# Wenger

# Owner's Manual STRATA<sup>®</sup> Event Staging and Tent Floor System

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Visit the STRATA Event Staging and Tent Floor System web page at wengercorp.com for more information.

**Note:** Please read and understand these instructions before proceeding. **Note:** If you need additional information, contact Wenger Corporation using the information below.

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# Important User Information

#### General

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In no event will Wenger Corporation be liable for technical or editorial omissions made herein, nor for direct, indirect, special, incidental, or consequential damages resulting from the use or defect of these instructions. The manufacturer reserves the right to change this product at any time.

The information in this document is not intended to cover all possible conditions and situations that might occur. The end user must exercise caution and common sense when assembling or installing Wenger Corporation products. If any questions or problems arise, call the Wenger Corporation at (800) 4WENGER (493-6437) or +1-507-455-4100 worldwide.

#### Manufacturer

The STRATA Event Staging and Tent Floor System is manufactured by:

Wenger Corporation 555 Park Drive Owatonna, MN 55060 (800) 4WENGER (493-6437) • +1 (507) 455-4100 wengercorp.com

#### Intended Use

- This product is intended for indoor use in normal ambient temperature and humidity conditions it must not be exposed to prolonged outside weather conditions.
- This product is intended to be assembled, installed and used only as described in these instructions.

#### Warranty

Warranty information is available at wengercorp.com.

# Important User Information (continued)

#### Event Staging and Tent Floor Intended Use

- The Wenger Corporationn STRATA event staging and tent floor is intended to be used inside and outside during fair weather conditions with the following limitations.
- The STRATA event staging and tent floor components are not intended to be exposed to extended periods of wet and humid conditions or to be exposed to severe outdoor weather conditions.
- The STRATA event staging and tent floor components are intended to be used in a way that complies with the recommended load limits defined in these instructions, complies with the statements of intended use in these instructions, and complies with all warnings and cautions defined in these instructions.
- The STRATA plywood deck is intended to comply with the information in plywood deck specification when assembling the kit or replacing the deck.
- The STRATA finished deck is intended to support a maximum uniform load limit of 125 lb/ft<sup>2</sup> (610 kg/m<sup>2</sup>).
- The STRATA leveled floor is intended to use cross bracing when the stage height is greater than 48" (1219 mm).

#### Accessories Intended Use

- STRATA Event staging and tent floor accessories are intended to be used only with STRATA event staging and tent floor components.
- STRATA event staging and tent floor accessories are intended to be installed and used as described in these instructions and in the STRATA event staging and tent floor accessories installation instructions.
- The STRATA indoor beam cart is intended for indoor use in normal ambient temperature and humidity conditions it is not intended to transport or store components on outside surfaces.
- The STRATA articulating leveling foot is intended to support a maximum load limit of 8000 lbs (35.6 kn) for each foot.
- The STRATA articulating leveling foot, when used on finished floor surfaces, is intended to have a pad between the floor surface and the bottom surface of the foot.

#### STRATA Cart Load Capacity

- The STRATA indoor rail cart is intended to support an evenly distributed maximum load of 2600 lbs (1179 kg).
- The Stage cart is intended to support an evenly distributed maximum load of six STRATA decks.
- The STRATA outdoor cart is intended to support an evenly distributed maximum load of 1200 lbs (544 kg).

#### Installation

- The STRATA event staging and tent floor installation and use must comply with local regulations and codes.
- All personnel (including all temporary workers) installing or maintaining the STRATA event staging and tent floor must read and understand this entire manual and other related installation instructions.

# Important User Information (continued)

#### **Guardrail Specifications**

### AWARNING

The rail plate assembly can be used by the end user to construct guardrails by attaching end user supplied uprights and rails. The design must comply with the International Building Code specifications and local codes and regulations contained in this document. See "End User Guardrails".

### AWARNING

In no event will Wenger Corporation be liable for direct, indirect, special, incidental, or consequential damages resulting from the end user design and construction of guardrails from materials other than STRATA accessories attached to STRATA components. The operator must observe local regulations and exercise caution and common sense when constructing their own guardrails.

Any end user guardrail design must comply with the following International Building Codes:

- The International Building Code, section 1607.7.1 states: Handrail assemblies and guards shall be designed to resist a load of 50 pounds per linear foot (0.73 kN/m) applied in any direction at the top and to transfer this load through the support structure.
- The International Building Code, section 1607.7.1.1 states: Handrail assemblies and guards shall be able to resist a single concentrated load of 200 pounds (0.89 kN), applied in any direction at any point along the top, and have attachment devices and supporting structure to transfer this loading to appropriate structural elements of the building. This load need not be assumed to act concurrently with loads specified in the preceding paragraph [section 1607.7 above].
- The International Building Code, section 1607.7.1.2 states: Intermediate rails (all those except the handrail), balusters and panel fillers shall be designed to withstand a horizontally applied load of 50 lbs (0.22 kN) on an area not to exceed 1 square foot (305 mm<sup>2</sup>) including openings and space between rails. Reactions due to this loading are not required to be superimposed with those of either preceding paragraph.
- The International Building Code, section 1607.7.1.2 states:

When a handrail and guards are designed in accordance with the provisions for allowable stress design (working stress design) exclusively for the loads specified in Section 1607.7.1, the allowable stress for the members and their attachments are permitted to be increased by one-third.

# **Safety Precautions**

Throughout this document you may find cautions and warnings which are defined as follows:

- WARNING: Failure to follow the instruction could result in serious injury or damage to property.
- CAUTION: Failure to follow the instruction could result in minor injury or damage to property.

Read and understand all of these safety instructions before any assembly, installation or use.

#### General

### 

Make sure anyone assembling, installing or using these products has read and understands these instructions.

### AWARNING

Failure to comply with Warnings and Cautions in this document or on the equipment can result in damage to property or injury.

#### Set Up and Usage

### AWARNING

Assembly requires that two or more persons work together. Some components are heavy and are difficult to handle alone.

### AWARNING

A dangerous pinch point develops when placing decks onto main beams, when connecting spacer beams to main beams, and when connecting main beams to main beams.

### AWARNING

If a wood board is not attached to the beam cap, suitable supports must be placed under the beam cap. The beam cap is not capable of supporting heavy loads without support, either a 2x4 or 4x4 board or some other type of support between the beam cap and the ground.

### AWARNING

When assembling plywood decks, reduced loading capacity can result if the plywood does not comply with minimum specifications.

### **AWARNING**

Never walk or stand on exposed main beams.

### AWARNING

Always assemble diagonal braces to main beams and spacer beams whenever the leveled floor height is 24" (610 mm) or greater.

### 

Additional cross bracing is required for all flooring 48" (1219 mm) or higher.

### AWARNING

Always wear safety glasses and safety shoes and use heavy work gloves when working on the STRATA Event Staging And Tent Floor.

### AWARNING

When assembling STRATA Event Staging And Tent Floor accessories or attaching guard rails always observe the warnings and other information contained in these instructions.

Continued on the following page.

# **Safety Precautions (continued)**

#### Set Up and Usage (continued)

# AWARNING

When spanning pools, landscaping or other obstructions where legs or beam caps are not convenient and standard construction joists are used to support beam caps, it is the responsibility of the floor installer to use a joist of sufficient depth to span the desired length. Using undersized joists will reduce the floor loading capacity and may result in partial or total failure of the floor.

### AWARNING

Maximum unsupported span under a beam cap is 24" (610 mm).

### 

Two or more people must always work together when setting up a laydown floor.

### AWARNING

Main beams longer than 16' (4877 mm), interconnector must be placed within 6" (152 mm) of the beam mid-point to prevent failure of the floor.

### 

All main beams must have support through an interconnector every 8' (2438 mm).

### **AWARNING**

Never exceed a uniform load limit of 125 lb/ft<sup>2</sup> (610 kg/m<sup>2</sup>).

### 

Never exceed a maximum load limit of 8000 lbs (35.6 kN) for each articulating leveling foot.

# Safety Precautions (continued)

#### Cart Usage

### AWARNING

Some cart assembly steps require that two or more persons work together. Some components are heavy and are difficult to handle alone.

# AWARNING

Never place more than six decks onto a stage cart.

### AWARNING

Never place more than ten decks onto an outdoor cart.

### AWARNING

Always fasten decks into place with a strap before moving a cart loaded with decks.

### 

A dangerous pinch point develops when assembling the beam cart upright to the beam cart chassis. Always take care to keep fingers from the contact point when placing the upright onto the chassis.

### AWARNING

Using the stage cart or beam cart on floor surfaces that are not level or that have rough and uneven areas can result in an unsafe condition. Make sure that all four caster remain in contact with the floor. Failure to observe this caution can result in carts not remaining in place, not being stable, and possibly not being safe when moving.

### 

Never stand on a cart when working on it or moving STRATA components.

### AWARNING

Do not place an excessive load onto the beam cart supports. Placing a larger load or concentrating the load can cause permanent deformation or a total collapse of the support.

### AWARNING

Never place a cart sideways on an inclined ramp – a loaded cart can tip over.

# Safety Precautions (continued)

#### Moving Carts

### AWARNING

Two people must always work together when moving a loaded cart (one person pushing at the rear and one person guiding the cart at the front).

### 

Always distribute the load evenly on a cart. Avoid top-heavy loading. Always load the cart on the bottom first. The top shelf load should never exceed the bottom shelf load.

# AWARNING

When moving a cart, never allow anyone to ride on the cart.

# AWARNING

Do not stand or place hands or feet in the cart pathway.

# 

Avoid moving loaded carts on ramps steeper than a 1' (305 mm) rise or drop in a 12' (3658 mm) horizontal distance.

# AWARNING

Always move slowly up or down a ramp with the narrow end of the cart in the direction of travel.

### AWARNING

Do not pull or push too high on a loaded cart or step on the side of the base (lower shelf) which may cause the cart to tip over.

# AWARNING

Avoid off-center loads which may cause the cart to tip over.

# AWARNING

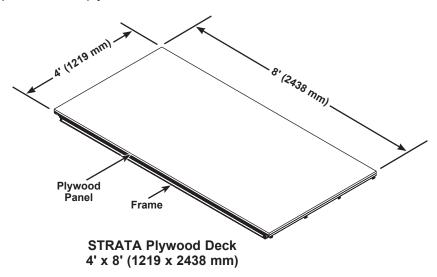
Because swivel casters move in any direction, the operator must move the cart slowly and have a clear view to avoid obstructions and individuals standing in the direction of travel.

# Plan the Floor

Two types of Deck Assemblies, STRATA plywood deck and STRATA finished deck, can be used with STRATA Event Staging And Tent Floor installations. The following paragraphs describe the two types of deck assemblies.

#### **Plywood Deck Description**

The STRATA plywood deck can be used with both the laydown floor and the leveled floor. Shown below is a typical STRATA plywood deck.



Available STRATA Plywood Deck Kit Sizes		
4' x 8' (1219 x 2438 mm)	2' x 8' (610 x 2438 mm)	
4' x 6' (1219 x 1829 mm)	2' x 6' (610 x 1829 mm)	
4' x 4' (1219 x 1219 mm)	2' x 4' (610 x 1219 mm)	

#### **Plywood Deck Specification**

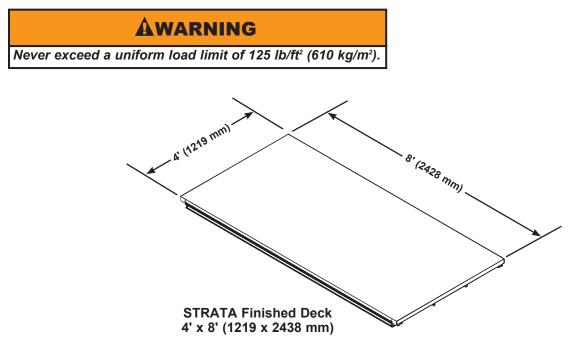
If the plywood needs to be replaced on any deck, it is the end user's responsibility to furnish wood that meets these minimum specifications. STRATA Event Staging And Tent Floor has been designed to meet certain loading requirements. The plywood is an important structural component and a minimum grade of plywood is necessary in order to meet the loading requirement. Failure to meet these specifications may reduce the STRATA Event Staging And Tent Floor loading capacity and may result in damage to components and a total or partial failure of the floor.

Minimum specifications are:

- 1. Minimum thickness of 3/4" (20 mm).
- 2. Acceptable grades include:
  - a. C-C exterior
  - b. C-C PTS (plugged and touch sanded)
  - c. B-C sanded
- 3. Certified to comply with the American Plywood Association standard PS 1-95.
- 4. All panels must show the exterior grade on the grade stamp appearing on each plywood panel.

#### Finished Deck

The STRATA finished deck is used with both the laydown floor and the leveled floor. Shown below is a typical STRATA finished deck.

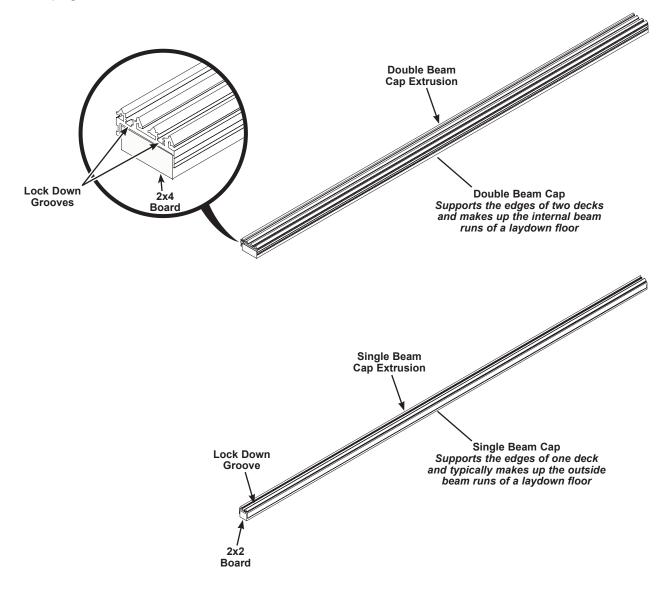


The STRATA finished deck is available in the following sizes.

Available STRATA Finished Deck Sizes		
4' x 8' (1219 x 2438 mm)	2' x 8' (610 x 2438 mm)	
4' x 6' (1219 x 1829 mm)	2' x 6' (610 x 1829 mm)	
4' x 4' (1219 x 1219 mm)	2' x 4' (610 x 1219 mm)	

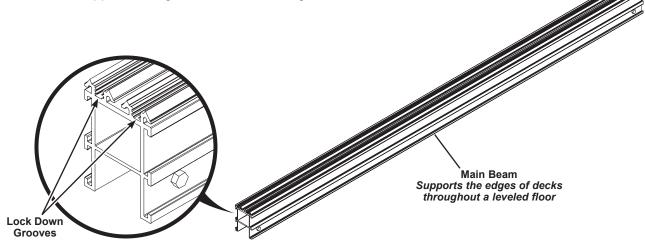
# *Laydown Floor Support Components* Beam caps are the support structure for laydown floors.

- For laydown floors, double and single beam caps are placed directly onto the ground or are shimmed • to a level support structure upon which decks are locked into place.
- For pool covers, double beam caps are attached to construction joists that span over pools, fountains, landscaping, etc.

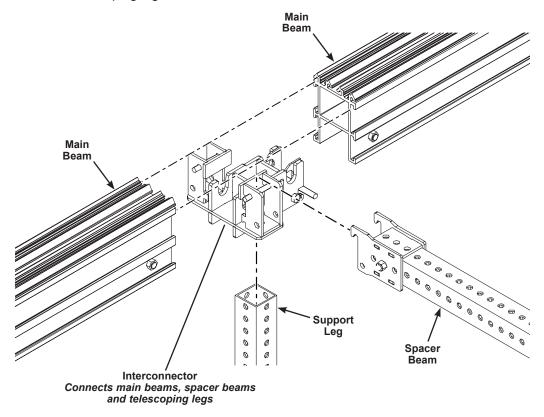


# Leveled Floor Support Components Leveled floor components are:

Main Beams support the edges of two decks throughout the leveled floor.

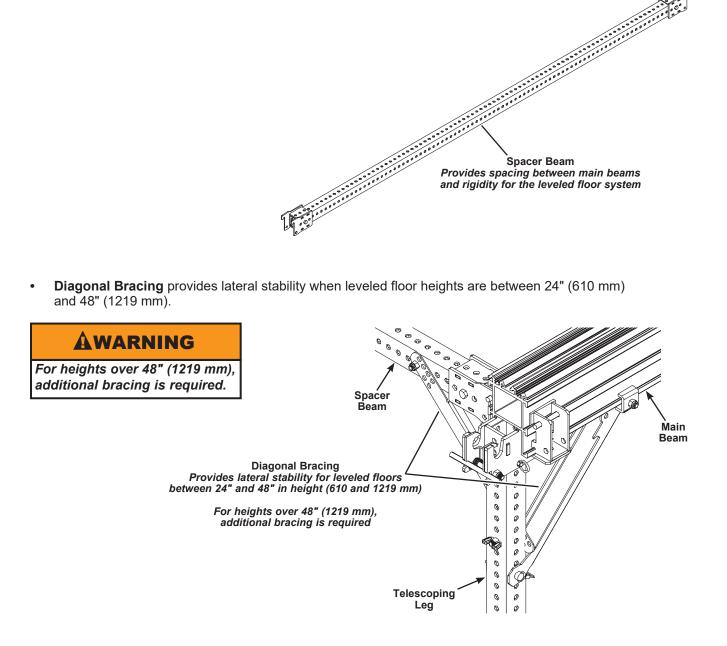


Interconnectors attach to the main beam and allow the connection of the main beam to other main beams, spacer beams, and telescoping legs.



