



## **REDD Team**

### **Assembly Instructions Cover Sheet**

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**Thank you for purchasing this quality aluminum product from REDD Team Manufacturing! We are confident that you will find it to be an excellent access solution for years to come.**

Our goal is 100% customer satisfaction so please check the contents of your shipment prior to beginning installation. If any parts appear to be damaged, missing or incorrect, contact a Customer Service Representative immediately at 1-800-648-3696 so we can work with you to quickly solve the problem.

The attached assembly instructions have been prepared for a typical ramp and landing system measuring 4 feet in width across the ramp deck and 30 feet in length up to the landing. The landing depicted in the instructions is 5 foot 4 inches square. When properly installed at a 1:12 slope, this ramp will allow access to a threshold 30 inches above ground. Please note that the configuration of the ramp system you purchased may differ from that shown on these instructions (different size landing, different width ramp, walkway sections, etc.). However, the same steps are used for connecting components illustrated in these instructions. Should you experience any difficulties installing the ramp or have any questions regarding the installation instructions, please do not hesitate to contact a Customer Service Representative at 1-800-648-3696, M-F between the hours of 8 AM and 5 PM, Central. You may also visit our web site at [www.reddteam.com](http://www.reddteam.com) for PDF copies of these instructions.

**The following is a list of tools that are recommended for installation:**

- 6" C-Clamp (suggest Vise-Grip Locking C-Clamp w/Swivel Pad)
- Phillips driver (included)
- Curved Jaw Vice-Grip
- Rubber mallet
- Level
- Allen wrench (included)
- Hex driver (included)
- Cordless Drill
- Work gloves

## REDD Team – Assembly Instructions: 34 VP or TL Ramp System

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### Aluminum Ramp System With 34" Vertical Picket Or Two Line Guardrail

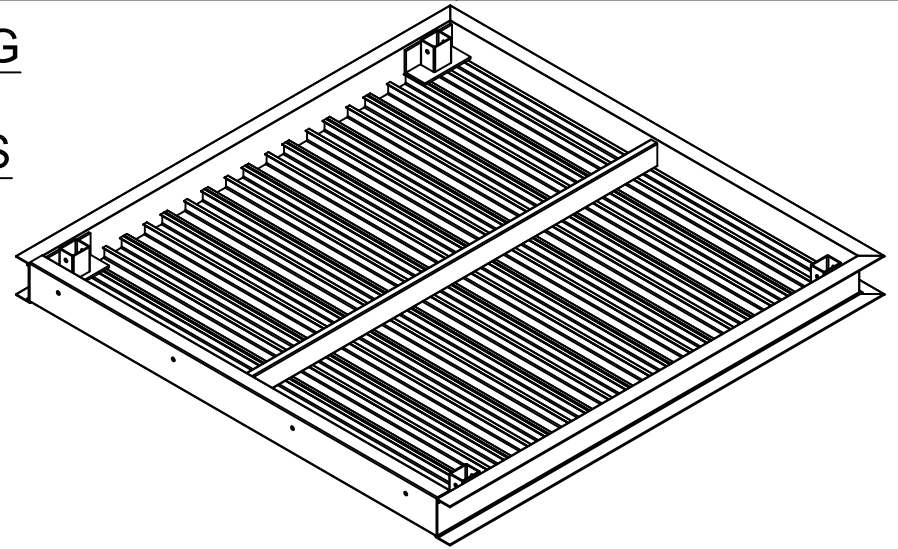
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5'-4" SQUARE LANDING  
AND  
LOOSE COMPONENTS

LANDING LEG CONE

RTM PART #: PLEG AS44M C22  
QTY USED: 4

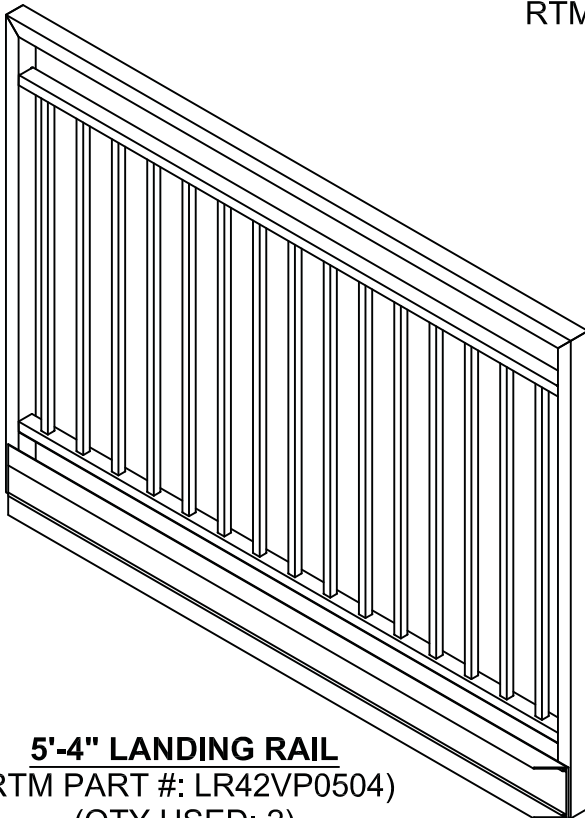
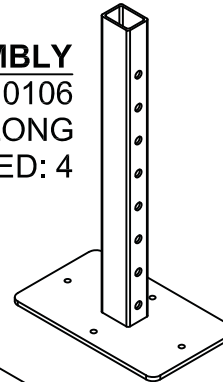


5'-4" x 5'-4" LANDING

LANDING SHOWN UPSIDE DOWN  
RTM PART #: L0504-0504T  
QTY USED: 1

LEG ASSEMBLY

RTM PART #: PLEG AS43M 0106  
1'-6" LONG  
QTY USED: 4

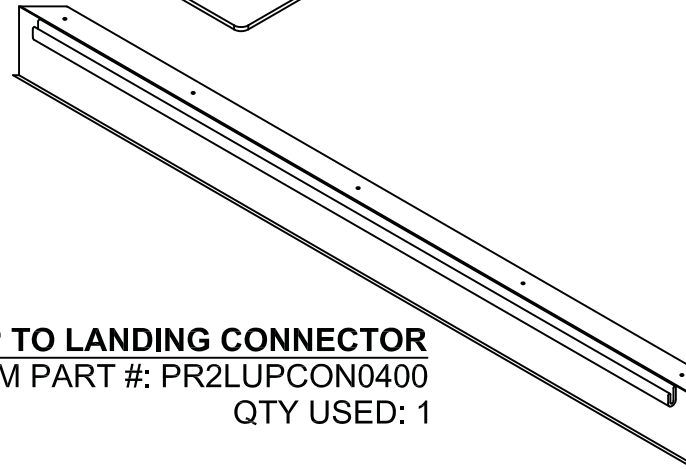


5'-4" LANDING RAIL

(RTM PART #: LR42VP0504)  
(QTY USED: 2)

