

Catwalk Assembly and Installation Guide



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Grain Handler, USA, Inc.

www.grainhandler.com

Lakeville, MN 55044

21785 Hamburg Ave.

Phone: 612-722-1085

Fax: 612-722-2642

St. Charles, MN 55972

1012 St. Charles Ave.

Phone: 507-932-5492

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May 2017	Updated format, Added diagrams Removed conveyor mounting section
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Introduction

Thank you for choosing Grain Handler, USA, Inc. as the manufacturer of your catwalk. We are pleased to have you as a customer and expect that you will enjoy many years of productive service from this product.

Information in this manual is intended to aid in your understanding of the assembly for standard catwalks that accommodate a conveyor. Please read and understand this documentation prior to beginning assembly or installation of this product. Guidelines for implementation of a standard catwalk do not include optional or custom features. For additional details on optional or custom features, contact your Dealer or Grain Handler directly.

Service Inquiries

Review this manual prior to assembly and installation. If you have questions or determine there are missing parts or issues with the materials delivered, contact your Dealer. The Dealer is your first line of support. If the Dealer is unable to resolve the issue or needs to order additional materials, they will contact Grain Handler on your behalf. Record the following information at the beginning of your project.

Length of Catwalk:	
Dealer Purchased From:	
Dealer Phone & Address:	
Date Purchased:	
Sales Order # (from packing slip):	
Assembled and Installed By (if different than Dealer):	
Millwright / Contractor Phone & Address (if different than Dealer):	

General Contractor Responsibilities

The general contractor is responsible to ensure that the complete catwalk system is constructed with quality workmanship and that all equipment is installed per the respective manufacturer's instructions including the Catwalk and attached Accessory Equipment. Additionally the contractor is responsible for the soundness of any system which he / she constructs.

Accessory equipment can be installed with the catwalk; however certain limitations and special considerations must be followed in order to maintain the warranty. Accessory equipment incorporated into the system, from each respective equipment manufacturer, should be approved for the intended use and installed and maintained in accordance with each individual supplier's installation and operation instructions. If any modifications to the Grain Handler standard design are required, contact Grain Handler for specific recommendations.

Note: *Do not modify the catwalk design without Grain Handler approval.*

Grain Handler, USA, Inc. assumes no responsibility for field modifications or installation defects which result in structural damage. Any unauthorized modification or installation defect which affects the structural integrity of the catwalk will void the warranty.

Safety

Your safety and the safety of others operating and working in the area of this equipment is a primary focus during initial installation and ongoing operations. We have summarized key safety recommendations to aid your understanding of installation requirements and safe operating procedures.

As owner and/or operator, it is your responsibility to know what requirements, hazards, and precautions exist, and to inform all personnel associated with the equipment or in the area. To ensure the safety of all individuals in the work area, only authorized and trained persons should install, and maintain the catwalk system. Under no circumstances should unauthorized individuals be allowed to trespass or be present in the work area. It is the duty of all operators to ensure

that the work area is clean, organized and kept free of debris and tools that might cause an accidental tripping or falling hazard. Special care should be taken when working from unsafe heights. Give consideration to weather conditions. When conditions such as rain or wind prohibit the safe use of equipment, the installation be discontinued. 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 can void the warranty.

- ⚠ Inspect all equipment before installation begins.
- ⚠ Install all equipment with OSHA, NFPA and ANSI standards.
- ⚠ Use fall protection when climbing.
- ⚠ Ensure the work area on the ground is clear of personnel when the crane is lifting equipment or when working with tools that may fall.
- ⚠ Ensure all pieces are securely attached prior to picking with the crane (example when conveyor is attached to catwalk and then lifted).
- ⚠ Wear protective clothing, safety glasses, ear protection and hard hats.
- ⚠ Be aware of your surroundings in the work area at all times.
- ⚠ Use appropriate tools for installing equipment.
- ⚠ If you install 'other ancillary' equipment provided by a different manufacturer along with the Grain Handler catwalk, ensure that you understand the instructions and follow all safety precautions recommended by the other manufacturer.

Verify the Shipment

At the time of delivery; verify and inspect all items carefully when unpacking.

Compare the items to the packing list provided with the shipment. Hardware,

Grain Handler		PACKING SLIP		
BILL TO:		SHIP TO:		DATE: 5/3/2017
Dealer Name & Address		Customer Name and Job Site Address		
ORDER DATE	SALES ORDER #	PURCHASE ORDER #	CUSTOMER CONTACT	
3/30/2017	1234	Dealer PO Appears Here	Name & Phone #	
Brief Job Description: 70'-8" Overhead Catwalk (3551lbs)				
ITEM #	DESCRIPTION	ORDER QTY	SHIP QTY	
GH4408	Catwalk Tread	15		
GH3885	Catwalk Top Rail	14		
GH3888	Catwalk Bottom Rail	21		
GH4998	Catwalk Cross Member	32		
GH3886	Catwalk Side Vertical	32		
GH3916	Catwalk Conveyor Support Vertical	16		
GH3884	Catwalk Side Diagonal	30		
GH3915	Catwalk Conveyor Support/Handrail Vertical	16		
GH5000	Catwalk Conveyor Support Horizontal	16		
GH3938	Catwalk Lifting Bracket	4		
GH4999	Catwalk Top Diagonal	15		
GH4740	Catwalk Half Bottom Rail	3		
GH4739	Catwalk Half Top Rail	2		
3726	1/2-13 X 1 Hex Head Bolt Grade 5	512		
3744	1/2-13 flange nut	512		
3752	1/4x3/4 Hex Head Thread Cutting Screw	330		
5266	3/4" IMC Conduit per foot	34		

including bolts, nuts, screws and other small clips or brackets may be divided into smaller packages.

In case of any shortage or damage during shipment, note detail of the shortage or damage on the 'Bill of Lading'

before you sign the shipment paperwork. File a claim with the carrier and also notify your Dealer. Parts that are short or damaged are the responsibility of the delivering carrier, not the manufacturer or dealer.