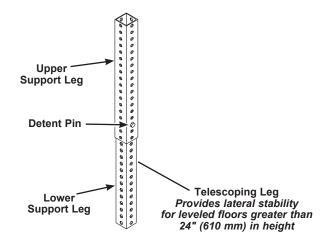
#### Leveled Floor Support Components (continued)

• Spacer Beams maintain the spacing between main beams and the rigidity of leveled floor systems.



### Leveled Floor Support Components (continued)

Telescoping Legs support main beams.



#### Definitions

Beam run - a row of main beams or beam caps.

Starter beam – the first main beam or beam cap in a beam run.

Running beam – the main beams or beam caps that extend the beam run.

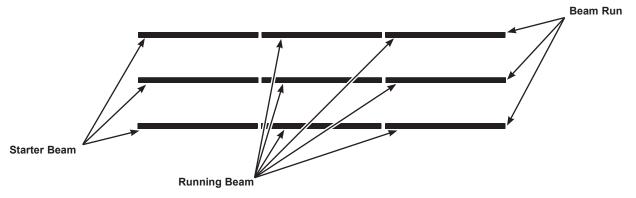
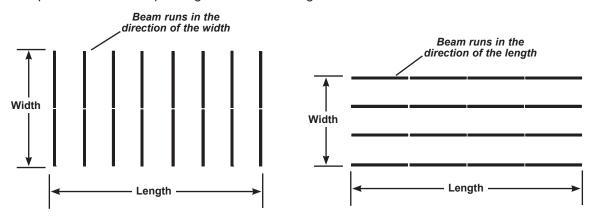


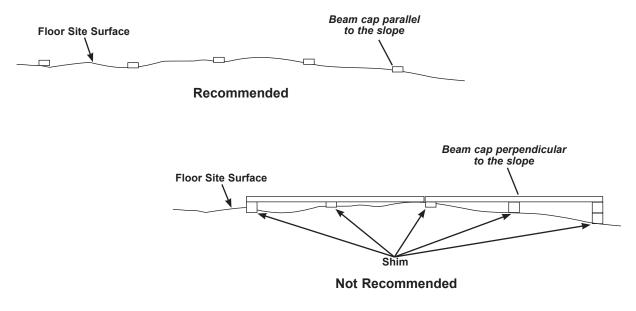
Illustration of Floor Layout

#### Planning the Floor

- 1. Choose a laydown floor, a leveled floor, or a combination of the two based on the following.
  - Construct a **laydown floor** with beam caps if the floor site is fairly level (elevation differences of less than 9" or 230 mm) and the floor needs to be as close to the ground as possible.
  - Construct a **leveled floor** if the floor site has elevation differences greater than 9" (230 mm) or if the floor requires elevation to allow cooling or heating ducts, electrical cables and other components to be underneath the floor or to reduce damage to the surface of the floor site or to avoid obstructions (landscaping, rocks, bushes, etc.).
  - Use a combination of a **laydown floor** and a **leveled floor** if a large floor site has both a level area and an uneven area.
- 2. Determine if beam runs are going to span the width or length of the floor.
  - Examples of beam runs spanning the width and length are below.

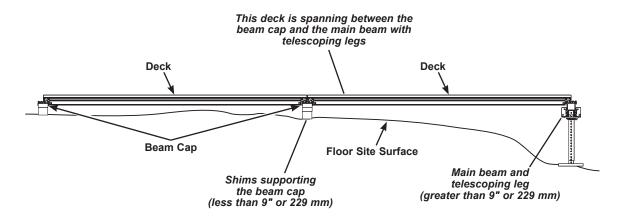


- Main beam and beam cap lengths other than the standard length, 16' (4877 mm) for main beams and 8' (2238 mm) or 16' (4877 mm) for beam caps, may be required to get a floor of specified size (a floor length or width that is not a multiple of the standard length). The length of a non-standard main beam or beam cap that is required may decide if it is best to run the beams along the width or length.
- For laydown floors, it is easier to install the beam runs parallel to the slope or grade than perpendicular to the slope because less shimming of the beam caps is required as shown below.



Planning the Floor (continued)
When a floor combination of laydown and leveled floors is necessary, it is easier to have the decks span the transition between the beam caps and main beams.

The illustration below shows a typical transition from a beam cap to a main beam.



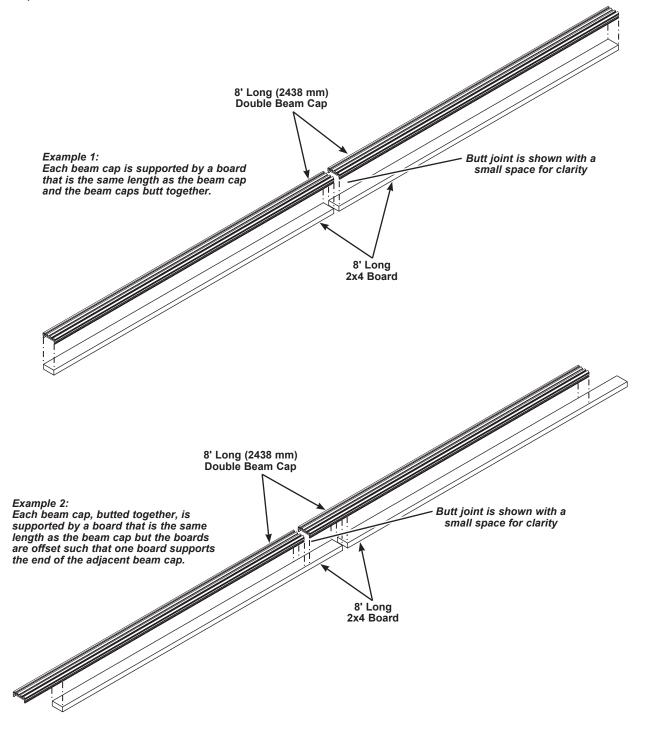
# Laydown Floor Set Up

#### Acceptable Beam Cap Support for Lay Down Floors

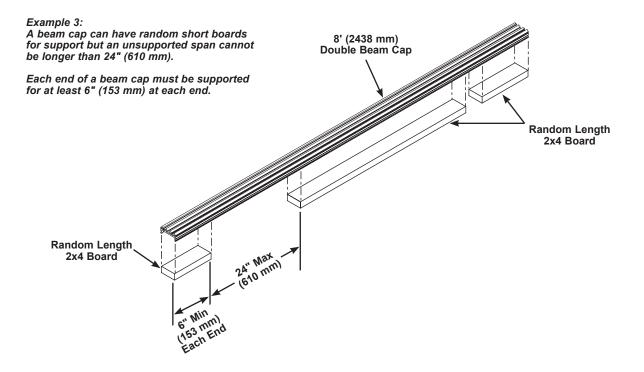
Failure to adequately support beam caps may reduce STRATA event staging and tent floor loading capacity and may result in damage to STRATA system components and a partial or total failure of the floor.

Single track and double track beam caps must not have any unsupported span exceeding 24" (610 mm) and joints between beam caps must be supported for at least 6" (153 mm) on each side of the joint.

The following examples illustrate acceptable beam cap support conditions using double beam caps or single beam caps for tent and event floors installed on level surfaces.



### Acceptable Beam Cap Support (continued)



#### Setting Up the Laydown Floor

### NOTICE

The following instructions illustrate constructing a laydown floor with 8' (2438 mm) beam caps and 8' (2438 mm) spacing between the beam caps. This procedure applies if the beam cap lengths or the spacing is different.

### AWARNING

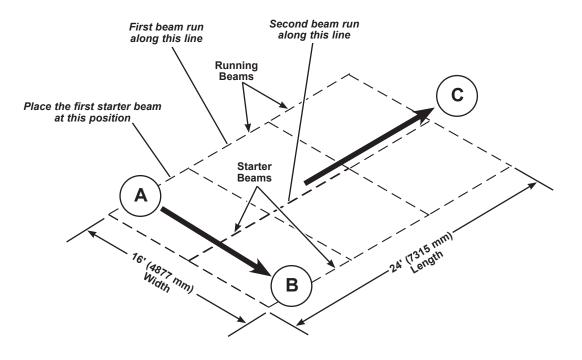
Maximum unsupported span under a beam cap is 24" (610 mm).

### ACAUTION

Two or more people must always work together when setting up a laydown floor.

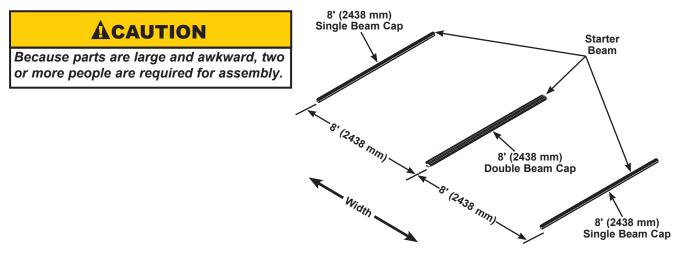
The following instructions explain the set up of a 16' x 24' (4877 mm x 7315 mm) laydown floor as an example. All laydown floors, regardless of size, are set up in the same way.

- 1. Plan the floor layout.
  - a. Before starting to assemble the floor, decide where the first beam will be placed. Consult any drawings or sketches such as the example below.
  - b. It is recommended starting at a known boundary of the laydown floor area and build the width (as shown in the example below, **A** to **B**) then, construct the length (as shown below in the example below, **A** to **C**).

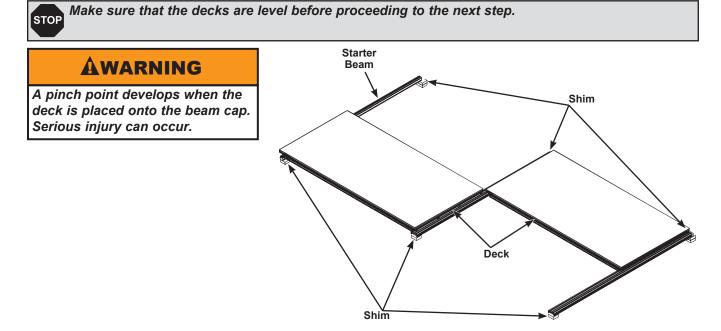


#### Setting Up the Laydown Floor (continued)

- 2. Lay the starter beams and establish the width of the floor area.
  - a. Place the first starter beam. Since this is the outside beam, use a single beam cap.
  - b. Place the second and third starter beam caps about 8' (2438 mm) apart.

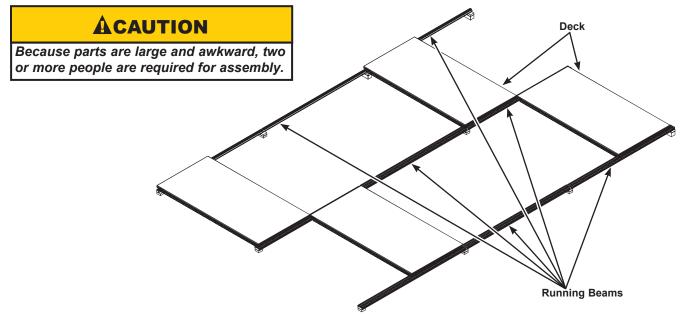


- 3. Level the starter beams.
  - a. Span the three starter beams with two decks (finished decks or plywood decks) as shown below. Do not lock the decks down.
  - b. Level the ends of each starter beam and the two decks using shims if necessary.

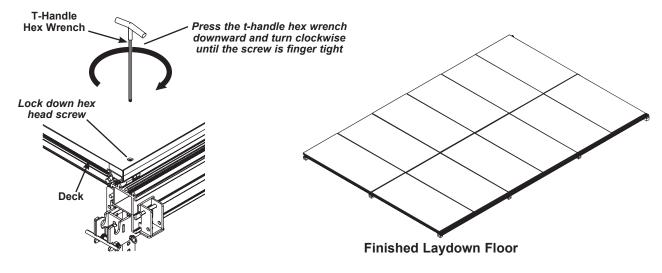


#### Setting Up the Laydown Floor (continued)

- 4. Lay running beams to complete the beam runs until the desired floor length and size is reached.
  - a. Place the running beams end to end and about 8' (2438 mm) apart.
  - b. Span the running beams with additional decks, about 16' apart (4877 mm), to set the spacing and keep the floor square. Do not lock the decks down.
  - c. Shim the ends of each running beam to level the runs and to level all four decks with each other.



- 5. Place the remaining decks into position. Allow about 1/8" (3 mm) between deck edges to facilitate removal.
- 6. Using a 5/16" t-handle hex wrench, lock the decks into place.
  - a. Insert the hex wrench into the lockdown hex head screw, push down, and turn the wrench clockwise no more than one turn.
  - b. If the capscrew is engaged, it will remain depressed. If it pops up when removing the hex wrench, the capscrew is not engaged.



# Leveled Floor Set Up

NOTICE

The following instructions illustrate constructing a leveled floor with 16' (4877 mm) main beams and 8' (2438 mm) spacing between the main beams. This procedure applies if the beam lengths or the spacing is different.

### AWARNING

*Main beams require leg support every 8' (2438 mm).* 

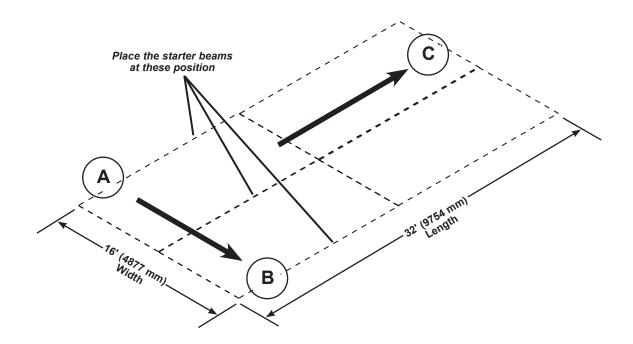
### AWARNING

Two or more people must always work together when setting up a leveled floor.

The following instructions explain the set up of a 16' x 32' (4877 x 9754 mm) leveled floor as an example. All leveled floors, regardless of size, are set up in the same way.

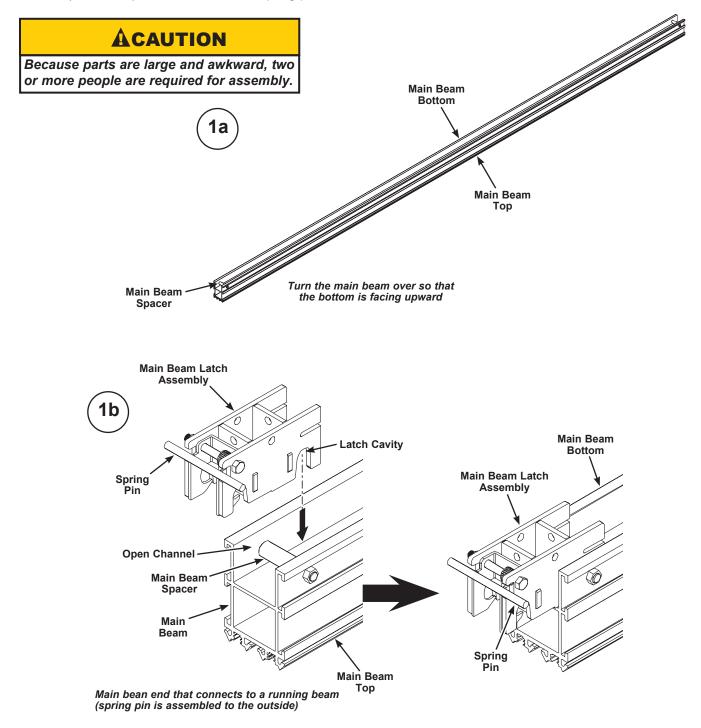
#### Plan the Floor Layout

Before starting to assemble the floor, decide where the first beam will be placed. Consult any drawings or sketches such as the example below. It is recommended starting at a known boundary of the leveled floor area and build the width (as shown in the example below, A to B) — then, construct the length (as shown below in the example below, A to C).



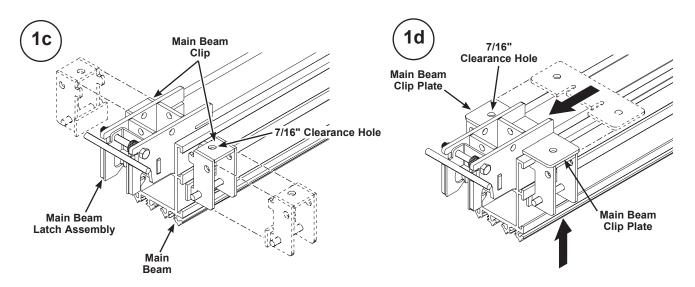
#### Assemble the Starter Beam

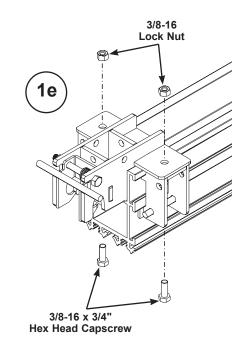
- 1. Assemble an interconnector to the end of a 16' (4877 mm) main beam as follows.
  - a. Take a main beam and turn it over so that the spacers are accessible as shown below.
  - b. Starting at the main beam end that fastens to a running beam, insert a main beam latch assembly into the open channel on the beam bottom side engaging the main beam spacer with the latch cavity (see below). Make sure that the spring pin is located outside the end of the main beam as shown below.



