"	11'6"	17'11"
MDHT06E-03	45DEG	26'-9"	21'-8"	11'6"	17'11"
MDHT06E-04	45DEG	30'-4"	25'-3"	11'6"	17'11"
MDHT06E-05	45DEG	33'-10"	28'-9"	11'6"	17'11"
MDHT06E-06	45DEG	37'-4"	32'-4"	11'6"	17'11"
MDHT06E-07	45DEG	41'-4"	36'-3"	11'6"	17'11"
MDHT06E-08	45DEG	44'-10"	39'-9"	11'6"	17'11"
MDHT06E-09	45DEG	48'-4"	43'-4"	11'6"	17'11"

TANK SIZE		A	B	C	D
MDHT07-03	45DEG	29'-9"	23'-7"	13'-4"	21'-8"
MDHT07-04	45DEG	33'-3"	27'-1"	13'-4"	21'-8"
MDHT07-05	45DEG	36'-9"	30'-8"	13'-4"	21'-8"
MDHT07-06	45DEG	40'-4"	34'-2"	13'-4"	21'-8"
MDHT07-07	45DEG	44'-3"	38'-1"	13'-4"	21'-8"
MDHT07-08	45DEG	47'-9"	41'-8"	13'-4"	21'-8"
MDHT07-09	45DEG	51'-4"	45'-2"	13'-4"	21'-8"
MDHT07E-03	45DEG	29'-1"	23'-2"	13'	20'-11"
MDHT07E-04	45DEG	32'-8"	26'-9"	13'	20'-11"
MDHT07E-05	45DEG	36'-2"	30'-3"	13'	20'-11"
MDHT07E-06	45DEG	39'-9"	33'-10"	13'	20'-11"
MDHT07E-07	45DEG	43'-8"	37'-9"	13'	20'-11"
MDHT07E-08	45DEG	47'-2"	41'-3"	13'	20'-11"
MDHT07E-09	45DEG	50'-9"	44'-10"	13'	20'-11"

GENERAL CAPACITY CHARTS**MDHT05 45° AND 60° HOPPERS**

TANK SIZE	Hopper Angle	Cubic Feet (ft³)	U.S. Bushel	Cubic Meter (M³)
MDHT05-02	45DEG	2021	1625	57
MDHT05-03	45DEG	2686	2159	76
MDHT05-04	45DEG	3350	2693	95
MDHT05-05	45DEG	4014	3227	114
MDHT05-06	45DEG	4679	3761	132
MDHT05-07	45DEG	5343	4295	151
MDHT05-08	45DEG	6078	4886	172
MDHT05-09	45DEG	6742	5420	191
MDHT05E-02	45DEG	1855	1491	53
MDHT05E-03	45DEG	2474	1989	70
MDHT05E-04	45DEG	3092	2486	88
MDHT05E-05	45DEG	3710	2982	105
MDHT05E-06	45DEG	4329	3480	123
MDHT05E-07	45DEG	4947	3977	140
MDHT05E-08	45DEG	5630	4526	159
MDHT05E-09	45DEG	6248	5023	177
TANK SIZE	Hopper Angle	Cubic Feet (ft³)	U.S. Bushel	Cubic Meter (M³)
MDHT05-02	60 DEG	2374	1908	67
MDHT05-03	60 DEG	3038	2442	86
MDHT05-04	60 DEG	3703	2977	105
MDHT05-05	60 DEG	4367	3510	124
MDHT05-06	60 DEG	5032	4045	142
MDHT05-07	60 DEG	5696	4579	161
MDHT05-08	60 DEG	6432	5170	182
MDHT05-09	60 DEG	7097	5705	201
MDHT05E-02	60 DEG	2172	1746	62
MDHT05E-03	60 DEG	2791	2244	79
MDHT05E-04	60 DEG	3409	2740	97
MDHT05E-05	60 DEG	4027	3237	114
MDHT05E-06	60 DEG	4645	3734	132
MDHT05E-07	60 DEG	5263	4231	149
MDHT05E-08	60 DEG	5948	4781	168
MDHT05E-09	60 DEG	6566	5278	186

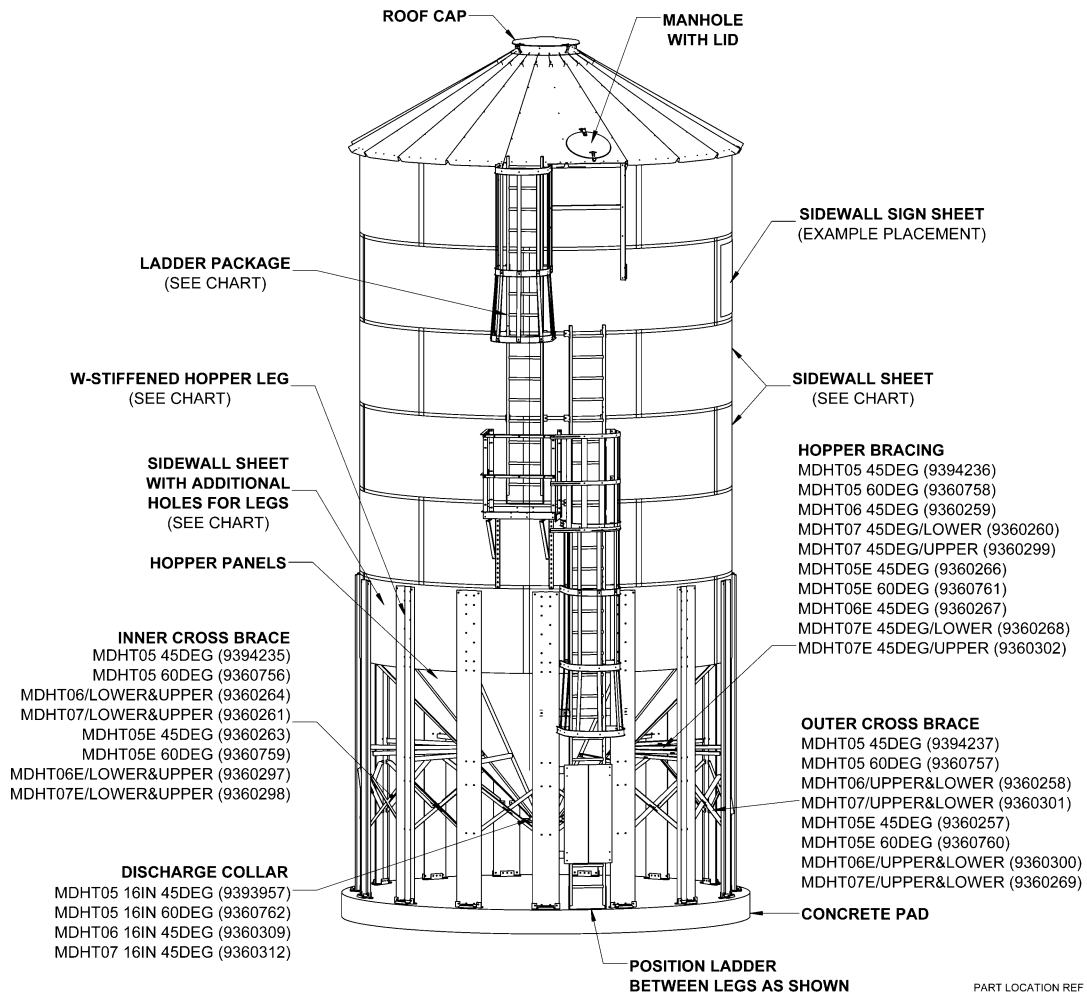
MDHT06 & MDHT07 45° HOPPERS

TANK SIZE	Hopper Angle	Cubic Feet (ft³)	U.S. Bushel	Cubic Meter (M³)
MDHT06-02	45DEG	3130	2516	89
MDHT06-03	45DEG	4087	3285	116
MDHT06-04	45DEG	5043	4054	143
MDHT06-05	45DEG	6001	4824	170
MDHT06-06	45DEG	6957	5592	197
MDHT06-07	45DEG	8016	6444	227
MDHT06-08	45DEG	8973	7213	254
MDHT06-09	45DEG	9929	7982	281
MDHT06E-02	45DEG	2870	2307	81
MDHT06E-03	45DEG	3760	3023	106
MDHT06E-04	45DEG	4650	3738	132
MDHT06E-05	45DEG	5540	4453	157
MDHT06E-06	45DEG	6430	5169	182
MDHT06E-07	45DEG	7415	5961	210
MDHT06E-08	45DEG	8306	6677	235
MDHT06E-09	45DEG	9196	7392	260

TANK SIZE	Hopper Angle	Cubic Feet (ft³)	U.S. Bushel	Cubic Meter (M³)
MDHT07-03	45DEG	5862	4712	166
MDHT07-04	45DEG	7165	5760	203
MDHT07-05	45DEG	8467	6806	240
MDHT07-06	45DEG	9769	7853	277
MDHT07-07	45DEG	11211	9012	317
MDHT07-08	45DEG	12513	10059	354
MDHT07-09	45DEG	13815	11105	391
MDHT07E-03	45DEG	5561	4470	157
MDHT07E-04	45DEG	6598	5304	187
MDHT07E-05	45DEG	7809	6277	221
MDHT07E-06	45DEG	9021	7252	255
MDHT07E-07	45DEG	10363	8330	293
MDHT07E-08	45DEG	11574	9304	328
MDHT07E-09	45DEG	12786	10278	362

LOCATION AND IDENTIFYING PARTS

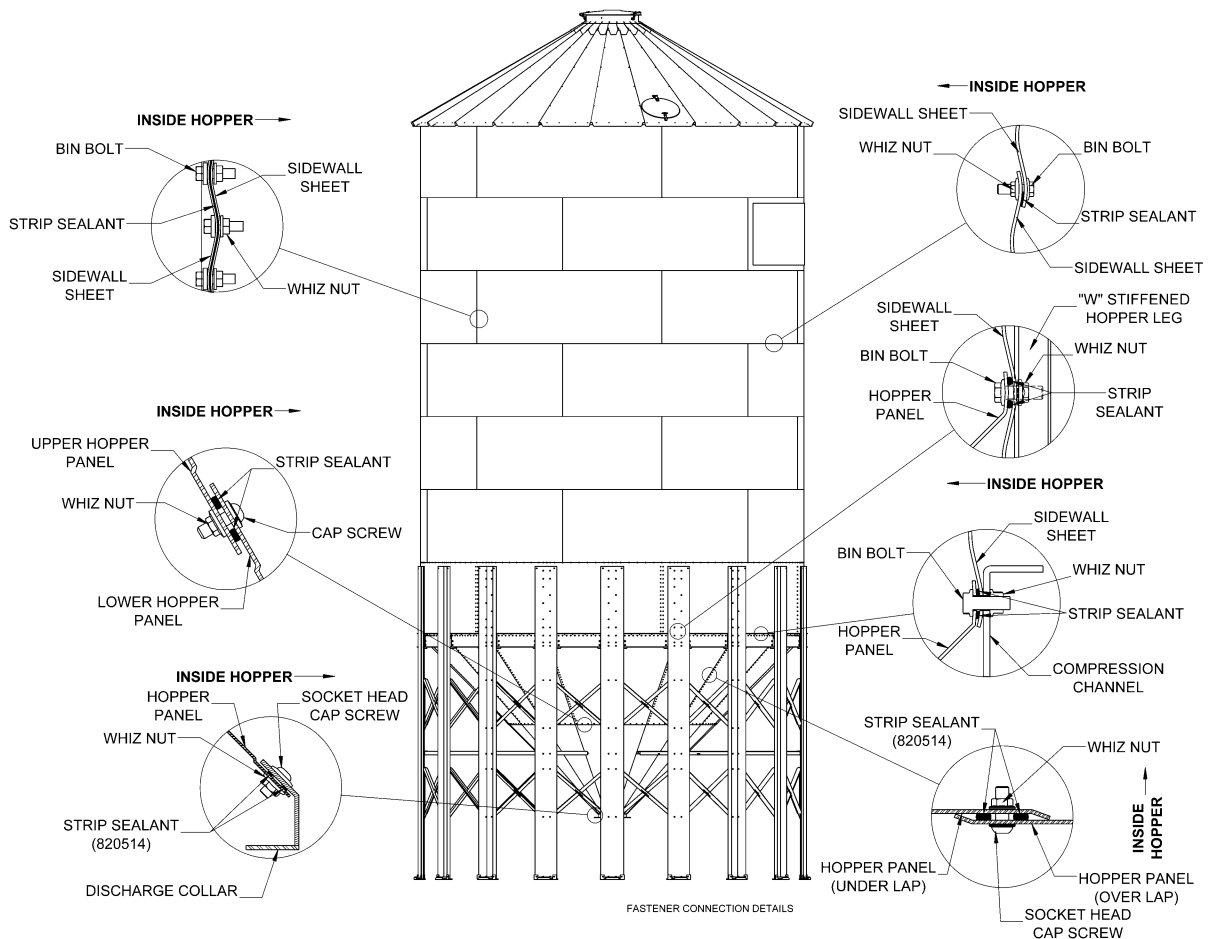
Below is a representation of a Medium Duty Hopper Tank with a generalized call outs to assist the installer with finding the location of critical parts during the assembly of the structure.



(Image of Typical Medium Duty Hopper Tank with Part Location References)

Important Note: This depiction is only meant to be used as a REFERENCE ILLUSTRATION of a Medium Duty Hopper Tank. The installer should carefully read through the entire installation manual to familiarize themselves with the procedures necessary to assembly the structure in the proper manner.

FASTENER CONNECTION DETAILS (HOPPER & TANK)



SUGGESTED EQUIPMENT

Chief recommends the following equipment and tools needed for the construction of the Medium Duty Hopper Tank assembly. Individual installations may vary.

- Impact wrenches and sockets
- Crescent wrenches
- Alignment punches
- Level
- Drill bits
- Metal saw
- Ladders
- End wrenches
- Vice grip pliers
- Rubber mallets
- Drills
- Screw guns
- Extension cords
- Telescopic crane

BEGINNING THE ASSEMBLY

Important Note: Prior to starting the installation it is very important to plan ahead by verifying the order and location of all bin components. This includes:

- Roofs, vents and manholes
- Ladders, platforms and stair components
- Hopper manway
- Sign Sheet location

A generalized assembly outline of the Medium Duty Hopper Tank would be in the following order:

1. Complete the layout plan for the Hopper Tank, including the construction of the foundation.
2. Locate all hardware, tools and materials necessary to complete the build.
3. Begin by assembling the top two rings of the sidewall stack.
4. Locate and assemble the roof to the top two rings of the sidewall stack.
5. Assemble remaining rings in order from the roof eave down (#3 then #4 then #5, etc.).
6. Install the Ladder Package to the sidewall stack as the sidewall assembly is being built.
7. Suspend the assembly and attach the hopper legs to the sidewalls.
8. Locate and attached the leg anchors to the foundation.
9. Affix the angled leg bracing to the hopper legs.
10. Install the hopper sheets and Discharge Collar.
11. Complete the Ladder Package assembly to the hopper legs.
12. Securely anchor legs to foundation.
13. Install any other equipment or added features.
14. Tighten all connections (legs, angle braces, ladder features).

SIDEWALL SHEET INSTALLATION

STEP 1. GETTING STARTED:

Locate all sidewall sheets and sort them according to color code sidewall stacking order (see SIDEWALL SHEET STACKING INFORMATION CHARTS). All sidewall sheets must be installed with the color code facing down towards the foundation. The color code is always located on the bottom edge of the sidewall sheet.

Important Note: Sidewall sheets for the top ring also have a gold color code.

Important Note: Sidewall sheets will be punched with either 3/8" holes or 1/2" holes. The 3/8" holes will require use of 5/16" x 1.00" Bin Bolts (820588) with 5/16" Whiz Nuts (708206) and for 1/2" holes will require 7/16" x 1.25" Bin Bolts (960811) and 7/16" Whiz Nuts (501635).

STEP 2. BEGIN TO ASSEMBLE THE SIDEWALL STACK:

Assemble the top two rings of the sidewall sheets using the SIDEWALL SHEET STACKING INFORMATION CHARTS shown in this manual. These charts are for standard design Medium Duty Hopper Tanks. If a Medium Duty Hopper Tank is designed for a specific use or for special seismic or wind conditions, contact Chief for the engineered gauge chart needed.

STEP 3. SIGN SHEET INSTALLATION:

Each Medium Duty Hopper Tank will include one sidewall sheet bearing a Chief logo decal already adhered to it. The Chief logo sidewall sheet will be adhered to a Ring #2 sidewall sheet and during the assembly should be positioned in such a way to be most easily visible without its view being obstructed by any ladder or platform or any other bin or tank accessory.

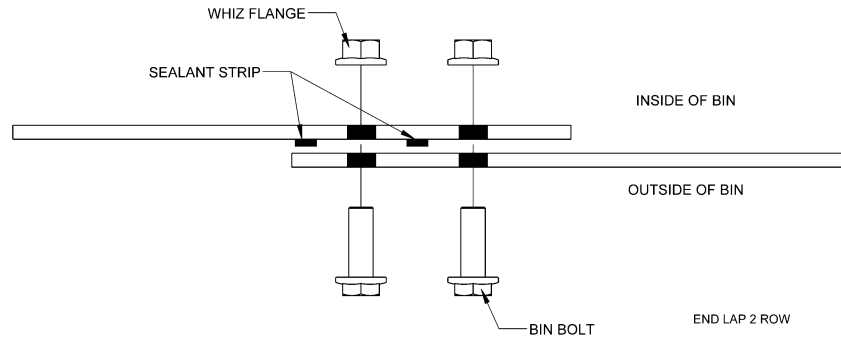
Important Note: On Medium Duty Hopper Tanks that only include 2 rings, the decal will be located on the top ring closest to the roof eave to clear the attachment of the hopper legs.



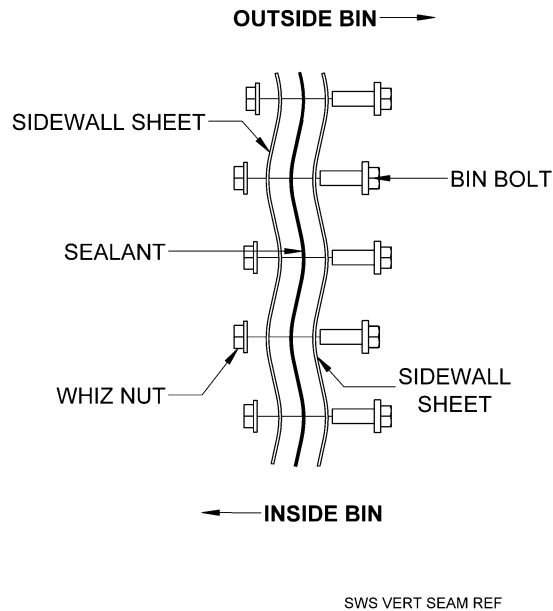
CHIEF LOGO PLACEMENT

STEP 4. PROPER SIDEWALL SHEET ASSEMBLY:

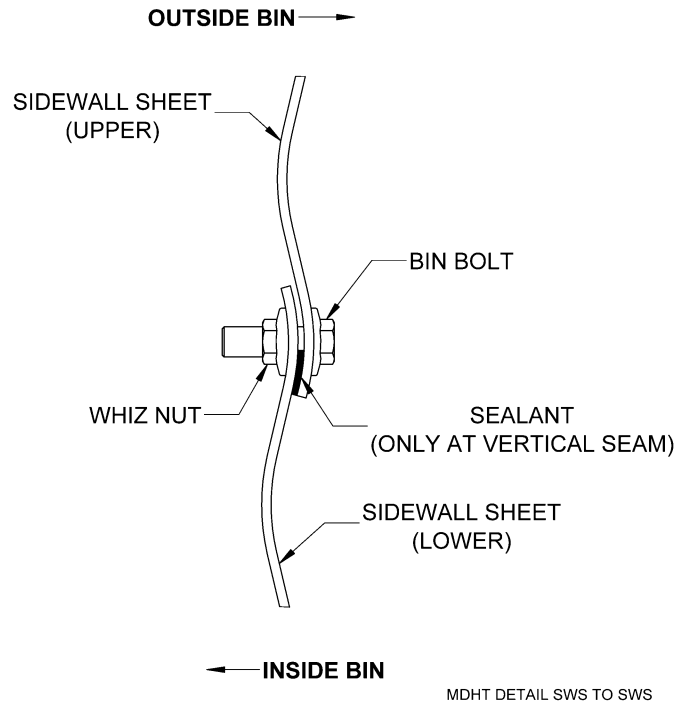
Overlap the sheets so that when located outside the bin, facing toward the bin, the right end of each sheet is always on the outside of the bin and the left end is always on the inside. Bolt the sidewall sheets together with bolt head on the outside of the hopper bin and the nuts on the inside.



(Sidewall Vertical Seam Top View)



(Sidewall Vertical Seam Side View)

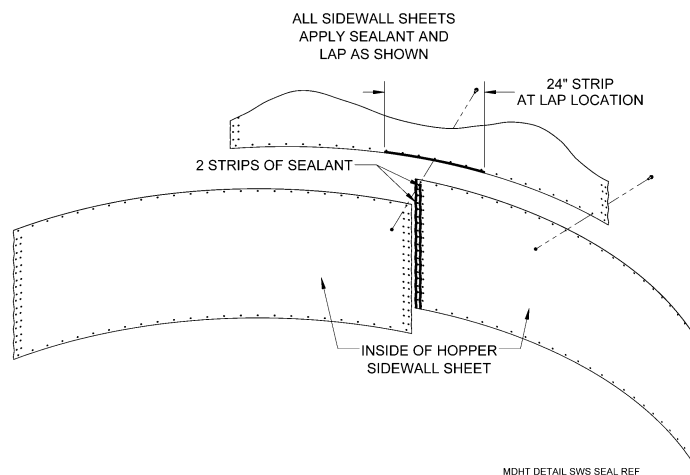


(Sidewall Horizontal Seam Side View)

STEP 5. SEALANT APPLICATION:

Sealant is required at specified seams for a watertight seal. **Wipe off the outside ends of all the sidewall sheets to remove excess oil so that the sealant will adhere to the metal.** Place the sealant as near as possible to the vertical inside edge of the sidewall sheet at every vertical seam.

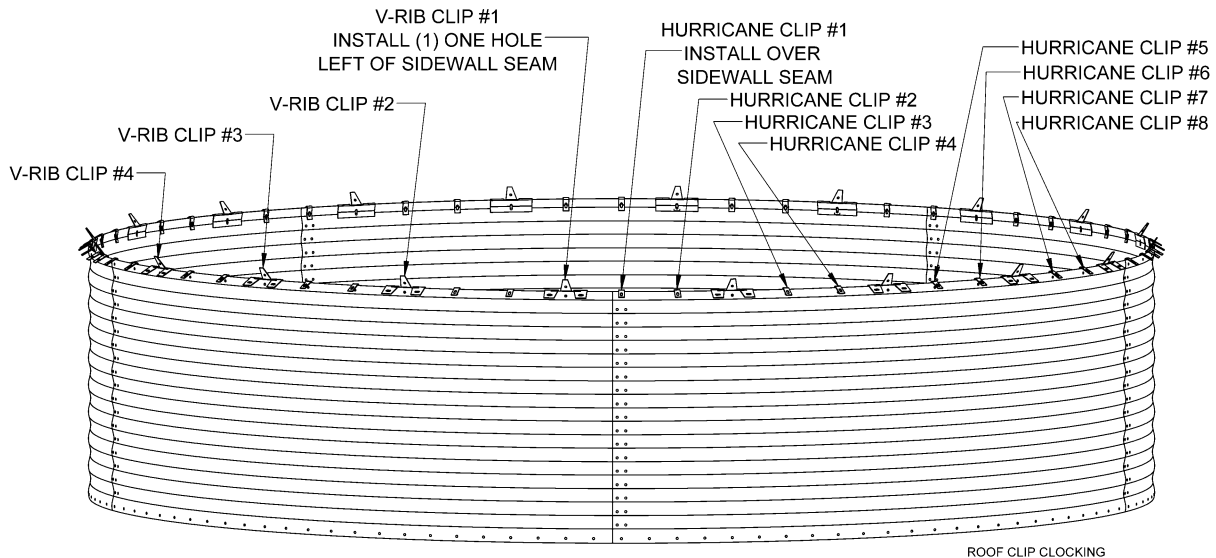
A horizontal strip of sealant is also required along the bottom edge of each sidewall sheet. This strip of sealant should fit on the hill corrugation below the holes where the end lap of the next ring of sidewall sheets will be located (1' either side of each vertical seam).



ROOF INSTALLATION

STEP 6. PROPERLY ALIGNING THE ROOF ASSEMBLY:

Once the top (2) two sidewall rings have been assembled, begin the installation of the roof structure. Refer to P/N 349024, CB05-CB16 Grain Bin V-Rib Roof Manual included with the Medium Duty Hopper Tank parts kit for how to properly assembly your Hopper Tank V-Rib Roof structure.

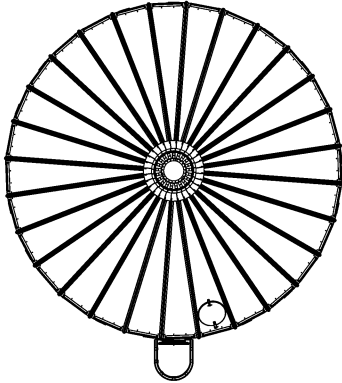


(Top Ring of Sidewall Detail of V-Rib & Hurricane Clip Clocking Reference)

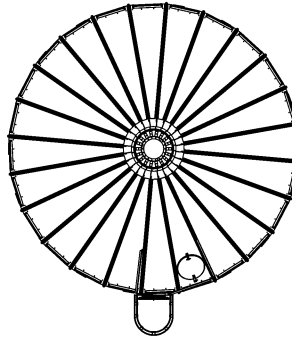
When assembling the roof structure for a Medium Duty Hopper Tank it differs from that of a standard grain bin roof install. For a Medium Duty Hopper Tank assembly, the V-Rib Clip will be installed one single punched hole to the left of a vertical sidewall seam of Sidewall Stack Ring #1 instead of directly over it.

It is important to plan the location of the Roof Manhole & Door in relation with where the Sidewall Ladder assembly and the Sidewall Sign Sheet will be located. Use the Roof Assembly Manual for instruction on how to property assemble the Medium Duty Hopper Tank Roof once it has been determined how it is to be clocked.

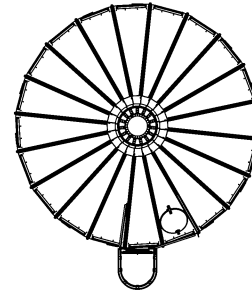
MDHT07 & MDHT07E



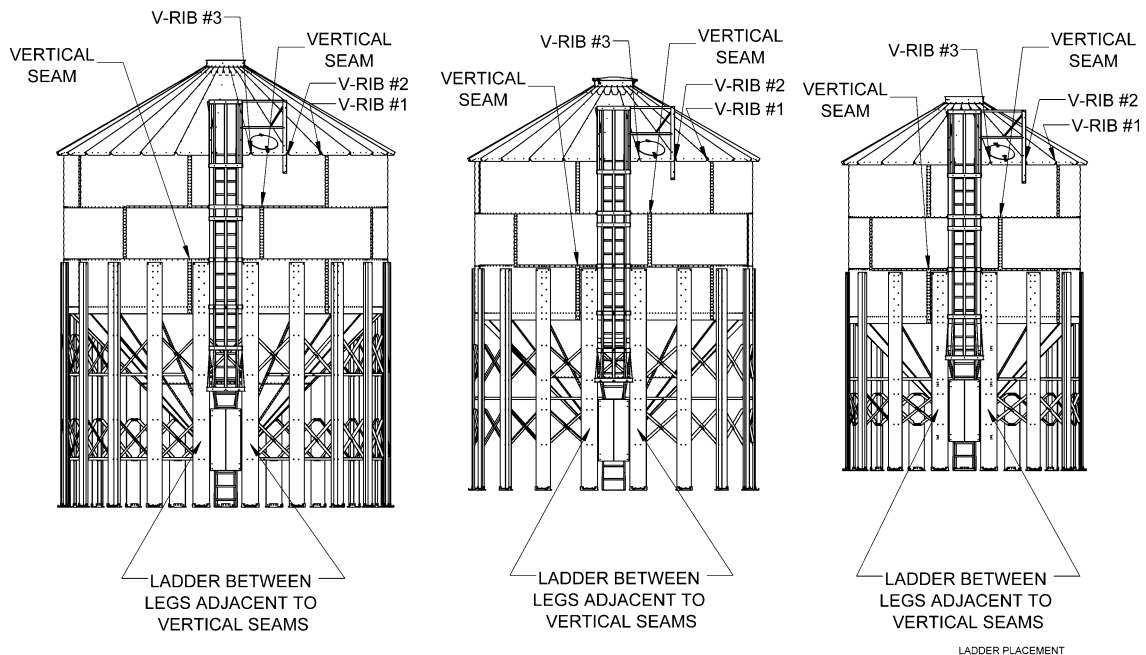
MDHT06 & MDHT06E



MDHT05 & MDHT05E



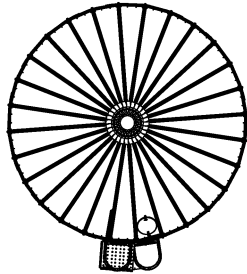
**LADDER/ROOF MANHOLE CLOCKING FOR
HOPPER TANK WITH NO REST PLATFORM PRESENT**



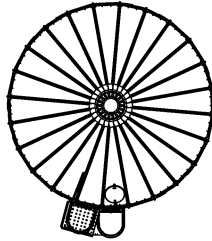
(Detail View of Roof Manhole & Door for Hopper Tanks with 24' or less Eave Height)

On Hopper Tank assemblies with an eave height of less than 24', the Roof Manhole & Door Panel should be installed over the V-Rib Clip #2 and V-Rib Clip #3 left of any given V-Rib Clip #1 on Ring #1 of the Sidewall Stack.

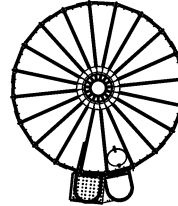
MDHT07 & MDHT07E



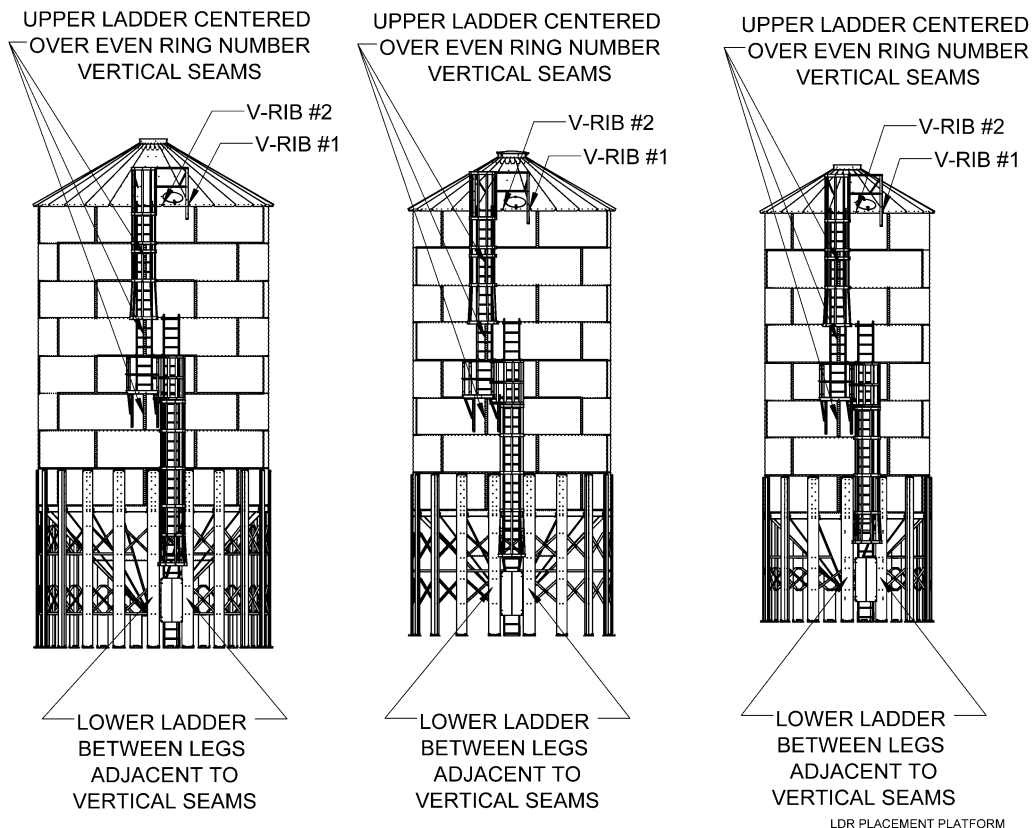
MDHT06 & MDHT06E



MDHT05 & MDHT05E



LADDER/ROOF MANHOLE CLOCKING FOR HOPPER TANK WITH REST PLATFORM PRESENT



(Detail View of Roof Manhole & Door for Hopper Tanks with Eave Height Greater than 24')

On Hopper Tank assemblies with an eave height of greater than 24', the Roof Manhole & Door Panel should be installed over any given V-Rib Clip #1 and V-Rib Clip #2 on Ring #1 of the Sidewall Stack.

ASSEMBLE REMAINING SIDEWALL SHEETS

STEP 7. COMPLETING THE SIDEWALL ASSEMBLY:

Once the roof assembly has been completed and properly clocked to allow for the correct installation of the Eave Rail /Eave Platform and Medium Duty Hopper Tank Ladder Assembly continue to assemble the remaining side wall sheets, following the correct **SIDEWALL SHEET STACKING INFORMATION CHART** on **pages 36-38** of this manual until your Sidewall Stack assembly is complete.

Remember, while you are building the Sidewall Stack assembly it is also necessary to install the corresponding components of the Ladder Package Assembly and any associated rail or platform kits. Follow the assembly instructions for your appropriate Ladder Package Assembly located in Section 22 of this instruction manual.

There is a diagram for each size of Ladder Package Assembly and a general assembly diagram for how to install specific parts of the Ladder Package assembly. In some instances additional holes will need to be field drilled into the sidewall in order to connect the Ladder Package Assembly to the Medium Duty Hopper Tank assembly.

Important Note: When installing the final bottom ring of the sidewall stack do not install the fasteners in the triple punched line of holes along the bottom most or second from the bottom corrugation of the bottom sidewall sheet. These holes are used when attaching the Hopper Panels and Legs to the sidewalls later in the assembly process.

Important Note: In every instance where a field hole is drilled into the Medium Duty Hopper Tank the Bin Bolt will be installed from the INSIDE of the tank and the Whiz Nut applied on the OUTSIDE.

STEP 8. SIDEWALL SHEET STACKING INFORMATION CHARTS:

MDHT05								
RING #	09 RING	08 RING	07 RING	06 RING	05 RING	04 RING	03 RING	02 RING
1	20 GA SP/DP	20GA SP/DP	20GA SP/DP	20GA SP/DP	20GA SP/DP	20GA SP/DP	20GA SP/DP	20GA SP/DP
2	20GA DP	20GA DP	20GA DP	20GA DP	20GA DP	20GA DP	18GA DP	14GA/DP/TP/3S/NBM
3	18GA DP	18GA DP	18GA DP	18GA DP	18GA DP	16GA DP	14GA/DP/TP/3S/NBM	
4	17GA DP	17GA DP	16GA DP	16GA DP	16GA DP	14GA/DP/TP/3S/NBM		
5	16GA DP	16GA DP	14GA DP/TR	14GA DP/TR	12GA DP/TP/3S/NBM			
6	14GA DP	14GA DP/TR	12GA DP	12GA DP/TP/3S/NBM				
7	14 GA DP/TR	12GA DP	12GA DP/TP/3S/NBM					
8	12GA DP	12GA DP/TP/3S/BM						
9	12GA DP/TP/3S/BM							
MDHT05 EVEN								
RING #	09 RING	08 RING	07 RING	06 RING	05 RING	04 RING	03 RING	02 RING
1	20 GA SP/DP	20GA SP/DP	20GA SP/DP	20GA SP/DP	20GA SP/DP	20GA SP/DP	20GA SP/DP	20GA SP/DP
2	20GA DP	20GA DP	20GA DP	20GA DP	20GA DP	20GA DP	18GA DP	14GA/DP/TP/3S/NBM
3	18GA DP	18GA DP	18GA DP	18GA DP	18GA DP	16GA DP	14GA/DP/TP/3S/NBM	
4	17GA DP	17GA DP	16GA DP	16GA DP	16GA DP	14GA/DP/TP/3S/NBM		
5	16GA DP	16GA DP	14GA DP/TR	14GA DP/TR	12GA DP/TP/3S/NBM			
6	14GA DP	14GA DP/TR	12GA DP	12GA DP/TP/3S/NBM				
7	14 GA DP/TR	12GA DP	12GA DP/TP/3S/NBM					
8	12GA DP	12GA DP/TP/3S/BM						
9	12GA DP/TP/3S/BM							

XXGA = GAUGE THICKNESS OF SHEET

SP = SINGLE PUNCHED (ROOF CONTACT)

DP = DOUBLE PUNCHED (STANDARD)

TP = TRIPLE PUNCHED (HOPPER CONTACT)

3S = 3 STIFFENED (# OF LEGS PER SHEET)

BM/NBM = BEAM / NO BEAM¹

TR = TRANSITION SHEET²

¹ On taller assemblies, the triple punched line of holes that connect the sidewall stack to the hopper assembly are located on the bottom corrugation of the bottom sidewall sheet. These sidewall sheets require a special structural "C" channel to be installed to the bottom sidewall sheets and the stiffener legs.

² Sidewall sheets thicker than 14 gauge thickness will have 1/2" hole punching, on gauge thickness lighter than 14 gauge the hole punching will be 3/8". On sidewall stacks where heavier gauges are required, a ring of 14 gauge sidewall sheets will have 3/8" punching along the top row of holes and 1/2" punching along the bottom row.

MEDIUM DUTY HOPPER TANK INSTRUCTION MANUAL

MDHT06								
RING #	09 RING	08 RING	07 RING	06 RING	05 RING	04 RING	03 RING	02 RING
1	20GA SP/DP	20GA SP/DP	20GA SP/DP	20GA SP/DP	20GA SP/DP	20GA SP/DP	20GA SP/DP	
2	20GA DP	20GA DP	20GA DP	20GA DP	20GA DP	20GA DP	18GA DP	
3	18GA DP	18GA DP	18GA DP	18GA DP	18GA DP	16GA DP	14GA DP/TP/3S/NBM	
4	17GA DP	17GA DP	16GA DP	14GA DP/TR	16GA DP	12GA DP/TP/3S/NBM		
5	16GA DP	16GA DP	14GA DP/TR	12GA DP	12GA DP/TP/3S/NBM			
6	14GA DP/TR	14GA DP/TR	12GA DP	10GA DP/TP/3S/NBM				
7	12GA DP	12GA DP	10GA DP/TP/3S/BM					
8	10GA DP	10GA DP/TP/3S/BM						
9	10GA DP/TP/3S/BM							
MDHT06 EVEN								
RING #	09 RING	08 RING	07 RING	06 RING	05 RING	04 RING	03 RING	02 RING
1	20GA SP/DP	20GA SP/DP	20GA SP/DP	20GA SP/DP	20GA SP/DP	20GA SP/DP	20GA SP/DP	
2	20GA DP	20GA DP	20GA DP	20GA DP	20GA DP	20GA DP	18GA DP	
3	18GA DP	18GA DP	18GA DP	18GA DP	18GA DP	16GA DP	14GA DP/TP/3S/NBM	
4	17GA DP	17GA DP	16GA DP	14GA DP/TR	16GA DP	12GA DP/TP/3S/NBM		
5	16GA DP	16GA DP	14GA DP/TR	12GA DP	12GA DP/TP/3S/NBM			
6	14GA DP/TR	14GA DP/TR	12GA DP	10GA DP/TP/3S/NBM				
7	12GA DP	12GA DP	10GA DP/TP/3S/BM					
8	10GA DP	10GA DP/TP/3S/BM						
9	10GA DP/TP/3S/BM							

XXGA = GAUGE THICKNESS OF SHEET

SP = SINGLE PUNCHED (ROOF CONTACT)

DP = DOUBLE PUNCHED (STANDARD)

TP = TRIPLE PUNCHED (HOPPER CONTACT)

3S = 3 STIFFENED (# OF LEGS PER SHEET)

BM/NBM = BEAM / NO BEAM¹

TR = TRANSITION SHEET²

¹ On taller assemblies, the triple punched line of holes that connect the sidewall stack to the hopper assembly are located on the bottom corrugation of the bottom sidewall sheet. These sidewall sheets require a special structural "C" channel to be installed to the bottom sidewall sheets and the stiffener legs.

² Sidewall sheets thicker than 14 gauge thickness will have 1/2" hole punching, on gauge thickness lighter than 14 gauge the hole punching will be 3/8". On sidewall stacks where heavier gauges are required, a ring of 14 gauge sidewall sheets will have 3/8" punching along the top row of holes and 1/2" punching along the bottom row.

MEDIUM DUTY HOPPER TANK INSTRUCTION MANUAL

MDHT07							
RING #	09 RING	08 RING	07 RING	06 RING	05 RING	04 RING	03 RING
1	20GA SP/DP	20GA SP/DP	20GA SP/DP	20GA SP/DP	20GA SP/DP	20GA SP/DP	20GA SP/DP
2	20GA DP	20GA DP	20GA DP	20GA DP	20GA DP	20GA DP	14 GA DP
3	18GA DP	18GA DP	18GA DP	18GA DP	18GA DP/TR	14GA DP	12GA DP/TP/3S/NBM
4	17GA DP	17GA DP	16GA DP	14GA DP/TR	12GA DP	12GA DP/TP/3S/NBM	
5	14GA DP	14GA DP	14GA DP/TR	12 GA DP	10GA DP/TP/3S/NBM		
6	14GA DP/TR	14GA DP/TR	12GA DP	10GA DP/TP/3S/NBM			
7	12GA DP	12 GA DP	10GA DP/TP/3S/BM				
8	10GA DP	10GA DP/TP/3S/BM					
9	10GA DP/TP/3S/BM						
MDHT07E							
RING #	09 RING	08 RING	07 RING	06 RING	05 RING	04 RING	03 RING
1	20GA SP/DP	20GA SP/DP	20GA SP/DP	20GA SP/DP	20GA SP/DP	20GA SP/DP	20GA SP/DP
2	20GA DP	20GA DP	20GA DP	20GA DP	20GA DP	20GA DP	14 GA DP
3	18GA DP	18GA DP	18GA DP	18GA DP	18GA DP/TR	14GA DP	12GA DP/TP/3S/NBM
4	17GA DP	17GA DP	16GA DP	14GA DP/TR	12GA DP	12GA DP/TP/3S/NBM	
5	14GA DP	14GA DP	14GA DP/TR	12 GA DP	10GA DP/TP/3S/NBM		
6	14GA DP/TR	14GA DP/TR	12GA DP	10GA DP/TP/3S/NBM			
7	12GA DP	12 GA DP	10GA DP/TP/3S/BM				
8	10GA DP	10GA DP/TP/3S/BM					
9	10GA DP/TP/3S/BM						

XXGA = GAUGE THICKNESS OF SHEET

SP = SINGLE PUNCHED (ROOF CONTACT)

DP = DOUBLE PUNCHED (STANDARD)

TP = TRIPLE PUNCHED (HOPPER CONTACT)

3S = 3 STIFFENED (# OF LEGS PER SHEET)

BM/NBM = BEAM / NO BEAM¹

TR = TRANSITION SHEET²

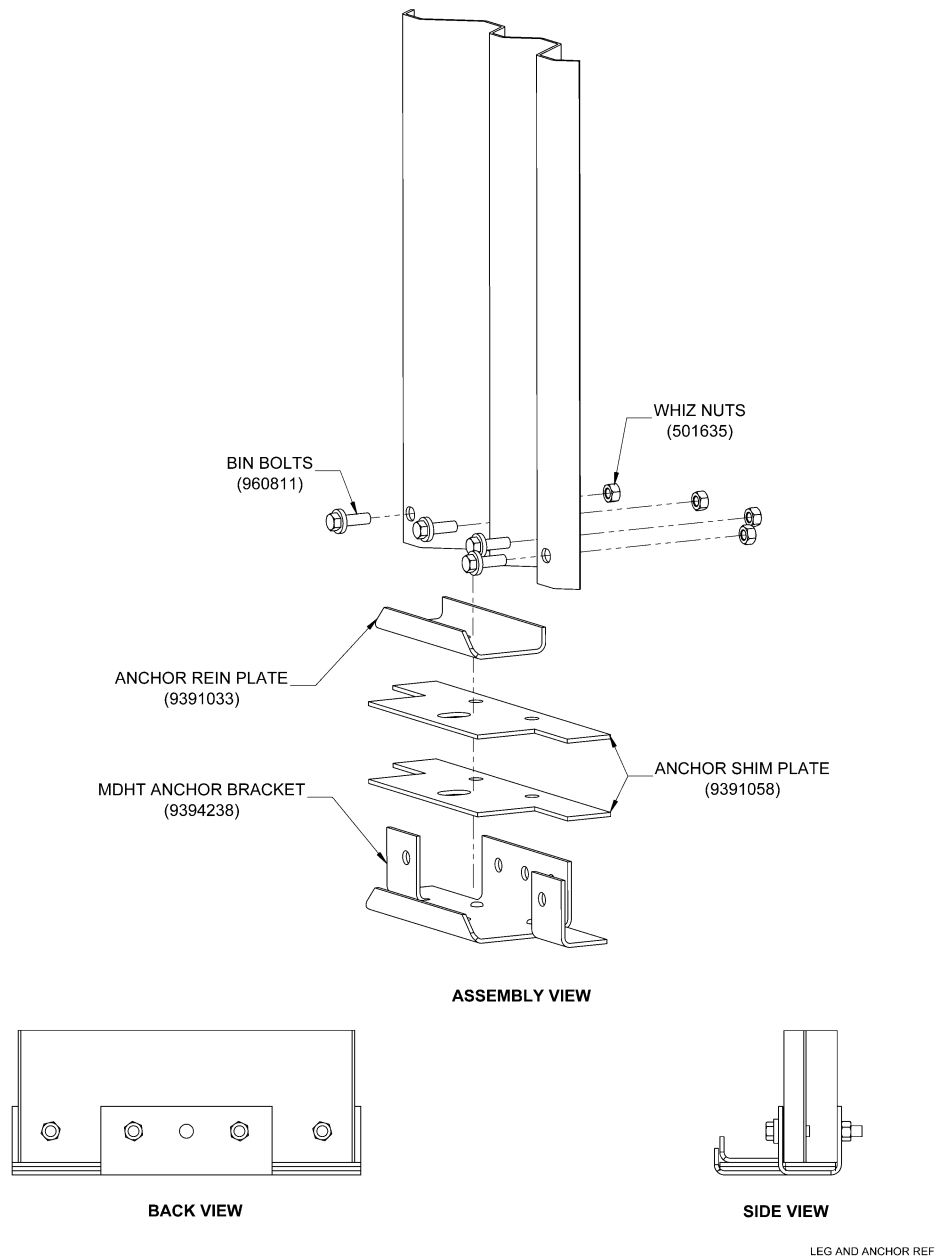
¹ On taller assemblies, the triple punched line of holes that connect the sidewall stack to the hopper assembly are located on the bottom corrugation of the bottom sidewall sheet. These sidewall sheets require a special structural "C" channel to be installed to the bottom sidewall sheets and the stiffener legs.

² Sidewall sheets thicker than 14 gauge thickness will have 1/2" hole punching, on gauge thickness lighter than 14 gauge the hole punching will be 3/8". On sidewall stacks where heavier gauges are required, a ring of 14 gauge sidewall sheets will have 3/8" punching along the top row of holes and 1/2" punching along the bottom row.

