# **Dock High Stairs**

# INSTALLATION INSTRUCTIONS





BUILT for LIFE

<u>IMPORTANT</u>

READ THESE INSTRUCTIONS CAREFULLY FOR SAFETY AND PROPER INSTALLATION

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### **BEFORE YOU BEGIN**

#### **CHECK DELIVERY**

Your dock stair has been carefully checked for completeness. However, upon receipt you should ensure you have received all parts and check for damage during shipping.

#### GENERAL SAFETY INFORMATION

We recommend two people when assembling this dock stair.

Some parts may have sharp edges, wear protective gloves.



Read this assembly instructions carefully before assembling this dock stair.

#### ADDITIONAL HARDWARE REQUIRED

 $\frac{\text{QTY}}{20}$ 

Description

1/2" Anchor bolts

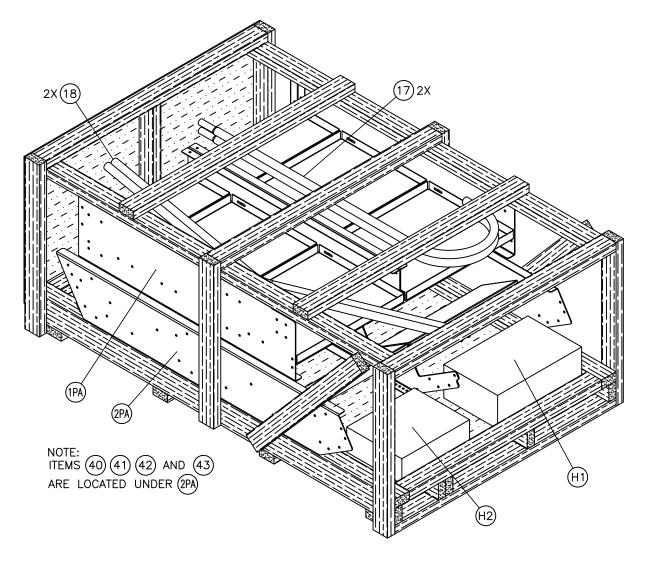
#### RECOMMENDED EQUIPMENT FOR INSTALLATION

- Forklift or other adequate lifting device for 400 lbs
- 3/4" End wrench for the anchors
- 9/16" End wrench
- 9/16" Socket and ratchet (A cordless impact driver would be the best)
- 5/16" Allen wrench
- Alignment bar to help with aligning the holes
- 2' Level
- 6" Level
- Rubber Mallet
- Box Cutter
- Tape Measure



### **PACKAGED CRATE CONTENTS**

	CRATE PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION	
1PA	1	750002-1PA	PRE ASSEMBLED LANDING	
2PA	1	750002-2PA	PRE ASSEMBLED STAIRCASE	
17	2	750002-17	TOP GUARDRAIL WITH LOOP	
18	2	750002-18	TOP GUARDRAIL WITH CORNER JOINT	
40	2	750002-40	SOLID PANEL — LANDING	
41	2	750002-41	SOLID PANEL - TRANSITION	
42	2	750002-42	SOLID PANEL – UPPER STAIR	
43	2	750002-43	SOLID PANEL – LOWER STAIR	
H1	1	750002H1	HARDWARE CARTON	
H2	1	750002H2	HARDWARE CARTON	





### PACKAGED HARDWARE CONTENTS

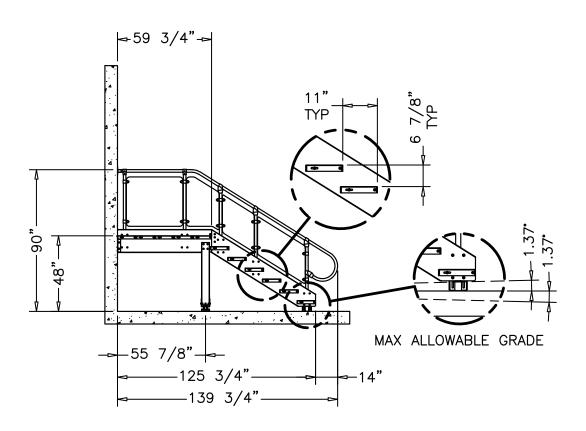
750002H1 PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
5	1	750002-5	CENTER LANDING COLUMN X 36 9/16"
6	2	750002-6	SIDE LANDING COLUMN X 39 1/2"
7	2	750000-7-37.62	STAIR CROSS BRACE ANGLE X 37 5/8"
36L	1	750000-36LH	DOCK STAIR WARNING STRIPE ANGLE
36R	1	750000-36RH	DOCK STAIR WARNING STRIPE ANGLE
Α	2	280186-40.5	Ø1 5/8" HANDRAIL POST X 40 1/2"
В	4	280186-41.62	Ø1 5/8" HANDRAIL POST X 41 1/2"
С	4	280186-49	Ø1 5/8" HANDRAIL POST X 49"
D	2	291426	GRIP STRUT STAIR TREAD 11 3/4" X 2" X 30" LONG