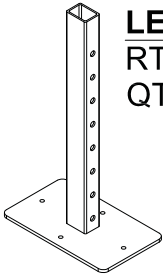
RAMP TO LANDING CONNECTOR

RTM PART #: PR2LUPCON0400  
QTY USED: 1



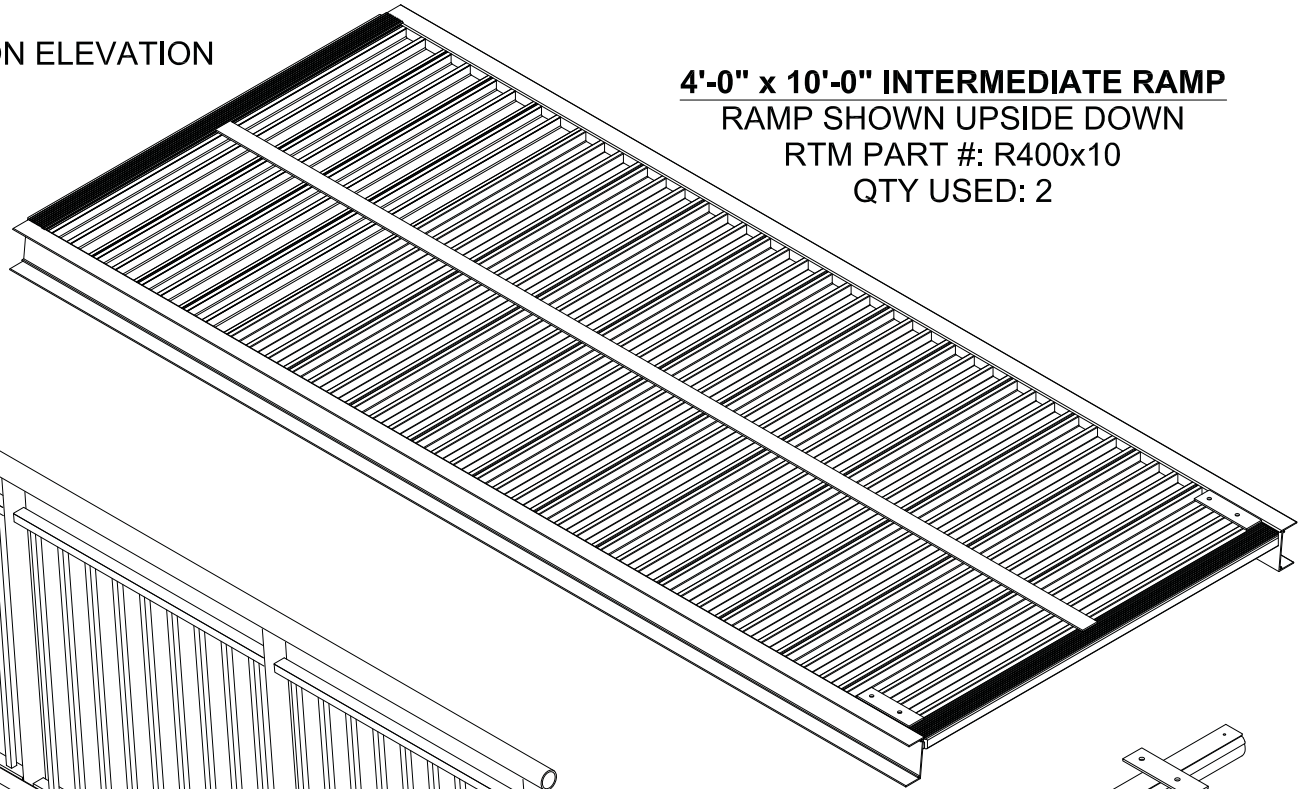
**LEG ASSEMBLY**

RTM PART#: VARIES BASED ON ELEVATION  
QTY USED: 2 PER INT. RAMP



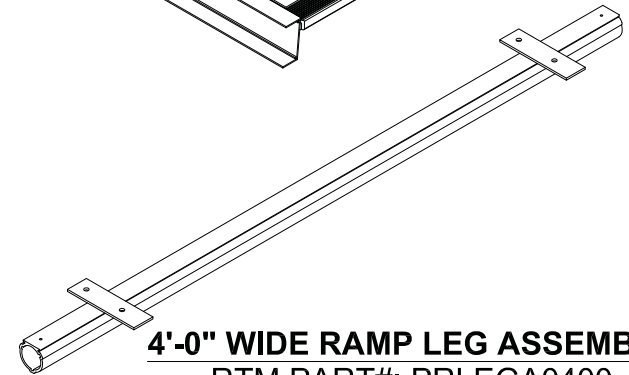
**4'-0" x 10'-0" INTERMEDIATE RAMP**

RAMP SHOWN UPSIDE DOWN  
RTM PART #: R400x10  
QTY USED: 2



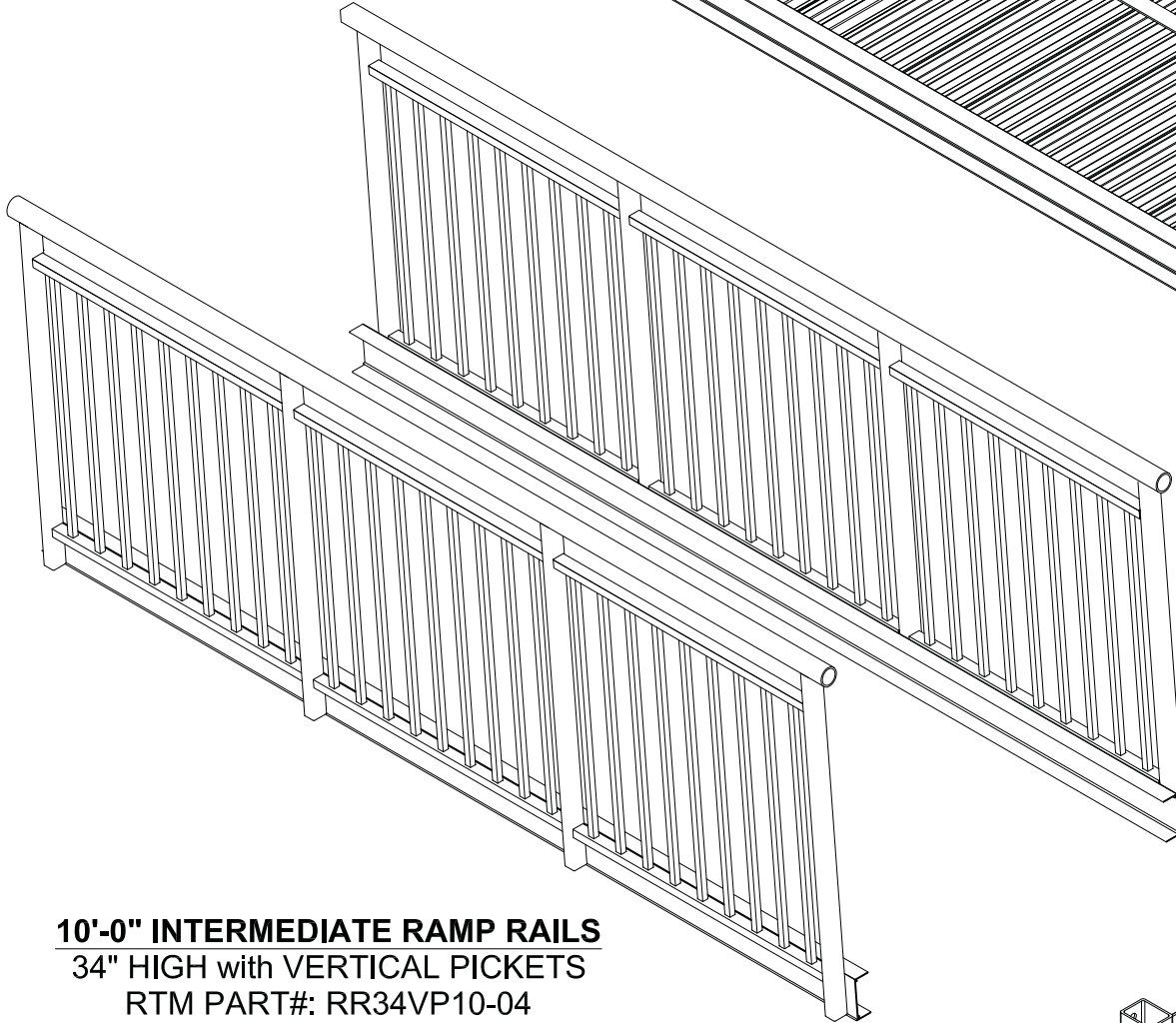
**4'-0" WIDE RAMP LEG ASSEMBLY**

RTM PART#: PRLEGA0400  
QTY USED: 1 PER INT. RAMP



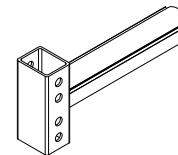
**10'-0" INTERMEDIATE RAMP RAILS**

34" HIGH with VERTICAL PICKETS  
RTM PART#: RR34VP10-04  
QTY USED: 1 SET PER INT. RAMP



**RAMP LEG "SWIVEL CONE" ASSY**

RTM PART#: PSWIVELCONE  
QTY USED: 2 PER INT. RAMP



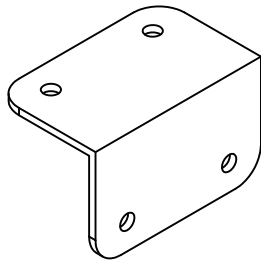
## 4' x 10' END RAMP COMPONENTS

**4'-0" x 10'-0" END RAMP**  
RAMP SHOWN UPSIDE DOWN  
RTM PART#: ER400x10  
QTY USED: 1

NOTE  
MITERED  
CHANNELS  
ONE END

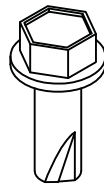
NOTE MITERED  
CHANNELS ONE END

**10'-0" LONG END RAMP RAILS**  
34" HIGH with VERTICAL PICKETS  
RTM PART#: ERR34VP10-04  
QTY USED: 1 PAIR PER END RAMP



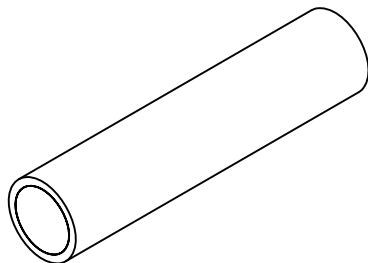
**LANDING RAIL CORNER CLIP**

2" x 2" x 1/8" THK x 3 1/4" LONG ANGLE  
RTM PART#: PLRCNRANGL  
QTY USED: 3



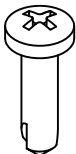
**HEX HEAD TEK SCREW (SELF DRILLING)**

#14 x 3/4" LONG  
RTM PART#: VHMTK1000  
BAGGED QTY: 120



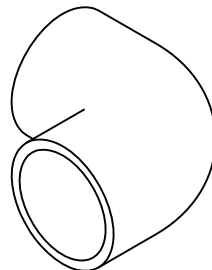
**TOP CAP SPLICE BAR (34VP)**

1" SCH 40 PIPE (1.315" OD x 0.133" WALL)  
RTM PART#: 262  
QTY USED: 4



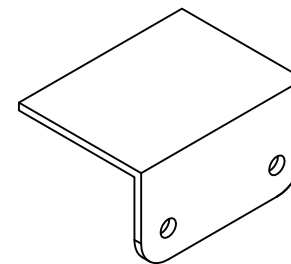
**PAN HEAD TEK SCREW (SELF DRILLING)**

#10 x 3/4" LONG  
RTM PART#: VHMTK1100  
BAGGED QTY: 26



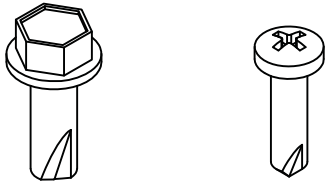
**D.E. RAIL TO RAMP RAIL CONN. (34VP)**  
**MECHANICAL ELBOW (WITH SET SCREWS)**

RTM PART#: VHME1050  
QTY USED: 1



**UPPER RAMP END CAP**

2 1/2" x 1 5/8" x 1/8" THK x 3" LONG ANGLE  
RTM PART#: 307  
QTY USED: 2



### **RAMP TO LANDING CONNECTION HARDWARE**

(RTM PART#: R2LHDWE) (QTY INCLUDED: 1 BAG)

#### **FOLLOWING ITEMS INCLUDED IN BAG:**

**HEX HEAD TEK SCREW** (SELF-DRILLING)

#14 x 3/4" LONG

(QUANTITY: 5)

**PAN HEAD TEK SCREW** (SELF-DRILLING)

#10 x 3/4" LONG

(QUANTITY: 5)



### **LANDING TO BUILDING CONNECTION HARDWARE**

(RTM PART#: L2BHDWE) (QTY INCLUDED: 1 BAG)

#### **FOLLOWING ITEMS INCLUDED IN BAG:**

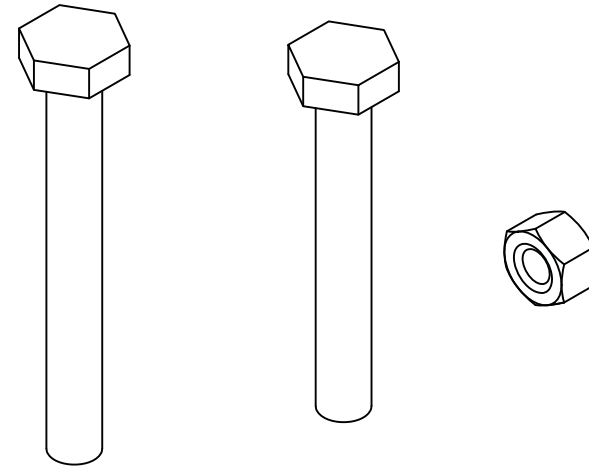
**LAG BOLT** (ZINC)

5/16" DIAMETER x 4 1/2" LONG

(QUANTITY: 4)

**5/16" FLAT WASHER** (STAINLESS STEEL)

(QUANTITY: 4)



### **NEW STYLE LANDING LEG HARDWARE**

(RTM PART#: NSLHDWE) (QTY INCLUDED: 1 BAG)

#### **FOLLOWING ITEMS INCLUDED IN BAG:**

**HEX HEAD CAP SCREW** (STAINLESS STEEL)

3/8" DIAMETER x 2 3/4" LONG

(QUANTITY: 4)

**HEX HEAD CAP SCREW** (STAINLESS STEEL)

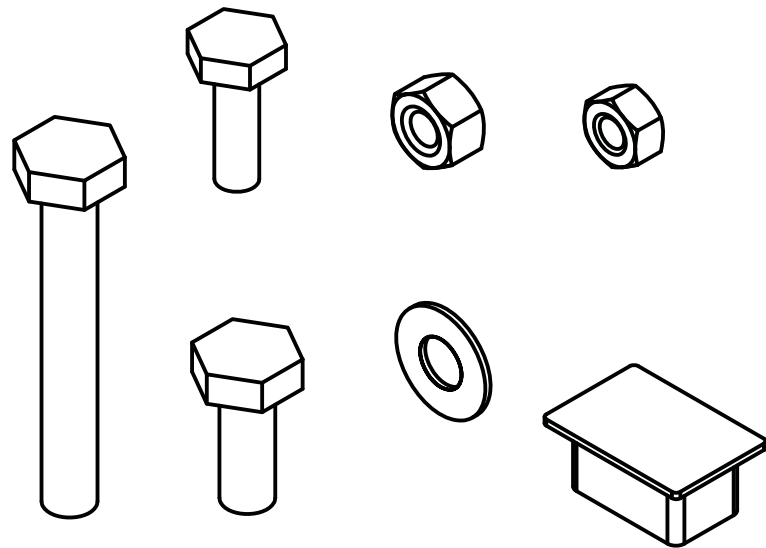
3/8" DIAMETER x 3 1/4" LONG

(QUANTITY: 4)

**3/8" HEX NUT** (STAINLESS STEEL)

(QUANTITY: 8)





### **RAMP LEG ASSEMBLY HARDWARE**

(RTM PART#: RLABAG)

(QTY INCLUDED: 1 BAG PER INT. RAMP SEGMENT)

#### **FOLLOWING ITEMS INCLUDED IN BAG:**

##### **PLASTIC END CAP**

(QUANTITY: 2)

##### **HEX HEAD CAP SCREW (STAINLESS STEEL)**

3/8" DIAMETER x 1" LONG

(QUANTITY: 2)

##### **HEX HEAD CAP SCREW (STAINLESS STEEL)**

5/16" DIAMETER x 1" LONG

(QUANTITY: 4)

##### **HEX HEAD CAP SCREW (STAINLESS STEEL)**

3/8" DIAMETER x 2 3/4" LONG

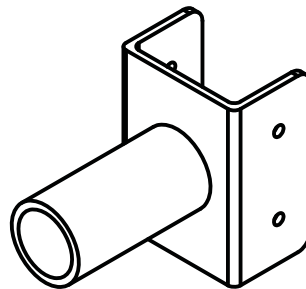
(QUANTITY: 2)

##### **5/16" HEX NUT (QUANTITY: 4)**

##### **3/8" HEX NUT (QUANTITY: 2)**

##### **3/8" FLAT WASHER (STAINLESS STEEL)**

(QUANTITY: 2)



### **NEW STYLE "90 DEG DEAD END" HARDWARE BAG**

(RTM PART#: P90BAG34-38)

(QTY INCLUDED: 1 BAG)

#### **FOLLOWING ITEMS INCLUDED IN BAG:**

##### **SQUARE PLASTIC CAP**

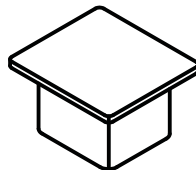
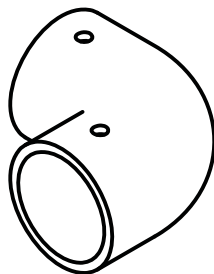
(QUANTITY: 1)

##### **34" or 38" RAIL HOOP ADAPTOR**

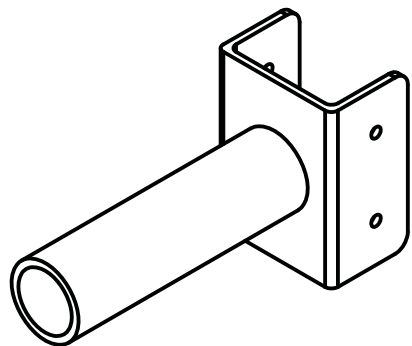
QTY USED: 1

##### **MECHANICAL ELBOW (W/SET SCREWS)**

QTY USED: 1







### **34-38 HOOP CONNECTOR POST ASSY**

RTM PART#: PHOOPCON38

QTY USED: 4

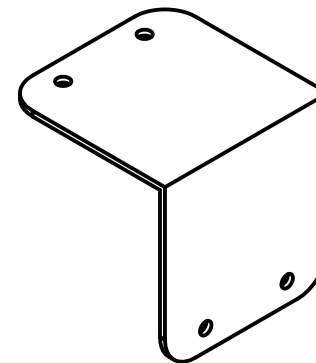
## **34-38 REMOVABLE HOOP COMPONENTS**



### **HEX HEAD TEK SCREW (SELF DRILLING)**

#14 x 3/4" LONG

RTM PART#: VHMTK1000

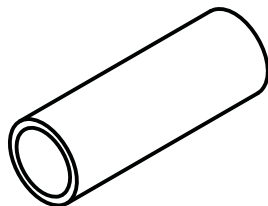


### **REMOVEABLE HOOP ANGLE BRACKET**

3 1/2" x 3 1/2" x 1/8" THK x 4" LONG ANGLE

RTM PART#: PLRANGL

QTY USED: 2

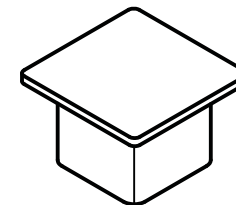


### **JOG HOOP SPLICE BAR (34-38VP)**

1" SCH 40 PIPE (1.315" OD x 0.133" WALL)

RTM PART#:

QTY USED: 2

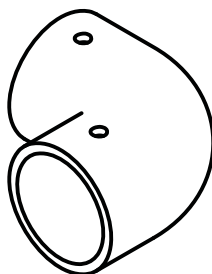


### **DEAD END RAIL CAP**

SQUARE BLACK CAP

RTM PART#: VBCAP1200

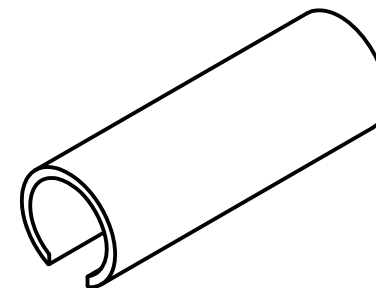
QTY USED: 1



### **MECHANICAL ELBOW (WITH SET SCREWS)**

RTM PART#: VHME1050

QTY USED: 4



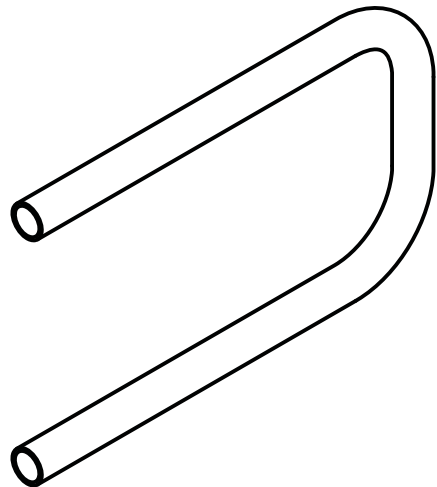
### **STRAIGHT HOOP ATTACHMENT SPLICE BAR**

FRICTION-FIT

RTM PART#: 262A

QTY USED: 3

## 34-38 REMOVABLE HOOP COMPONENTS



### 34-38 HOOP

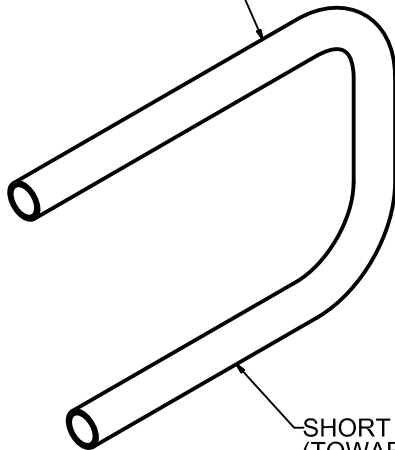
(USED FOR: UPPER, LOWER & END RAMP HOOPS)

1 1/4 SCH 40 PIPE

RTM PART#: 34-38HOOP

QTY USED: 3

LONG SIDE  
(TOWARDS TOP)



### 34-38 'JOG' HOOP

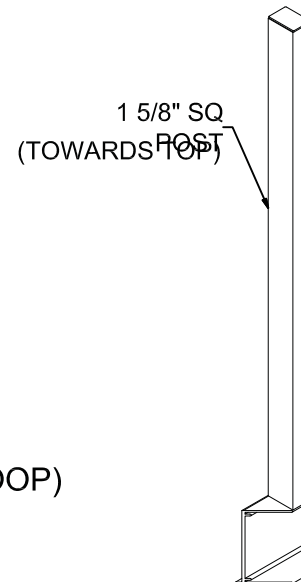
(USED FOR: UPPER JOG HOOP)

1 1/4 SCH 40 PIPE

RTM PART#: 34-38JHOOP

QTY USED: 1

SHORT SIDE  
(TOWARDS BOTTOM)



### 6" DEAD-END RAIL

RTM PART#:

PL6DERAIL-URS

QTY USED: 1

# LANDING LEG ASSEMBLY

## THRESHOLD

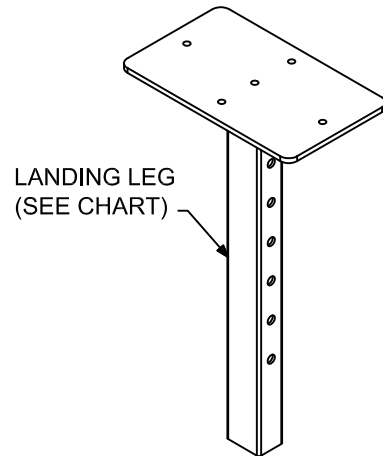
## CONE / LEG SIZE USED

0'-12"	C08 / 1'-0" LEG
12"-16"	C12 / 0'-10" LEG
18"-20"	C16 / 1'-0" LEG
22"-24"	C18 / 1'-2" LEG
26"-32"	C22 / 1'-6" LEG
34"-42"	C30 / 2'-0" LEG
44"-48"	C30 / 2'-6" LEG
50"-56"	C42 / 2'-6" LEG
58"-66"	C48 / 2'-6" LEG

NOTE: GUIDE ONLY.  
REQUIREMENTS  
MAY DICTATE OTHER  
COMBINATIONS

## INSTRUCTIONS:

- Measure threshold height at doorway where landing will be located.
- Turn landing section upside down.
- Locate the landing leg cones, landing legs and landing leg hardware bag. See table above and page 1 and 5 for description of parts.
- Insert landing leg cone into receiver on underside of landing (as shown in picture) and attach using (1)  $\frac{3}{8}$ " x  $3\frac{1}{4}$ " long hex head cap screw and (1)  $\frac{3}{8}$ " hex head nut. **TIGHTEN BOLT AND NUT SECURELY.**
- Adjust leg to appropriate threshold height determined above, measuring from the walking surface to the bottom side of the landing leg pad.
- Using (1)  $\frac{3}{8}$ " x  $2\frac{3}{4}$ " long hex head cap screw and (1)  $\frac{3}{8}$ " hex head nut, insert landing leg into landing leg cone (as shown in picture). **FINGER TIGHTEN NUT.** Adjustments to grade may be required later.
- Repeat installation of leg cones and legs for remaining landing legs.



LANDING LEG CONE  
(SEE CHART)

$\frac{3}{8}$ " x  $2\frac{3}{4}$ " LONG HEX  
HEAD CAP SCREW

$\frac{3}{8}$ " x  $3\frac{1}{4}$ " LONG HEX  
HEAD CAP SCREW

$\frac{3}{8}$ " HEX HEAD NUTS

# LANDING TO BUILDING ATTACHMENT

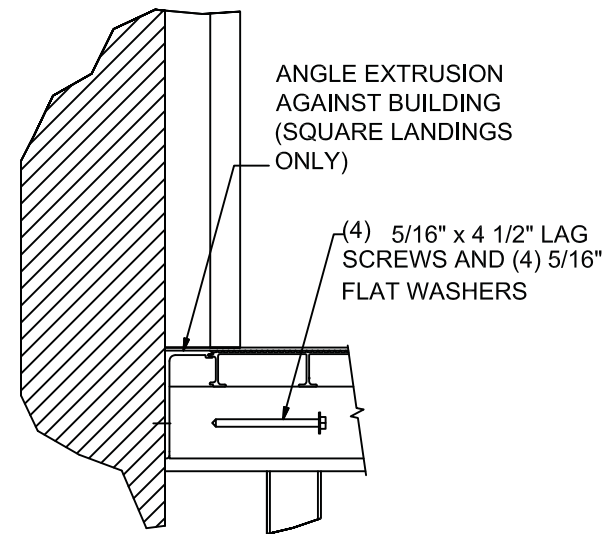
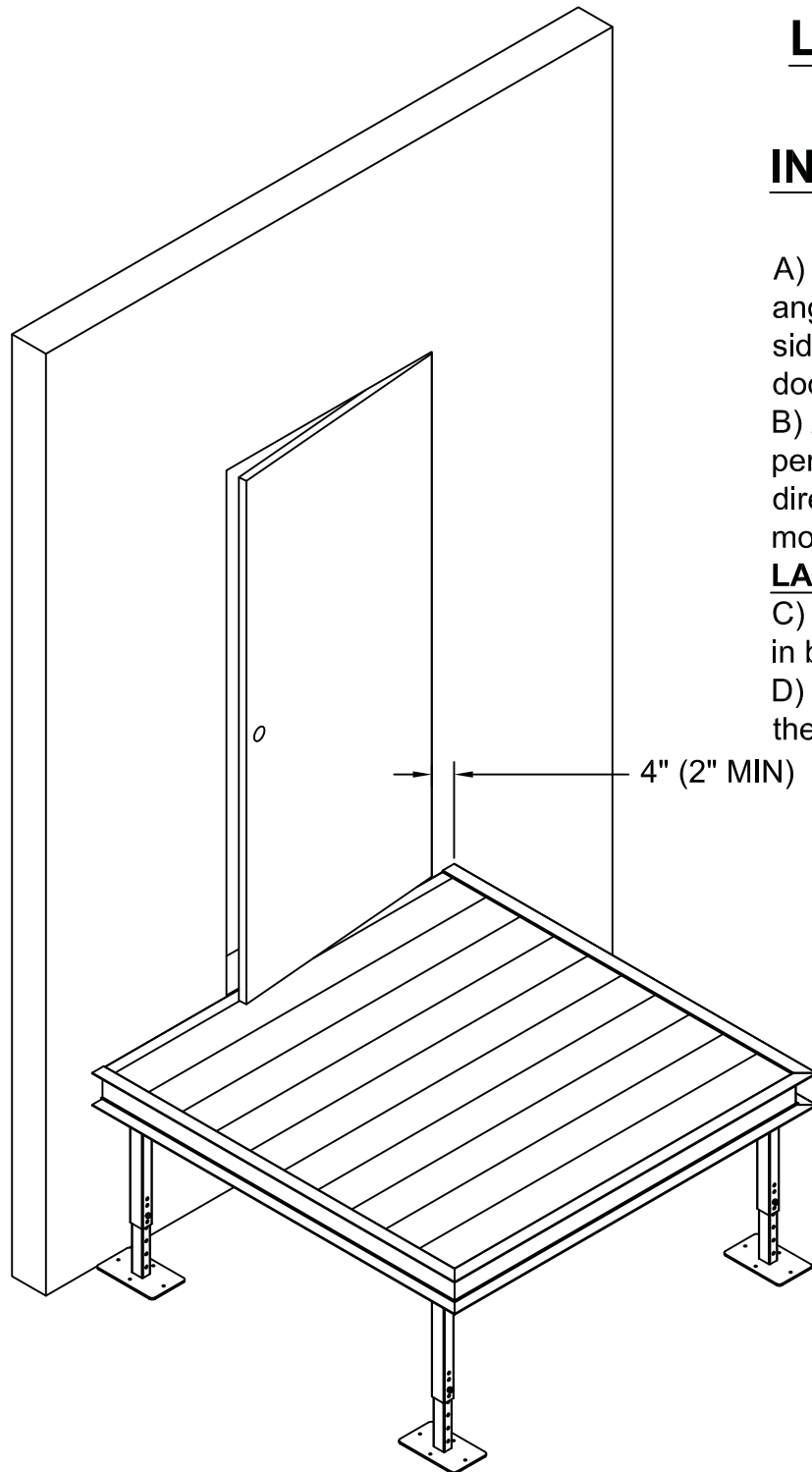
## INSTRUCTIONS:

A) Flip landing section over so that waking surface is facing up. Place angle side of landing towards building. A 2" to 4" space is needed on hinge side of door to allow for proper opening/closing of the door. Note: your door may open in opposite direction of that shown on drawing.

B) Adjust landing leg elevations as needed. Model Codes allow a 1:48 (2 percent) slope. It is recommended that this slope be achieved in the direction away from the building to help prevent any accumulation of moisture. **ONCE LANDING IS LEVEL, SECURELY TIGHTEN NUTS ON LANDING LEGS.**

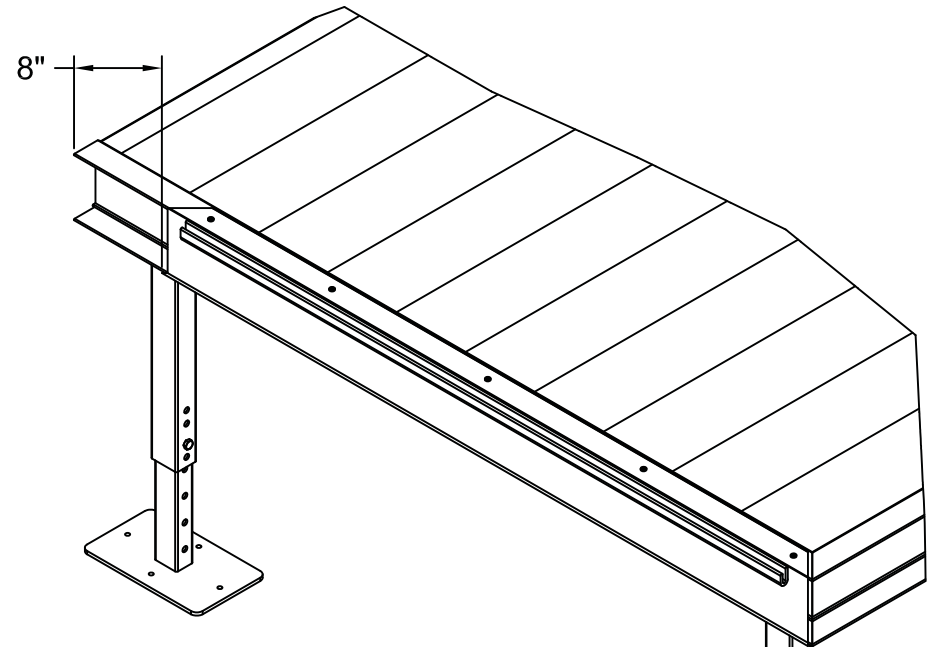
C) Locate the landing to building hardware bag. (For descriptions of parts in bag refer to page 5).

D) Using (4) 5/16" x 4 1/2" long lag screws and (4) 5/16" flat washers, lag the landing into building (as shown in section view below).