LEG INSTALLATION

STEP 9. INSTALLING THE LEG ANCHORS:

Once the side wall sheets have all been assembled locate the anchor plates and the hardware needed to assemble the anchor plates to the hopper legs.



(Detail view of Leg Anchor Assembly)

STEP 10. HOPPER LEG SIZING CHART:

TANK SIZE	Hopper Angle	Part Number	Description
MDHT05-02	45DEG	9394301	LEG,MDHT05 02-04,45DEG,16IN,DISC STIFF C42 14GA SW
MDHT05-03	45DEG	9394302	LEG,MDHT05 02-04,45DEG,16IN,DISC STIFF C42 14GA SW
MDHT05-04	45DEG	9394303	LEG,MDHT05 02-04,45DEG,16IN,DISC STIFF C42 14GA SW
MDHT05-05	45DEG	9360252	LEG,MDHT05 05-07,45DEG,16IN,DISC STIFF C42 12GA SW
MDHT05-06	45DEG	9360252	LEG,MDHT05 05-07,45DEG,16IN,DISC STIFF C42 12GA SW
MDHT05-07	45DEG	9360252	LEG,MDHT05 05-07,45DEG,16IN,DISC STIFF C42 12GA SW
MDHT05-08	45DEG	9360404	LEG,MDHT05 08-09,45DEG,16IN,DISC STIFF C42 10GA SW
MDHT05-09	45DEG	9360405	LEG,MDHT05 08-09,45DEG,16IN,DISC STIFF C42 10GA SW
MDHT05E-02	45DEG	9360290	LEG,MDHT05E 02-04,45DEG,16IN,DISC STIFF C42 14GA SW
MDHT05E-03	45DEG	9360290	LEG,MDHT05E 02-04,45DEG,16IN,DISC STIFF C42 14GA SW
MDHT05E-04	45DEG	9360290	LEG,MDHT05E 02-04,45DEG,16IN,DISC STIFF C42 14GA SW
MDHT05E-05	45DEG	9360291	LEG,MDHT05E 05-07,45DEG,16IN,DISC STIFF C42 12GA SW
MDHT05E-06	45DEG	9360291	LEG,MDHT05E 05-07,45DEG,16IN,DISC STIFF C42 12GA SW
MDHT05E-07	45DEG	9360291	LEG,MDHT05E 05-07,45DEG,16IN,DISC STIFF C42 12GA SW
MDHT05E-08	45DEG	9360408	LEG,MDHT05E 08-09,45DEG,16IN,DISC STIFF C42 10GA SW
MDHT05E-09	45DEG	9360409	LEG,MDHT05E 08-09,45DEG,16IN,DISC STIFF C42 10GA SW

TANK SIZE	Hopper Angle	Part Number	Description
MDHT05-02	60 DEG	9360744	LEG,MDHT05 02-02,60DEG,16IN,DISC STIFF C42 14GA SW
MDHT05-03	60 DEG	9360745	LEG,MDHT05 03-04,60DEG,16IN,DISC STIFF C42 12GA SW
MDHT05-04	60 DEG	9360746	LEG,MDHT05 03-04,60DEG,16IN,DISC STIFF C42 12GA SW
MDHT05-05	60 DEG	9360746	LEG,MDHT05 05-06,60DEG,16IN,DISC STIFF C42 10GA SW
MDHT05-06	60 DEG	9360747	LEG,MDHT05 05-06,60DEG,16IN,DISC STIFF C42 10GA SW
MDHT05-07	60 DEG	9360747	LEG,MDHT05 07-07,60DEG,16IN,DISC STIFF C42 8GA SW
MDHT05-08	60 DEG	9360748	LEG,MDHT05 08-08,60DEG,16IN,DISC STIFF C42 8GA SW
MDHT05-09	60 DEG	9360749	LEG,MDHT05 09-09,60DEG,16IN,DISC STIFF C42 12GA SW
MDHT05E-02	60 DEG	9360750	LEG,MDHT05E 02-02,60DEG,16IN,DISC STIFF C42 14GA SW
MDHT05E-03	60 DEG	9360751	LEG,MDHT05E 03-04,60DEG,16IN,DISC STIFF C42 12GA SW
MDHT05E-04	60 DEG	9360752	LEG,MDHT05E 03-04,60DEG,16IN,DISC STIFF C42 12GA SW
MDHT05E-05	60 DEG	9360752	LEG,MDHT05E 05-06,60DEG,16IN,DISC STIFF C42 10GA SW
MDHT05E-06	60 DEG	9360753	LEG,MDHT05E 05-06,60DEG,16IN,DISC STIFF C42 10GA SW
MDHT05E-07	60 DEG	9360753	LEG,MDHT05E 07-07,60DEG,16IN,DISC STIFF C42 8GA SW
MDHT05E-08	60 DEG	9360754	LEG,MDHT05E 08-08,60DEG,16IN,DISC STIFF C42 8GA SW
MDHT05E-09	60 DEG	9360755	LEG,MDHT05E 09-09,60DEG,16IN,DISC STIFF C42 12GA SW

(Leg Chart for MDHT05's Standard and Even Sidewall Diameters, 45° & 60° Hoppers)

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TANK SIZE	Hopper Angle	Part Number	Description
MDHT06-02	45DEG	9360253	LEG,MDHT06 02-04,45DEG,16IN,DISC STIFF C42 14GA SW
MDHT06-03	45DEG	9360253	LEG,MDHT06 02-04,45DEG,16IN,DISC STIFF C42 14GA SW
MDHT06-04	45DEG	9360253	LEG,MDHT06 02-04,45DEG,16IN,DISC STIFF C42 14GA SW
MDHT06-05	45DEG	9360254	LEG,MDHT06 05-06,45DEG,16IN,DISC STIFF C42 12GA SW
MDHT06-06	45DEG	9360254	LEG,MDHT06 05-06,45DEG,16IN,DISC STIFF C42 12GA SW
MDHT06-07	45DEG	9360405	LEG,MDHT06 07-08,45DEG,16IN,DISC STIFF C42 10GA SW
MDHT06-08	45DEG	9360406	LEG,MDHT06 07-08,45DEG,16IN,DISC STIFF C42 10GA SW
MDHT06-09	45DEG	9360594	LEG,MDHT06 09-09,45DEG,16IN,DISC STIFF C42 8GA SW
MDHT06E-02	45DEG	9360292	LEG,MDHT06E 02-04,45DEG,16IN,DISC STIFF C42 14GA SW
MDHT06E-03	45DEG	9360292	LEG,MDHT06E 02-04,45DEG,16IN,DISC STIFF C42 14GA SW
MDHT06E-04	45DEG	9360292	LEG,MDHT06E 02-04,45DEG,16IN,DISC STIFF C42 14GA SW
MDHT06E-05	45DEG	9360293	LEG,MDHT06E 05-06,45DEG,16IN,DISC STIFF C42 12GA SW
MDHT06E-06	45DEG	9360293	LEG,MDHT06E 05-06,45DEG,16IN,DISC STIFF C42 12GA SW
MDHT06E-07	45DEG	9360409	LEG,MDHT06E 07-08,45DEG,16IN,DISC STIFF C42 10GA SW
MDHT06E-08	45DEG	9360410	LEG,MDHT06E 07-08,45DEG,16IN,DISC STIFF C42 10GA SW
MDHT06E-09	45DEG	9360595	LEG,MDHT06E 09-09,45DEG,16IN,DISC STIFF C42 8GA SW

TANK SIZE	Hopper Angle	Part Number	Description
MDHT07-03	45DEG	9360255	LEG,MDHT07 03-03,45DEG,16IN,DISC STIFF C42 14GA SW
MDHT07-04	45DEG	9360256	LEG,MDHT07 04-05,45DEG,16IN,DISC STIFF C42 12GA SW
MDHT07-05	45DEG	9360256	LEG,MDHT07 04-05,45DEG,16IN,DISC STIFF C42 12GA SW
MDHT07-06	45DEG	9360596	LEG,MDHT07 06-06,45DEG,16IN,DISC STIFF C42 10GA SW
MDHT07-07	45DEG	9360597	LEG,MDHT07 07-08,45DEG,16IN,DISC STIFF C42 10GA SW
MDHT07-08	45DEG	9360598	LEG,MDHT07 07-08,45DEG,16IN,DISC STIFF C42 10GA SW
MDHT07-09	45DEG	9360598	LEG,MDHT07 09-09,45DEG,16IN,DISC STIFF C42 8GA SW
MDHT07E-03	45DEG	9360294	LEG,MDHT07E 03-03,45DEG,16IN,DISC STIFF C42 14GA SW
MDHT07E-04	45DEG	9360295	LEG,MDHT07E 04-05,45DEG,16IN,DISC STIFF C42 12GA SW
MDHT07E-05	45DEG	9360296	LEG,MDHT07E 04-05,45DEG,16IN,DISC STIFF C42 12GA SW
MDHT07E-06	45DEG	9360599	LEG,MDHT07E 06-06,45DEG,16IN,DISC STIFF C42 10GA SW
MDHT07E-07	45DEG	9360600	LEG,MDHT07E 07-08,45DEG,16IN,DISC STIFF C42 10GA SW
MDHT07E-08	45DEG	9360601	LEG,MDHT07E 07-08,45DEG,16IN,DISC STIFF C42 10GA SW
MDHT07E-09	45DEG	9360601	LEG,MDHT07E 09-09,45DEG,16IN,DISC STIFF C42 8GA SW

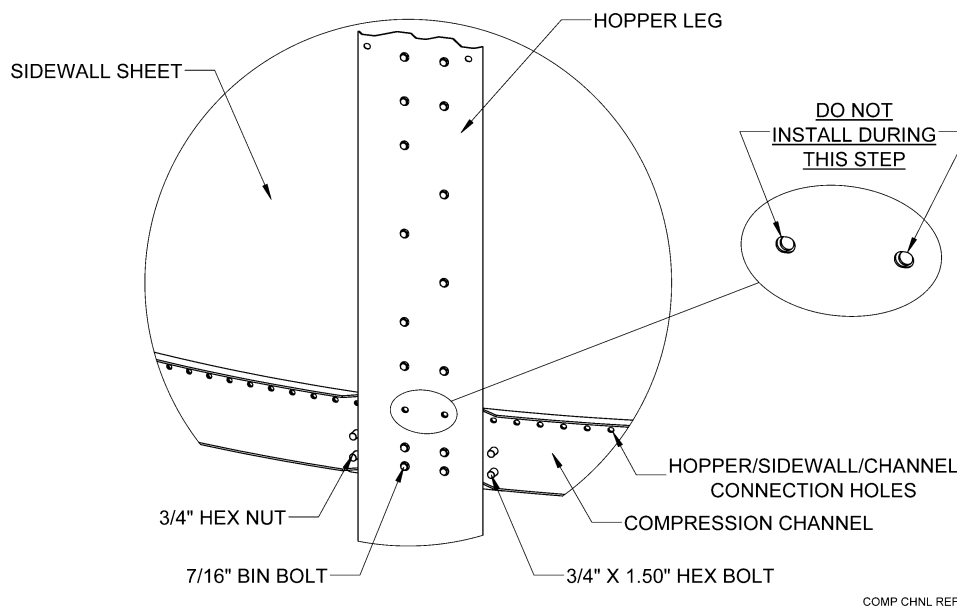
(Leg Chart for MDHT06's and MDHT07's Standard and Even Sidewall Diameters, 45° Hopper)

STEP 11. ATTACHING THE LEG TO SIDEWALL ASSEMBLY:

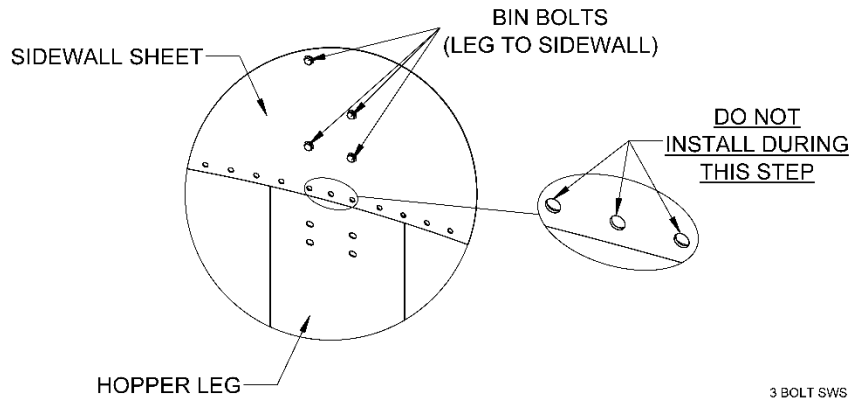
After the hopper legs are assembled to the anchor plates begin attaching the legs to the sidewall assembly while the assembly is suspended. Each bottom sheet of the sidewall assembly will have 3 separate columns of holes for the legs to be attached. The legs should be installed using the 7/16" Bin Bolt on the inside of the bin and 7/16" Whiz Nuts on the outside.

On larger tanks it will be required to install a special Compression Channel in combination with the sidewall/leg/hopper connection. For these bins, locate the Compression Channels, the Compression Channel Mounting Plates and the 3/4" x 1.50" Hex Bolts (806267) and 3/4" Hex Nuts (806266). Attach the mounting brackets to the legs through the (2) two sets of holes just below the bottom of the sidewall using standard 7/16" Bin Bolt from the outside and 7/16" Whiz Nuts on the inside.

Then bolt the Compression Channel to these brackets on either sides of the legs using the 3/4" hex bolts and 3/4" hex nuts (806266). When fastening the legs to the sidewall sheet, do not install the 7/16" Bin Bolt and 7/16" Whiz Nut into the bottom two holes of the hopper leg that connect back to the sidewall sheet or the hole in between them. These fasteners are used to connect the Hopper Panels to the rest of the assembly in a later step.



(Sidewall to Leg Connection with Compression Channels from Outside of Bin)



(Sidewall to Leg Connection no Compression Channel from Inside of Bin)

Important Note: Do not tighten the hopper leg fasteners at this time. Keeping these fasteners loose, this will help to facilitate the connection of the leg angle braces to the hopper legs.

STEP 12. CONNECTING LEGS TO THE CONCRETE FOUNDATION:

Once the legs are attached to the sidewalls the whole assembly can be partially lowered onto the foundation and each Anchor Plate can then be mounted to the foundation by means of anchor bolts. Align each Anchor Plate to its corresponding anchor bolt and use the required hardware to attach the Anchor Plate to the foundation.

Important Note: Align the hopper leg Anchor Plates with their corresponding anchor bolt and attach them using the required hardware. It is suggested to leave the anchor hardware loose until the completion of the entire assembly before tightening.

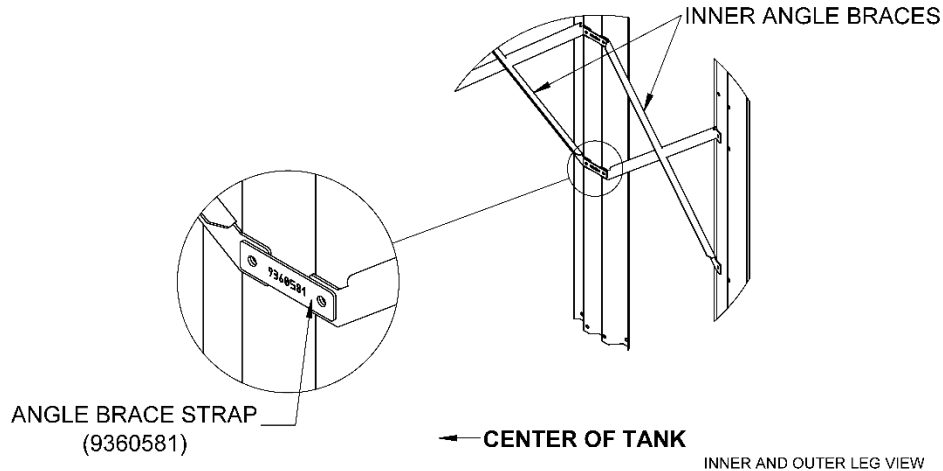
STEP 13. LEG ANGLE BRACING:

Next, install the Leg Angle Bracing making sure to install each brace in the right orientation. Each Leg Angle Brace is labeled with its part number and the word “inner” or “outer”. The “outer” brace should be installed so that the stamping is facing away from the center of the Medium Duty Hopper Tank and the “inner” bracing facing toward the center of the Medium Duty Hopper Tank.

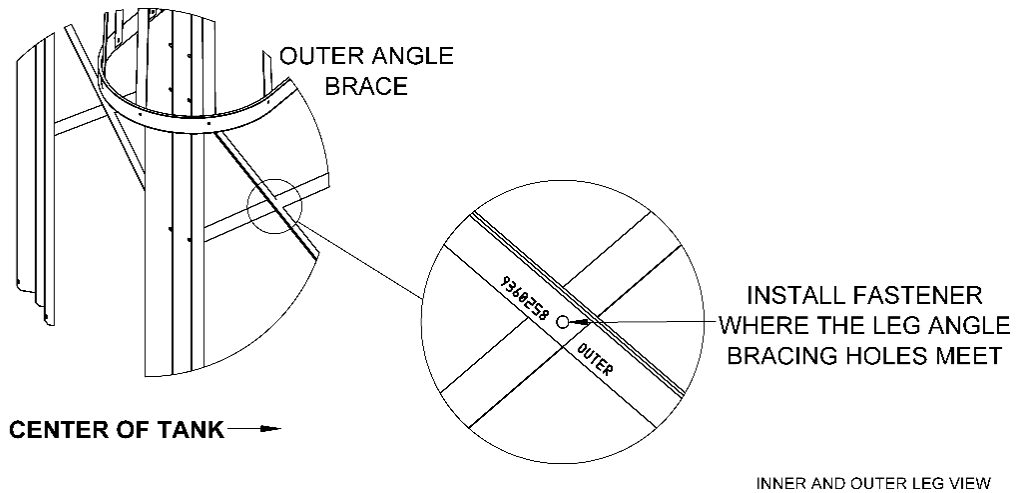
The Angle Brace Strap (9360581) should be installed so that it fits over the ends of one inner and one outer Leg Angle Brace and bolted directly to the Medium Duty Hopper Tank leg. Where two angle braces overlap between the legs locate the center hole and install the additional center 7/16” Bin Bolt & 7/16” Whiz Nut.

On some larger Medium Duty Hopper Tank assemblies, 2 sets of Leg Angle Bracing will be required, one lower and one upper. Part numbers for both the lower and upper Leg Angle Bracing will be the same. On assemblies that require 2 different Hopper Angle Braces, Hopper Brace Clips (9394233) will be utilized in place of the Angle Brace Straps (9360581).

MEDIUM DUTY HOPPER TANK INSTRUCTION MANUAL

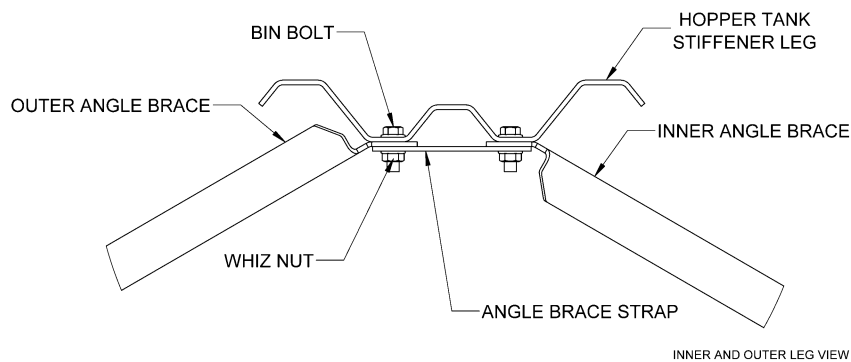


(Inside detail view of Angle Brace Strap (9360581) installation)



(Outside detail view of Hardware Location for Angle Brace Assembly)

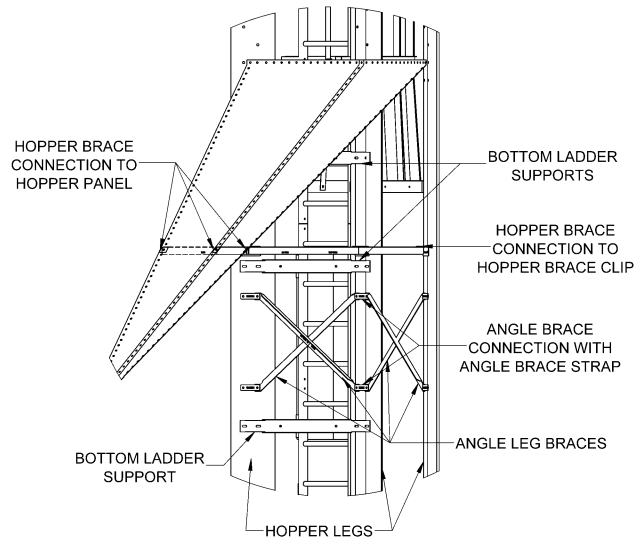
Important Note: It is recommended not to tighten the Leg Angle Bracing hardware at this time. Additional parts and hardware will be installed and leaving these fasteners loose will help aid in the assembly of these remaining parts and hardware



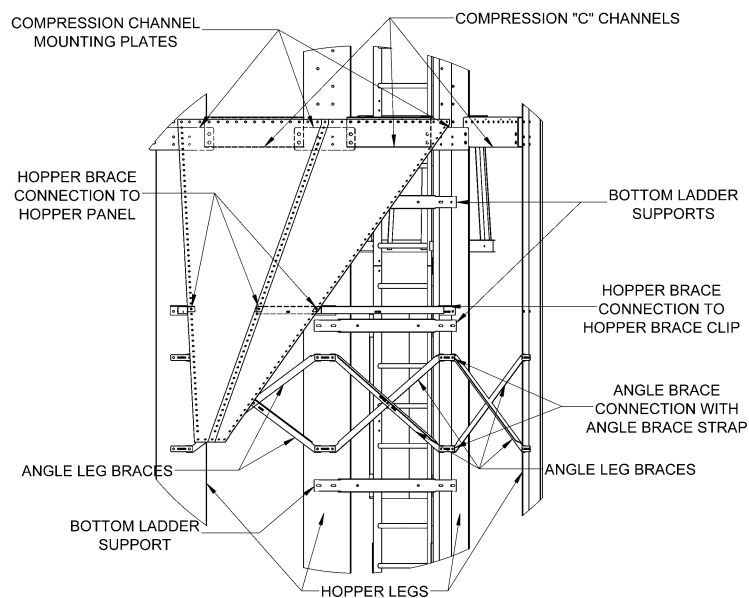
(Top detail view of Angle Brace to Hopper Leg Connection)

STEP 14. SUBSTRUCTURE PART LOCATION DIAGRAMS:

MDHT05 45DEG HPR LOWER LEG BRACE LOCATION
(FOR MDHT05-02 THROUGH MDHT05-07 BOTH STANDARD AND EVEN SIZES)



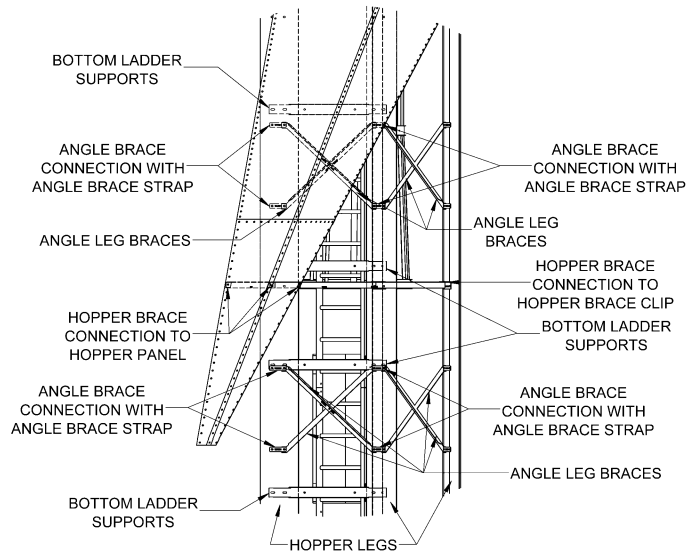
MDHT05 45DEG HPR LOWER LEG BRACE LOCATION
(FOR MDHT05-08 THROUGH MDHT05-09 BOTH STANDARD AND EVEN SIZES)



(MDHT05 & MDHT05 Even with 45° hopper substructure part location images)

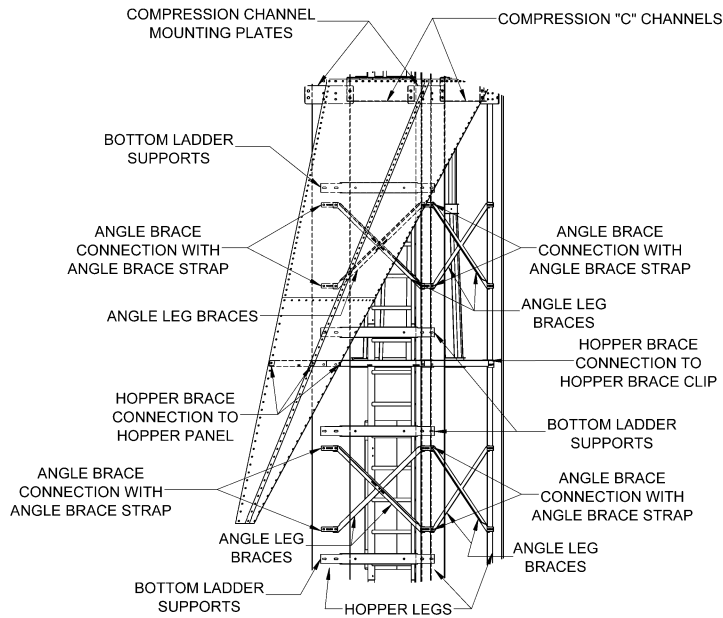
MDHT05 60DEG HPR LOWER LEG BRACE LOCATION

(FOR MDHT05-02 THROUGH MDHT05-07 BOTH STANDARD AND EVEN SIZES)



MDHT05 60DEG HPR LOWER LEG BRACE LOCATION

(FOR MDHT05-08 THROUGH MDHT05-09 BOTH STANDARD AND EVEN SIZES)

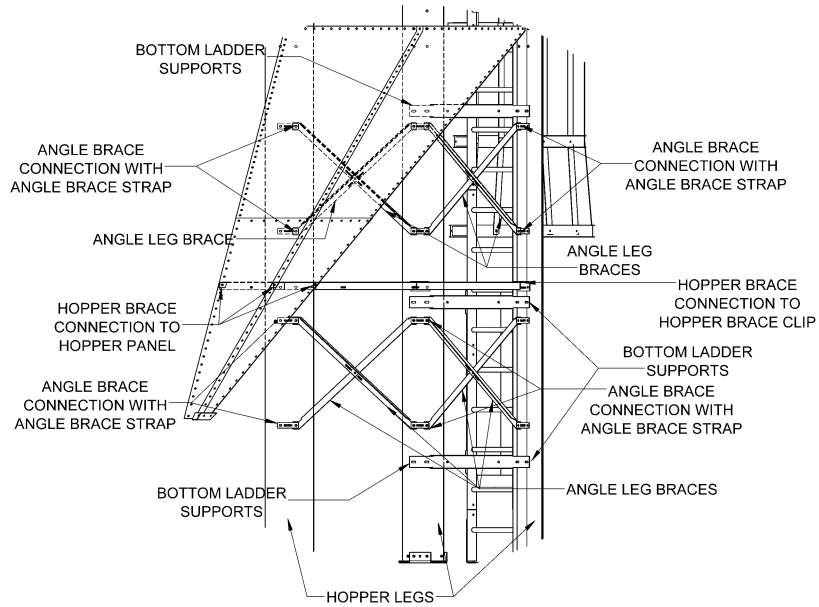


(MDHT05 & MDHT05 Even with 60° hopper substructure part location images)

MEDIUM DUTY HOPPER TANK INSTRUCTION MANUAL

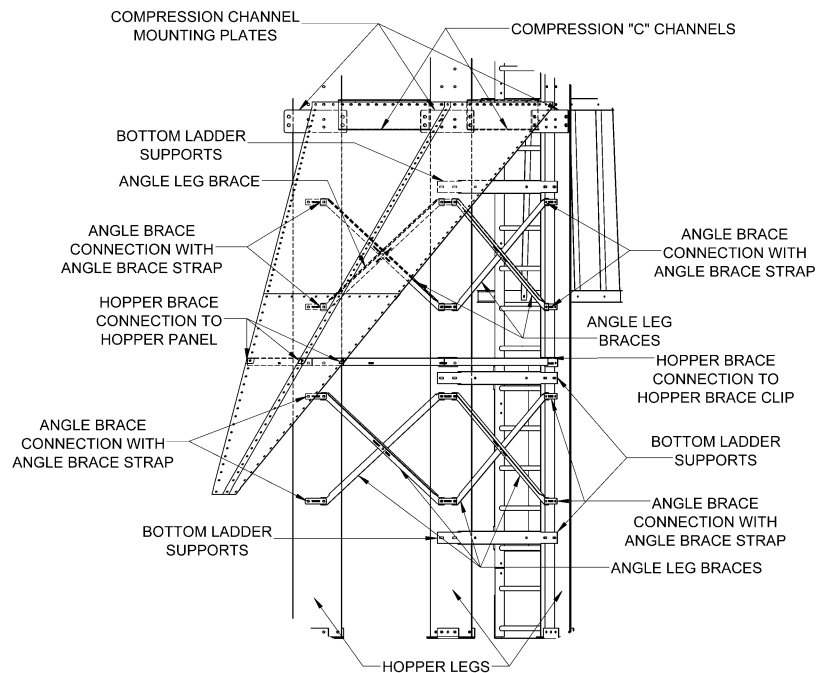
MDHT06 45DEG HPR LOWER LEG BRACE LOCATION

(FOR MDHT06-02 THROUGH MDHT06-06 BOTH STANDARD AND EVEN SIZES)



MDHT06 45DEG HPR LOWER LEG BRACE LOCATION

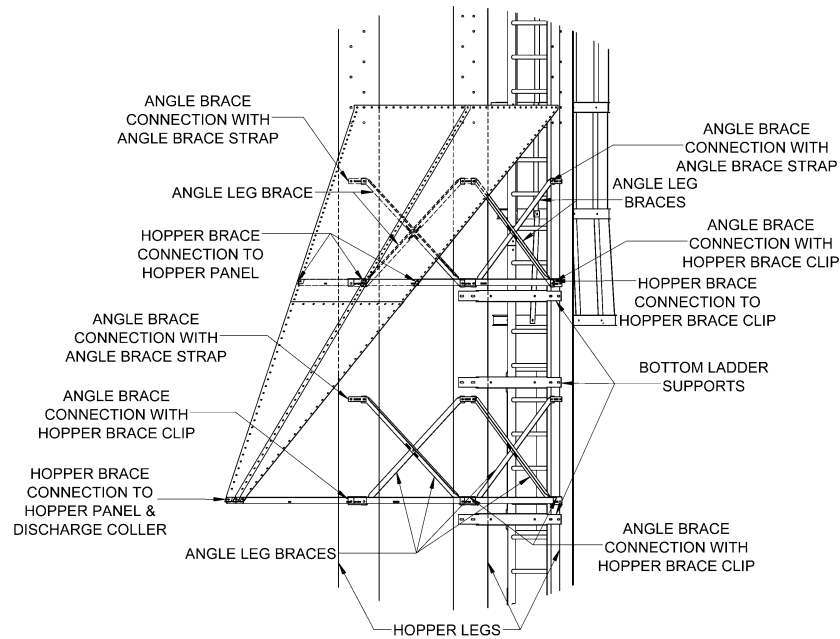
(FOR MDHT06-07 THROUGH MDHT06-09 BOTH STANDARD AND EVEN SIZES)



(MDHT06 & MDHT06 Even with 45° hopper substructure part location images)

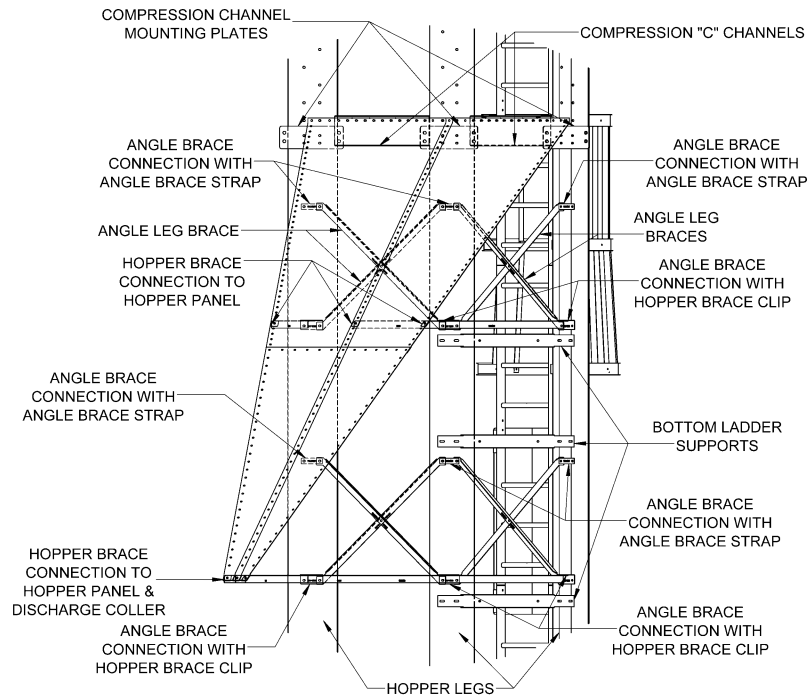
MDHT07 45DEG HPR LOWER LEG BRACE LOCATION

(FOR MDHT07-03 THROUGH MDHT07-06 BOTH STANDARD AND EVEN SIZES)



MDHT07 45DEG HPR LOWER LEG BRACE LOCATION

(FOR MDHT07-07 THROUGH MDHT07-09 BOTH STANDARD AND EVEN SIZES)



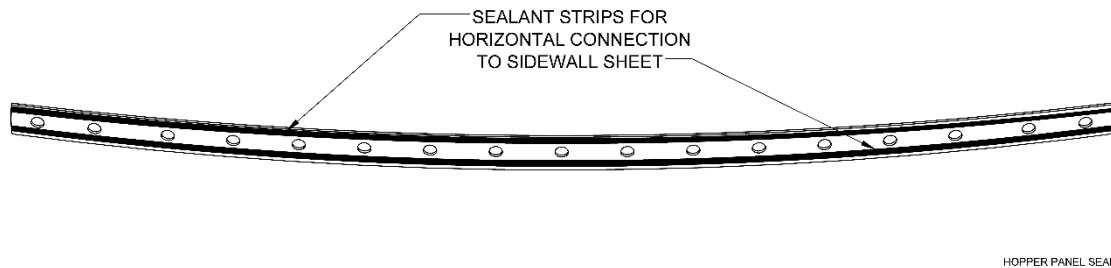
(MDHT07 & MDHT07 Even with 45° hopper substructure part location images)

HOPPER PANEL ASSEMBLY

STEP 14. LOCATING AND INSTALLING THE FIRST PANEL:

Important Note: All Medium Duty Hopper Tanks will have a lower and upper set of Hopper Panels to be installed except for (5) five sheet diameter tanks with a 45° hopper angle which will only have a single Hopper Panel from sidewall to Discharge Collar.

Apply one strip of sealant above and one strip below the fastener holes on the outer surface of the tail of the Hopper Panel before setting the panel into place.



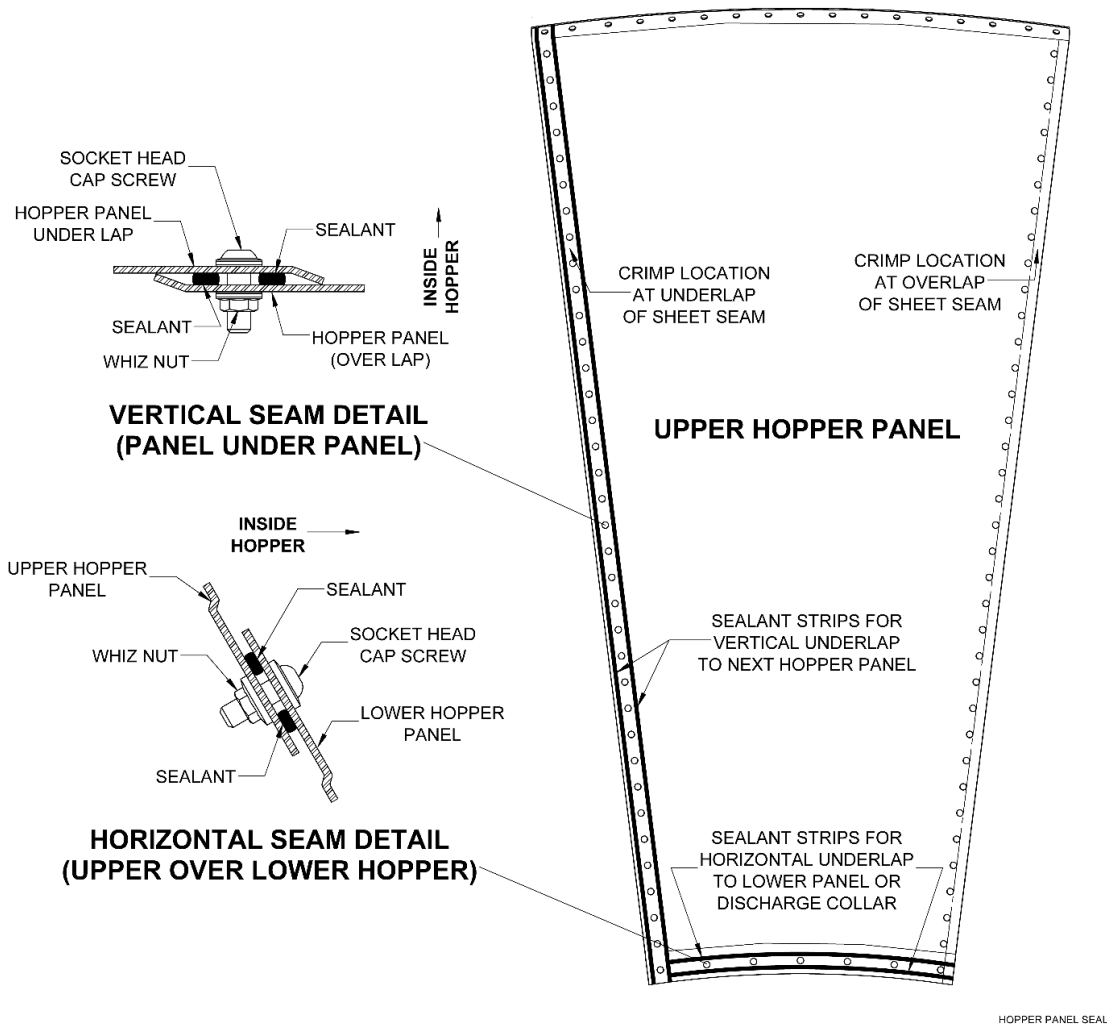
(View from the outside "tail" end of the Hopper Panel with sealant strips)

Locate the line of triple punched holes on the first or second corrugation from the bottom (this depends on tank size) as this line of holes will be the connection point for the Hopper Panels to the sidewalls.

Next begin connecting the Hopper Panels to the sidewall sheet. Each Hopper Panel must be aligned so that the holes on either end of the tail of the panel will mount to the hole in the sidewall directly over the center of each hopper leg.

Using a locating punch place fit the first Hopper Panel to the sidewall sheet through the triple punched line of holes. If a Compression Channel is present be sure to align the channel with the holes in the bottom sheet of the Sidewall Stack and the Hopper Panel. Insert a 7/16" Bin Bolt from the inside and finger tighten a 7/16" Whiz Nut from the outside. Repeat this for each hole across the top of the Hopper Panel leaving just the two holes either end of the tail open for the second and last panels to overlap/underlap and connect with the first panel.

Strips of sealant need to be adhered along the underlapping crimped vertical edge on both sides of the fastener holes of the Hopper Panel in preparation for the installation of the next panel. Make certain to clean the surface where the strips will be adhered. Strips of sealant should also be placed along the horizontal offset at the bottom of the panel at the upper and lower panel connection seam and/or the Hopper Panel to Discharge Collar connection.



(Locating Sealing Placement on Hopper Panels for Install)

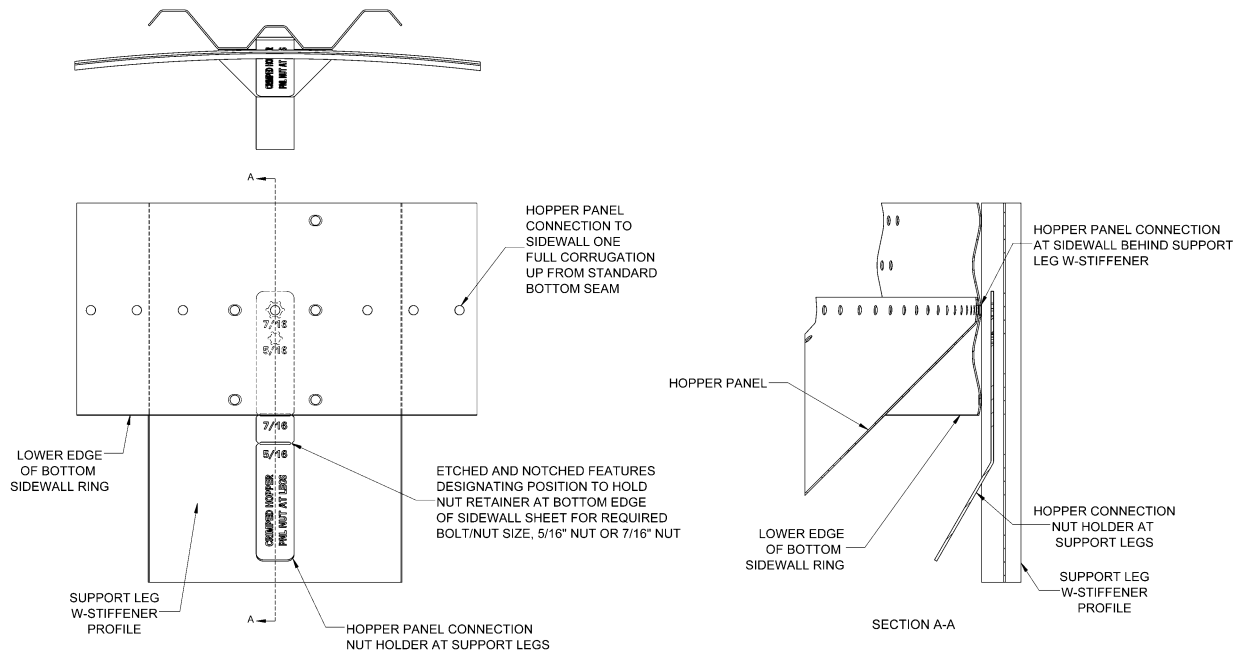
STEP 15. OVERLAPPING THE HOPPER SHEETS:

Once the first panel is in place support it at the bottom and begin installing the second Hopper Panel. Hopper Panels should be installed in a counter-clockwise rotation overlapping the previous Hopper Panel. Apply two strips of sealant, one above and one below the holes on the outer surface of the tail of every Hopper Panel before setting the panel into place.

Using a locating punch place fit the next Hopper Panel so that the first hole on the right hand end of the tail overlaps the last hole of the left hand end of the tail of the previous Hopper Panel. Once again if a Compression Channel is present be sure to align the channel holes with the holes in the sidewall and hopper.

Insert a 7/16" Bin Bolt from the inside and finger tighten a 7/16" Whiz Nut from the outside. Repeat this for each hole across the top of the Hopper Panel leaving just the last hole on the left side of the Hopper Panel for the next Hopper Panel to be installed.

On smaller assemblies where the Hopper Panels connect back to the sidewall at the second to last corrugation, the fasteners that connect the end holes of every Hopper Panel through the sidewall sheets at the middle of the hopper legs will be difficult to reach. Use the supplied Support Leg Hopper Panel Nut Installation Tool (9360929) to help hold the nut in place when aligning the Bin Bolt and later when tightening the fasteners to complete the assembly.



(Illustration of How and Where to Use the Hopper Panel Nut Installation Tool)

Important Note: On smaller Medium Duty Hopper Tanks that do not use a Compression Channel, the top most hole of the vertical Hopper Panel seam will require you to use a 7/16" Bin Bolt to be installed with the head of the bolt on the OUTSIDE of the Hopper Panel and the 7/16" Whiz Nut on the INSIDE of the Hopper Panel to allow for clearance with the sidewall sheet.

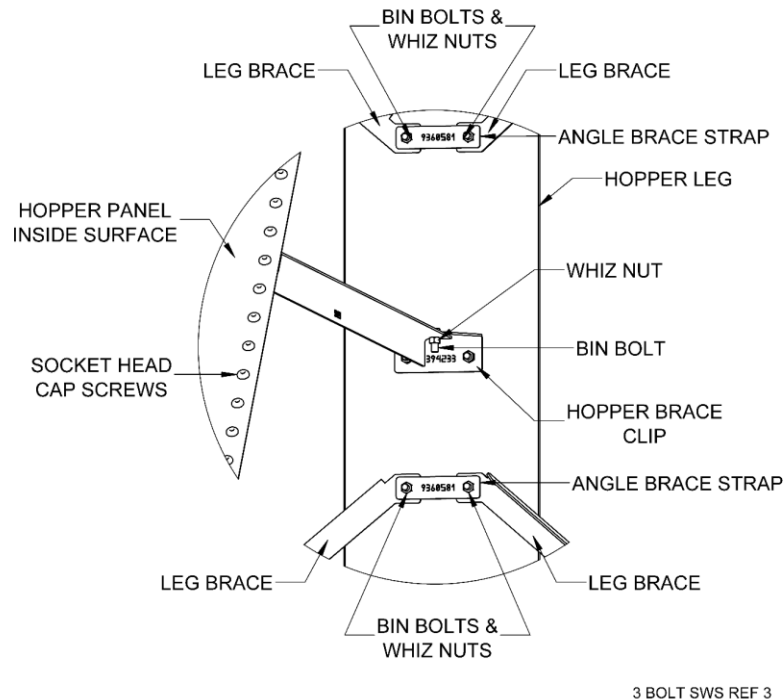
Next, using the locating punch begin to align the vertical Hopper Panel seam between the two Hopper Panels. Insert a 7/16" Socket Head Cap Screw from the inside of the Medium Duty Hopper Tank and finger tighten a 7/16" Whiz Nut from the outside. Place a fastener into each hole along the vertical seam between the two panels except for the last hole at the bottom of the panel on the offset surface.

Follow the instructions in Step 16 to locate and install the hopper bracing that will be located at each vertical seam connection when aligning the fasteners along the vertical seams of the Hopper Panels. Once all the Hopper Panels and bracing are in place continue on and install the lower panels using the same general technique as the upper panels (where applicable).

STEP 16. HOPPER BRACING:

Hopper Braces will be fastened to the Hopper Panels along each vertical seam. On larger assemblies there will be two Hopper Braces that will be connected back to the Hopper Tank assembly. Locate the Hopper Braces for your particular assembly and the Hopper Brace Leg Clips (9394233).