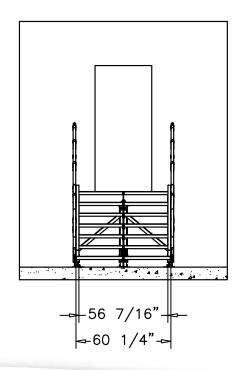
750002H2 PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
10	1	750000-10	LANDING TO CONCRETE WALL CLIP
11	2	750000-11	CENTER COLUMN CLIP
12	2	750002-12	STAIR STRINGER TO LANDING CHANNEL CLIP
16	2	750000-16	HANDRAIL WALL MOUNTING CLIP
27	3	750000-27	DOCK HIGH STAIRCASE COLUMN BASE PLATE
28	3	750000-28	DOCK HIGH STAIRCASE COLUMN SHOE PLATE
30	1	750000-30	CENTER COLUMN TOP CAP PLATE
32	2	750002-32	STRINGER ADJUSTABLE ANCHOR CLIP
33L	1	750002-33LH	MID STRINGER ADJUSTABLE ANCHOR CLIP
34R	1	750002-33RH	MID STRINGER ADJUSTABLE ANCHOR CLIP
34	8	750000-34	STAIR HANDRAIL CLIP
35	2	750000-35	STAIR HANDRAIL ANCHOR CLIP
Е	4	290715	TYPE 10-7 - SINGLE SOCKET TEE
F	8	291556	TYPE 29-7 - 30°-60° SINGLE SOCKET TEE
G	8	291686	HANDRAIL END CLAMP FITTING
Н	24	750002-44	HANDRAIL CLAMP FITTING
J	4	291129	1 5/8" WEATHER PLUG END CAP
K	25	290190	#12-14 X 3/4" SELF-DRILLING FASTENER W/SW
L	130	291292	3/8" X 1" SERRATED FLANGE HEX HEAD BOLT GRADE 8
М	6	291284	3/8" X 2 1/2" HEX HEAD BOLT W/SW GRADE 8
N	155	290961	3/8" SERRATED FLANGE HEX NUT

NOTE: ADDITIONAL HARDWARE MAY BE PROVIDED AS A CONVENIENCE

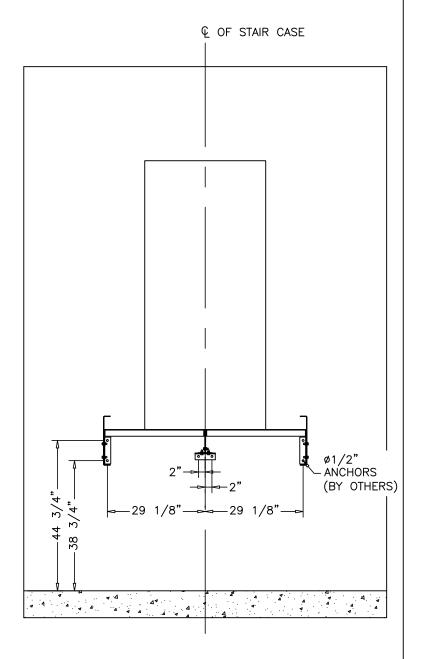


#### **DOCK STAIR ELEVATIONS**









INSTALL LANDING ANCHORS

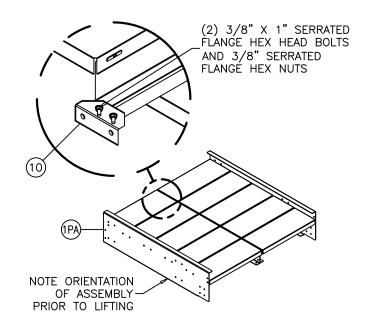
INSTALL (6) Ø1/2" WALL ANCHORS (NOT INCLUDED) AT THE LOCATIONS SHOWN.

#### NOTE

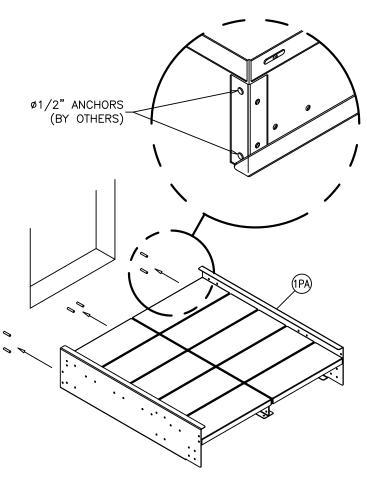
EXAMPLE SHOWS THE STAIRS CENTERED ON THE DOORWAY, BUT THEY MAY BE OFFSET TO EACH SIDE AS NEEDED

### Step 2 & 3 Attach Landing Mid Anchor Clip





## STEP 2 ATTACH LANDING MID ANCHOR CLIP



#### **STEP 3**

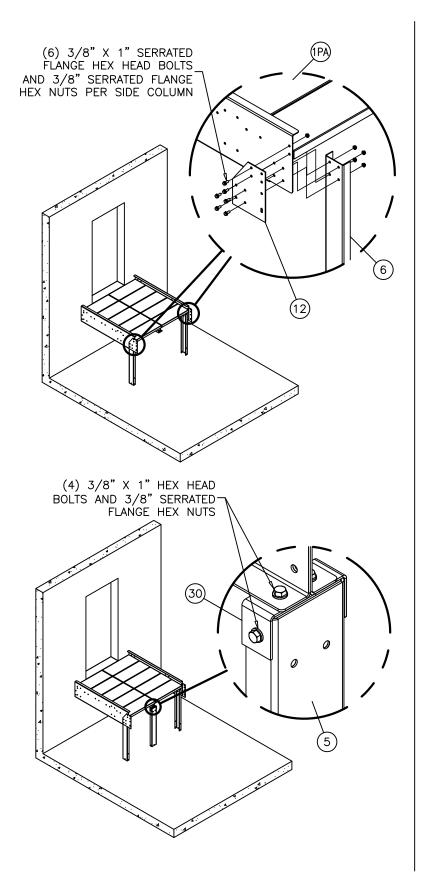
ANCHOR LANDING TO WALL. ENSURE LANDING IS LEVEL PRIOR TO TIGHTENING ANCHOR BOLTS.