#### Assemble the Starter Beam (continued)

- c. Place two main beam clips against the sides of the main beam with the clip hooks facing toward the beam and upward slide the two main beam clips upward until the hooks engage the extruded hooks on the main beam as shown below.
- d. Place a main beam clip plate onto the bottom surface of the main beam and slide the clip toward the main beam latch assembly until the slots in the clip plate engage the slots in the latch assembly and the 7/16" clearance holes are aligned.
- e. Fasten the main beam clip plate to the main beam clips with two 3/8-16 x 3/4" hex head cap screws and two 3/8-16 lock nuts. Insert the screw through the beam clip clearance hole first.





#### Assemble the Starter Beam (continued)

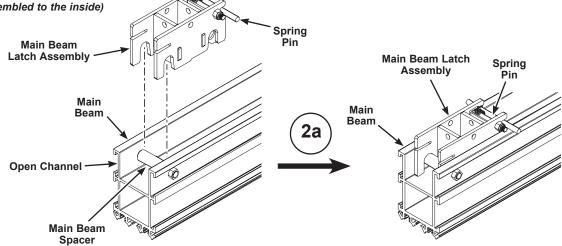
2. Assemble an interconnector to the main beam end facing the outside edge of the floor.

a. Starting at one end of the main beam that faces the outside of the floor, insert a main beam latch assembly into the open channel on the bottom side of the beam engaging the main beam spacer with the latch cavity (see below).

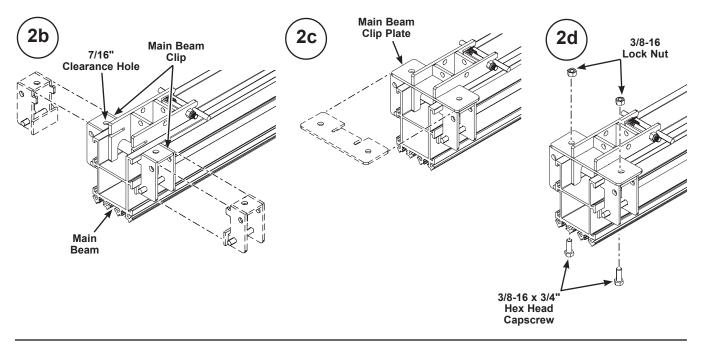
Make sure that the spring pin is located inside the main beam as shown below.

#### Main beam end that faces the outside

of the floor area (spring pin is assembled to the inside)

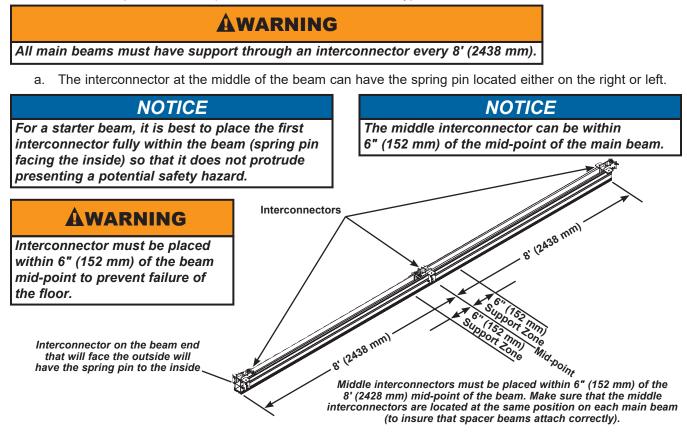


- b. Place two main beam clips against the sides of the main beam with the clip hooks facing toward the beam and upward slide the two main beam clips upward until the hooks engage the extruded hooks on the main beam as shown below.
- c. Slide the main beam clip into the main beam latch assembly so that the slots in the clip plate engage the slots in the latch assembly and the 7/16" clearance holes are aligned.
- d. Fasten the main beam clip plate to the main beam clips with two 3/8-16 x 3/4" hex head cap screws and two 3/8-16 lock nuts. Insert the screw through the beam clip clearance hole first.

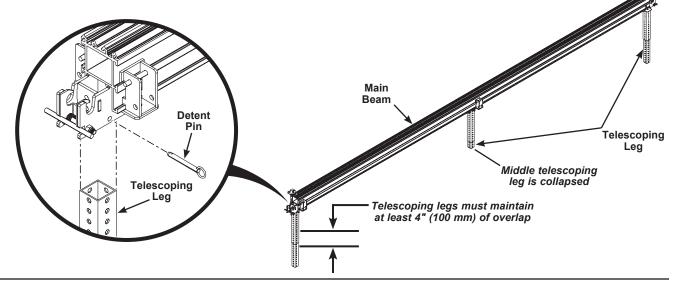


#### Assemble the Starter Beam (continued)

3. Assemble an interconnector in the middle of the main beam (8' [2438 mm] from the end plus or minus 6" [152 mm]). All interconnectors must be located at the same location on each beam used to construct a leveled floor (to insure that spacer beams will attach correctly).

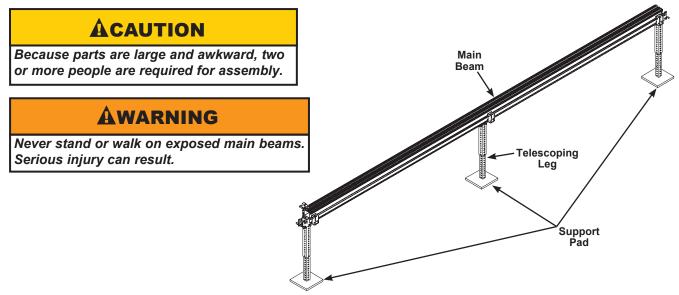


- 4. Insert a telescoping leg into each interconnector.
  - a. Fasten each telescoping leg with a detent pin as shown below.
  - b. Adjust the legs at the end of the main beam at the approximate desired height.
  - c. The leg in the middle should be collapsed so that it will not interfere with the leveling process.

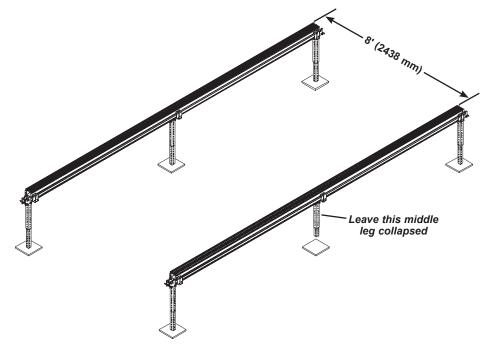


#### Build the Floor Width

- 1. Set the starter beam into place and level it.
  - a. Place support pads under each telescoping leg. The support pads should be at least 6" (153 mm) square and 3/4" (20 mm) thick plywood to minimize damage to the ground and prevent the telescoping leg from sinking into the ground.
  - b. After the starter beam is leveled, extend the middle telescoping leg until it makes firm contact with the support pad.



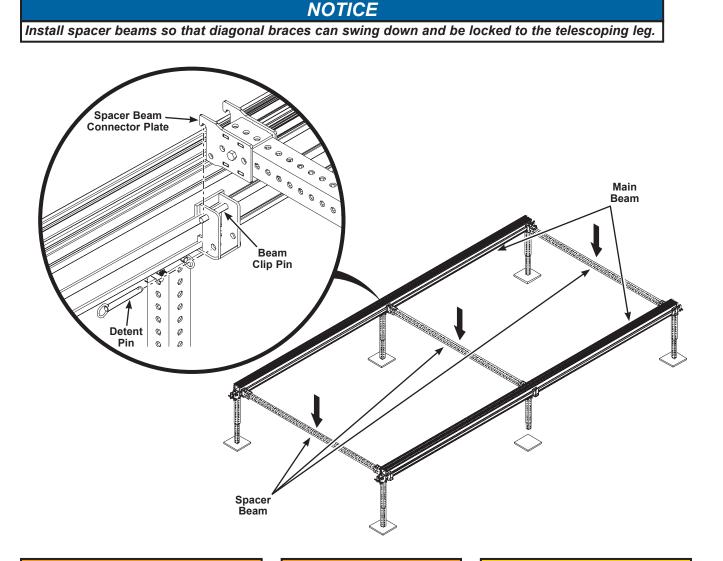
- 2. Assemble a second starter beam and place it about 8' (2438 mm) from the first starter beam.
  - a. Leave the middle leg collapsed to avoid interfering with the leveling of the main beam.



#### Build the Floor Width (continued)

3. Connect the two main beams with three spacer beams.

- a. Make sure that the spacer beam connector plates engage the beam clip pins on the interconnector.
- b. Pin both ends of each spacer beam with a detent pin.



### AWARNING

A pinch point develops when the spacer beam is inserted into the beam clip. Serious injury can occur.

### AWARNING

Never stand or walk on exposed main beams. Serious injury can result.

# ACAUTION

Because parts are large and awkward, two or more people are required for assembly.

### Build the Floor Width (continued)

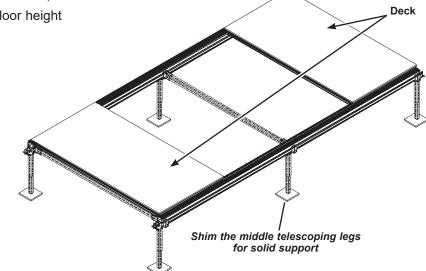
- 4. Extend the middle telescoping leg and add any shims necessary for solid support.
- 5. Place at least two decks (finished deck or plywood deck) onto the main beams, one deck at each end of the framework. Do not lock the decks into place at this time.
  - a. Make any adjustments to the position of the second main beam or the spacer beams to square the framework.
  - b. Using the top surface to the two decks, level the framework.
  - Attach diagonal bracing if the floor height is greater than 24" (610 mm). See "Diagonal Bracing".

### AWARNING

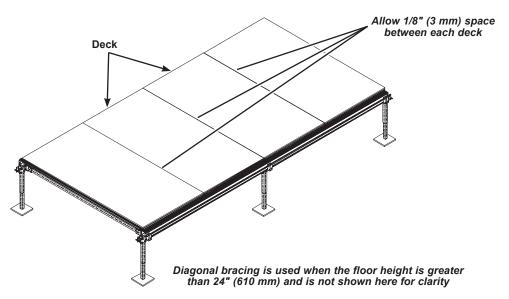
A pinch point develops when the deck is placed onto the main beam. Serious injury can occur.

### ACAUTION

Because parts are large and awkward, two or more people are required for assembly.

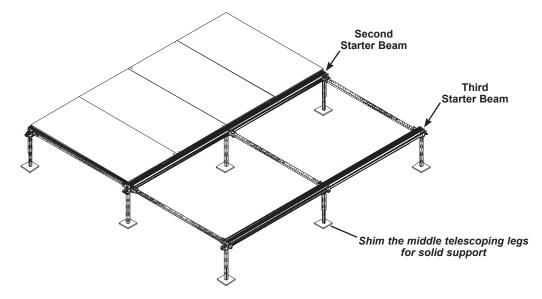


- 6. Add the additional two decks.
  - a. Do not lock the decks to the main beams until all main beams and decks are in place.
  - b. Allow an 1/8" (3 mm) space between each deck to facilitate removal.



#### Build the Floor Width (continued)

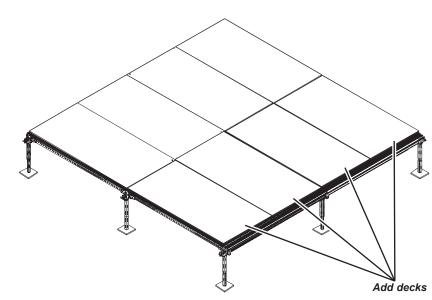
- 7. Add the third starter beam.
  - a. Assemble a third main beam and place it about 8' (2438 mm) from the second starter beam. Leave the middle leg collapsed to avoid interfering with the leveling of the main beam.
  - b. Connect the second and third starter beams with three spacer beams.
  - c. Level the spacer beams and the third starter beam.
  - d. Extend the middle telescoping leg and shim if necessary for solid support.
  - e. Attach diagonal bracing if the floor height is greater than 24" (610 mm). See "diagonal bracing".



8. Add the additional decks, leaving an 1/8" (3 mm) space between decks. **Do not lock the decks.** 

### 

A pinch point develops when the deck is placed onto the main beam. Serious injury can occur.

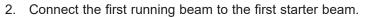


#### Build the Floor Length

- 1. Assemble another main beam to connect to the first starter beam as follows. This will be the first running beam.
  - a. On the beam end that will connect to the first starter beam, do not assemble an interconnector.
  - b. Assemble interconnectors to the middle [plus or minus 6" (153 mm) zone 8' (2438 mm) from the end] and on the opposite end of the main beam.
  - c. Assemble telescoping legs to the interconnectors, collapsing the middle leg and extending the end leg to the approximate finished height.

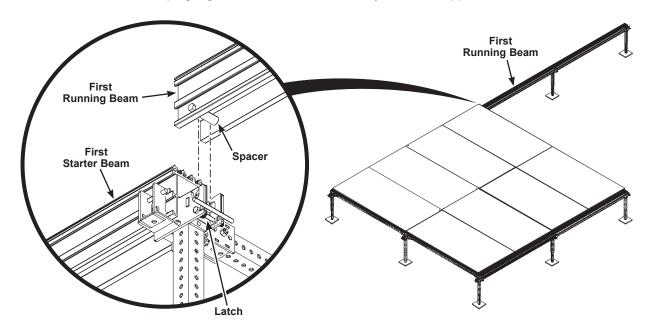
### ACAUTION

Because parts are large and awkward, two or more people are required for assembly.



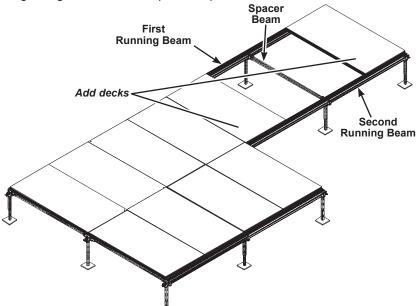
- a. Carefully place the end of the first running beam onto the first starter beam interconnector.
- b. Push down on the first running beam until the spacer engages the latch.

- 3. Level the running beam by adjusting the telescoping legs and shimming as necessary.
- 4. Extend the middle telescoping leg and add shims if necessary for solid support.



# **Build the Floor Length (continued)** 5. Complete the floor length as follows.

- a. Connect a second running beam to the second starter beam and attach two spacer beams.
- b. Place two decks onto the exposed main beams.
- c. Level the new section of floor.
- d. Attach diagonal bracing if the floor height is greater than 24" (610 mm). See "Diagonal Bracing".

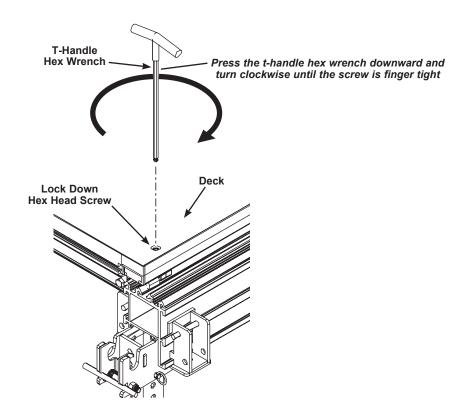


6. Complete the floor length.

a. Maintain the 1/8" (3 mm) space between decks. 32' Length (9754 mm) 16' Width (4877 Midth mm)

#### Lock the Decks

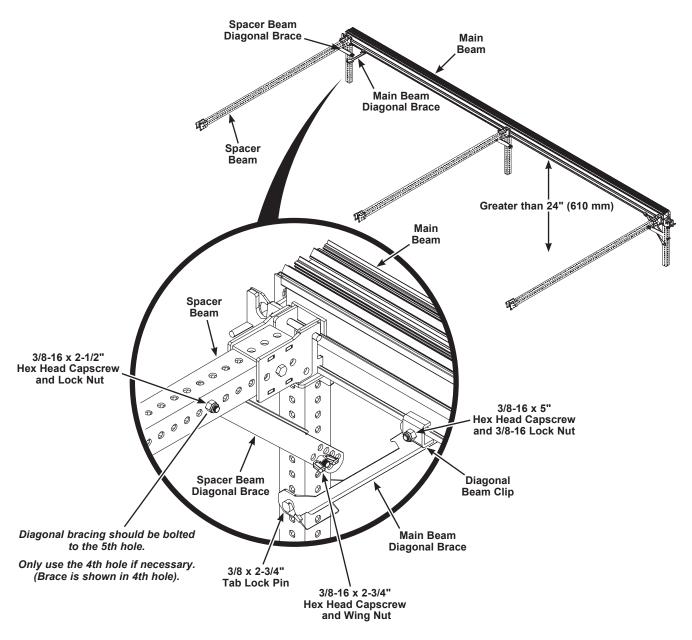
- 1. When all finished decks or plywood decks are in place and the STRATA floor system has been leveled, lock the decks to the main beams as follows.
  - a. Use a 5/16" t-handle hex wrench.
  - b. Insert the hex wrench into the lock down hex head screw and lock the deck by pushing downward and turning the wrench clockwise.
  - c. Each deck has four lock down assemblies, one on each corner.