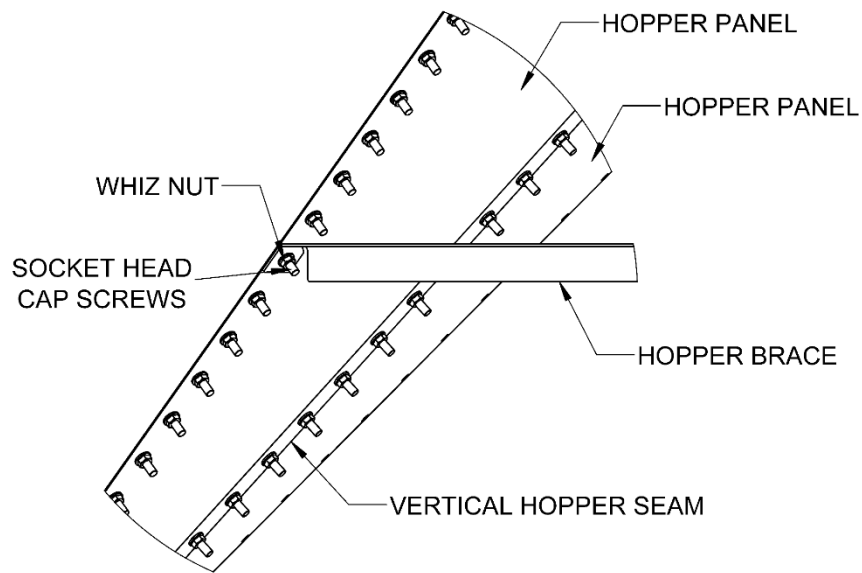
First, connect the outer end of the hopper brace (straight end) to the Hopper Brace Clip and attach the bracket to the corresponding holes in the hopper leg except on those assemblies that require (2) two hopper braces and the Hopper Brace Clips have already been installed. The angled end of the hopper angle brace should make contact with the Hopper Panel at a hole on the Hopper Panel vertical seam while the top face of the brace is level.



(View of Hopper Brace Connection to Hopper Leg)

Align the hole of the angled end of the hopper brace to the hole in the Hopper Panel and fasten the brace to the Hopper Panel using the same 7/16" Socket Head Cap Screw and 7/16" Whiz Nut used along the rest of the vertical seam. Repeat for each vertical seam of the Hopper Panel, twice on those assemblies that require (2) two Hopper Angle Braces.

Once all of the vertical hopper seam fasteners are in place and the hopper braces are in the installed, go ahead and tighten the fasteners along the vertical seam between the previous and current Hopper Panels.



3 BOLT SWS REF 4

(View of Hopper Brace Connection at Hopper Panel)

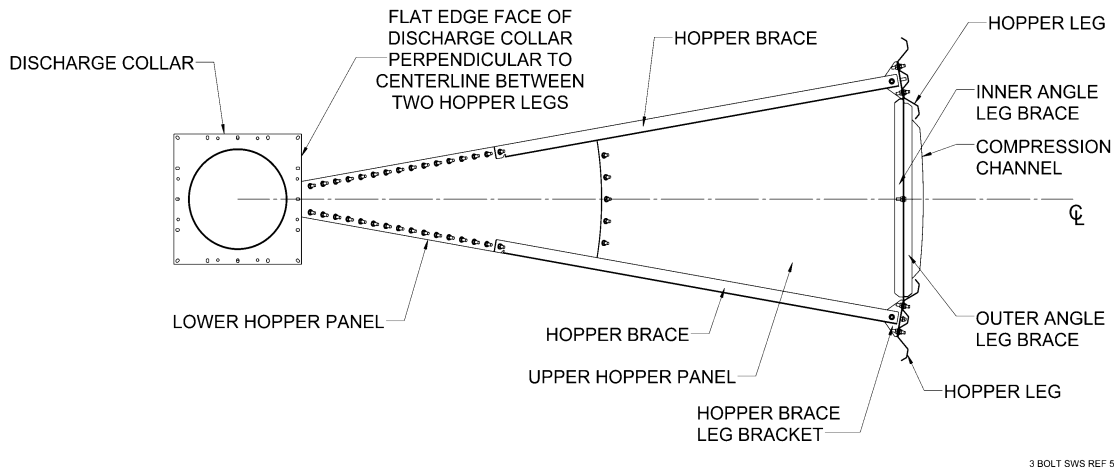
When installing Hopper Panels for a (5) five ring diameter tank with a 45° hopper or the bottom Hopper Panels of any another tank, make certain to attach the Discharge Collar to the bottom of the hopper assembly. Refer to Step 17 for Discharge Collar installation as you work toward finishing the Hopper Panel assembly. Wait until the entire hopper assembly is complete before tightening the Discharge Collar fasteners.

After the vertical seam is tightened begin tightening the horizontal row of fasteners connecting the Hopper Panels back to the sidewall sheet. Then tighten the remaining fasteners connecting the legs to the sidewall sheet. Repeat each time you go on to install another Hopper Panel (if applicable).

STEP 17. DISCHARGE COLLAR:

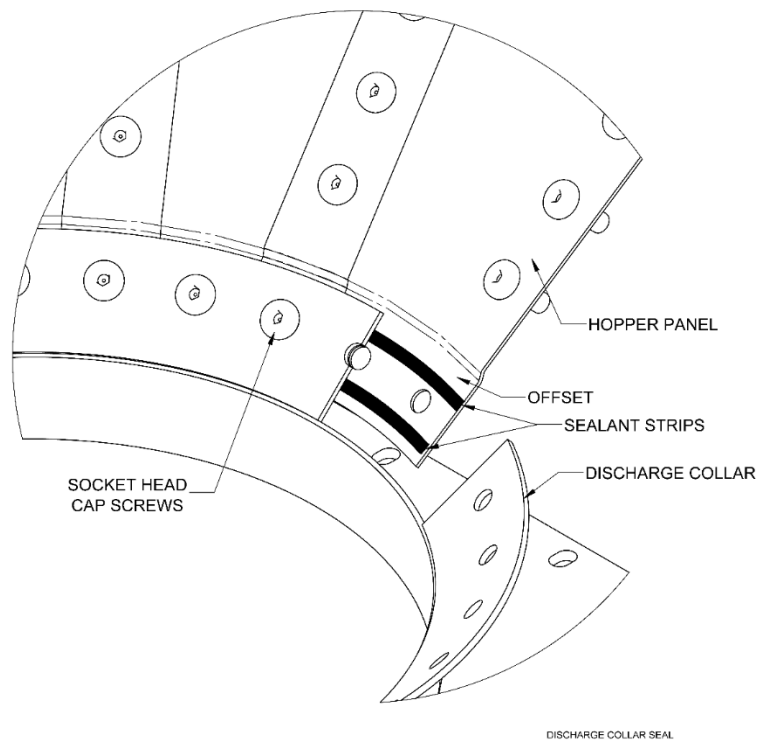
Once you have a couple lower Hopper Panels installed and the fasteners aligned and tightened you will need to install the Discharge Collar at the bottom set of holes on the Hopper Panels. First determine the alignment of the Discharge Collar to be sure that it will be orientated in the desired direction.

Align the flat edge face of the plate portion of the Discharge Collar so that one of the flat ends of the plate is perpendicular to the centerline between two of the hopper legs in the direction that the conveyor will be installed and the holes in the Hopper Panel align with the holes in the Discharge Collar.



(Reference Image for Discharge Collar Alignment)

Once you have determined the orientation of the discharge begin to attach the discharge collar to the Hopper Panels using the same 7/16" Socket Head Cap Screws and 7/16" Whiz Nuts as used on the vertical seams of the Hopper Panels. Insert the bolt from the inside of the Medium Duty Hopper Tank and finger tighten the nut from the outside. It is recommended to leave these fasteners loose until the assembly of the hopper is complete.



(Cross Sectional View of Discharge Assembly)

STEP 18. FINISH THE HOPPER TANK ASSEMBLY:

Once you have all of the Hopper Panels in place and the Discharge Collar has been aligned and attached begin to tighten all of the remaining fasteners that were left loose during the assembly. Start with the fasteners that connect the Discharge Collar to the Hopper Panels.

Next tighten the leg angle braces by working your way around the hopper tank in a counter-clockwise rotation working your way from the top down and from the inside out. Do not forget to also tighten the fasteners for the hopper brace brackets.

Finally, make sure that all required hardware is present and then finish by tightening the fasteners that hold the leg anchors to the anchor bolts where the anchor meets the foundation.

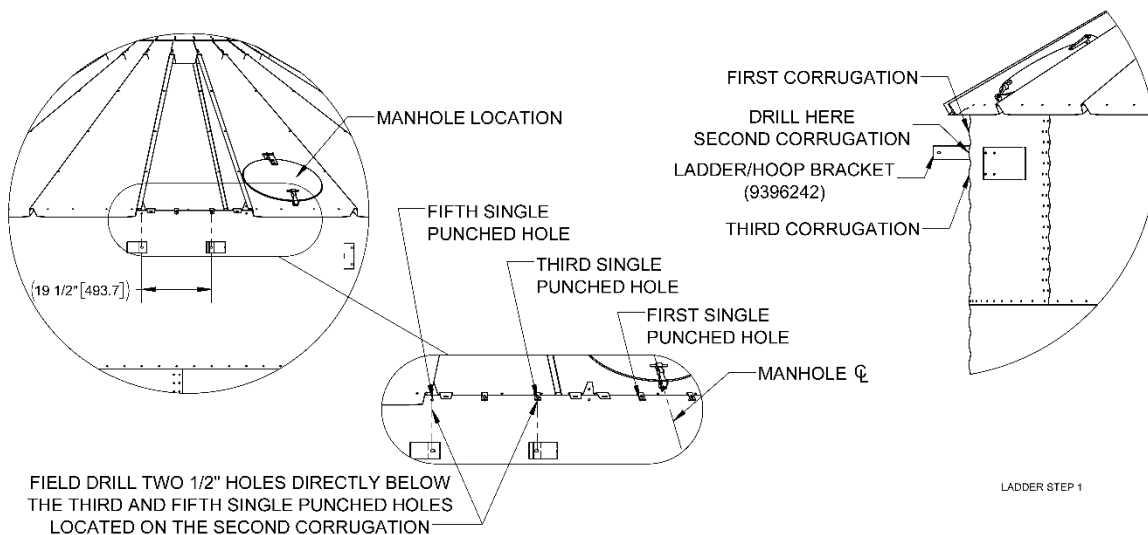
LADDER PACKAGES

With the purchase of a Medium Duty Hopper Tank there is the option to purchase a Ladder Package system that can be installed during the erection of the tank to allow the operator ease of access to the eave and roof of the storage unit.

STEP 19. EAVE RAIL:

The Ladder Package Assembly for the Medium Duty Hopper Tanks comes standard with an Eave Rail Assembly. When beginning the construction of the Medium Duty Hopper Tank it will be necessary to also begin installing the components that make up the Ladder Package.

After the Roof and the first (2) two rings of the Sidewall Stack have been put together, begin determining the position that the Ladder Package will be installed by locating the roof manhole. After you've located the correct placement for the ladder assembly begin by drilling a 1/2" hole thru the sidewall on the second corrugation from the top of the Ring #1 sidewall sheet. The first drilled hole on the left must line up directly below the V-Rib clip one full roof panel to the left of the manhole.

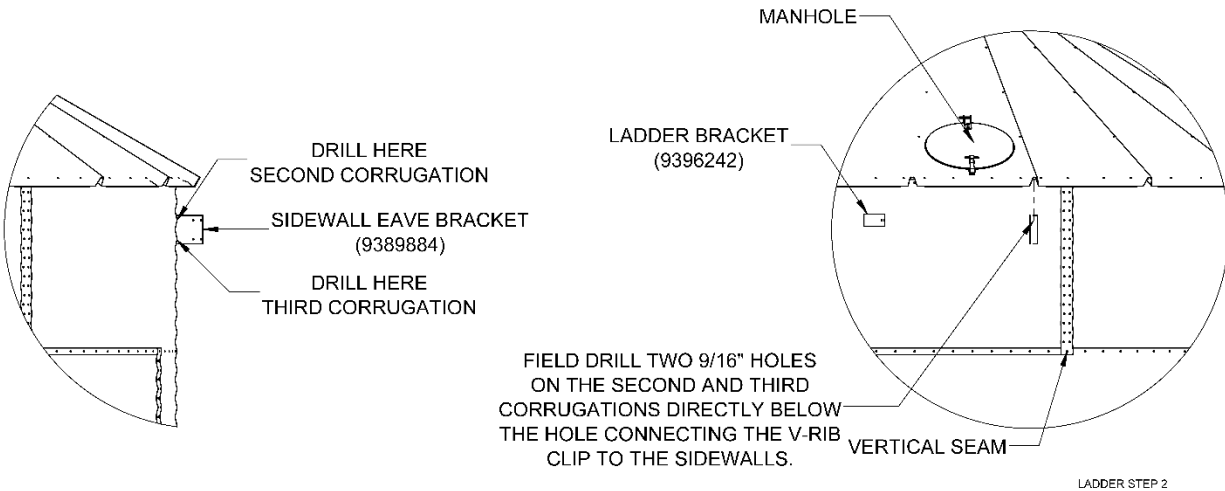


(Detail View of Where to Drill Holes for Ladder/Hoop Brackets for Eave Rail Assembly)

Drill a second hole into the sidewall to the right and on the same corrugation as the first hole directly below the hurricane clip located (2) two holes to the right of the V-Rib clip that the first drilled hole is located directly under. The (2) holes should be spaced approximately 19-1/2" apart horizontally.

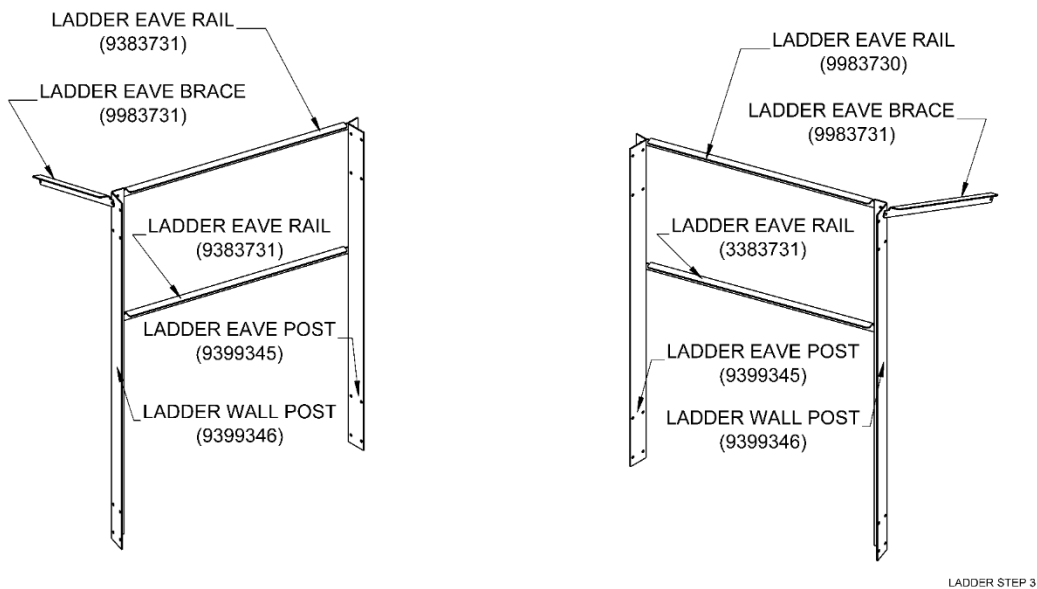
Attach one Ladder/Hoop Bracket (9396242) to each hole using a 7/16" Bin Bolt and 7/16" Whiz Nut insuring that the head of the Bin Bolt is located inside of the hopper tank and finger tighten the Whiz Nut from the outside.

The next step is to drill two more 1/2" holes in the second and third corrugations directly below the V-Rib Clip immediately to the right of the manhole. Connect the Sidewall Eave Bracket (9389884) to the Hopper Tank with (2) two 7/16" Bin Bolts from the INSIDE of the Hopper Tank and finger tighten the 7/16" Whiz Nuts.



(Detail View of Where to Drill Holes and Attach Sidewall Eave Bracket)

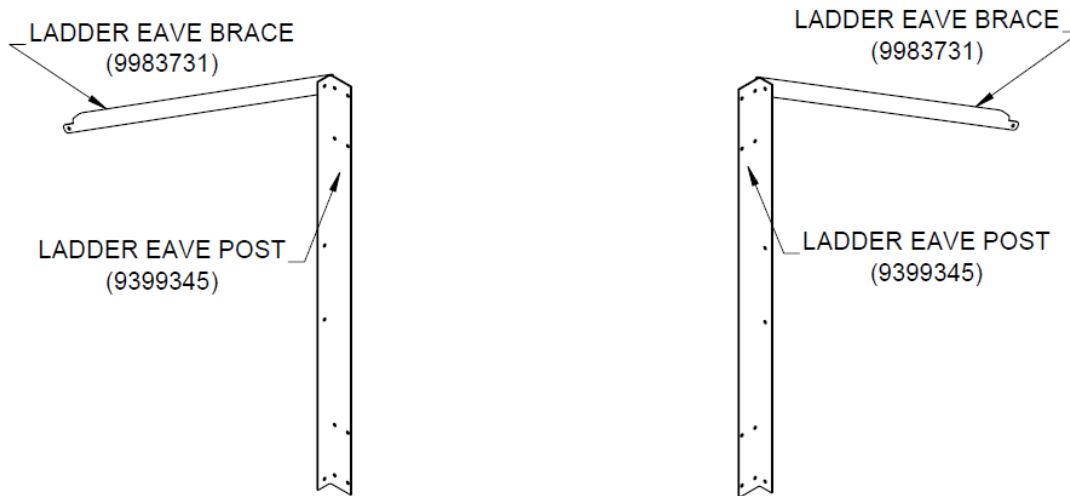
After both Ladder/Hoop Brackets and the Sidewall Eave Bracket are in place begin to put together the Eave Hand Rail Assembly. Using 5/16" x 1.00" hex bolts and 5/16" hex nuts, loosely connect together the (2) two Ladder Eave Rails to the Ladder Eave Post. Attach the Ladder Eave Wall Post to the other end of the Ladder Eave Rails and then loosely fasten the Ladder Eave Brace to the Ladder Eave Wall Post to form the Eave Hand Rail Assembly.



(View of Eave Rail Assembly Both Left and Right Handed)

Important Note: The Eave Rail Assembly is interchangeable and can be installed either on the right hand or left hand side of the Ladder Package simply by flipping the Ladder Eave Wall post and the Sidewall Eave Bracket.

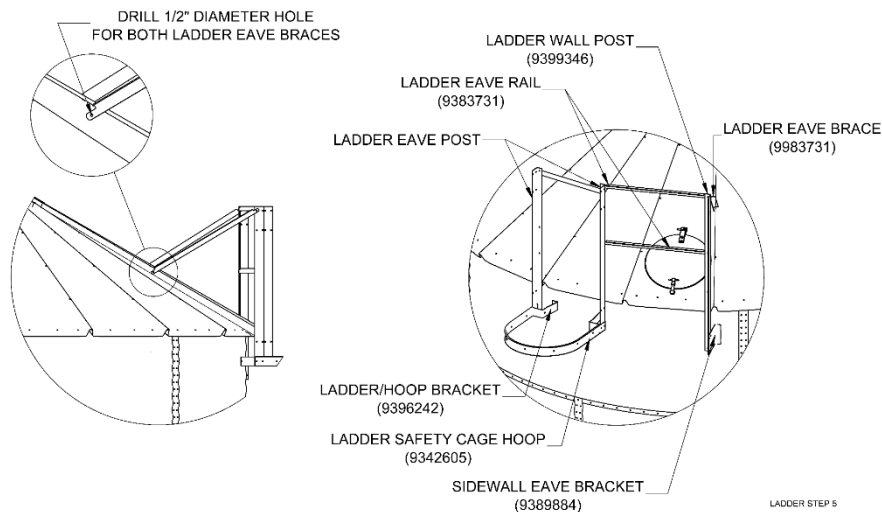
Assemble the other Ladder Eave Post to the remaining Ladder Eave Brace finger tightening the fasteners as well.



LADDER STEP 4

(Remaining Left and Right Handed Ladder Eave Post/Brace Assemblies)

After both sides of the Eave Rail Assembly are complete begin mounting the Ladder Eave Posts to the Ladder/Hoop Brackets (9396242) and install the first Ladder Safety Cage Hoop (9342605) to both Ladder/Hoop Brackets. Next, attach the Ladder Wall Post to the Sidewall Eave Bracket. Allow both Ladder Eave Braces from both sides to rest on the roof.

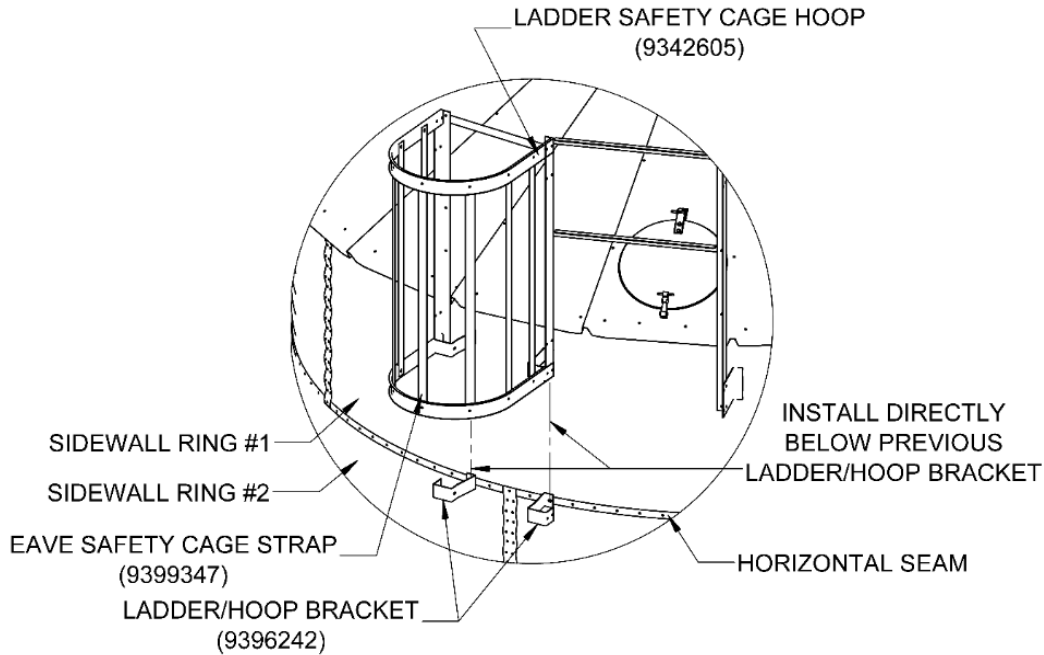


LADDER STEP 5

(Views of Eave Handrail connections to Hopper Tank)

While insuring that the Ladder Eave Post connected to the Ladder Eave Brace is perpendicular to the ground mark and drill a 1/2" hole in the V-Rib of the roof where the hole of Ladder Eave Brace is located. Do the same with the Ladder Eave Brace connected to the Ladder Wall Post on the opposite side.

Connect the free ends of the Ladder Eave Braces to the V-Rib through the drilled holes in the roof using a Bin Bolt from the INSIDE of the Hopper Tank and a Whiz Nut from the OUTSIDE and completely tighten. Finish this portion of the build by tightening all of the fasteners used on the Eave Rail Assembly thus far.



LADDER STEP 6

(Detail of Installation of First Cage Straps in Eave Rail Assembly)

Next, install a second Ladder Safety Cage Hoop (9342605) at the top of each of the (2) two Ladder Eave Posts making sure to install the bolts from the inside of the cage outward. After the top Ladder Safety Cage Hoop is in place begin installing the 53" Eave Safety Cage Straps (9399347) along the very top Ladder Safety Cage Hoop making sure to install the bolts from inside of the cage and nut on the outside. Leave the cage strap fasteners just finger tightened for now and do not install the fasteners along the bottom of the 53" Eave Safety Cage Straps at this time.

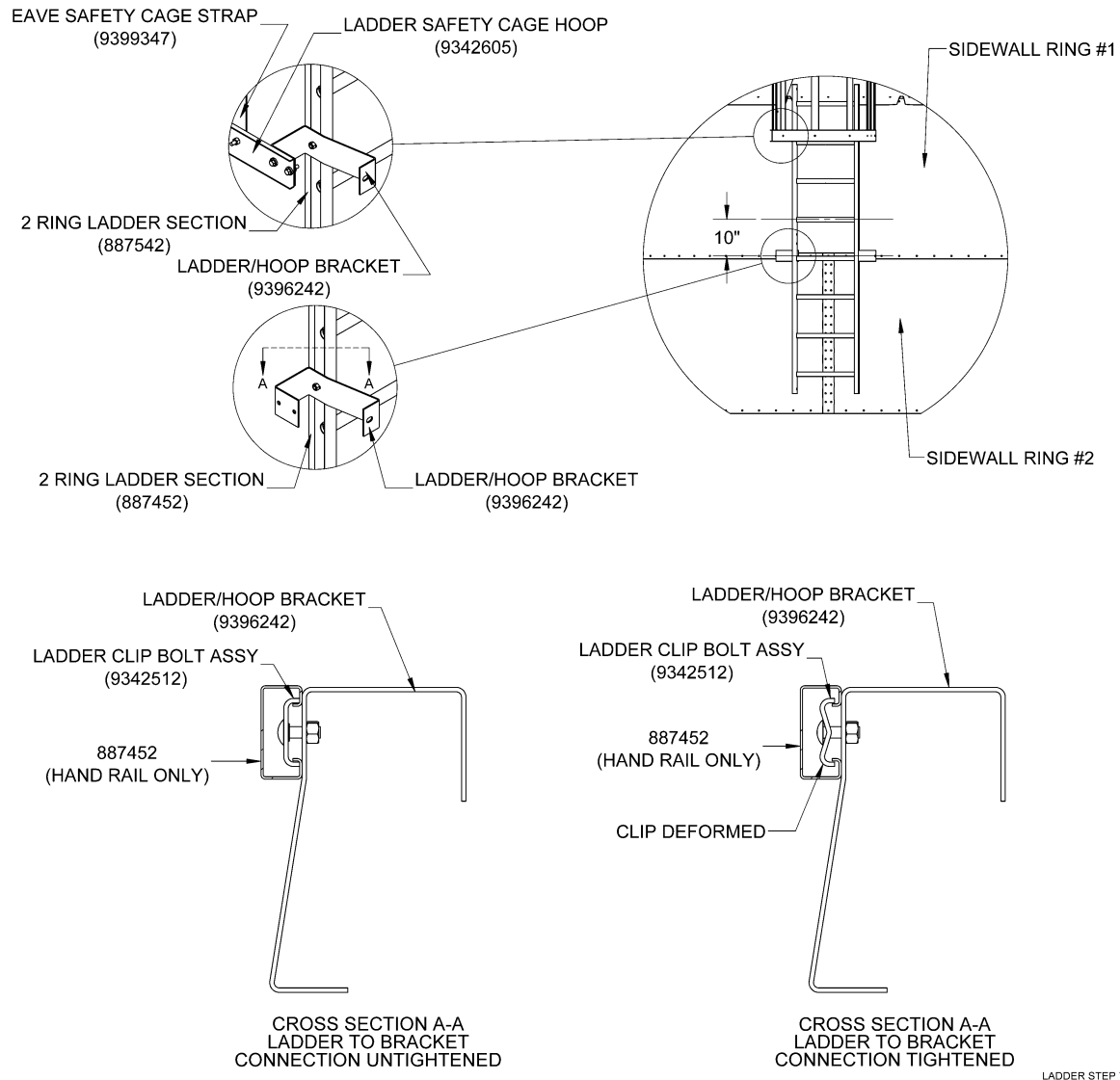
Important Note: It is recommended that before proceeding with the full completion of the Eave Rail Assembly that you install the top section of the ladder assembly at this time.

Following that, remove the previously installed fasteners two holes to either side of the vertical seam along the horizontal seam formed by the overlap of Ring #1 and Ring #2. Install (2) two additional Ladder/Hoop Brackets (9396242) directly below the first pair of Ladder/Hoop brackets re-using the same nut/bolts that you just removed from the horizontal seam. Locate your first 2 Ring Ladder Section (887452), (2) two Ladder Clip Bolt Assy (9342512) and (2) two 5/16" Whiz Nuts.

Then position the first 2 Ring Ladder Section so that the 4th ladder rung from the top measures approximately 10" from the centerline of the 4th rung to center of the horizontal seam between Sidewall Ring #1 and Ring #2. Check the orientation of the rung drip holes and make sure they're facing toward the ground.

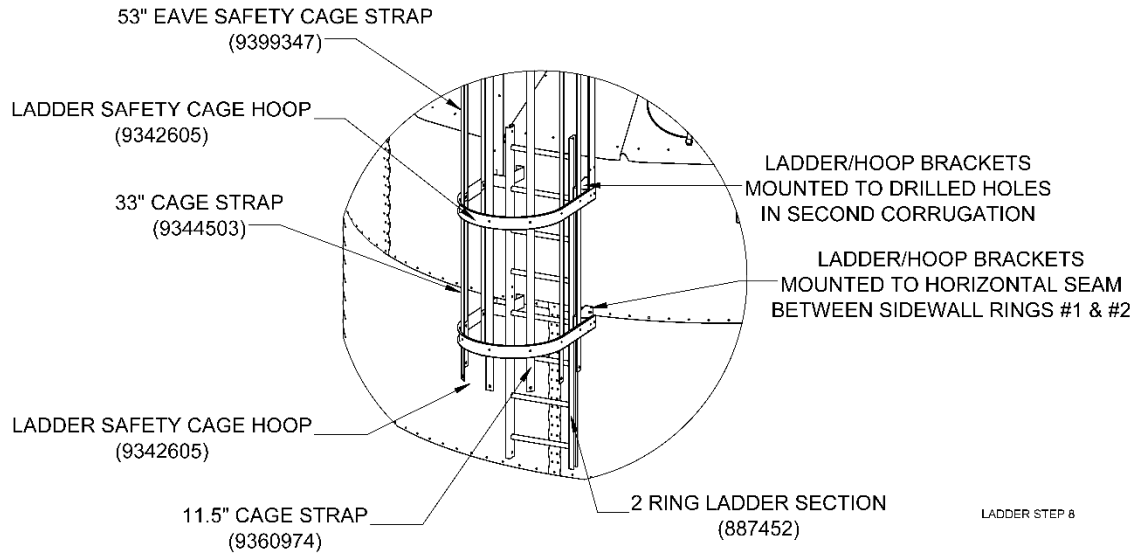
Slide one Ladder Clip Bolt Assy into the Hand Rail portion of the Ladder Section and connect to the Ladder/Hoop Bracket by pushing the bolt portion of the Ladder Clip Bolt Assy through the hole in the Ladder/Hoop Bracket and fastening a 5/16" Whiz Nut on the inside face of the Ladder/Hoop Bracket.

Tighten the nut but do not over-tighten, repeat this process for the other side of the ladder and twice again for the upper set of Ladder/Hoop Brackets that were installed. When finished tightening the Ladder Clip Bolt Assy it should deform and lock into the Hand Rail of the Ladder Section.



(Installing the First Ladder Section)

Once you've installed the first 2 Ring Ladder Section complete the Eave Rail Assembly. Locate the (7) seven Safety Cage Straps 35" (9344503) and using 5/16" Bin Bolts and Whiz Nuts connect them with the bottoms of the 53" Eave Safety Cage Straps (9399347) to the Ladder Safety Cage Hoop (9342605) that is mounted (2) two corrugations below the eave of the Hopper Tank and then install the (7) seven 11.5" Safety Cage Straps (9360974) to the bottom of the 35" Safety Cage Straps fixing them to the bottom Ladder Safety Cage Hoop.



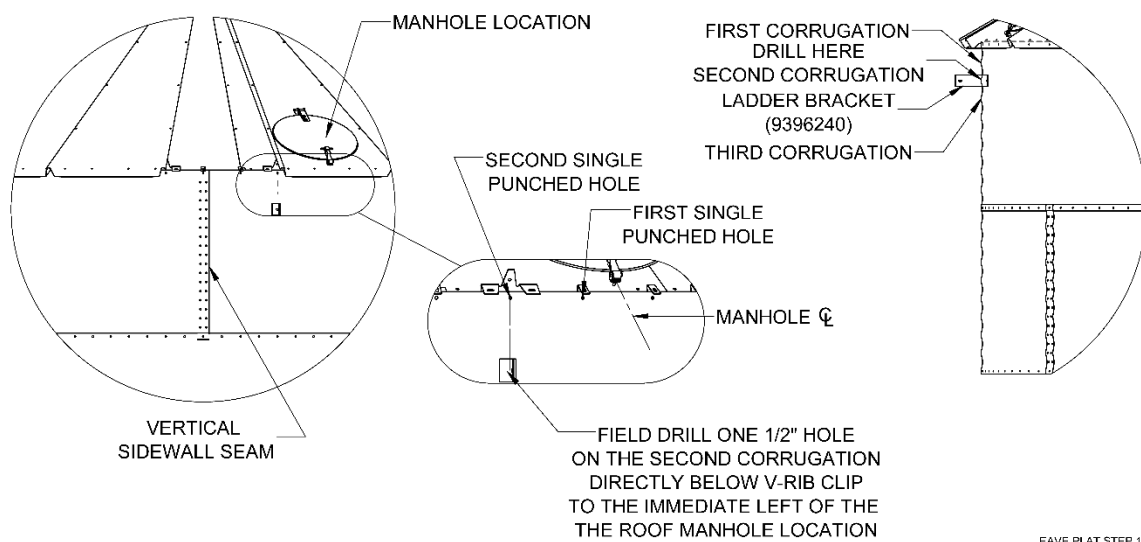
(View of Final Portion of Eave Rail Assembly)

This completes the Eave Rail Assembly portion of the standard Ladder Package.

STEP 20. EAVE PLATFORM:

The following is a step by step detail of how to assemble an Eave Platform Assembly for use with your Ladder Package installed with your Medium Duty Hopper Tank.

After the Roof and the first (2) two rings of the Sidewall Stack have been put together, begin by locating the position that the Ladder Package will be installed by locating the Roof Manhole. After you've located the correct placement for the Ladder Assembly begin by drilling a 1/2" hole thru the Sidewall Sheet on the second corrugation from the top of the Ring #1 directly below the V-Rib Clip to the immediate left of the Roof Manhole location.

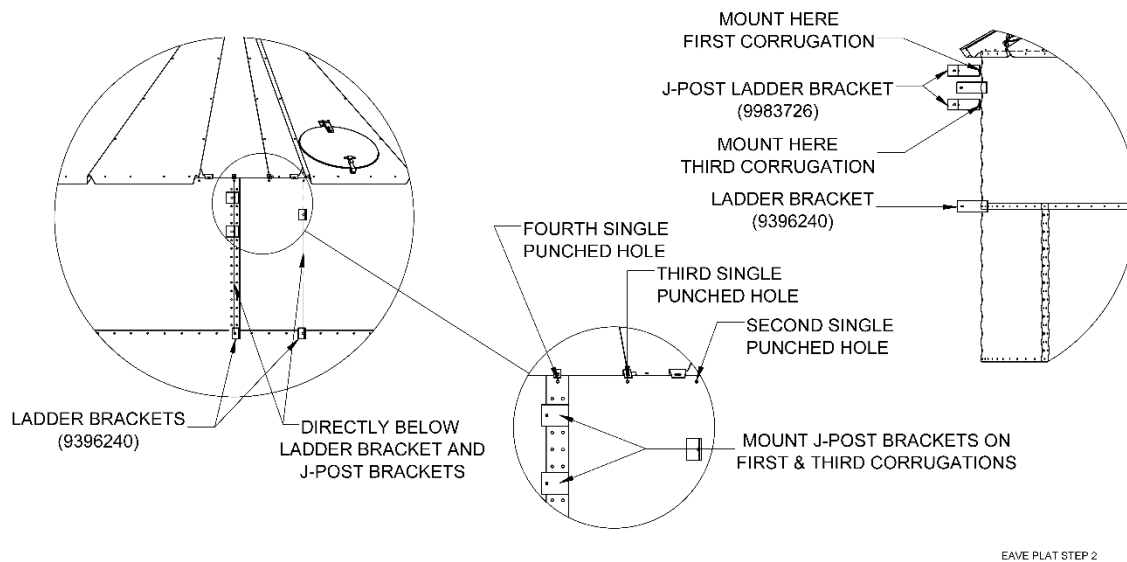


(Detail View of Where to Drill Holes for Ladder Brackets for Eave Platform Assembly)

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Attach one Ladder Bracket (9396240) using a 7/16" Bin Bolt and 7/16" Whiz Nut insuring that the head of the Bin Bolt is located inside of the hopper tank and finger tighten the Whiz Nut from the outside.

The next step is to remove the left –hand fasteners on the first and third corrugations along the vertical seam to the immediate left of the Roof Manhole location. Connect the (2) two J-Post Ladder Brackets (9393726) to one of the vertical seam holes in the Hopper Tank with the same (2) two 7/16" Bin Bolts that were removed and finger tighten the 7/16" Whiz Nuts.



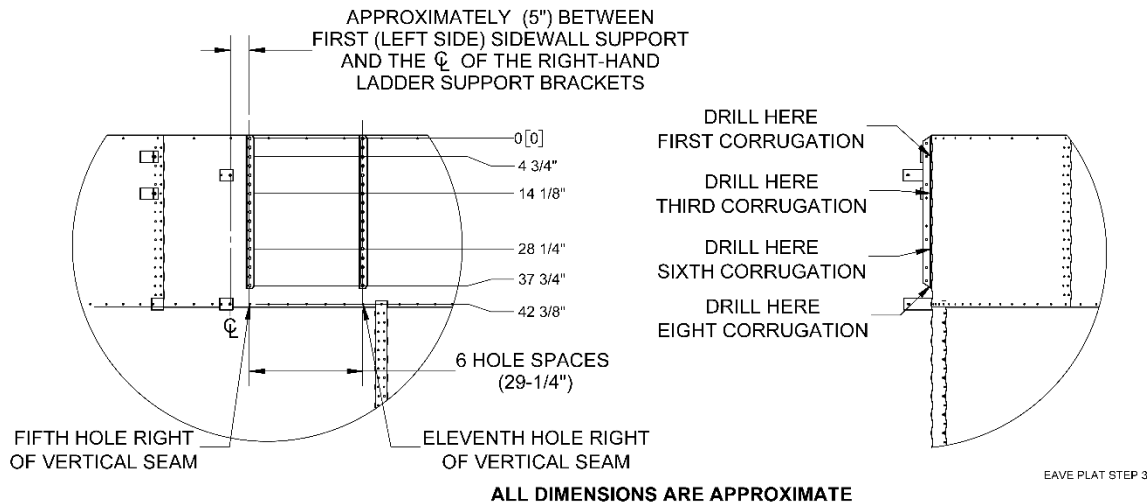
(Detailed View of J-Post Ladder Bracket Installation)

Continue the Eave Platform Assembly by locating and fastening the next (2) two Ladder Brackets (9396240) from the Eave Platform Assembly kit to the Sidewall Stack Along the first horizontal seam. Install one (1) Ladder bracket directly below the (2) two J-Post Ladder Brackets and install the other Ladder Bracket directly below the single Ladder Bracket on the second corrugation.

Start by removing the corresponding Bin Bolt/Whiz Nut currently used along the horizontal seam of Ring #1 and Ring #2 of the Sidewall Stack, place the Ladder Brackets into position and fasten the Ladder Bracket to the Sidewall Stack by replacing the Bin Bolts and Whiz Nuts back into the same holes and finger tighten.

Next, begin to position the Adjustable Platform Sidewall Supports to Ring #1 of the Sidewall Stack. Start by drilling 1/2" holes through the Sidewall Sheet. Holes should be drilled at the First, Third, Sixth and Eighth corrugations directly above the **FIFTH** and **ELEVENTH** holes of the horizontal seam, on the right side of the vertical seam.

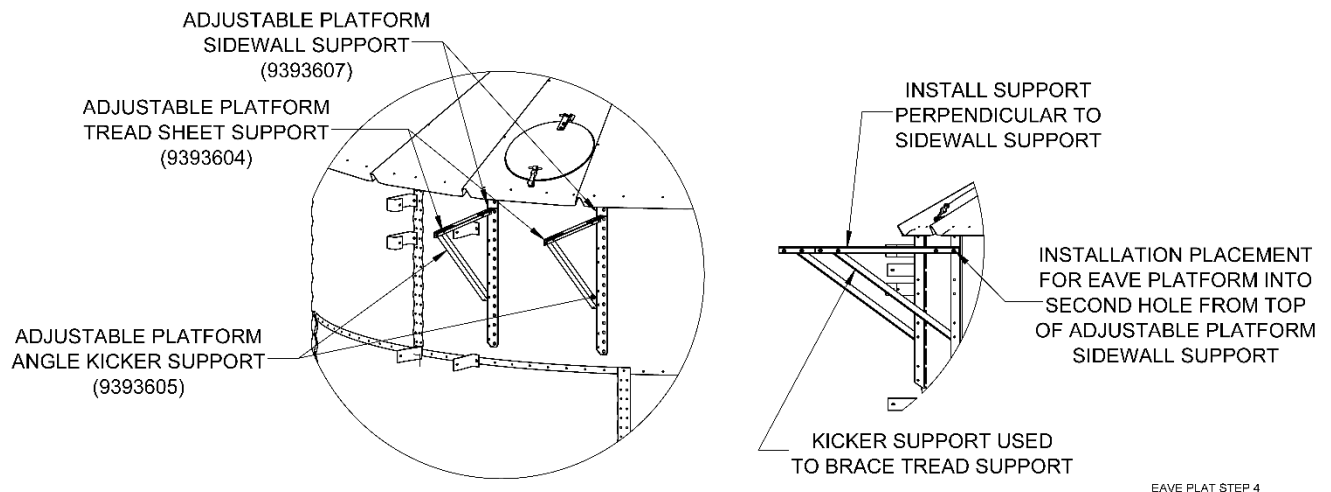
MEDIUM DUTY HOPPER TANK INSTRUCTION MANUAL



(Installation of the Adjustable Platform Sidewall Supports)

Once all (8) eight 1/2" holes are drilled, install the Adjustable Platform Sidewall Supports using (4) four 7/16" Bin Bolts from the INSIDE and (4) Whiz Nuts on the OUTSIDE of the Hopper Tank and completely tightening the fasteners once both supports are in place.

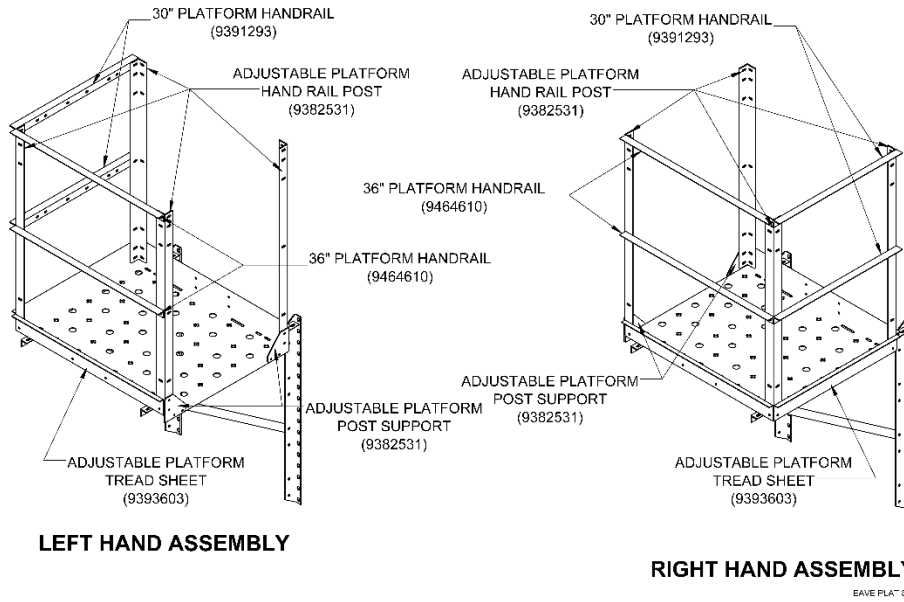
Following the installation of the Sidewall Supports, locate and affix the Adjustable Platform Tread Sheet Supports and the Adjustable Platform Angle Kicker Supports by connecting them to the Adjustable Platform Sidewall Supports using 5/16" Bin Bolt and 5/16" Whiz Nuts.



(Assembly View for Adjustable Platform Support Bracing)

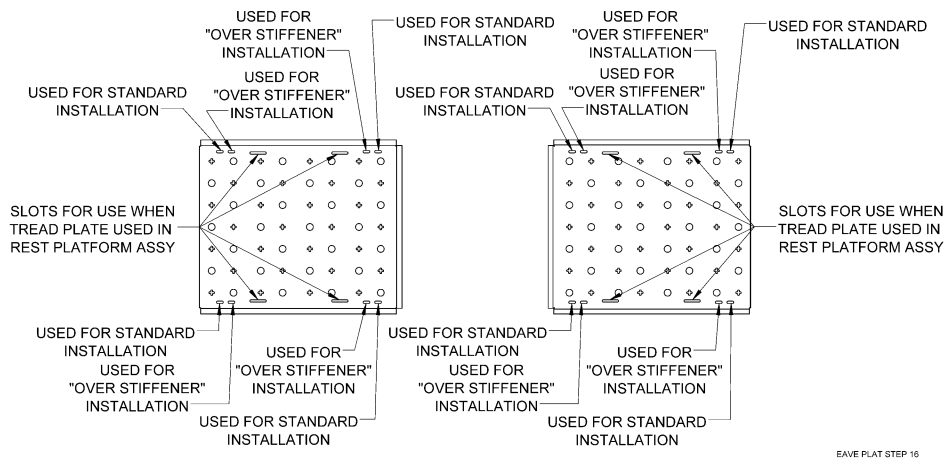
Important Note: The Eave Platform Assembly is interchangeable and can be installed either on the right hand or left hand side of the Ladder Package simply by flipping the orientation of the Adjustable Platform Tread Sheet and assembling the Platform Handrails, Platform Handrail Posts and Adjustable Platform Post Supports accordingly.

MEDIUM DUTY HOPPER TANK INSTRUCTION MANUAL



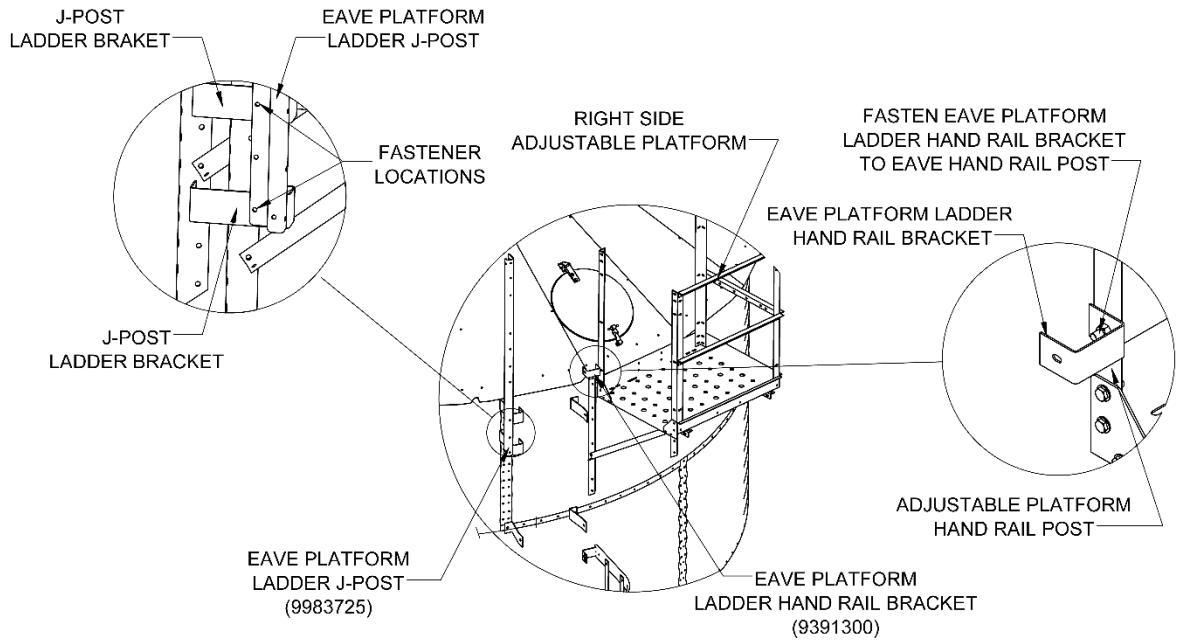
(Left and Right Hand Assemblies of Adjustable Platform)

Now construct the Adjustable Platform assembly using 5/16" Bin Bolts and Whiz Nuts, separate from the Hopper Tank Assembly. Once the Adjustable Platform Assembly is together, lift the platform into place aligning the smaller slotted holes in the Tread Sheet to the holes in the Tread Sheet Supports and connect them with 5/16" fasteners. Make note if your installation requires you to install your platform in an "over stiffener" position and use the appropriate holes when completing the installation.