USE A LIFTING DEVICE TO LOCATE AND HOLD LANDING ASSEMBLY IN PLACE UNTIL COLUMNS ARE PLACED

### **Step 4 & 5 Attach Side and Center Columns**





#### STEP 4

TO (PA) WITH CLIP (12) AS SHOWN

LEAVE ALL BOLTS LOOSE TO ALLOW ADJUSTMENTS FOR LEVELING AFTER COLUMNS ARE INSTALLED

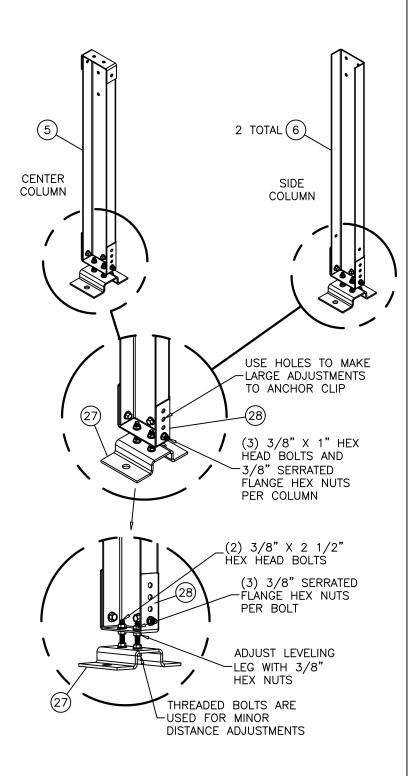
#### STEP 5

ATTACH CENTER COLUMN 5
AND CAP PLATE 30 TO (PA)
AS SHOWN

LEAVE ALL BOLTS LOOSE TO ALLOW ADJUSTMENTS FOR LEVELING AFTER COLUMNS ARE INSTALLED

### **Step 6 Assemble Center and Side Columns**





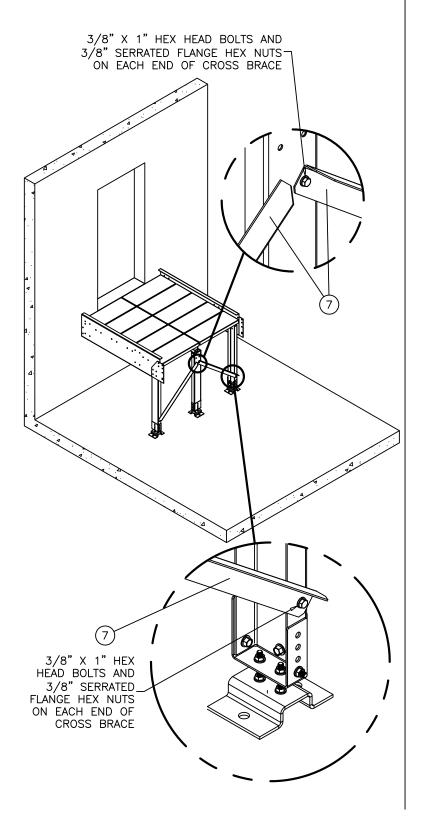
STEP 6
ASSEMBLE THE CENTER AND

LEAVE ALL BOLTS LOOSE TO ALLOW ADJUSTMENTS FOR LEVELING AFTER COLUMNS ARE INSTALLED

SIDE COLUMN ANCHOR CLIPS

### **Step 7 Attach Cross Column Bracing**



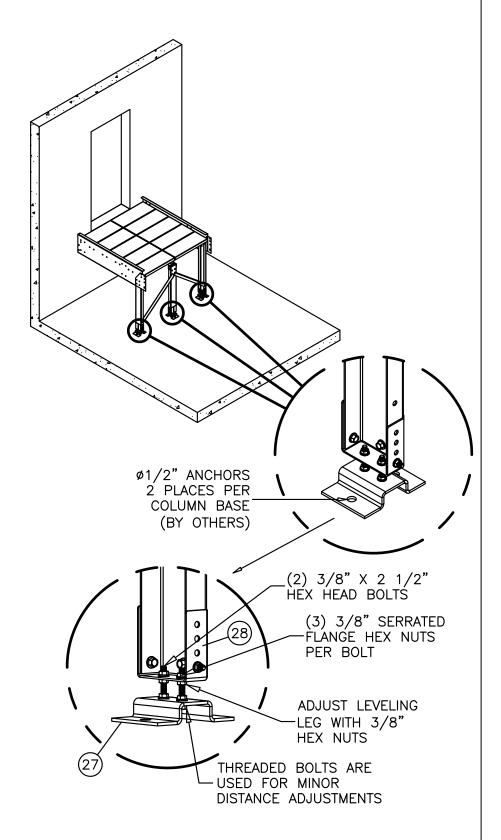


STEP 7
ATTACH CROSS COLUMN
BRACING (7)

LEAVE ALL BOLTS LOOSE TO ALLOW ADJUSTMENTS FOR LEVELING AFTER COLUMNS ARE INSTALLED

### **Step 8 Plumb the Columns Vertically**





#### STEP 8

AFTER COLUMNS AND BRACING ARE INSTALLED, PLUMB THE COLUMNS VERTICALLY

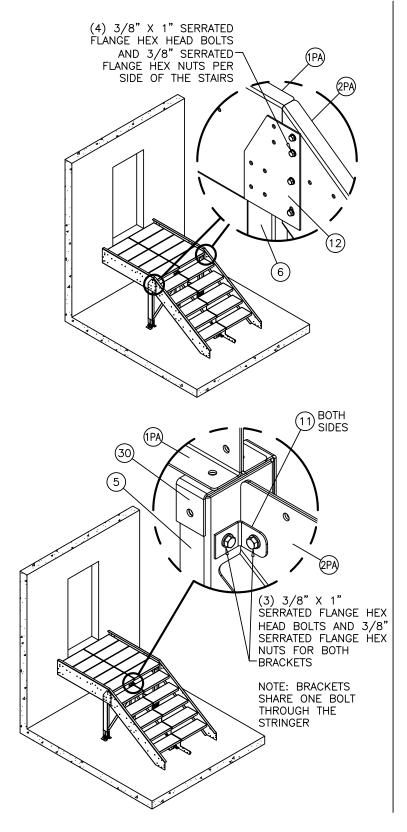
INSTALL ANCHORS FOR THE COLUMN MOUNTING FEET (6 PLACES)