#### **Diagonal Braces**

Whenever leveled floor heights are 24" (610 mm) or greater, diagonal bracing must be installed.

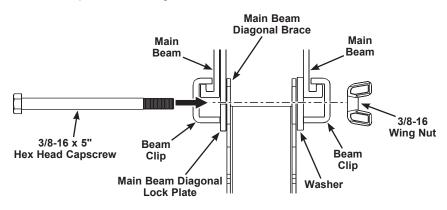
- Main beams always have main beam diagonal braces at each end when supporting a deck height of 24" (610 mm) or more.
- Spacer beams always have spacer beam diagonal braces at each end that connects to a telescoping leg supporting a deck height of 24" (610 mm) or more.



#### Main Beam Diagonal Brace Assembly

Assemble the Main Beam Diagonal Brace to the Main Beam:

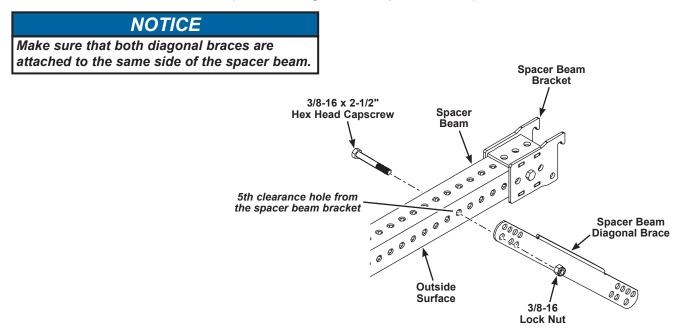
- 1. Insert the hex head cap screw, 3/8-16 x 5" through the beam clips, main beam lock plate, main beam diagonal and washer.
- 2. Attach the 3/8-16 wing nut to the hex head cap screw and tighten.



#### Spacer Beam Diagonal Brace Assembly

Assemble the spacer beam diagonal brace as follows.

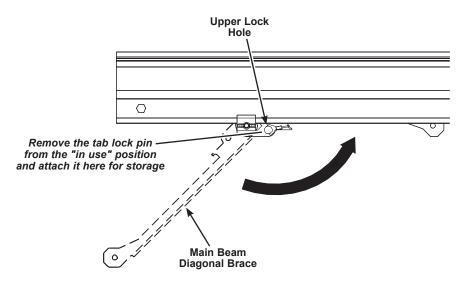
- 1. Insert a 3/8-16 x 2-1/2" hex head capscrew through the 5th clearance hole from the spacer beam bracket.
- 2. Place a spacer beam diagonal clearance hole onto the threaded end of the capscrew.
- 3. Attach a 3/8-16 lock nut to the capscrew and tighten with a pair of 9/16" open end wrenches.



### Diagonal Brace Storage

When storing main beams or spacer beams with diagonal braces, do as follows.

- 1. Remove the tab lock pin that connects the diagonal brace to the telescoping leg.
- 2. Loosen the wing nut on the main beam connection to permit the diagonal brace to swing freely.
- 3. Fold the diagonal brace.
  - a. The main beam diagonal brace fits inside the lower channel of the main beam.
  - b. The spacer beam diagonal brace fits along the side of the spacer beam.
- 4. Pin the diagonal brace in the folded position by attaching the tab lock pin or hex head capscrew to the upper lock hole.
- 5. Tighten the wing nut (if the wing nut is not tightened, it may eventually fall off).

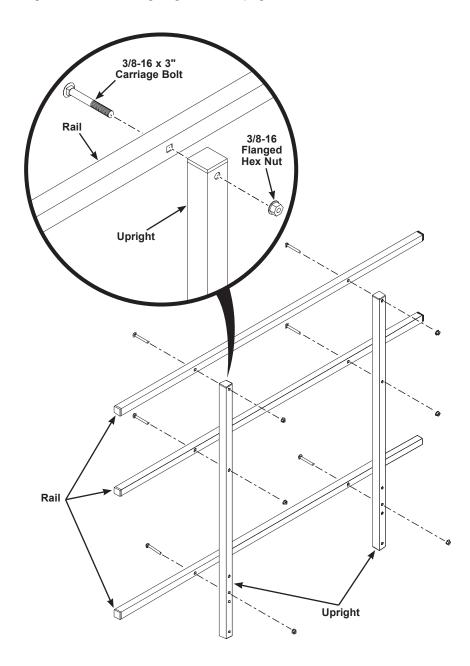


## **Guardrail Assembly**

#### Assemble the Rails and Uprights

Guardrail assemblies are available in three sizes: 4', 6' and 8' lengths. The assembly is the same for all sizes.

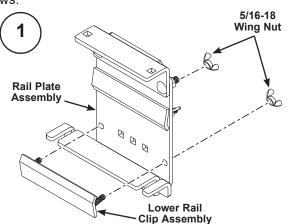
- 1. Remove the three rails, two uprights, and the hardware pack from the shipping carton.
- 2. Inventory the hardware pack and make that all of the fasteners are present.
- 3. Using a 9/16" open-end wrench, attach the two uprights to the three rails with six 3/8-16 x 3" carriage bolts and six 3/8-16 flanged hex nuts as shown below.
  - a. Insert the carriage bolt through the rail square clearance hole and then through the upright.
  - b. Attach the flange nut with the flange against the upright.

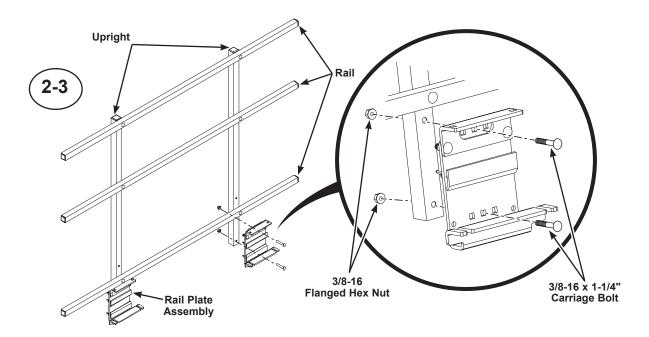


#### Assemble the Guardrail Assembly and Rail Plate

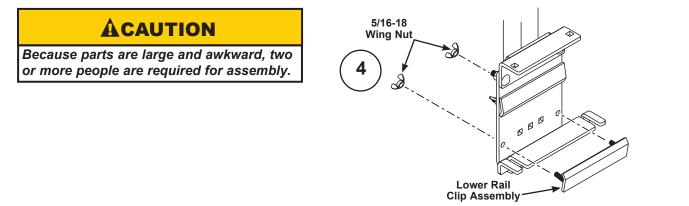
Attach two rail plate assemblies to the guardrail assembly as follows.

- 1. Remove the lower rail clip assembly from both rail plate assemblies.
  - a. Unscrew the two 5/16-18 wing nuts that attach the lower rail clip assembly to the rail plate and set them aside.
  - b. Remove the lower clip assembly and set it aside.
- 2. Attach one of the two rail plate assemblies to one upright of the guardrail assembly as follows.
  - a. Insert two 3/8-16 x 1-1/4" carriage bolts through the rail plate assembly and upright as shown below.
  - b. Using a 9/16" open-end wrench, fasten two 3/8-16 flanged hex nuts to the carriage bolts.





- 3. Attach the other rail plate assembly to the other upright as done in steps 2a and 2b.
- 4. Re-attach the two lower rail clip assemblies with the wing nuts set aside in steps 1a and 1b.



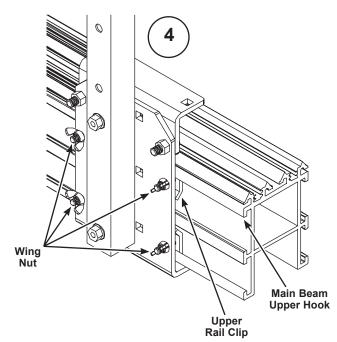
#### Attach the Guardrail to a Leveled Deck Main Beam

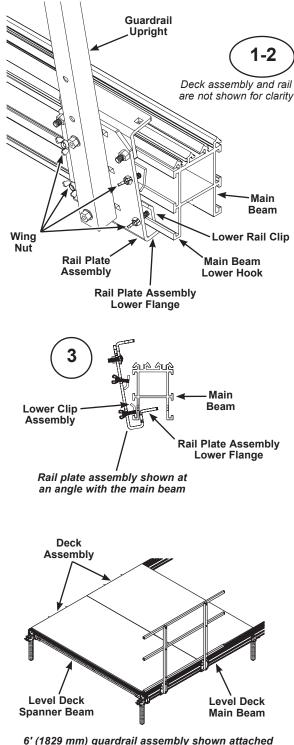
Attach the guardrail and rail plate assembly to a leveled deck main beam as follows.

### **ACAUTION**

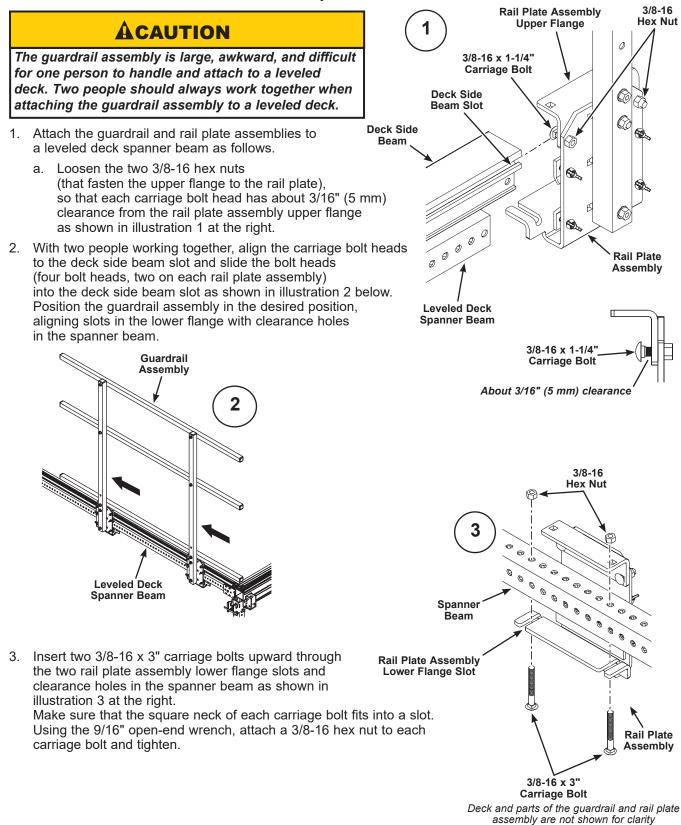
The guardrail assembly is large, awkward and difficult for one person to handle and attach to a leveled deck. Two people should always work together when attaching the guardrail assembly to a leveled deck.

- 1. Loosen the four wing nuts that fasten the two rail clip assemblies to each rail plate assembly.
- With two people working together, place each rail plate assembly lower flange under the main beam. With the guardrail assembly at a slight angle to the main beam as shown in illustration 1-2 at the right.
- 3. Attach each rail plate assembly by engaging the lower clip assembly with the main beam lower hook as shown in the illustration 3 at the right.
- 4. Keeping the lower clip assembly engaged to the main beam lower hook, tilt the guardrail assembly to a vertical position as shown in illustration 4 below and place the upper rail clip behind the main beam upper hook. Tighten the four wing nuts on each rail plate assembly.





Attach the Guardrail to a Leveled Deck Spanner Beam



#### End User Guardrails

### AWARNING

The rail plate assembly can be used by the end user to construct guardrails by attaching end user supplied uprights and rails. The design must comply with the International Building Code specifications and local codes and regulations contained in this document.

### AWARNING

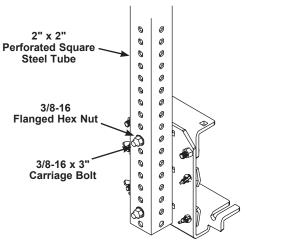
In no event will Wenger Corporation be liable for direct, indirect, special, incidental, or consequential damages resulting from the end user design and construction of guardrails from materials other than STRATA accessories attached to STRATA components. The operator must observe local regulations and exercise caution and common sense when constructing their own guardrails.

If end users design, construct, and attach guardrails to a leveled deck using the rail plate assemblies, the guardrails must:

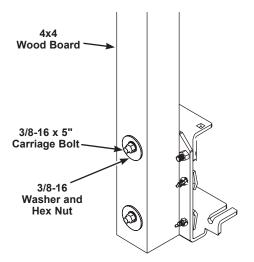
- Comply with all of the warnings in these instructions.
- Comply with the important end user information.

Examples of guardrail uprights that can be constructed by an end user are shown below. The choice of materials and specific design is solely the responsibility of the end user. The suggested minimum size of materials for an upright are:

- Steel square tube no smaller than 1-1/4" (32 mm) square with at least a 16 gauge (.0598") wall thickness.
- Wood boards no smaller than 2x2 in size.
- Minimum fastener size used for attachment to a rail plate assembly is a 3/8-16 carriage bolt.
- Wood boards must use a 3/8" flat washer between the board and hex nut attached to the carriage bolt.
- Always use at least two sets of fasteners to attach each upright to each rail plate assembly.
- Always make sure that the fasteners are tight.



Example using steel tube



Example using a 4x4 wood board

## Beam Link Assembly

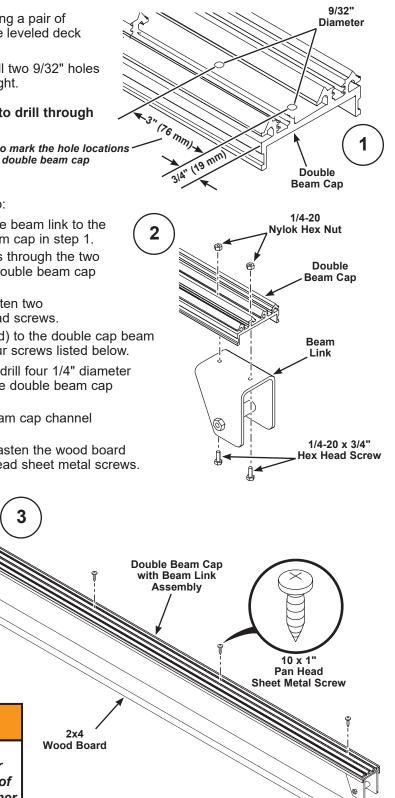
#### Ramp Assembly

An inclined ramp can be constructed by connecting a pair of double beam caps and a pair of beam links to the leveled deck as follows.

 Using a cordless drill and a 9/32" drill bit, drill two 9/32" holes in each double beam cap as shown at the right.
 Use the beam link as a template.
 Mark the hole locations – do not attempt to drill through the beam link clearance holes.

> Use the beam link as a template to mark the hole locations on the bottom side of the double beam cap

- 2. Attach a beam link to each double beam cap:
  - a. Align the two 9/32" clearance holes in the beam link to the two 9/32" holes drilled in the double beam cap in step 1.
  - b. Insert two 1/4-20 x 3/4" hex head screws through the two holes in the beam link and through the double beam cap as shown in illustration 2 at the right.
  - c. Using a pair of 7/16" hex nut drivers, fasten two 1/4-20 nylok hex nuts to the two hex head screws.
- 3. Attach a 2x4 wood board (or 4x4 wood board) to the double cap beam as follows. The end user must supply the four screws listed below.
  - a. Using a cordless drill and a 1/4" drill bit, drill four 1/4" diameter clearance holes into the center slot of the double beam cap as shown below.
  - b. Fit a 2x4 wood board into the double beam cap channel as shown below.
  - c. Using a cordless drill and a phillips bit, fasten the wood board to the beam cap with four 10 x 1" pan head sheet metal screws.



## AWARNING

**NOTICE** The board must be fastened to the beam cap every 2' to 3'

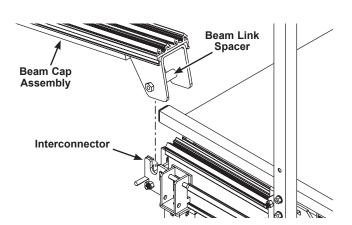
(610 mm to 914 mm).

If a wood board is not attached to the beam cap, suitable supports must be placed under the beam cap. The beam cap is not capable of supporting heavy loads without support, either a 2x4 or 4x4 board or some type of support between the beam cap and the ground.

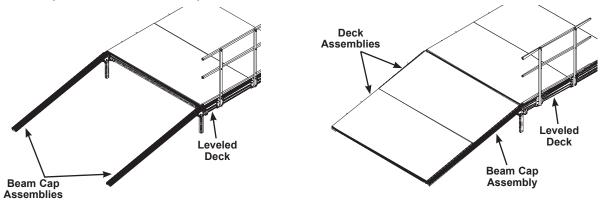
## **Beam Link Assembly (continued)**

#### Ramp Assembly (continued)

4. Attach a beam cap assembly to the leveled deck by inserting the beam link spacer into the interconnector as shown at the right.

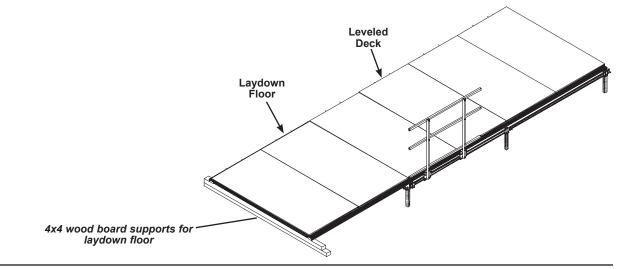


5. Complete the ramp by attaching the other beam cap assembly to the leveled deck and then placing deck assemblies onto the beam caps. Refer to the STRATA Event Staging And Tent Floor Owner's Manual and the STRATA System Deck Kit Assembly Instructions for more information.



