

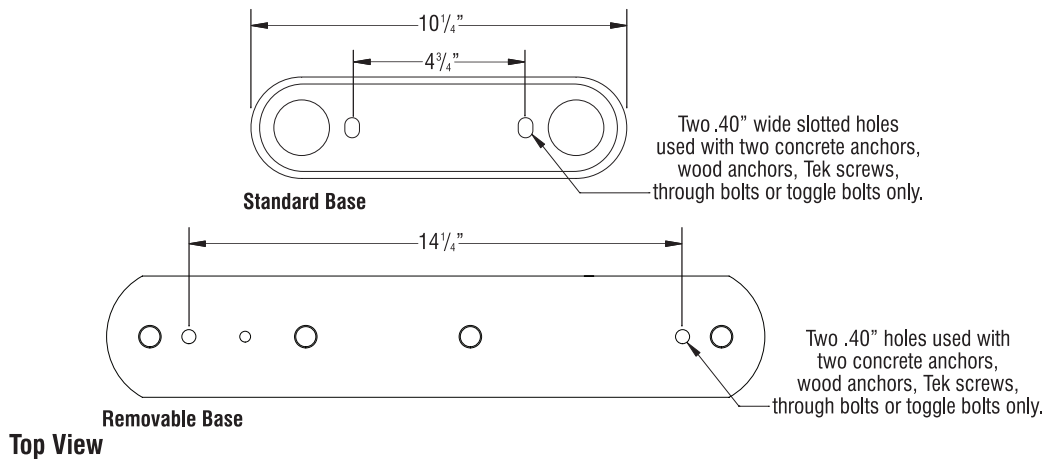
March 2025

[illegible]



Assemble units as described herein only. To do otherwise may result in instability. All screws, nuts and bolts must be tightened securely and must be checked periodically after assembly. Failure to assemble properly, or to secure parts may result in assembly failure and personal injury.

### Floor Anchor Specifications

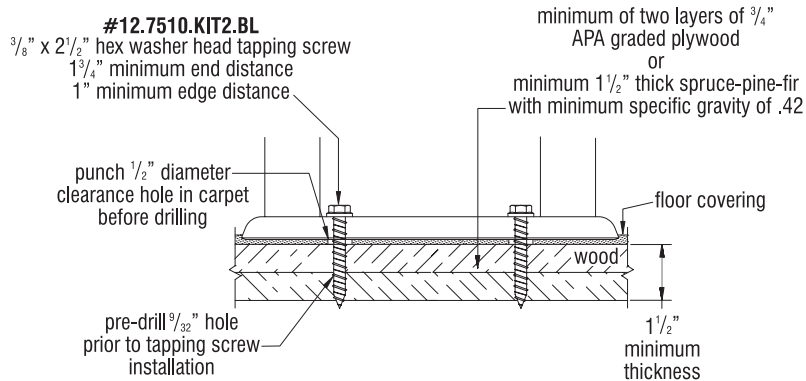


#### Minimum End Distance

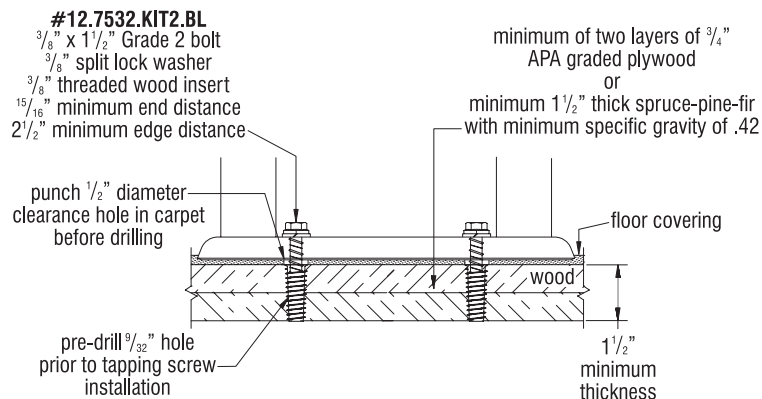
**Wood:** The distance from center of anchor to the end of the wood floor panel (parallel to the grain).

#### Minimum Edge Distance

**Wood:** The distance from center of anchor to the edge of the wood floor panel (perpendicular to the grain).



#### Wood Anchor #12.7510.KIT2.BL

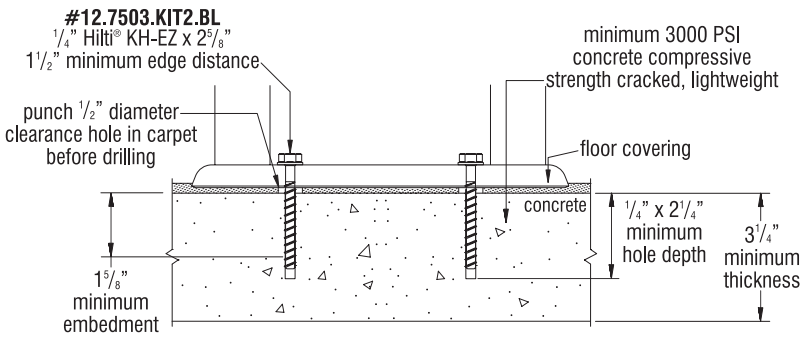


#### Wood Anchor #12.7532.KIT2.BL

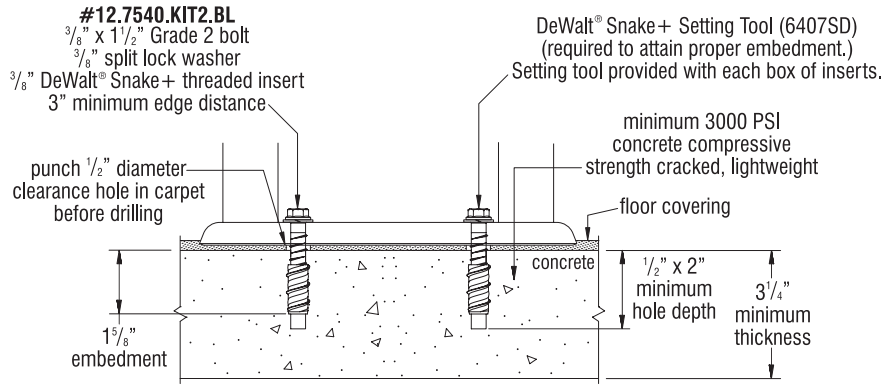


Assemble units as described herein only. To do otherwise may result in instability. All screws, nuts and bolts must be tightened securely and must be checked periodically after assembly. Failure to assemble properly, or to secure parts may result in assembly failure and personal injury.

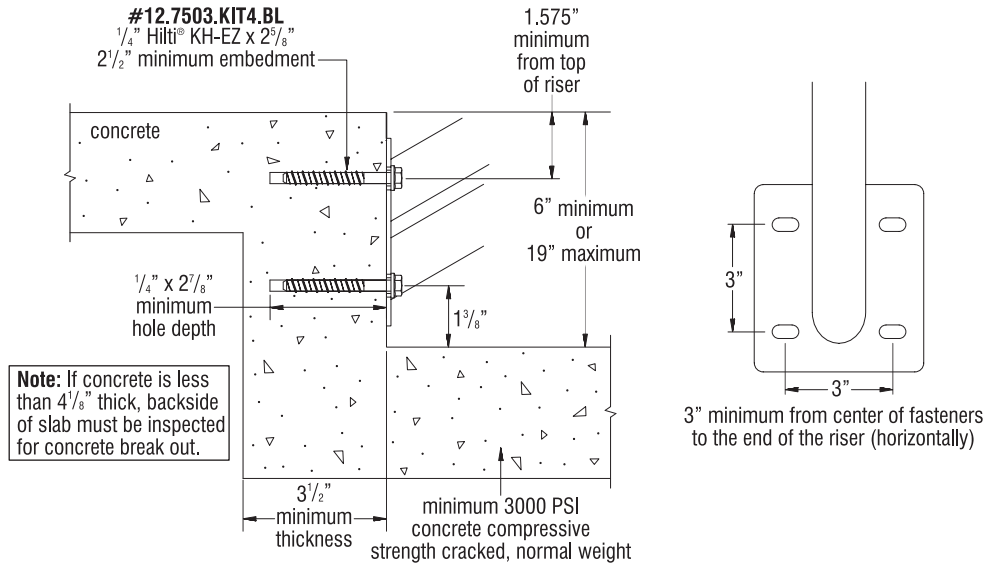
**Minimum Edge Distance**  
**Concrete:** The distance from center of anchor to the edge of the concrete material in either direction.



**Concrete Anchor #12.7503.KIT2.BL**



**Concrete Anchor #12.7540.KIT2.BL**



**Concrete Riser Mount Anchor #12.7503.KIT4.BL**

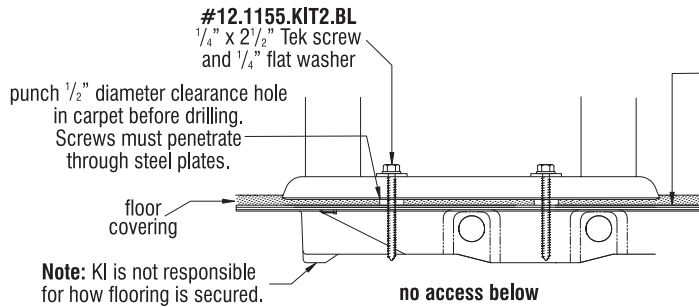
**Front View**



Assemble units as described herein only. To do otherwise may result in instability. All screws, nuts and bolts must be tightened securely and must be checked periodically after assembly. Failure to assemble properly, or to secure parts may result in assembly failure and personal injury.

**Minimum Edge Distance**

**Steel:** The distance from center of anchor to the edge of the steel plate in either direction.



**Note:** Core material negligible. Pre-drilling needed for concrete cores. Pre-drilling may not be required on non-concrete cores.

**Steel Plate on Bottom Only:**

Minimum thickness required is .075\".