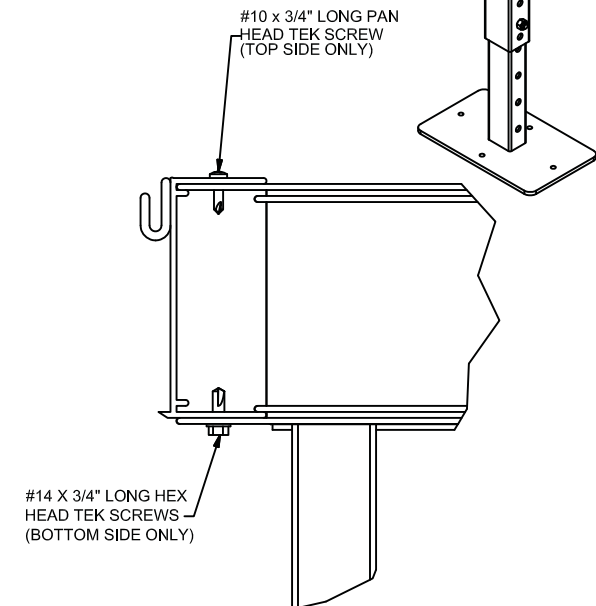
SECTION VIEW OF LANDING

## RAMP TO LANDING CONNECTOR ASSEMBLY



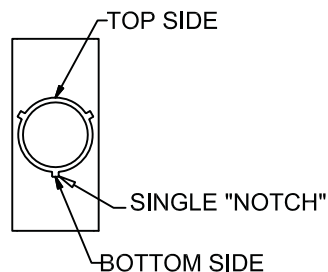
## INSTRUCTIONS:

- A) Locate ramp to landing connector (see page 1 for description). Position one end flush with outermost edge of landing (opposite the building). Make sure there is an 8" space on open side to allow 6" dead end rail installation.
- B) Using a rubber mallet, secure the ramp to landing connector to landing channel, making sure the hinge is facing upwards (as shown in section view).
- \*\*NOTE\*\*** Be sure not to contact hinge with hammer as it may damage hinge.
- C) Locate ramp to landing hardware bag. (For description of parts included in bag, refer to page 5).
- D) Secure top side of ramp to landing connector to landing using (5) #10 x 3/4" pan head Tek screws. Drill through pilot holes provided in connector channel.
- E) Secure bottom side of ramp to landing connector to landing using (5) #14 x 3/4" hex head Tek screws. Space same distance apart as the pan head screws used on top side.

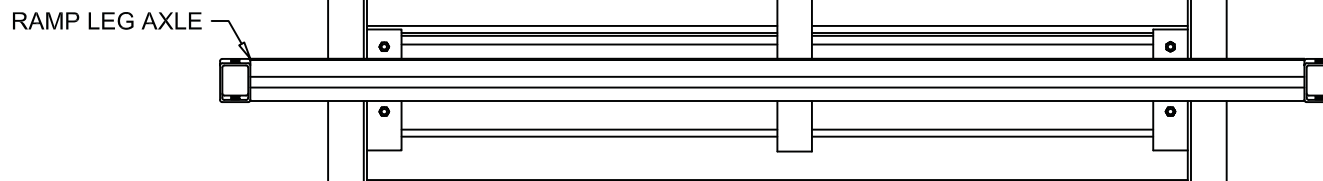


SECTION VIEW OF LANDING

# RAMP LEG ASSEMBLY TO RAMP



SIDE VIEW OF SWIVEL CONE



BOTTOM VIEW OF RAMP

## INSTRUCTIONS:

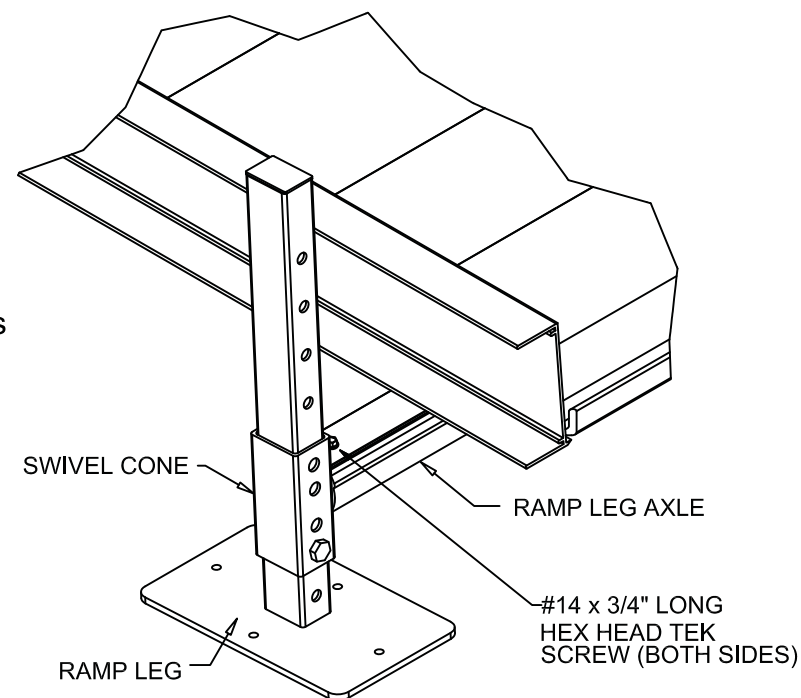
- A) Locate intermediate ramp section and turn upside down.  
B) Locate ramp leg axle and ramp leg assembly hardware bag (for descriptions of parts included in bag, refer to page 6).  
C) Using (4) 5/16" x 1" hex head cap screw and (1) 5/16" hex head nut; attach ramp leg axle to underside of intermediate ramp (as shown in picture).

### **TIGHTEN BOLT AND NUT SECURELY AT THIS TIME.**

- D) Insert ramp legs into swivel cones. Position of leg in cone is not critical at this time as adjustment of leg height to be made after ramp is turned over. Temporarily secure leg to cone using (1) 3/8" x 2 3/4" long S.S. hex head cap screw and (1) 3/8" hex head nut.

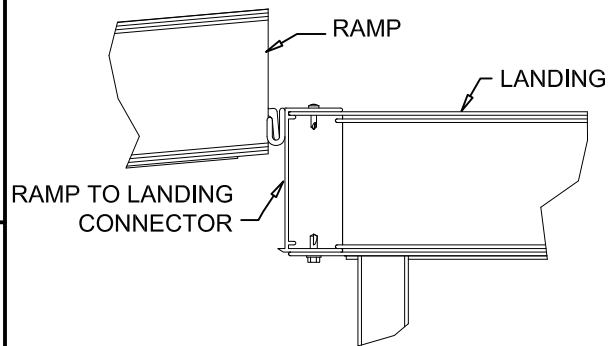
**Note:** The single notch on the swivel cone must be on the bottom (facing the ground / leg pad).

- E) Insert swivel cone into ramp leg axle. Do not secure at this time.

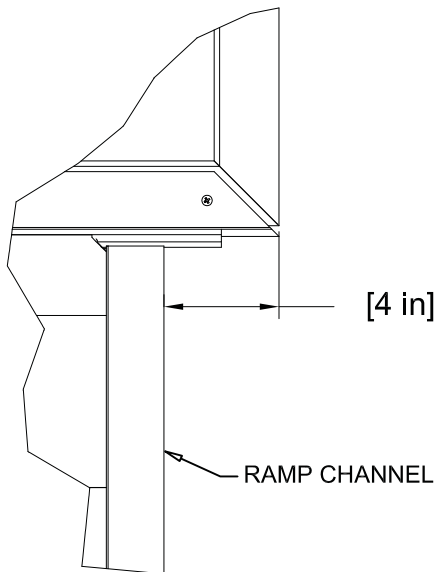
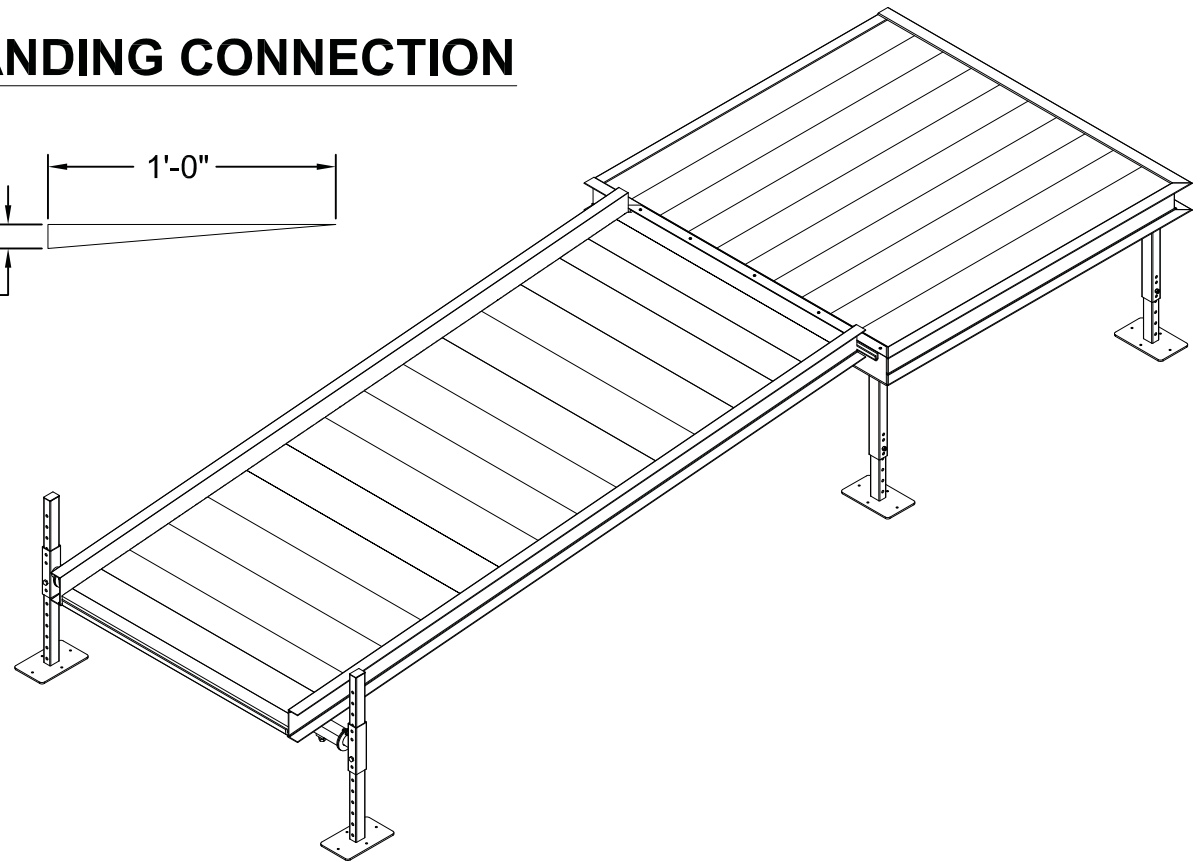
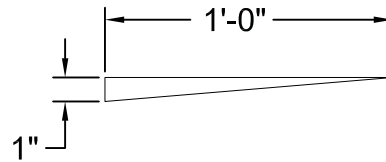


ISOMETRIC VIEW OF  
RAMP LEG ASSEMBLY

# INTERMEDIATE RAMP TO LANDING CONNECTION



**SIDE VIEW OF RAMP TO LANDING**



**TOP VIEW OF RAMP TO LANDING**

## INSTRUCTIONS:

- Flip intermediate ramp section over and place ramp "down hinge" into ramp to landing connector located on landing. Position ramp so there is a 4" space from the edge of the outside edge of the landing to the side of the ramp channel (as shown in top view).
- Reposition leg bolts as necessary to adjust legs on both sides of ramp so that ramp slopes 1" for every 12" of length (1:12 slope). Finger tighten nuts.
- Secure each swivel cone to ramp leg axle using (1) #14x3/4" Hex Head Screws thru pilot hole pre-drilled on flat surface of ramp leg axle (see isometric view on previous page).
- Insert plastic caps into open end of each leg.

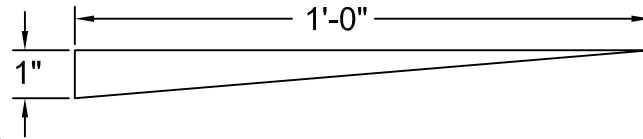


## LOWER RAMP TO UPPER RAMP CONNECTION

UPPER RAMP  
"UP HINGE"

LOWER RAMP  
"DOWN HINGE"

**SIDE VIEW OF  
RAMP TO RAMP**



1'-6"  
RAMP  
LEGS

2'-6" RAMP LEGS

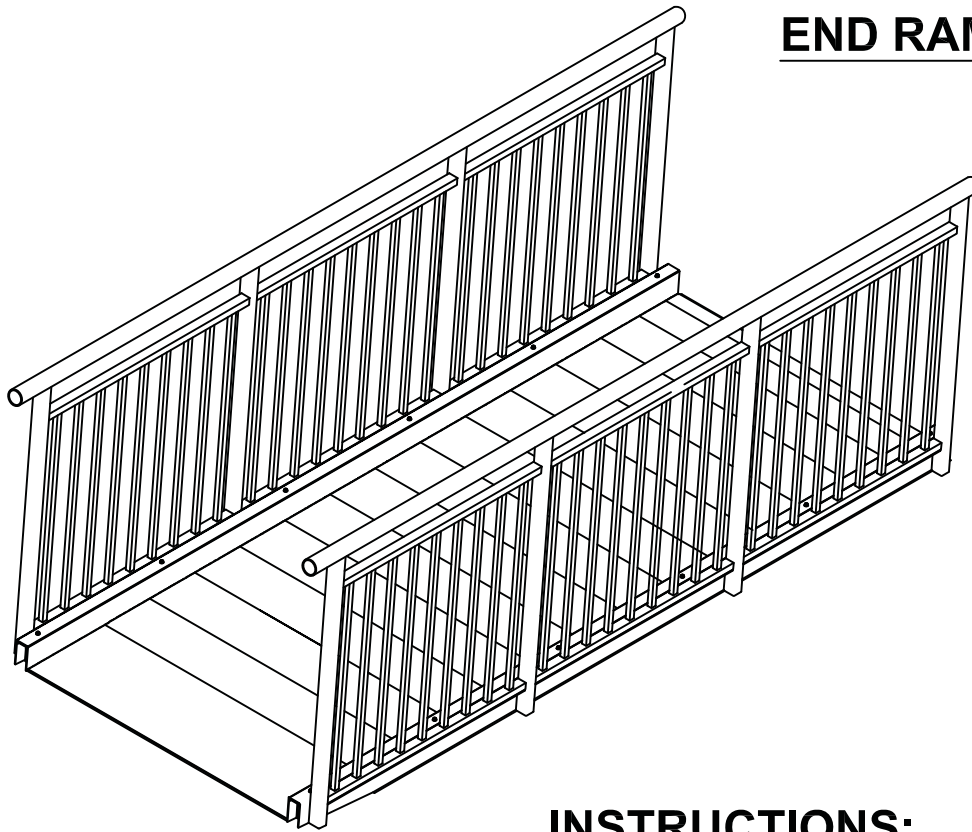
### **INSTRUCTIONS:**

A) Flip intermediate ramp section over and place ramp "down hinge" into upper ramp "up hinge".