(Detail of Left and Right Tread Plate Slot Locations for Installation)

Once you have the Adjustable Platform in place and mounted to the supporting brackets locate the Eave Platform Ladder J-Post. Fasten the J-Post to the J-Post Ladder Brackets previously installed using 5/16" Bin Bolts and Whiz Nuts. After the J-Post is securely fastened in place install the Ladder Hand Rail Bracket to the Adjustable Platform Hand Rail Post also using a 5/16" Bin Bolt and Whiz Nut.



EAVE PLAT STEP 6

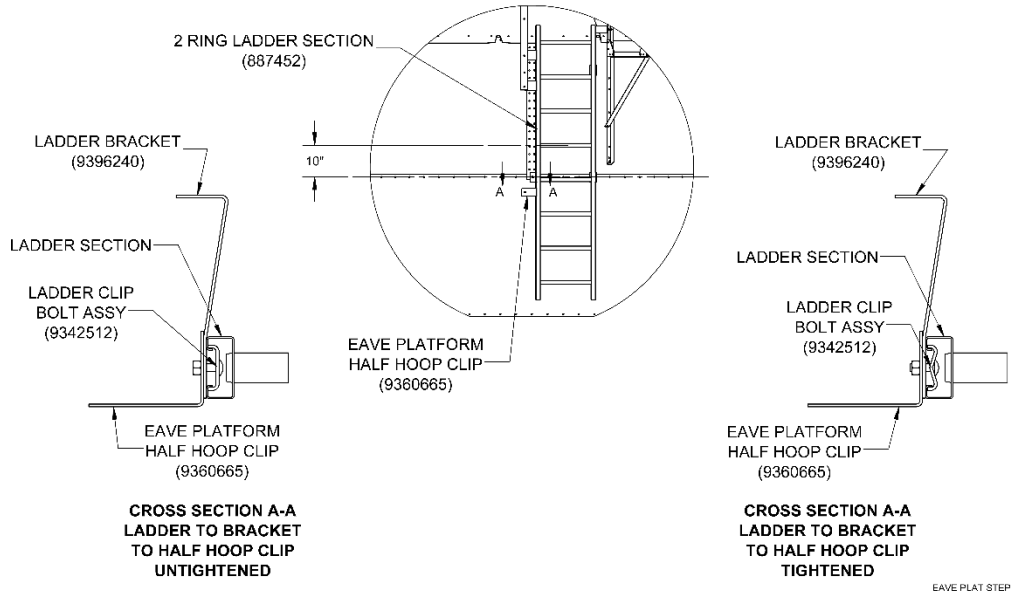
(Detail View of J-Post and Eave Platform Ladder Hand Rail Bracket Installation)

Important Note: It is recommended that before proceeding with the full completion of the Eave Platform Cage Assembly that you install the top section of the ladder assembly at this time.

Previously, (2) two Ladder Brackets were installed at the horizontal seam where Ring #1 and Ring #2 of the Sidewall Stack. You want to position the first 2 Ring Ladder Section so that the 4th ladder rung from the top measures approximately 10" from center of rung to the center of the horizontal seam at the overlap of Sidewall Ring #1 and Ring #2.

Be certain to check the orientation of the rung drip holes to make sure they're facing toward the ground. Use (2) two Ladder Clip Bolt Assy (9342512) with nut to fasten the ladder to the Hopper Tank.

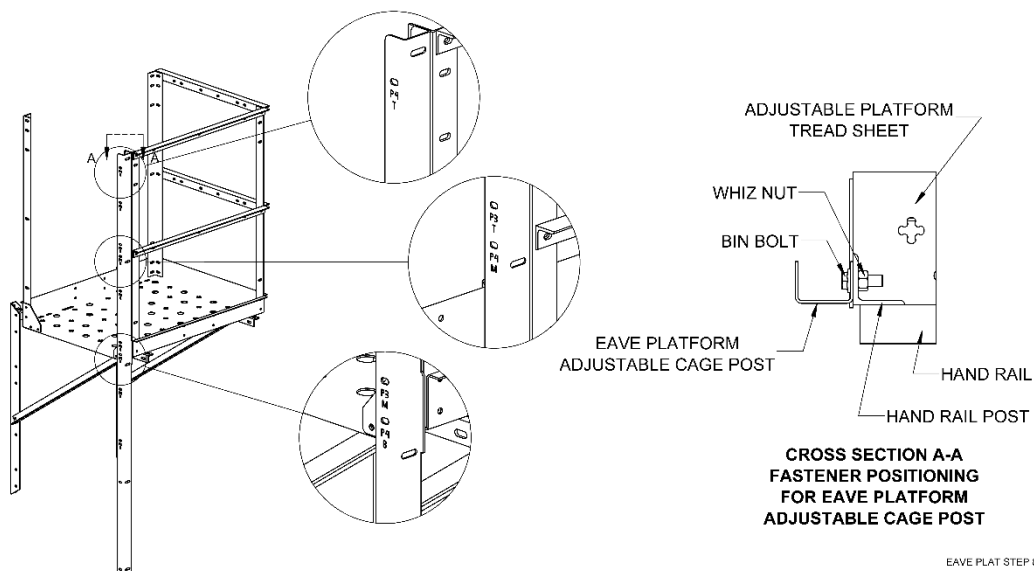
Slide one Ladder Clip Bolt Assy into the Hand Rail portion of the Ladder Section and connect to the Ladder Bracket by pushing the bolt portion of the Ladder Clip Bolt Assy through the hole in the Ladder Bracket previously attached to the Hopper Tank and then affix the Eave Platform Half Hoop Clip onto the bolt and finally fasten with a 5/16" Whiz Nut.



(Detail of Ladder Bracket, Half Hoop Clip to Ladder Assembly)

Tighten the nut but do not over-tighten, repeat this process for the other side of the ladder less the installation of the Eave Platform Half Hoop Clip and again directly above with the Ladder Bracket on the second corrugation. Repeat this process for both of the J-Post Ladder Brackets on the first and third corrugations. When finished tightening the Ladder Clip Bolt Assy it should deform and lock into the Hand Rail of the Ladder Section.

The next step is to begin the assembly of the Eave Platform Adjustable Cage package. Begin by finding and attaching the Eave Platform Adjustable Cage Post (9360663) to the Adjustable Platform Handrail Post located at the outside open corner of the Eave Platform Assembly using 5/16" fasteners and positioning the Cage Post using the position 4 alignment holes labeled "P4" with either a "T" (Top), "M" (Middle) or "B" (Bottom).

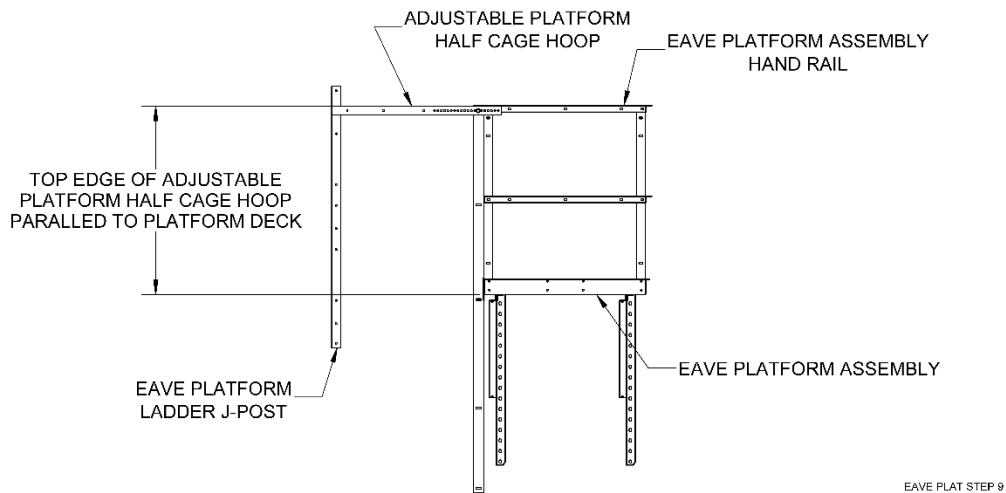


(Assembly View of Eave Platform Adjustable Cage Post Connection)

After the Eave Platform Cage Post is secured locate (3) three of the Adjustable Platform Half Cage Hoops (9360656) in your Eave Platform Assembly kit.

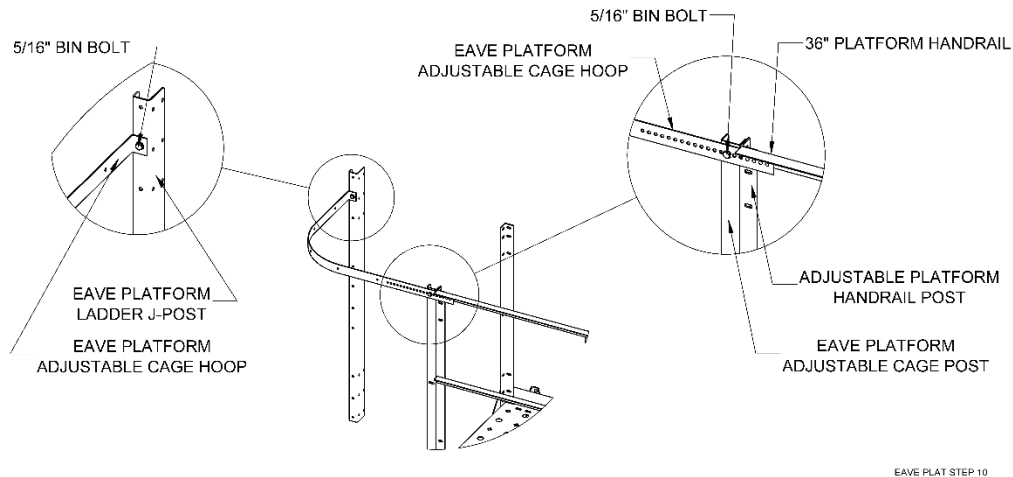
Connect the small angled jogged end of the Adjustable Platform Half Cage Hoop directly to the Eave Platform Ladder J-Post through one of the (3) three holes in the top group of holes located on the front face using 5/16" fasteners so that the TOP edge of the Adjustable Platform Half Cage Hoop is parallel to the ground and even with the top of the Eave Platform Assembly Hand Rail.

Fasten the other end of the Adjustable Platform Half Cage Hoop to the Eave Platform Adjustable Cage Post at the corresponding location through the large elongated slot on the outer face. Leave the fasteners for the Half Cage Hoop loose for the time being.



(Alignment Diagram for First Adjustable Platform Half Cage Hoop)

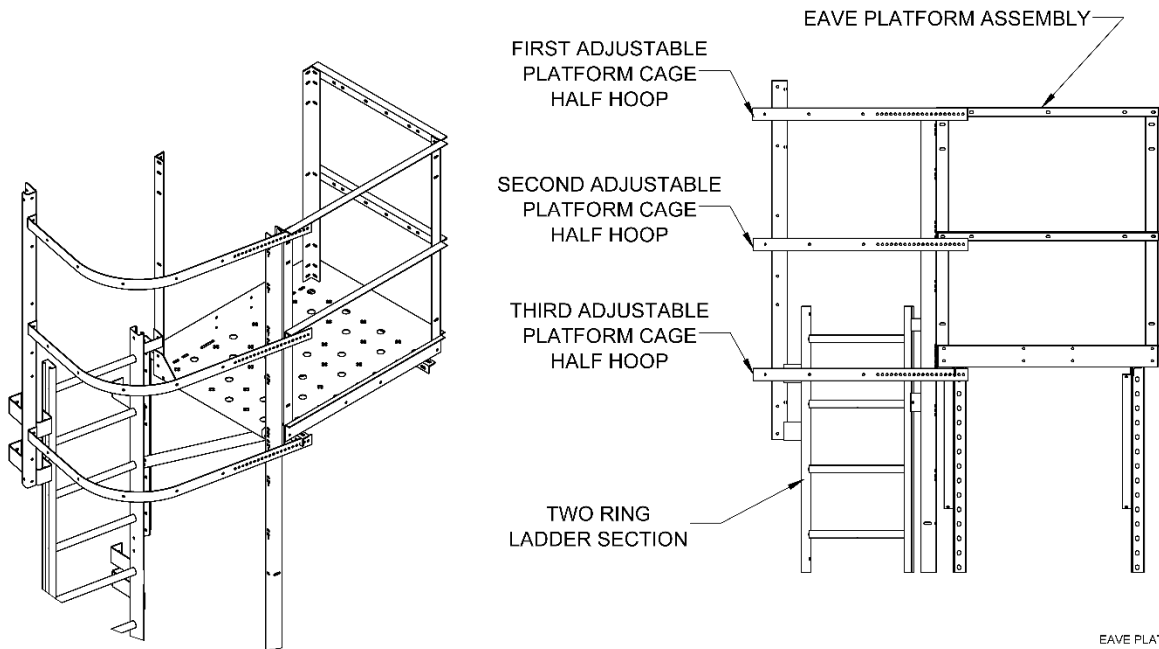
Important Note: It is recommended that fasteners used during the assembly of the Eave Platform Adjustable Cage Package be left "finger tightened" until the end to help facilitate in the completion of the assembly.



(Detail of Assembly for First Adjustable Platform Half Cage Hoop)

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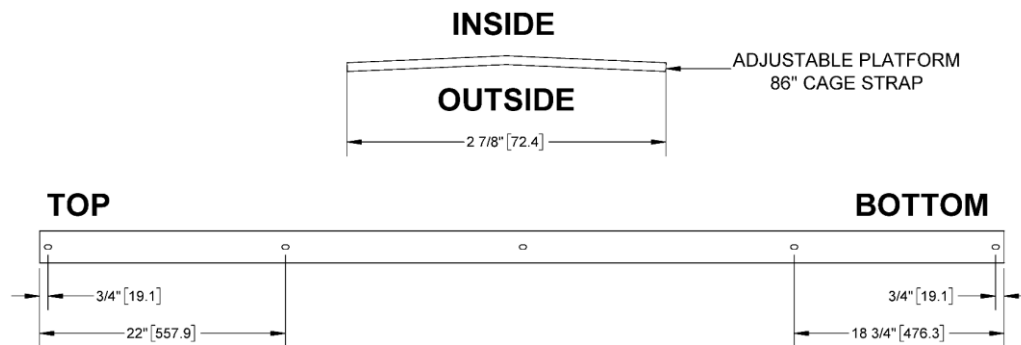
Continue with the installation of the second and third Adjustable Platform Cage Half Hoops in the same manner as the first. It is important that each Half Cage Hoop is installed using the same holes on the aft end of the Half Hoops so additional parts installed later in the assembly will properly line up.



EAVE PLAT STEP 11

(View of Second and Third Adjustable Platform Half Cage Hoops)

The Eave Platform Adjustable Cage package will include (5) five Adjustable Platform 86" Cage Straps that will attach to the Adjustable Platform Half Cage Hoops through the stand alone holes around and near the "rounded portion" of the Half Hoops. Insert the 5/16" fasteners in such a way that the bolt head is **INSIDE** of the cage assembly with the nuts on the **OUTSIDE**.

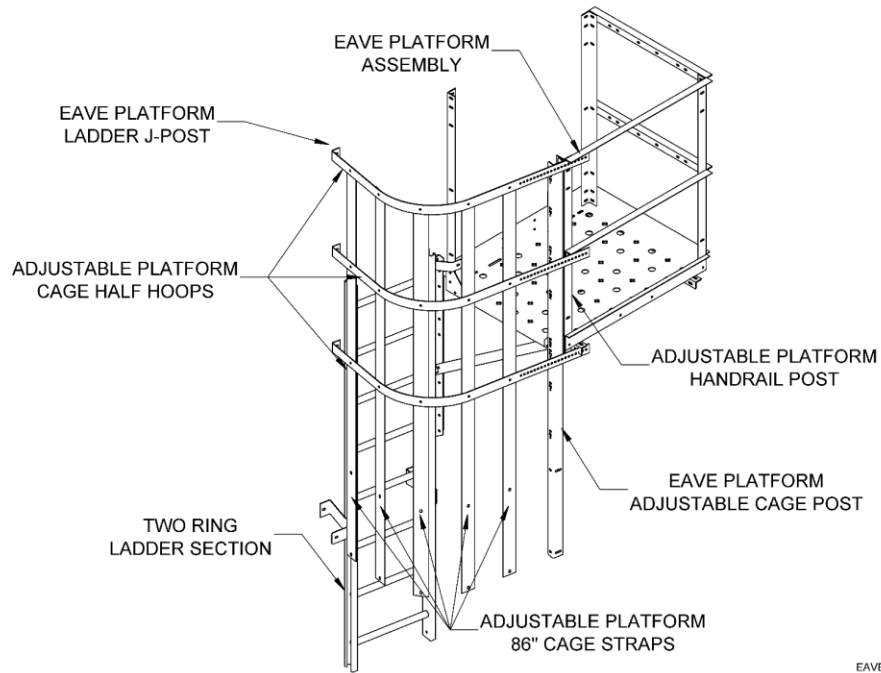


EAVE PLAT STEP 13

(How to Determine Top/Bottom and Inside/Outside Orientation of Cage Straps)

The Adjustable Platform 86" Cage Straps have a subtle centerline bend. When installing the straps make certain that the bend is facing **OUTWARD** away from the Hopper Tank. Be certain to correctly orientate the Adjustable Platform 86" Cage Straps. The **SECOND** hole from the **TOP** is **22 INCHES** from the **TOP END**. The second hole from the bottom will only measure 18-3/4" from the bottom end.

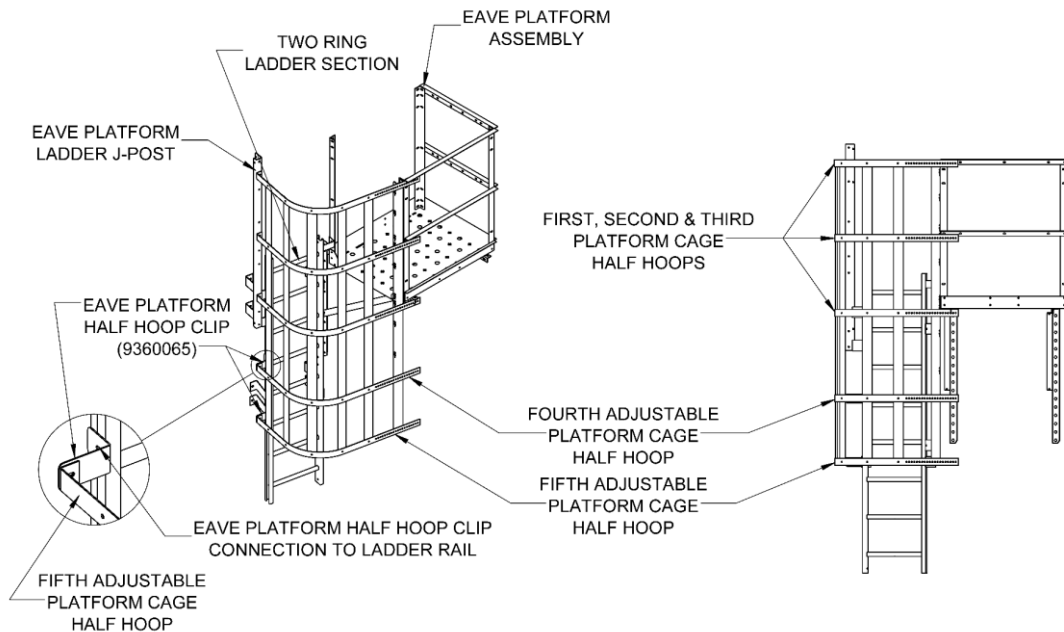
Important Note: It is recommended to only finger tighten the fasteners at this stage until the rest of the Eave Platform Cage Assembly is complete.



EAVE PLAT STEP 12

(Detail of Installation of Adjustable Platform 86" Cage Straps)

Install the remaining (2) two Adjustable Platform Cage Half Hoops. Start by attaching the small angled jogged end of the bottom most Adjustable Platform Half Cage Hoop (the Fifth Half Hoop) to the previously installed Eave Platform Half Hoop Clip located on the first 2 Ring Ladder Section, on top of the Ladder Bracket located on the horizontal seam of Rings #1 and Rings #2 of the Sidewall Stack.



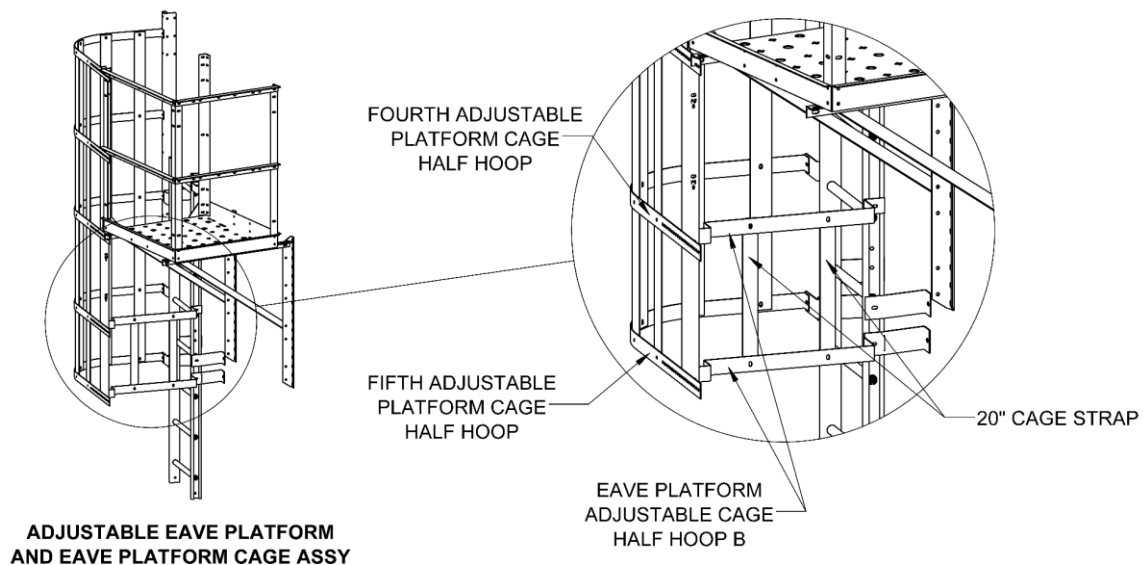
EAVE PLAT STEP 14

(Locating and Installing the Remaining Adjustable Platform Cage Half Hoops)

Connect the other end of the Half Hoop to the bottom most elongated slot of the Eave Platform Adjustable Cage Post and then fasten it to each of the (5) five Adjustable Platform 86" Cage Straps at the bottom most hole of each strap.

Install the remaining Adjustable Platform Cage Half Hoop (the fourth Half Hoop) into the remaining holes of the Adjust Platform 86" Cage Straps. It will be necessary to first fasten the last Eave Platform Half Hoop Clip to the small angled jogged end of the Fourth Adjustable Platform Cage Half Hoop using 5/16" fasteners.

Join the last Half Hoop Clip to the 2 Ring Ladder Section with a Ladder Clip Bolt Assy and 5/16" Whiz Nut. Once all of the Half Hoops and Cage Straps are in place proceed to square up the Eave Platform Cage Assembly and then tighten all fasteners used thus far in the assembly.



(Installing the Eave Platform Adjustable Cage Half Hoop B)

Finish the Eave Platform Adjustable Cage package by locating the (4) four remaining pieces of the assembly, the (2) two Eave Platform Adjustable Cage Half Hoop B and (2) two 20" Cage Straps.

Connect the (2) two Eave Platform Adjustable Cage Half Hoop B to the 2 Ring Ladder Section by mounting the shorter jogged end to the 2 Ring Ladder Section using Ladder Clip Bolt Assy and a 5/16" Whiz Nuts. The bottom Half Hoop B you will simply need to back the nut off of the Ladder Clip Bolt Assy already holding the 2 Ring Ladder Section to the Ladder Bracket at the horizontal seam of Ring #1 and Ring #2 of the Sidewall Stack.

The (2) two Eave Platform Adjustable Cage Half Hoop B should mount to the Cage Assembly so that they coincide with the mounting positions of the Fourth and Fifth Adjustable Platform Cage Half Hoops and mount to the inside surface of the Eave Platform Adjustable Cage Post.

Once both Eave Platform Adjustable Cage Half Hoop B are in place finish the assembly and install the (2) two 20" Cage Straps to the slots located on the long straight center portion of both of the Platform Adjustable Cage Half Hoop B with 5/16" fasteners. Once all fasteners are in place complete the assembly and tighten all remaining fasteners.

This completes the installation of the Medium Duty Hopper Tank Adjustable Eave Platform and Eave Platform Cage Assembly.

STEP 21. REST PLATFORM & REST PLATFORM CAGE:

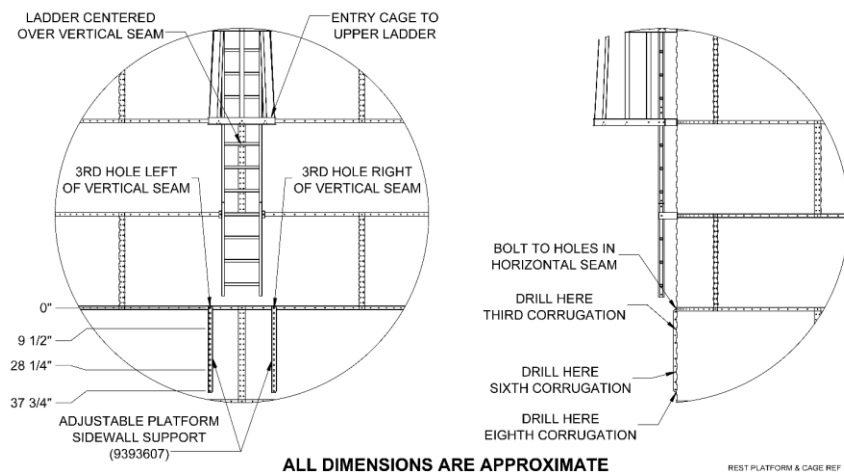
Important Note: Only Medium Duty Hopper Tanks with an Eave Height greater than 24 feet require a Rest Platform & Rest Platform Cage Assembly. If your Medium Duty Hopper Tanks does not have an Eave Height of 24 feet you may skip this step.

On Hopper Tanks with an Eave Height greater than 24 feet, Ladder Packages will come equipped with a Rest Platform Assembly and a Rest Platform Cage Assembly. Once you've completed the upper portion of your particular Ladder Package you will need to install your Rest Platform and Rest Platform Cage Assemblies.

First, start by locating all the pieces and hardware needed to assemble your Rest Platform and make them readily available to be assembled. Next, located the (2) two Adjustable Platform Sidewall Support Brackets (9393607) and find the 3rd hole both left and right of the Vertical Seam centered under the upper ladder portion of the Ladder Package.

Remove the previously placed hardware in the 3rd hole left and right of the vertical seam and attach the Adjustable Platform Sidewall Support Brackets through the top hole on both brackets reusing the same previously used hardware.

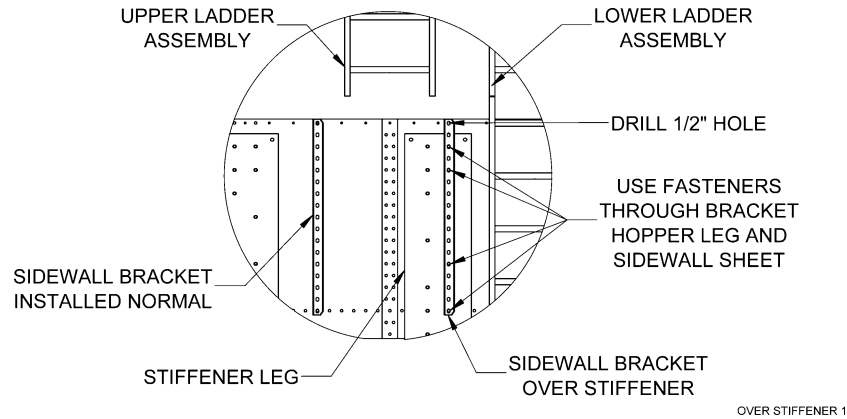
Once both Brackets are attached to the Sidewall Stack mark and drill 1/2" holes on the 3rd, 6th, and 8th corrugations so that the brackets run parallel with the vertical seam. Finish the bracket installation by fastening the brackets through the drilled holes remembering Bin Bolts are to be inserted from the INSIDE and Whiz Nuts tightened from the outside of the Hopper Tank.



(Detail View of Adjustable Platform Sidewall Support Brackets)

MEDIUM DUTY HOPPER TANK INSTRUCTION MANUAL

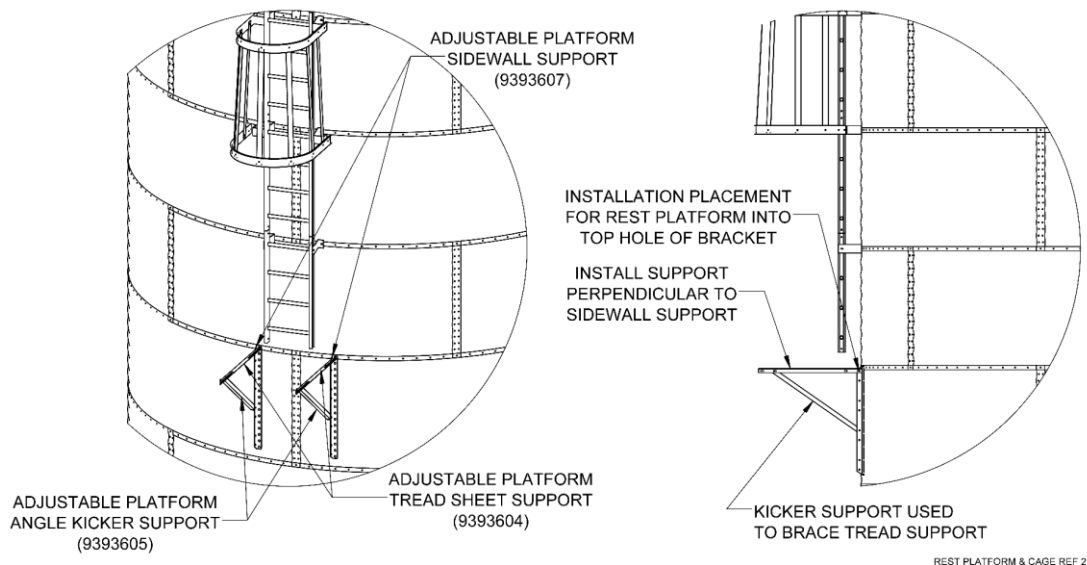
In some circumstances a Rest Platform and Cage may be installed over the bottom ring of the Sidewall Stack. In this case the Sidewall Support Bracket on the Lower Ladder Assembly side will be connected over the Hopper Tank Leg in the “hardware channel” of the Hopper Tank Leg utilizing the same hardware used to fasten the Hopper Leg to the Sidewall Stack.



(Illustration of How to Install Sidewall Bracket over Stiffener)

Following the Sidewall Bracket installation, assemble the Tread Sheet Supports and Angle Kicker supports to the Sidewall Brackets ensuring the Tread Sheet Supports are installed in the first hole of the Sidewall Support brackets.

Connect the Angle Kicker Supports to both the Sidewall Support Brackets and Tread Supports. The Angle Kicker Support should attach to the Sidewall Support Bracket in the top hole of the 3rd pair of holes down and to the Tread Sheet Support through the inner hole of the outer set of holes.



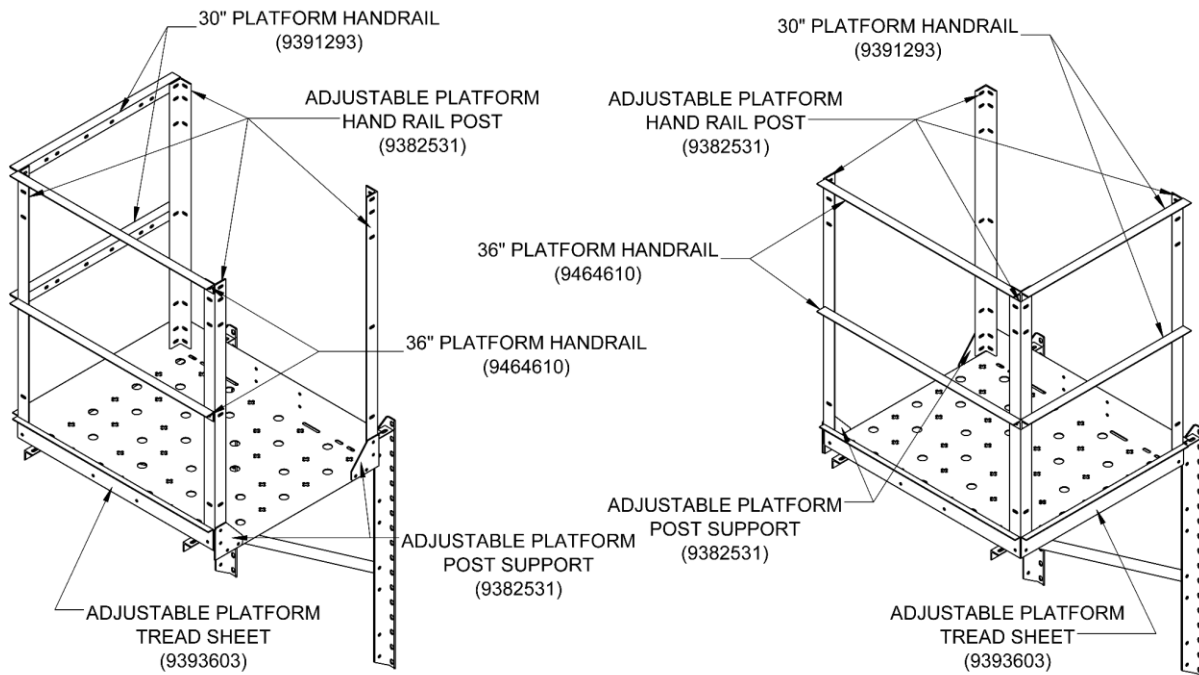
(Detail Assembly View of Support for Rest Platform Tread Plate)

Once the Platform Tread Sheet and Angle Kicker Supports are in place begin assembling the Adjustable Platform using 5/16” Bin Bolts and Whiz Nuts separate from the Hopper Tank Assembly.

After the Adjustable Platform Assembly is together, lift the platform into place aligning the slotted holes in the Tread Sheet to the holes in the Tread Sheet Supports and connect them with 5/16" fasteners.

Once you have fastened the Tread Sheet to both Tread Sheet Supports, ensure that the assembly is square and tighten all the fasteners used in the assembly of the platform.

Important Note: The Reset Platform Assembly is interchangeable and can be installed either on the right hand or left hand side of the Ladder Package simply by flipping the orientation of the Adjustable Platform Tread Sheet and assembling the Platform Handrails, Platform Handrail Posts and Adjustable Platform Post Supports accordingly.



LEFT HAND ASSEMBLY

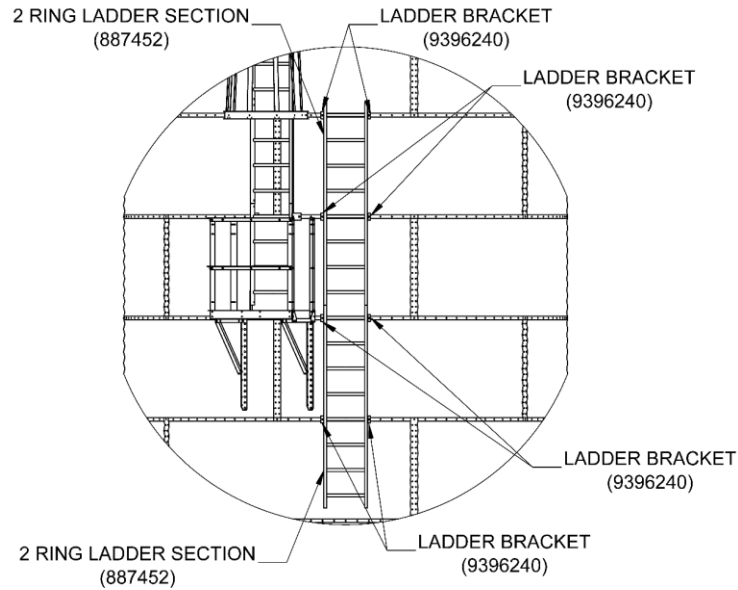
RIGHT HAND ASSEMBLY

EAVE PLAT STEP 5

(Left and Right Hand Assemblies of Adjustable Platform in Position #1)

Before beginning to assemble the Rest Platform Cage it is a good idea to begin installing the first two sections of the Lower Ladder assembly. Reference the appropriate Ladder Package Illustration for your particular Medium Duty Hopper Tank Assembly.

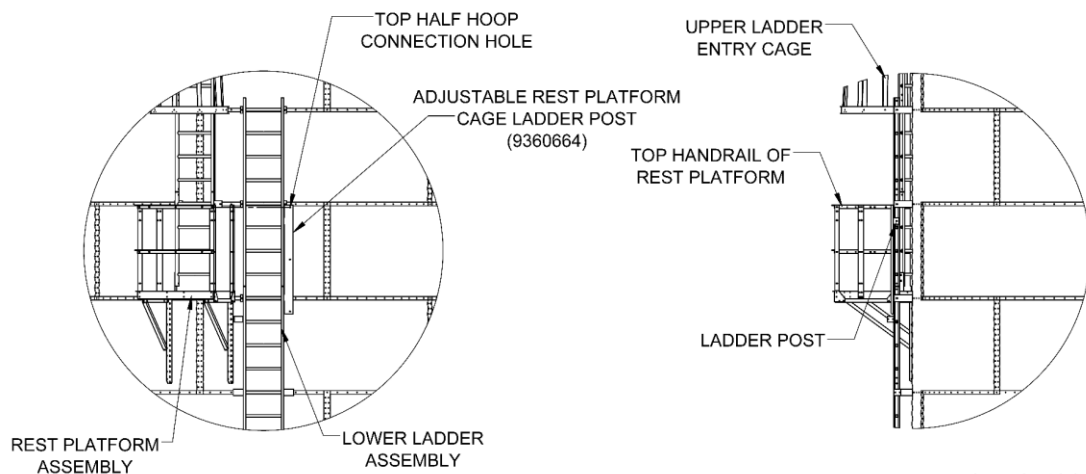
MEDIUM DUTY HOPPER TANK INSTRUCTION MANUAL



REST PLATFORM & CAGE REF 3

(Drawing Showing Rest Platform & Lower Ladder 2 Ring Ladder Sections)

After the first two ladder sections of the Lower Ladder assembly are in place begin assembling the Rest Platform Cage. Start by locating the Adjustable Rest Platform Cage Ladder Post (9360664) and attach it to the right side ladder rail of the first section of the Lower Ladder assembly using (2) two Ladder Clip Bolt Assy (9342512) and position it so that the top Half Hoop connection hole is level with the holes in the top hand rail of the Rest Platform.

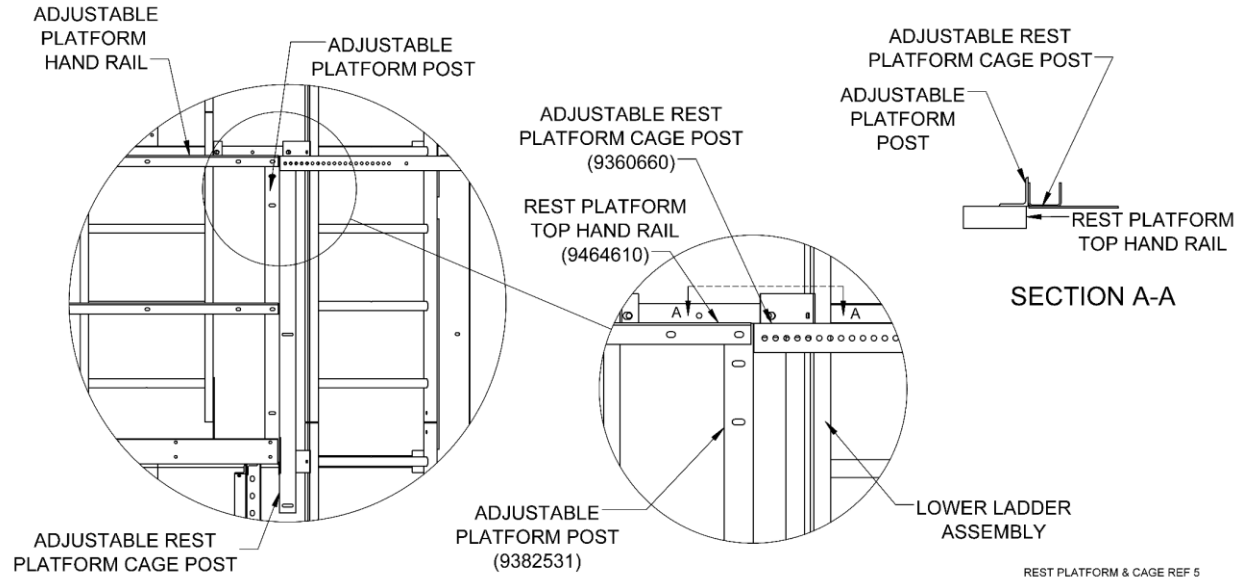


REST PLATFORM & CAGE REF 4

(How to Install and Locate Adjustable Rest Platform Cage Ladder Post)

Next, find and install the Adjustable Rest Platform Cage Ladder Post (9360660) to the outer Adjustable Platform Handrail Post using 5/16" hardware in such a way that a short portion of the Cage Ladder Post will protrude down below the Tread Plate of the Rest Platform approximately 6-3/4" inches and the top of the Adjustable Rest Platform Cage Post is relatively flush with the top Handrail of the Adjustable Rest Platform.

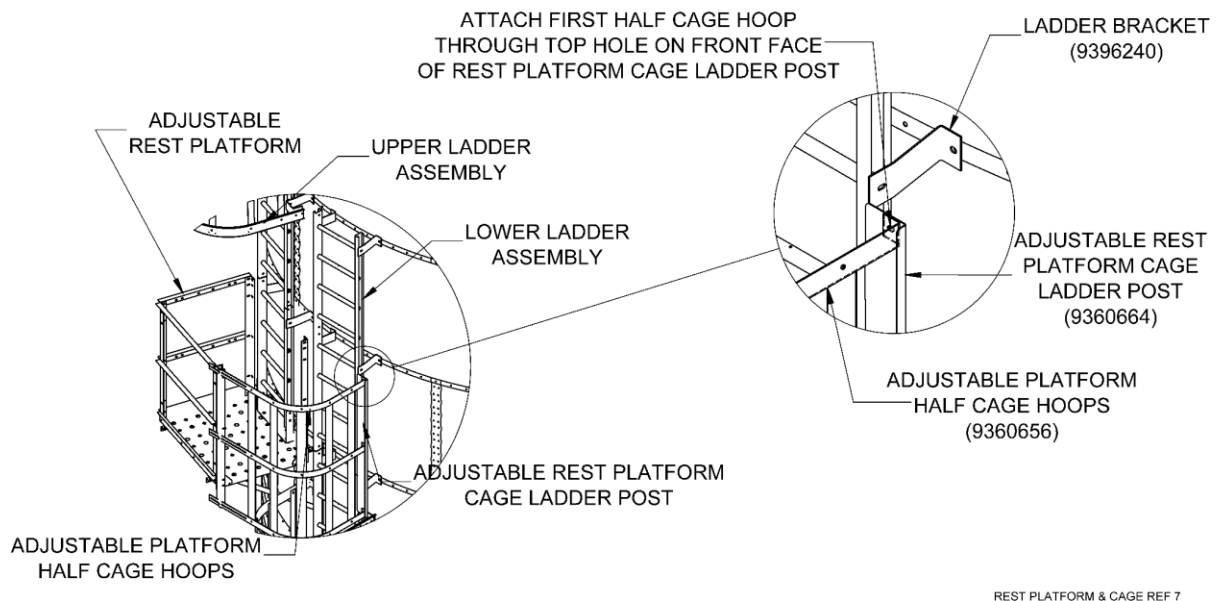
MEDIUM DUTY HOPPER TANK INSTRUCTION MANUAL



(Locating and Installing the Adjustable Rest Platform Cage Post)

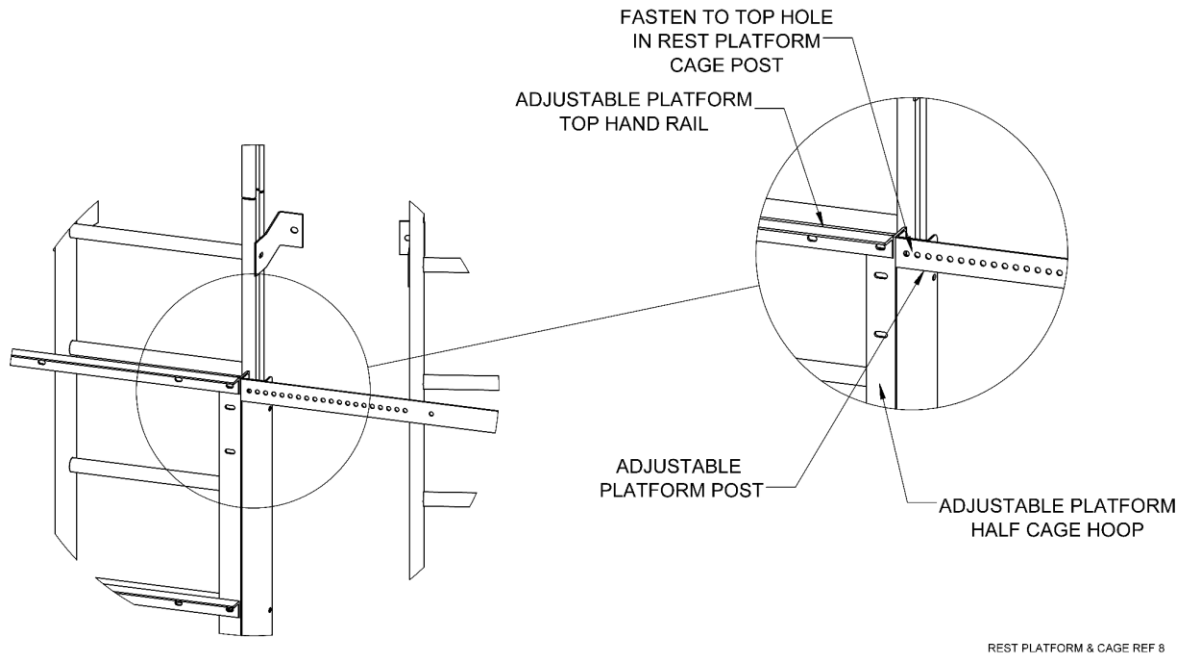
Important Note: It is recommended that fasteners used during the assembly of the Rest Platform Adjustable Cage Package be left “finger tightened” until the end to help facilitate in the completion of the assembly.