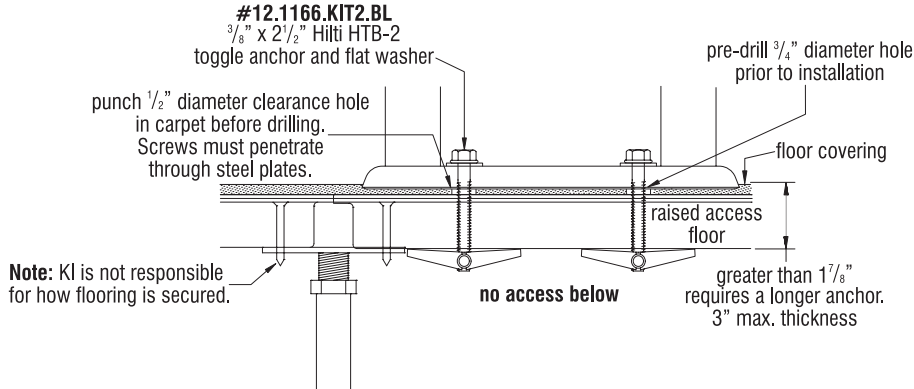
**Steel Plate on Top Only:**

Minimum thickness required is .075\".

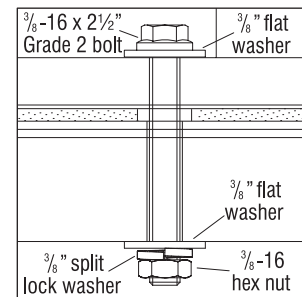
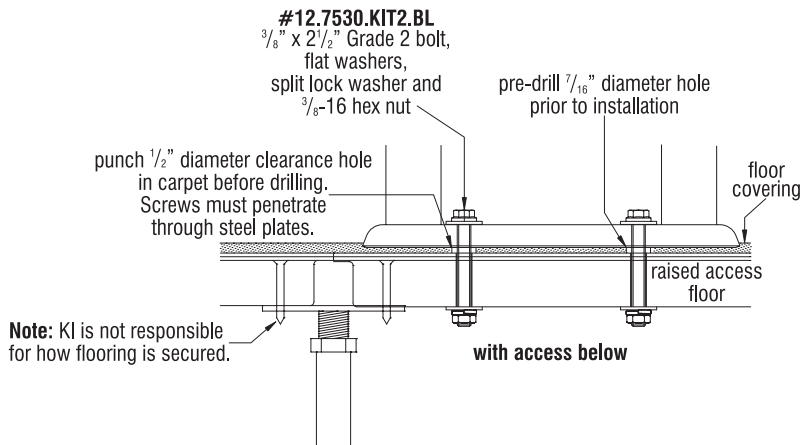
**Steel Plate on Top & Bottom:**

Minimum thickness of each plate is 0.040\".

**Raised Floor Anchor #12.1155.KIT2.BL**



**Raised Floor Anchor #12.1166.KIT2.BL**



**Bolt Detail**

**Raised Floor Anchor #12.7530.KIT2.BL**



Assemble units as described herein only. To do otherwise may result in instability. All screws, nuts and bolts must be tightened securely and must be checked periodically after assembly. Failure to assemble properly, or to secure parts may result in assembly failure and personal injury.

#### TOOLS REQUIRED

- Hammer drill and bit for concrete anchor holes
- Drill and bit for pilot holes in wood floor
- DeWalt® Snake+ setting tool (required to attain proper embedment. Setting tool provided with each box of inserts)
- #3 Phillips head for back screws
- #2 Phillips head for end panels
- $\frac{9}{16}$ " small head box end ratchet wrench for tablet bolts
- $\frac{3}{8}$ " deep well socket with ratchet or power driver for seat pivot bolts
- Chalk line
- Tape measure
- T-20 Torx bit
- Torque wrench

**Note:** Read these assembly instructions carefully prior to product installation. Electrically interconnected furnishings must also be mechanically interconnected. Product failure and personal injury may result if instructions are not followed.

#### MINIMUM CONSTRUCTION REQUIRED FOR UPRIGHT INSTALLATION

##### Riser Mount

- Minimum 3000 psi Concrete, compressed strength, cracked, normal weight.
- See specific anchor diagram for minimum anchor embedment.

##### Wood Floors

- Minimum two layers of  $\frac{3}{4}$ " APA Graded plywood or minimum  $1\frac{1}{2}$ " thick spruce-pine-fir with minimum specific gravity 0.42.
- Allow minimum embedment  $1\frac{1}{2}$ " with lag screws.

##### Concrete Floors

- Minimum 3000 psi Concrete, compressed strength, cracked, lightweight.
- See specific anchor diagram for minimum anchor embedment.

#### Raised Floors

- KI is not responsible for how flooring is secured.

**Note:** Warranty null and void if KI product is installed on flooring not meeting minimum structural requirements stated above.

#### FLOOR FASTENER REQUIREMENTS

##### Riser Mount

- $\frac{1}{4}$ " Hilti® KH-EZ x  $2\frac{5}{8}$ " screws.
- Four screw assemblies required per base.

##### Wood Floors

- See wood anchor details for specific anchor.
- Two screw assemblies required per base.

#### Concrete Floors

- See concrete anchor details for specific anchor.
- Two screw or bolt assemblies required per base.

#### Raised Floors

- See raised floor anchor details for specific anchor.
- Two screw or bolt assemblies required per base.

**Note: Floor-mounting fasteners are provided unless specified.**

- For questions concerning anchor selection and special floor conditions, please contact KI Customer Service at 1-800-424-2432.



Assemble units as described herein only. To do otherwise may result in instability. All screws, nuts and bolts must be tightened securely and must be checked periodically after assembly. Failure to assemble properly, or to secure parts may result in assembly failure and personal injury.

### Steps for Installation

1. Read and review Concerto Seating Assembly Instructions.
2. Review space-planning layouts.
3. Call 1-800-542-7421 for technical assistance as questions arise.
4. Review job site and verify field conditions.
5. Verify floor structural conditions.
6. Stage product for installation.
7. Locate and mark layout reference points.
8. Locate and drill upright holes into floor.
9. Mount uprights to the floor per the tablet option and the electrical circuit specified on the space-planning layout (if required). Make sure to include bottom infeed brackets where needed. Install anchor bolts loosely to allow for adjustment.
10. Fasten Concerto Seating backs to the uprights.
11. Assemble the power distribution harnesses to the simplex receptacle connector ends and power infeed harness housing end.
12. Route data wires and insert data jacks into their data plates before securing to the flange on the electrical box.
13. Mount lower wireway covers to the seat back panels.
14. Mount tablet arms and side panel.
15. Mount power & data side panels and finish electrical infeed connections.
16. Fasten seats to uprights: Center seat between uprights, tighten seat pivot bolts.
17. Tighten upright mounting hardware being careful to keep aisle uprights and front edges in line.
18. Install ADA removable base (optional). **Note:** ADA bases are not available with power & data.
19. Bolt on tablet arm (optional).
20. Install end panel (optional).
21. Mount row and seat numbering (optional).
22. Clean product and site.
23. Walk through with installation crew to assure the product has been installed per Concerto Seating Assembly Instructions and space-planning layout.
24. Perform final walk through with the customer. Receive sign-off.

**Note:** Dimensional spacing referenced is centerline to centerline unless otherwise noted.

### Preliminary Mounting and Hole Layout - No Power & Data

**Note:** Review space-planning layout provided to identify which uprights are to be equipped with tablet arms and/or aisle lights (Figure 4). Tablet arm uprights have a pivot mount bracket between the top of the uprights (Figure 6).

1. Follow the space-planning layout and stage the uprights by the correct type or option.

#### Caution:

Assembly problems, product failure and personal injury may result if uprights are not properly spaced.

**Note:** On radiused installations, the front tubes of the upright are shifted closer together. Rear tubes always remain at the appropriate dimension matching the seat size: 19", 20", 21", 22", 23" or 24" (Detail A, "Radius Chart" and "Tolerances for Mounting Uprights").

2. Carefully locate the upright mounting holes and the appropriate floor anchors as specified in the space-planning layout provided. Study "Detail A" the guidelines in the "Radius Chart" and "Tolerances for Mounting Uprights."





Assemble units as described herein only. To do otherwise may result in instability. All screws, nuts and bolts must be tightened securely and must be checked periodically after assembly. Failure to assemble properly, or to secure parts may result in assembly failure and personal injury.

### Preliminary Mounting and Hole Layout - with Power

- Follow the space-planning layout provided and stage the uprights in position with the specified right, left or no-tablet option (Figure 1), as well as by indicated electrical circuit number and/or aisle light option. Each right-hand powered upright comes with a simplex receptacle box labeled "1", "2", or "3" (Figure 1). All upright locations designated "FL" (full-length side-cover upright) will require a

bottom side cover bracket (Figure 1). A side cover bracket is also required at power infeed locations "P" (Figure 1). A data bracket is required at data infeed locations "D" (Figure 1). The data infeed side cover is full length with a protrusion at the bottom where the data wires enter the cover (Figure 6). Half-height side covers may be used on uprights where no power or data is run up from the floor (Figure 6). Half-height side cover locations require no

mounting bracket to be positioned on the foot, between the uprights (Figure 6).

**Note:** On radiused installations, the front tubes of the upright are shifted closer together. Rear tubes always remain at the appropriate dimension matching the seat size: 19", 20", 21", 22", 23" or 24" (Detail A, "Radius Chart" and "Tolerances for Mounting Uprights").

- Carefully locate the upright mounting holes and the appropriate floor anchors as specified in the space-planning layout provided. Study "Detail A" and the guidelines in the "Radius Chart" and "Tolerances for Mounting Uprights".
- Route the power infeed and data infeed to the correct location according to the space-planning layout provided. The power infeed wires **must not** be connected to the power source at this time.

**Radius Chart:** See space-planning layout for specific anchor bolt locations per seat, per row. The following dimensions are a reference to aid in upright alignment.