Catwalk Features, Lengths and Components

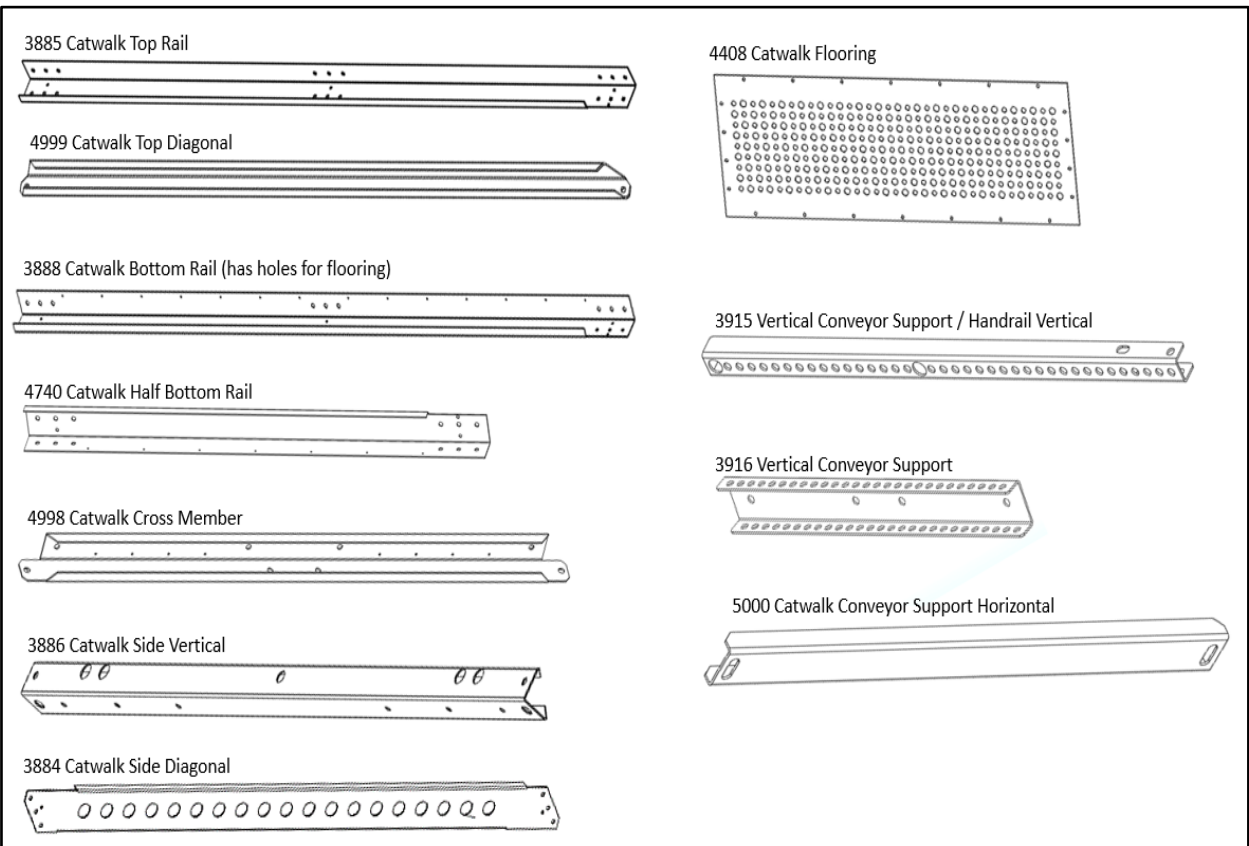
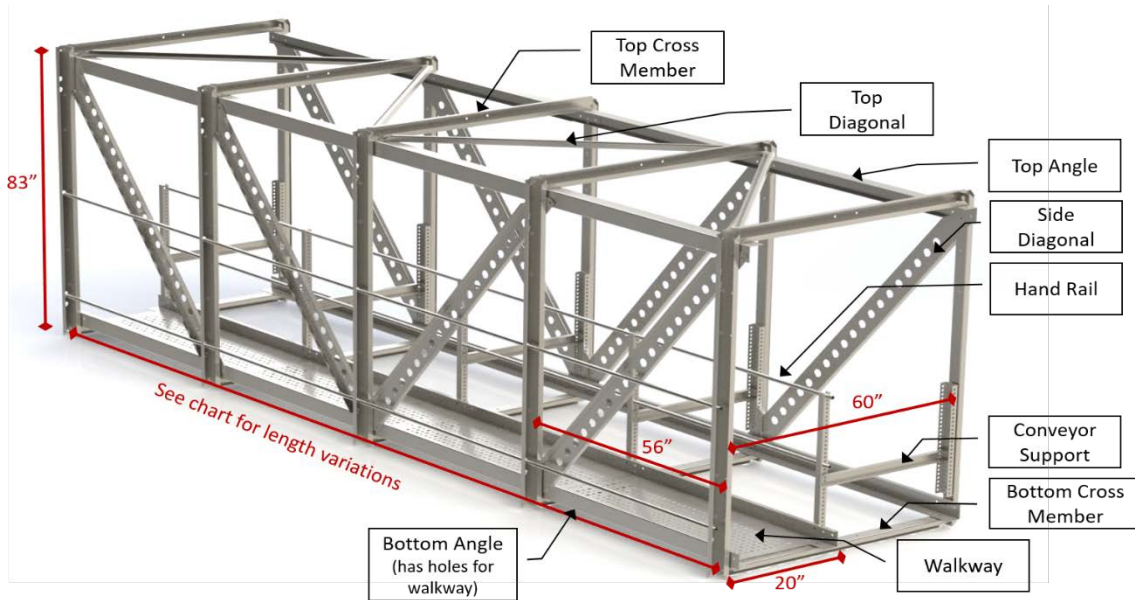
Standard Features:

- G90 Galvanized Steel
- Adjustable Conveyor Supports
- Accommodates Conveyor Widths to 26"
- Clear Span 85' with 5,000 bph Conveyor
- Clear Span 60' with 15,000 bph Conveyor