After the Adjustable Rest Platform Cage Ladder Post is secured install the (3) three Adjustable Platform Half Cage Hoops (9360656). Connect the small angled jogged end of the first Adjustable Platform Half Cage Hoop directly to the Adjustable Rest Platform Cage Ladder Post through the top hole on the front face using 5/16” fasteners so that the TOP edge of the Adjustable Platform Half Cage Hoop is parallel and even with the top of the Rest Platform Assembly Top Hand Rail.



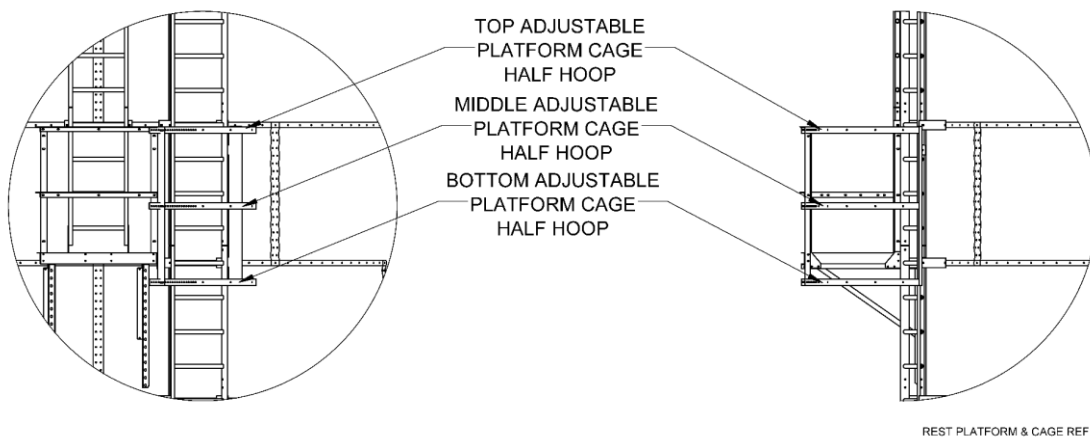
(Locating and Installing the First Adjustable Platform Half Cage Hoop)

Fasten the other end of the Adjustable Platform Half Cage Hoop to the Adjustable Rest Platform Cage Post through the large elongated top slot on the outer face. Finger tighten the fasteners for the Half Cage Hoop for now.



(Fastening the Outer End of the Half-Cage Hoop)

Repeat the same steps for the middle and bottom Adjustable Platform Half Cage Hoops. Remember to leave the fasteners finger tightened at this time.

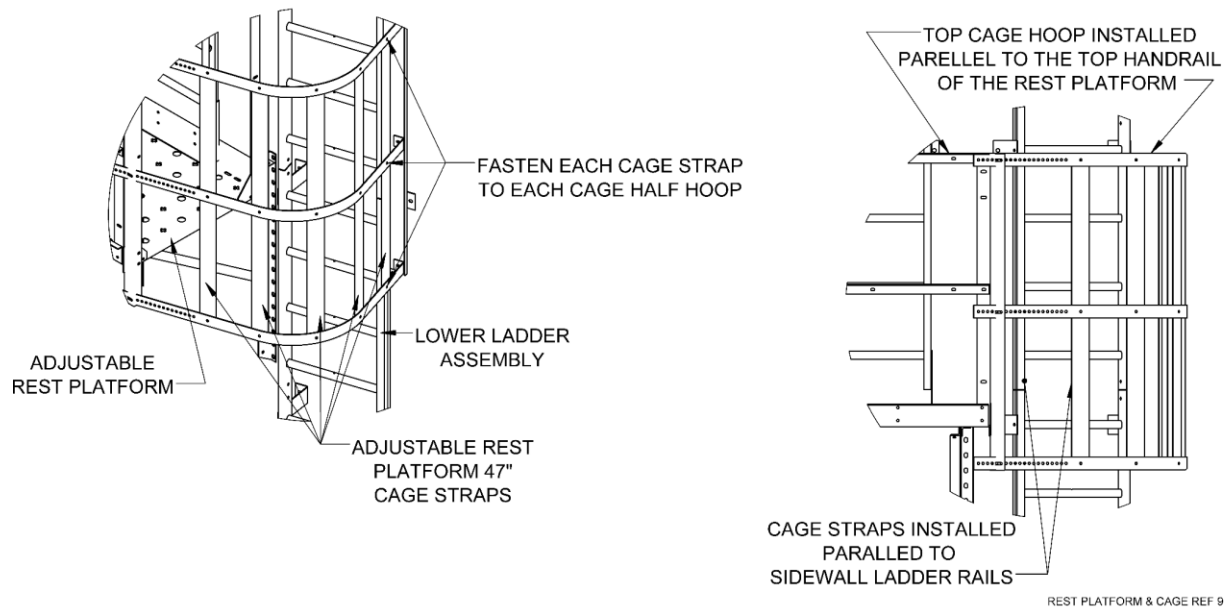


(Positioning the Adjustable Platform Cage Half Hoops for the Rest Platform)

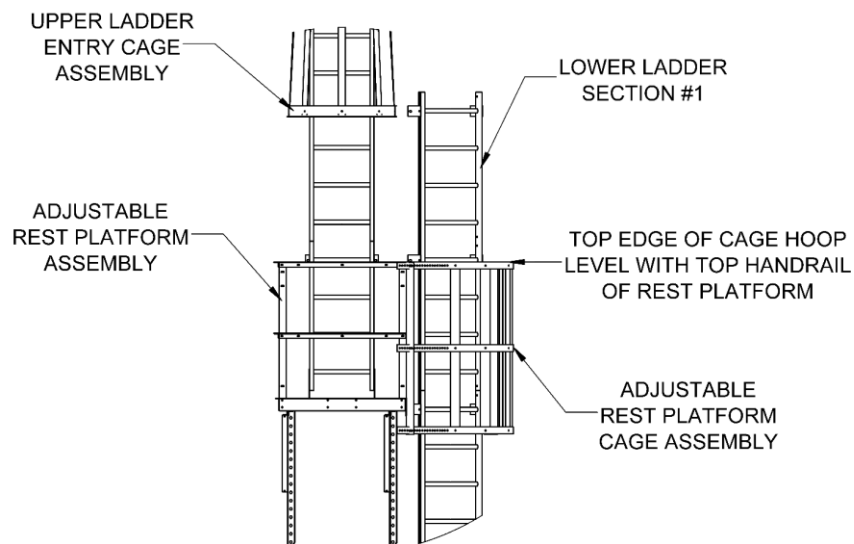
The next step will be to connect the (5) five Adjustable Rest Platform 47" Cage Straps to the Adjustable Platform Cage Half Hoops through the stand alone holes around and near the "rounded portion" of the Half Hoops. Insert the 5/16" fasteners in such a way that the bolt head is INSIDE of the cage assembly with the nuts on the OUTSIDE.

MEDIUM DUTY HOPPER TANK INSTRUCTION MANUAL

The Adjustable Rest Platform 47" Cage Straps will have a subtle centerline bend. When installing the straps make certain that the bend is facing OUTWARD away from the Hopper Tank. The straps are symmetrical from end to end so they can't be installed upside down.



Finally, after all the Rest Platform Cage Straps and Half Hoops are in place, square up the assembly making certain that the top Cage Half Hoop is parallel and even with the Platform Top Hand Rail and tighten up all the fasteners of the Rest Platform Cage Assembly.



(Final View of Rest Platform & Platform Cage Assembly)

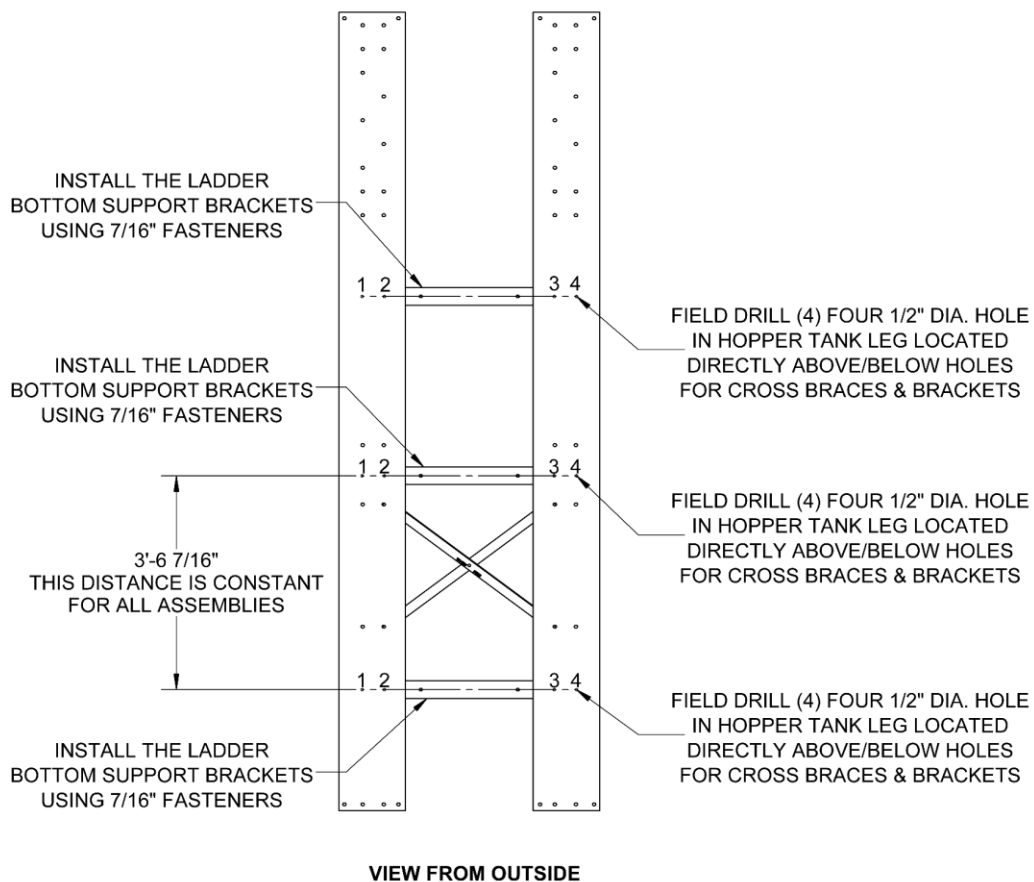
This completes the installation of the Medium Duty Hopper Tank Rest Platform and Cage Assembly.

STEP 22. LADDER ENTRY DOOR ASSEMBLY:

The Medium Duty Hopper Tank Ladder Package comes with a Two Door Safety Access assembly that allows the end user to lock out access to the ladder when not in use for safety reasons. Although there are some subtle differences in the assembly locations between sizes, each Two Door Safety Access assembly goes together in the same fashion.

Once the assembly of the Medium Duty Hopper Tank Ladder Package is nearly complete, the Two Door Safety Access assembly will be installed at the same location of the lowest two (2) Bottom Ladder Support Brackets (9360128) using Ladder/Door Hinge Brackets (9360129) with two (2) Ladder Clip Bolt Assy's (9342512) at each door hinge location.

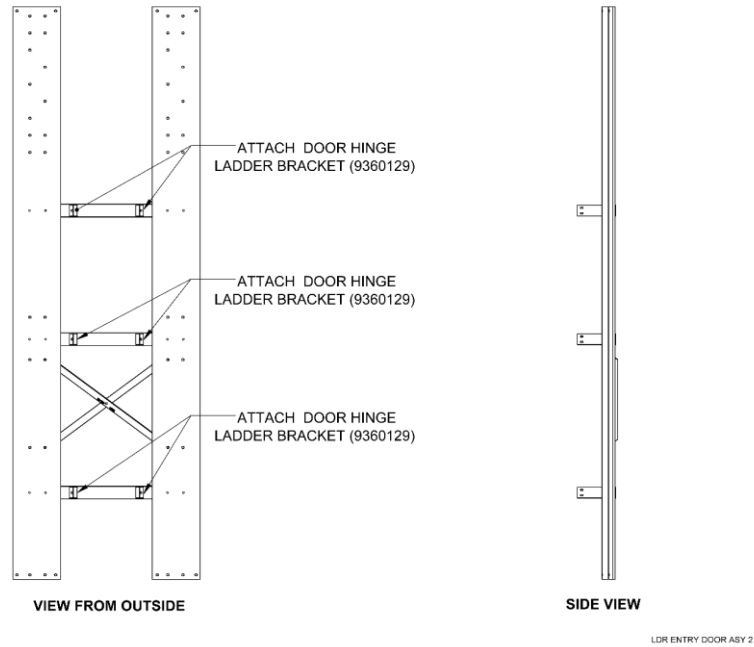
First step is to install the Ladder Bottom Support Brackets (9360128) in accordance with the parameters provided on the representation for your particular Hopper Tank and Ladder Assembly. We recommend that you only finger tighten the fasteners at this time to facilitate the rest of the assembly process. It will be necessary to field drill (4) four 1/2" holes at each Bottom Support Bracket location.



(Field Drill and Install Ladder Bottom Support Brackets)

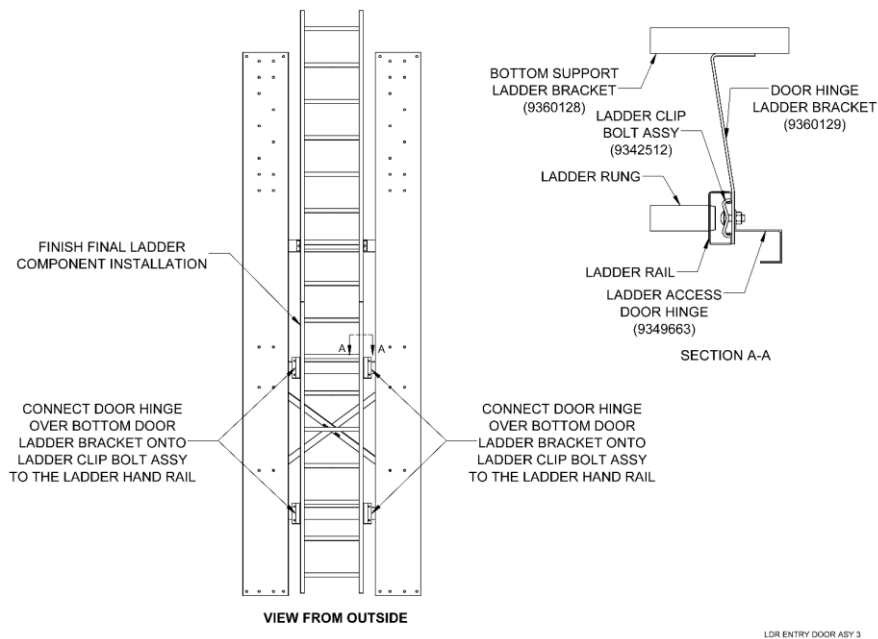
Next, attach the Door Hinge Ladder Brackets (9360129) to the Ladder Bottom Support Brackets through the two holes on the large flat surface using 7/16" fasteners. The brackets should be positioned in such a way as to receive a ladder section (flat ends facing toward the centerline).

MEDIUM DUTY HOPPER TANK INSTRUCTION MANUAL



(Install the Door Hinge Ladder Brackets to the Ladder Bottom Support Brackets)

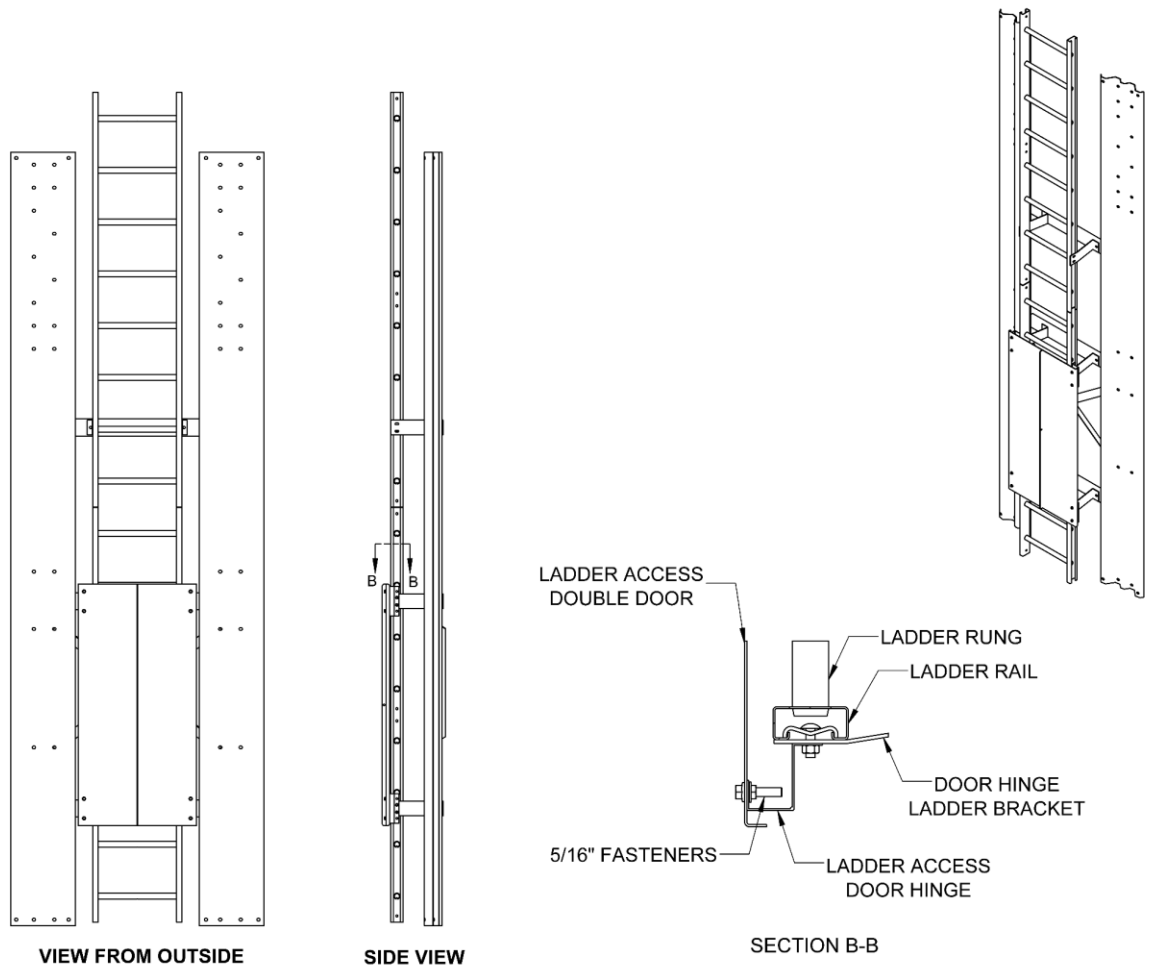
Secure the remaining Ladder Section(s) to the Door Hinge Ladder Brackets with (2) two Ladder Clip Bolt Assy in combination with a Ladder Access Door Hinge at each location of the bottom (4) four Door Hinge Ladder Brackets on the lowest (2) two Ladder Bottom Support Brackets using 5/16" fasteners. Field cut the bottom ladder section to length (if necessary) and once each piece is in place go ahead and tighten up all the fasteners.



(Connection Detail for Ladder Section, Ladder Bracket and Ladder Access Door Hinge)

Last, attach both Ladder Access Double Door halves to the hinges. There will be (2) two holes in the upper and lower corners of the Ladder Access Double Door half. Use (4) four 5/16" bolts and nuts to fasten the door to the (2) two hinges on one side of the ladder.

Repeat this step for the other half of the Double Access Entry Door assembly. Ensure that the "flanged edge" of both door halves meet in the middle so that the single hole in the center of both Double Door halves align. This hole is used to lock out access to the Medium Duty Hopper Tank Ladder Package when not in use.

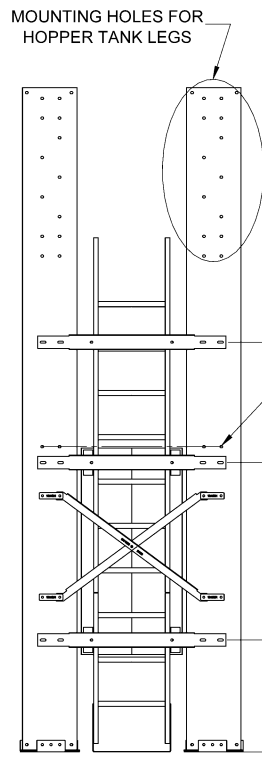


LDR ENTRY DOOR ASY 4

(Final Step of Ladder Access Double Door Assembly)

Complete the Ladder Package assembly by fastening the bottom section of the ladder to the Ladder Ground Bracket using (2) two Ladder Clip Bolt Assy (9342512) on both sides of the ladder section. The Ladder Ground Bracket should finally be bolted to the foundational concrete that the entire assembly sits on with concrete lag bolts.

This will complete the assembly of the entire Medium Duty Hopper Tank and Ladder Package.

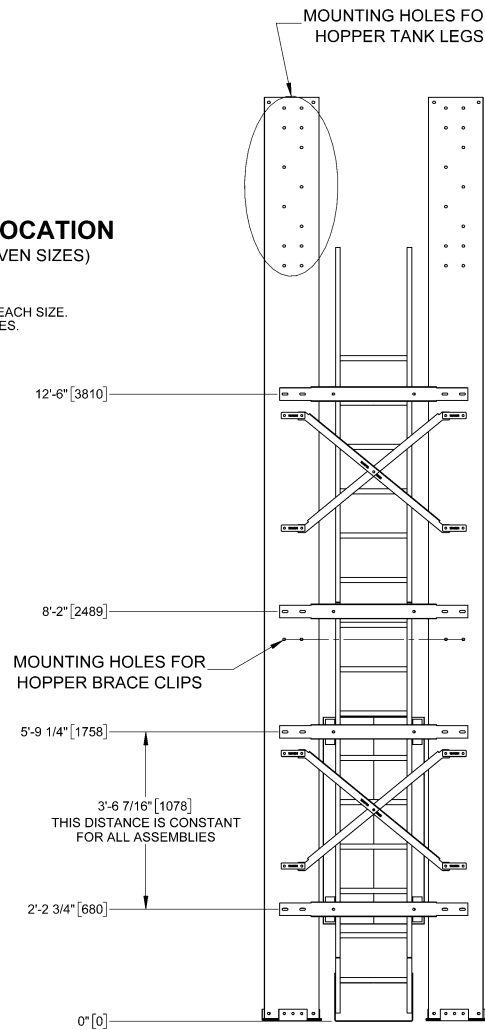


MDHT05 45DEG HPR LOWER LEG BRACE LOCATION (FOR MDHT05-02 THROUGH MDHT05-09 BOTH STANDARD AND EVEN SIZES)

1. ALL DIMENSIONS ARE APPROXIMATE.
2. TWO (2) 1/2" HOLES PER LEG PER BOTTOM SUPPORT BRACKET.
3. TWO (2) BOTTOM SUPPORT BRACKETS MAINTAIN CONSTANT SPACING FOR EACH SIZE.
4. THREE (3) BOTTOM SUPPORT BRACKETS USED IN EACH OF THESE ASSEMBLIES.

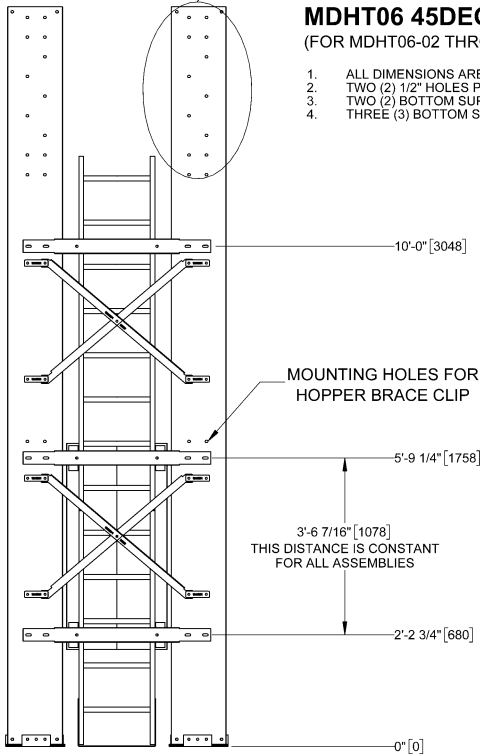
MDHT05 60DEG HPR LOWER LEG BRACE LOCATION (FOR MDHT05-02 THROUGH MDHT05-09 BOTH STANDARD AND EVEN SIZES)

1. ALL DIMENSIONS ARE APPROXIMATE.
2. TWO (2) 1/2" HOLES PER LEG PER BOTTOM SUPPORT BRACKET.
3. TWO (2) BOTTOM SUPPORT BRACKETS MAINTAIN CONSTANT SPACING FOR EACH SIZE.
4. FOUR (4) BOTTOM SUPPORT BRACKETS USED IN EACH OF THESE ASSEMBLIES.



LWR LDR BRKT DIM REF 1

MOUNTING HOLES FOR
HOPPER TANK LEGS



MDHT06 45DEG HPR LOWER LEG BRACE LOCATION

(FOR MDHT06-02 THROUGH MDHT06-09 BOTH STANDARD AND EVEN SIZES)

1. ALL DIMENSIONS ARE APPROXIMATE.
2. TWO (2) 1/2" HOLES PER LEG PER BOTTOM SUPPORT BRACKET.
3. TWO (2) BOTTOM SUPPORT BRACKETS MAINTAIN CONSTANT SPACING FOR EACH SIZE.
4. THREE (3) BOTTOM SUPPORT BRACKETS USED IN EACH OF THESE ASSEMBLIES.

MDHT07 45DEG HPR LOWER LEG BRACE LOCATION

(FOR MDHT07-02 THROUGH MDHT06-09 BOTH STANDARD AND EVEN SIZES)

1. ALL DIMENSIONS ARE APPROXIMATE.
2. TWO (2) 1/2" HOLES PER LEG PER BOTTOM SUPPORT BRACKET.
3. TWO (2) BOTTOM SUPPORT BRACKETS MAINTAIN CONSTANT SPACING FOR EACH SIZE.
4. THREE (3) BOTTOM SUPPORT BRACKETS USED IN EACH OF THESE ASSEMBLIES.

NO HOLES TO BE DRILLED
HOPPER BRACE CLIPS
TO BE INSTALLED IN PLACE OF
ANGLE BRACE BRACKET

8'-6" [2591]

6'-3 1/4" [1910]

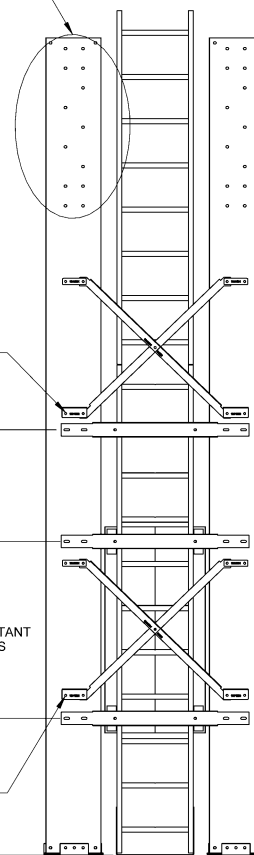
3'-6 7/16" [1078]
THIS DISTANCE IS CONSTANT
FOR ALL ASSEMBLIES

2'-8 3/4" [833]

NO HOLES TO BE DRILLED
HOPPER BRACE CLIPS
TO BE INSTALLED IN PLACE OF
ANGLE BRACE BRACKET

0" [0]

MOUNTING HOLES FOR
HOPPER TANK LEGS



LWR LDR BRKT DIM REF 2

STEP 23. LADDER PACKAGE REFERENCE DIAGRAMS:

MDHT05-02 30DEG V-RIB 45DEG HPR 16IN DISC

(ALSO USED FOR MDHT05E-02 30 DEG V-RIB 45DEG HPR 16IN DISC)

LADDER PACKAGE: 9360632

REST PLATFORM PKG: N/A

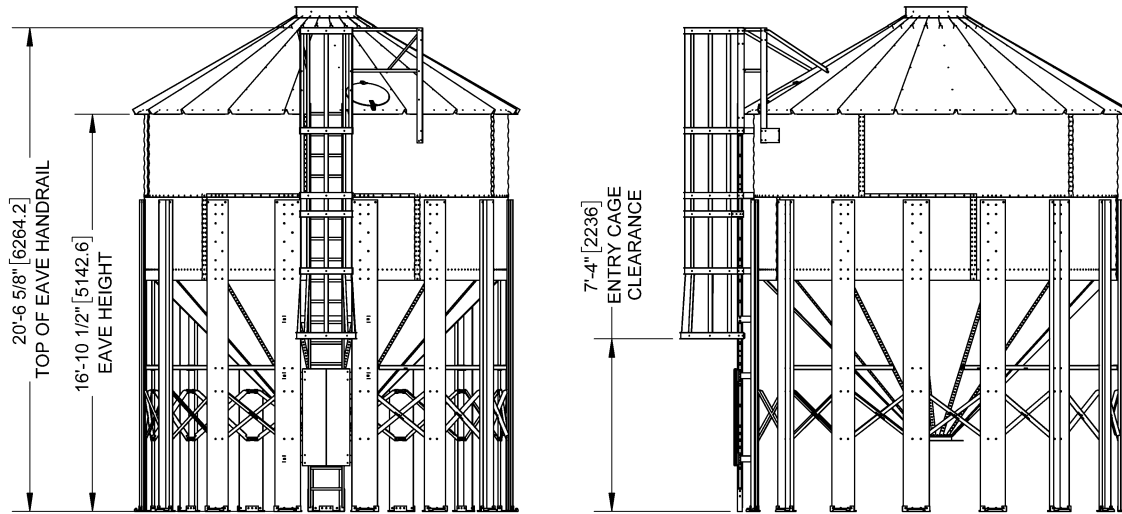
REST PLATFORM CAGE PKG: N/A

EAVE RAIL PKG: 9360661 (STANDARD)

EAVE PLATFORM PKG: 9393610

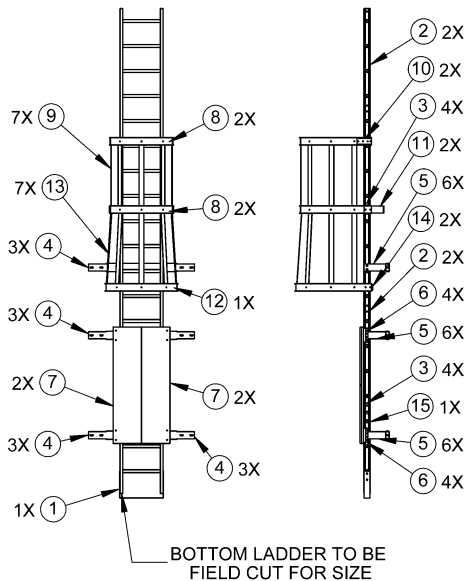
EAVE PLATFORM CAGE PKG: 9360631

1. MDHT05-02 30DEG V-RIB 45DEG HPR 16IN DISC HAS EAVE HEIGHT OF 16' 10-1/2" AND DOES NOT REQUIRE A REST PLATFORM.
2. CHIEF LOGO INSTALL ON TOP RING OF SIDEWALL STACK IN A VISIBLE, UNOBSTRUCTED LOCATION



ALL DIMENSIONS ARE APPROXIMATE

LADDER ASSEMBLY



ITEM	QTY	PART NO.	DESCRIPTION
1	1	9623250	TOWER, LADDER BRACKET GROUND
2	2	887452	LADDER,SECTION,2 RING,ASSY,CHIEF
3	4	9440073	LADDER CONNECT STRAP 8GA SW
4	3	9360128	LDR,MDHT BTM,SUPPORT,SW
5	6	9360129	BRKT,DOOR HINGE,LADDER,MDHT,3-STIFF,CHIEF,SW
6	4	9349663	LADDER ACCESS DOOR HINGE
7	2	9391272	LADDER ACCESS DOUBLE DOOR COVER
8	2	9342605	LADDER SAFETY CAGE HOOP 27.25X30.63
9	7	9360629	CAGE STRAP 31"X2.00" SW
10	2	9342612	BRKT LADDER CAGE HOOP STANDOFF MH
11	2	9396242	BRKT,LADDERANDHOOP,CHIEF
12	1	9342613	LADDER SAFETY CAGE HOOP 31.15X32.57
13	7	9344503	CAGE STRAP 1-33"SW 35"X2.00"
14	2	9623306	BRKT,HOOP STANDOFF,CAGE ACCESS
15	1	887450	LADDER,SECTION,1 RING,ASSY,CHIEF

(MEDIUM DUTY HOPPER TANK 05-02 or 05-02 EVEN 45DEG HPR LADDER INSTALL)

MDHT05-02 30DEG V-RIB 60DEG HPR 16IN DISC

(ALSO USED FOR MDHT05E-03 30 DEG V-RIB 60DEG HPR 16IN DISC)

LADDER PACKAGE: 9360766

REST PLATFORM PKG: N/A

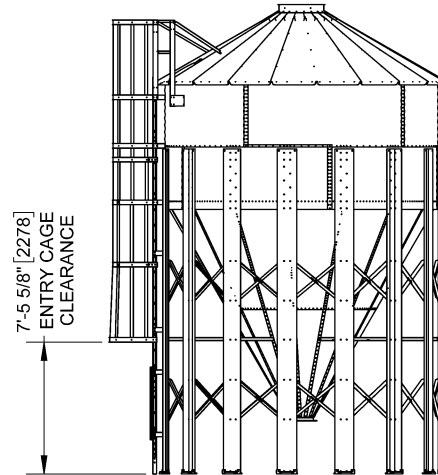
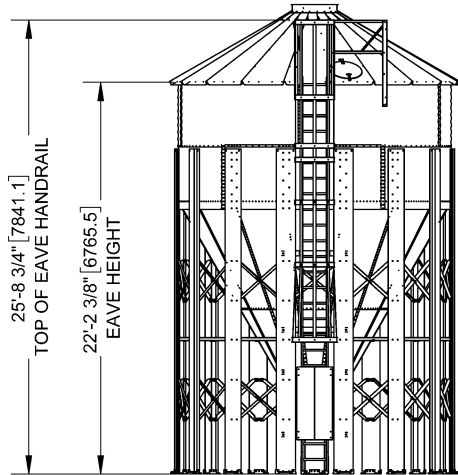
REST PLATFORM CAGE PKG: N/A

EAVE RAIL PKG: 9360661 (STANDARD)

EAVE PLATFORM PKG: 9393610

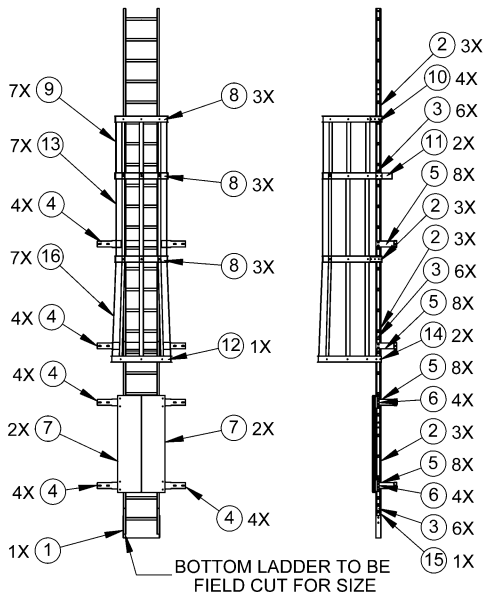
EAVE PLATFORM CAGE PKG: 9360631

1. MDHT05-02 30DEG V-RIB 60DEG HPR 16IN DISC HAS EAVE HEIGHT OF 22' 2-3/8" AND DOES NOT REQUIRE A REST PLATFORM.
2. CHIEF LOGO INSTALL ON TOP RING OF SIDEWALL STACK IN A VISIBLE, UNOBSTRUCTED LOCATION.



ALL DIMENSIONS ARE APPROXIMATE

LADDER ASSEMBLY



ITEM	QTY	PART NO.	DESCRIPTION
1	1	9623250	TOWER, LADDER BRACKET GROUND
2	3	887452	LADDER,SECTION,2 RING,ASSY,CHIEF
3	6	9440073	LADDER CONNECT STRAP 8GA SW
4	4	9360128	LDR,MDHT BTM,SUPPORT,SW
5	8	9360129	BRKT,DOOR HINGE,LADDER,MDHT,3-STIFF,CHIEF,SW
6	4	9349663	LADDER ACCESS DOOR HINGE
7	2	9391272	LADDER ACCESS DOUBLE DOOR COVER
8	3	9342605	LADDER SAFETY CAGE HOOP 27.25X30.63
9	7	9360629	CAGE STRAP 31"X2.00" SW
10	4	9342612	BRKT LADDER CAGE HOOP STANDOFF MH
11	2	9396242	BRKT,LADDERANDHOOP,CHIEF
12	1	9342613	LADDER SAFETY CAGE HOOP 31.15X32.57
13	7	9344505	CAGE STRAP 1-42"SWS 43"X2.00"
14	2	9623306	BRKT,HOOP STANDOFF,CAGE ACCESS
15	1	887450	LADDER,SECTION,1 RING,ASSY,CHIEF
16	7	9399347	CAGE STRAP,EAVE,53"X2.00"

(MEDIUM DUTY HOPPER TANK 05-02 or 05-02 EVEN 60DEG HPR LADDER INSTALL)

MDHT05-03 30DEG V-RIB 45DEG HPR 16IN DISC

(ALSO USED FOR MDHT05E-03 30 DEG V-RIB 45DEG HPR 16IN DISC)

LADDER PACKAGE: 9360633

REST PLATFORM PKG: N/A

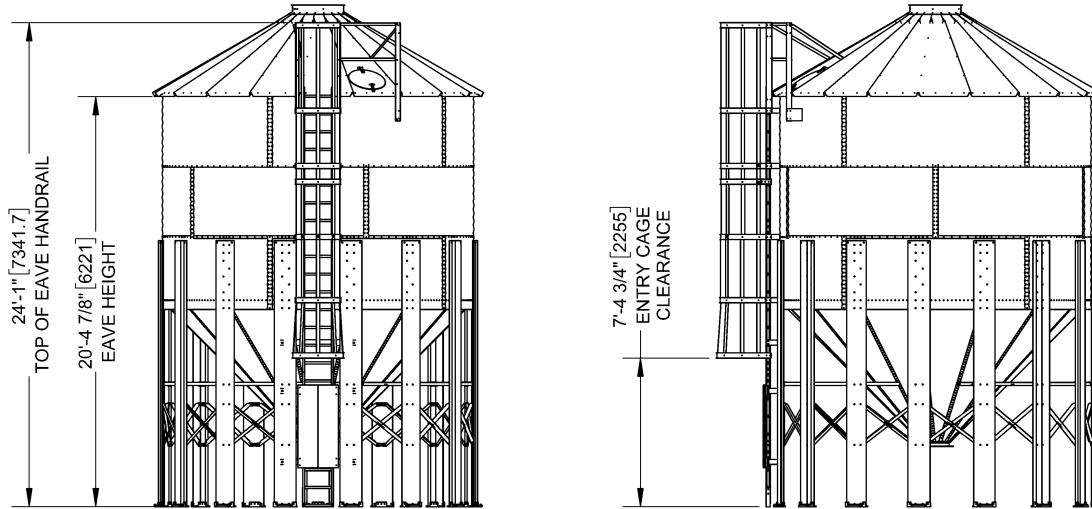
REST PLATFORM CAGE PKG: N/A

EAVE RAIL PKG: 9360661 (STANDARD)

EAVE PLATFORM PKG: 9393610

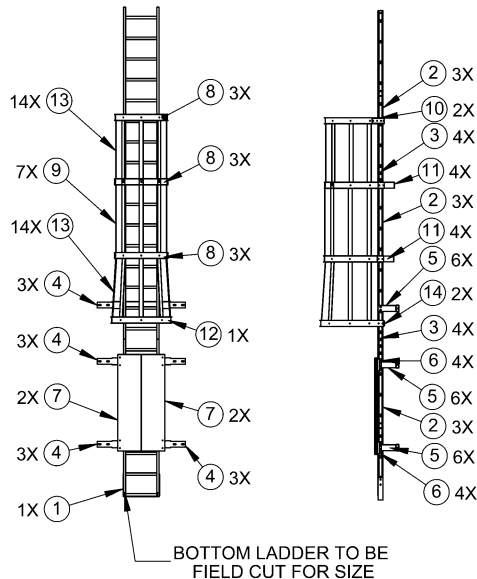
EAVE PLATFORM CAGE PKG: 9360631

1. MDHT05-03 30DEG V-RIB 45DEG HPR 16IN DISC HAS EAVE HEIGHT OF 20' 4-7/8" AND DOES NOT REQUIRE A REST PLATFORM.
2. CHIEF LOGO INSTALL ON SECOND RING OF SIDEWALL STACK IN A VISIBLE, UNOBSTRUCTED LOCATION.



ALL DIMENSIONS ARE APPROXIMATE

LADDER ASSEMBLY



ITEM	QTY	PART NO.	DESCRIPTION
1	1	9623250	TOWER, LADDER BRACKET GROUND
2	3	887452	LADDER, SECTION, 2 RING, ASSY, CHIEF
3	4	9440073	LADDER CONNECT STRAP 8GA SW
4	3	9360128	LDR, MDHT BTM, SUPPORT, SW
5	6	9360129	BRKT, DOOR HINGE, LADDER, MDHT, 3-STIFF, CHIEF, SW
6	4	9349663	LADDER ACCESS DOOR HINGE
7	2	9391272	LADDER ACCESS DOUBLE DOOR COVER
8	3	9342605	LADDER SAFETY CAGE HOOP 27.25X30.63
9	7	9360152	CAGE STRAP 1-42"SWS 39.75"X2.00" SW
10	2	9342612	BRKT LADDER CAGE HOOP STANDOFF MH
11	4	9396242	BRKT, LADDER AND HOOP, CHIEF
12	1	9342613	LADDER SAFETY CAGE HOOP 31.15X32.57
13	14	9344503	CAGE STRAP 1-33"SWS 35"X2.00"
14	2	9623306	BRKT, HOOP STANDOFF, CAGE ACCESS

(MEDIUM DUTY HOPPER TANK 05-03 or 05-03 EVEN 45DEG HPR LADDER INSTALL)

MDHT05-03 30DEG V-RIB 60DEG HPR 16IN DISC

(ALSO USED FOR MDHT05E-03 30 DEG V-RIB 60DEG HPR 16IN DISC)

LADDER PACKAGE: 9360667

REST PLATFORM PKG: N/A

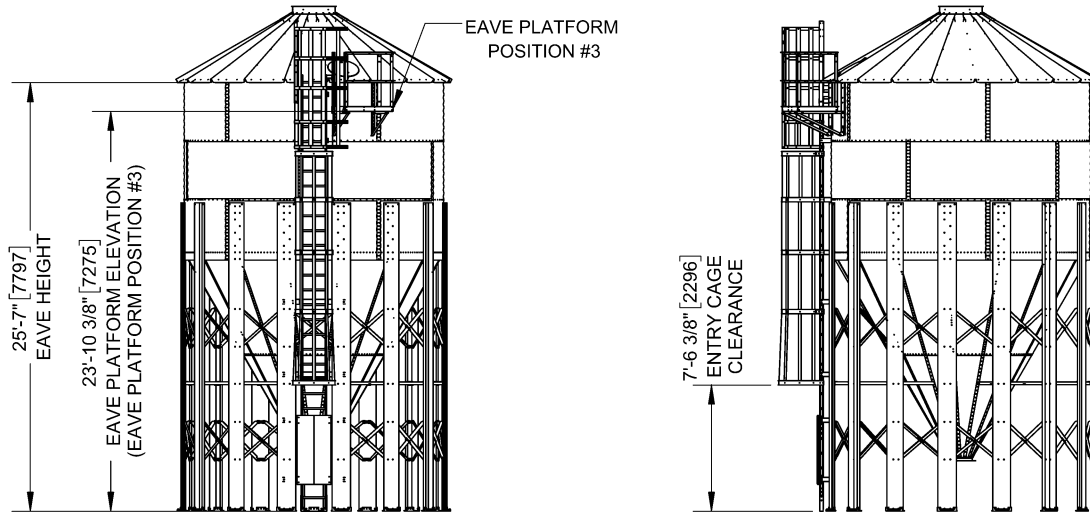
REST PLATFORM CAGE PKG: N/A

EAVE RAIL PKG: N/A

EAVE PLATFORM PKG: 9393610

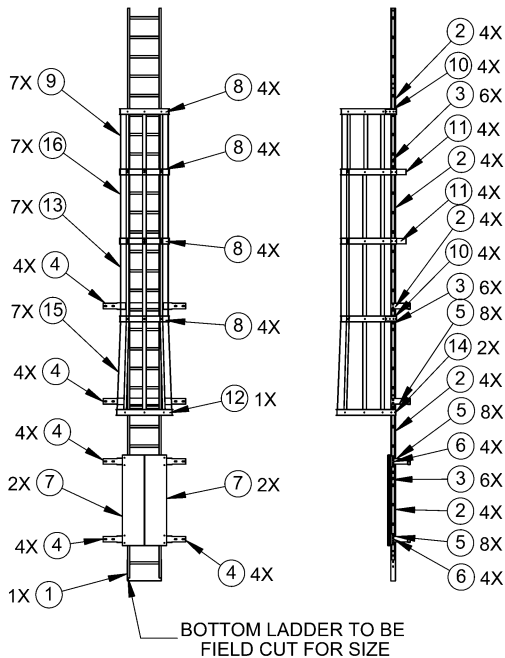
EAVE PLATFORM CAGE PKG: 9360631

- MDHT05-03 30DEG V-RIB 60DEG HPR 16IN DISC HAS EAVE HEIGHT OF 25' 7" AND COMES STANDARD WITH AN EAVE PLATFORM
NO EAVE RAIL ASSEMBLY AVAILABLE.
- CHIEF LOGO INSTALL ON SECOND RING OF SIDEWALL STACK IN A VISIBLE, UNOBSTRUCTED LOCATION.
- EAVE PLATFORM MUST BE INSTALLED IN POSITION #3 WHEN CONSTRUCTING BOTH STANDARD AND EVEN MDHT05-03 30DEG V-RIB 60DEG HPR 16IN DISC TANKS.