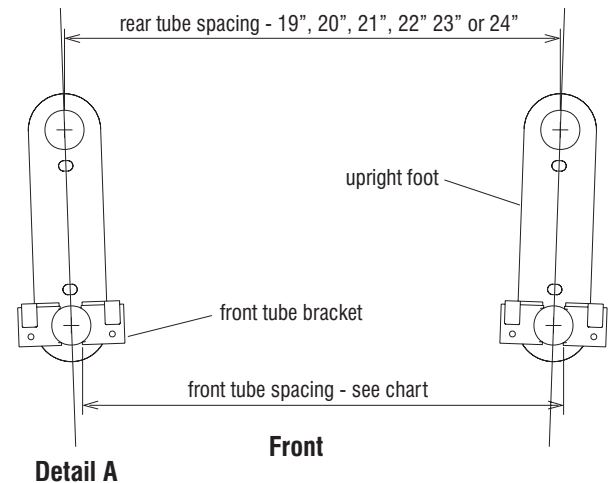
The following chart is a guide to front tube, center-to-center dimensions for specific radius installations. This dimension can be measured from front bracket to front bracket. Rear tube center-to-center dimension must remain

at 19", 20", 21", 22", 23" or 24" for straight runs and radius installations.

**Individual seats can only be used with a radius of 20' or less.**

**For a radius of 40' or less, 1/8" is added to nominal center-to-center spacing of rear tubes.**

Radius (ft)	19" Seat	20" Seat	21" Seat	22" Seat	23" Seat	24" Seat
20'	18 1/2"	19 1/2"	20 7/16"	21 7/16"	22 3/8"	23 3/8"
25'	18 5/8"	19 5/8"	20 9/16"	21 9/16"	22 1/2"	23 1/2"
30'	18 3/4"	19 11/16"	20 11/16"	21 11/16"	22 5/8"	23 5/8"
40'	18 13/16"	19 13/16"	20 13/16"	21 3/4"	22 3/4"	23 3/4"
60'	18 13/16"	19 13/16"	20 13/16"	21 3/4"	22 13/16"	23 13/16"
100'	18 7/8"	19 7/8"	20 7/8"	21 7/8"	22 7/8"	23 7/8"
200'	18 15/16"	19 15/16"	20 15/16"	21 15/16"	22 15/16"	23 15/16"
300'	18 31/32"	19 31/32"	20 31/32"	21 31/32"	22 31/32"	23 31/32"
400' - straight	19"	20"	21"	22"	23"	24"



### Tolerances for Mounting Uprights

The following tolerances apply to standard, floor-mounted Concerto. They are applied to the center-to-center dimensions of the uprights, e.g. a 22" seat must maintain an upright spacing of 21 13/16" to 22 3/16" between the centerlines of the rear upright tubes. See above "Radius chart" text in reference to a radius which is 40' or less. Note that these dimensions must be maintained at each

seat. Attempting to rob from an adjacent seat may only move the problem down the row.

	TUBE CENTERLINE		FLOOR BOLT CENTERLINE	
	FRONT	REAR	5/16" Diameter	3/8" Diameter
<b>Minimum Radius (20')</b>	+ 7/16" / - 1/16"	± 3/16"	+ 9/16" / - 3/16"	+ 1/2" / - 1/8"
<b>Median Radius</b>	± 1/4"	± 3/16"	± 7/16"	± 3/8"
<b>Straight Installation</b>	+ 1/16" / - 7/16"	± 3/16"	+ 3/16" / - 9/16"	+ 1/8" / - 1/2"



Assemble units as described herein only. To do otherwise may result in instability. All screws, nuts and bolts must be tightened securely and must be checked periodically after assembly. Failure to assemble properly, or to secure parts may result in assembly failure and personal injury.

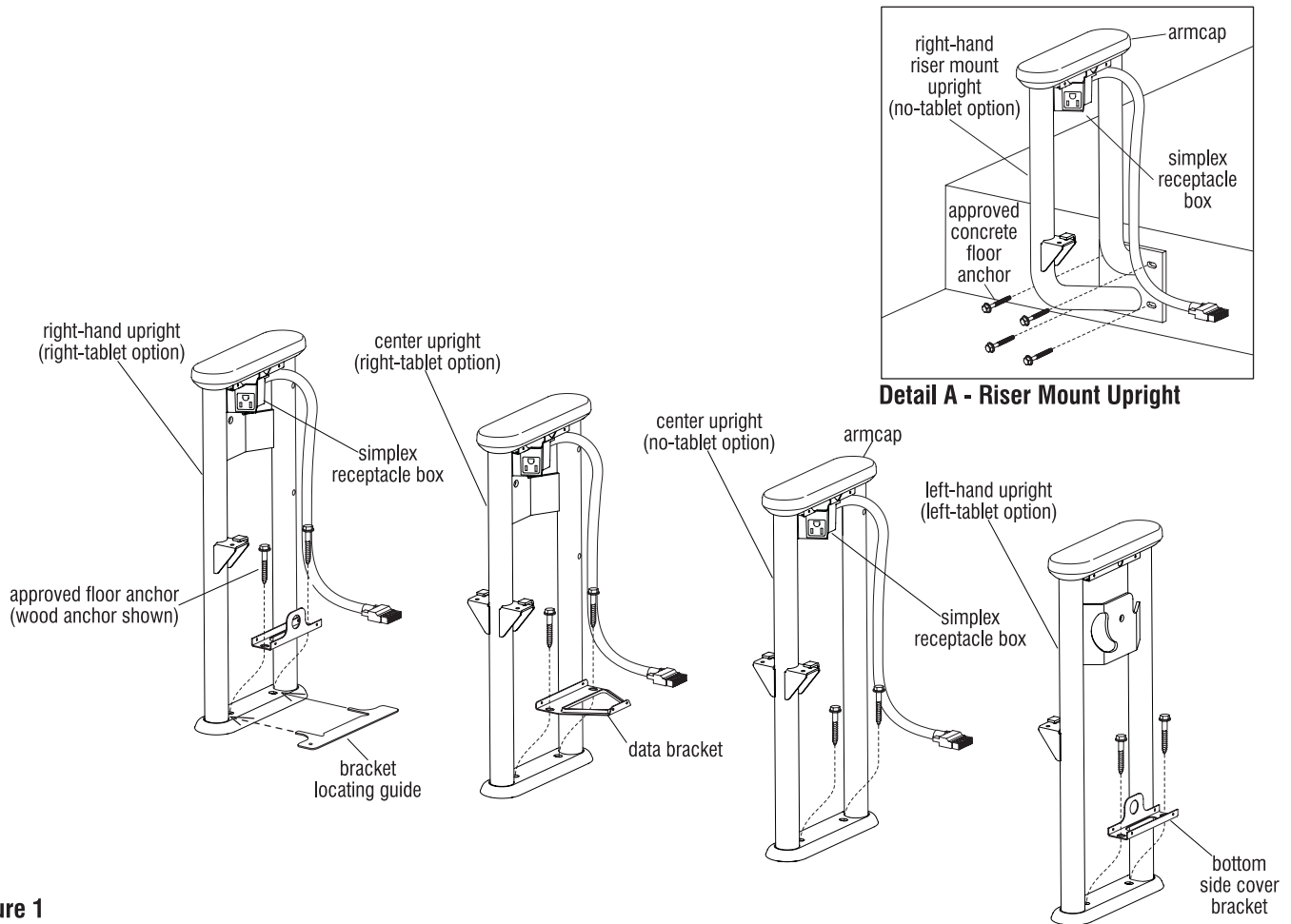


Figure 1

### Upright Installation - Standard Concerto Seating

1. For floor mounted uprights, bore anchor holes to required hole depth for floor-type specific floor anchors. See pages 2 through 5 for anchor information. Locate upright foot over pre-drilled holes and drive in (do not tighten) mounting anchors. **Do not tighten any uprights down at this time.** Leave fastener loose with head approximately  $\frac{1}{16}$ " from contacting the foot of the upright (Figure 1).

2. When mounting riser mount uprights to the face of a riser, the lowest upright mounting holes should be  $1\frac{3}{8}$ " off the floor. Bore anchor holes to required hole depth for specific

concrete floor anchors. See page 3, "Concrete Riser Mount Anchor", for anchor information. Locate upright mounting plate over pre-drilled holes and drive in concrete mounting anchors. Upright can be tightened to the riser at this time (Detail A).

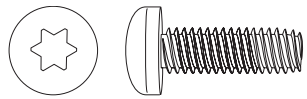
### Upright Installation - Concerto Seating with Power & Data

**Note:** For the following steps, refer to the space-planning layout to determine which uprights will have full-height side covers. The uprights at power infeed and data infeed locations require these side covers, which must use the appropriate bottom side cover bracket or data bracket. Row ends may also have full-length covers specified.

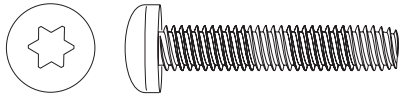
1. Begin installing uprights to the floor by placing the appropriate bottom side cover bracket over the mounting holes in the upright foot. Orient bottom side cover bracket so wire routing hole is facing in toward the seat on end-of-run uprights. Align the holes in the upright foot (and bracket if applicable) with the floor-type specific floor anchors. Insert fasteners through to the floor. **Do not tighten any uprights down at this time.** Leave fastener head loose with approximately  $\frac{1}{16}$ " from contacting the foot of the upright (Figure 1).

2. At locations specified for full-height side covers, use a bracket locating guide to center the bottom side cover bracket both front-to-back and side-to-side. Orient the locator hole in the guide to the front of the upright when centering. Tighten the fasteners, securing the brackets and uprights to the floor. **Only tighten full-height side-cover uprights at this time.** The other uprights must only be tightened after installation of seats.





$\frac{1}{4}$ -20 x  $\frac{3}{4}$ " Pan Head T-30 Torx Screw



$\frac{1}{4}$ -20 x  $1\frac{1}{4}$ " Pan Head T-30 Torx Screw



Assemble units as described herein only. To do otherwise may result in instability. All screws, nuts and bolts must be tightened securely and must be checked periodically after assembly. Failure to assemble properly, or to secure parts may result in assembly failure and personal injury.