#### Connecting a Laydown Floor to a Leveled Deck

A laydown floor can be connected to a leveled deck by attaching beam link assemblies to the laydown floor beam caps in the same way as done in steps 1, 2, 3 and 4 in the preceding "Ramp Assembly" section. Refer to the STRATA Event Staging And Tent Floor Owner's Manual and the STRATA System Deck Kit Assembly Instructions for more information.



## **Stairway Attachment**

#### Assemble Stairway Attachment

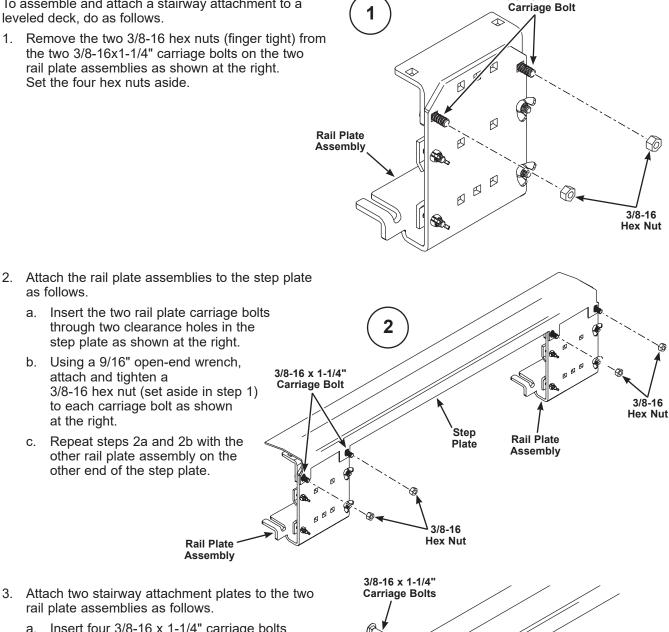
as follows.

at the right.

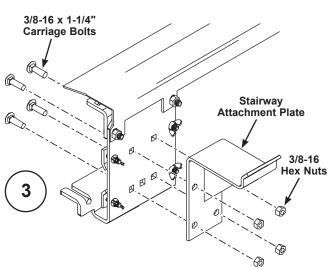
a.

To assemble and attach a stairway attachment to a leveled deck, do as follows.

Remove the two 3/8-16 hex nuts (finger tight) from 1. the two 3/8-16x1-1/4" carriage bolts on the two rail plate assemblies as shown at the right. Set the four hex nuts aside.



- a. Insert four 3/8-16 x 1-1/4" carriage bolts through the four square holes in the
- rail plate as shown at the right. b. Fit the stairway attachment plate clearance
  - holes onto the four carriage bolts and attach and tighten four 3/8-16 hex nuts to each carriage bolt. Tighten with a 9/16" open-end wrench.
- c. Attach the other stairway attachment plate to the step plate as done in steps 3a and 3b.

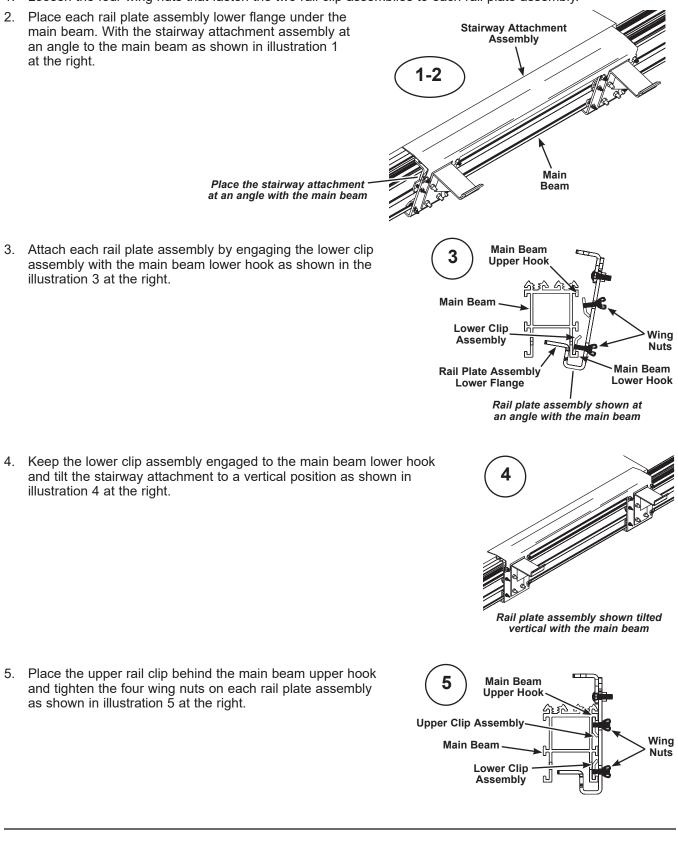


3/8-16 x 1-1/4"

## **Stairway Attachment (continued)**

#### Attach Stairway Attachment to a Main Beam

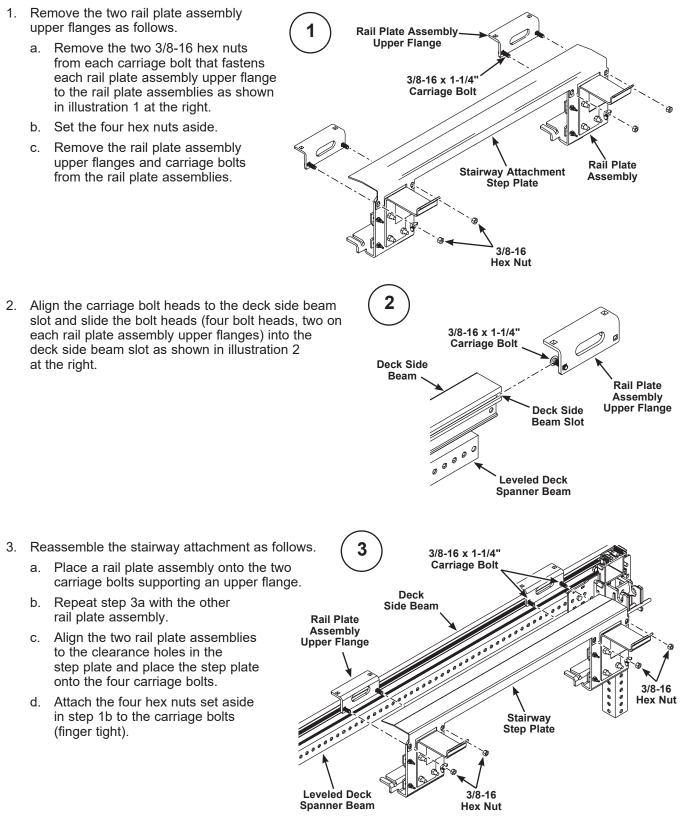
1. Loosen the four wing nuts that fasten the two rail clip assemblies to each rail plate assembly.



## **Stairway Attachment (continued)**

#### Attach Stairway Attachment to a Spanner Beam

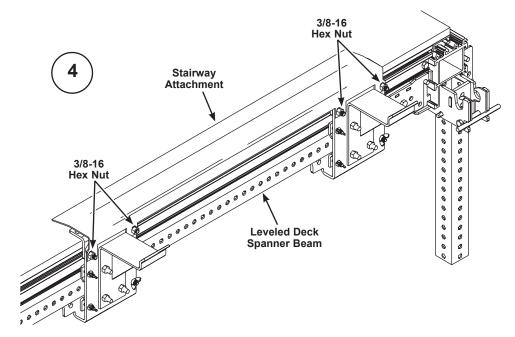
Attach the stairway attachment and rail plate assemblies to a leveled deck spanner beam as follows.



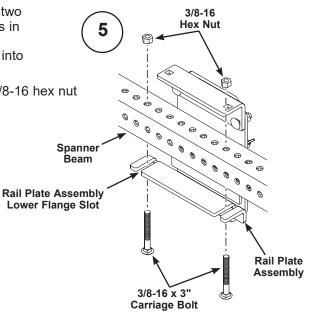
### **Stairway Attachment (continued)**

#### Attach The Stairway Attachment to a Leveled Deck Spanner Beam (continued)

4. Position the stairway attachment and attach and tighten the four hex nuts with a 9/16" open-end wrench.



- 5. Attach each rail plate assembly lower flange to the spanner beam as follows.
- a. Insert two 3/8-16 x 3" carriage bolts, upward through the two rail plate assembly lower flange slots and clearance holes in the spanner beam as shown in illustration 5 at the right. Make sure that the square neck of each carriage bolt fits into a lower flange slot.
- b. Using the 9/16" open-end wrench, attach and tighten a 3/8-16 hex nut to each carriage bolt.



## ADA Adapter

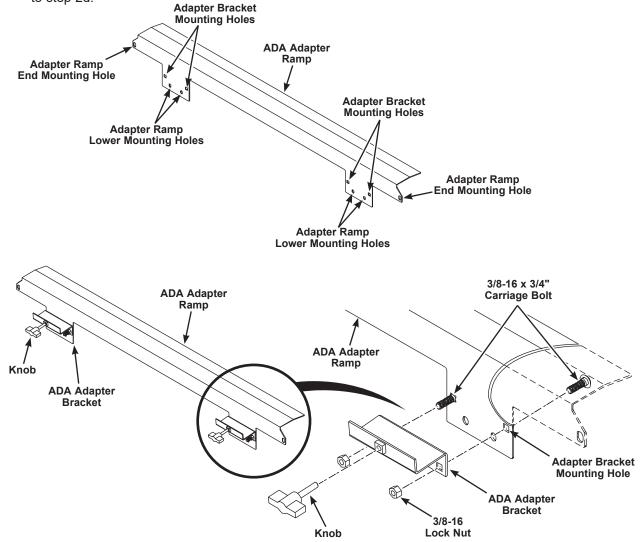
#### Assemble the ADA Adapter

- 1. Before starting the ADA adapter assembly, do the following.
  - a. Move the shipping carton to the assembly area.
  - b. Open the carton and remove the ADA adapter ramp and the hardware packages.
  - c. Inventory the hardware and make sure that everything is present.

#### NOTICE

Discard any hardware items that are not used in the assembly.

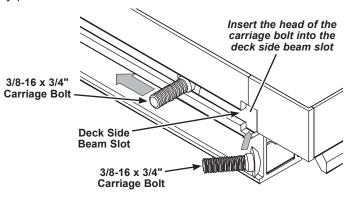
- 2. Assemble the ADA adapter ramp assembly.
  - a. On one end of the ADA adapter ramp, insert two 3/8-16 x 3/4" carriage bolts through the two square adapter bracket mounting holes as shown in the illustration below.
  - b. Place a ADA adapter bracket onto the two carriage bolts, making sure that each carriage bolt square shoulder fits into the adapter bracket square mounting hole.
  - c. Use a 9/16" combination wrench and attach a 3/8-16 lock nut to each carriage bolt.
  - d. Attach the knob to the ADA adapter bracket as shown below.
  - e. Assemble the other adapter bracket to the other end of the adapter ramp by repeating step 2a to step 2d.



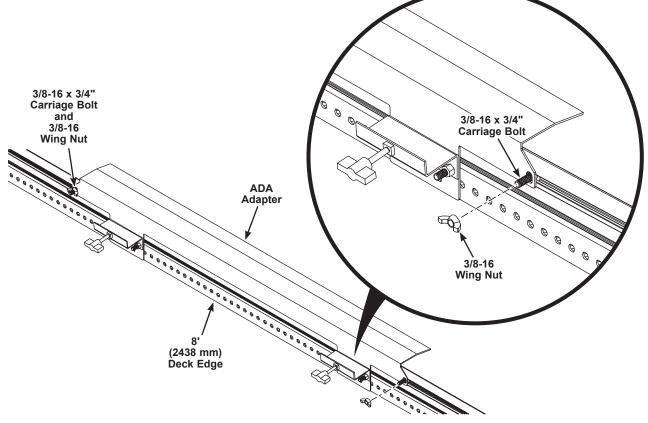
## ADA Adapter (continued)

# Attach the ADA Adapter to the 8' (2438 mm) Deck Edge 1. Insert two carriage bolts, 3/8-16 x 3/4", into the deck side slot.

- - Insert the two carriage bolt heads, 3/8-16 x 3/4", into the deck side beam slot as shown in the a. illustration below.
  - Slide the bolt heads to the approximate assembly position. b.



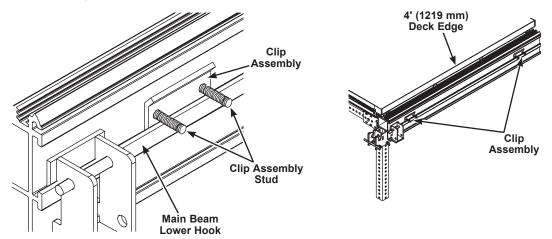
- 2. Attach the ADA adapter to the 8' (2438 mm) deck edge.
  - a. Place the adapter ramp mounting holes (one on each end) onto the two carriage bolts inserted into the deck side beam slot in step 1 above.
  - b. Attach a 3/8-16 wing nut to each carriage bolt.
  - c. Position the ADA adapter and tighten the wing nuts.



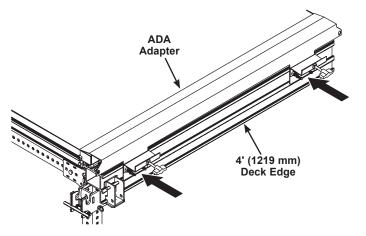
## ADA Adapter (continued)

Attach the ADA Adapter to the 4' (1219 mm) Deck Edge To attach an ADA Adapter to a 4' (1219 mm) deck edge, so as follows. Refer to the illustrations below.

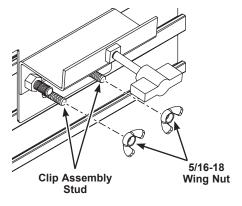
1. Insert two clip assemblies into the main beam lower hook.



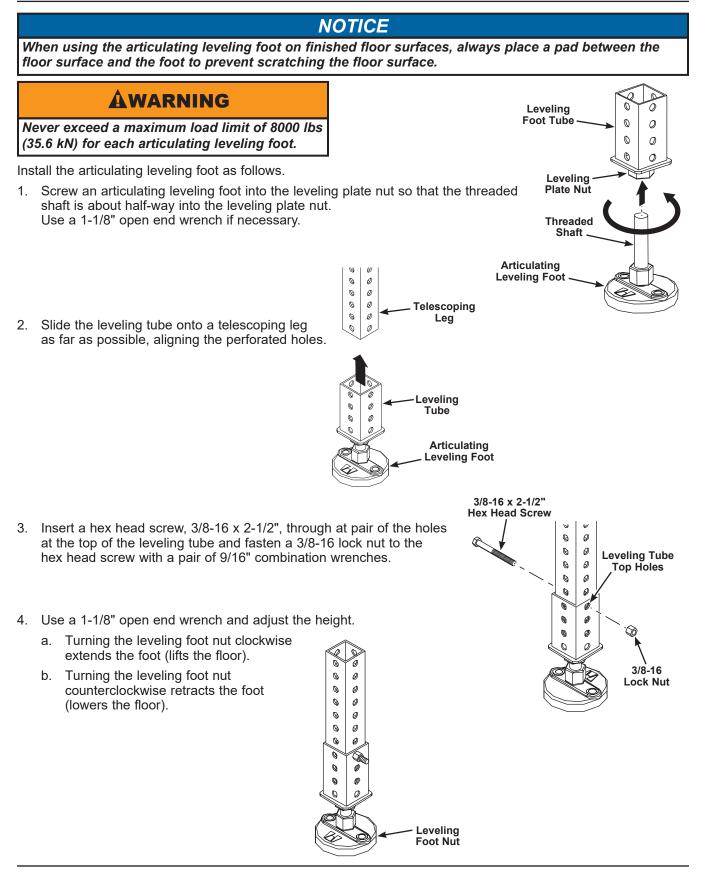
- 2. Align the four clip assembly studs to the four lower ADA adapter mounting holes.
- 3. Place the ADA adapter four lower mounting holes onto the four clip assembly studs.



4. Attach a 5/16-18 wing nut to each clip assembly stud (four).



## **Articulating Leveling Foot**



## **Cross Bracing**

Cross bracing is available in two sizes — 3' (914 mm) and 4' (1219 mm).

NOTICE

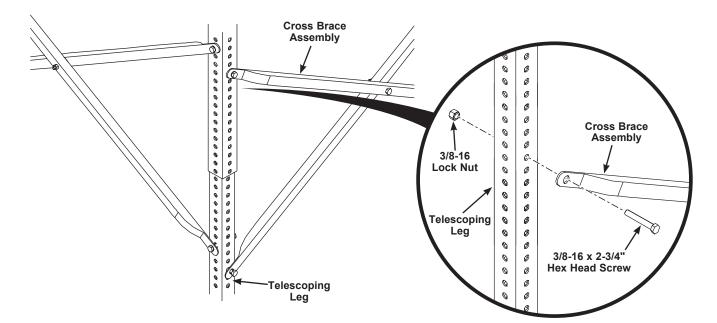
Cross brace assemblies are always installed in pairs. One assembly must be assembled parallel with a main beam and one assembly must be parallel with a spacer beam.