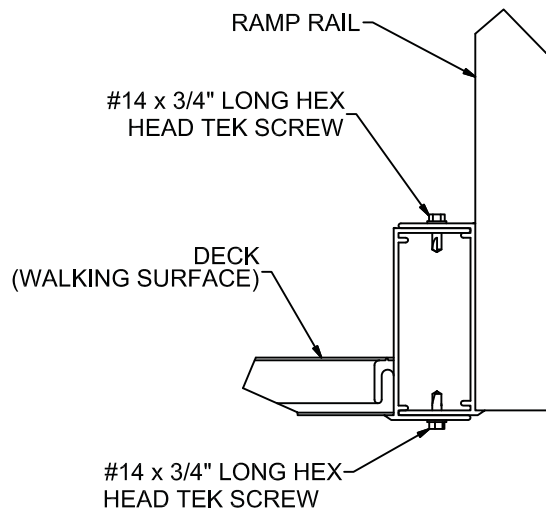
B) Adjust legs on the ramp so that lower ramp slopes 1" for every 1'-0" of length.

**FINGER TIGHTEN THE BOLTS AT THIS TIME.**

## END RAMP RAILS TO END RAMP ASSEMBLY



### INSTRUCTIONS:

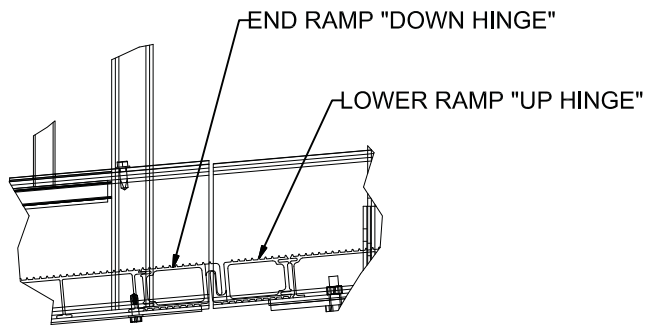


- A) Locate end ramp section and 34" Vertical Picket End ramp rails (pair). The rails have a notch in the channel, which is not on intermediate ramp rails.
- B) Using a rubber mallet, secure right side rail to end ramp. The notched end of the rail should be towards the transition plate (ground) on the end ramp. Make sure end of rail channel is flush with top of end ramp to allow for rails to line up properly.
- C) Secure top side of the rails to end ramp using #14 x  $\frac{3}{4}$ " Hex head Tek screws (found in bag of 120) by drilling through pilot holes provided on rail.
- D) Secure bottom side of the rail to end ramp channel using #14 x  $\frac{3}{4}$ " Hex head Tek screws (found in bag of 120). Space same distance apart as Tek head screws used on top side.

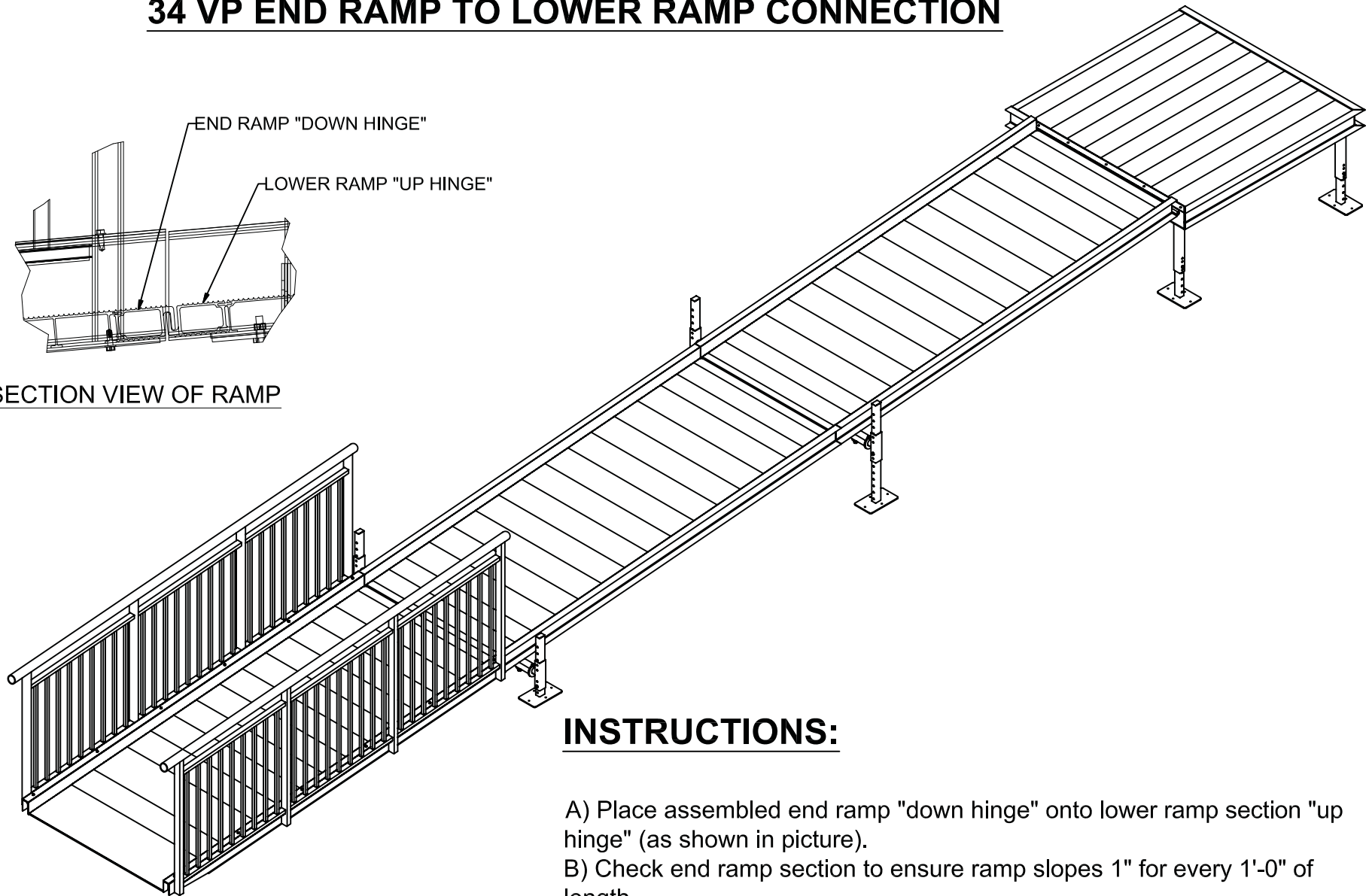
**REPEAT ABOVE STEPS FOR LEFT RAMP RAIL**

### SECTION VIEW OF RAMP RAIL ASS'Y

## 34 VP END RAMP TO LOWER RAMP CONNECTION



SECTION VIEW OF RAMP



### INSTRUCTIONS:

A) Place assembled end ramp "down hinge" onto lower ramp section "up hinge" (as shown in picture).

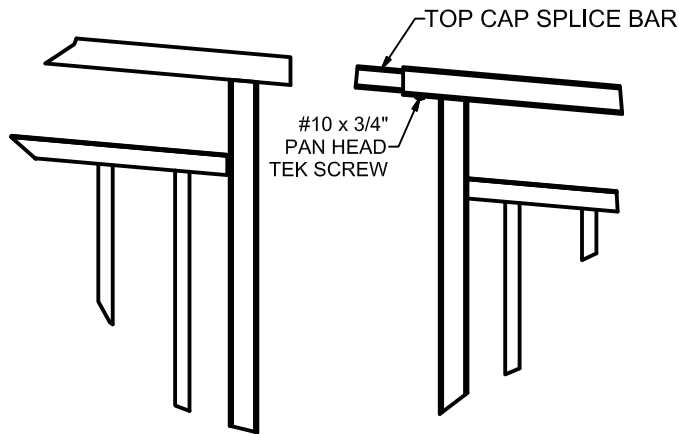
B) Check end ramp section to ensure ramp slopes 1" for every 1'-0" of length.

Uneven gaps between channels indicate ramp leg height adjustment is required.

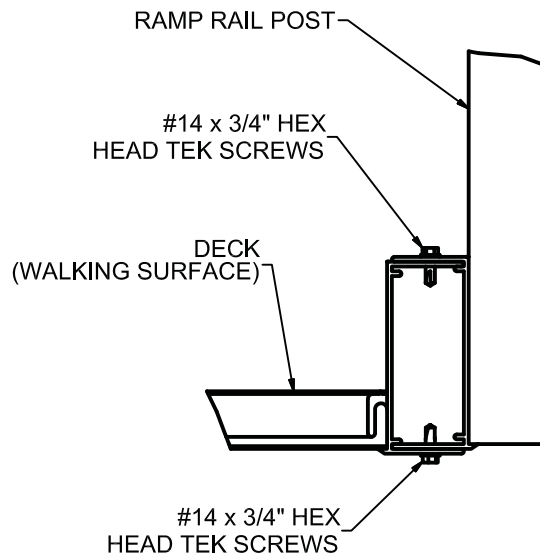
\*\*If ramp **DOES MAINTAIN** correct slope, you may securely tighten all bolts located on the ramp leg assemblies at this time.

C) Once slope is correct, securely tighten all bolts located on ramp leg assemblies.

# 34 VP SPLICE BAR INSTALLATION



SIDE VIEW OF RAMP RAILS  
(SPLICE BAR INSTALLATION)



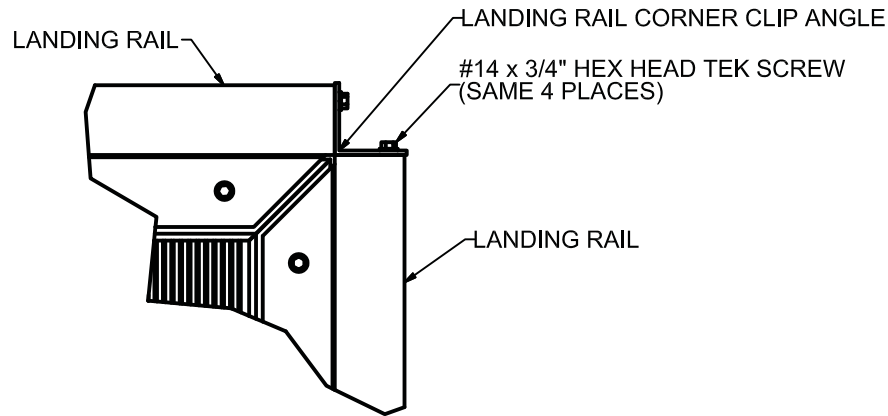
END VIEW OF RAMP RAIL

## INSTRUCTIONS:

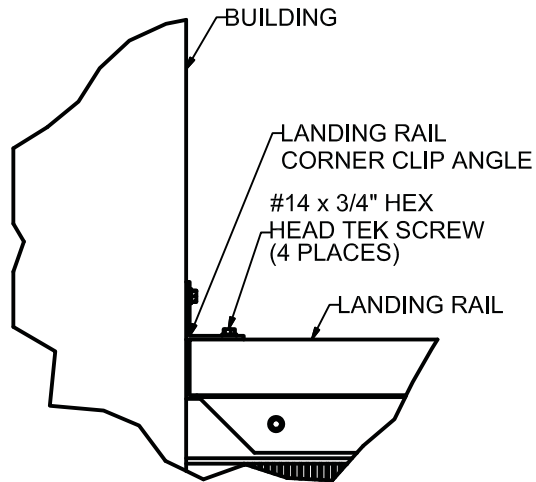
- A) Locate 34" top cap splice bar (part# 262) and (4) #10 x  $\frac{3}{4}$ " pan head Tek screws (from bag of 26). See Page 4 for description of parts.
- B) Position top cap splice bar approximately halfway into end ramp top cap. Secure top cap splice bar to upper end of top cap using (1) #10 x  $\frac{3}{4}$ " pan heads Tek screw through pilot hole on underside of top cap.
- C) Locate intermediate ramp rail and slide towards splice bars making sure rail channel is on top of ramp channel (as shown in end view). When splice bars come in contact with the opening, use rubber mallet to secure rail channel to ramp channel.
- D) To secure splice bars to intermediate rails, hammer rail from top down towards splice bars. You may have to tap splice bars to align them with openings in rail. If aligned properly, there should not be a gap between rails.
- E) Attach splice bar to intermediate ramp rail using (1) #10 x  $\frac{3}{4}$ " pan head Tek screw drilling through underside of grab rail. Repeat process to secure splice bar to top cap.
- F) Attach rail to ramp using #14 x  $\frac{3}{4}$ " hex head Tek screws (found in bag of 120), drilling through pilot holes found in top of channel; secure bottom side of rail to ramp using #14 x  $\frac{3}{4}$ " hex head Tek screws (found in bag of 120); space approximately same distance apart as Tek head screws on top side of rail.