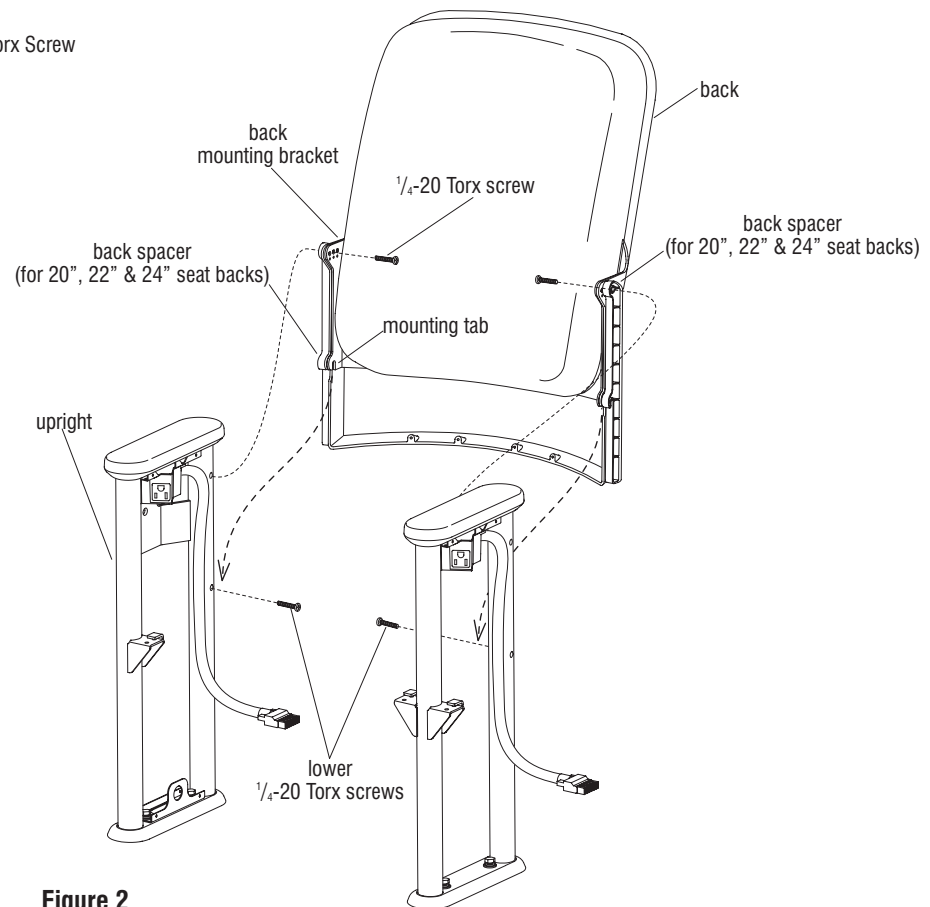


Figure 2

### Back Attachment

1. Follow the Concerto space-planning layout and stage the backs at their installation location by specified size (19", 20", 21", 22", 23" or 24"). Back spacers are riveted to the sides of the mounting brackets on 20", 22" and 24" backs.

**Note:** For the following procedure, 19", 21" and 23" backs will require use of the shorter  $\frac{1}{4}$ -20 x  $\frac{3}{4}$ " T-30 Torx screws (no spacers). The 20", 22" and 24" backs will require the longer  $\frac{1}{4}$ -20 x  $1\frac{1}{4}$ " T-30 Torx screws.

2. Install either the  $\frac{1}{4}$ -20 x  $\frac{3}{4}$ " or the  $\frac{1}{4}$ -20 x  $1\frac{1}{4}$ " T-30 Torx screw into the **lower** back mounting hole on both uprights. For 19", 21" and 23" units, leave a minimum of  $\frac{3}{8}$ " of threads exposed when using the  $\frac{3}{4}$ " screws; and for 20", 22" and 24" units (with spacers), leave a minimum of  $\frac{7}{8}$ " of threads exposed when using the  $1\frac{1}{4}$ " screws (Figure 2).
3. Hold the back at a 30° angle behind the uprights. Hook the mounting tabs on each side of the back onto the lower  $\frac{1}{4}$ -20 Torx screws which

were installed in the previous step. Rotate the backrest forward to line up with one of the three top holes specified to achieve the appropriate back angle. Each hole marks a 4° increment. Unless otherwise specified, use the center hole. On 20", 22" and 24" units, the spacers may be repositioned on the mounting brackets to achieve a different angle. Remove the spacer rivet and reposition the spacer to line up with one of the other two upper mounting holes on the mounting bracket. Use the  $\frac{1}{4}$ -20 x  $1\frac{1}{4}$ " T-30 Torx screw to help keep the spacer aligned with the bracket. The backrest will fit snugly between the uprights and may

need additional inward pressure on the mounting brackets to squeeze between the uprights (Figure 2).

**Note:** The rivets are used to keep the holes aligned at assembly, and the back panel properly connected to the back board. Do not separate the back panel from the back board when removing the rivets. Maintain hole alignment for assembly.

4. Install and tighten the appropriate  $\frac{1}{4}$ -20 Torx screws in the top of both sides of the unit. Tighten the screws in the lower holes (Figure 2).
5. Do not tighten any fasteners to the floor at this time.



Assemble units as described herein only. To do otherwise may result in instability. All screws, nuts and bolts must be tightened securely and must be checked periodically after assembly. Failure to assemble properly, or to secure parts may result in assembly failure and personal injury.

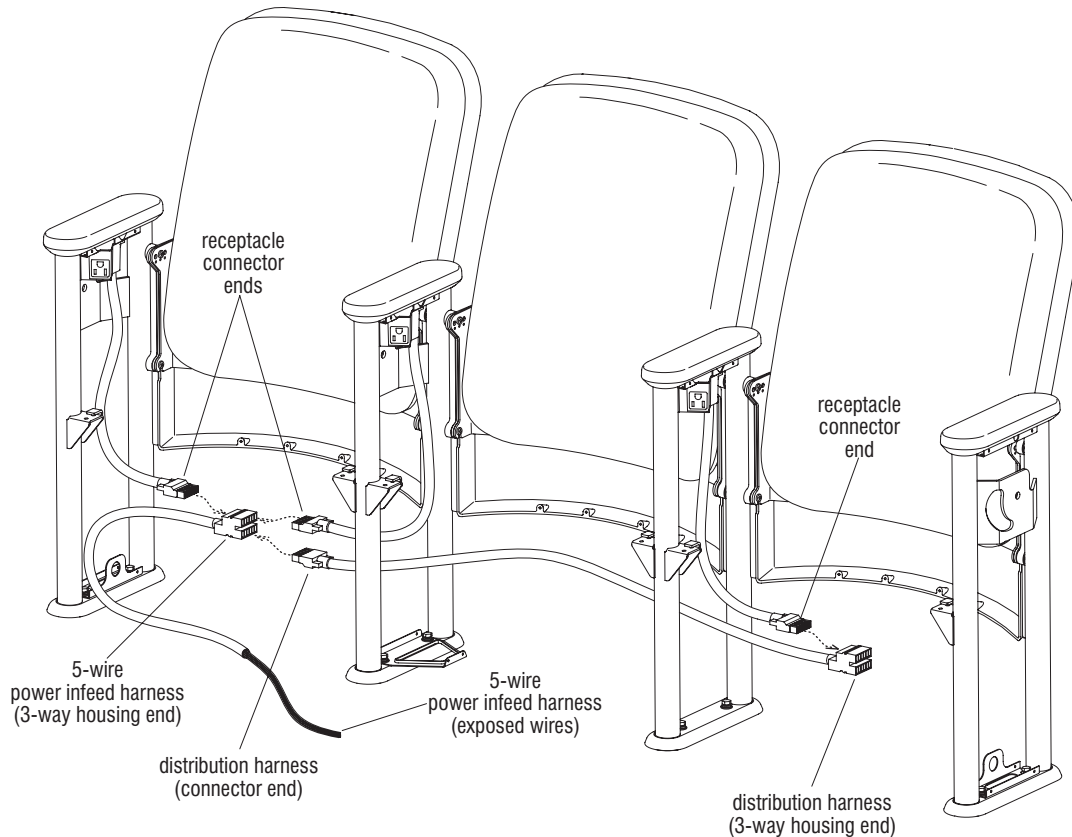


Figure 3

#### Electrical Distribution Installation

**Note:** Follow the space-planning layout provided (also reference Power Infeed examples on page 20) to stage electrical components as specified. The simplex receptacle in each powered upright will have a length of flexible conduit with a connector end on it. At power infeed location(s), a 5-wire power infeed harness is used to begin distribution of the power. 46", 49" and 52" distribution harnesses run to every other seat, passing power to each individual seating location (Figure 3). A 25" distribution harness is used with a mid-row power infeed and at the end of a row with an odd number of seating locations.

1. Check to be certain that each upright is installed with the correct electrical circuit designation, as specified in the space-planning layout.
2. At the power infeed location, connect the two receptacle connector ends into the "3-way housing end" of the 5-wire power infeed harness as illustrated. **Do not** connect the exposed 5-wire end of the power infeed harness to a power source at this time (Figure 3).
3. Plug the connector end of the power distribution harness into the remaining location in the "3-way housing end" of the power infeed harness. Route the "3-way housing end" of the distribution harness between the next two sets of leg uprights and connect the receptacle connector end into it as illustrated (Figure 3).

**Note:** Figure 3 illustrates a three-place unit where one distribution harness is used and is the end of the power run. When power is to continue on, as with four or more seats, a simplex receptacle connector end and another distribution harness will plug into the "3-way housing end" of the first distribution harness. (reference power infeed examples on page 20).



Assemble units as described herein only. To do otherwise may result in instability. All screws, nuts and bolts must be tightened securely and must be checked periodically after assembly. Failure to assemble properly, or to secure parts may result in assembly failure and personal injury.