Standard Lengths

10'-0" (3.0m)	14'-8 1/2" (4.5m)	19'-3 1/2" (5.9m)	24'-0" (7.3m)	28'-8 1/2" (8.8m)	33'-3 1/2" (10.1m)
38'-0" (11.6m)	42'-8 1/2 " (13.0m)	47'-3 1/2" (14.4m)	51'-8 1/2" (15.8m)	56'-8 1/2" (17.3m)	61'-3 1/2" (18.7m)
66'-0" (20.1m)	70'-8 1/2 " (21.6m)	75'-3 1/2" (22.9m)	80'-0" (24.4m)	84'-8 1/2" (25.8m)	89'-3 1/2" (27.2m)
94'-0" (28.7m)	98'-8 1/2" (30.1m)	103'-3 1/2" (31.5m)			

Catwalk Components



Tool List

Installation Tools - Catwalk	
Alignment Punches:	3/8" and 3/16" (one per installer)
Bolt & Nut Apron:	One per installer
Come-along Winch	2-Ton
Climbing:	Safety harnesses with three way lanyards
Ladders:	Two 6'
Level:	One 48"
Hammers (dead blow):	2
Square (Framing)	54"
Tag Lines:	Two 100'
Tape Measure	One 100' and One 25'
Tool lanyards:	For each installer
Wrenches	3/4" (one per installer)
Wrenches – Impact Socket	3/8" and 3/4" Sockets (one per installer)

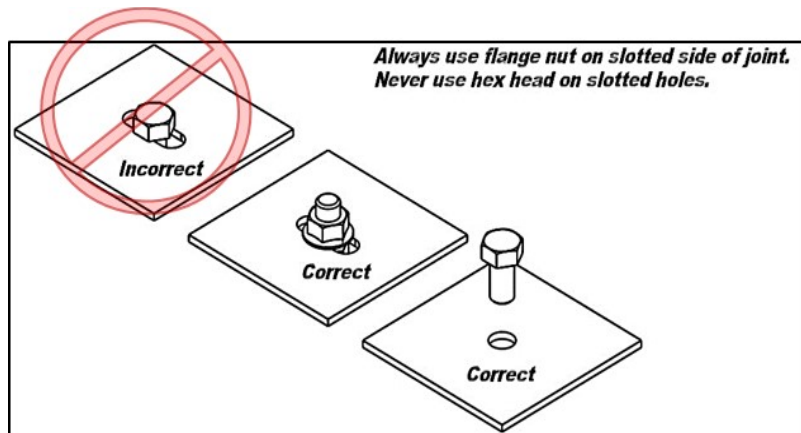
Catwalk Assembly General Notes

Before starting the assembly, make sure you have a copy of the packing list to help you identify the parts.

- Leave all hardware (bolts, nuts, washers) loose until all components (including flooring) in a single section have been added. This will allow you to

square and plumb each section.

- Bolt heads are to be installed outside of the catwalk walkway.



- Hoist the catwalk into place using an appropriate capacity crane supporting the catwalk at points equal to half the length (free span length). Consider the additional weight of a conveyor if it will be included with the catwalk.
- **NOTE:** Catwalk only weight = 70 lbs per foot.

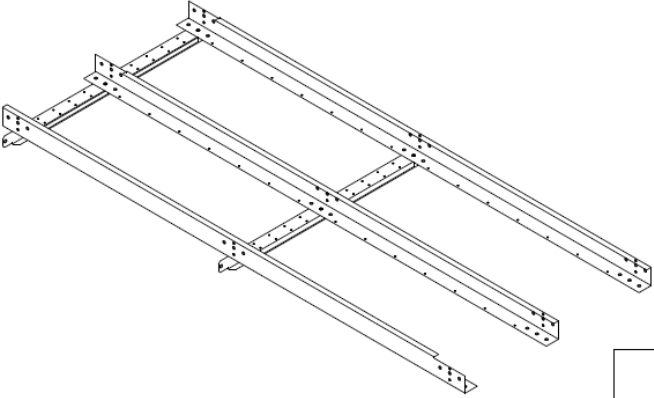
Standard Catwalk Assembly Steps

Figure 1 – Horizontal Channels

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED

#1 Assemble 2 horizontal channels and 3 bottom angle as shown using the middle holes and 1/2" x 1" bolts.

The bottom channels can be identified by the extra holes for the flooring.



TOLERANCE:		DRWN BY: EAH		SIZE	ECN	PART NO.	REV
.XXX	= +/- .010	DATE: 12/21/2012	DO NOT SCALE DRAWING	B			A
.XX	= +/- .020						
.X	= +/- .060						

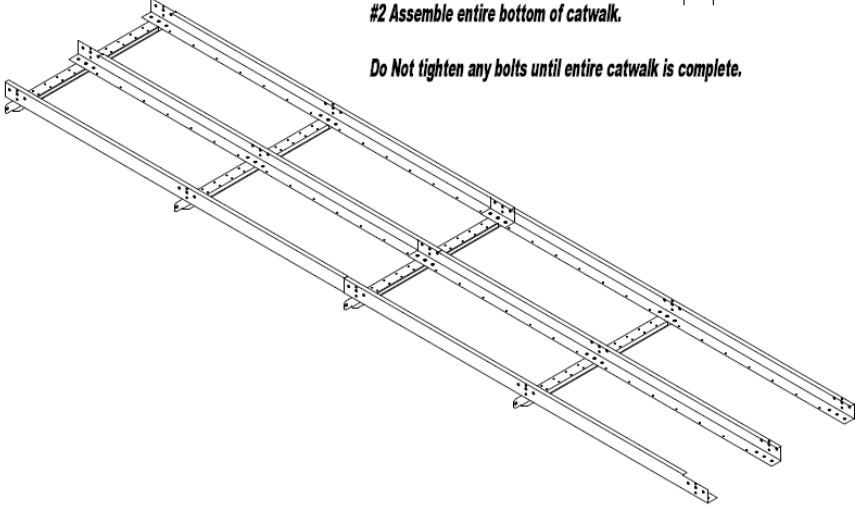
GRAIN HANDLER USA	
Catwalk Assembly #1	

Figure 2 - Bottom

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED

#2 Assemble entire bottom of catwalk.

Do Not tighten any bolts until entire catwalk is complete.