ALL DIMENSIONS ARE APPROXIMATE

LADDER ASSEMBLY



ITEM	QTY	PART NO.	DESCRIPTION
1	1	9623250	TOWER, LADDER BRACKET GROUND
2	4	887452	LADDER,SECTION,2 RING,ASSY,CHIEF
3	6	9440073	LADDER CONNECT STRAP 8GA SW
4	4	9360128	LDR,MDHT BTM,SUPPORT,SW
5	8	9360129	BRKT,DOOR HINGE,LADDER,MDHT,3-STIFF,CHIEF,SW
6	4	9349663	LADDER ACCESS DOOR HINGE
7	2	9391272	LADDER ACCESS DOUBLE DOOR COVER
8	4	9342605	LADDER SAFETY CAGE HOOP 27.25X30.63
9	7	9344503	CAGE STRAP 1-33"SWS 35"X2.00"
10	4	9342612	BRKT LADDER CAGE HOOP STANDOFF MH
11	4	9396242	BRKT,LADDERANDHOOP,CHIEF
12	1	9342613	LADDER SAFETY CAGE HOOP 31.15X32.57
13	7	9344505	CAGE STRAP 1-42"SWS 43"X2.00"
14	2	9623306	BRKT,HOOP STANDOFF,CAGE ACCESS
15	7	9399347	CAGE STRAP,EAVE,53"X2.00"
16	7	9360152	CAGE STRAP 1-42"SWS 39.75"X2.00" SW

(MEDIUM DUTY HOPPER TANK 05-03 or 05-03 EVEN 60DEG HPR LADDER INSTALL)

MDHT05-04 30DEG V-RIB 45DEG HPR 16IN DISC

(ALSO USED FOR MDHT05E-04 30 DEG V-RIB 45DEG HPR 16IN DISC)

LADDER PACKAGE: 9360634

REST PLATFORM PKG: N/A

REST PLATFORM CAGE PKG: N/A

EAVE RAIL PKG: N/A

EAVE PLATFORM PKG: 9393610

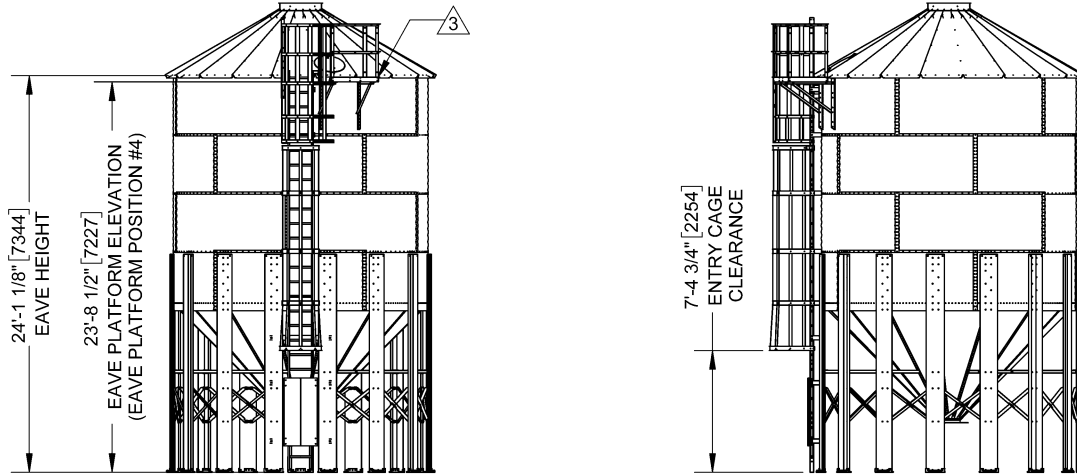
EAVE PLATFORM CAGE PKG: 9360631

1. MDHT05-03 30DEG V-RIB 60DEG HPR 16IN DISC HAS EAVE HEIGHT OF 25' 7" AND COMES STANDARD WITH AN EAVE PLATFORM

2. NO EAVE RAIL ASSEMBLY AVAILABLE.

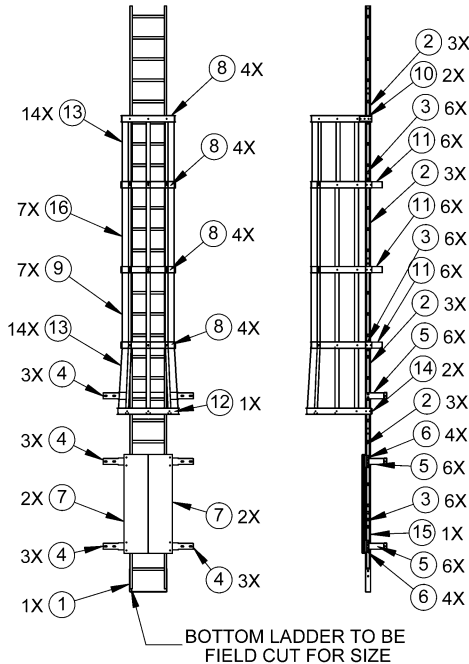
3. CHIEF LOGO INSTALL ON SECOND RING OF SIDEWALL STACK IN A VISIBLE, UNOBSTRUCTED LOCATION.

EAVE PLATFORM TO BE INSTALLED IN POSITION #4 WHEN CONSTRUCTING BOTH STANDARD AND EVEN MDHT05-03 30DEG V-RIB 60DEG HPR 16IN DISC TANKS.



ALL DIMENSIONS ARE APPROXIMATE

LADDER ASSEMBLY



ITEM	QTY	PART NO.	DESCRIPTION
1	1	9623250	TOWER, LADDER BRACKET GROUND
2	3	887452	LADDER,SECTION,2 RING,ASSY,CHIEF
3	6	9440073	LADDER CONNECT STRAP 8GA SW
4	3	9360128	LDR,MDHT BTM,SUPPORT,SW
5	6	9360129	BRKT,DOOR HINGE,LADDER,MDHT,3-STIFF,CHIEF,SW
6	4	9349663	LADDER ACCESS DOOR HINGE
7	2	9391272	LADDER ACCESS DOUBLE DOOR COVER
8	4	9342605	LADDER SAFETY CAGE HOOP 27.25X30.63
9	7	9360152	CAGE STRAP 1-42"SWS 39.75"X2.00" SW
10	2	9342612	BRKT LADDER CAGE HOOP STANDOFF MH
11	6	9396242	BRKT,LADDERANDHOOP,CHIEF
12	1	9342613	LADDER SAFETY CAGE HOOP 31.15X32.57
13	14	9344503	CAGE STRAP 1-33"SWS 35"X2.00"
14	2	9623306	BRKT,HOOP STANDOFF,CAGE ACCESS
15	1	887450	LADDER,SECTION,1 RING,ASSY,CHIEF
16	7	9344505	CAGE STRAP 1-42"SWS 43"X2.00"

(MEDIUM DUTY HOPPER TANK 05-04 or 05-04 EVEN 45DEG HPR LADDER INSTALL)

MDHT05-04 30DEG V-RIB 60DEG HPR 16IN DISC

(ALSO USED FOR MDHT05E-04 30 DEG V-RIB 60DEG HPR 16IN DISC)

LADDER PACKAGE: 9360768

REST PLATFORM PKG: 9360610

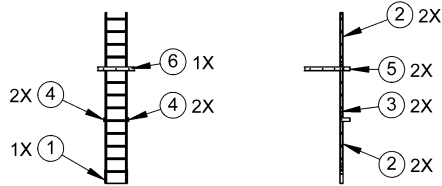
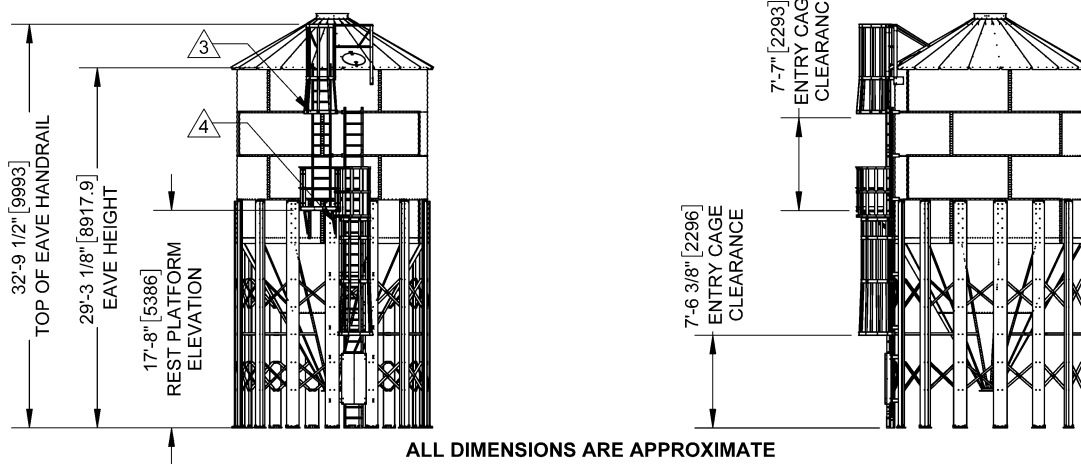
REST PLATFORM CAGE PKG: 9360655

EAVE RAIL PKG: 9360661 (STANDARD)

EAVE PLATFORM PKG: 9393610

EAVE PLATFORM CAGE PKG: 9360631

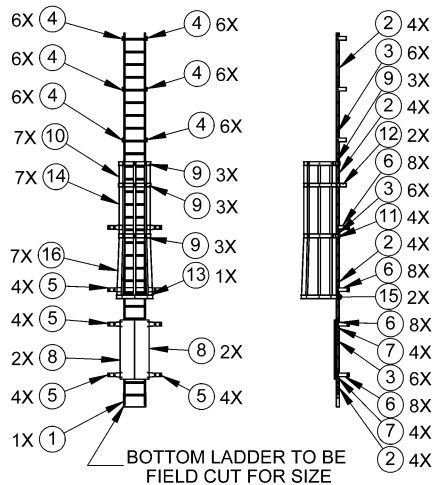
1. MDHT05-04 30DEG V-RIB 60DEG HPR 16IN DISC HAS EAVE HEIGHT OF 29' 3-1/8" AND COMES STANDARD WITH AN EAVE RAIL AND REST PLATFORM.
2. CHIEF LOGO INSTALL ON SECOND RING OF SIDEWALL STACK IN A VISIBLE, UNOBSTRUCTED LOCATION.
3. REPLACE (93402605) AT BOTTOM OF EAVE RAIL CAGE WITH (93402613). INCLUDED WITH 9360768 LADDER PACKAGE.
4. REST PLATFORM INSTALLED IN POSITION #4 "OVER STIFFENER".



UPPER LADDER ASSEMBLY

ITEM	QTY	PART NO.	DESCRIPTION
1	1	9623250	TOWER, LADDER BRACKET GROUND
2	2	887452	LADDER, SECTION, 2 RING, ASSY, CHIEF
3	2	9440073	LADDER CONNECT STRAP 8GA SW
4	2	9396240	BRKT, STNDRD, LADDER, CHIEF
5	2	9396242	BRKT, LADDER AND HOOP, CHIEF
6	1	9342613	LADDER SAFETY CAGE HOOP 31.15X32.57

LOWER LADDER ASSEMBLY



ITEM		PART NO.	DESCRIPTION
1	1	9623250	TOWER, LADDER BRACKET GROUND
2	4	887452	LADDER, SECTION, 2 RING, ASSY, CHIEF
3	6	9440073	LADDER CONNECT STRAP 8GA SW
4	6	9396240	BRKT, STNDRD, LADDER, CHIEF
5	4	9360128	LDR, MDHT BTM, SUPPORT, SW
6	8	9360129	BRKT, DOOR HINGE, LADDER, MDHT, 3-STIFF, CHIEF, SW
7	4	9349663	LADDER ACCESS DOOR HINGE
8	2	9391272	LADDER ACCESS DOUBLE DOOR COVER
9	3	9342605	LADDER SAFETY CAGE HOOP 27.25X30.63
10	7	9320958	CAGE STRAP 20"X2.00"
11	4	9342612	BRKT LADDER CAGE HOOP STANDOFF MH
12	2	9396242	BRKT, LADDER AND HOOP, CHIEF
13	1	9342613	LADDER SAFETY CAGE HOOP 31.15X32.57
14	7	9344505	CAGE STRAP 1-42" SWS 43"X2.00"
15	2	9623306	BRKT, HOOP STANDOFF, CAGE ACCESS
16	7	9399347	CAGE STRAP, EAVE, 53"X2.00"

(MEDIUM DUTY HOPPER TANK 05-04 or 05-04 EVEN 60DEG HPR LADDER INSTALL)

MDHT05-05 30DEG V-RIB 45DEG HPR 16IN DISC

(ALSO USED FOR MDHT05E-05 30 DEG V-RIB 45DEG HPR 16IN DISC)

LADDER PACKAGE: 9360635

REST PLATFORM PKG: 9393610

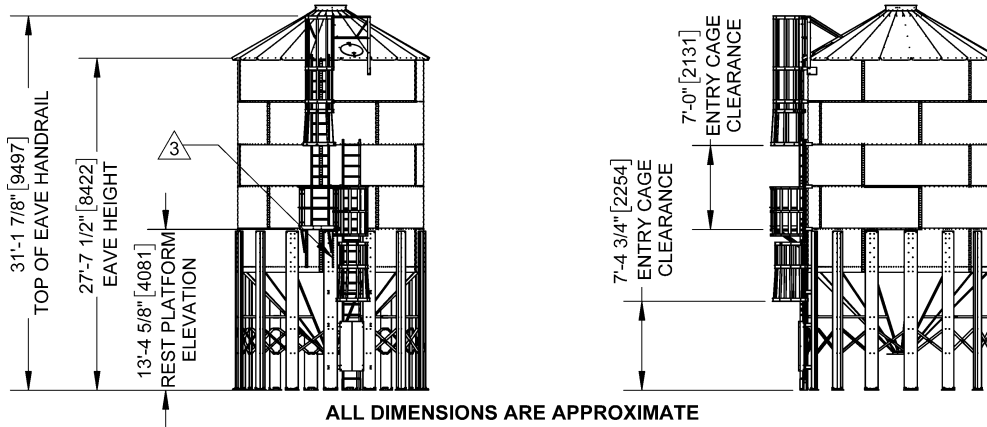
REST PLATFORM CAGE PKG: 9360655

EAVE RAIL PKG: 9360661 (STANDARD)

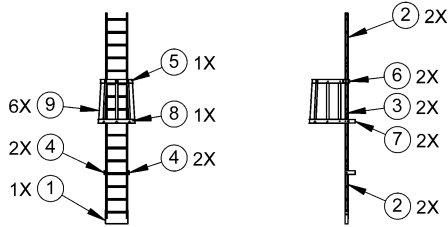
EAVE PLATFORM PKG: 9393610

EAVE PLATFORM CAGE PKG: 9360631

1. MDHT05-05 30DEG V-RIB 45DEG HPR 16IN DISC HAS EAVE HEIGHT OF 27' 7-1/2" AND COMES STANDARD WITH AN EAVE RAIL AND REST PLATFORM.
2. CHIEF LOGO INSTALL ON SECOND RING OF SIDEWALL STACK IN A VISIBLE, UNOBSTRUCTED LOCATION.
3. REST PLATFORM INSTALLED IN POSITION #1 "OVER STIFFENER".



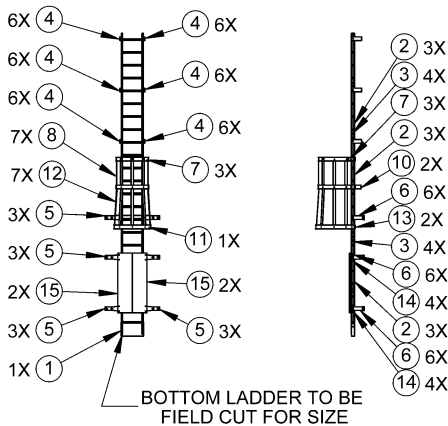
ALL DIMENSIONS ARE APPROXIMATE



UPPER LADDER ASSEMBLY

ITEM	QTY	PART NO.	DESCRIPTION
1	1	9623250	TOWER, LADDER BRACKET GROUND
2	2	887452	LADDER,SECTION,2 RING,ASSY,CHIEF
3	2	9440073	LADDER CONNECT STRAP 8GA SW
4	2	9396240	BRKT,STNDRD,LADDER,CHIEF
5	1	9342605	LADDER SAFETY CAGE HOOP 27.25X30.63
6	2	9342612	BRKT LADDER CAGE HOOP STANDOFF MH
7	2	9396242	BRKT,LADDERANDHOOP,CHIEF
8	1	9342613	LADDER SAFETY CAGE HOOP 31.15X32.57
9	6	9344503	CAGE STRAP 1-33"SWS 35"X2.00"

LOWER LADDER ASSEMBLY



BOTTOM LADDER TO BE FIELD CUT FOR SIZE

ITEM	QTY	PART NO.	DESCRIPTION
1	1	9623250	TOWER, LADDER BRACKET GROUND
2	3	887452	LADDER,SECTION,2 RING,ASSY,CHIEF
3	4	9440073	LADDER CONNECT STRAP 8GA SW
4	6	9396240	BRKT,STNDRD,LADDER,CHIEF
5	3	9360128	LDR,MDHT BTM,SUPPORT,SW
6	6	9360129	BRKT,DOOR HINGE,LADDER,MDHT,3-STIFF,CHIEF,SW
7	3	9342605	LADDER SAFETY CAGE HOOP 27.25X30.63
8	7	9399200	CAGE STRAP 1-23.75"SWS 25.75"X2.00"
9	2	9342612	BRKT LADDER CAGE HOOP STANDOFF MH
10	2	9396242	BRKT,LADDERANDHOOP,CHIEF
11	1	9342613	LADDER SAFETY CAGE HOOP 31.15X32.57
12	7	9344503	CAGE STRAP 1-33"SWS 35"X2.00"
13	2	9623306	BRKT,HOOP STANDOFF,CAGE ACCESS
14	4	9349663	LADDER ACCESS DOOR HINGE
15	2	9391272	LADDER ACCESS DOUBLE DOOR COVER

(MEDIUM DUTY HOPPER TANK 05-05 or 05-05 EVEN 45DEG HPR LADDER INSTALL)

(ALSO USED FOR MDHT05E-05 30 DEG V-RIB 60DEG HPR 16IN DISC)

LADDER PACKAGE: 9360768

REST PLATFORM PKG: 9393610

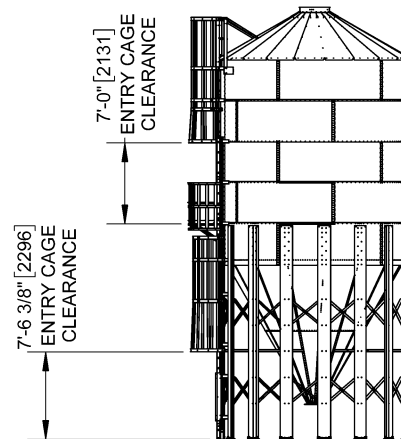
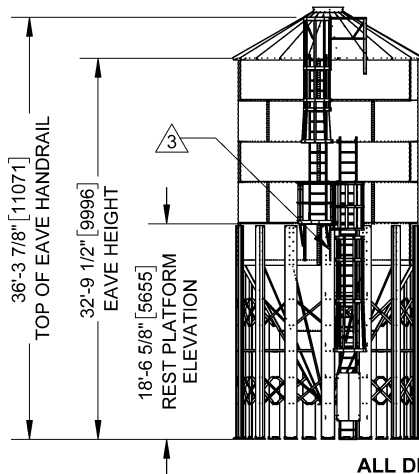
REST PLATFORM CAGE PKG: 9360655

EAVE RAIL PKG: 9360661 (STANDARD)

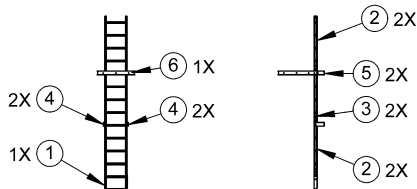
EAVE PLATFORM PKG: 9393610

EAVE PLATFORM CAGE PKG: 9360631

1. MDHT05-05 30DEG V-RIB 45DEG HPR 16IN DISC HAS EAVE HEIGHT OF 32" 9-1/2" AND COMES STANDARD WITH AN EAVE RAIL AND REST PLATFORM.
2. CHIEF LOGO INSTALL ON SECOND RING OF SIDEWALL STACK IN A VISIBLE, UNOBSTRUCTED LOCATION.
3. REST PLATFORM INSTALLED IN POSITION #1 "OVER STIFFENER".



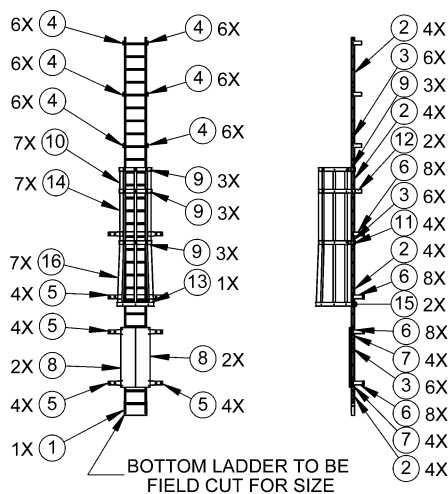
ALL DIMENSIONS ARE APPROXIMATE



UPPER LADDER ASSEMBLY

ITEM	QTY	PART NO.	DESCRIPTION
1	1	9623250	TOWER, LADDER BRACKET GROUND
2	2	887452	LADDER,SECTION,2 RING,ASSY,CHIEF
3	2	9440073	LADDER CONNECT STRAP 8GA SW
4	2	9396240	BRKT,STNDRD,LADDER,CHIEF
5	2	9396242	BRKT,LADDERANDHOOP,CHIEF
6	1	9342613	LADDER SAFETY CAGE HOOP 31.15X32.57

LOWER LADDER ASSEMBLY



ITEM	QTY	PART NO.	DESCRIPTION
1	1	9623250	TOWER, LADDER BRACKET GROUND
2	4	887452	LADDER,SECTION,2 RING,ASSY,CHIEF
3	6	9440073	LADDER CONNECT STRAP 8GA SW
4	6	9396240	BRKT,STNDRD,LADDER,CHIEF
5	4	9360128	LDR,MDHT BTM,SUPPORT,SW
6	8	9360129	BRKT,DOOR HINGE,LADDER,MDHT,3-STIFF,CHIEF,SW
7	4	9349663	LADDER ACCESS DOOR HINGE
8	2	9391272	LADDER ACCESS DOUBLE DOOR COVER
9	3	9342605	LADDER SAFETY CAGE HOOP 27.25X30.63
10	7	9320958	CAGE STRAP 20"X2.00"
11	4	9342612	BRKT LADDER CAGE HOOP STANDOFF MH
12	2	9396242	BRKT,LADDERANDHOOP,CHIEF
13	1	9342613	LADDER SAFETY CAGE HOOP 31.15X32.57
14	7	9344505	CAGE STRAP 1-42"SWS 43"X2.00"
15	2	9623306	BRKT,HOOP STANDOFF,CAGE ACCESS
16	7	9399347	CAGE STRAP,EAVE,53"X2.00"

(MEDIUM DUTY HOPPER TANK 05-05 or 05-05 EVEN 60DEG HPR LADDER INSTALL)

MDHT05-06 30DEG V-RIB 45DEG HPR 16IN DISC

(ALSO USED FOR MDHT05E-06 30 DEG V-RIB 45DEG HPR 16IN DISC)

LADDER PACKAGE: 9360636

REST PLATFORM PKG: 9393610

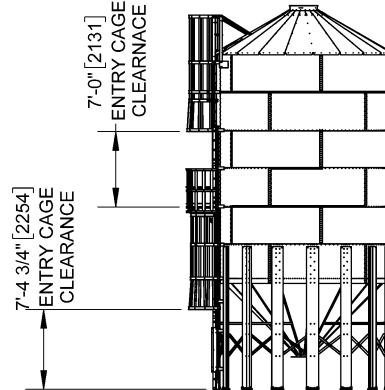
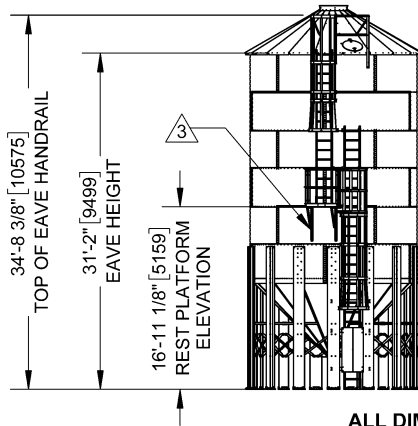
REST PLATFORM CAGE PKG: 9360655

EAVE RAIL PKG: 9360661 (STANDARD)

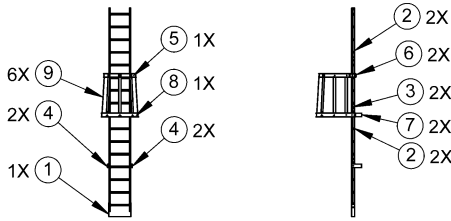
EAVE PLATFORM PKG: 9393610

EAVE PLATFORM CAGE PKG: 9360631

1. MDHT05-06 30DEG V-RIB 45DEG HPR 16IN DISC HAS EAVE HEIGHT OF 31' 2" AND COMES STANDARD WITH AN EAVE RAIL AND REST PLATFORM.
2. CHIEF LOGO INSTALL ON SECOND RING OF SIDEWALL STACK IN A VISIBLE, UNOBSTRUCTED LOCATION.
3. REST PLATFORM INSTALLED IN POSITION #1.



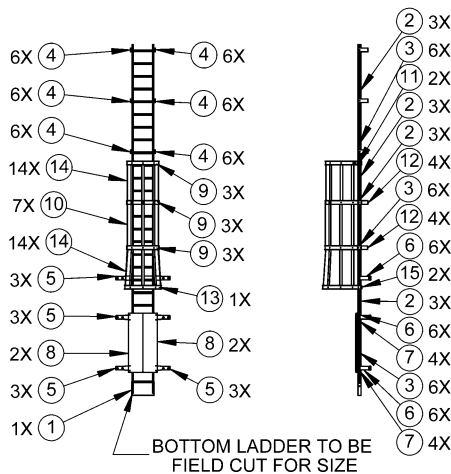
ALL DIMENSIONS ARE APPROXIMATE



UPPER LADDER ASSEMBLY

ITEM	QTY	PART NO.	DESCRIPTION
1	1	9623250	TOWER, LADDER BRACKET GROUND
2	2	887452	LADDER,SECTION,2 RING,ASSY,CHIEF
3	2	9440073	LADDER CONNECT STRAP 8GA SW
4	2	9396240	BRKT,STNDRD,LADDER,CHIEF
5	1	9342605	LADDER SAFETY CAGE HOOP 27.25X30.63
6	2	9342612	BRKT LADDER CAGE HOOP STANDOFF MH
7	2	9396242	BRKT,LADDERANDHOOP,CHIEF
8	1	9342613	LADDER SAFETY CAGE HOOP 31.15X32.57
9	6	9344503	CAGE STRAP 1-33"SWS 35"X2.00"

LOWER LADDER ASSEMBLY



BOTTOM LADDER TO BE FIELD CUT FOR SIZE

ITEM	QTY	PART NO.	DESCRIPTION
1	1	9623250	TOWER, LADDER BRACKET GROUND
2	3	887452	LADDER,SECTION,2 RING,ASSY,CHIEF
3	6	9440073	LADDER CONNECT STRAP 8GA SW
4	6	9396240	BRKT,STNDRD,LADDER,CHIEF
5	3	9360128	LDR,MDHT BTM,SUPPORT,SW
6	6	9360129	BRKT,DOOR HINGE,LADDER,MDHT,3-STIFF,CHIEF,SW
7	4	9349663	LADDER ACCESS DOOR HINGE
8	2	9391272	LADDER ACCESS DOUBLE DOOR COVER
9	3	9342605	LADDER SAFETY CAGE HOOP 27.25X30.63
10	7	9360152	CAGE STRAP 1-42"SWS 39.75"X2.00" SW
11	2	9342612	BRKT LADDER CAGE HOOP STANDOFF MH
12	4	9396242	BRKT,LADDERANDHOOP,CHIEF
13	1	9342613	LADDER SAFETY CAGE HOOP 31.15X32.57
14	14	9344503	CAGE STRAP 1-33"SWS 35"X2.00"
15	2	9623306	BRKT,HOOP STANDOFF,CAGE ACCESS
16	1	887450	LADDER,SECTION,1 RING,ASSY,CHIEF

(MEDIUM DUTY HOPPER TANK 05-06 or 05-06 EVEN 45DEG HPR LADDER INSTALL)

MDHT05-06 30DEG V-RIB 60DEG HPR 16IN DISC

(ALSO USED FOR MDHT05E-06 30 DEG V-RIB 60DEG HPR 16IN DISC)

LADDER PACKAGE: 9360769

REST PLATFORM PKG: 9393610

REST PLATFORM CAGE PKG: 9360655

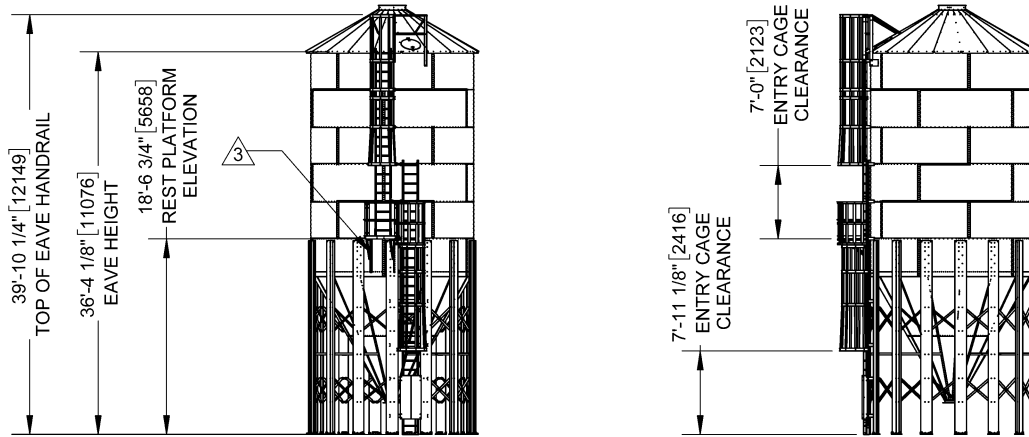
EAVE RAIL PKG: 9360661 (STANDARD)

EAVE PLATFORM PKG: 9393610

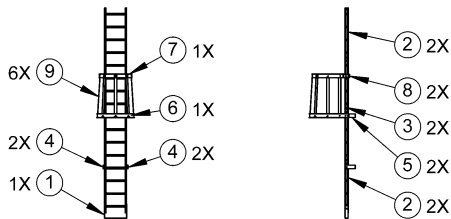
EAVE PLATFORM CAGE PKG: 9360631

- MDHT05-06 30DEG V-RIB 45DEG HPR 16IN DISC HAS EAVE HEIGHT OF 36' 4-1/8" AND COMES STANDARD WITH AN EAVE RAIL AND REST PLATFORM.
- CHIEF LOGO INSTALL ON SECOND RING OF SIDEWALL STACK IN A VISIBLE, UNOBSTRUCTED LOCATION.

REST PLATFORM INSTALLED IN POSITION #1 "OVER STIFFENER".



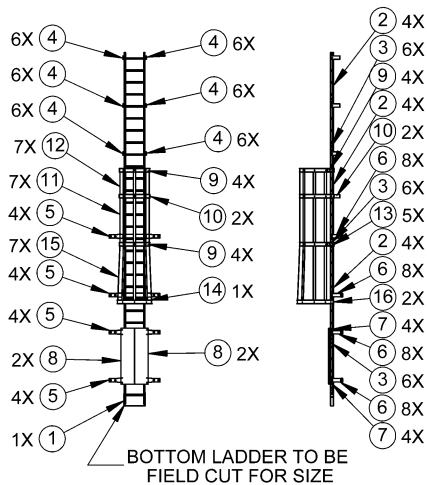
ALL DIMENSIONS ARE APPROXIMATE



UPPER LADDER ASSEMBLY

ITEM	QTY	PART NO.	DESCRIPTION
1	1	9623250	TOWER, LADDER BRACKET GROUND
2	2	887452	LADDER,SECTION,2 RING,ASSY,CHIEF
3	2	9440073	LADDER CONNECT STRAP 8GA SW
4	2	9396240	BRKT,STNDRD,LADDER,CHIEF
5	2	9396242	BRKT,LADDERANDHOOP,CHIEF
6	1	9342613	LADDER SAFETY CAGE HOOP 31.15X32.57
7	1	9342605	LADDER SAFETY CAGE HOOP 27.25X30.63
8	2	9342612	BRKT LADDER CAGE HOOP STANDOFF MH
9	6	9344503	CAGE STRAP 1-33"SWS 35"X2.00"

LOWER LADDER ASSEMBLY



ITEM	QTY	PART NO.	DESCRIPTION
1	1	9623250	TOWER, LADDER BRACKET GROUND
2	4	887452	LADDER,SECTION,2 RING,ASSY,CHIEF
3	6	9440073	LADDER CONNECT STRAP 8GA SW
4	6	9396240	BRKT,STNDRD,LADDER,CHIEF
5	4	9360128	LDR,MDHT BTM,SUPPORT,SW
6	8	9360129	BRKT,DOOR HINGE,LADDER,MDHT,3-STIFF,CHIEF,SW
7	4	9349663	LADDER ACCESS DOOR HINGE
8	2	9391272	LADDER ACCESS DOUBLE DOOR COVER
9	4	9342605	LADDER SAFETY CAGE HOOP 27.25X30.63
10	2	9396242	BRKT,LADDERANDHOOP,CHIEF
11	7	9344505	CAGE STRAP 1-42"SWS 43"X2.00"
12	7	9399200	CAGE STRAP 1-23.75"SWS 25.75"X2.00"
13	5	9342612	BRKT LADDER CAGE HOOP STANDOFF MH
14	1	9342613	LADDER SAFETY CAGE HOOP 31.15X32.57
15	7	9399347	CAGE STRAP,EAVE,53"X2.00"
16	2	9623306	BRKT,HOOP STANDOFF,CAGE ACCESS

(MEDIUM DUTY HOPPER TANK 05-06 or 05-06 EVEN 60DEG HPR LADDER INSTALL)

MDHT05-07 30DEG V-RIB 45DEG HPR 16IN DISC

(ALSO USED FOR MDHT05E-07 30 DEG V-RIB 45DEG HPR 16IN DISC)

LADDER PACKAGE: 9360637

REST PLATFORM PKG: 9393610

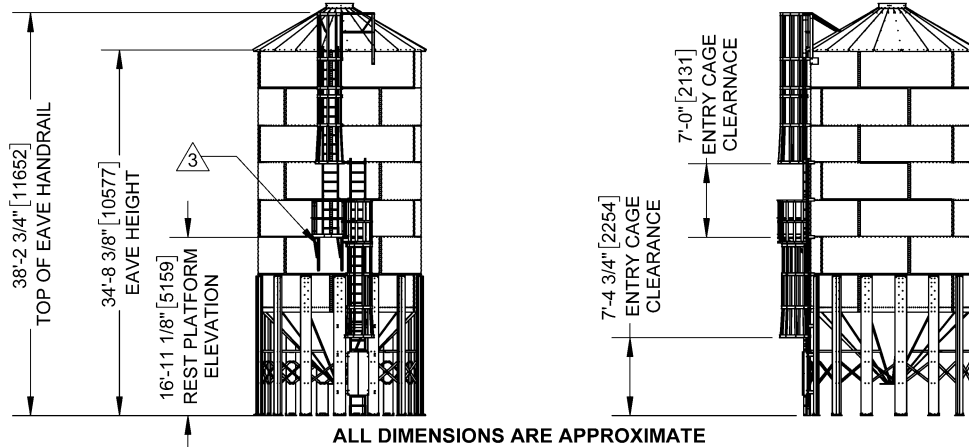
REST PLATFORM CAGE PKG: 9360655

EAVE RAIL PKG: 9360661 (STANDARD)

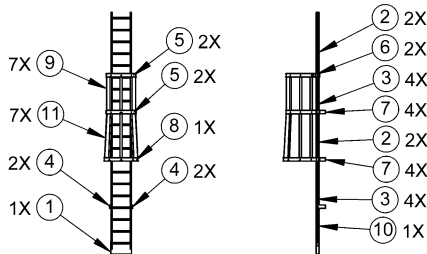
EAVE PLATFORM PKG: 9393610

EAVE PLATFORM CAGE PKG: 9360631

1. MDHT05-07 30DEG V-RIB 45DEG HPR 16IN DISC HAS EAVE HEIGHT OF 34' 8-3/8" AND COMES STANDARD WITH AN EAVE RAIL AND REST PLATFORM.
2. CHIEF LOGO INSTALL ON SECOND RING OF SIDEWALL STACK IN A VISIBLE, UNOBSTRUCTED LOCATION.
3. REST PLATFORM INSTALLED IN POSITION #1.



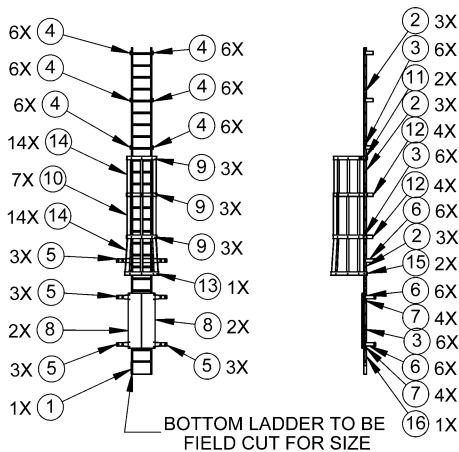
ALL DIMENSIONS ARE APPROXIMATE



UPPER LADDER ASSEMBLY

ITEM	QTY	PART NO.	DESCRIPTION
1	1	9623250	TOWER, LADDER BRACKET GROUND
2	2	887452	LADDER, SECTION, 2 RING, ASSY, CHIEF
3	4	9440073	LADDER CONNECT STRAP 8GA SW
4	2	9396240	BRKT, STNDRD, LADDER, CHIEF
5	2	9342605	LADDER SAFETY CAGE HOOP 27.25X30.63
6	2	9342612	BRKT LADDER CAGE HOOP STANDOFF MH
7	4	9396242	BRKT, LADDER AND HOOP, CHIEF
8	1	9342613	LADDER SAFETY CAGE HOOP 31.15X32.57
9	7	9344503	CAGE STRAP 1-33"SWS 35"X2.00"
10	1	887450	LADDER, SECTION, 1 RING, ASSY, CHIEF
11	7	9344505	CAGE STRAP 1-42"SWS 43"X2.00"

LOWER LADDER ASSEMBLY



BOTTOM LADDER TO BE FIELD CUT FOR SIZE

ITEM	QTY	PART NO.	DESCRIPTION
1	1	9623250	TOWER, LADDER BRACKET GROUND
2	3	887452	LADDER, SECTION, 2 RING, ASSY, CHIEF
3	6	9440073	LADDER CONNECT STRAP 8GA SW
4	6	9396240	BRKT, STNDRD, LADDER, CHIEF
5	3	9360128	LDR, MDHT BTM, SUPPORT, SW
6	6	9360129	BRKT, DOOR HINGE, LADDER, MDHT, 3-STIFF, CHIEF, SW
7	4	9349663	LADDER ACCESS DOOR HINGE
8	2	9391272	LADDER ACCESS DOUBLE DOOR COVER
9	3	9342605	LADDER SAFETY CAGE HOOP 27.25X30.63
10	7	9360152	CAGE STRAP 1-42"SWS 39.75"X2.00" SW
11	2	9342612	BRKT LADDER CAGE HOOP STANDOFF MH
12	4	9396242	BRKT, LADDER AND HOOP, CHIEF
13	1	9342613	LADDER SAFETY CAGE HOOP 31.15X32.57
14	14	9344503	CAGE STRAP 1-33"SWS 35"X2.00"
15	2	9623306	BRKT, HOOP STANDOFF, CAGE ACCESS
16	1	887450	LADDER, SECTION, 1 RING, ASSY, CHIEF

(MEDIUM DUTY HOPPER TANK 05-07 or 05-07 EVEN 45DEG HPR LADDER INSTALL)

MDHT05-08 30DEG V-RIB 45DEG HPR 16IN DISC**(ALSO USED FOR MDHT05E-08 30 DEG V-RIB 45DEG HPR 16IN DISC)**

LADDER PACKAGE: 9360638

REST PLATFORM PKG: 9393610

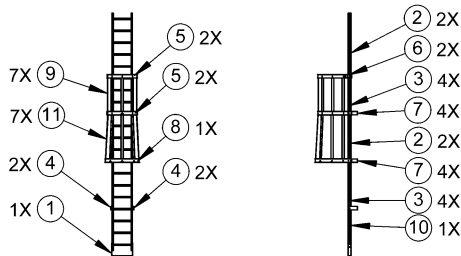
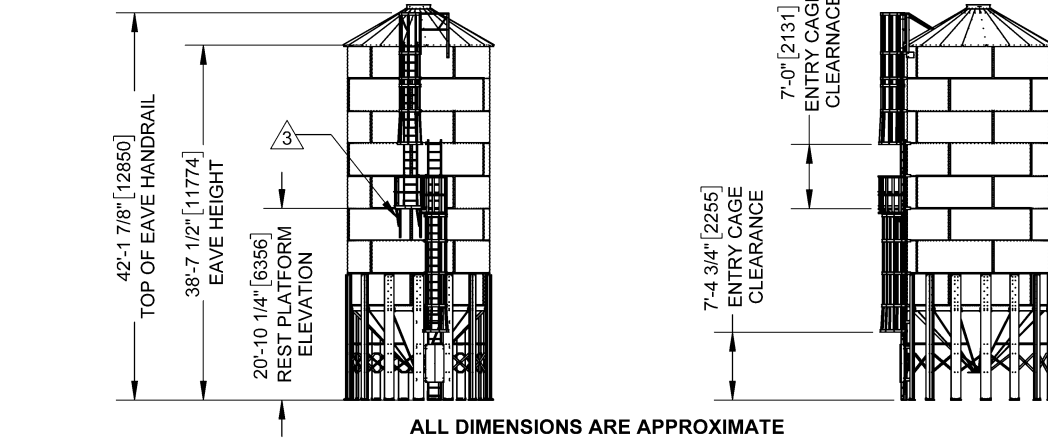
REST PLATFORM CAGE PKG: 9360655

EAVE RAIL PKG: 9360661 (STANDARD)

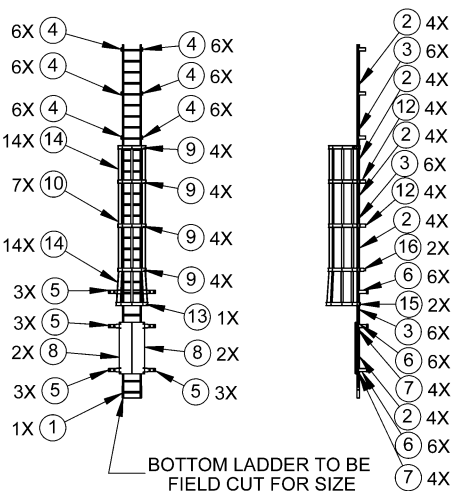
EAVE PLATFORM PKG: 9393610

EAVE PLATFORM CAGE PKG: 9360631

1. MDHT05-08 30DEG V-RIB 45DEG HPR 16IN DISC HAS EAVE HEIGHT OF 38' 7-1/2" AND COMES STANDARD WITH AN EAVE RAIL AND REST PLATFORM.
2. CHIEF LOGO INSTALL ON SECOND RING OF SIDEWALL STACK IN A VISIBLE, UNOBSTRUCTED LOCATION.
3. REST PLATFORM INSTALLED IN POSITION #1.

**UPPER LADDER ASSEMBLY**

ITEM	QTY	PART NO.	DESCRIPTION
1	1	9623250	TOWER, LADDER BRACKET GROUND
2	2	887452	LADDER, SECTION, 2 RING, ASSY, CHIEF
3	4	9440073	LADDER CONNECT STRAP 8GA SW
4	2	9396240	BRKT, STNDRD, LADDER, CHIEF
5	2	9342605	LADDER SAFETY CAGE HOOP 27.25X30.63
6	2	9342612	BRKT LADDER CAGE HOOP STANDOFF MH
7	4	9396242	BRKT, LADDER AND HOOP, CHIEF
8	1	9342613	LADDER SAFETY CAGE HOOP 31.15X32.57
9	7	9344503	CAGE STRAP 1-33"SWS 35"X2.00"
10	1	887450	LADDER, SECTION, 1 RING, ASSY, CHIEF
11	7	9344505	CAGE STRAP 1-42"SWS 43"X2.00"



15	7	9344504	CAGE STRAP 2-42"SWS 85"X2.00"
1	1	9623250	TOWER, LADDER BRACKET GROUND
2	4	887452	LADDER, SECTION, 2 RING, ASSY, CHIEF
3	6	9440073	LADDER CONNECT STRAP 8GA SW
4	6	9396240	BRKT, STNDRD, LADDER, CHIEF
5	3	9360128	LDR, MDHT BTM, SUPPORT, SW
6	6	9360129	BRKT, DOOR HINGE, LADDER, MDHT, 3-STIFF, CHIEF, SW
7	4	9349663	LADDER ACCESS DOOR HINGE
8	2	9391272	LADDER ACCESS DOUBLE DOOR COVER
9	4	9342605	LADDER SAFETY CAGE HOOP 27.25X30.63
10	7	9344504	CAGE STRAP 2-42"SWS 85"X2.00"
11	2	9342612	BRKT LADDER CAGE HOOP STANDOFF MH
12	4	9396242	BRKT, LADDER AND HOOP, CHIEF
13	1	9342613	LADDER SAFETY CAGE HOOP 31.15X32.57
14	14	9344503	CAGE STRAP 1-33"SWS 35"X2.00"
15	2	9623306	BRKT, HOOP STANDOFF, CAGE ACCESS
16	2	9360335	BRKT, LADDER AND HOOP, MDHT, COMPRESSION, CHIEF SW

(MEDIUM DUTY HOPPER TANK 05-08 or 05-08 EVEN 45DEG HPR LADDER INSTALL)

MDHT05-08 30DEG V-RIB 60DEG HPR 16IN DISC

(ALSO USED FOR MDHT05E-08 30 DEG V-RIB 60DEG HPR 16IN DISC)

LADDER PKG: 9360771

REST PLATFORM PKG: 9393610

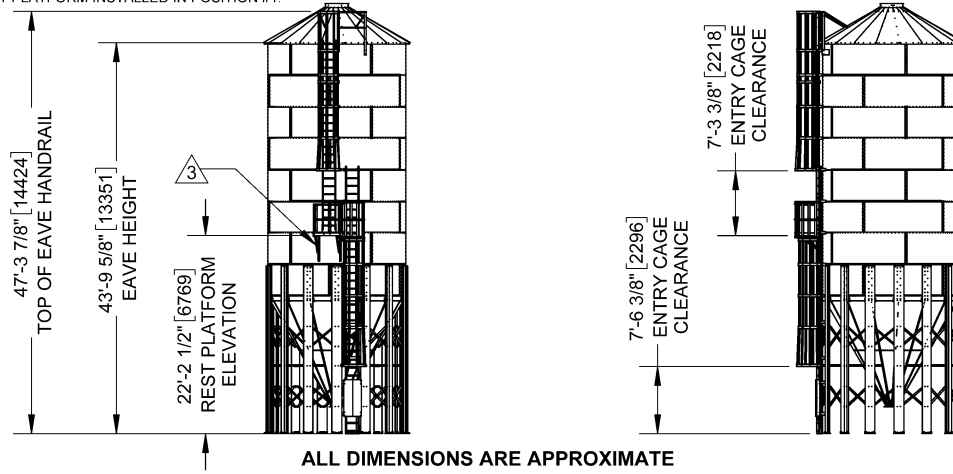
REST PLATFORM CGE PKG: 9360655

EAVE RAIL PKG: 9360661 (STANDARD)

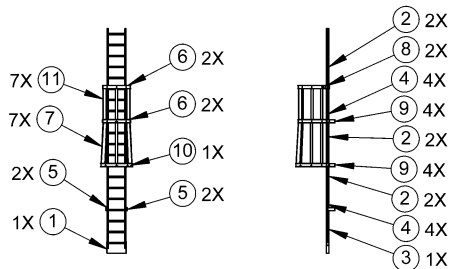
EAVE PLATFORM PKG: 9393610

EAVE PLATFORM CAGE PKG: 9360631

1. MDHT05-08 30DEG V-RIB 60DEG HPR 16IN DISC HAS EAVE HEIGHT OF 43'-9 5/8" AND COMES STANDARD WITH AN EAVE RAIL AND REST PLATFORM.
2. CHIEF LOGO INSTALL ON SECOND RING OF SIDEWALL STACK IN A VISIBLE, UNOBSTRUCTED LOCATION.
3. REST PLATFORM INSTALLED IN POSITION #1.