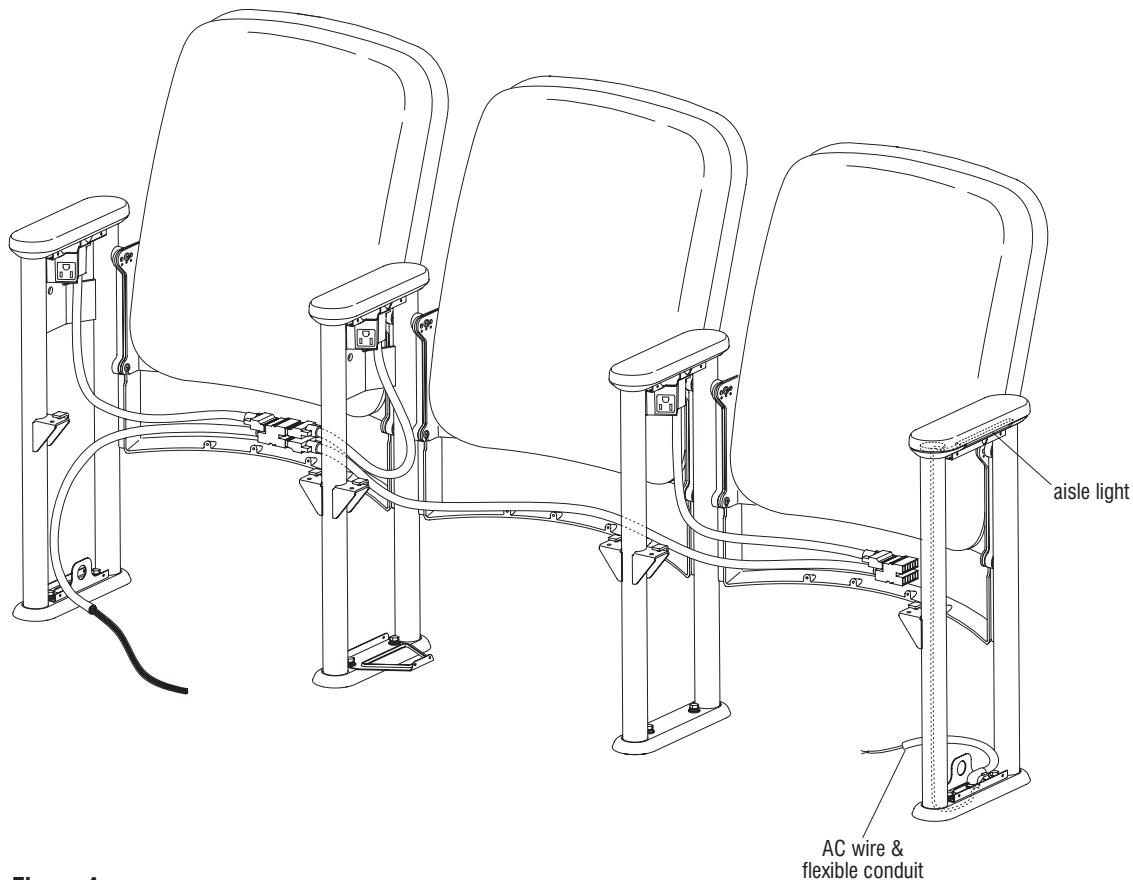


Figure 4

#### Aisle Light electrical

**Note:** The aisle light wiring is to be connected to an appropriate 12VDC power source by a qualified electrician who must check the electrical integrity of the finished system. 12VDC power source is used for LED aisle lights. The step to the right is intended as a guideline for installation.

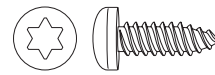
**Note:** Aisle light transformers and dimmers are available. Contact KI Customer Service at: 1-800-424-2432.

1. Aisle lights and wiring come installed in end uprights specified for aisle lights. The AC wire and flexible conduit must be routed and connected to an appropriate 12VDC power source.

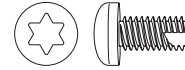
**Note:** Side covers specified for aisle light power infeed have a cut-out at the lower rear of the side cover. The flexible conduit will pass through this slot. Full-height side cover installation is covered on pages 12 and 13.



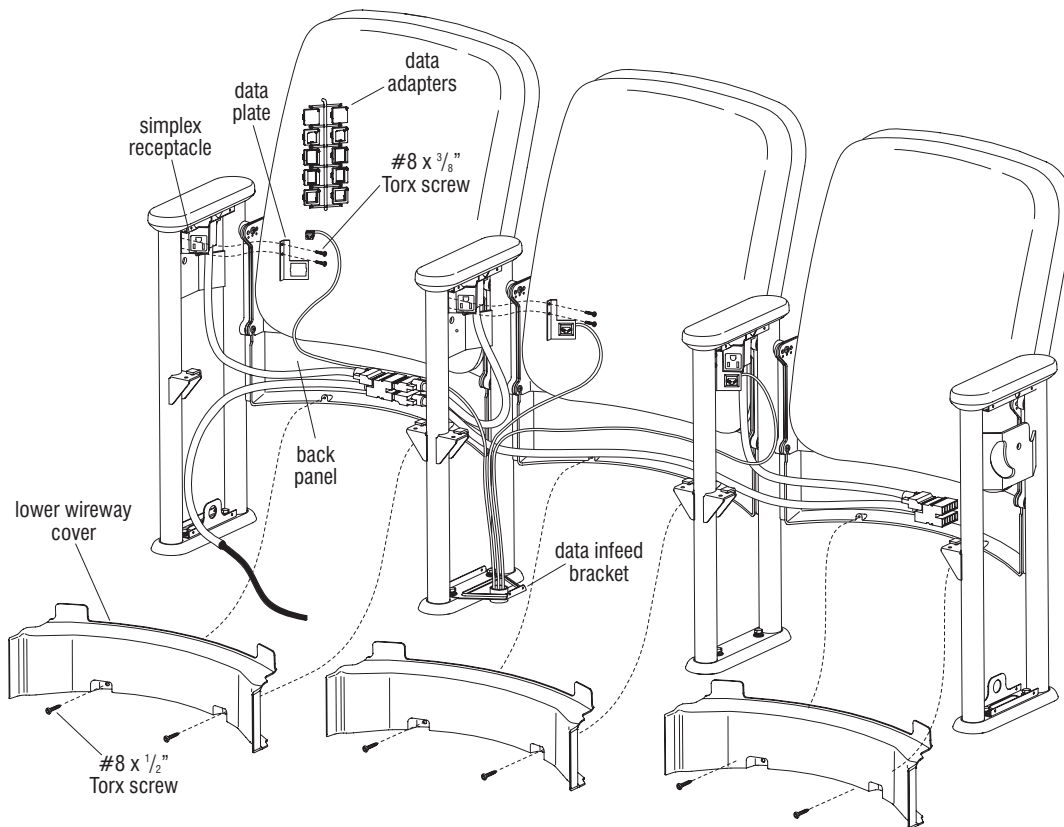
Assemble units as described herein only. To do otherwise may result in instability. All screws, nuts and bolts must be tightened securely and must be checked periodically after assembly. Failure to assemble properly, or to secure parts may result in assembly failure and personal injury.



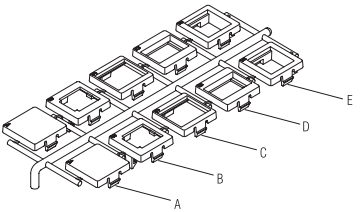
#8 x 1/2" Pan Head T-20 Torx Screw



#8 x 3/8" Pan Head Self-Tap T-20 Torx Screw



**Figure 5**

Data Adapters		
		
Letter	Opening Size	Phone/Data Jack
A	None	Blank
B	.635 x .730"	Panduit "C"
C	.670 x .929"	Ortronics "TrakJack"
D	.585 x .780"	Panduit "KJ" & "KJA" Amp CAT-3 & CAT-5 Hubbel "HD5", Ortronics "OR-6295003-T568B" & "OR-6295004-T568A" Krone, Leviton "41108-RE5"
E	.680 x .710"	AT&T

**Detail B**

### Data Wire Installation

- At the data infeed location, be sure that a data bracket has been installed on top of the foot of the upright and that the data wires run up through the opening in the bracket (Figure 5) (Also reference "Data Infeed" section view, page 21).
- At the data infeed location, route the data wires up between the upright tubes and direct them right or left, under each back. **Leave enough slack in the wires to allow for installation of the lower wireway covers and side covers after final data connections are made** (Figure 5).
- Install the lower wireway cover by first directing the two top tabs up between the backboard and the back panel of the installed back assembly. Align the two holes of the lower

wireway cover with the holes in the back panel and secure with two #8 x 1/2" Torx screws per cover (Figure 5).

**Note:** A variety of data adapters may be used in the following step. The data adapters must match the data plate. Your component design and installation procedure may vary (Detail B).

- Fasten the data bracket to the simplex receptacle using two #8 x 3/8" Torx screws. A variety of data jacks can be accommodated by picking from the tree of data adapters (Figure 5 & Detail B).
- Make the appropriate data wire connections and snap into the data adapter.

### Tablet Arm and Full-Height Side Cover Installation

**Note:** It is important that tablet arm side covers and the tablet arms are installed before any other side covers. Tablet arm side covers can be right-hand or left-hand and full-height or half-height. For installation of power infeed side covers see "Power Infeed Installation." The instructions and Figure 6 depict a left-hand end tablet arm, full-height option. Your configuration may vary.