AFTER INSTALLING COLUMN ANCHORS, MAKE ADJUSTMENTS TO COLUMN FOOTINGS TO ENSURE THE LANDING IS LEVEL

TIGHTEN ALL BOLTS FROM PREVIOUS STEPS AFTER LEVELED

### **Step 9 & 10 Stair Assembly Attachment**





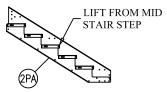
#### STEP 9

STAIR ASSEMBLY ATTACHMENT



USE A LIFTING DEVICE TO LOCATE AND HOLD THE STAIR ASSEMBLY

2PA) IN PLACE UNTIL FIRMLY SECURED



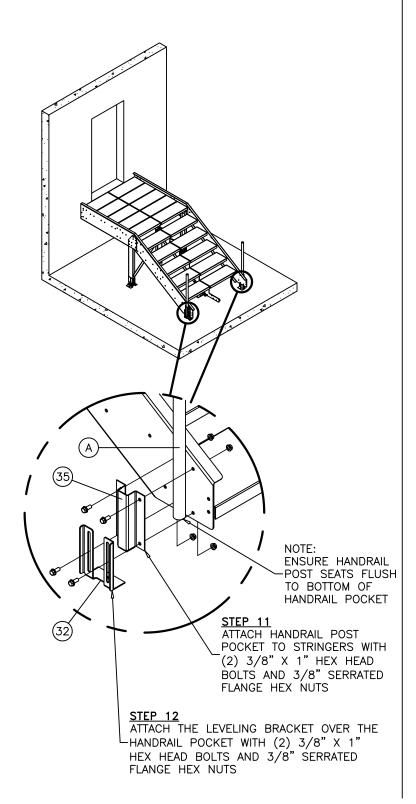
LEAVE ALL BOLTS LOOSE TO ALLOW ADJUSTMENTS FOR LEVELING AFTER ANCHOR CLIPS ARE INSTALLED

#### STEP 10

STAIR ASSEMBLY ATTACHMENT TO CENTER COLUMN.

INSTALL BRACKET (11) AS SHOWN





ATTACH TOP TWO BOLTS
OF HANDRAIL POST BRACKET

35 TO STRINGER
KEEP BOLTS LOOSE

#### **STEP 12**

ATTACH THE LEVELING
BRACKET (32) OVER THE
HANDRAIL POCKET (35)
AND SECURE TO STRINGER
WITH TWO BOLTS
KEEP BOLTS LOOSE

#### **STEP 13**

PLACE HANDRAIL POST (A)
INTO HANDRAIL POCKET (35).
ENSURE POST SITS FLUSH TO
BOTTOM OF HANDRAIL
BRACKET. KEEP BOLTS LOOSE

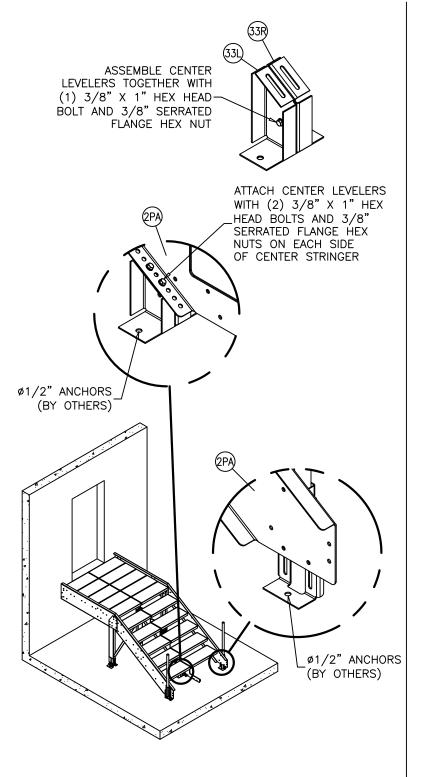
#### NOTE:

HANDRAIL POST POCKET IS DESIGNED TO CLAMP AROUND POST WHEN THE POCKET IS SECURELY BOLTED TO THE STRINGER.

	LENGTH
Α	40 1/2"

### Step 14, 15, 16 & 17 Assemble Levelers





STEP 14
ASSEMBLE 33L AND 33R USING
CENTER BOLT AS SHOWN

#### **STEP 15**

PLACE CENTER LEVELER
UNDER THE CENTER STRINGER,
ATTACH WITH TWO BOLTS.
KEEP BOLTS LOOSE

#### **STEP 16**

LEVEL THE STAIR USING BOTH
THE SIDE AND CENTER
LEVELERS. ENSURE ALL
LEVELERS ARE FLUSH TO GRADE
AND THE VERTICAL HANDRAIL
POST (A) IS PLUMB STRAIGHT