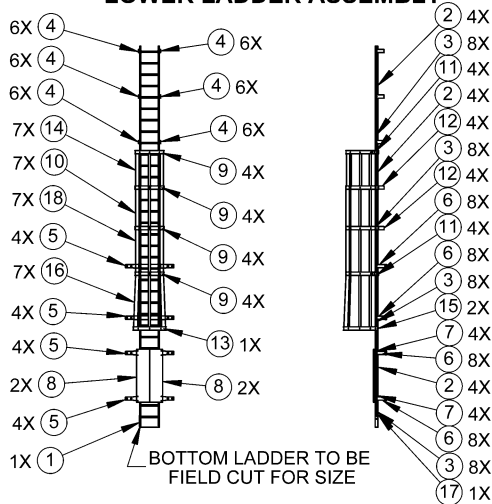


ALL DIMENSIONS ARE APPROXIMATE



UPPER LADDER ASSEMBLY

LOWER LADDER ASSEMBLY



ITEM	QTY	PART NO.	DESCRIPTION
1	1	9623250	TOWER, LADDER BRACKET GROUND
2	2	887452	LADDER,SECTION,2 RING,ASSY,CHIEF
3	1	887450	LADDER,SECTION,1 RING,ASSY,CHIEF
4	4	9440073	LADDER CONNECT STRAP 8GA SW
5	2	9396240	BRKT,STNDRD,LADDER,CHIEF
6	2	9342605	LADDER SAFETY CAGE HOOP 27.25X30.63
7	7	9344505	CAGE STRAP 1-42"SWS 43"X2.00"
8	2	9342612	BRKT LADDER CAGE HOOP STANDOFF MH
9	4	9396242	BRKT,LADDERANDHOOP,CHIEF
10	1	9342613	LADDER SAFETY CAGE HOOP 31.15X32.57
11	7	9344503	CAGE STRAP 1-33"SWS 35"X2.00"

ITEM	QTY	PART NO.	DESCRIPTION
1	1	9623250	TOWER, LADDER BRACKET GROUND
2	4	887452	LADDER,SECTION,2 RING,ASSY,CHIEF
3	8	9440073	LADDER CONNECT STRAP 8GA SW
4	6	9396240	BRKT,STNDRD,LADDER,CHIEF
5	4	9360128	LDR,MDHT BTM,SUPPORT,SW
6	8	9360129	BRKT,DOOR HINGE,LADDER,MDHT,3-STIFF,CHIEF,SW
7	4	9349663	LADDER ACCESS DOOR HINGE
8	2	9391272	LADDER ACCESS DOUBLE DOOR COVER
9	4	9342605	LADDER SAFETY CAGE HOOP 27.25X30.63
10	7	9360152	CAGE STRAP 1-42"SWS 39.75"X2.00" SW
11	4	9342612	BRKT LADDER CAGE HOOP STANDOFF MH
12	4	9396242	BRKT,LADDERANDHOOP,CHIEF
13	1	9342613	LADDER SAFETY CAGE HOOP 31.15X32.57
14	7	9344503	CAGE STRAP 1-33"SWS 35"X2.00"
15	2	9623306	BRKT,HOOP STANDOFF,CAGE ACCESS
16	7	9399347	CAGE STRAP,EAVE,53"X2.00"
17	1	887450	LADDER,SECTION,1 RING,ASSY,CHIEF
18	7	9344505	CAGE STRAP 1-42"SWS 43"X2.00"

(MEDIUM DUTY HOPPER TANK 05-08 or 05-08 EVEN 60DEG HPR LADDER INSTALL)

MDHT05-09 30DEG V-RIB 45DEG HPR 16IN DISC

(ALSO USED FOR MDHT05E-09 30 DEG V-RIB 45DEG HPR 16IN DISC)

LADDER PKG: 9360639

REST PLATFORM PKG: 9393610

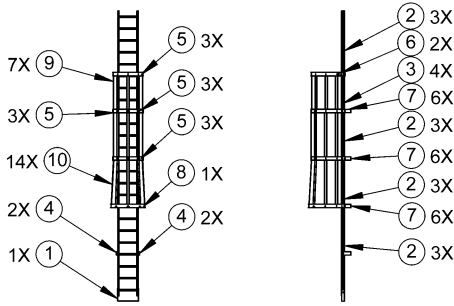
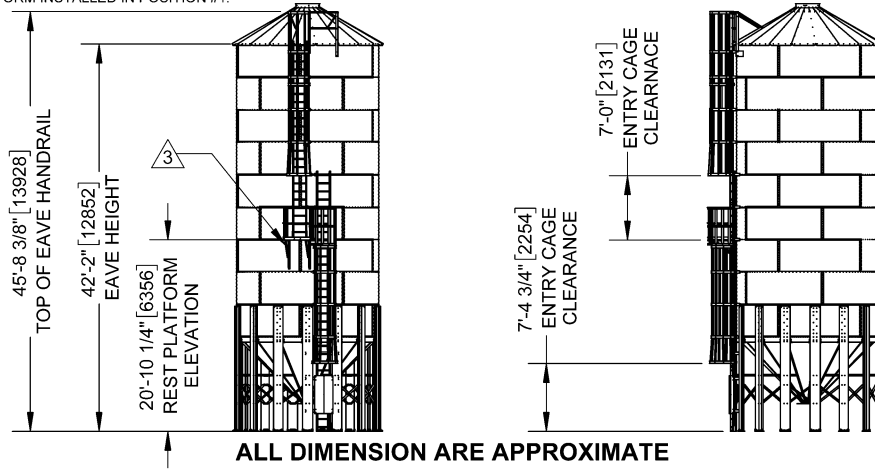
REST PLATFORM CGE PKG: 9360655

EAVE RAIL PKG: 9360661 (STANDARD)

EAVE PLATFORM PKG: 9393610

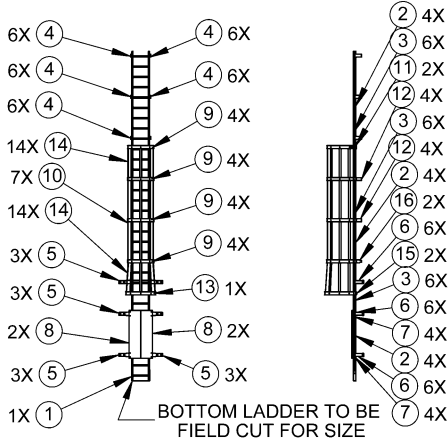
EAVE PLATFORM CAGE PKG: 9360631

1. MDHT05-09 30DEG V-RIB 45DEG HPR 16IN DISC HAS EAVE HEIGHT OF 42' 2" AND COMES STANDARD WITH AN EAVE RAIL AND REST PLATFORM.
2. CHIEF LOGO INSTALL ON SECOND RING OF SIDEWALL STACK IN A VISIBLE, UNOBSTRUCTED LOCATION.
3. REST PLATFORM INSTALLED IN POSITION #1.



ITEM	QTY	PART NO.	DESCRIPTION
1	1	9623250	TOWER, LADDER BRACKET GROUND
2	3	887452	LADDER,SECTION,2 RING,ASSY,CHIEF
3	4	9440073	LADDER CONNECT STRAP 8GA SW
4	2	9396240	BRKT,STNDRD,LADDER,CHIEF
5	3	9342605	LADDER SAFETY CAGE HOOP 27.25X30.63
6	2	9342612	BRKT LADDER CAGE HOOP STANDOFF MH
7	6	9396242	BRKT,LADDERANDHOOP,CHIEF
8	1	9342613	LADDER SAFETY CAGE HOOP 31.15X32.57
9	7	9344503	CAGE STRAP 1-33"SWS 35"X2.00"
10	14	9344505	CAGE STRAP 1-42"SWS 43"X2.00"

LOWER LADDER ASSEMBLY



ITEM	QTY	PART NO.	DESCRIPTION
1	1	9623250	TOWER, LADDER BRACKET GROUND
2	4	887452	LADDER,SECTION,2 RING,ASSY,CHIEF
3	6	9440073	LADDER CONNECT STRAP 8GA SW
4	6	9396240	BRKT,STNDRD,LADDER,CHIEF
5	3	9360128	LDR,MDHT BTM,SUPPORT,SW
6	6	9360129	BRKT,DOOR HINGE,LADDER,MDHT,3-STIFF,CHIEF,SW
7	4	9349663	LADDER ACCESS DOOR HINGE
8	2	9391272	LADDER ACCESS DOUBLE DOOR COVER
9	4	9342605	LADDER SAFETY CAGE HOOP 27.25X30.63
10	7	9344504	CAGE STRAP 2-42"SWS 85"X2.00"
11	2	9342612	BRKT LADDER CAGE HOOP STANDOFF MH
12	4	9396242	BRKT,LADDERANDHOOP,CHIEF
13	1	9342613	LADDER SAFETY CAGE HOOP 31.15X32.57
14	14	9344503	CAGE STRAP 1-33"SWS 35"X2.00"
15	2	9623306	BRKT,HOOP STANDOFF,CAGE ACCESS
16	2	9360335	BRKT,LADDERANDHOOP,MDHT,COMPRESSION,CHIEF SW

(MEDIUM DUTY HOPPER TANK 05-09 or 05-09 EVEN 45DEG HPR LADDER INSTALL)

MDHT05-09 30DEG V-RIB 60DEG HPR 16IN DISC

(ALSO USED FOR MDHT05E-09 30 DEG V-RIB 60DEG HPR 16IN DISC)

LADDER PKG: 9360773

REST PLATFORM PKG: 9393610

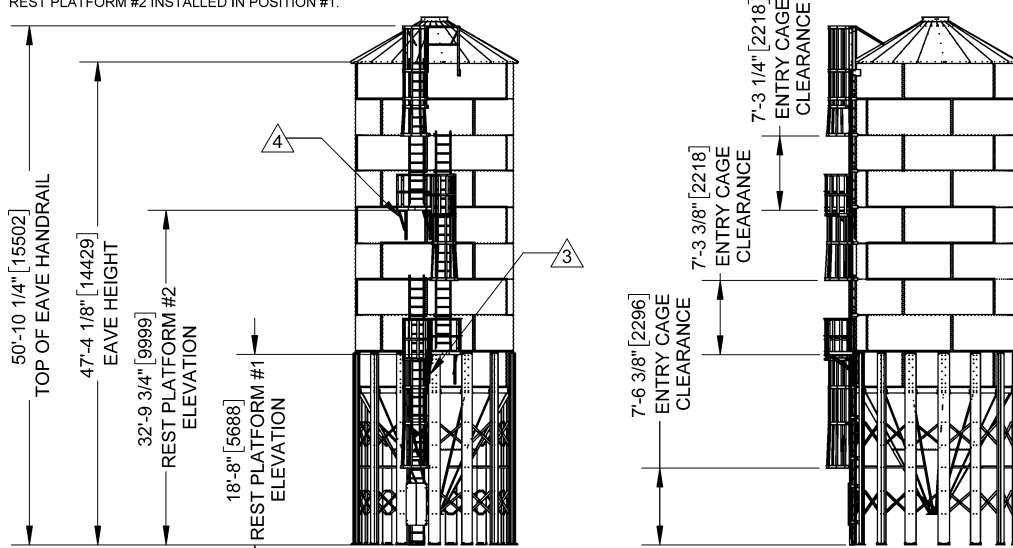
REST PLATFORM CGE PKG: 9360655

EAVE RAIL PKG: 9360661 (STANDARD)

EAVE PLATFORM PKG: 9393610

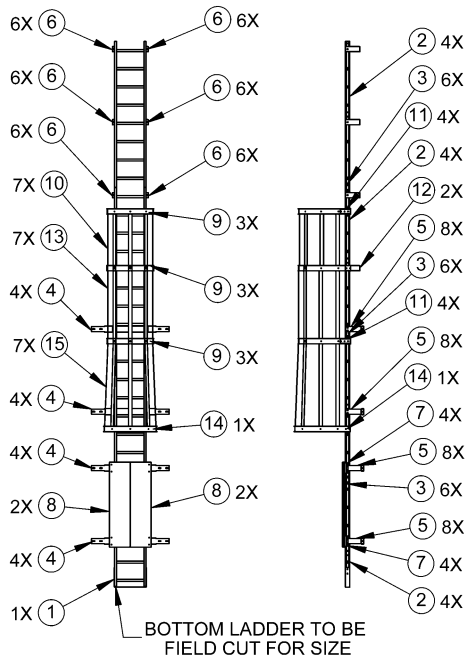
EAVE PLATFORM CAGE PKG: 9360631

1. MDHT05-09 30DEG V-RIB 60DEG HPR 16IN DISC HAS EAVE HEIGHT OF 47' 4-1/8" AND COMES STANDARD WITH AN EAVE RAIL AND (2) TWO REST PLATFORMS.
2. CHIEF LOGO INSTALL ON SECOND RING OF SIDEWALL STACK IN A VISIBLE, UNOBSTRUCTED LOCATION.
3. REST PLATFORM #1 INSTALLED IN POSITION #1 "OVER STIFFENER".
4. REST PLATFORM #2 INSTALLED IN POSITION #1.



ALL DIMENSIONS ARE APPROXIMATE

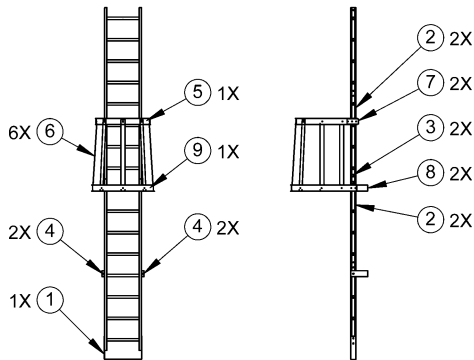
LOWER LADDER ASSEMBLY



ITEM	QTY	PART NO.	DESCRIPTION
1	1	9623250	TOWER, LADDER BRACKET GROUND
2	4	887452	LADDER,SECTION,2 RING,ASSY,CHIEF
3	6	9440073	LADDER CONNECT STRAP 8GA SW
4	4	9360128	LDR,MDHT BTM,SUPPORT,SW
5	8	9360129	BRKT,DOOR HINGE,LADDER,MDHT,3-STIFF,CHIEF,SW
6	6	9396240	BRKT,STNDRD,LADDER,CHIEF
7	4	9349663	LADDER ACCESS DOOR HINGE
8	2	9391272	LADDER ACCESS DOUBLE DOOR COVER
9	3	9342605	LADDER SAFETY CAGE HOOP 27.25X30.63
10	7	9344503	CAGE STRAP 1-33"SWS 35"X2.00"
11	4	9342612	BRKT LADDER CAGE HOOP STANDOFF MH
12	2	9396242	BRKT,LADDERANDHOOP,CHIEF
13	7	9344505	CAGE STRAP 1-42"SWS 43"X2.00"
14	1	9342613	LADDER SAFETY CAGE HOOP 31.15X32.57
15	7	9399347	CAGE STRAP,EAVE,53"X2.00"
16	2	9623306	BRKT,HOOP STANDOFF,CAGE ACCESS

(MEDIUM DUTY HOPPER TANK 05-09 or 05-09 EVEN 60DEG HPR LADDER INSTALL FULL & BOTTOM)

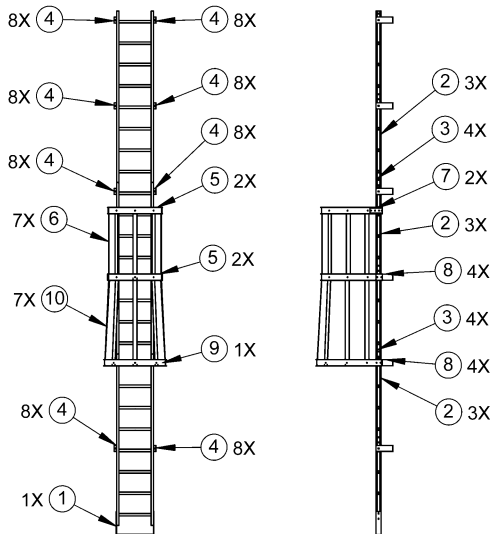
MEDIUM DUTY HOPPER TANK INSTRUCTION MANUAL



ITEM	QTY	PART NO.	DESCRIPTION
1	1	9623250	TOWER, LADDER BRACKET GROUND
2	2	887452	LADDER,SECTION,2 RING,ASSY,CHIEF
3	2	9440073	LADDER CONNECT STRAP 8GA SW
4	2	9396240	BRKT,STNDRD,LADDER,CHIEF
5	1	9342605	LADDER SAFETY CAGE HOOP 27.25X30.63
6	6	9344503	CAGE STRAP 1-33"SWS 35"X2.00"
7	2	9342612	BRKT LADDER CAGE HOOP STANDOFF MH
8	2	9396242	BRKT,LADDERANDHOOP,CHIEF
9	1	9342613	LADDER SAFETY CAGE HOOP 31.15X32.57

UPPER LADDER ASSEMBLY

MIDDLE LADDER ASSEMBLY



ITEM	QTY	PART NO.	DESCRIPTION
1	1	9623250	TOWER, LADDER BRACKET GROUND
2	3	887452	LADDER,SECTION,2 RING,ASSY,CHIEF
3	4	9440073	LADDER CONNECT STRAP 8GA SW
4	8	9396240	BRKT,STNDRD,LADDER,CHIEF
5	2	9342605	LADDER SAFETY CAGE HOOP 27.25X30.63
6	7	9344503	CAGE STRAP 1-33"SWS 35"X2.00"
7	2	9342612	BRKT LADDER CAGE HOOP STANDOFF MH
8	4	9396242	BRKT,LADDERANDHOOP,CHIEF
9	1	9342613	LADDER SAFETY CAGE HOOP 31.15X32.57
10	7	9344505	CAGE STRAP 1-42"SWS 43"X2.00"

(MEDIUM DUTY HOPPER TANK 05-09 or 05-09 EVEN 60DEG HPR LADDER INSTALL MIDDLE & TOP)

MDHT06-02 30DEG V-RIB 45DEG HPR 16IN DISC

(ALSO USED FOR MDHT06E-02 30 DEG V-RIB 45DEG HPR 16IN DISC)

LADDER PKG: 9360640

REST PLATFORM PKG: 9393610

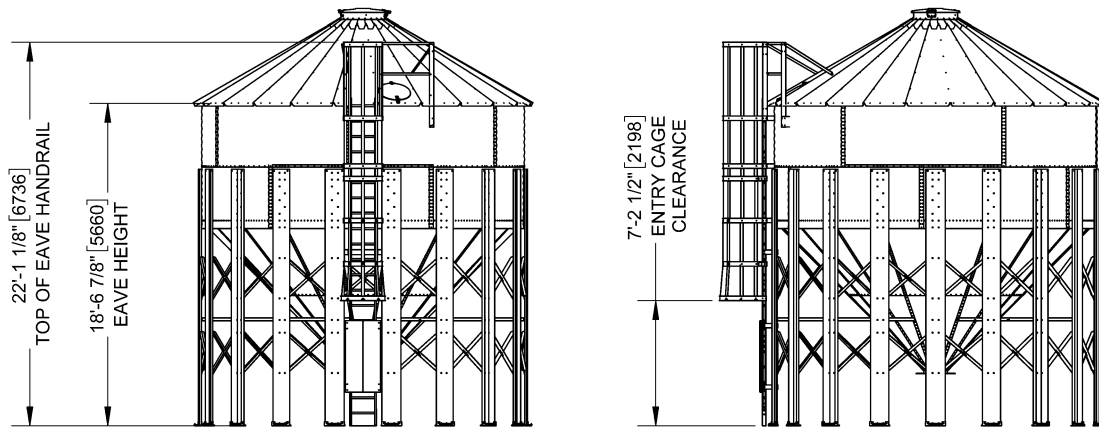
REST PLATFORM CGE PKG: 9360655

EAVE RAIL PKG: 9360661 (STANDARD)

EAVE PLATFORM PKG: 9393610

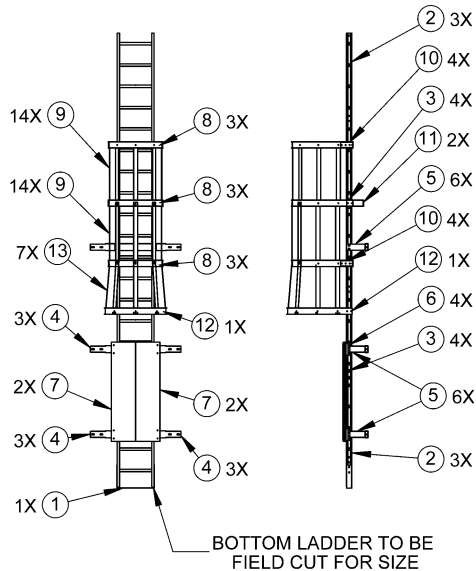
EAVE PLATFORM CAGE PKG: 9360631

1. MDHT06-02 30DEG V-RIB 45DEG HPR 16IN DISC HAS EAVE HEIGHT OF 18' 6-7/8" AND COMES STANDARD WITH AN EAVE RAIL.
2. CHIEF LOGO INSTALL ON TOP RING OF SIDEWALL STACK IN A VISIBLE, UNOBSTRUCTED LOCATION.



ALL DIMENSIONS ARE APPROXIMATE

LADDER ASSEMBLY



ITEM	QTY	PART NO.	DESCRIPTION
1	1	9623250	TOWER, LADDER BRACKET GROUND
2	3	887452	LADDER,SECTION,2 RING,ASSY,CHIEF
3	4	9440073	LADDER CONNECT STRAP 8GA SW
4	3	9360128	LDR,MDHT BTM,SUPPORT,SW
5	6	9360129	BRKT,DOOR HINGE,LADDER,MDHT,3-STIFF,CHIEF,SW
6	4	9349663	LADDER ACCESS DOOR HINGE
7	2	9391272	LADDER ACCESS DOUBLE DOOR COVER
8	3	9342605	LADDER SAFETY CAGE HOOP 27.25X30.63
9	14	9360629	CAGE STRAP 31\"X2.00\" SW
10	4	9342612	BRKT LADDER CAGE HOOP STANDOFF MH
11	2	9396242	BRKT,LADDERANDHOOP,CHIEF
12	1	9342613	LADDER SAFETY CAGE HOOP 31.15X32.57
13	7	9399200	CAGE STRAP 1-23.75\"SWS 25.75\"X2.00"
14	2	9623306	BRKT,HOOP STANDOFF,CAGE ACCESS

(MEDIUM DUTY HOPPER TANK 06-02 or 06-02 EVEN 45DEG HPR LADDER INSTALL)

MDHT06-03 30DEG V-RIB 45DEG HPR 16IN DISC

(ALSO USED FOR MDHT06E-03 30 DEG V-RIB 45DEG HPR 16IN DISC)

LADDER PKG: 9360641

REST PLATFORM PKG: 9393610

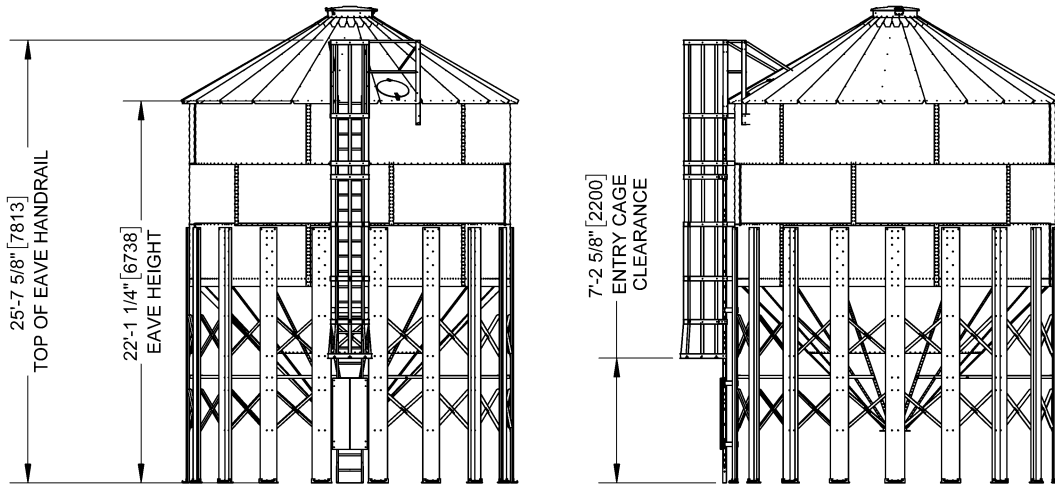
REST PLATFORM CGE PKG: 9360655

EAVE RAIL PKG: 9360661 (STANDARD)

EAVE PLATFORM PKG: 9393610

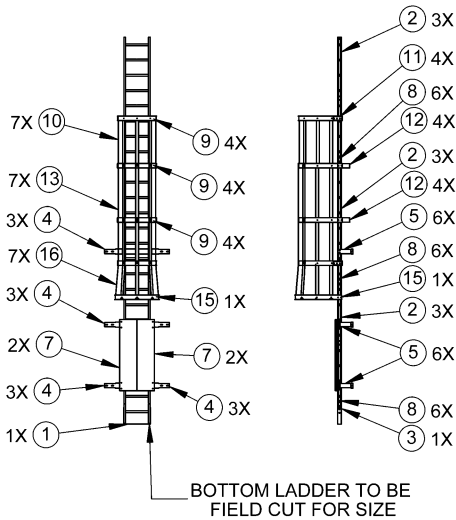
EAVE PLATFORM CAGE PKG: 9360631

1. MDHT06-03 30DEG V-RIB 45DEG HPR 16IN DISC HAS EAVE HEIGHT OF 22' 1-1/4" AND COMES STANDARD WITH AN EAVE RAIL.
2. CHIEF LOGO INSTALL ON SECOND RING OF SIDEWALL STACK IN A VISIBLE, UNOBSTRUCTED LOCATION.



ALL DIMENSION ARE APPROXIMATE

LADDER ASSEMBLY



ITEM	QTY	PART NO.	DESCRIPTION
1	1	9623250	TOWER, LADDER BRACKET GROUND
2	3	887452	LADDER,SECTION,2 RING,ASSY,CHIEF
3	1	887450	LADDER,SECTION,1 RING,ASSY,CHIEF
4	3	9360128	LDR,MDHT BTM,SUPPORT,SW
5	6	9360129	BRKT,DOOR HINGE,LADDER,MDHT,3-STIFF,CHIEF,SW
6	4	9349663	LADDER ACCESS DOOR HINGE
7	2	9391272	LADDER ACCESS DOUBLE DOOR COVER
8	6	9440073	LADDER CONNECT STRAP 8GA SW
9	4	9342605	LADDER SAFETY CAGE HOOP 27.25X30.63
10	7	9344503	CAGE STRAP 1-33"SWS 35"X2.00"
11	4	9342612	BRKT LADDER CAGE HOOP STANDOFF MH
12	4	9396242	BRKT,LADDERANDHOOP,CHIEF
13	7	9360152	CAGE STRAP 1-42"SWS 39.75"X2.00" SW
14	7	9360629	CAGE STRAP 31"X2.00" SW
15	1	9342613	LADDER SAFETY CAGE HOOP 31.15X32.57
16	7	9399200	CAGE STRAP 1-23.75"SWS 25.75"X2.00"
17	2	9623306	BRKT,HOOP STANDOFF,CAGE ACCESS

(MEDIUM DUTY HOPPER TANK 06-03 or 06-03 EVEN 45DEG HPR LADDER INSTALL)

MDHT06-04 30DEG V-RIB 45DEG HPR 16IN DISC

(ALSO USED FOR MDHT05E-04 30 DEG V-RIB 45DEG HPR 16IN DISC)

LADDER PKG: 9360642

REST PLATFORM PKG: 9393610

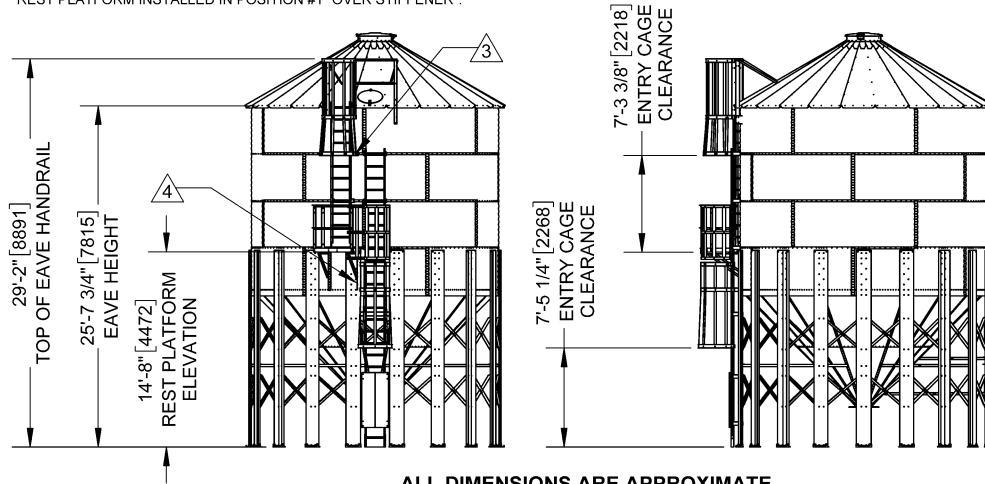
REST PLATFORM CGE PKG: 9360655

EAVE RAIL PKG: 9360661 (STANDARD)

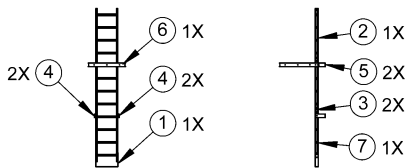
EAVE PLATFORM PKG: 9393610

EAVE PLATFORM CAGE PKG: 9360631

1. MDHT06-04 30DEG V-RIB 45DEG HPR 16IN DISC HAS EAVE HEIGHT OF 25' 7-3/4" AND COMES STANDARD WITH AN EAVE RAIL AND REST PLATFORM.
2. CHIEF LOGO INSTALL ON SECOND RING OF SIDEWALL STACK IN A VISIBLE, UNOBSTRUCTED LOCATION.
3. REPLACE (93402605) AT BOTTOM OF EAVE RAIL CAGE WITH (93402613) INCLUDED WITH 9360642 LADDER PACKAGE.
4. REST PLATFORM INSTALLED IN POSITION #1 "OVER STIFFENER".



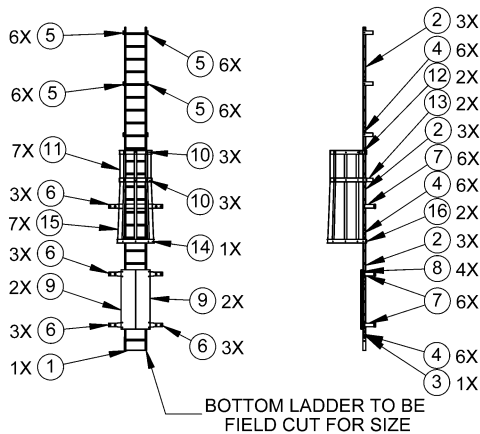
ALL DIMENSIONS ARE APPROXIMATE



UPPER LADDER ASSEMBLY

ITEM	QTY	PART NO.	DESCRIPTION
1	1	9623250	TOWER, LADDER BRACKET GROUND
2	1	887452	LADDER,SECTION,2 RING,ASSY,CHIEF
3	2	9440073	LADDER CONNECT STRAP 8GA SW
4	2	9396240	BRKT,STNDRD,LADDER,CHIEF
5	2	9396242	BRKT,LADDERANDHOOP,CHIEF
6	1	9342613	LADDER SAFETY CAGE HOOP 31.15X32.57
7	1	887450	LADDER,SECTION,1 RING,ASSY,CHIEF

LOWER LADDER ASSEMBLY



ITEM	QTY	PART NO.	DESCRIPTION
1	1	9623250	TOWER, LADDER BRACKET GROUND
2	3	887452	LADDER,SECTION,2 RING,ASSY,CHIEF
3	1	887450	LADDER,SECTION,1 RING,ASSY,CHIEF
4	6	9440073	LADDER CONNECT STRAP 8GA SW
5	6	9396240	BRKT,STNDRD,LADDER,CHIEF
6	3	9360128	LDR,MDHT BTM,SUPPORT,SW
7	6	9360129	BRKT,DOOR HINGE,LADDER,MDHT,3-STIFF,CHIEF,SW
8	4	9349663	LADDER ACCESS DOOR HINGE
9	2	9391272	LADDER ACCESS DOUBLE DOOR COVER
10	3	9342605	LADDER SAFETY CAGE HOOP 27.25X30.63
11	7	9399200	CAGE STRAP 1-23.75"SWS 25.75"X2.00"
12	2	9342612	BRKT LADDER CAGE HOOP STANDOFF MH
13	2	9396242	BRKT,LADDERANDHOOP,CHIEF
14	1	9342613	LADDER SAFETY CAGE HOOP 31.15X32.57
15	7	9399347	CAGE STRAP,EAVE,53"X2.00"
16	2	9623306	BRKT,HOOP STANDOFF,CAGE ACCESS

(MEDIUM DUTY HOPPER TANK 06-04 or 06-04 EVEN 45DEG HPR LADDER INSTALL)

MDHT06-05 30DEG V-RIB 45DEG HPR 16IN DISC

(ALSO USED FOR MDHT06E-05 30 DEG V-RIB 45DEG HPR 16IN DISC)

LADDER PKG: 9360643

REST PLATFORM PKG: 9393610

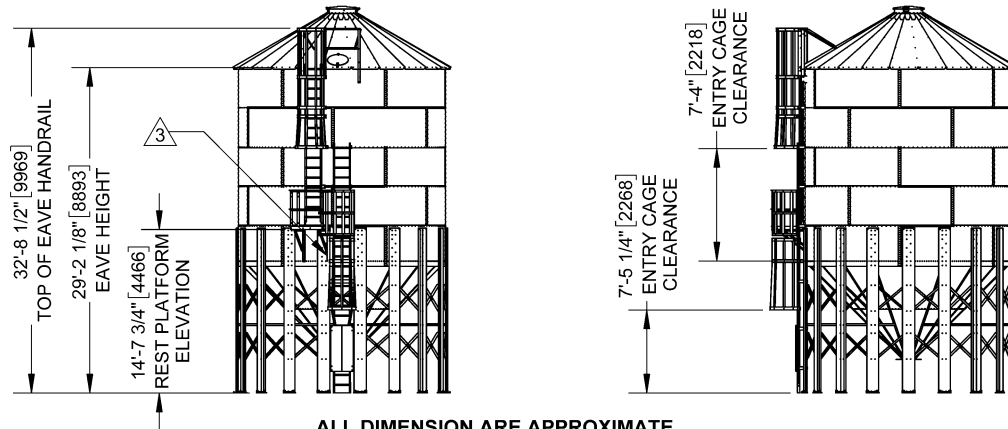
REST PLATFORM CGE PKG: 9360655

EAVE RAIL PKG: 9360661 (STANDARD)

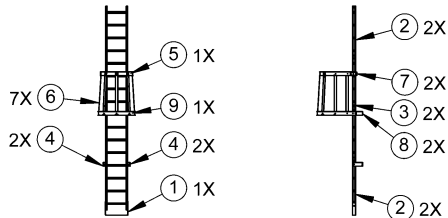
EAVE PLATFORM PKG: 9393610

EAVE PLATFORM CAGE PKG: 9360631

1. MDHT06-05 30DEG V-RIB 45DEG HPR 16IN DISC HAS EAVE HEIGHT OF 29' 2-1/8" AND COMES STANDARD WITH AN EAVE RAIL AND REST PLATFORM.
2. CHIEF LOGO INSTALL ON SECOND RING OF SIDEWALL STACK IN A VISIBLE, UNOBSTRUCTED LOCATION.
3. REST PLATFORM INSTALLED IN POSITION #4 "OVER STIFFENER".



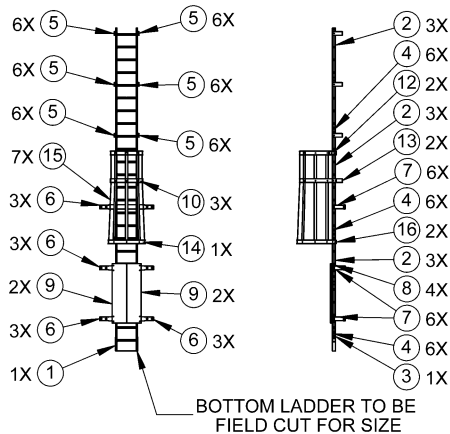
ALL DIMENSION ARE APPROXIMATE



UPPER LADDER ASSEMBLY

ITEM	QTY	PART NO.	DESCRIPTION
1	1	9623250	TOWER, LADDER BRACKET GROUND
2	2	887452	LADDER,SECTION,2 RING,ASSY,CHIEF
3	2	9440073	LADDER CONNECT STRAP 8GA SW
4	2	9396240	BRKT,STNDRD,LADDER,CHIEF
5	1	9342605	LADDER SAFETY CAGE HOOP 27.25X30.63
6	7	9344503	CAGE STRAP 1-33"SWS 35"X2.00"
7	2	9342612	BRKT LADDER CAGE HOOP STANDOFF MH
8	2	9396242	BRKT,LADDERANDHOOP,CHIEF
9	1	9342613	LADDER SAFETY CAGE HOOP 31.15X32.57

LOWER LADDER ASSEMBLY



BOTTOM LADDER TO BE FIELD CUT FOR SIZE

ITEM	QTY	PART NO.	DESCRIPTION
1	1	9623250	TOWER, LADDER BRACKET GROUND
2	3	887452	LADDER,SECTION,2 RING,ASSY,CHIEF
3	1	887450	LADDER,SECTION,1 RING,ASSY,CHIEF
4	6	9440073	LADDER CONNECT STRAP 8GA SW
5	6	9396240	BRKT,STNDRD,LADDER,CHIEF
6	3	9360128	LDR,MDHT BTM,SUPPORT,SW
7	6	9360129	BRKT,DOOR HINGE,LADDER,MDHT,3-STIFF,CHIEF,SW
8	4	9349663	LADDER ACCESS DOOR HINGE
9	2	9391272	LADDER ACCESS DOUBLE DOOR COVER
10	3	9342605	LADDER SAFETY CAGE HOOP 27.25X30.63
11	7	9399200	CAGE STRAP 1-23.75"SWS 25.75"X2.00"
12	2	9342612	BRKT LADDER CAGE HOOP STANDOFF MH
13	2	9396242	BRKT,LADDERANDHOOP,CHIEF
14	1	9342613	LADDER SAFETY CAGE HOOP 31.15X32.57
15	7	9399347	CAGE STRAP,EAVE,53"X2.00"
16	2	9623306	BRKT,HOOP STANDOFF,CAGE ACCESS

(MEDIUM DUTY HOPPER TANK 06-05 or 06-05 EVEN 45DEG HPR LADDER INSTALL)

MDHT06-06 30DEG V-RIB 45DEG HPR 16IN DISC

(ALSO USED FOR MDHT06E-06 30 DEG V-RIB 45DEG HPR 16IN DISC)

LADDER PKG: 9360644

REST PLATFORM PKG: 9393610

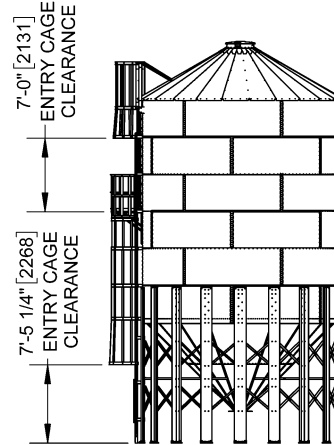
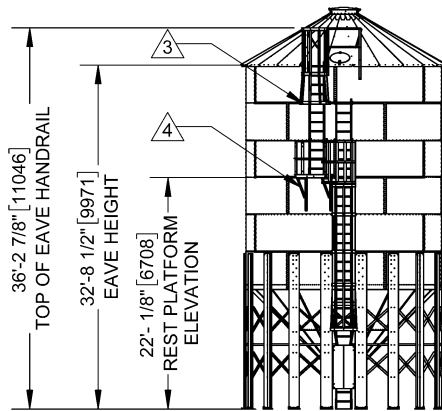
REST PLATFORM CGE PKG: 9360655

EAVE RAIL PKG: 9360661 (STANDARD)

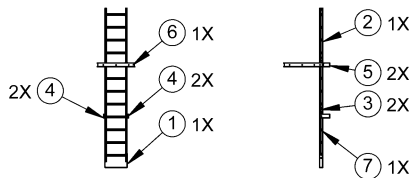
EAVE PLATFORM PKG: 9393610

EAVE PLATFORM CAGE PKG: 9360631

1. MDHT06-06 30DEG V-RIB 45DEG HPR 16IN DISC HAS EAVE HEIGHT OF 32'-8 1/2" AND COMES STANDARD WITH AN EAVE RAIL AND REST PLATFORM.
2. CHIEF LOGO INSTALL ON SECOND RING OF SIDEWALL STACK IN A VISIBLE, UNOBSTRUCTED LOCATION.
3. REPLACE (93402605) AT BOTTOM OF EAVE RAIL CAGE WITH (93402613) INCLUDED WITH 9360644 LADDER PACKAGE.
4. REST PLATFORM INSTALLED IN POSITION #1.



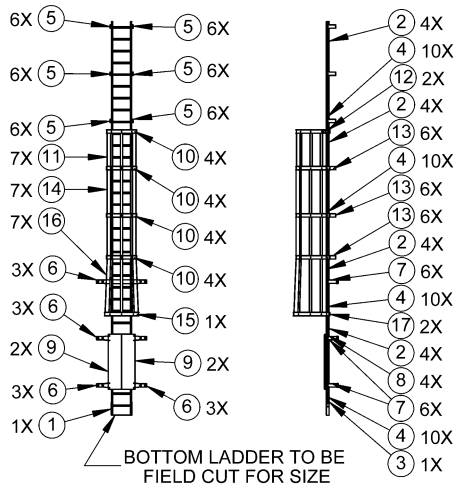
ALL DIMENSIONS ARE APPROXIMATE



UPPER LADDER ASSEMBLY

ITEM	QTY	PART NO.	DESCRIPTION
1	1	9623250	TOWER, LADDER BRACKET GROUND
2	1	887452	LADDER, SECTION, 2 RING, ASSY, CHIEF
3	2	9440073	LADDER CONNECT STRAP 8GA SW
4	2	9396240	BRKT, STNDRD, LADDER, CHIEF
5	2	9396242	BRKT, LADDER AND HOOP, CHIEF
6	1	9342613	LADDER SAFETY CAGE HOOP 31.15X32.57
7	1	887450	LADDER, SECTION, 1 RING, ASSY, CHIEF

LOWER LADDER ASSEMBLY



ITEM	QTY	PART NO.	DESCRIPTION
1	1	9623250	TOWER, LADDER BRACKET GROUND
2	4	887452	LADDER, SECTION, 2 RING, ASSY, CHIEF
3	1	887450	LADDER, SECTION, 1 RING, ASSY, CHIEF
4	10	9440073	LADDER CONNECT STRAP 8GA SW
5	6	9396240	BRKT, STNDRD, LADDER, CHIEF
6	3	9360128	LDR, MDHT BTM, SUPPORT, SW
7	6	9360129	BRKT, DOOR HINGE, LADDER, MDHT, 3-STIFF, CHIEF, SW
8	4	9349663	LADDER ACCESS DOOR HINGE
9	2	9391272	LADDER ACCESS DOUBLE DOOR COVER
10	4	9342605	LADDER SAFETY CAGE HOOP 27.25X30.63
11	7	9344503	CAGE STRAP 1-33"SWS 35"X2.00"
12	2	9342612	BRKT LADDER CAGE HOOP STANDOFF MH
13	6	9396242	BRKT, LADDER AND HOOP, CHIEF
14	7	9344505	CAGE STRAP 1-42"SWS 43"X2.00"
15	1	9342613	LADDER SAFETY CAGE HOOP 31.15X32.57
16	7	9399347	CAGE STRAP, EAVE, 53"X2.00"
17	2	9623306	BRKT, HOOP STANDOFF, CAGE ACCESS
18	7	9360152	CAGE STRAP 1-42"SWS 39.75"X2.00" SW

(MEDIUM DUTY HOPPER TANK 06-06 or 06-06 EVEN 45DEG HPR LADDER INSTALL)

MDHT06-07 30DEG V-RIB 45DEG HPR 16IN DISC

(ALSO USED FOR MDHT06E-07 30 DEG V-RIB 45DEG HPR 16IN DISC)

LADDER PKG: 9360645

REST PLATFORM PKG: 9393610

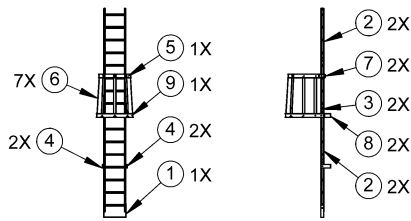
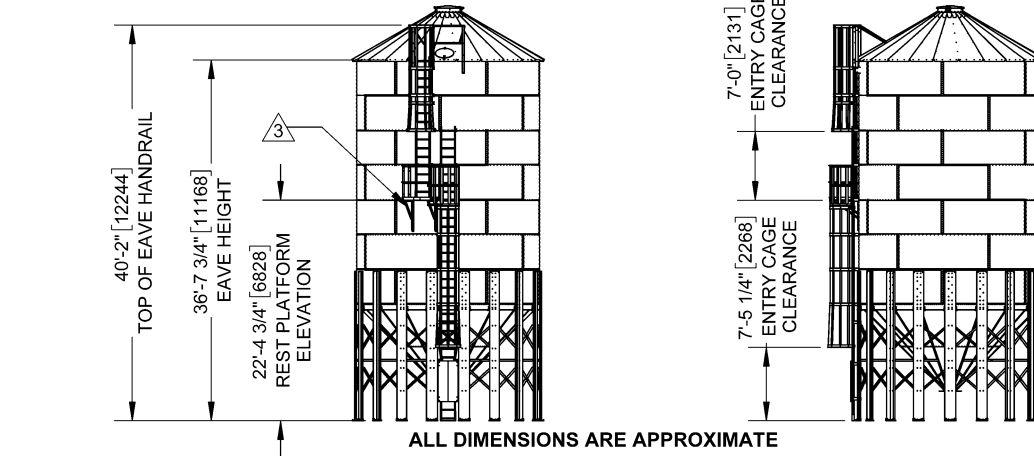
REST PLATFORM CGE PKG: 9360655

EAVE RAIL PKG: 9360661 (STANDARD)

EAVE PLATFORM PKG: 9393610

EAVE PLATFORM CAGE PKG: 9360631

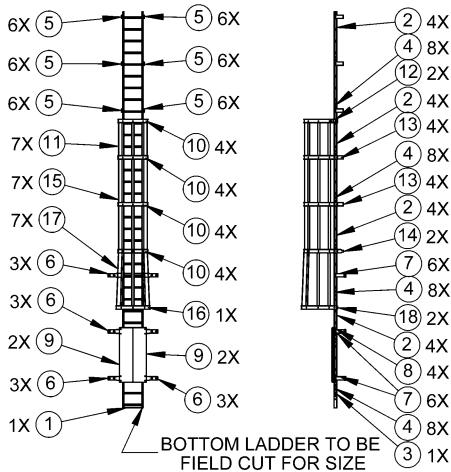
1. MDHT06-07 30DEG V-RIB 45DEG HPR 16IN DISC HAS EAVE HEIGHT OF 36'-7-3/4" AND COMES STANDARD WITH AN EAVE RAIL AND REST PLATFORM.
2. CHIEF LOGO INSTALL ON SECOND RING OF SIDEWALL STACK IN A VISIBLE, UNOBSTRUCTED LOCATION.
3. REST PLATFORM INSTALLED IN POSITION #1.