For specific information regarding the location of cross bracing and the cross bracing size 3' (914 mm) or 4' (1219 mm) contact Wenger Corporation.

#### AWARNING

Cross bracing is required for all stages 48" (1219 mm) or higher.

- 1. Using a pair of 9/16" combination wrenches, attach a cross brace assembly to a pair of telescoping legs with four 3/8-16 lock nuts and four 3/8-16x2-3/4" hex head screws, as shown below.
- 2. Attach other cross brace assemblies in the same as step 1.
- 3. Make sure that all fasteners attaching the cross brace assemblies to telescoping legs are tight.



## **Indoor Beam Cart Accessory**

#### Before Indoor Beam Cart Assembly

Before assembling the indoor beam cart, do the following.

1. All personnel, including temporary personnel, must read and understand the entire safety section in these instructions.

### AWARNING

Personal injury or damage to property can happen if the instructions in these instructions are not followed.

### ACAUTION

Always wear safety glasses and safety shoes when assembling the indoor beam cart.

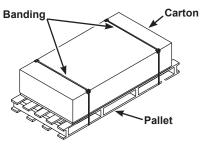
### ACAUTION

Some components are very heavy, large, and awkward to handle. Serious injury or property damage can happen if only one person attempts to move or lift some components such as a chassis. Two or more people must always work together when lifting or moving heavy components.

2. Using a pallet truck, move the banded cart carton and pallet to the location where the cart will be assembled.

### ACAUTION

Always use a pallet truck to move the pallet and carton.



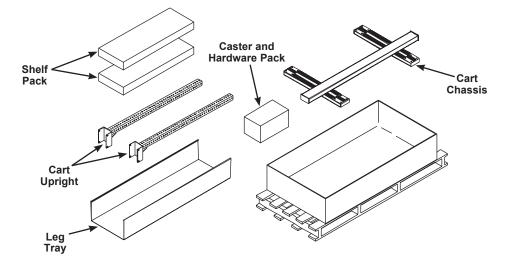
3. Cut the banding and remove the carton top. The carton top can be used as a work surface on the floor or on a table to prevent scratching components during assembly.

#### NOTICE

Not all hardware items packed in the carton may be needed. When the assembly is complete, discard any hardware items not used.

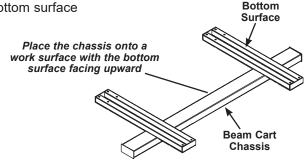
Cut the banding and remove the carton top

4. Remove the cart components from the carton and discard the packing materials.

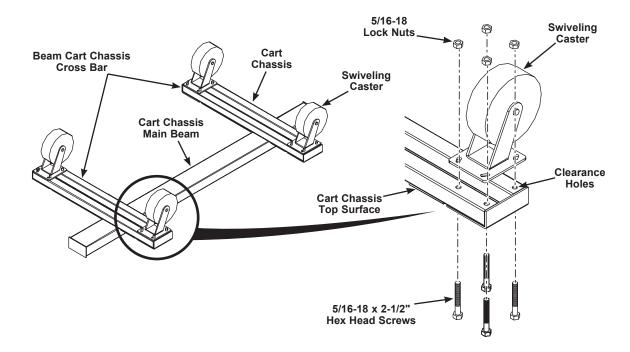


#### Attach the Casters to the Chassis

1. Place the chassis onto a work surface with the chassis bottom surface facing upward as shown.



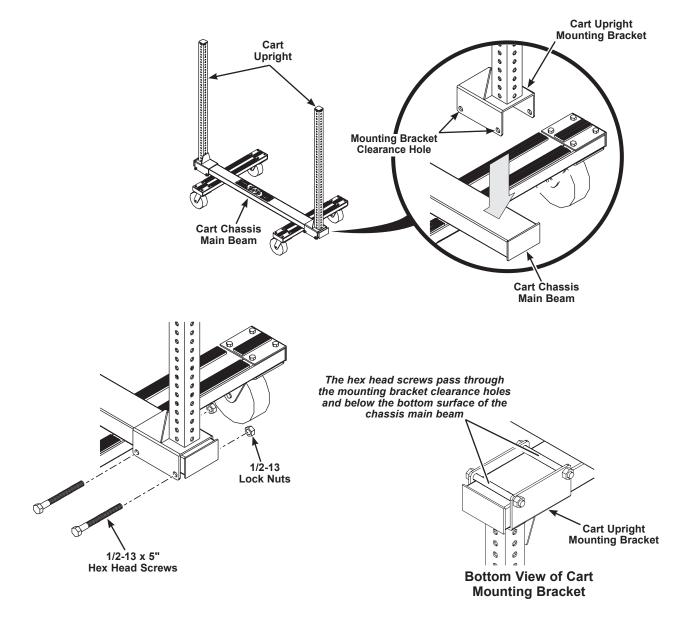
- 2. Remove the four swiveling casters and hardware from the caster and hardware pack.
- 3. Align a caster to a set of four clearance holes on the bottom surface of the cart chassis. See the illustration below.
- 4. Using a pair of 1/2" combination wrenches, attach the caster to the chassis with four 5/16-18 x 2-1/2" hex head screws and four 5/16-18 lock nuts. Insert the hex head screws through the top surface of the chassis. Refer to the illustrations below.
- 5. Attach the other three casters by repeating step 2 and step 3.
- 6. Make sure that the screws and lock nuts are tight.



#### Attach the Legs to the Chassis

After the four swiveling casters are attached to the cart chassis, assemble the two cart uprights as follows. Refer to the illustrations below.

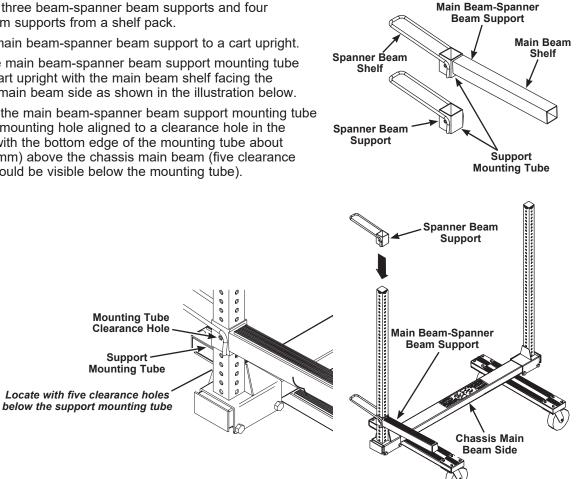
- 1. Cut the two cable ties that hold the two cart uprights together and discard the hexcomb separator.
- 2. Place the cart chassis and casters (facing downward) onto the work surface.
- 3. Attach one cart upright to the chassis.
  - a. Fit the cart upright mounting bracket over the cart chassis main beam.
  - b. Insert two 1/2-13 x 5" hex head screws through the two clearance holes in the mounting bracket.
  - c Using a pair of 3/4" combination wrenches, attach a 1/2-13 lock nut to each hex head screw.
- 4. Attach the second upright by repeating step 3.
- 5. Make sure that the hex head screws and lock nuts are tight.



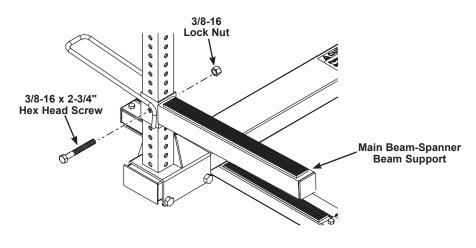
#### Attach the Beam Supports and Spanner Beam Supports

Assemble three main beam-spanner beam supports and four spanner beam supports to each cart upright. Refer to the illustrations below.

- Remove the three beam-spanner beam supports and four 1. spanner beam supports from a shelf pack.
- 2. Attach one main beam-spanner beam support to a cart upright.
  - a. Slide the main beam-spanner beam support mounting tube onto a cart upright with the main beam shelf facing the chassis main beam side as shown in the illustration below.
  - b. Position the main beam-spanner beam support mounting tube with the mounting hole aligned to a clearance hole in the upright with the bottom edge of the mounting tube about 5" (127 mm) above the chassis main beam (five clearance holes should be visible below the mounting tube).

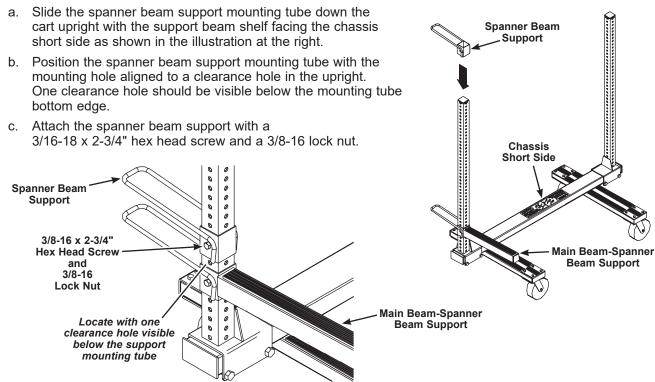


- c. Insert a hex head screw, 3/16-18 x 2-3/4", through the tube mounting hole.
- d. Use a pair of 9/16" combination wrenches and attach a 3/8-16 lock nut to the hex head screw.

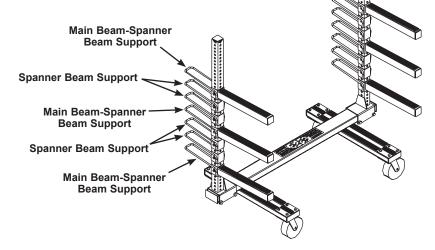


#### Attach The Beam Supports and Spanner Beam Supports (continued)

3. Attach a spanner beam support above the main beam-spanner beam support on the same upright.



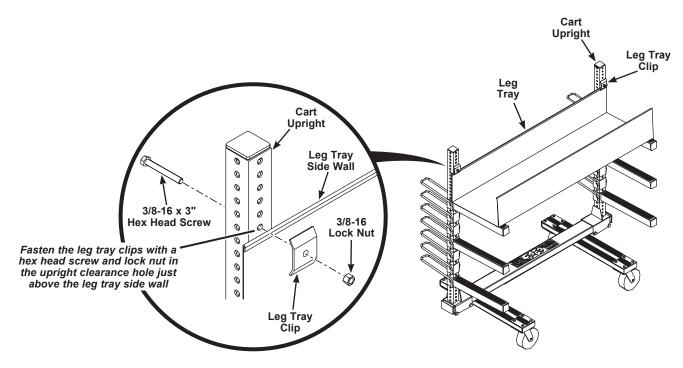
- 4. Refer to the illustration at the right and continue to install spacer beam supports and main beam-support beam supports on the upright.
  - a. Make sure that two spacer beam supports separate each main beam-support beam support.
  - b. Make sure that the hex head screws and lock nuts are tight.
- 5. Open the second shelf pack and install the spacer beam supports and main beam-support beam supports on the other upright.



#### Attach the Leg Tray

To assemble the leg tray to the beam cart, do as follows. Refer to the illustration below.

- 1. Place the leg tray onto the upper pair of main beam shelves.
- 2. Insert a 3/8-16 x 3" hex head screw through the upright clearance hole just above the upper edge of the leg tray side wall.
- 3. Place a leg tray clip onto the hex head screw and, using a pair of 9/16" combination wrenches, attach a 3/8" lock nut to the hex head screw. Refer to the illustration below.
- 4. Attach a leg tray clip to the other upright by repeating step 2 and step 3.
- 5. Tighten all screws and lock nuts.



#### Loading the Beam Cart

#### AWARNING

Using the indoor deck cart or beam cart on floor surfaces that are not level or that have rough and uneven areas can result in an unsafe condition. Make sure that all four caster remain in contact with the floor. Failure to observe can result in carts not remaining in place, not being stable, and possibly not being safe when moving.

### AWARNING

Do not place an excessive load onto the beam cart supports. Placing a larger load or concentrating the load can cause permanent deformation or a total collapse of the support.

### AWARNING

Always distribute the load evenly on the cart. Avoid top-heavy loading. Always load the cart on the bottom first. The top shelf load should never exceed the bottom shelf load.

### AWARNING

Never stand on a cart when working on it or moving STRATA components.

### AWARNING

Avoid off-center loads which may cause the cart to tip over.

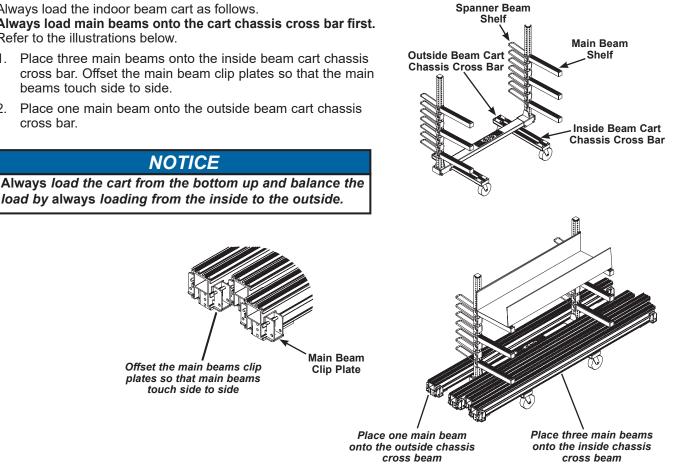
Always load the indoor beam cart as follows.

Always load main beams onto the cart chassis cross bar first. Refer to the illustrations below.

- 1. Place three main beams onto the inside beam cart chassis cross bar. Offset the main beam clip plates so that the main beams touch side to side.
- 2. Place one main beam onto the outside beam cart chassis cross bar.

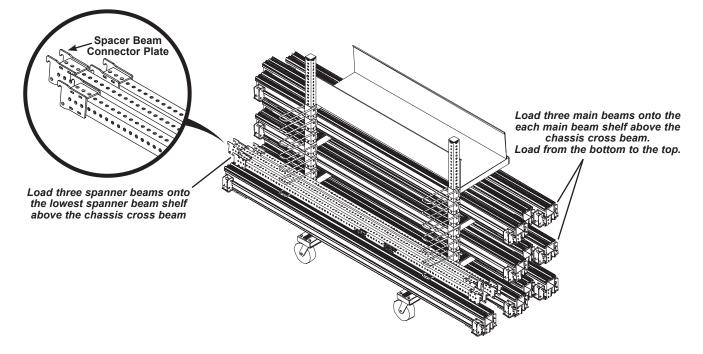
### AWARNING

The maximum evenly distributed load for the beam cart is 2600 lb (1179 kg).

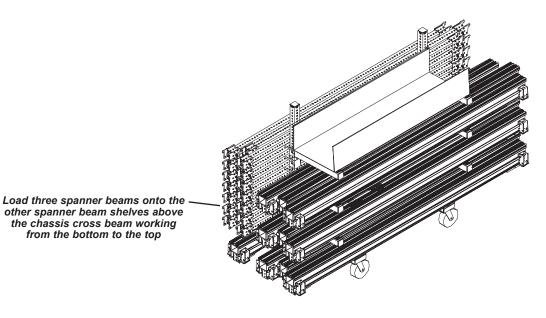


#### Loading the Beam Cart (continued)

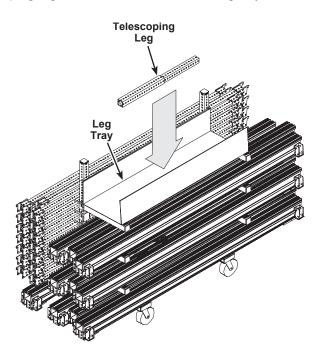
- 3. Add three main beams to each main beam shelf. Offset the main beam clip plates as done in step 1 on the previous page.
- 4. Load three spanner beams onto the lowest spanner beam shelf, offsetting the spanner beam connector plates so that the spanner beams will touch side to side.



5. Continue loading three spanner beams onto each spanner beam shelf, working from the bottom to the top. Offset the spanner beam connector plates as done in step 4 above.



Loading the Beam Cart (continued)
6. Place telescoping legs horizontally into the leg tray. Make sure that the telescoping legs will not tumble out of the leg tray when the rail cart is moved.



#### Moving a Loaded Beam Cart

#### AWARNING

Using the indoor deck cart or beam cart on floor surfaces that are not level or that have rough and uneven areas can result in an unsafe condition. Make sure that all four caster remain in contact with the floor. Failure to observe this caution can result in carts not remaining in place, not being stable, and possibly not being safe when moving.

#### AWARNING

Never stand on a cart when working on it or moving STRATA components.

### AWARNING

When moving a cart, never allow people to ride on the cart.

### AWARNING

Two people must always work together when moving a cart (one person pushing at the rear and one person guiding the cart at the front).

### AWARNING

Do not stand or place hands or feet in the cart pathway.

### AWARNING

Avoid ramps steeper than a 1' (305 mm) rise or drop in a 12' (3658 mm) horizontal distance.

#### AWARNING

Always move slowly up or down a ramp with the narrow end of the cart in the direction of travel.

### AWARNING

Because swivel casters move in any direction, the operator must move the cart slowly and have a clear view to avoid obstructions and individuals standing in the direction of travel.

### AWARNING

Do not pull or push too high on the cart or step on the side of the base (lower shelf) which may cause the cart to tip over.

#### AWARNING

Never place a cart sideways on an inclined ramp where they can tip over.