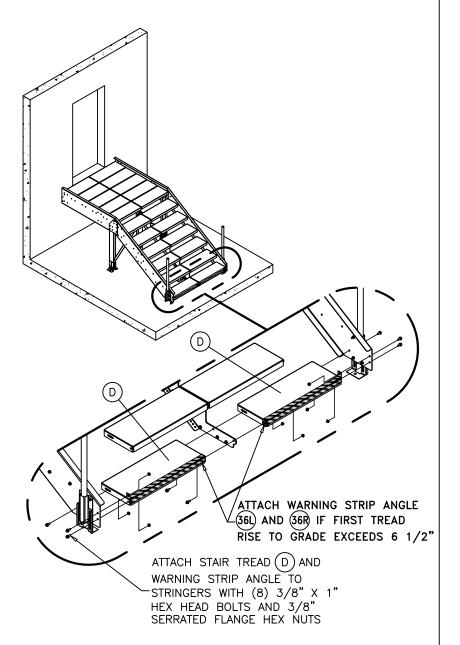
### TIGHTEN ALL BOLTS FROM PREVIOUS STEPS ONCE LEVELED

#### **STEP 17**

INSTALL Ø1/2" ANCHORS IN LEVELERS (4 PLACES)

### Step 18 First Stair Step Installation



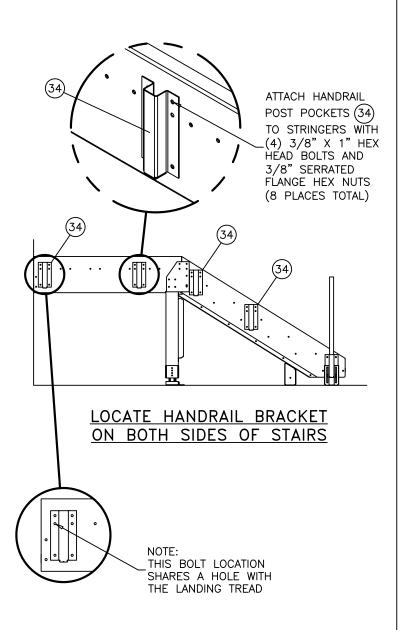


#### **STEP 18**

FIRST STAIR STEP INSTALLATION
ATTACH STAIR TREADS D TO
FRONT OF (2PA)
NOTE: IF WARNING STRIP
ANGLES ARE REQUIRED,
INSTALL (36L) AND (36R) AS YOU
INSTALL STAIR TREADS D

### Step 19 Attach Handrail Post Pockets



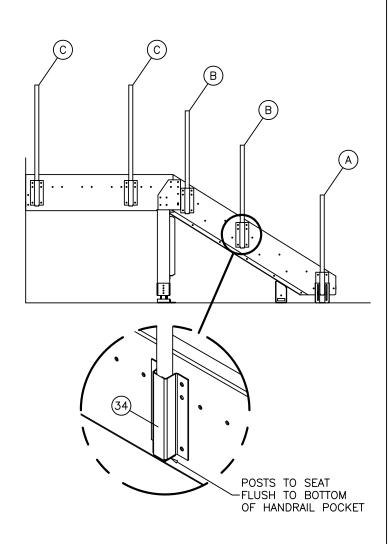


#### **STEP 19**

ATTACH HANDRAIL POST POCKETS (34) TO STRINGER

LEAVE ALL BOLTS LOOSE TO UNTIL HANDRAIL POSTS ARE INSTALLED





LOCATE POSTS ON BOTH SIDES OF STAIRS

#### **STEP 20**

INSERT HANDRAIL POSTS

(B) AND (C)

INTO POCKETS (34)

NOTE:

ENSURE HANDRAIL POST SEATS FLUSH TO BOTTOM OF HANDRAIL POCKET

HANDRAIL POST POCKET IS DESIGNED TO CLAMP AROUND POST WHEN THE POCKET IS BOLTED TO THE STRINGER.

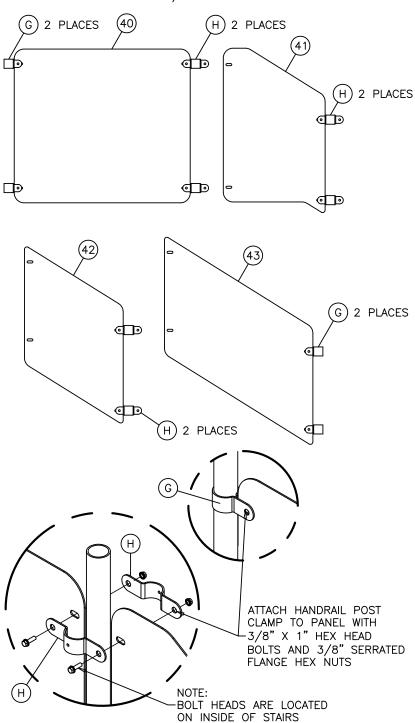
## ENSURE POST IS VERTICALLY STRAIGHT PRIOR TO TIGHTENING BOLTS

	LENGTH
Α	40 1/2"
В	41 5/8"
С	49"