## REPEAT ABOVE STEPS FOR ALL OTHER RAILS

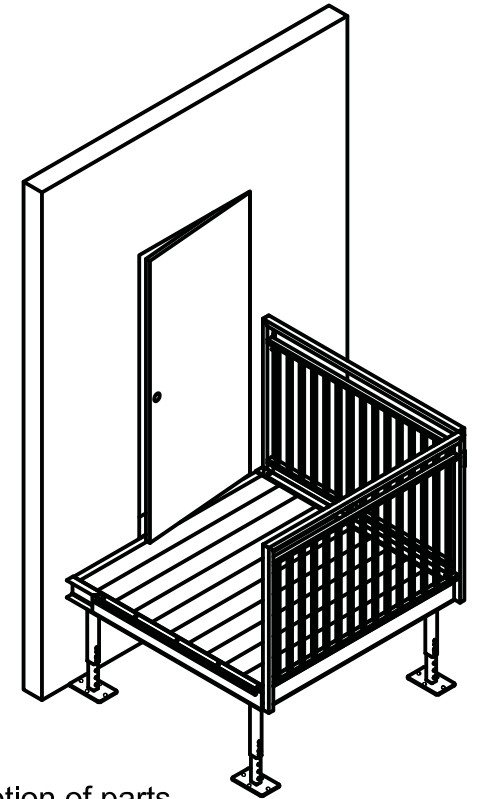
# LANDING RAIL INSTALLATION



TOP VIEW OF RAIL  
TO RAIL CONNECTION



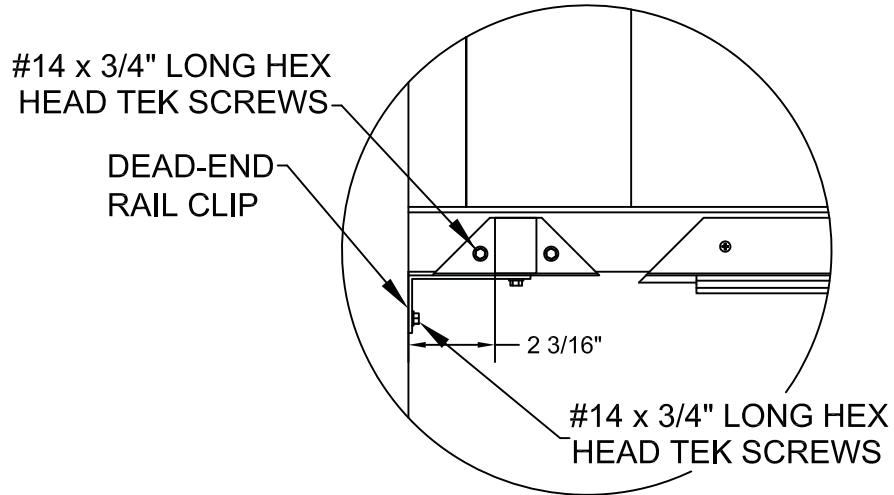
TOP VIEW OF RAIL  
TO BUILDING CONNECTION



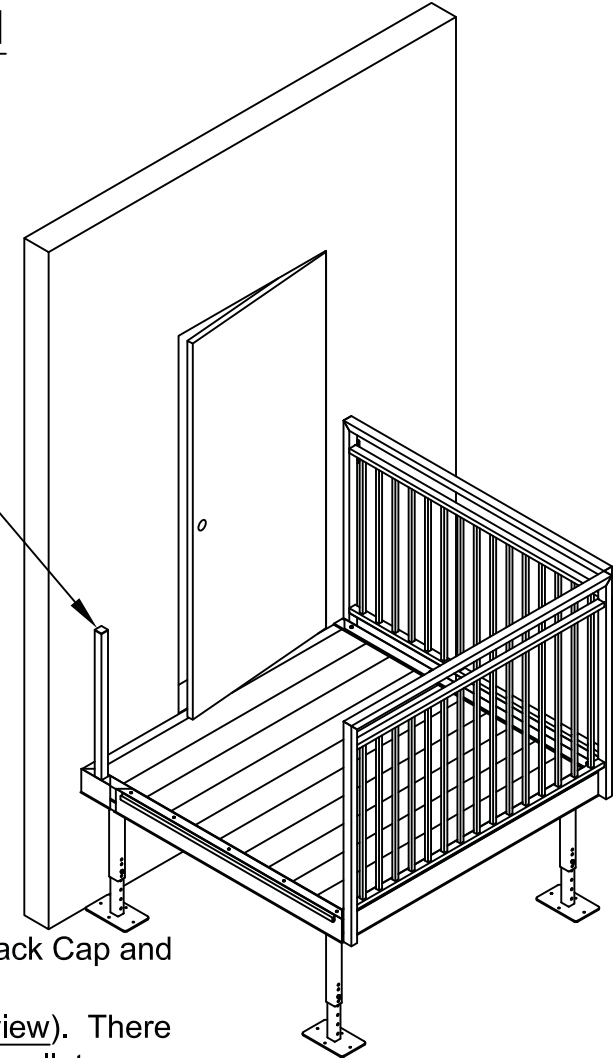
## INSTRUCTIONS:

- Locate the 5'-4" landing rails. See Page 1 for description of parts.
  - Position one side of rail flush with outermost edge of landing (as shown in top view). Using a rubber mallet, secure rail to channel, making sure that rail is fully seated.
  - Attach rail to landing using #14 x 3/4" hex head Tek screws (found in bag of 120); drilling through pilot holes found on top of rail channel.
  - Secure bottom side of rail to landing channel using #14 x 3/4" hex head Tek screws (found in bag of 120). Space approximately the same distance apart as Tek head screws used on top side.
  - Align second 5'-4" rail to edge of landing opposite building or as required to accommodate your configuration (as shown in top view).
- REPEAT STEPS "B" AND "C" TO SECURE THE SECOND RAIL TO THE LANDING.**
- Secure both landing rails together using (1) landing rail corner clip and (4) #14 x 3/4" Tek head screws (see detail). Space landing rail corner clip approximately 6" from top of rail.
  - Secure other landing rail to building using (1) landing rail corner clip and (4) #14 x 3/4" Tek head screws (see detail). Space landing rail corner clip approximately 6" from top of rail.

## DEAD END RAIL INSTALLATION



SQUARE  
BLACK CAP



### INSTRUCTIONS:

A) Locate the 6" dead end rail, (8) #14 x 3/4" Hex head Tek screws, (1) square Black Cap and (1) Dead-end rail corner clip.

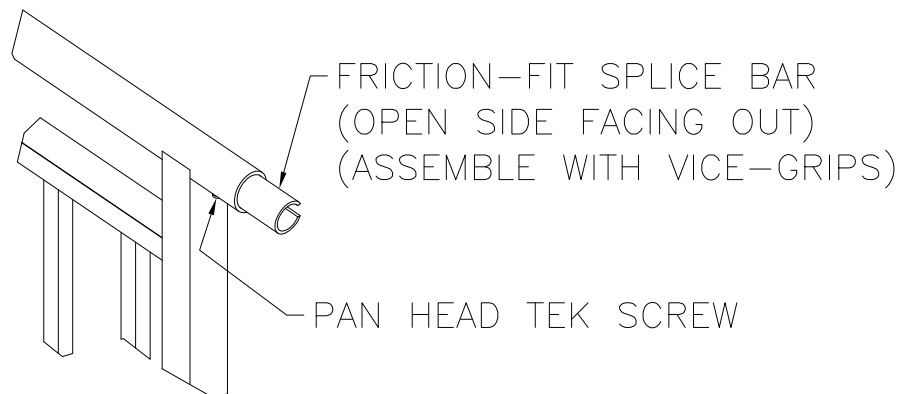
B) Position one side of rail flush with outermost edge of landing (as shown in top view). There should be a 2 3/16" gap between dead end rail post and the wall. Using a rubber mallet, secure rail to channel. Make sure rail is fully seated. Secure black cap into top of dead-end rail.

C) Attach rail to landing using #14 x 3/4" Hex head Tek screws (found in the bag of 120); drilling through pilot holes found on top of rail channel.

D) Secure bottom side of rail to landing channel using (2) #14 x 3/4" Hex head Tek screws (found in bag of 120). Space approximately same distance apart as Tek head screws used on top side.

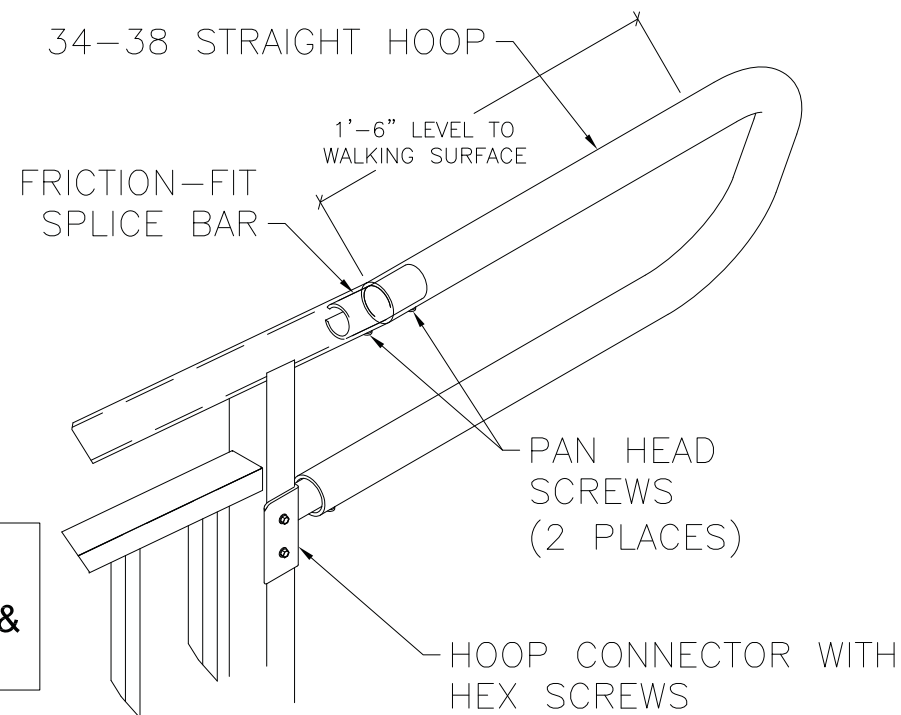
E) Secure dead end rail to building using (1) dead end rail angle and (4) #14 x 3/4" Hex head Tek screws (see detail). Space angle approximately 6" from top of rail.