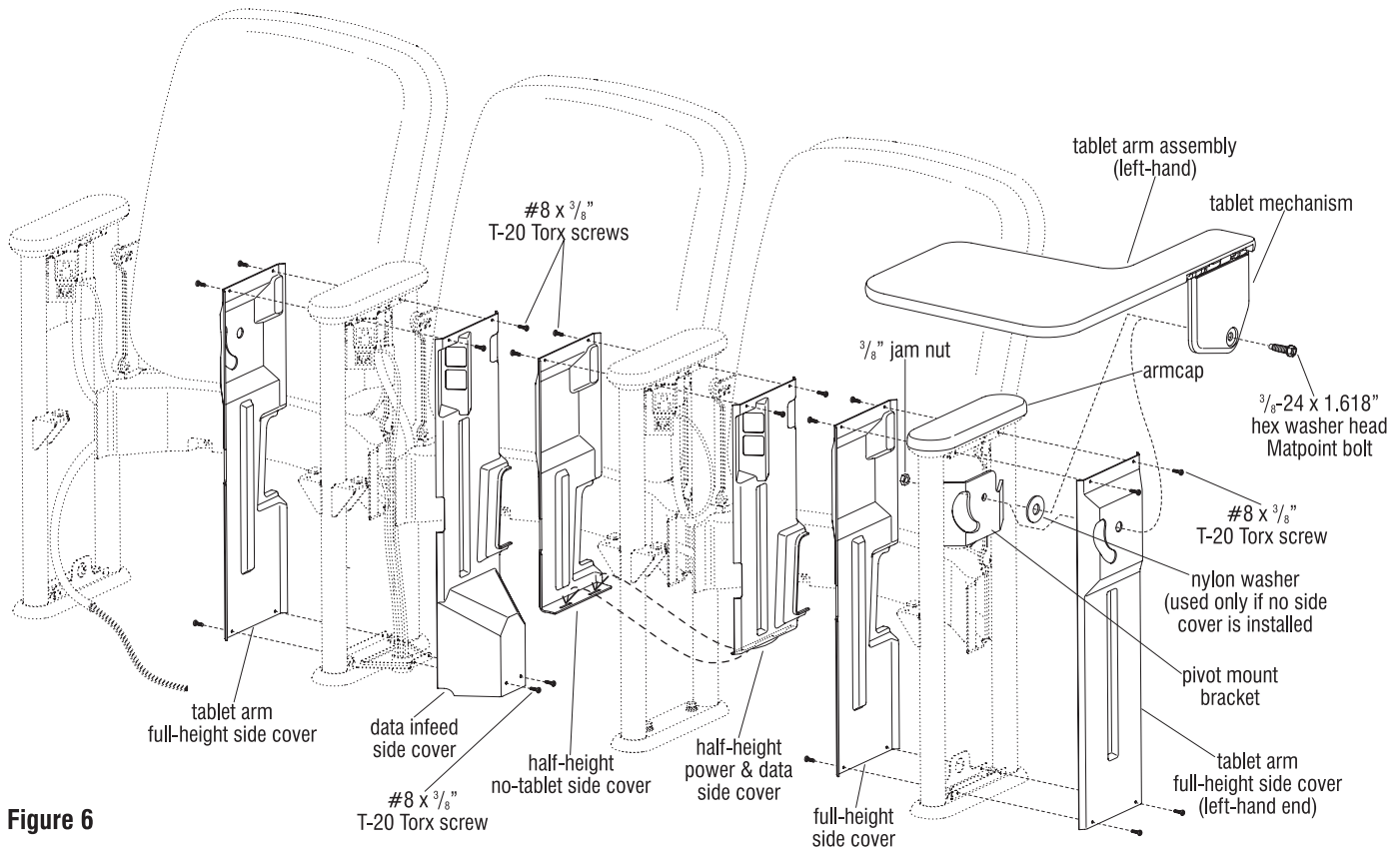
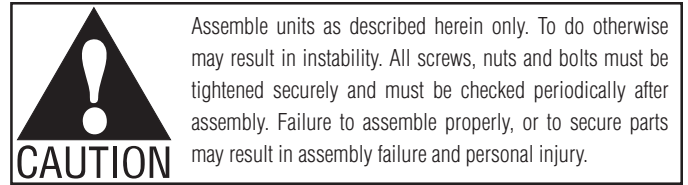
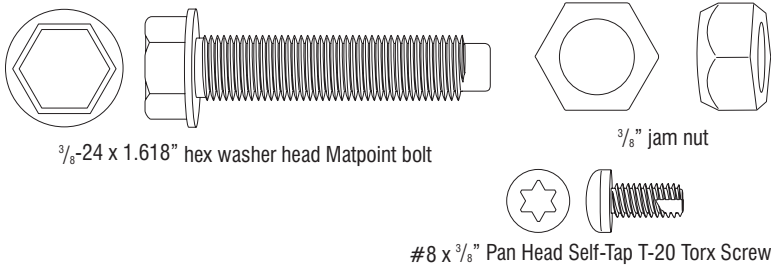
- Carefully maneuver the tablet arm side cover (left-hand end shown) against the upright to align the upper and lower mounting holes with the holes in the top of the upright and the bottom side cover bracket. Secure the cover to the upright with four #8 x 3/8" Torx screws (Figure 6).

**Note:** When a tablet arm is installed to an upright without a tablet arm side cover, a nylon washer must be installed between the tablet mechanism and the pivot mount bracket per step 2 below.

- Insert the 3/8"-24 x 1.618" hex washer head Matpoint bolt through the tablet arm mechanism. If a tablet arm side cover is not to be installed to the tablet arm upright, place a nylon washer onto the 3/8"-24 hex washer head bolt at this time (Figure 6).

**Note:** Tablets with the wood armcap option have a UHMW protective strip added to the underside of the tablet to protect the armcap. Do not remove.

- To avoid cross-threading and jamming of mounting bolts, **do not use impact drivers to install tablet hardware**. Rest the tablet mechanism onto the armcap and



**Figure 6**

thread the  $\frac{3}{8}$ -24 hex washer head bolt into the tablet arm side cover and pivot mount bracket on the upright. Tighten the  $\frac{3}{8}$ -24 hex washer head bolt to 10 inch pounds of torque. Thread a  $\frac{3}{8}$ " jam nut onto the cap hex washer bolt behind the pivot mount bracket. Holding the hex washer bolt in place with a  $\frac{9}{16}$ " wrench on the bolt and a wrench on the nut, tighten the  $\frac{3}{8}$ " jam nut behind the pivot mount bracket to 450 inch pounds. Hold the nut tight and tighten the  $\frac{3}{8}$ -24 hex washer head bolt to 500 inch pounds of torque. The tablet arm must rotate down smoothly under its own weight (Figure 6).

4. The full-height side cover can now be installed opposite the tablet arm full-height side cover. Carefully maneuver the side cover against the upright to align the mounting holes. Secure the cover to the upright with four #8 x  $\frac{3}{8}$ " Torx self-tapping screws (Figure 6).

5. Continue with the installation of all tablet arm and side covers (Figure 6).

#### Half-Height Side Cover Installation

**Note:** The following section depicts a half-height, no-tablet side cover, installed opposite a half-height power & data side cover. When a tablet arm is to be installed to a tablet arm half-height side cover, refer to the "Tablet Arm and Full-Height Side Cover Installation", steps 2 and 3 beginning on page 12.

1. Begin installation with the half-height side cover that is opposite the power & data outlets. In most instances, this will require a right-hand tablet arm. Carefully maneuver the half-height side cover (no-tablet, right-hand option shown) against the upright to align the upper mounting holes on the cover with the

upper holes in the upright. Secure the top of the cover to the upright with two #8 x  $\frac{3}{8}$ " Torx self-tapping screws (Figure 6).

2. If a tablet arm is to be installed to the upright and the half-height tablet arm side cover described above in step 1, follow steps 2 and 3 in the section "Tablet Arm and Side Cover Installation", then return to this section and continue with step 3 below. If no tablet arm is to be installed, continue on now with step 3 below.
3. Next install the half-height power & data side cover by inserting the tabs at the bottom of the cover into the slots on the bottom flange of the opposite half-height side cover. Carefully maneuver the half-height power & data side cover into place so the mounting holes align with the holes at the top of the upright.

Secure with two #8 x  $\frac{3}{8}$ " Torx self-tapping screws (Figure 6).

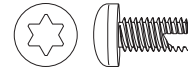
#### Data Infeed Side Cover Installation

**Note:** The data infeed full-height side cover requires a full-height side cover to be mounted opposite it on the same upright. If a tablet arm is specified, but not yet installed, refer now to the section "Tablet Arm and Full-Height Side Cover Installation", page 12, steps 2 and 3. For a no-tablet full-height side cover, refer to step 4 in the same section.

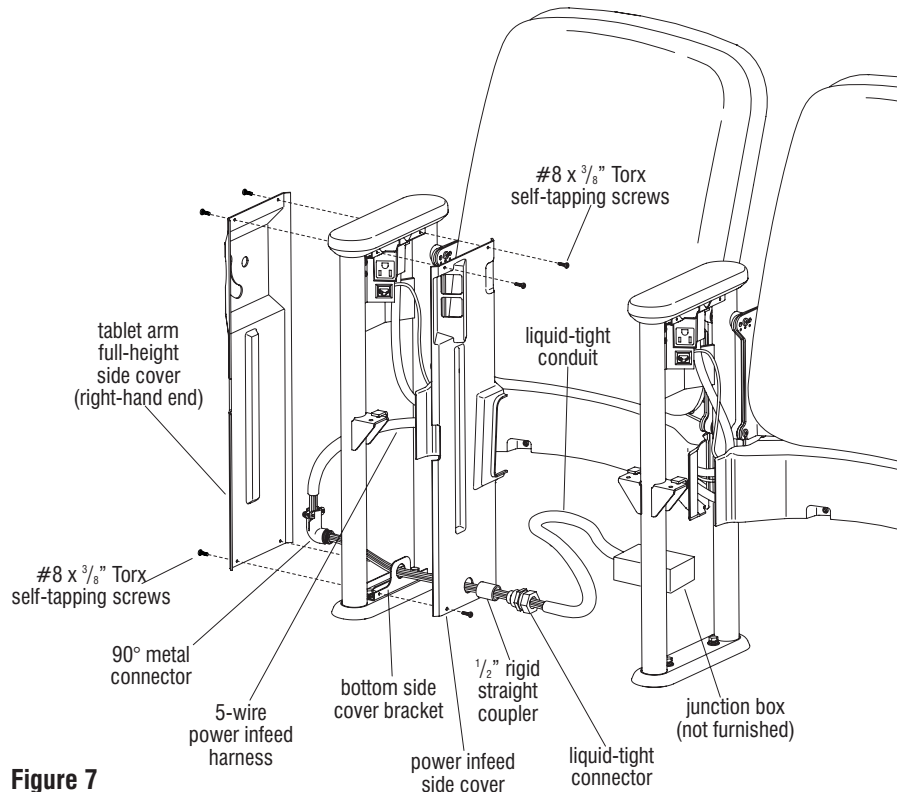
1. Carefully maneuver the data infeed side cover against the upright to align the upper and lower mounting holes with the holes in the top of the upright and the data bracket. Secure the cover to the upright and bracket with four #8 x  $\frac{3}{8}$ " Torx self-tapping screws (Figure 6).