TOLERANCE:		DRWN BY: EAH		SIZE	ECN	PART NO.	REV
.XXX	= +/- .010	DATE: 12/21/2012	DO NOT SCALE DRAWING	B			A
.XX	= +/- .020						
.X	= +/- .060						

GRAIN HANDLER USA	
Catwalk Assembly #2	

Figure 3 – Side Diagonals

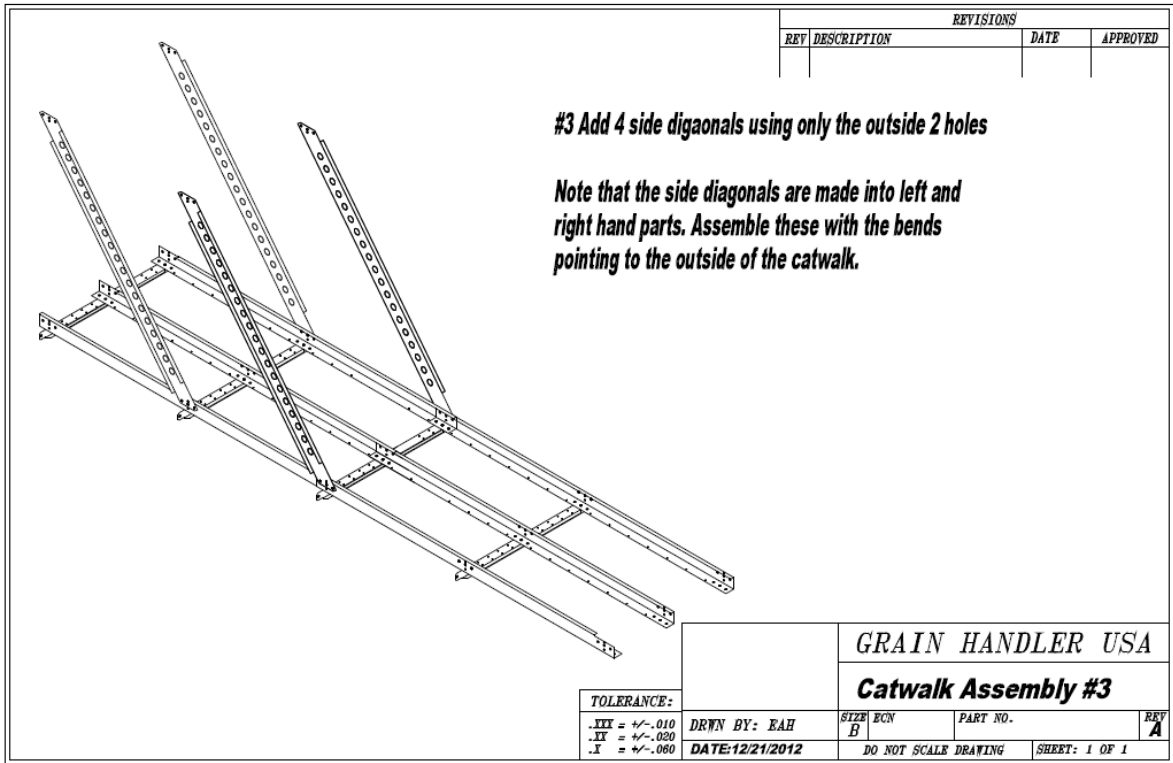


Figure 4 – Side Posts

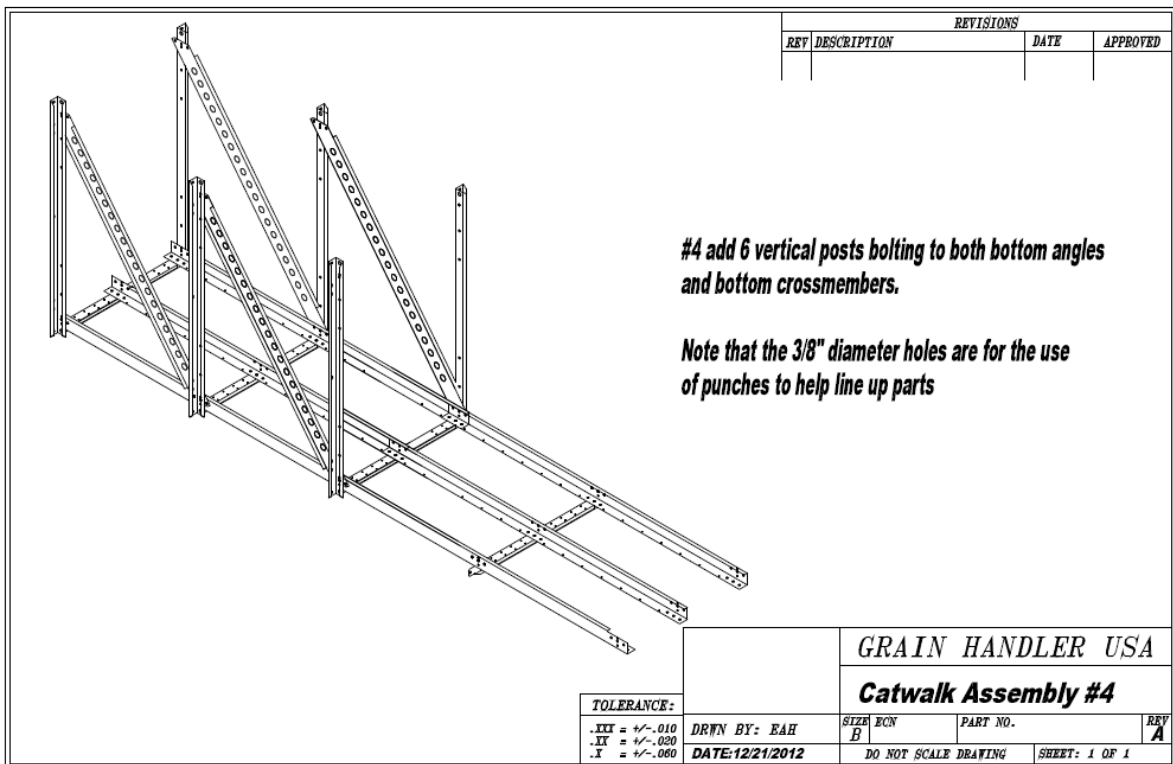


Figure 5 – Top Angles

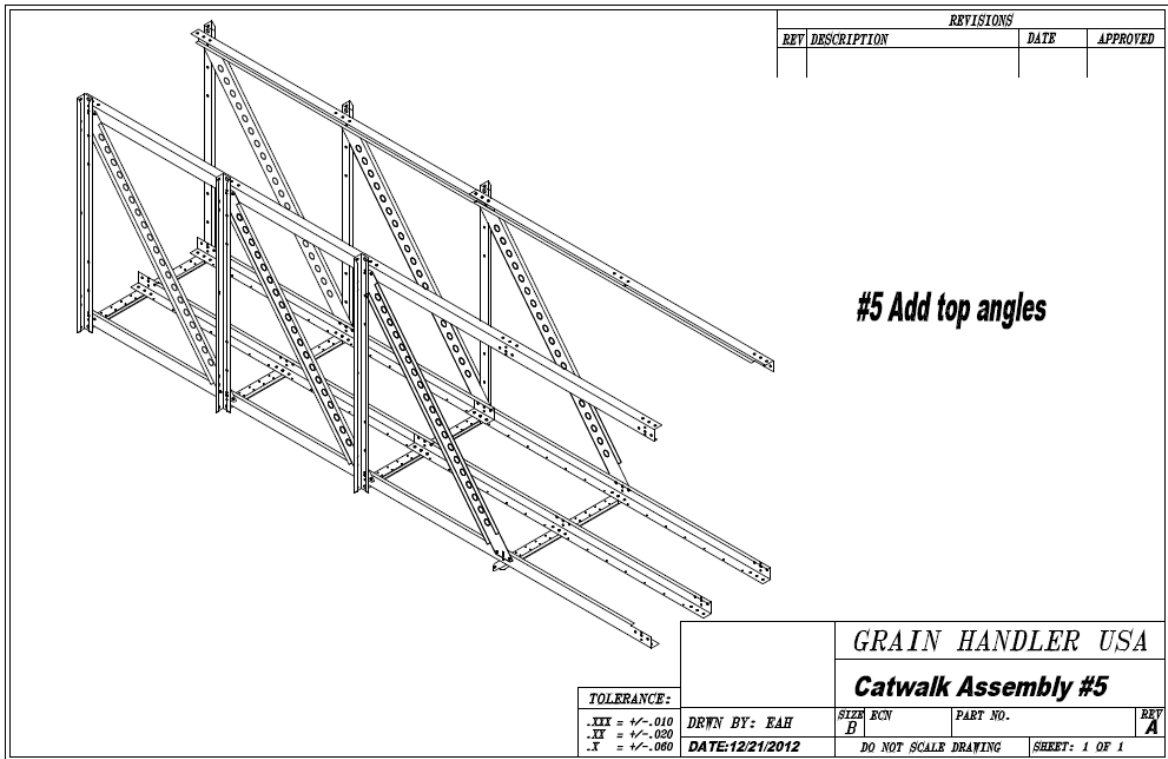