### AWARNING

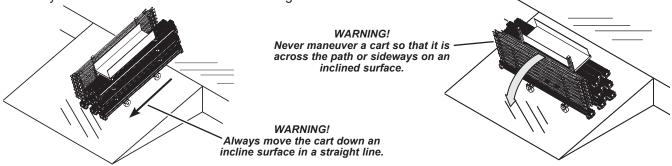
The maximum evenly distributed load for the stage cart is 2600 lb (1179 kg).

#### 1. When moving a loaded rail cart, always push from the rear and one person in front making sure that the pathway is safe.

## WARNING! Always push from the rear.

One person must be in front making sure that the pathway is safe.

2. When moving a loaded rail cart down an inclined surface, always make sure that the cart remains straight.



## Stage Cart Accessory

#### Before Stage Cart assembly

Before assembling the stage cart, do the following.

1. All personnel, including temporary personnel, must read and understand the entire safety section in these instructions.

### AWARNING

Some components are very heavy, large, and awkward to handle. Serious injury or property damage can happen if only one person attempts to move or lift some components such as a chassis. Two or more people must always work together when lifting or moving heavy components.

### 

Always wear safety glasses and safety shoes when assembling the stage cart.

## AWARNING

Personal injury or damage to property can happen if the procedures in these instructions are not followed.

2. Using a wheeled dolly, move the banded stage cart carton to the location where the cart will be assembled.

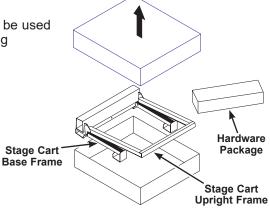
### AWARNING

Always use a wheeled dolly to move the carton.

3. Cut the banding and remove the carton top. The carton top can be used as a work surface on the floor or on a table to prevent scratching components during assembly.

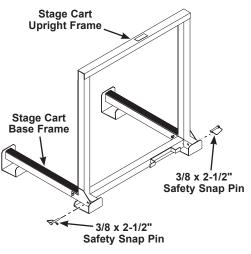
#### NOTICE

Not all hardware items packed in the carton may be needed. When the assembly is complete, discard any hardware items not used.



#### Attach the Casters

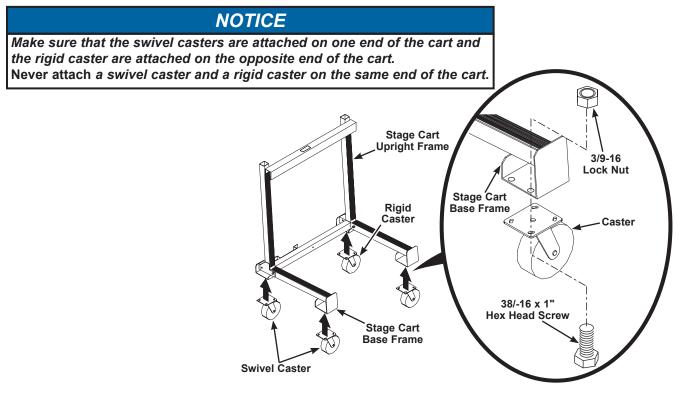
- 1. Remove the hardware package and stage cart chassis from the carton and discard the packing materials. Unpack the hardware package.
- 2. Lock the stage cart upright frame into position.
  - a. Remove the stage cart chassis from the carton and place the bottom surface of the base frame onto the work surface.
  - b. Rotate the upright frame upward and hold it place.
  - c. Insert a 3/8 x 2-1/2" safety snap pin into the two base frame clearance holes as shown in the illustration at the right. Make sure that the retainer on each pin is engaged.



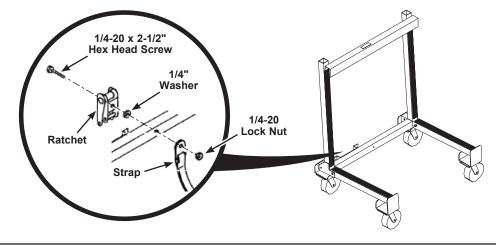
## Stage Cart Accessory (continued)

#### Attach the Casters (continued)

- 3. Attach two rigid casters to one end of the stage cart base frame.
  - a. Insert 3/8-16 x 1" hex head screws upward through the clearance holes.
  - b. Using a pair of 9/16" combination wrenches, attach a 3/8-16 lock nut to each hex head screw.
- 4. Attach two swiveling casters to the opposite end of the stage cart base frame.
  - a. Insert 3/8-16 x 1" hex head screws upward through the clearance holes.
  - b. Using a pair of 9/16" combination wrenches, attach a 3/8-16 lock nut to each hex head screw.



- 5. Attach the ratchet and strap to the stage cart base frame. Refer to the illustration below.
  - a. Align the ratchet to the base frame clearance hole with a 1/4" washer between the ratchet and base frame.
  - b. Insert a 1/4-20 x 2-1/2" hex head screw through the ratchet, washer and base frame.
  - c. Using a pair of 7/16" combination wrenches, attach a 1/4-20 lock nut to the hex head screw.



## Stage Cart Accessory (continued)

Loading and Moving the Stage Cart

#### AWARNING

Never place more than six STRATA finished decks or six STRATA plywood decks onto the stage cart.

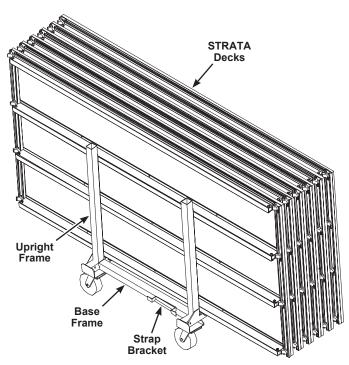
1. With two people working together, load decks onto the cart base frame with the decks resting against the cart upright frame. Always place the decks onto the cart on the deck long edge as shown in the illustration below.

### AWARNING

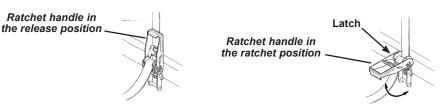
Always secure the decks with the ratchet and strap.

### AWARNING

The maximum evenly distributed load for the stage cart is 2600 lb (1179 kg).



- 2. Secure the decks with the strap.
  - a. Place the ratchet handle into the released position.
  - b. Pull the strap around the decks and through the ratchet center spindle until the strap is snug.
  - c. Pull the latch open and swing the ratchet handle into the ratchet position.
  - d. Move the ratchet handle downward and then upward until the strap is tight, then place the handle in the down position.
  - e. Make sure that the ratchet handle is flush with the cart (not protruding when the cart is moved).
  - f. Wrap the excess strap around the strap bracket.



3. To release the strap, pull the latch open and move the ratchet handle to the release position. The strap can be pulled from the ratchet.

## **Outdoor Cart Accessory**

#### Before Outdoor Cart Assembly

Before assembling the outdoor cart, do the following.

1. All personnel, including temporary personnel, must read and understand the entire safety section in these instructions.

### AWARNING

Some components are very heavy, large, and awkward to handle. Serious injury or property damage can happen if only one person attempts to move or lift some components such as a chassis. Two or more people must always work together when lifting or moving heavy components.

### AWARNING

Always wear safety glasses and safety shoes when assembling the outdoor cart.

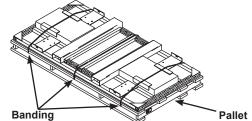
### **A**WARNING

Personal injury or damage to property can happen if the procedures in these instructions are not followed.

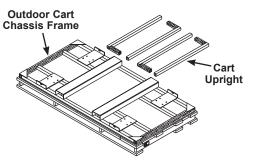
2. Using a pallet truck, move the banded outdoor cart pallet to the location where the cart will be assembled.

#### AWARNING

Always use a pallet truck to move the pallet.

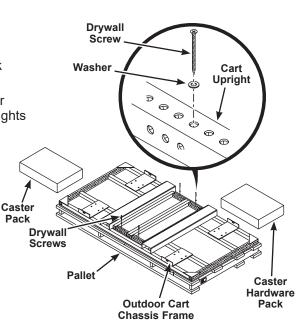


- 3. Cut and remove the banding from the pallet.
  - a. Discard the banding and angleboard pieces.
  - b. Remove the caster package, the caster-hardware pack and set both aside.
  - c. Using a cordless drill with a phillips bit, remove the four drywall screws and washers that hold the four cart uprights to the pallet. Refer to the illustration at the right.
  - d. Remove the four cart uprights and set aside.



#### NOTICE

Not all hardware items packed in the hardware pack may be needed. When the assembly is complete, discard any hardware items not used.

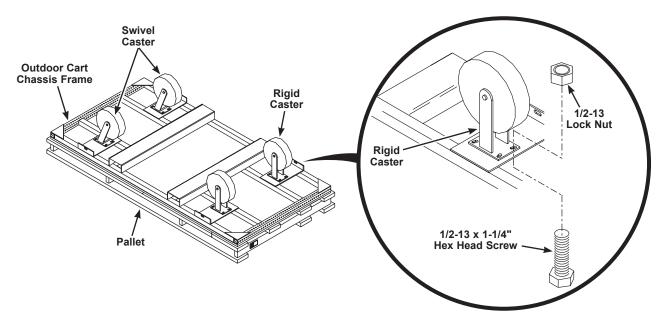


## **Outdoor Cart Accessory (continued)**

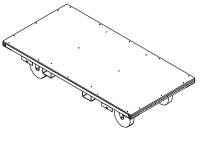
#### Attach the Casters to the Outdoor Cart Chassis

Leave the outdoor cart resting on the pallet when attaching the casters. Both swivel casters must be attached to the outdoor cart chassis on the same end.

- 1. Align the rigid caster mounting holes to a set of mounting holes on one end of the chassis frame. Refer to the illustrations below.
- 2. Insert four 1/2-13 x 1-1/4" hex head screws upward through the mounting holes.
- 3. Using a pair of 3/4" combination wrenches, attach a 1/2-13 lock nut to each hex head screw.
- 4. Attach the other rigid caster on the same end of the chassis frame.
- 5. Attach two swivel caster to the other end of the chassis frame by repeating steps 1 to 4.



6. With two people working together, remove the chassis frame from the pallet and place it with the casters resting on the floor.

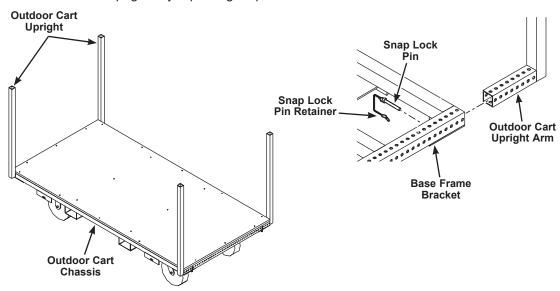


Outdoor Cart Chassis with Casters

## **Outdoor Cart Accessory (continued)**

#### Attach the Uprights to the Outdoor Cart Chassis

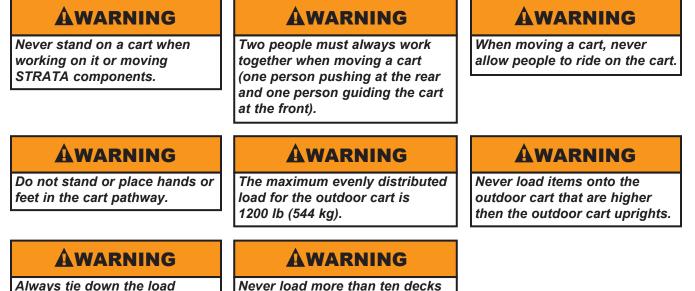
- 1. Insert a cart upright base arm into a outdoor cart base frame bracket.
- 2. Insert a 3/8 x 3-1/2" snap lock pin through a clearance hole in the base frame bracket and close the snap lock pin retainer.
- 3. Assemble the other three cart uprights by repeating steps 1 and 2.



#### Outdoor Cart Use

before attempting to move a

loaded outdoor cart.



Never load more than ten decks onto the outdoor cart.

### Maintenance

#### **Routine Inspections**

After the initial set up and after every event if the components are left standing, do the following.

- 1. Inspect the following parts before each set up and replace any defective parts.
  - a. Main beam latch assembles (springs, pins)
  - b. Main beam spacers
  - c. Beam clips
  - d. Deck lock down assembles
  - e. Detent pins, bolts, wing nuts, tab locking pins
  - f. Telescoping leg fasteners
  - g. Diagonal braces
- 2. Replace any damaged plywood decking.

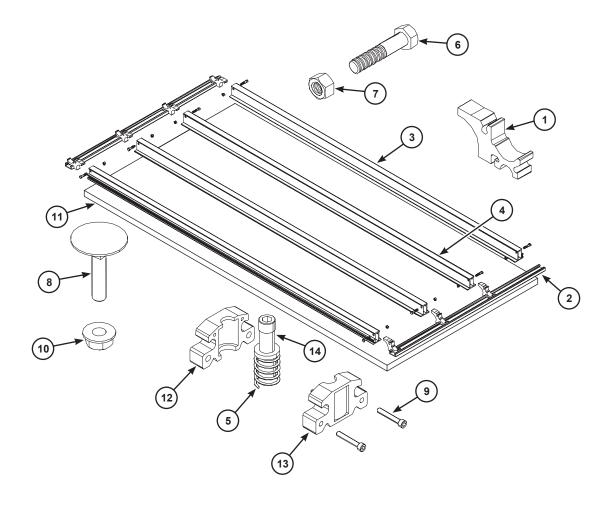
#### Cleaning

- 1. STRATA finished decks can be cleaned with any mild commercial detergents by following the detergent manufacturer's directions. Never use harsh or abrasive cleaning agents on finished decks.
- 2. All metal components can be cleaned with any mild commercial detergents by following the detergent manufacturer's directions.

# **Replacement Parts**

### Plywood Deck Kit

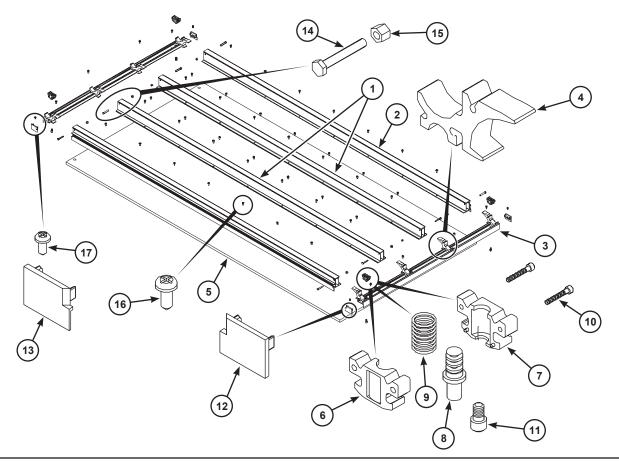
Item	Qty	Description	
1	8	Deck Hook	
2	2	Deck Hook Cap	
3	2	Deck Side Beam	
4	2	Deck Middle Beam	
5	4	Compression Spring	
6	8	1/4-20 x 1-1/2" Hex Head Capscrew	
7	8	1/4-20 Lock Nut	
8	20	1/4-20x1" Elevator Bolt	
9	8	6-32 x 7/8" Socket Head Capscrew	
10	20	1/4-20 Flanged Lock Nut	
11	1	Plywood Sheet See minimum grade requirement in "Plan the Floor"	
12	4	Female Deck Lock Housing	
13	4	Male Deck Lock Housing	
14	4	Deck Lockdown Screw	



# **Replacement Parts (continued)**

### 4' (1219 mm) Finished Deck

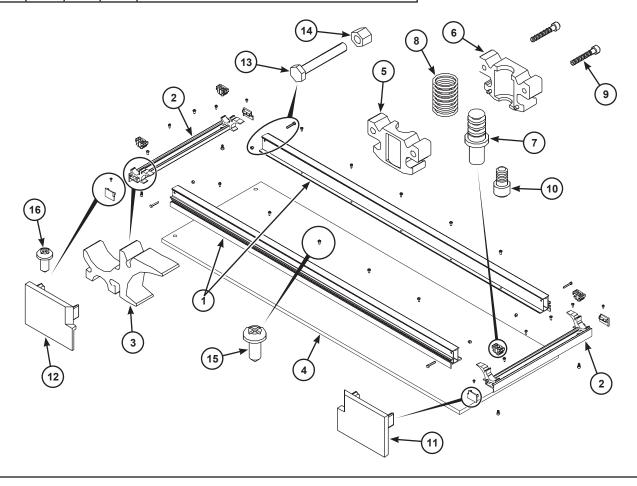
Item	Qty	Qty	Qty	Description
	4' x 8'	4' x 6'	4' x 4'	Finished Deck Assembly
1	2	2	2	Deck Middle Extrusion (specify size when ordering)
2	2	2	2	Deck Side Beam Extrusion (specify size when ordering)
3	2	2	2	Deck Hook Cap Extrusion
4	8	8	8	Deck Hook
5	1	1	1	Deck Stage Top (specify size when ordering)
6	4	4	4	Male Lock Housing
7	4	4	4	Female Lock Housing
8	4	4	4	Deck Lockdown Screw
9	4	4	4	Compression Spring
10	8	8	8	6-32 x 7/8" Hex Head Screw
11	4	4	4	5/16-18 x 1/2" Socket Head Screw
12	2	2	2	Corner Block A
13	2	2	2	Corner Block B
14	8	8	8	1/4-20 x 1-1/2" Hex Head Screw
15	8	8	8	1/4-20 Lock Nut
16	50	38	26	14-10 x 3/4" Pan Head sheet Metal Screw
17	4	4	4	8-32 x 3/8" Tapping Screw