Assemble units as described herein only. To do otherwise may result in instability. All screws, nuts and bolts must be tightened securely and must be checked periodically after assembly. Failure to assemble properly, or to secure parts may result in assembly failure and personal injury.



#8 x 3/8" Pan Head Self-Tap T-20 Torx Screw



**Figure 7**

### Power Infeed Installation

1. Begin installation by making sure that a bottom side cover bracket has been installed and tightened correctly over the foot of the upright. Orient the power infeed side cover into position against the upright and the bottom side cover bracket. Secure the power infeed side cover to the bottom bracket only with two #8 x 3/8" Torx self-tapping screws. The top screws may be installed only if no tablet arm is to be attached to the upright. The top two screws must not secure the power infeed side cover at this time to allow for access to install the tablet arm (Figure 7).

**Note:** The power infeeds are to be connected to the power source by a qualified electrician who must also check the electrical integrity of the finished system (see wiring schematic, page 21). The steps

below are intended as a guideline for the installation.

2. Remove the locking nut from the threaded end of the 90° metal connector and take off the back for ease in routing power wires. Place the threaded end of the metal connector through the hole in the bottom side cover bracket and the attached power infeed side cover. Thread a 1/2" rigid straight coupler onto the connector, over the power infeed side cover. Route the exposed 5-wires, of the power infeed harness, through the 90° metal connector and 1/2" rigid straight coupler. Pull the wires tight from the elbow side, to compress the flexible conduit to its required length. Replace the back of

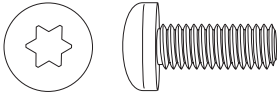
the 90° metal connector and secure the flexible conduit of the power infeed harness into the 90° metal connector (Figure 7).

3. Slide the liquid-tight connector onto the 5-wires and connect it to the 1/2" rigid straight coupler. Slide the liquid-tight conduit over the 5-wires and connect it to the liquid-tight connector. Finally, the liquid-tight conduit may be cut to appropriate size, fastened to the junction box and the 5-wires may be connected to the power source (junction box not provided) (Figure 7).

4. For a power infeed upright requiring a tablet arm, refer to "Tablet Arm and Side Cover Installation" steps 2, 3 and 4 (page 13). For a no-tablet full-height side cover, skip to step 4 in the same section.

5. Secure the top of the power infeed side cover with two #8 x 3/8" Torx screws at this time (Figure 7).





1/4-20 x 5/8" Pan Head T-30 Torx Screw



Assemble units as described herein only. To do otherwise may result in instability. All screws, nuts and bolts must be tightened securely and must be checked periodically after assembly. Failure to assemble properly, or to secure parts may result in assembly failure and personal injury.

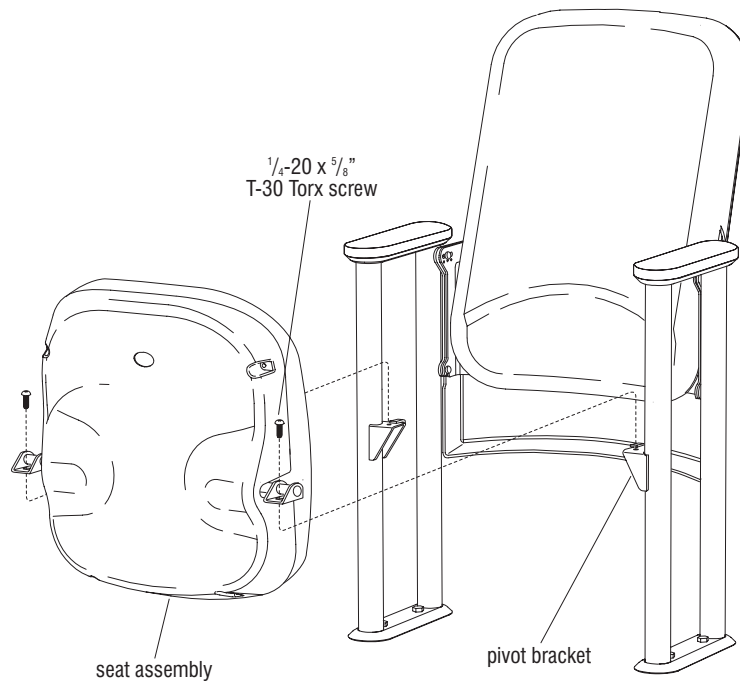


Figure 8

### Seat Attachment

**Note:** Seats are to be attached to uprights prior to tightening the uprights to the floor.

1. Stage product by seat type listed below and as marked on the product to aid product installation.

**NOTE:** There are 14 different Seat

Types:

1. 19STD - 19" seat
2. 20STD - 20" seat
3. 20TAR - 20" tablet seat right-hand
4. 20TAL - 20" tablet seat left-hand
5. 21STD - 21" seat
6. 21TA - 21" tablet seat (this is not handed)
7. 22STD - 22" seat
8. 22TAR - 22" tablet seat right-hand
9. 22TAL - 22" tablet seat left-hand
10. 23STD - 23" seat
11. 23TA - 23" tablet seat (this is not handed)
12. 24STD - 24" seat
13. 24TAR - 24" tablet seat, right-hand
14. 24TAL - 24" tablet seat, left-hand

**Seat type and location are noted on space-planning layout. In addition, each seat assembly is marked with a decal noting its type.**

2. Hold the seat assembly with the shroud facing you as shown in the above drawing. Slide the seat into the pivot brackets as shown. Start the 1/4-20 x 5/8" T-30 Torx screws into the pivot brackets. The pivot mounting screws are thread forming screws. Tighten them just tight enough to allow adjustment of the seat's position between the uprights (Figure 8).
3. Adjust seat so there is equal space between each end of the axle and the adjacent upright tube. Be sure uprights are properly positioned to be straight in-line with other rows and to give a straight aisle.

4. Tighten the screws.

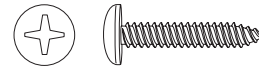
5. Check seat to assure that it pivots freely and returns to the stored position.

6. While maintaining upright alignment along aisles, position uprights so front edges are in-line along row.

### 7. Tighten floor anchors to secure.



Assemble units as described herein only. To do otherwise may result in instability. All screws, nuts and bolts must be tightened securely and must be checked periodically after assembly. Failure to assemble properly, or to secure parts may result in assembly failure and personal injury.



#10 x  $\frac{3}{4}$ " wood screw

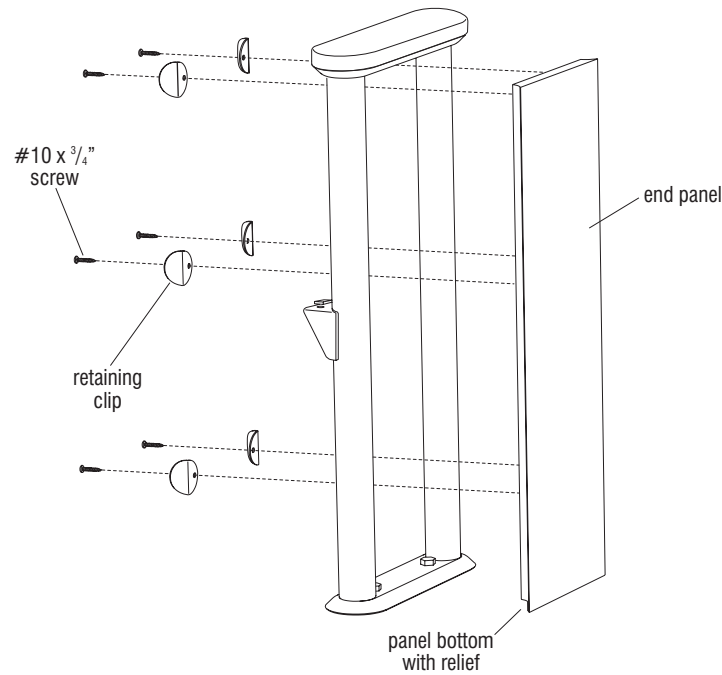


Figure 9

#### Decorative End Panels - Standard Concerto Seating

**Note:** Decorative end panels (laminate, wood or steel) are available with tablets. Laminate and wood decorative end panels are available with power & data while steel is not. Steel decorative end panels come installed to the upright from the factory.

**NOTE:** Installation of the end panel should take place after completing all installation of tablet arms, seat and back assemblies.

1. Place the end panel between the upright tubes as shown, noting that there is a top and a bottom to the end panel. The bottom of the end panel has a relief for the  $\frac{1}{4}$ -20 x  $1\frac{1}{2}$ " bolts used to mount the upright to the floor (Figure 9).
2. Position an end panel retaining clip as shown and tighten the #10 screws, clamping the end panel to the upright (Figure 9).
3. Repeat the above step for the five remaining end panel retaining clips.



Assemble units as described herein only. To do otherwise may result in instability. All screws, nuts and bolts must be tightened securely and must be checked periodically after assembly. Failure to assemble properly, or to secure parts may result in assembly failure and personal injury.