Figure 6 – Top Cross members

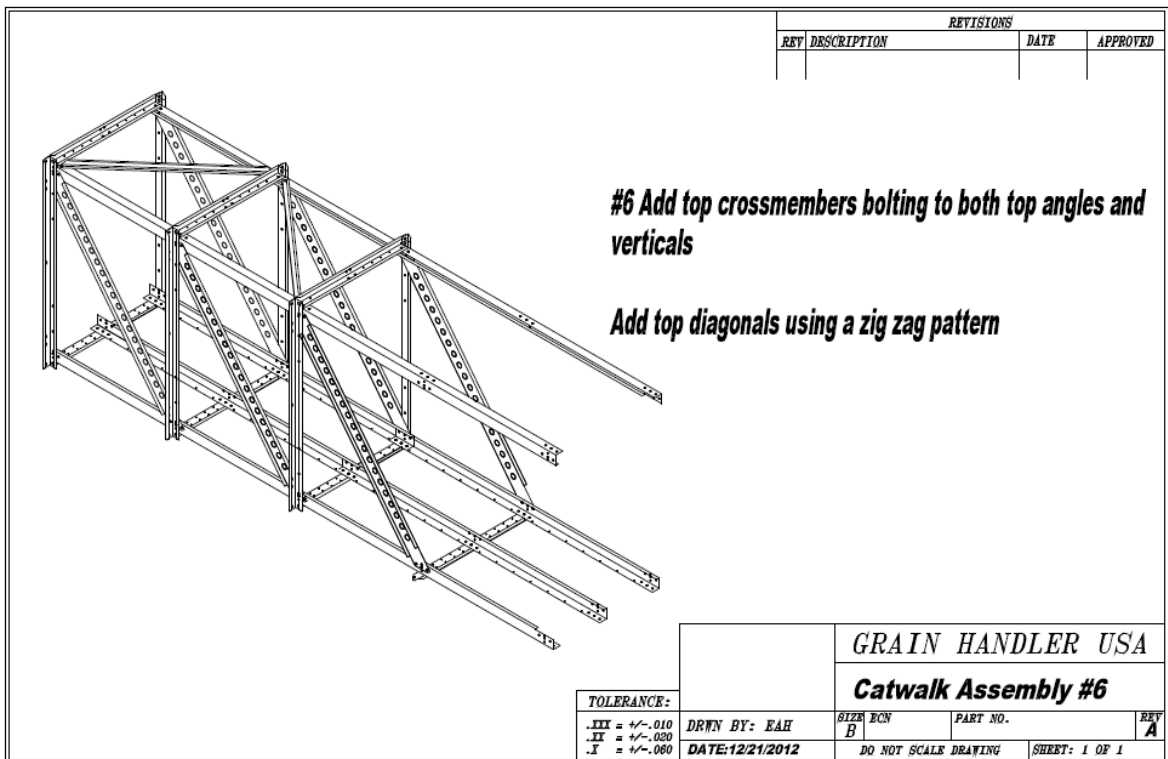


Figure 7 – Flooring

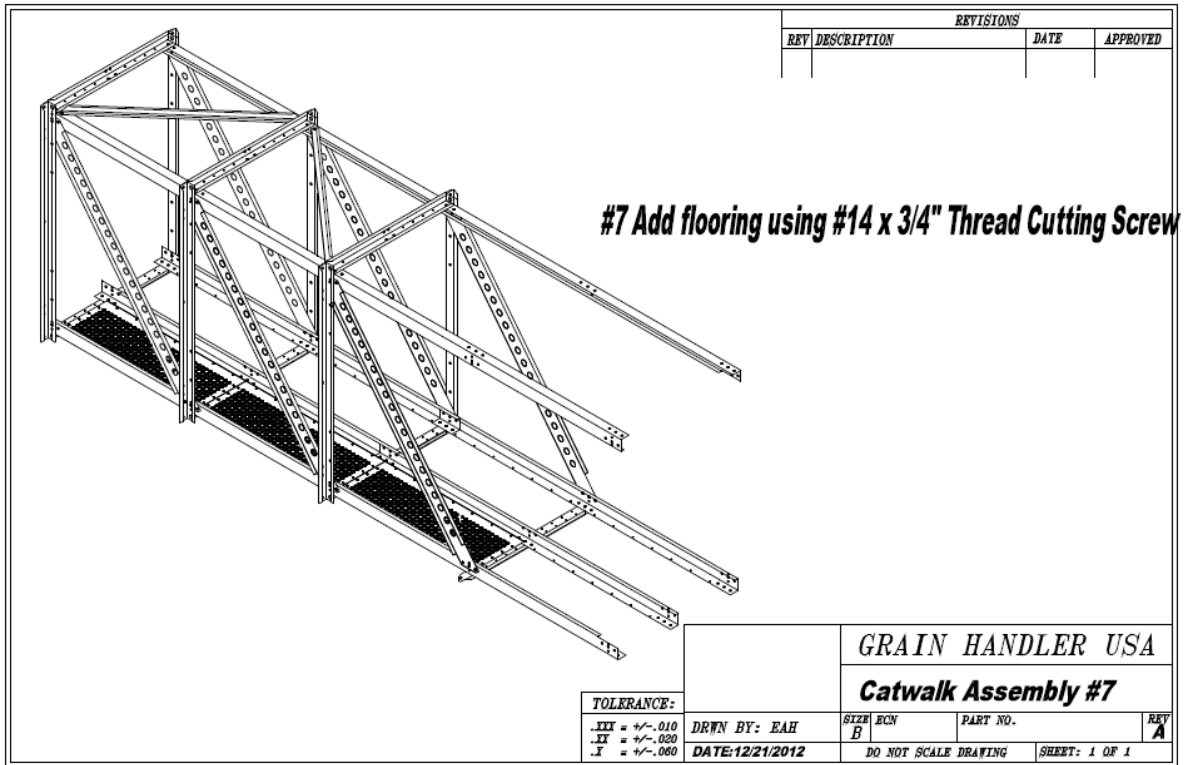


Figure 8 – Reverse at Center

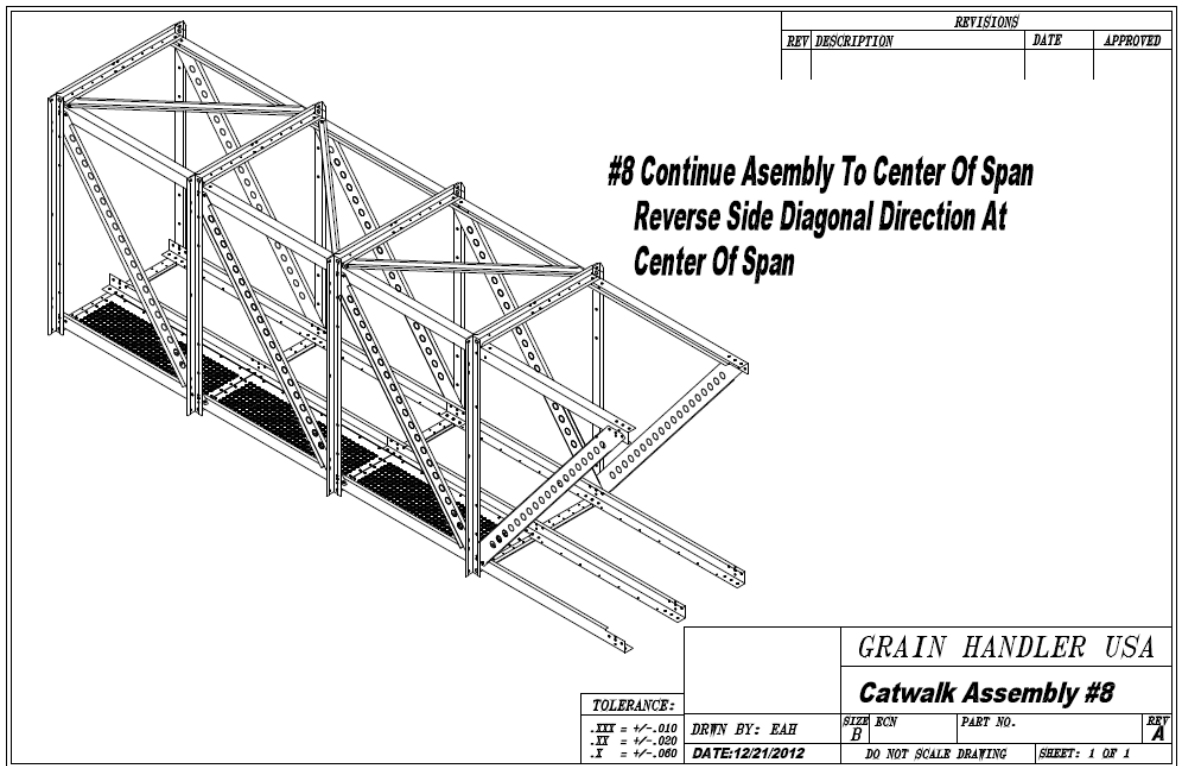