# 34" OR 38" HIGH "STRAIGHT HOOP" CONNECTIONS



ISOMETRIC VIEW OF  
FRICION-FIT SPLICE BAR

**TO BE USED FOR:  
UPPER STRAIGHT HOOPS,  
LOWER STRAIGHT HOOPS &  
END RAMP HOOPS**



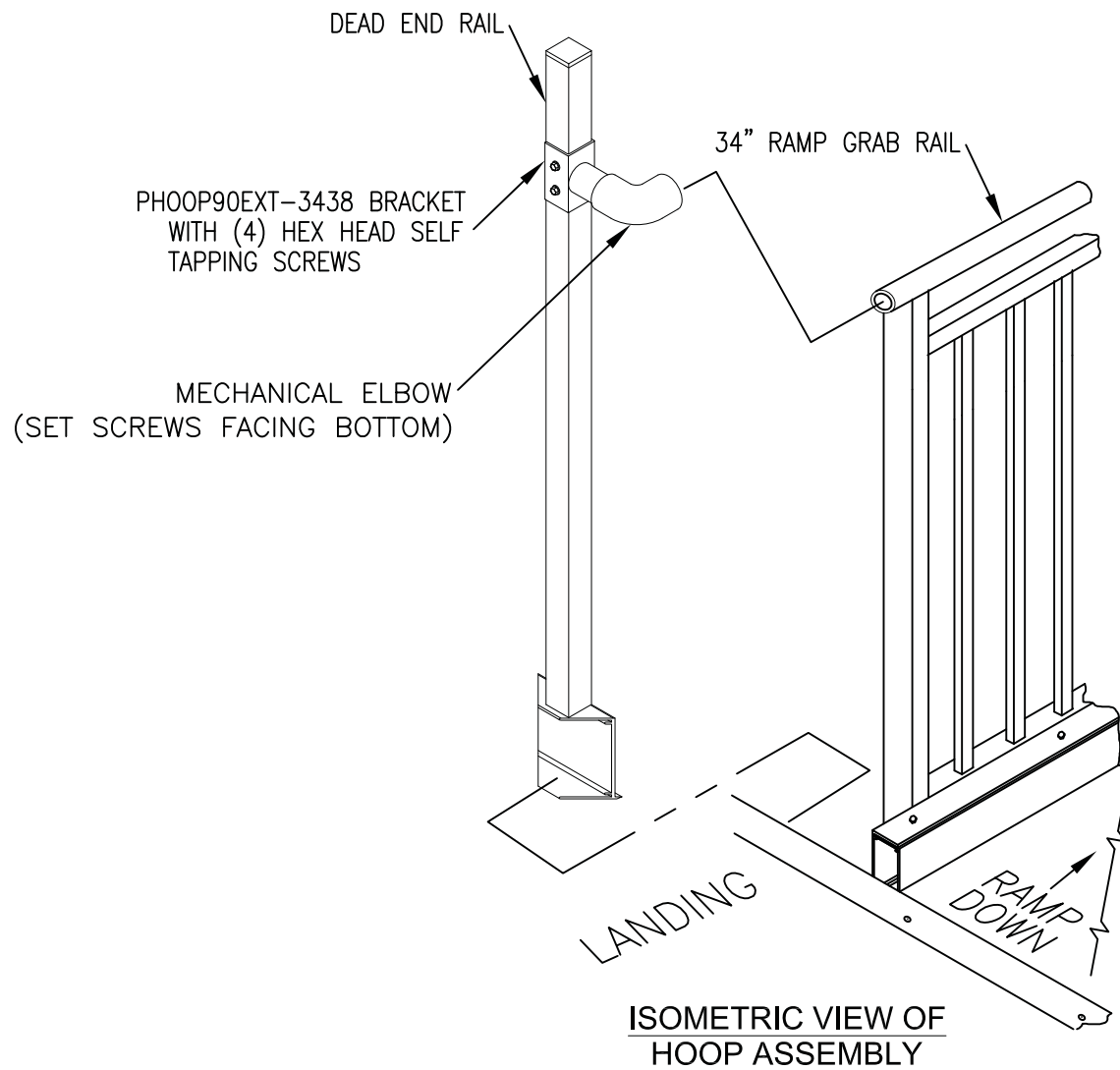
ISOMETRIC VIEW OF  
HOOP ASSEMBLY

## **INSTRUCTIONS:**

- A) Locate (1) 38-34 hoop, (1) friction-fit splice bar (RTM #262A), (3) Pan head Tek screws, (4) Hex Head Tek Screws, and (1) Hoop Conn Post (RTM #PHoopcon34-38)
- B) Using Vice Grips slide friction-fit splice bar HALFWAY into end of ramp grab rail, making sure that the "open end" is facing sideways. Secure using (1) pan head screw on underside of grab rail.
- C) Place Hoop Connector Post (PHoopCon) into one end of the 38-34 hoop. DO NOT SECURE TO HOOP AT THIS TIME.
- D) Using Vice Grips, squeeze the friction-fit splice bar so that the hoop engages. Using a rubber mallet, hammer the end of the hoop to fully seat the friction-fit splice bar.
- E) Level Hoop. (To level hoop with walking surface: apply downward pressure for "upper hoop" or upward pressure for "lower hoop")
- F) While hoop is level, slide PHoopCon over ramp post. Connect PHoopCon34-38 to ramp post using (4) Hex head Tek Screws. Secure to hoop side using (1) Pan head Tek screw.
- G) Secure hoop side of friction-fit splice bar with (1) pan head tek screw on underside of grab rail.



# 34" OR 38" HIGH "90 DEGREE DEAD END" CONNECTION

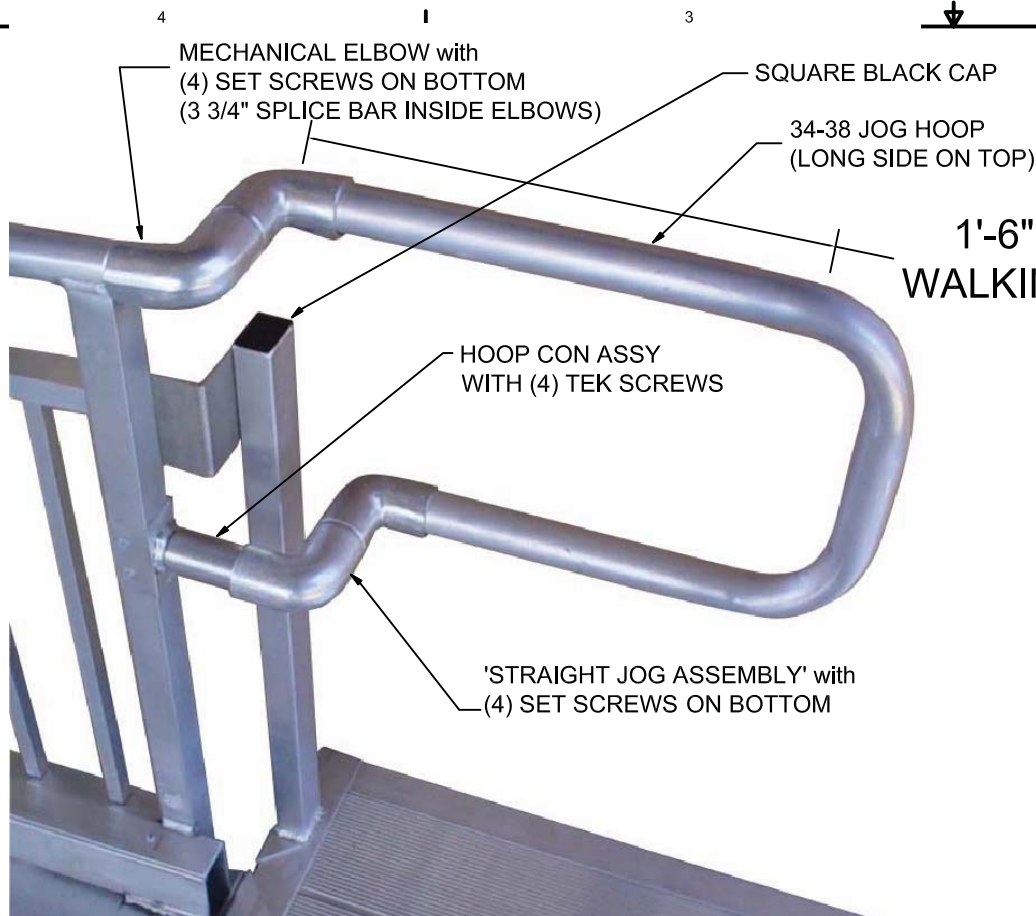


## INSTRUCTIONS:

- A) Locate (1) PHOOP90EXT-3438, (1) Mechanical Elbow, (4) Hex head Tek screws.
- B) Place PHOOP90EXT-3438 into Mechanical Elbow. The set screws on the elbow should be facing down. DO NOT FASTEN.
- C) Place open end of Mechanical Elbow into the end of the ramp grab rail. DO NOT FASTEN.
- D) Slide Channel of PHOOP90EXT-3438 over dead end rail, making sure that channel is fully seated against dead end post; and fasten each side using Hex Head Tek Screws.
- E) Fasten set screws on Mechanical Elbow.

# OPTIONAL 34" OR 38" JOG HOOP CONNECTION

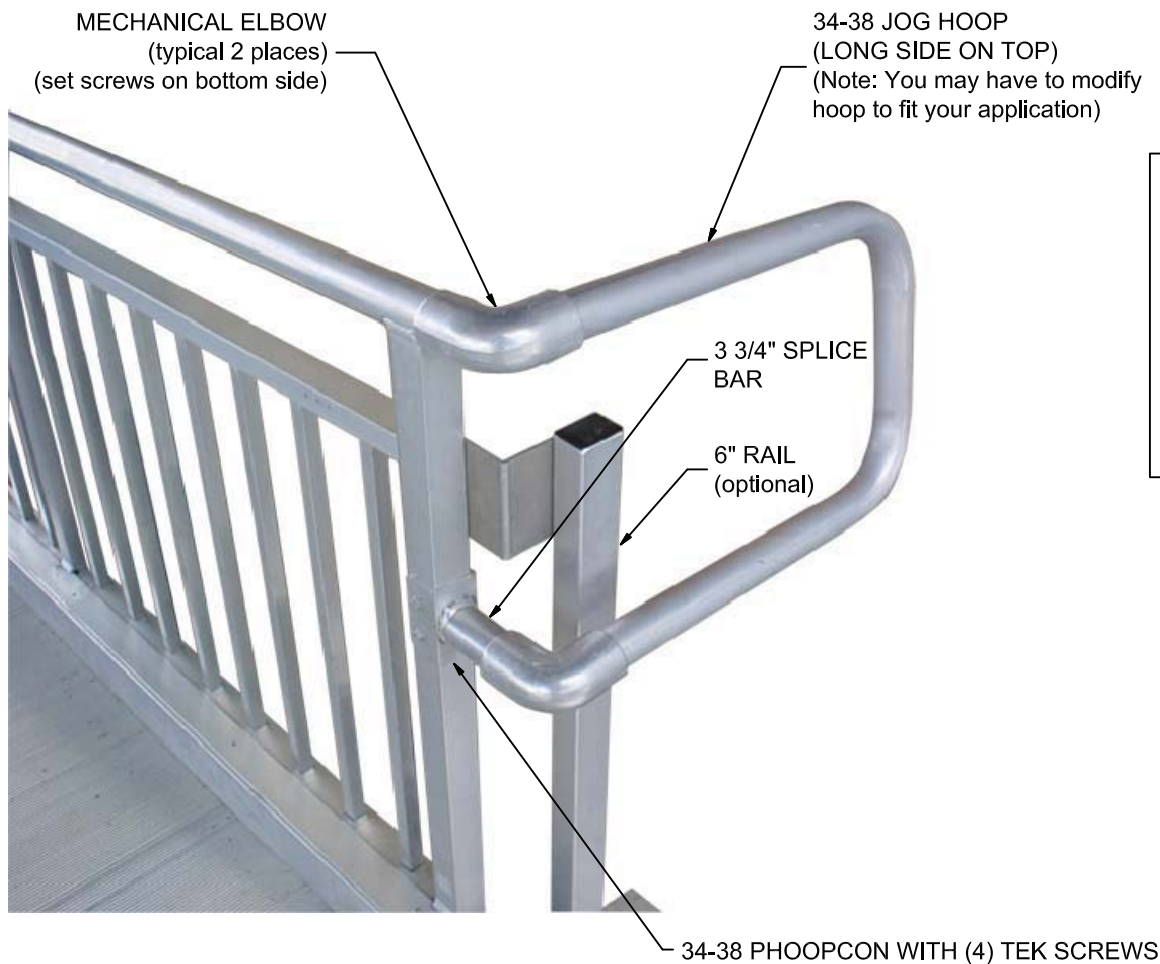
1'-6" LEVEL TO  
WALKING SURFACE



## ELEVATION VIEW OF HOOP ASSEMBLY

### INSTRUCTIONS:

- 1) Locate (1) 3438JHoop, (4) Mechanical Elbows, (2) Jog hoop splice bars, (1) PHoop Connector and (4) Hex Head Tek Screws
- 2) Place (1) Jog hoop splice bar into one side of a Mechanical Elbow. Tighten set screw. Place another Mechanical Elbow on to splice bar, forming "S" shape. Mechanical elbows should be rotated at 5 degrees, so that the upper hoop can be level to walking surface. Make sure that set screws are on same side. Tighten set screw.  
REPEAT PROCESS FOR OTHER "JOG ASSEMBLY" BUT KEEP "S" SHAPE STRAIGHT
- 3) Place 5-degree "Jog Assembly" into top cap of ramp rail, making sure that set screws are on bottom side.
- 4) Place PHoopCon into "Straight jog assembly". Slide short end of 3438JHoop into other end of "straight jog assembly", making sure that the set screws are facing down.
- 5) Slide long end of 34-38 Jog Hoop into upper Jog Assembly, making sure that PHoopCon slides over Dead end rail. Tighten set screw at upper hoop connection. Adjust rotation of upper jog assembly to allow hoop to remain level to walking surface.
- 6) Attach PHoopCon to Dead end rail using (4) #14 x 3/4" Hex Head Tek Screws. Secure to hoop end by tightening set screw on mechanical elbow.



## 34" OR 38" HIGH 90° HOOP CONNECTION

**NOTE: THIS  
CONFIGURATION IS USED IF  
YOU HAVE A LANDING  
THAT CANNOT  
ACCOMMODATE A JOG  
HOOP**

### ELEVATION VIEW OF 90 DEGREE HOOP ASSEMBLY

### **INSTRUCTIONS:**

1) Locate (1) 3438JHoop, (2) Mechanical Elbows, (1) Jog hoop 3 3/4" splice bar, (1) PHoop38 Connector and (4) Hex Head Tek Screws.

2) Place Mechanical elbow on to top of ramp rail. Tighten set screw.

3) Place Splice Bar into a mechanical elbow. Tighten set screw.

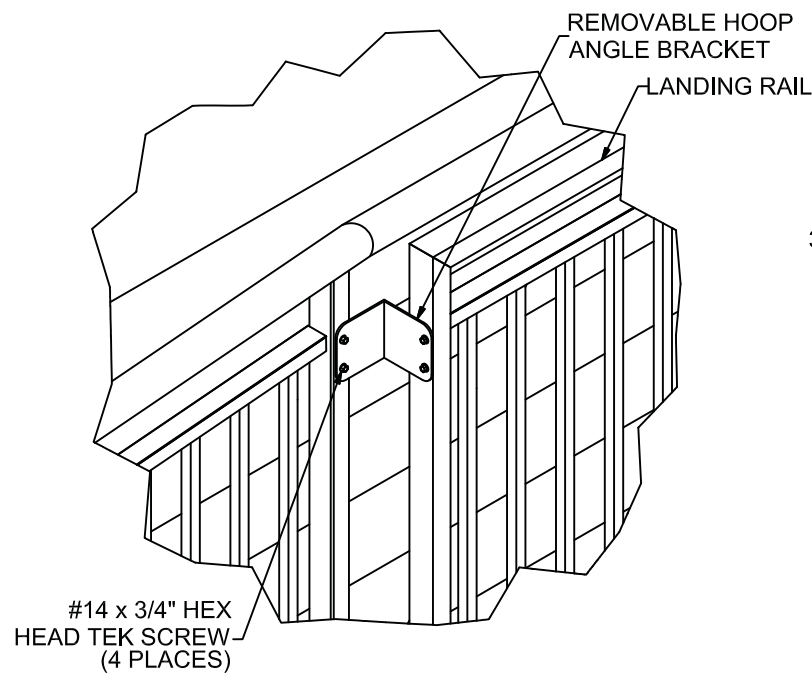
4) Slide PHoopCon38 into splice bar and position on ramp rail. DO NOT FASTEN TO RAIL AT THIS TIME.