### **Step 21 Stair Handrail Panel Assembly**



ATTACH HANDRAIL FITTINGS TO PANELS WITH 3/8" X 1" HEX HEAD BOLTS AND 3/8" SERRATED FLANGE HEX NUTS

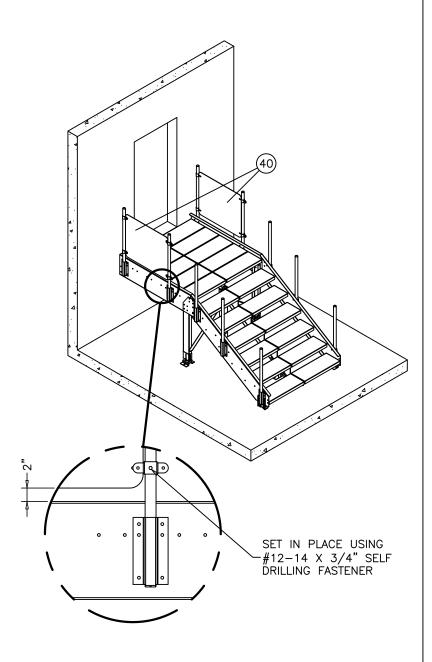


#### **STEP 21**

ASSEMBLY HANDRAIL SOLID
PANELS 40 41 42 AND 43
WITH FITTINGS G AND H AS
SHOWN

LEAVE ALL BOLTS LOOSE TO ALLOW ADJUSTMENTS FOR LEVELING AFTER PANELS ARE INSTALLED

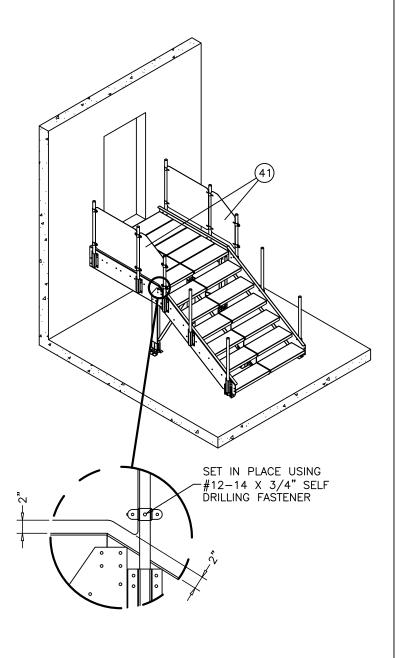




INSTALL HANDRAIL
PANELS (40) AS SHOWN

WITH HANDRAIL FITTINGS ALREADY ATTACHED TO THE PANELS, SLIDE THE FITTINGS OVER THE HANDRAIL POSTS AND SECURE THEM IN PLACE SO THAT THE BOTTOM OF THE PANEL IS 2" ABOVE THE STRINGER



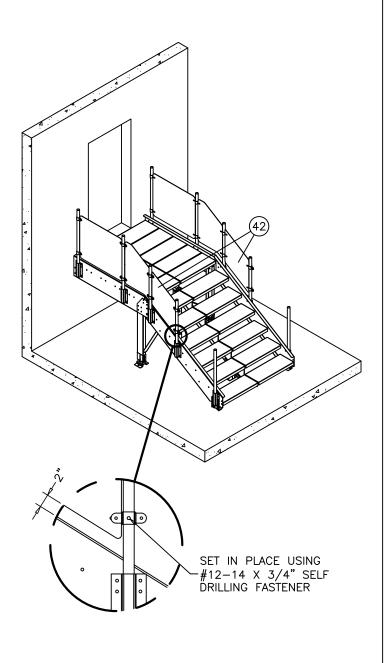


INSTALL HANDRAIL

PANELS (41) AS SHOWN

WITH HANDRAIL FITTINGS ALREADY ATTACHED TO THE PANELS, SLIDE THE FITTINGS OVER THE HANDRAIL POSTS AND SECURE THEM IN PLACE SO THAT THE BOTTOM OF THE PANEL IS 2" ABOVE THE STRINGER



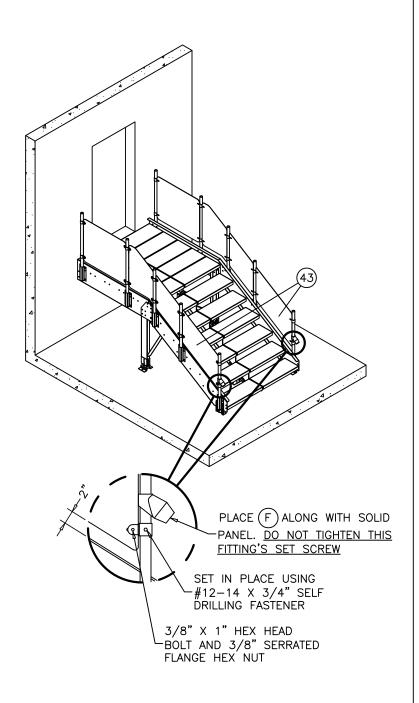


INSTALL HANDRAIL

PANELS (42) AS SHOWN

WITH HANDRAIL FITTINGS ALREADY ATTACHED TO THE PANELS, SLIDE THE FITTINGS OVER THE HANDRAIL POSTS AND SECURE THEM IN PLACE SO THAT THE BOTTOM OF THE PANEL IS 2" ABOVE THE STRINGER





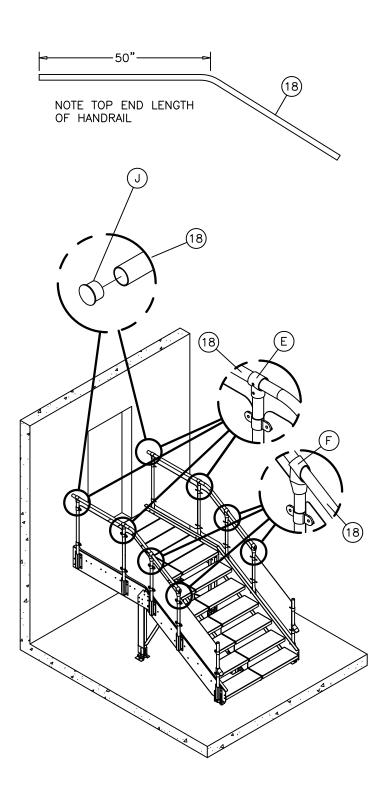
INSTALL HANDRAIL
PANELS (43) AS SHOWN

WITH HANDRAIL FITTINGS ALREADY ATTACHED TO THE PANELS, SLIDE THE FITTINGS OVER THE HANDRAIL POSTS AND SECURE THEM IN PLACE SO THAT THE BOTTOM OF THE PANEL IS 2" ABOVE THE STRINGER