Figure 9 – Conveyor Supports

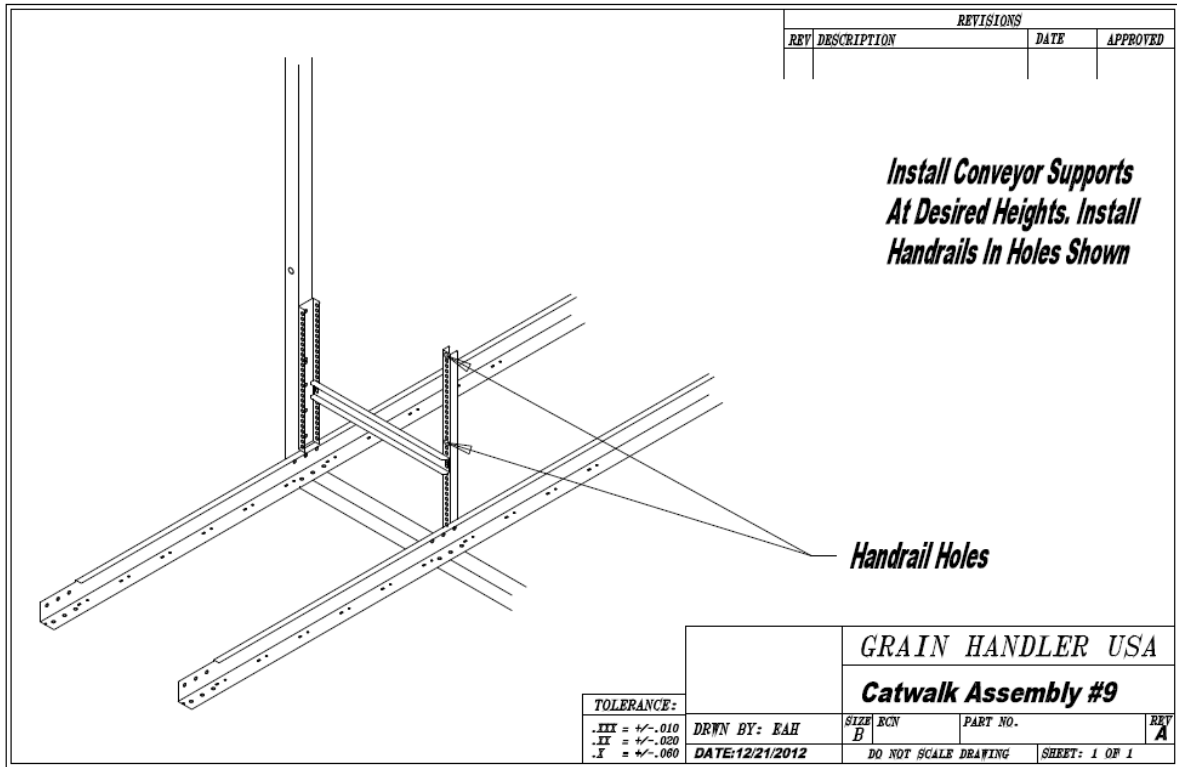


Figure 10 – Handrails

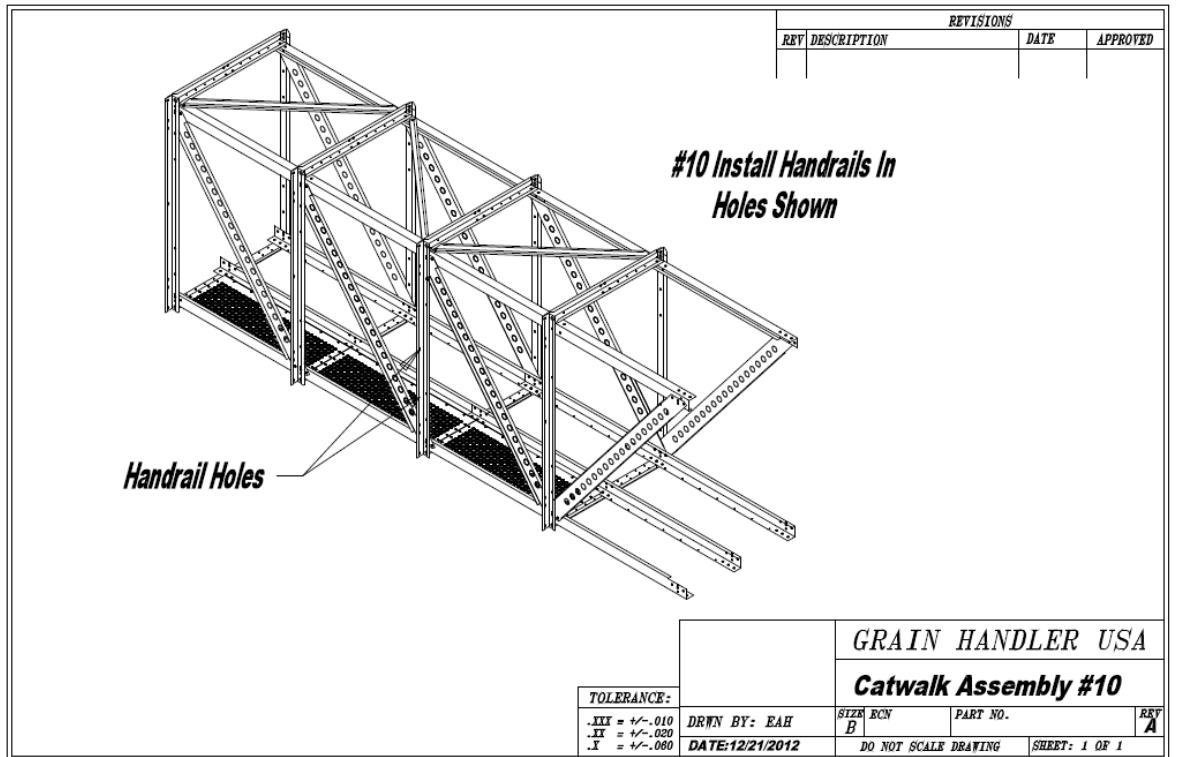
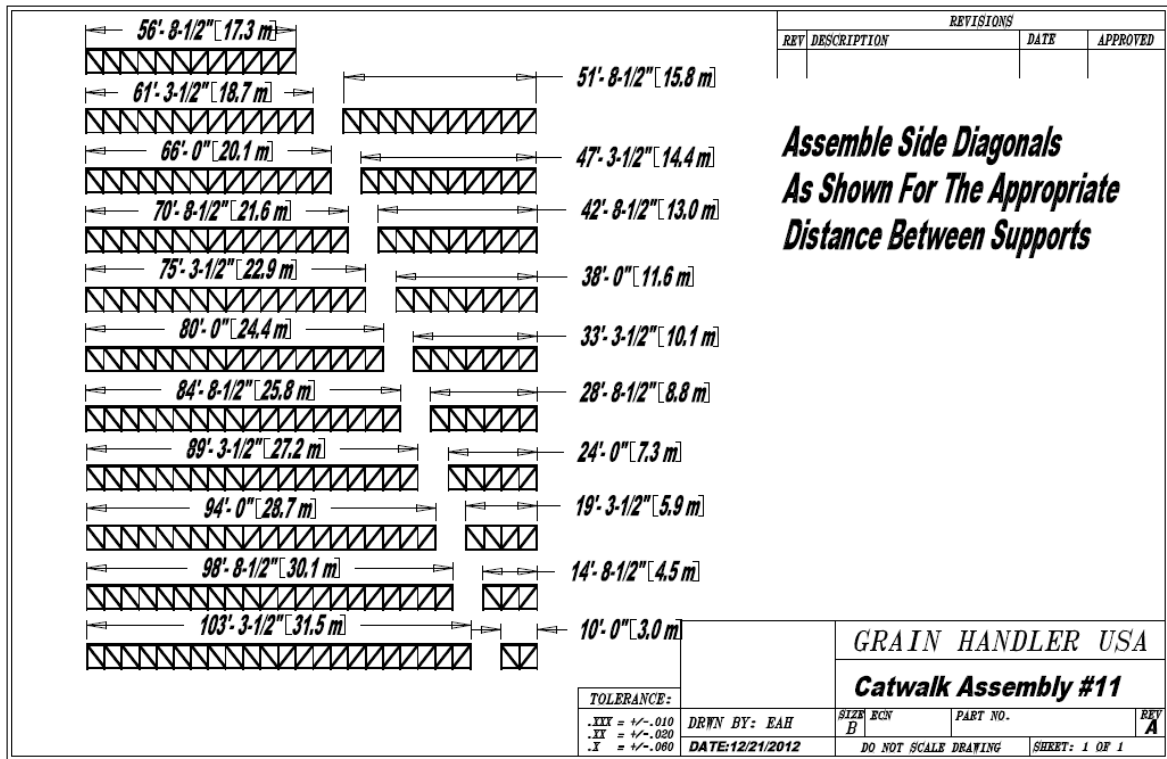