5) Slide long end of 34-38 Jog Hoop into "upper" Mechanical Elbow, and short end of hoop into Lower Mechanical Elbow.

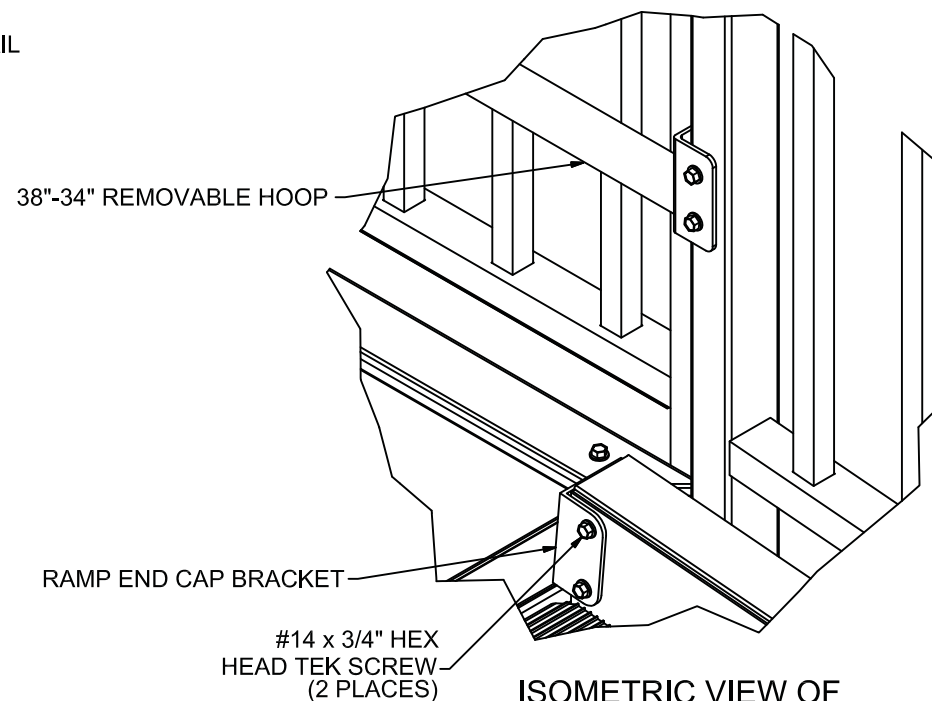
NOTE: You may have to trim upper end of hoop to align correctly

6) Attach PHoopCon38 to Dead end rail using (4) #14 x 3/4" Hex Head Tek Screws. Secure to hoop end by tightening set screw on mechanical elbows.

# REMOVABLE HOOP ANGLE BRACKET & END CAP INSTALLATION



ISOMETRIC VIEW OF  
REM. HOOP ANGLE BRACKET



ISOMETRIC VIEW OF  
END CAP BRACKET

## INSTRUCTIONS:

Locate the (2) upper ramp end caps and removable hoop angle bracket.

### **STEPS TO ATTACH END CAP BRACKET TO RAMP RAIL:**

- A) Place (1) upper ramp end cap over hole in upper ramp channel (as shown in picture).
- B) secure to ramp channel using (2) #14 x 3/4" hex head Tek screws (found in bag of 120)

**\*\*REPEAT STEPS B & C TO SECURE OTHER BRACKET TO RAMP\*\***

### **STEPS TO ATTACH REM. HOOP ANGLE BRACKET TO RAIL:**

- A) Locate removable hoop angle bracket.
- B) Attach removable hoop angle bracket to hoop side of ramp (as shown in picture). Position bracket 5" down from top of landing rail.
- C) Secure removable hoop angle bracket to landing rail/ramp rail using (4) #14 x 3/4" hex head Tek screws.

# VARIOUS LANDING CONNECTIONS:

## RECTANGULAR LANDINGS TO BUILDING:

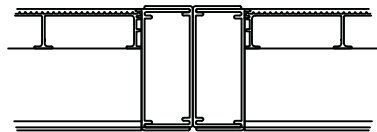
- A) Attach Blank Channel to landing using #10 and #14 x 3/4" Tek screws, 5 top (pan head) and 5 bottom (Hex).
- B) Flip landing section over so that waking surface is facing up. Place side of landing with blocks towards building. A 2" to 4" space is needed on hinge side of door to allow for proper opening/closing of the door.
- C) Make sure landing is level. Adjust leg heights as needed. **ONCE LANDING IS LEVEL, SECURELY TIGHTEN REMAINING BOLTS ON LANDING LEGS.**
- D) Locate the landing to building hardware bag. (For descriptions of parts in bag refer to page 5).
- E) Using (4) Ø5/16" x 4 1/2" long lag screws and (4) 5/16" flat washers, lag the landing into building (see view D).

## LANDING TO LANDING CONNECTION:

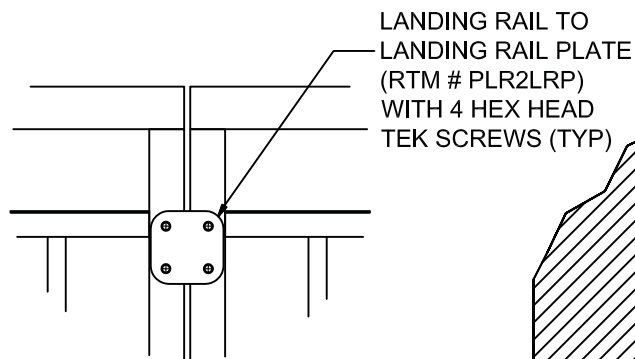
- A) Attach Blank Channel to landing using #14 x 3/4" Hex Head Tek screws, 5 top and 5 bottom side.
- B) Using PL2LCON (angle), fasten to underside of landing (2 per 5'-0" span) with 1/4" long self tapping screws, provided.

## LANDING RAIL CONNECTION:

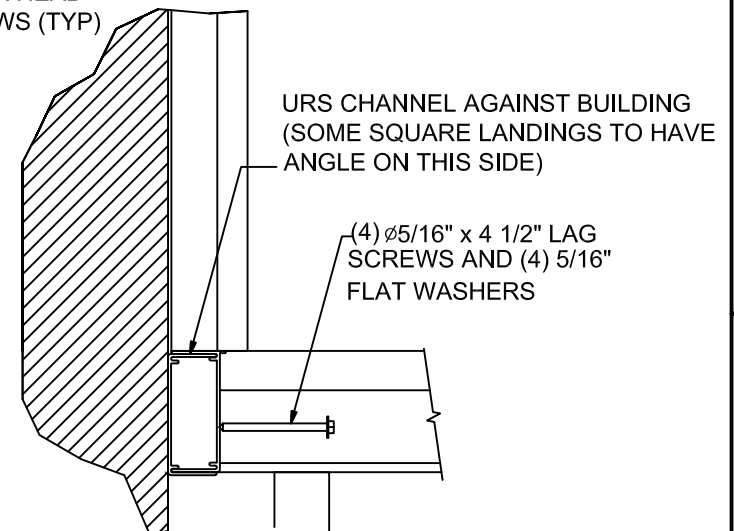
- A) Attach Landing Rails to Landing using same steps as on page #18.
- B) Attach 3" x 3" plate to rails as shown in view B (top of rail) using (4) #14 x 3/4" Tek Screws per plate.



VIEW A: LAND TO LAND  
SECTION VIEW



VIEW B: RAIL CONNECTION  
DETAIL (TOP OF RAIL)



SECTION VIEW OF  
LANDING TO BUILDING

# ANTI-SKID TAPE INSTALLATION:

## NOTE:

ALL SMOOTH CHANNELS AND SURFACES ALONG PATH OF TRAVEL SHALL BE COVERED WITH ANTI-SKID TAPE, TO REDUCE THE RISK OF SLIPPING DURING INCLEMENT WEATHER. THE FOLLOWING ARE SOME APPLICATIONS WHERE TAPE SHOULD BE UTILIZED. TAPE WILL BE PROVIDED IN HARDWARE BAG INCLUDED WITH THE SYSTEM.

## LANDING TO LANDING CONNECTION:

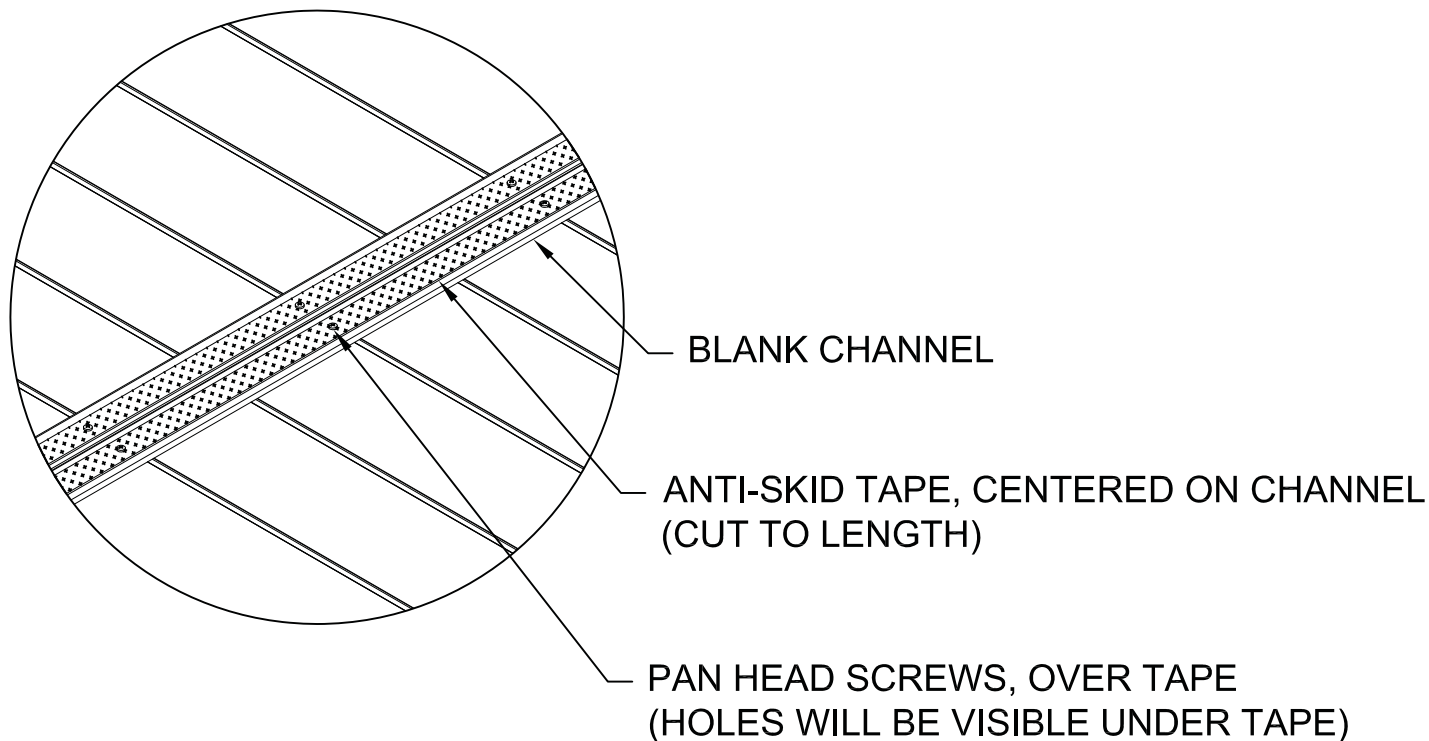
A) INSTALL TAPE OVER BLANK CHANNEL PRIOR TO SECURING CHANNEL TO LANDING WITH PAN HEAD SCREWS.

## LANDING TO BUILDING CONNECTION:

A) INSTALL TAPE OVER BLANK CHANNEL UNDERNEATH DOOR THRESHOLD, PRIOR TO SECURING CHANNEL TO LANDING WITH PAN HEAD SCREWS.

## RAMP TO LANDING LOWER CONNECTOR:

A) INSTALL TAPE OVER CHANNEL PRIOR TO SECURING TO LANDING WITH PAN HEAD SCREWS.





# LAND TO LAND TUBE INSTALLATION:

A) INSTALL (1) LANDING TO LANDING TUBE IN CENTER OF LANDING, SECURING WITH RUBBER Mallet.

B) PLACE NEXT LANDING TO LANDING CONNECTOR ON SIDE OF LANDING, MAKING SURE THAT YOU CAN FASTEN ON BACK SIDE OF CHANNEL (MOVE TO SIDE OF RECIEVER IF NECESSARY).

REPEAT STEP "B" FOR OTHER CONNECTOR.

C) FASTEN TO URS CHANNEL USING (2) HEX HEAD TEK SCREWS PER TUBE.

D) SLIDE OTHER URS CHANNEL OVER TUBES, MAKING SURE THAT EDGES OF LANDINGS ARE SQUARE TO EACHOTHER.

FASTEN TO LANDING FOLLOWING STEP "C" ABOVE.

E) INSTALL ANTI-SKID TAPE ON TOP OF URS CHANNEL (SEE APPROPRIATE PAGE FOR DETAILS).