NOTE: CONNECTOR (F) MUST ALSO BE ADDED TO THE LOWER POST (A)

### Step 26 Top Guardrail Installation





#### **STEP 26**

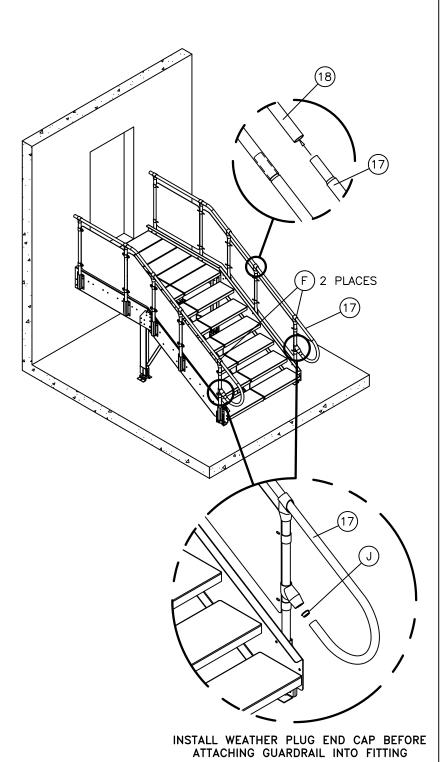
TOP GUARDRAIL INSTALLATION
SLIDE CONNECTOR (E) AND (F)
ONTO HANDRAIL (18) AS SHOWN
AND PLACE THEM ONTO THE
VERTICAL HANDRAIL POSTS

NOTE:

ADD END CAP (J) TO THE TOP END OF HANDRAIL (18)

LEAVE GUARDRAIL FITTING SET SCREW LOOSE UNTIL HANDRAIL IS COMPLETELY ASSEMBLED





**STEP 27** 

LOWER GUARDRAIL INSTALLATION

SLIDE CONNECTOR FONTO THE LOWER GUARDRAIL (17)

ADD END CAP (J) ON THE LOWER END OF (17)

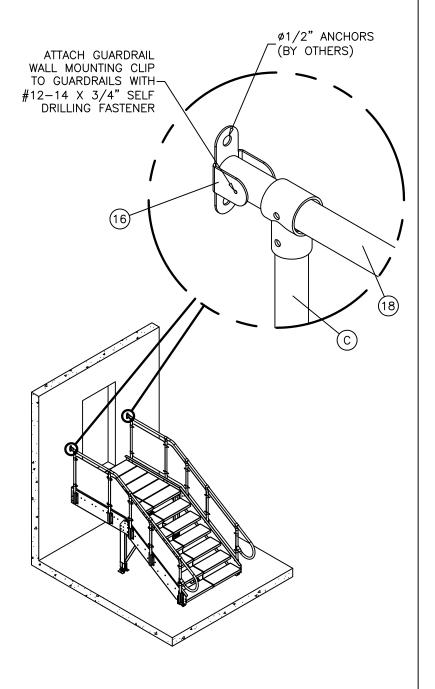
INSERT THE GUARDRAIL TAPERED END INTO THE TOP GUARDRAIL (18)

THE LOWER END OF 17 IS SECURED IN CONNECTOR (F)

TIGHTEN ALL CONNECTIONS
ONCE HANDRAILS ARE IN
PLACE

### Step 28 Optional Guardrail Wall Mounting Clip





#### **STEP 28**

OPTIONAL GUARDRAIL WALL MOUNTING CLIP (16) PROVIDED, INSTALL AS SHOWN

ONCE BOTH HANDRAIL
MOUNTING CLIPS ARE
INSTALLED REVIEW ALL
CONNECTIONS AND
ENSURE ALL FASTENERS
ARE FULLY TIGHTENED

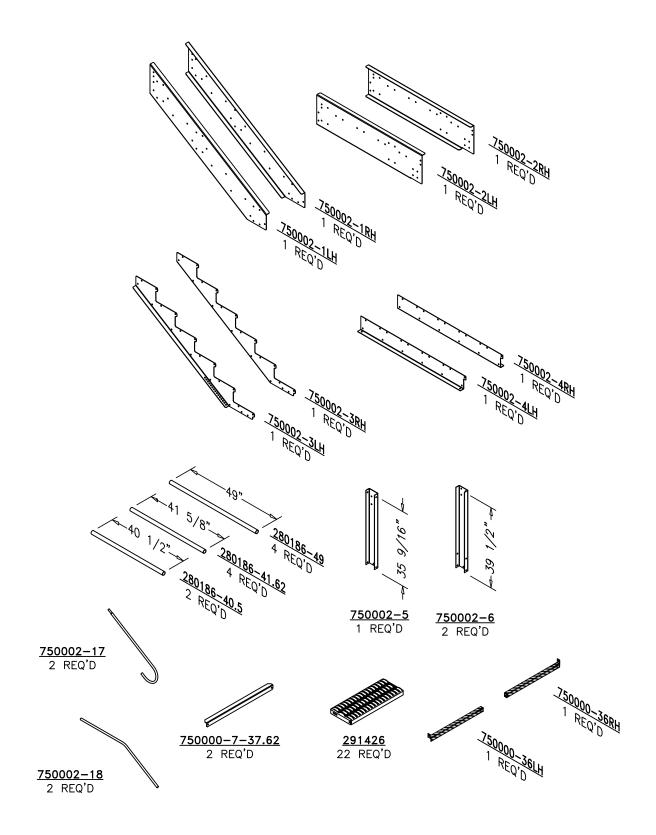
 $\frac{\textbf{END OF INSTALLATION}}{\textbf{INSTRUCTIONS}}$ 