Figure 11 – Side Diagonal Overview



Lifting Information

Calculate the total load using the catwalk weight of 70 lbs. per foot. The weight of a conveyor and any other accessory equipment will need to be added to the base catwalk weight. When determining the crane capacity necessary, the boom distance must be considered. If a single crane is unable to perform the lift, two cranes may be used, utilizing a spreader bar. The spreader bar must be



adequately designed to carry the entire weight.

Lifting Support Plates

are mounted on the vertical posts to reinforce connections where the crane straps are attached.

Optional Walk-Around Catwalk Assembly Steps

Step 1 – Attach bottom channels

ADDING THE WALKAROUND CATWALK STARTS WITH ATTACHING THESE BOTTOM CHANNELS AND REINFORCEMENTS TO THE END OF THE CATWALK

	NAME	DATE	GRAINHANDLER USA	
DRAWN	JJH	6/5/2017	TITLE:	
CHECKED			CATWALK WALK AROUND	
ENG APPR.			SIZE	DWG. NO.
MFG APPR.			A	REV
Q.A.			SCALE: 1:50	SHEET 1 OF 1

REFERENCE

Step 2 – Connect Toeboards

THE NEXT STEP IS CONNECTING THE BOTTOM TOEBOARD RAILS

	NAME	DATE	GRAINHANDLER USA	
DRAWN	JJH	6/5/2017	TITLE:	
CHECKED			CATWALK WALK AROUND	
ENG APPR.			SIZE	DWG. NO.
MFG APPR.			A	REV
Q.A.			SCALE: 1:50	SHEET 1 OF 1

REFERENCE

Step 3 – Adding the sides and top

ADDING THE SIDE DIAGONALS, UPRIGHTS, AND TOP HORIZONTALS

NOTE: THE SIDE DIAGONALS PART ON THE WALKAROUND PLATFORM ITSELF IS #7773. #3884 IS THE STANDARD CATWALK DIAGONAL TO CONNECT INTO THE WALK AROUND PORTION

NAME	DATE	GRAINHANDLER USA
DRAWN: JH	6/5/2017	
CHECKED:		
ENG APPR.:		
MFG APPR.:		
Q.A.:		TITLE: CATWALK WALKAROUND
REFERENCE	SIZE DWG. NO.	REV
	A	
	SCALE: 1:50	SHEET 1 OF 1

Step 4 – Connect Top and Diagonal Rails

NEXT IS CONNECTING THE TOP RAILS AND DIAGONALS

NOTE: ON THE WALK AROUND PLATFORM, THE BOTTOMS AND TOP RAILS ARE THE SAME

NAME	DATE	GRAINHANDLER USA
DRAWN: JH	6/5/2017	
CHECKED:		
ENG APPR.:		
MFG APPR.:		
Q.A.:		TITLE: CATWALK WALK AROUND
REFERENCE	SIZE DWG. NO.	REV
	A	
	SCALE: 1:50	SHEET 1 OF 1

Step 5 – Add flooring and corner supports

NEXT STEP IS ADDING THE FLOORS AND CORNER SUPPORTS

NOTE: CORNER SUPPORT ATTACHES ON THE INSIDE CORNERS AND THE CLEARANCE FLOOR IS THE MIDDLE FLOOR

CORNER SUPPORT BRACKET #775

CLEARANCE FLOOR #778

CORNER SUPPORT BRACKET

	NAME	DATE
DRAWN	JJH	6/5/2017
CHECKED		
ENG APPR.		
MFG APPR.		
G.A.		

GRAINHANDLER USA

TITLE:
CATWALK WALK AROUND

SIZE	DWG. NO.	REV
A		

REFERENCE

SCALE: 1:50

SHEET 1 OF 1



Note – Remember to tighten all bolts, washers and nuts as you complete each section. These would have been left loose until all components are connected to allow you to square and plumb each section.