UPPER LADDER ASSEMBLY

ITEM	QTY	PART NO.	DESCRIPTION
1	1	9623250	TOWER, LADDER BRACKET GROUND
2	2	887452	LADDER, SECTION, 2 RING, ASSY, CHIEF
3	2	9440073	LADDER CONNECT STRAP 8GA SW
4	2	9396240	BRKT, STNDRD, LADDER, CHIEF
5	1	9342605	LADDER SAFETY CAGE HOOP 27.25X30.63
6	7	9344503	CAGE STRAP 1-33"SWS 35"X2.00"
7	2	9342612	BRKT LADDER CAGE HOOP STANDOFF MH
8	2	9396242	BRKT, LADDERANDHOOP, CHIEF
9	1	9342613	LADDER SAFETY CAGE HOOP 31.15X32.57

LOWER LADDER ASSEMBLY



ITEM	QTY	PART NO.	DESCRIPTION
1	1	9623250	TOWER, LADDER BRACKET GROUND
2	4	887452	LADDER, SECTION, 2 RING, ASSY, CHIEF
3	1	887450	LADDER, SECTION, 1 RING, ASSY, CHIEF
4	8	9440073	LADDER CONNECT STRAP 8GA SW
5	6	9396240	BRKT, STNDRD, LADDER, CHIEF
6	3	9360128	LDR, MDHT BTM, SUPPORT, SW
7	6	9360129	BRKT, DOOR HINGE, LADDER, MDHT, 3-STIFF, CHIEF, SW
8	4	9349663	LADDER ACCESS DOOR HINGE
9	2	9391272	LADDER ACCESS DOUBLE DOOR COVER
10	4	9342605	LADDER SAFETY CAGE HOOP 27.25X30.63
11	7	9344503	CAGE STRAP 1-33"SWS 35"X2.00"
12	2	9342612	BRKT LADDER CAGE HOOP STANDOFF MH
13	4	9396242	BRKT, LADDERANDHOOP, CHIEF
14	2	9360335	BRKT, LADDERANDHOOP, MDHT, COMPRESSION, CHIEF SW
15	7	9344504	CAGE STRAP 2-42"SWS 85"X2.00"
16	1	9342613	LADDER SAFETY CAGE HOOP 31.15X32.57
17	7	9399347	CAGE STRAP, EAVE, 53"X2.00"
18	2	9623306	BRKT, HOOP STANDOFF, CAGE ACCESS

(MEDIUM DUTY HOPPER TANK 06-07 or 06-07 EVEN 45DEG HPR LADDER INSTALL)

MDHT06-08 30DEG V-RIB 45DEG HPR 16IN DISC

(ALSO USED FOR MDHT06E-08 30 DEG V-RIB 45DEG HPR 16IN DISC)

LADDER PKG: 9360646

REST PLATFORM PKG: 9393610

REST PLATFORM CGE PKG: 9360655

EAVE RAIL PKG: 9360661 (STANDARD)

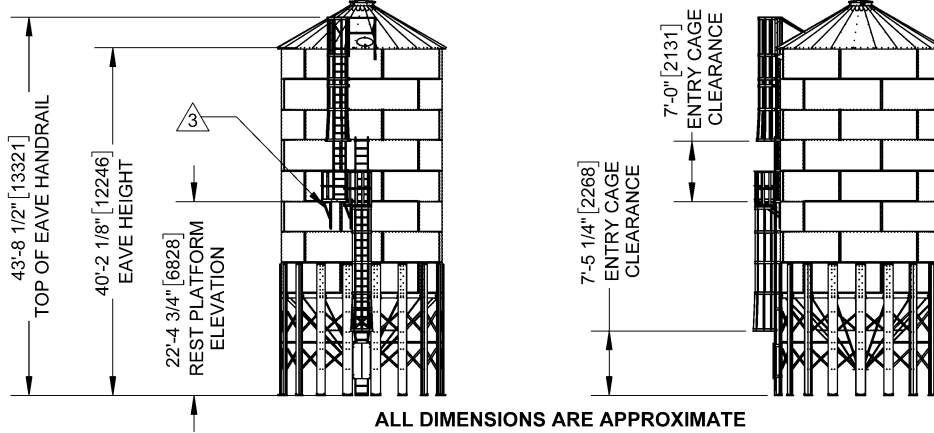
EAVE PLATFORM PKG: 9393610

EAVE PLATFORM CAGE PKG: 9360631

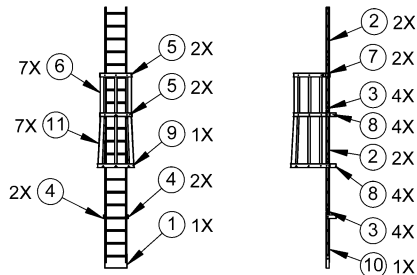
1. MDHT06-08 30DEG V-RIB 45DEG HPR 16IN DISC HAS EAVE HEIGHT OF 40' 2-1/8" AND COMES STANDARD WITH AN EAVE RAIL AND REST PLATFORM.
2. CHIEF LOGO INSTALL ON SECOND RING OF SIDEWALL STACK IN A VISIBLE, UNOBSTRUCTED LOCATION.



REST PLATFORM INSTALLED IN POSITION #1.



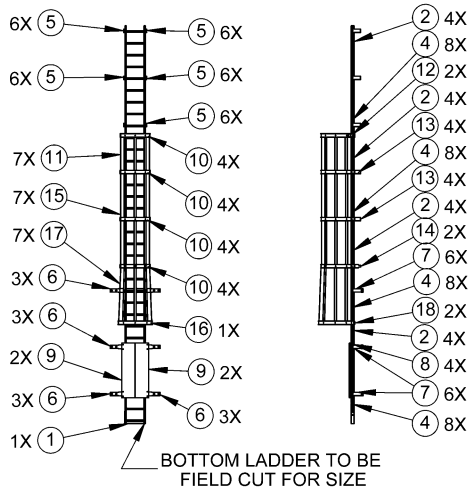
ALL DIMENSIONS ARE APPROXIMATE



UPPER LADDER ASSEMBLY

ITEM	QTY	PART NO.	DESCRIPTION
1	1	9623250	TOWER, LADDER BRACKET GROUND
2	2	887452	LADDER,SECTION,2 RING,ASSY,CHIEF
3	4	9440073	LADDER CONNECT STRAP 8GA SW
4	2	9396240	BRKT,STNDRD,LADDER,CHIEF
5	2	9342605	LADDER SAFETY CAGE HOOP 27.25X30.63
6	7	9344503	CAGE STRAP 1-33"SWS 35"X2.00"
7	2	9342612	BRKT LADDER CAGE HOOP STANDOFF MH
8	4	9396242	BRKT,LADDERANDHOOP,CHIEF
9	1	9342613	LADDER SAFETY CAGE HOOP 31.15X32.57
10	1	887450	LADDER,SECTION,1 RING,ASSY,CHIEF
11	7	9344505	CAGE STRAP 1-42"SWS 43"X2.00"

LOWER LADDER ASSEMBLY



BOTTOM LADDER TO BE FIELD CUT FOR SIZE

ITEM	QTY	PART NO.	DESCRIPTION
1	1	9623250	TOWER, LADDER BRACKET GROUND
2	4	887452	LADDER,SECTION,2 RING,ASSY,CHIEF
3	1	887450	LADDER,SECTION,1 RING,ASSY,CHIEF
4	8	9440073	LADDER CONNECT STRAP 8GA SW
5	6	9396240	BRKT,STNDRD,LADDER,CHIEF
6	3	9360128	LDR,MDHT BTM,SUPPORT,SW
7	6	9360129	BRKT,DOOR HINGE,LADDER,MDHT,3-STIFF,CHIEF,SW
8	4	9349663	LADDER ACCESS DOOR HINGE
9	2	9391272	LADDER ACCESS DOUBLE DOOR COVER
10	4	9342605	LADDER SAFETY CAGE HOOP 27.25X30.63
11	7	9344503	CAGE STRAP 1-33"SWS 35"X2.00"
12	2	9342612	BRKT LADDER CAGE HOOP STANDOFF MH
13	4	9396242	BRKT,LADDERANDHOOP,CHIEF
14	2	9360335	BRKT,LADDERANDHOOP,MDHT,COMPRESSION,CHIEF SW
15	7	9344504	CAGE STRAP 2-42"SWS 85"X2.00"
16	1	9342613	LADDER SAFETY CAGE HOOP 31.15X32.57
17	7	9399347	CAGE STRAP EAVE,53"X2.00"
18	2	9623306	BRKT,HOOP STANDOFF,CAGE ACCESS

(MEDIUM DUTY HOPPER TANK 06-08 or 06-08 EVEN 45DEG HPR LADDER INSTALL)

MDHT06-09 30DEG V-RIB 45DEG HPR 16IN DISC

(ALSO USED FOR MDHT06E-09 30 DEG V-RIB 45DEG HPR 16IN DISC)

LADDER PKG: 9360647

REST PLATFORM PKG: 9393610

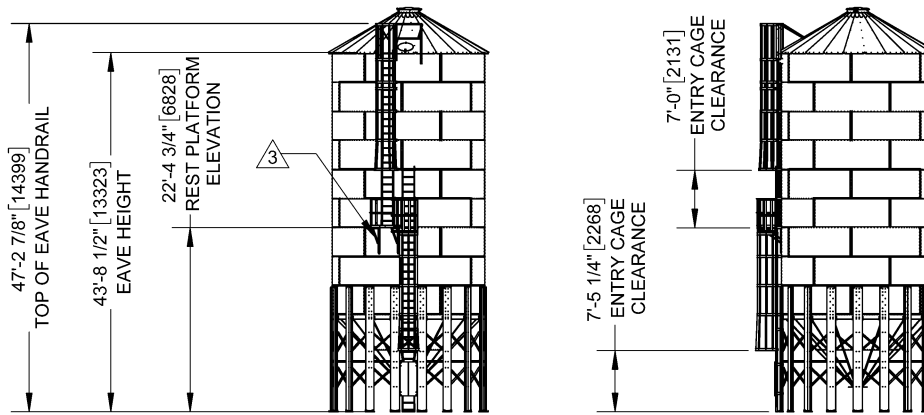
REST PLATFORM CGE PKG: 9360655

EAVE RAIL PKG: 9360661 (STANDARD)

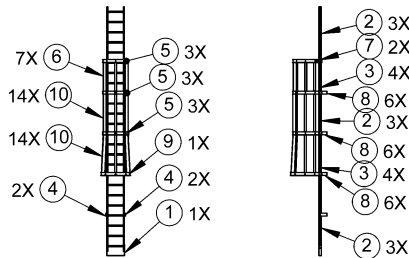
EAVE PLATFORM PKG: 9393610

EAVE PLATFORM CAGE PKG: 9360631

1. MDHT06-09 30DEG V-RIB 45DEG HPR 16IN DISC HAS EAVE HEIGHT OF 43' 8-1/2" AND COMES STANDARD WITH AN EAVE RAIL AND REST PLATFORM.
2. CHIEF LOGO INSTALL ON SECOND RING OF SIDEWALL STACK IN A VISIBLE, UNOBSTRUCTED LOCATION.
3. REST PLATFORM INSTALLED IN POSITION #1.



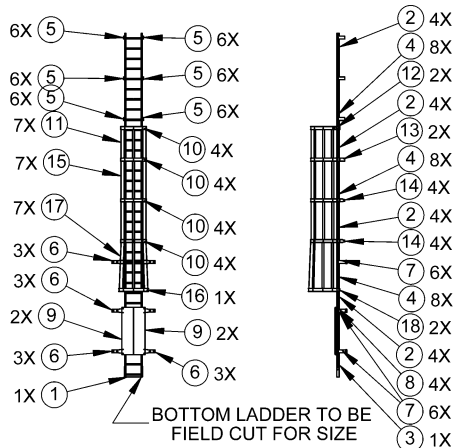
ALL DIMENSIONS ARE APPROXIMATE



UPPER LADDER ASSEMBLY

ITEM	QTY	PART NO.	DESCRIPTION
1	1	9623250	TOWER, LADDER BRACKET GROUND
2	3	887452	LADDER, SECTION, 2 RING, ASSY, CHIEF
3	4	9440073	LADDER CONNECT STRAP 8GA SW
4	2	9396240	BRKT, STNDRD, LADDER, CHIEF
5	3	9342605	LADDER SAFETY CAGE HOOP 27.25X30.63
6	7	9344503	CAGE STRAP 1-33"SWS 35"X2.00"
7	2	9342612	BRKT LADDER CAGE HOOP STANDOFF MH
8	6	9396242	BRKT, LADDERANDHOOP, CHIEF
9	1	9342613	LADDER SAFETY CAGE HOOP 31.15X32.57
10	14	9344505	CAGE STRAP 1-42"SWS 43"X2.00"

LOWER LADDER ASSEMBLY



ITEM	QTY	PART NO.	DESCRIPTION
1	1	9623250	TOWER, LADDER BRACKET GROUND
2	4	887452	LADDER, SECTION, 2 RING, ASSY, CHIEF
3	1	887450	LADDER, SECTION, 1 RING, ASSY, CHIEF
4	8	9440073	LADDER CONNECT STRAP 8GA SW
5	6	9396240	BRKT, STNDRD, LADDER, CHIEF
6	3	9360128	LDR, MDHT BTM, SUPPORT, SW
7	6	9360129	BRKT, DOOR HINGE, LADDER, MDHT, 3-STIFF, CHIEF, SW
8	4	9349663	LADDER ACCESS DOOR HINGE
9	2	9391272	LADDER ACCESS DOUBLE DOOR COVER
10	4	9342605	LADDER SAFETY CAGE HOOP 27.25X30.63
11	7	9344503	CAGE STRAP 1-33"SWS 35"X2.00"
12	2	9342612	BRKT LADDER CAGE HOOP STANDOFF MH
13	2	9396242	BRKT, LADDERANDHOOP, CHIEF
14	4	9360335	BRKT, LADDERANDHOOP, MDHT, COMPRESSION, CHIEF SW
15	7	9344504	CAGE STRAP 2-42"SWS 85"X2.00"
16	1	9342613	LADDER SAFETY CAGE HOOP 31.15X32.57
17	7	9399347	CAGE STRAP, EAVE, 53"X2.00"
18	2	9623306	BRKT, HOOP STANDOFF, CAGE ACCESS

(MEDIUM DUTY HOPPER TANK 06-09 or 06-09 EVEN 45DEG HPR LADDER INSTALL)

MDHT07-03 30DEG V-RIB 45DEG HPR 16IN DISC

(ALSO USED FOR MDHT07E-03 30 DEG V-RIB 45DEG HPR 16IN DISC)

LADDER PKG: 9360648

REST PLATFORM PKG: 9393610

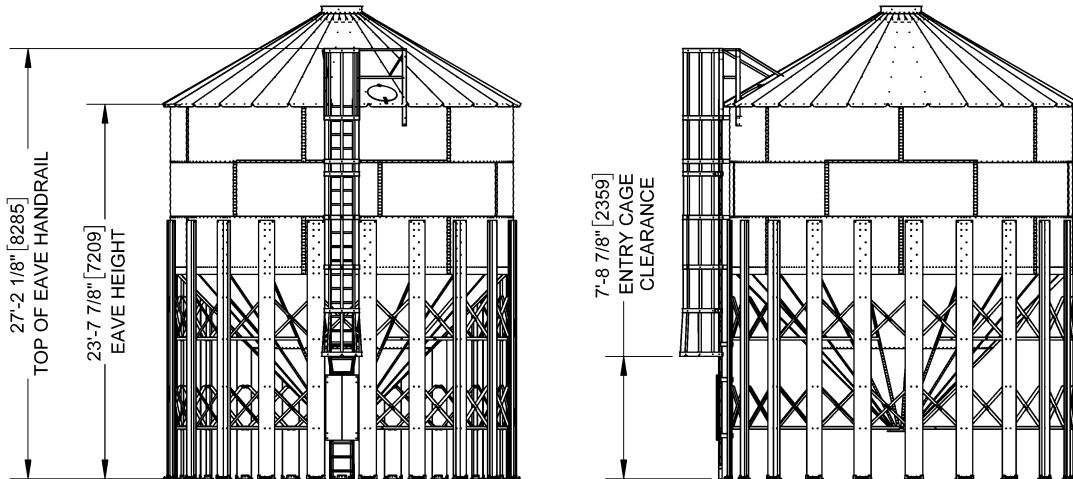
REST PLATFORM CGE PKG: 9360655

EAVE RAIL PKG: 9360661 (STANDARD)

EAVE PLATFORM PKG: 9393610

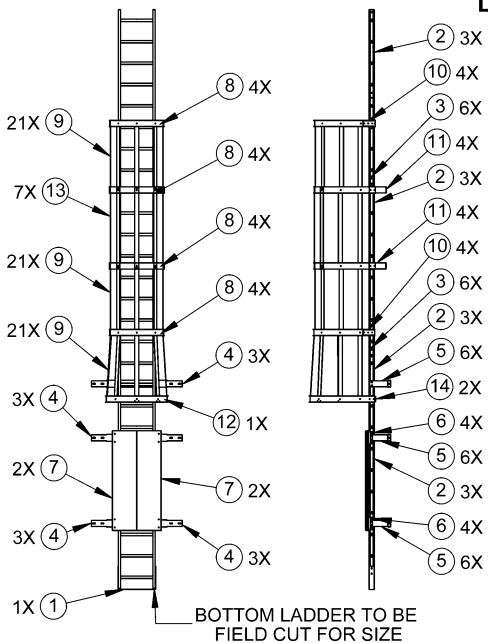
EAVE PLATFORM CAGE PKG: 9360631

1. MDHT07-03 30DEG V-RIB 45DEG HPR 16IN DISC HAS EAVE HEIGHT OF 23' 7-7/8" AND COMES STANDARD WITH AN EAVE RAIL AND REST PLATFORM.
2. CHIEF LOGO INSTALL ON SECOND RING OF SIDEWALL STACK IN A VISIBLE, UNOBSTRUCTED LOCATION.



ALL DIMENSIONS ARE APPROXIMATE

LADDER ASSEMBLY



ITEM	QTY	PART NO.	DESCRIPTION
1	1	9623250	TOWER, LADDER BRACKET GROUND
2	3	887452	LADDER,SECTION,2 RING,ASSY,CHIEF
3	6	9440073	LADDER CONNECT STRAP 8GA SW
4	3	9360128	LDR,MDHT BTM,SUPPORT,SW
5	6	9360129	BRKT,DOOR HINGE,LADDER,MDHT,3-STIFF,CHIEF,SW
6	4	9349663	LADDER ACCESS DOOR HINGE
7	2	9391272	LADDER ACCESS DOUBLE DOOR COVER
8	4	9342605	LADDER SAFETY CAGE HOOP 27.25X30.63
9	21	9344503	CAGE STRAP 1-33"SWS 35"X2.00"
10	4	9342612	BRKT LADDER CAGE HOOP STANDOFF MH
11	4	9396242	BRKT,LADDERANDHOOP,CHIEF
12	1	9342613	LADDER SAFETY CAGE HOOP 31.15X32.57
13	7	9360152	CAGE STRAP 1-42"SWS 39.75"X2.00" SW
14	2	9623306	BRKT,HOOP STANDOFF,CAGE ACCESS
15	1	887450	LADDER,SECTION,1 RING,ASSY,CHIEF

(MEDIUM DUTY HOPPER TANK 07-03 or 07-03 EVEN 45DEG HPR LADDER INSTALL)

MDHT07-04 30DEG V-RIB 45DEG HPR 16IN DISC

(ALSO USED FOR MDHT07E-04 30 DEG V-RIB 45DEG HPR 16IN DISC)

LADDER PKG: 9360649

REST PLATFORM PKG: 9393610

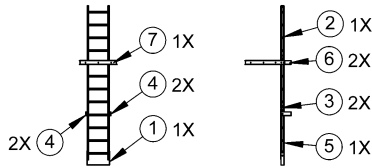
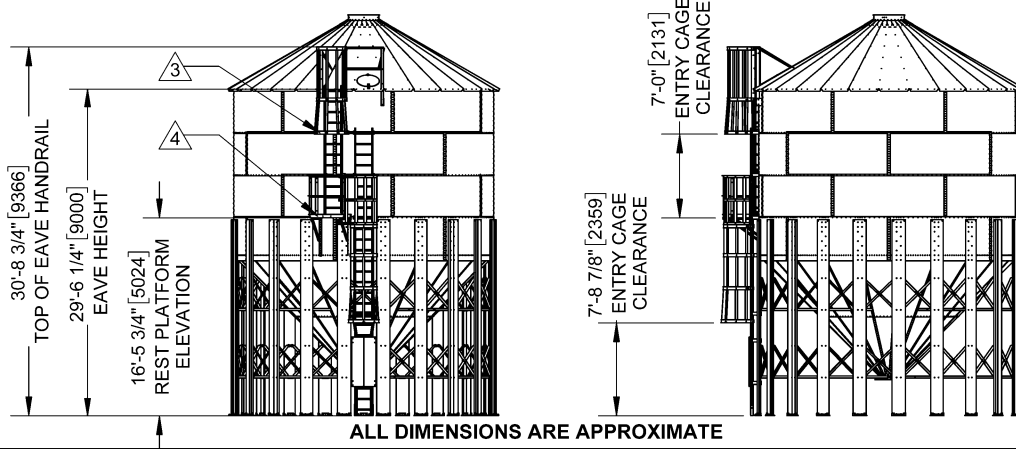
REST PLATFORM CGE PKG: 9360655

EAVE RAIL PKG: 9360661 (STANDARD)

EAVE PLATFORM PKG: 9393610

EAVE PLATFORM CAGE PKG: 9360631

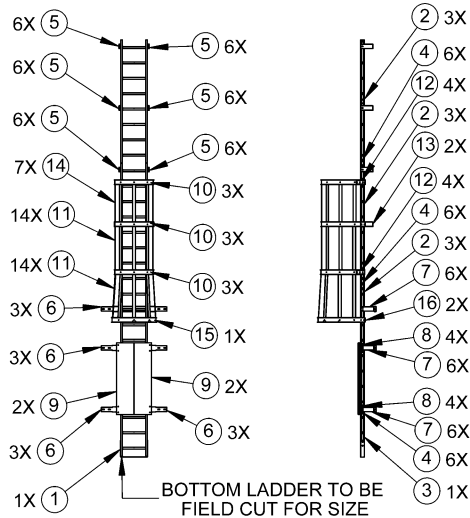
1. MDHT07-04 30DEG V-RIB 45DEG HPR 16IN DISC HAS EAVE HEIGHT OF 29' 6-1/4" AND COMES STANDARD WITH AN EAVE RAIL AND REST PLATFORM.
2. CHIEF LOGO INSTALL ON SECOND RING OF SIDEWALL STACK IN A VISIBLE, UNOBSTRUCTED LOCATION.
3. REPLACE (93402605) AT BOTTOM OF EAVE RAIL CAGE WITH (93402613) INCLUDED WITH 9360649 LADDER PACKAGE.
4. REST PLATFORM INSTALLED IN POSITION #1 "OVER STIFFENER".



UPPER LADDER ASSEMBLY

ITEM	QTY	PART NO.	DESCRIPTION
1	1	9623250	TOWER, LADDER BRACKET GROUND
2	1	887452	LADDER,SECTION,2 RING,ASSY,CHIEF
3	2	9440073	LADDER CONNECT STRAP 8GA SW
4	2	9396240	BRKT,STNDRD,LADDER,CHIEF
5	1	887450	LADDER,SECTION,1 RING,ASSY,CHIEF
6	2	9396242	BRKT,LADDERANDHOOP,CHIEF
7	1	9342613	LADDER SAFETY CAGE HOOP 31.15X32.57

LOWER LADDER ASSEMBLY



ITEM	QTY	PART NO.	DESCRIPTION
1	1	9623250	TOWER, LADDER BRACKET GROUND
2	3	887452	LADDER,SECTION,2 RING,ASSY,CHIEF
3	1	887450	LADDER,SECTION,1 RING,ASSY,CHIEF
4	6	9440073	LADDER CONNECT STRAP 8GA SW
5	6	9396240	BRKT,STNDRD,LADDER,CHIEF
6	3	9360128	LDR,MDHT BTM,SUPPORT,SW
7	6	9360129	BRKT,DOOR HINGE,LADDER,MDHT,3-STIFF,CHIEF,SW
8	4	9349663	LADDER ACCESS DOOR HINGE
9	2	9391272	LADDER ACCESS DOUBLE DOOR COVER
10	3	9342605	LADDER SAFETY CAGE HOOP 27.25X30.63
11	14	9344503	CAGE STRAP 1-33"SWS 35"X2.00"
12	4	9342612	BRKT LADDER CAGE HOOP STANDOFF MH
13	2	9396242	BRKT,LADDERANDHOOP,CHIEF
14	7	9360629	CAGE STRAP 31"X2.00" SW
15	1	9342613	LADDER SAFETY CAGE HOOP 31.15X32.57
16	2	9623306	BRKT,HOOP STANDOFF,CAGE ACCESS

(MEDIUM DUTY HOPPER TANK 07-04 or 07-04 EVEN 45DEG HPR LADDER INSTALL)

MDHT07-05 30DEG V-RIB 45DEG HPR 16IN DISC

(ALSO USED FOR MDHT07E-05 30 DEG V-RIB 45DEG HPR 16IN DISC)

LADDER PKG: 9360650

REST PLATFORM PKG: 9393610

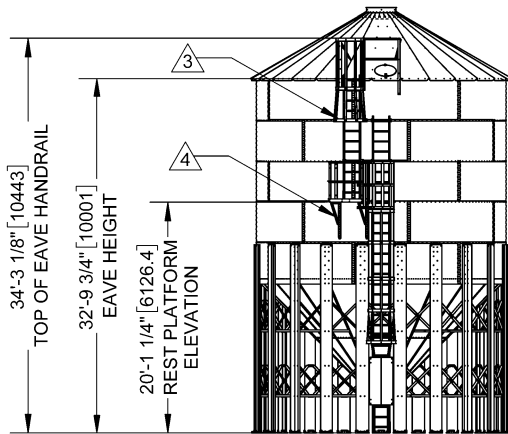
REST PLATFORM CGE PKG: 9360655

EAVE RAIL PKG: 9360661 (STANDARD)

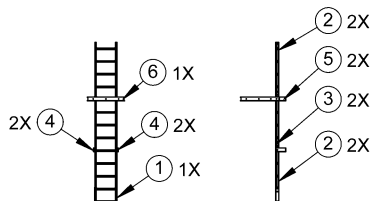
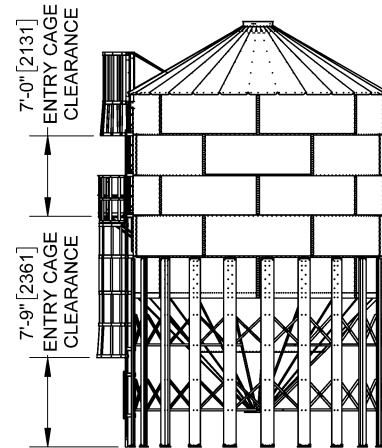
EAVE PLATFORM PKG: 9393610

EAVE PLATFORM CAGE PKG: 9360631

1. MDHT07-05 30DEG V-RIB 45DEG HPR 16IN DISC HAS EAVE HEIGHT OF 32' 9-3/4" AND COMES STANDARD WITH AN EAVE RAIL AND REST PLATFORM.
2. CHIEF LOGO INSTALL ON SECOND RING OF SIDEWALL STACK IN A VISIBLE, UNOBSTRUCTED LOCATION.
3. REPLACE (93402605) AT BOTTOM OF EAVE RAIL CAGE WITH (9302613) INCLUDED WITH 9360650 LADDER PACKAGE.
4. REST PLATFORM INSTALLED IN POSITION #1.



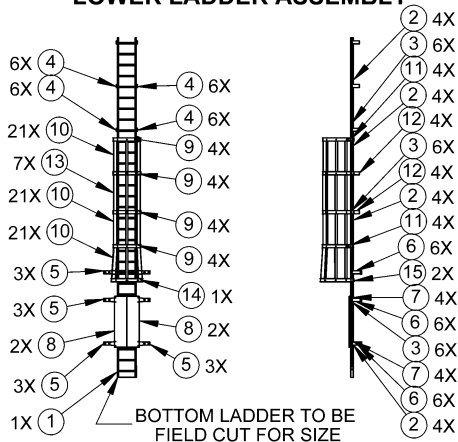
ALL DIMENSIONS ARE APPROXIMATE



UPPER LADDER ASSEMBLY

ITEM	QTY	PART NO.	DESCRIPTION
1	1	9623250	TOWER, LADDER BRACKET GROUND
2	2	887452	LADDER, SECTION, 2 RING, ASSY, CHIEF
3	2	9440073	LADDER CONNECT STRAP 8GA SW
4	2	9396240	BRKT, STNDRD, LADDER, CHIEF
5	2	9396242	BRKT, LADDER AND HOOP, CHIEF
6	1	9342613	LADDER SAFETY CAGE HOOP 31.15X32.57

LOWER LADDER ASSEMBLY



ITEM	QTY	PART NO.	DESCRIPTION
1	1	9623250	TOWER, LADDER BRACKET GROUND
2	4	887452	LADDER, SECTION, 2 RING, ASSY, CHIEF
3	6	9440073	LADDER CONNECT STRAP 8GA SW
4	6	9396240	BRKT, STNDRD, LADDER, CHIEF
5	3	9360128	LDR, MDHT BTM, SUPPORT, SW
6	6	9360129	BRKT, DOOR HINGE, LADDER, MDHT, 3-STIFF, CHIEF, SW
7	4	9349663	LADDER ACCESS DOOR HINGE
8	2	9391272	LADDER ACCESS DOUBLE DOOR COVER
9	4	9342605	LADDER SAFETY CAGE HOOP 27.25X30.63
10	21	9344503	CAGE STRAP 1-33"SWS 35"X2.00"
11	4	9342612	BRKT LADDER CAGE HOOP STANDOFF MH
12	4	9396242	BRKT, LADDER AND HOOP, CHIEF
13	7	9360152	CAGE STRAP 1-42"SWS 39.75"X2.00" SW
14	1	9342613	LADDER SAFETY CAGE HOOP 31.15X32.57
15	2	9623306	BRKT, HOOP STANDOFF, CAGE ACCESS

(MEDIUM DUTY HOPPER TANK 07-05 or 07-05 EVEN 45DEG HPR LADDER INSTALL)

MDHT07-06 30DEG V-RIB 45DEG HPR 16IN DISC**(ALSO USED FOR MDHT07E-06 30 DEG V-RIB 45DEG HPR 16IN DISC)**

LADDER PKG: 9360651

REST PLATFORM PKG: 9393610

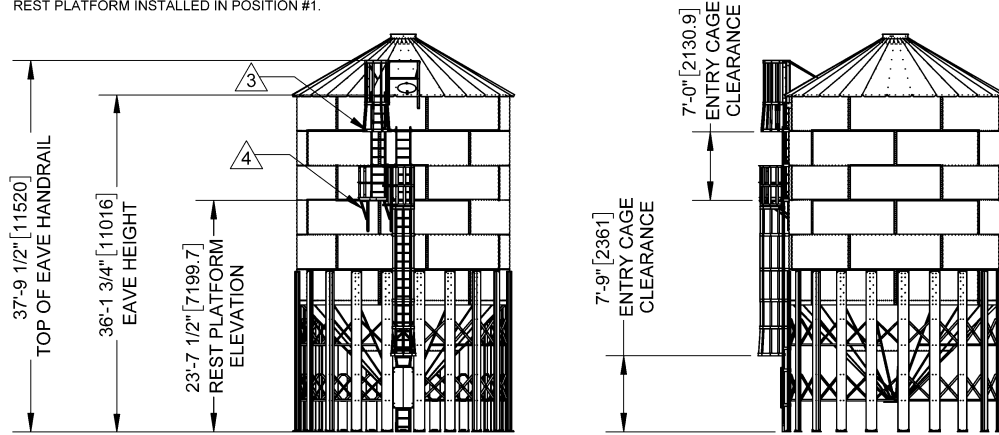
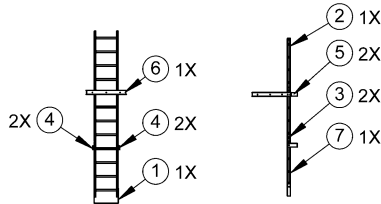
REST PLATFORM CGE PKG: 9360655

EAVE RAIL PKG: 9360661 (STANDARD)

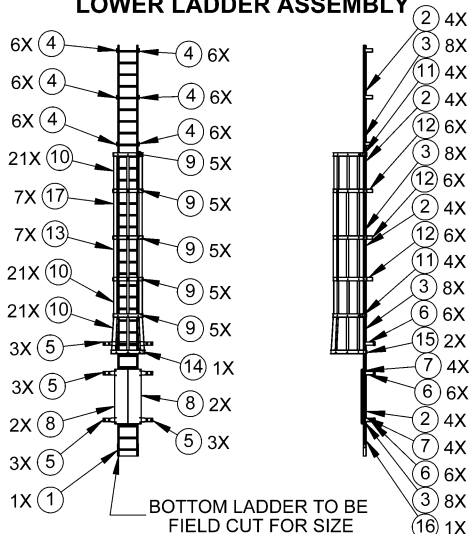
EAVE PLATFORM PKG: 9393610

EAVE PLATFORM CAGE PKG: 9360631

1. MDHT07-05 30DEG V-RIB 45DEG HPR 16IN DISC HAS EAVE HEIGHT OF 32' 9-3/4" AND COMES STANDARD WITH AN EAVE RAIL AND REST PLATFORM. CHIEF LOGO INSTALL ON SECOND RING OF SIDEWALL STACK IN A VISIBLE, UNOBSTRUCTED LOCATION.
2. REPLACE (93402605) AT BOTTOM OF EAVE RAIL CAGE WITH (9302613) INCLUDED WITH 9360650 LADDER PACKAGE.
3. REST PLATFORM INSTALLED IN POSITION #1.

**ALL DIMENSIONS ARE APPROXIMATE****UPPER LADDER ASSEMBLY**

ITEM	QTY	PART NO.	DESCRIPTION
1	1	9623250	TOWER, LADDER BRACKET GROUND
2	1	887452	LADDER, SECTION, 2 RING, ASSY, CHIEF
3	2	9440073	LADDER CONNECT STRAP 8GA SW
4	2	9396240	BRKT, STNDRD, LADDER, CHIEF
5	2	9396242	BRKT, LADDER AND HOOP, CHIEF
6	1	9342613	LADDER SAFETY CAGE HOOP 31.15X32.57
7	1	887450	LADDER, SECTION, 1 RING, ASSY, CHIEF

LOWER LADDER ASSEMBLYBOTTOM LADDER TO BE
FIELD CUT FOR SIZE

ITEM	QTY	PART NO.	DESCRIPTION
1	1	9623250	TOWER, LADDER BRACKET GROUND
2	4	887452	LADDER, SECTION, 2 RING, ASSY, CHIEF
3	8	9440073	LADDER CONNECT STRAP 8GA SW
4	6	9396240	BRKT, STNDRD, LADDER, CHIEF
5	3	9360128	LDR, MDHT BTM, SUPPORT, SW
6	6	9360129	BRKT, DOOR HINGE, LADDER, MDHT, 3-STIFF, CHIEF, SW
7	4	9349663	LADDER ACCESS DOOR HINGE
8	2	9391272	LADDER ACCESS DOUBLE DOOR COVER
9	5	9342605	LADDER SAFETY CAGE HOOP 27.25X30.63
10	21	9344503	CAGE STRAP 1-33"SWS 35"X2.00"
11	4	9342612	BRKT LADDER CAGE HOOP STANDOFF MH
12	6	9396242	BRKT, LADDER AND HOOP, CHIEF
13	7	9360152	CAGE STRAP 1-42"SWS 39.75"X2.00" SW
14	1	9342613	LADDER SAFETY CAGE HOOP 31.15X32.57
15	2	9623306	BRKT, HOOP STANDOFF, CAGE ACCESS
16	1	887450	LADDER, SECTION, 1 RING, ASSY, CHIEF
17	7	9344505	CAGE STRAP 1-42"SWS 43"X2.00"

(MEDIUM DUTY HOPPER TANK 07-06 or 07-06 EVEN 45DEG HPR LADDER INSTALL)

MDHT07-08 30DEG V-RIB 45DEG HPR 16IN DISC

(ALSO USED FOR MDHT07E-08 30 DEG V-RIB 45DEG HPR 16IN DISC)

LADDER PKG: 9360653

REST PLATFORM PKG: 9393610

REST PLATFORM CGE PKG: 9360655

EAVE RAIL PKG: 9360661 (STANDARD)

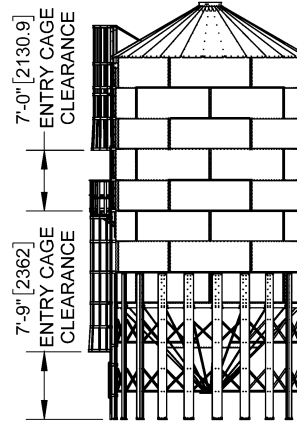
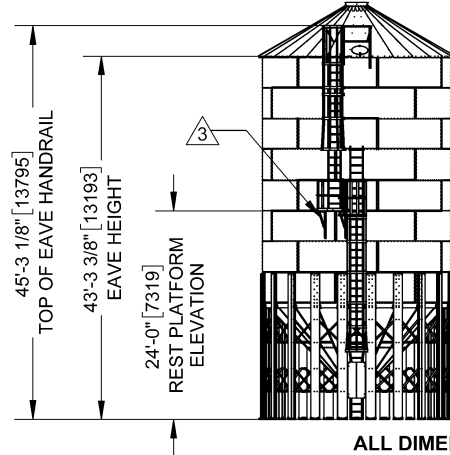
EAVE PLATFORM PKG: 9393610

EAVE PLATFORM CAGE PKG: 9360631

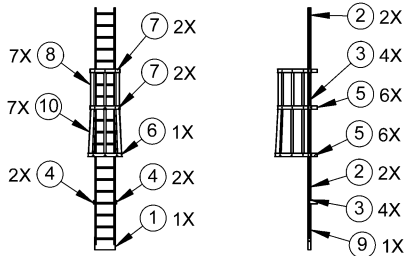
1. MDHT07-08 30DEG V-RIB 45DEG HPR 16IN DISC HAS EAVE HEIGHT OF 43' 3-3/8" AND COMES STANDARD WITH AN EAVE RAIL AND REST PLATFORM.
2. CHIEF LOGO INSTALL ON SECOND RING OF SIDEWALL STACK IN A VISIBLE, UNOBSTRUCTED LOCATION.



REST PLATFORM INSTALLED IN POSITION #1.

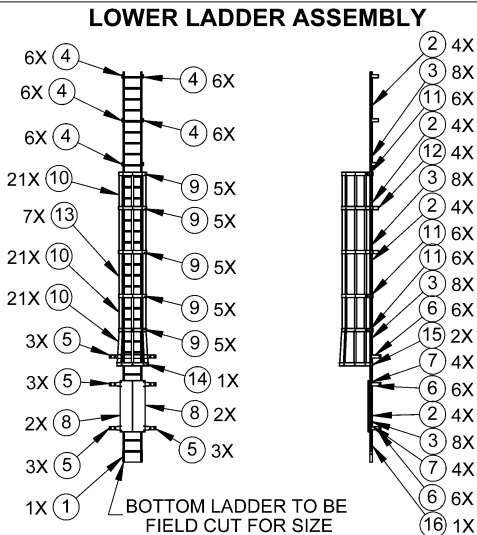


ALL DIMENSIONS ARE APPROXIMATE



UPPER LADDER ASSEMBLY

ITEM	QTY	PART NO.	DESCRIPTION
1	1	9623250	TOWER, LADDER BRACKET GROUND
2	2	887452	LADDER,SECTION,2 RING,ASSY,CHIEF
3	4	9440073	LADDER CONNECT STRAP 8GA SW
4	2	9396240	BRKT,STNDRD,LADDER,CHIEF
5	6	9396242	BRKT,LADDERANDHOOP,CHIEF
6	1	9342613	LADDER SAFETY CAGE HOOP 31.15X32.57
7	2	9342605	LADDER SAFETY CAGE HOOP 27.25X30.63
8	7	9344503	CAGE STRAP 1-33"SWS 35"X2.00"
9	1	887450	LADDER,SECTION,1 RING,ASSY,CHIEF
10	7	9344505	CAGE STRAP 1-42"SWS 43"X2.00"



LOWER LADDER ASSEMBLY

ITEM	QTY	PART NO.	DESCRIPTION
1	1	9623250	TOWER, LADDER BRACKET GROUND
2	4	887452	LADDER,SECTION,2 RING,ASSY,CHIEF
3	8	9440073	LADDER CONNECT STRAP 8GA SW
4	6	9396240	BRKT,STNDRD,LADDER,CHIEF
5	3	9360128	LDR,MDHT BTM,SUPPORT,SW
6	6	9360129	BRKT,DOOR HINGE,LADDER,MDHT,3-STIFF,CHIEF,SW
7	4	9349663	LADDER ACCESS DOOR HINGE
8	2	9391272	LADDER ACCESS DOUBLE DOOR COVER
9	5	9342605	LADDER SAFETY CAGE HOOP 27.25X30.63
10	21	9344503	CAGE STRAP 1-33"SWS 35"X2.00"
11	6	9342612	BRKT LADDER CAGE HOOP STANDOFF MH
12	4	9396242	BRKT,LADDERANDHOOP,CHIEF
13	7	9344504	CAGE STRAP 2-42"SWS 85"X2.00"
14	1	9342613	LADDER SAFETY CAGE HOOP 31.15X32.57
15	2	9623306	BRKT,HOOP STANDOFF,CAGE ACCESS
16	1	887450	LADDER,SECTION,1 RING,ASSY,CHIEF

(MEDIUM DUTY HOPPER TANK 07-08 or 07-08 EVEN 45DEG HPR LADDER INSTALL)

MDHT07-09 30DEG V-RIB 45DEG HPR 16IN DISC

(ALSO USED FOR MDHT07E-09 30 DEG V-RIB 45DEG HPR 16IN DISC)

LADDER PKG: 9360654

REST PLATFORM PKG: 9393610

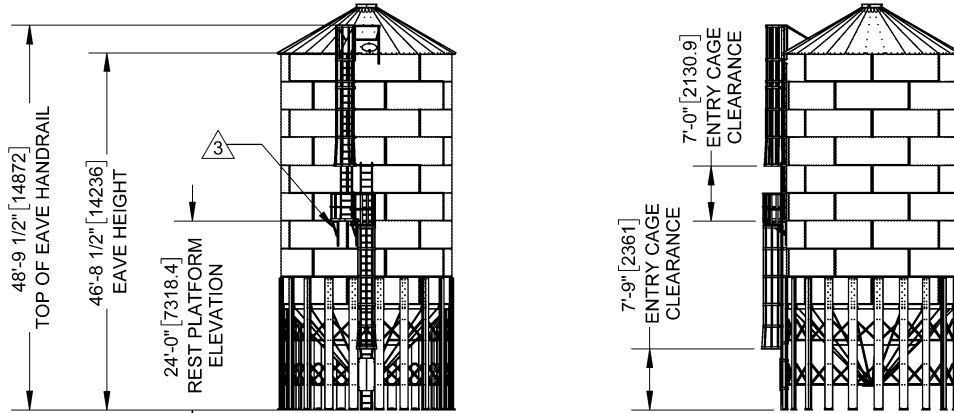
REST PLATFORM CGE PKG: 9360655

EAVE RAIL PKG: 9360661 (STANDARD)

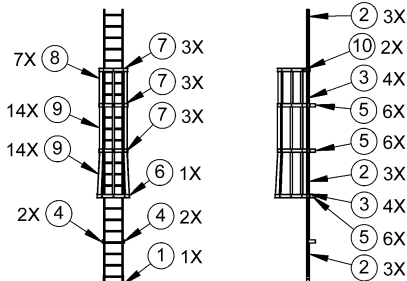
EAVE PLATFORM PKG: 9393610

EAVE PLATFORM CAGE PKG: 9360631

1. MDHT07-09 30DEG V-RIB 45DEG HPR 16IN DISC HAS EAVE HEIGHT OF 46' 8-1/2" AND COMES STANDARD WITH AN EAVE RAIL AND REST PLATFORM.
2. CHIEF LOGO INSTALL ON SECOND RING OF SIDEWALL STACK IN A VISIBLE, UNOBSTRUCTED LOCATION.
3. REST PLATFORM INSTALLED IN POSITION #1.



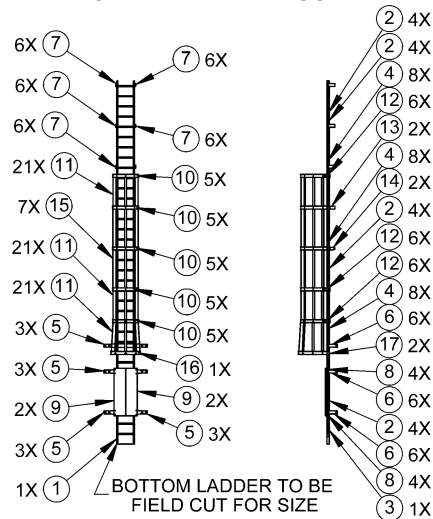
ALL DIMENSIONS ARE APPROXIMATE



UPPER LADDER ASSEMBLY

ITEM	QTY	PART NO.	DESCRIPTION
1	1	9623250	TOWER, LADDER BRACKET GROUND
2	3	887452	LADDER, SECTION, 2 RING, ASSY, CHIEF
3	4	9440073	LADDER CONNECT STRAP 8GA SW
4	2	9396240	BRKT, STNDRD, LADDER, CHIEF
5	6	9396242	BRKT, LADDER AND HOOP, CHIEF
6	1	9342613	LADDER SAFETY CAGE HOOP 31.15X32.57
7	3	9342605	LADDER SAFETY CAGE HOOP 27.25X30.63
8	7	9344503	CAGE STRAP 1-33"SWS 35"X2.00"
9	14	9344505	CAGE STRAP 1-42"SWS 43"X2.00"
10	2	9342612	BRKT LADDER CAGE HOOP STANDOFF MH

LOWER LADDER ASSEMBLY



ITEM	QTY	PART NO.	DESCRIPTION
1	1	9623250	TOWER, LADDER BRACKET GROUND
2	4	887452	LADDER, SECTION, 2 RING, ASSY, CHIEF
3	1	887450	LADDER, SECTION, 1 RING, ASSY, CHIEF
4	8	9440073	LADDER CONNECT STRAP 8GA SW
5	3	9360128	LDR, MDHT BTM, SUPPORT, SW
6	6	9360129	BRKT, DOOR HINGE, LADDER, MDHT, 3-STIFF, CHIEF, SW
7	6	9396240	BRKT, STNDRD, LADDER, CHIEF
8	4	9349663	LADDER ACCESS DOOR HINGE
9	2	9391272	LADDER ACCESS DOUBLE DOOR COVER
10	5	9342605	LADDER SAFETY CAGE HOOP 27.25X30.63
11	21	9344503	CAGE STRAP 1-33"SWS 35"X2.00"
12	6	9342612	BRKT LADDER CAGE HOOP STANDOFF MH
13	2	9396242	BRKT, LADDER AND HOOP, CHIEF
14	2	9360335	BRKT, LADDER AND HOOP, MDHT, COMPRESSION, CHIEF SW
15	7	9344504	CAGE STRAP 2-42"SWS 85"X2.00"
16	1	9342613	LADDER SAFETY CAGE HOOP 31.15X32.57
17	2	9623306	BRKT, HOOP STANDOFF, CAGE ACCESS

(MEDIUM DUTY HOPPER TANK 07-09 or 07-09 EVEN 45DEG HPR LADDER INSTALL)