	PARTS LIST*		
ITEM	PART NUMBER	DESCRIPTION	
1L		STAIR STRINGER CHANNEL (LEFT HAND)	
1R	750002-1RH	STAIR STRINGER CHANNEL (RIGHT HAND)	
2L		LANDING STRINGER CHANNEL (LEFT HAND)	
2R		LANDING STRINGER CHANNEL (RIGHT HAND)	
3L		STAIR CENTER STRINGER (LEFT HAND)	
3R	750002 3EH	STAIR CENTER STRINGER (RIGHT HAND)	
4L		LANDING MID STRINGER SUPPORT (LEFT HAND)	
4R		LANDING MID STRINGER SUPPORT (RIGHT HAND)	
5	750002 1111	CENTER LANDING COLUMN X 36 9/16"	
6	750002 5	SIDE LANDING COLUMN X 39 1/2"	
7		STAIR CROSS BRACE ANGLE X 37 5/8"	
10		LANDING TO CONCRETE WALL CLIP	
11	750000-10 750000-11	CENTER COLUMN CLIP	
12	750000-11	STAIR STRINGER TO LANDING CHANNEL CLIP	
16	750002=12 750000=16	HANDRAIL WALL MOUNTING CLIP	
17	750000-18	TOP GUARDRAIL WITH LOOP	
18	750002-17	TOP GUARDRAIL WITH CORNER JOINT	
27	750002=18	DOCK HIGH STAIRCASE COLUMN BASE PLATE	
28	750000-27	DOCK HIGH STAIRCASE COLUMN SHOE PLATE	
30	750000-28	CENTER COLUMN TOP CAP PLATE	
32	750000=30	STRINGER ADJUSTABLE ANCHOR CLIP	
33L		MID STRINGER ADJUSTABLE ANCHOR CLIP	
34R	750002=33LH 750002=33RH	MID STRINGER ADJUSTABLE ANCHOR CLIP	
34		STAIR HANDRAIL CLIP	
	750000-34		
35	750000-35	STAIR HANDRAIL ANCHOR CLIP  DOCK STAIR WARNING STRIPE ANGLE	
36L	750000-36LH 750000-36RH	DOCK STAIR WARNING STRIPE ANGLE  DOCK STAIR WARNING STRIPE ANGLE	
36R 40	750000-36RH 750002-40		
41	750002-40	SOLID PANEL — LANDING SOLID PANEL — TRANSITION	
42	750002-41	SOLID PANEL - UPPER STAIR	
43		SOLID PANEL - LOWER STAIR	
A		Ø1 5/8" HANDRAIL POST X 40 1/2"	
В	280186-41.62	ø1 5/8" HANDRAIL POST X 41 1/2"	
C	280186-49	ø1 5/8" HANDRAIL POST X 49"	
D	291426	GRIP STRUT STAIR TREAD 11 3/4" X 2" X 30" LONG	
E	290715	TYPE 10-7 - SINGLE SOCKET TEE	
F	291556	TYPE 29-7 - 30°-60° SINGLE SOCKET TEE	
G	291682	TYPE M50 - SINGLE	
Н	291683	TYPE M51 - DOUBLE	
J	291129	1 5/8" WEATHER PLUG END CAP	
K	290190	#12-14 X 3/4" SELF-DRILLING FASTENER W/SW	
L	291292	3/8" X 1" SERRATED FLANGE HEX HEAD BOLT GRADE 8.2	
М	291284	3/8" X 2 1/2" HEX HEAD BOLT W/SW GRADE 8.2	
N	290961	3/8" SERRATED FLANGE HEX NUT	

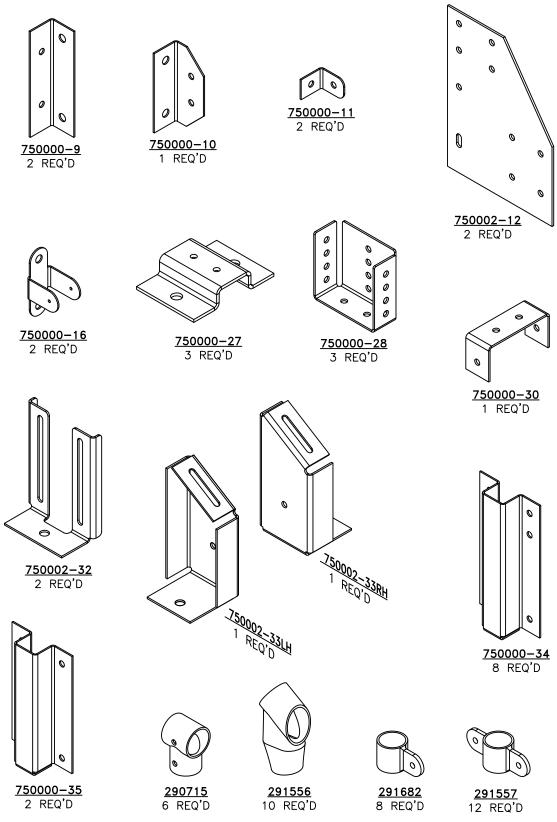
NOTE: SOME OF THESE PARTS MAY BE PRE-ASSEMBLED INTO LARGER ASSEMBLIES





NOTE: SOME OF THESE PARTS MAY BE PRE-ASSEMBLED INTO LARGER ASSEMBLIES





NOTE: SOME OF THESE PARTS MAY BE PRE-ASSEMBLED INTO LARGER ASSEMBLIES





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