# **Replacement Parts (continued)**

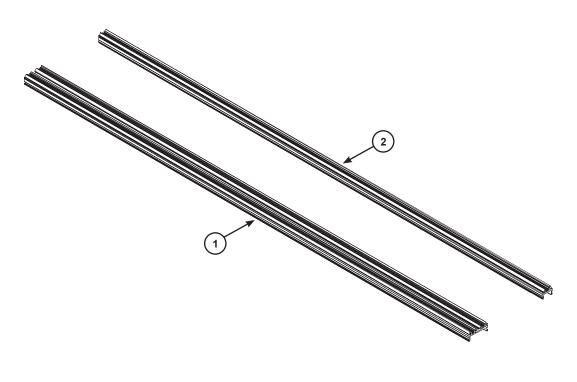
### 2' (610 mm) Finished Deck

Item	Qty	Qty	Qty	Description
	2' x 8'	2' x 6'	2' x 4'	Finished Deck Assembly
1	2	2	2	Deck Side Beam Extrusion (specify size when ordering)
2	2	2	2	Deck Hook Cap Extrusion
3	4	4	4	Deck Hook
4	1	1	1	Deck Stage Top (specify size when ordering)
5	4	4	4	Male Lock Housing
6	4	4	4	Female Lock Housing
7	4	4	4	Deck Lockdown Screw
8	4	4	4	Compression Spring
9	8	8	8	6-32 x 7/8" Hex Head Screw
10	4	4	4	5/16-18 x 1/2" Socket Head Screw
11	2	2	2	Corner Block A
12	2	2	2	Corner Block B
13	4	4	4	1/4-20 x 1-1/2" Hex Head Screw
14	4	4	4	1/4-20 Lock Nut
15	22	18	14	14-10 x 3/4" Pan Head sheet Metal Screw
16	4	4	4	8-32 x 3/8" Tapping Screw



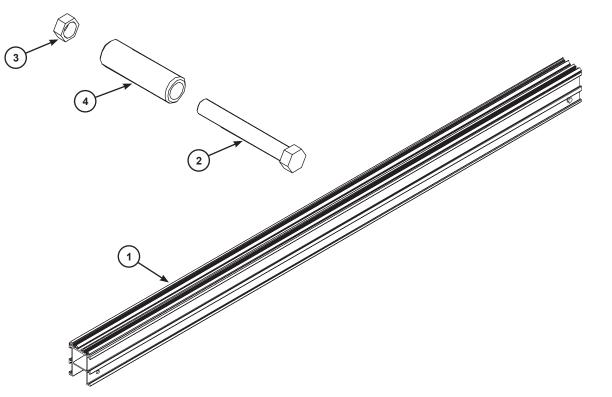
#### Beam Cap

Item	Qty	Description
1	1	Double Beam Cap**
2	1	Single Beam Cap**
**Specify Length		



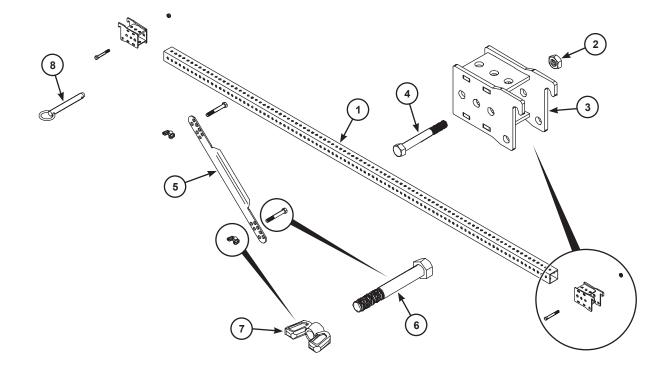
### Main Beam

Item	Qty	Description	
1	1	Main Beam**	
2	2	1/2-13 x 3-1/2" Hex Head Capscrew	
3	2	1/2-13 Lock Nut	
4	2	Main Beam Spacer	
**Spec	**Specify Main Beam Length		



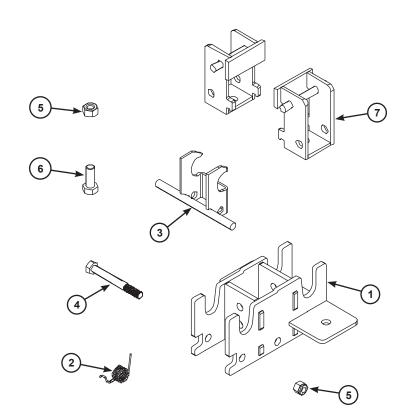
## Spacer Beam

Item	Qty	Description
1	1	Spacer Beam**
2	2	3/8-16 Lock Nut
3	2	Spacer Beam Bracket
4	2	3/8-16 x 3" Hex Head Capscrew
5	2	Beam Cross Brace
6	4	3/8-16 x 2-3/4" Hex Head Screw
7	4	3/8-16 Wing Nut
8	2	3/8" x 2-5/8" Detent Pin
**Spec	ify leng	gth



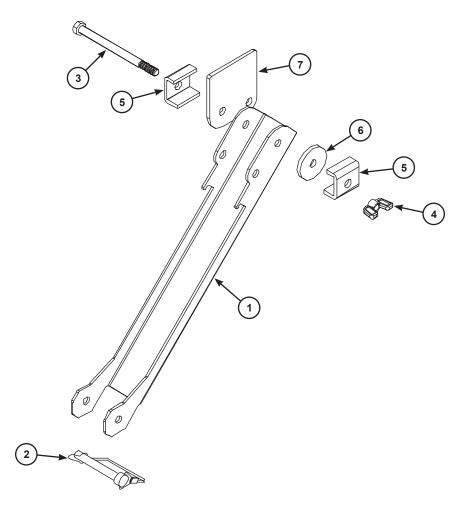
### Interconnector

Item	Qty	Description
1	1	Latch Housing
2	1	Latch Spring
3	1	Main Beam Latch
4	1	3/8-16 x 3-1/4" Hex Head Capscrew
5	3	3/8-16 Lock Nut
6	2	3/8-16 x 1" Hex Head Capscrew
7	2	Beam Clip



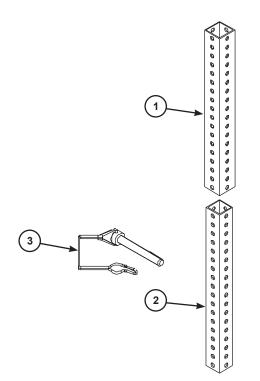
## Main Beam Diagonal

Item	Qty	Description
1	1	Main Beam Diagonal
2	1	Tab Lock Pin
3	1	3/8-16 x 5" Hex Head Capscrew
4	1	3/8-16 Wing Nut
5	2	Diagonal Beam Clip
6	1	Washer
7	1	Main Beam Diagonal Lock Plate



## Telescoping Leg

Item	Qty	Description
1	1	Upper Support Leg**
2	1	Lower Support Leg**
3	1	3/8" x 2-5/8" Tab-lock Pin***
**Specify Length		
***Included When Ordering Lower Support Leg		

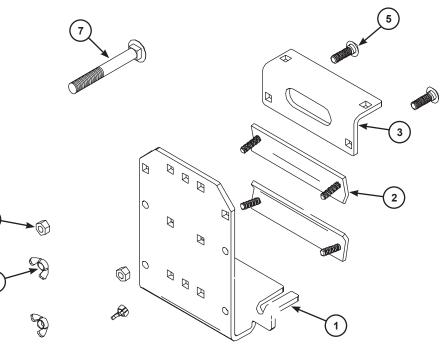


### Rail Plate Accessory

Item	Qty	Description
1	2	Rail Plate
2	4	Rail Clip Assembly
3	2	Rail Plate Clamp Bracket
4	8	5/16-18 Wing Nut
5	4	3/8-16 x 1-1/4" Carriage Bolt
6	8	3/8-16 Hex Nut
7	4	3/8-16 x 3" Carriage Bolt

6

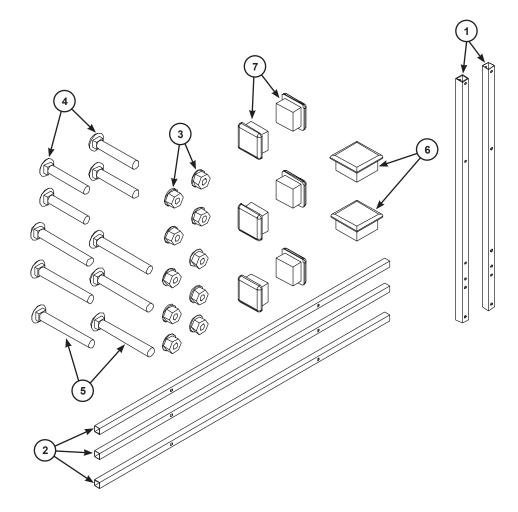
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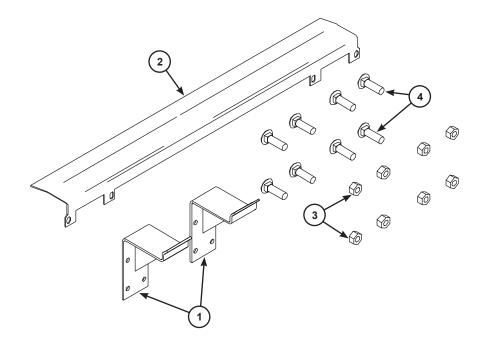
## Guardrail Accessory Kit

Item	Qty	Description
1	2	STRATA Guardrail Upright
2	3	STRATA Rail (Specify length when ordering)
3	10	3/8-16 Flanged Hex Nut
4	6	3/8-16 x 3" Carriage Bolt
5	4	3/8-16 x 2-1/4" Carriage Bolt
6	2	1-1/2" Square Tube Plug
7	6	1-1/4" Square Tube Plug



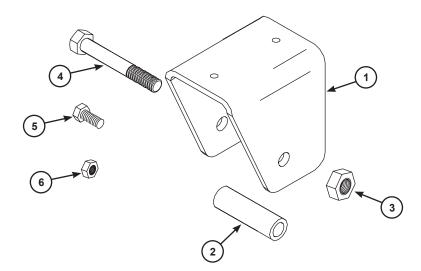
Stairway Attachment Accessory Kit

Item	Qty	Description
1	2	STRATA Stairway Attachment Assembly
2	1	STRATA Step Plate
3	8	3/8-16 Hex Nut
4	8	3/8-16 x 1-1/4" Carriage Bolt



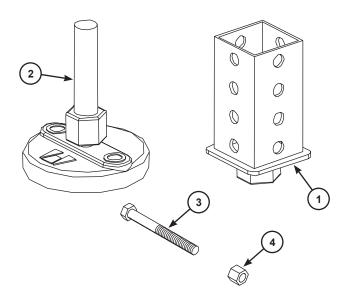
## Beam Link Accessory Kit

ltem	Qty	Description
1	2	Beam Link Bracket
2	2	Main Beam Spacer
3	2	1/2-13 Nylok Nut
4	2	1/2-13 x 4" Hex Head Capscrew
5	4	1/4-20 x 3/4" Hex Head Capscrew
6	4	1/4-20 Nylok Lock Nut



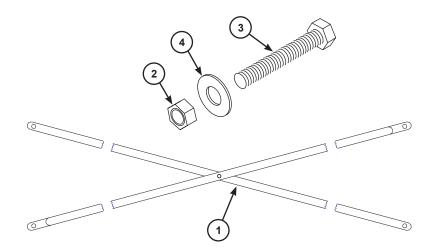
Articulating Leveling Foot Accessory Kit

ltem	Qty	Description
1	1	Leveling Foot Tube
2	1	Articulating Leveling Foot
3	1	3/8-16 x 2-1/2" Hex Head Screw
4	1	3/8-16 Nylok Lock Nut



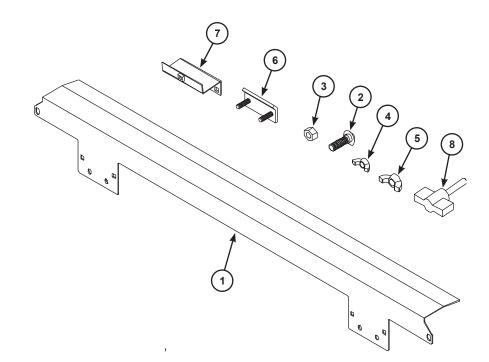
## Cross Bracing Accessory Kit

Item	Qty	Description
1	1	Cross Brace Kit
2	4	Cross Brace Assembly (specify size when ordering)
3	4	3/8-16 x 2-3/4" Hex Head Screw
4	4	3/8 x 1-1/4" Flat Washer



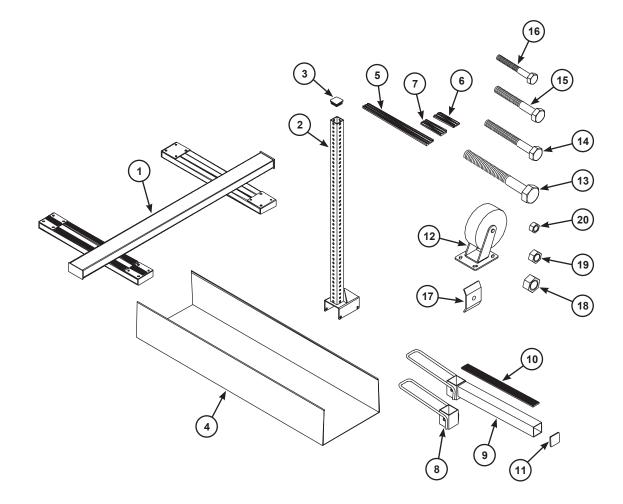
## ADA Bracket

Item	Qty	Description		
1	1	STRATA ADA Adapter Ramp		
2	6	3/8-16 x 3/4" Carriage Bolt		
3	4	3/8-16 Lock Nut		
4	4	5/16-18 Wing Nut		
5	2	3/8-16 Wing Nut		
6	2	Clip Assembly		
7	2	Adapter Ramp Bracket		
8	2	5/16-18 x 1-1/2" Knob		



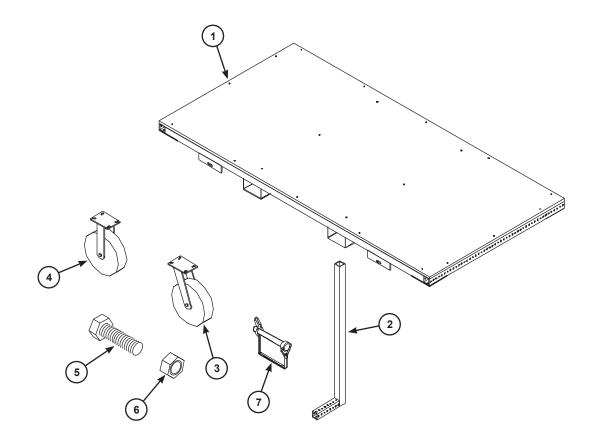
## STRATA Rail Cart

Item	Qty	Description	Item	Qty	Description
1	1	Beam Cart Chassis	11	6	Beam Shelf Plug
2	2	Beam Cart Upright	12	4	6" Dia 650 lbs Capacity Swivel Caster
3	1	Beam Cart Upright Plug	13	4	1/2-13 x 5" Hex Head Screw
4	1	Beam Cart Leg Tray	14	2	3/8-16 x 3" Hex Head Screw
5	4	12-1/8" Chassis Cross Beam Matting	15	14	3/8-16 x 2-3/4" Hex Head Screw
6	4	3-5/8" Chassis Cross Beam Matting	16	16	5/16-18 x 2-1/4" Hex Head Screw
7	4	3-3/4" Chassis Cross Beam Matting	17	2	Leg Tray Clip
8	6	Main Beam-Spanner Beam Support	18	4	1/2-13 Lock Nut
9	8	Spanner Beam Support	19	16	3/8-16 Lock Nut
10	6	17-1/8" Beam Shelf Matting		16	5/16-18 Lock Nut



### STRATA Outdoor Cart

Item	Qty	Description	
1	1	Outdoor Cart Chassis	
2	4	Outdoor Cart Upright	
3	2	12" Pneumatic Swivel Caster	
4	2	12" Pneumatic Rigid Caster	
5	16	1/2-13 x 1-1/4" Hex Head Screw	
6	16	1/2-13 Lock Nut	
7	4	3/8 x 3-1/2" Snap Lock Pin	
8	2	Strap (not shown)	



## Stage Cart

Item	Qty	Description	
1	1	Stage Cart Upright	
2	2	Stage Cart Upright Matting	
3	1	Stage Cart Base	
4	2	Stage Cart Base Matting	
5	1	Ratchet (not shown)	
6	1	Strap (not shown)	
7	2	6" Rigid Caster	
8	2	6" Swivel Caster with Brake	
9	16	3/8-16 x 1" Hex Head Screw	
10	16	3/8-16 Lock Nut	
11	2	3/8 x 2-1/2" Snap Lock Pin	
12	1	1/4-20 x 2-1/2" Hex Head Screw	
13	1	1/4" Flat Washer	
14	1	1/4-20 Lock Nut	
15	2	3/8-16 x 3" Hex Head Screw	