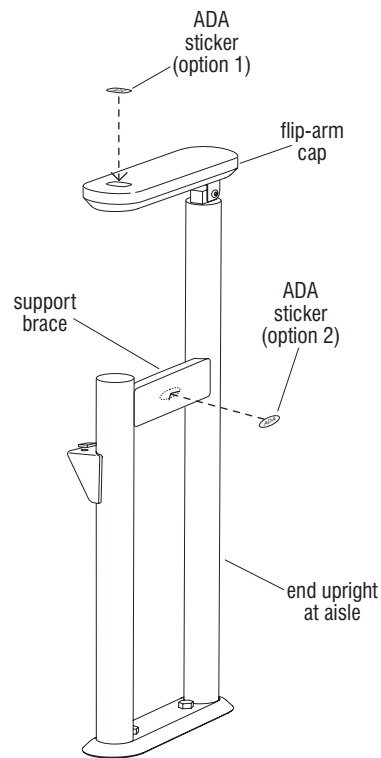
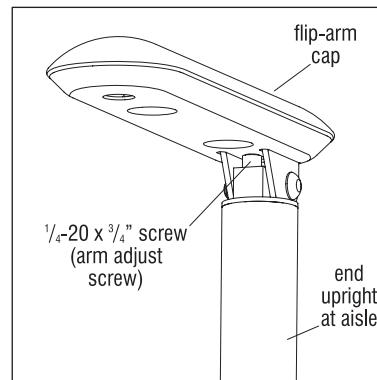


Figure 10



Detail C

#### ADA Upright with Flip-Arm Cap

1. ADA uprights are to receive an "ADA sticker" to designate upright as an ADA upright. The sticker may be placed onto either the arm cap or the support brace as shown (Figure 10). The sticker should face outward to the aisle so it can be easily visible.

**Note:** A 1/4-20 x 3/4" screw (arm adjust screw) is located on the underside of the flip-arm cap. The screw can be twisted inward or outward slightly to adjust the angle of the arm to be level (Detail C).

# Concerto® Seating with Power & Data

## Assembly Instructions



Assemble units as described herein only. To do otherwise may result in instability. All screws, nuts and bolts must be tightened securely and must be checked periodically after assembly. Failure to assemble properly, or to secure parts may result in assembly failure and personal injury.

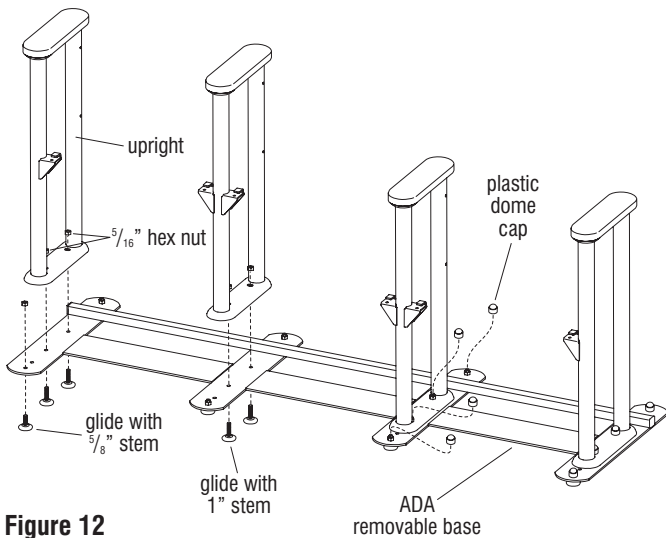
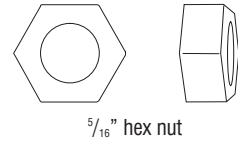


Figure 12



$\frac{5}{16}$ " hex nut

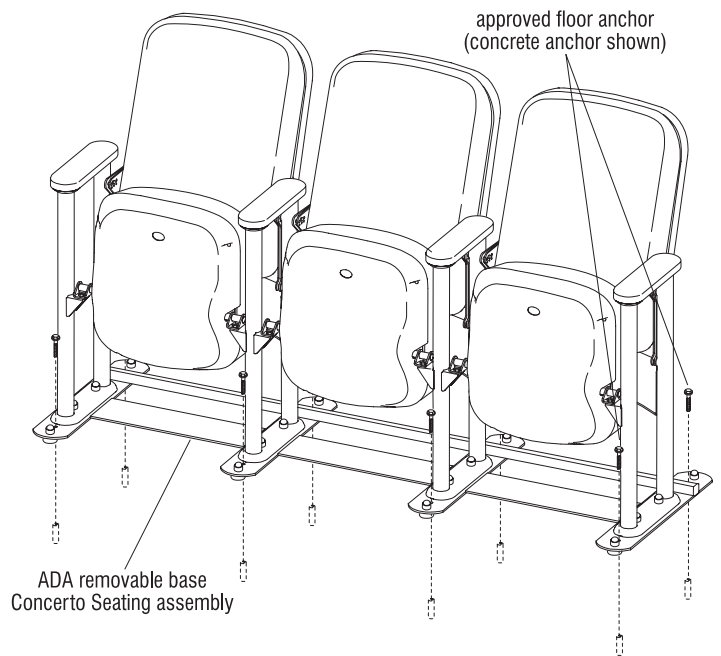


Figure 13

### ADA Removable Base - Standard Concerto Seating

**Note:** ADA Removable Bases are not available with power & data or aisle lights. The instructions below detail the installation of the uprights to the ADA removable base using the glides, nuts and caps provided. They will refer to sections of the standard Concerto Seating Assembly Instructions for completion. It is important to follow them during assembly.

1. Locate the glides that attach underneath the base strips. Glides with  $\frac{5}{8}$ " long stems must be installed at the end of the foot, while the glides with 1" long stems install in the middle of the base strips. Insert the appropriate glides up through the ADA base and the mounting holes in the foot of each upright. Secure the components together with  $\frac{5}{16}$ " hex nuts on the glides (Figure 12).

2. Place a plastic dome cap on top of each glide stem, above the installed  $\frac{5}{16}$ " hex nut (Figure 12).
3. Refer to pages 9 and 15 of this instruction. Follow instructions for "Back Attachment" and "Seat Attachment" as described. If equipped with accessories like tablet arms or end panels, refer to page 13 or 16.
4. Place the assembled ADA removable base/Concerto Seating assembly in the desired location for mounting to the floor. Mark the location of the mounting holes on the floor and move the unit out of the way for drilling.

5. Bore anchor holes to required hole depth for floor-type specific floor anchors. See pages 2 through 5 for anchor information.
6. Reposition the unit and insert fasteners through to the floor following the anchor requirements (Figure 13).
7. For removal of the unit, remove the hardware that anchors the ADA base to the floor and move the unit. To reinstall, repeat steps 5 & 6 (Figure 13).

**Note:** Take great care when removing and installing the unit. Damage to the anchoring hardware may result in expensive repairs to the floor and anchoring hardware.

**Caution:** Unit must be properly fastened to the floor. Failure to properly fasten unit to the floor may result in instability of the unit and personal injury.



Assemble units as described herein only. To do otherwise may result in instability. All screws, nuts and bolts must be tightened securely and must be checked periodically after assembly. Failure to assemble properly, or to secure parts may result in assembly failure and personal injury.

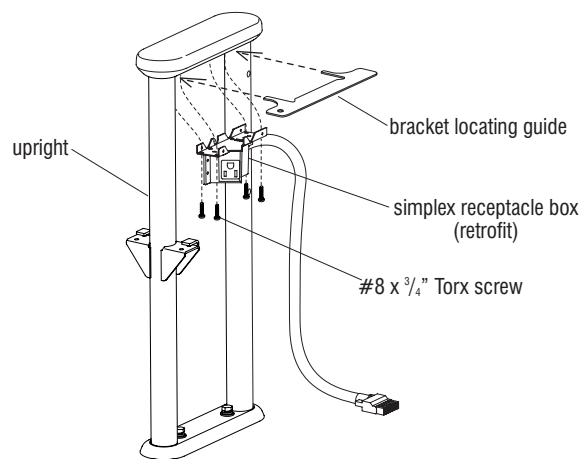


Figure 14

#### Retrofit of Power & Data Components To Concerto Seating

1. Remove the pivot screws and lift the seat assembly off the pivot brackets (see figure 8 in the "Seat Attachment" section). Keep seats in the correct order and location for reassembly at a later time.

**Note:** Simplex receptacles are labeled "1", "2" or "3" to indicate their circuit designation. Follow your space-planning layout for the correct location.

2. Follow the space-planning layout and position the correct number simplex receptacle box between the uprights, under the armcap. Use a bracket locating guide to center the receptacle box both front-to-back and side-to-side. Orient the **locator hole** in the guide to the **front** of the upright when centering. Using the 6" Torx bit supplied, secure the receptacle box to the upright with four #8 x 3/4" Torx screws (Figure 14).

**Note:** Upright locations specified as "FL" (full-length side cover), "P" (power infeed side cover), "D" (data infeed side cover), will require the appropriate bottom side cover bracket or data bracket.

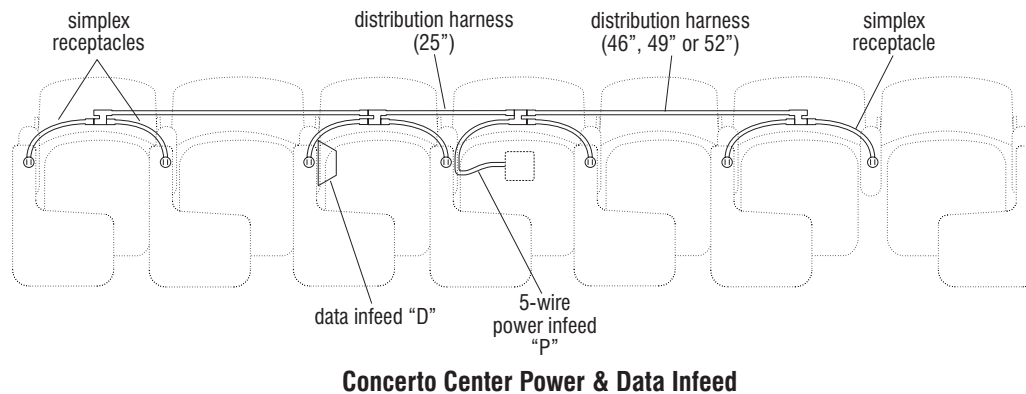
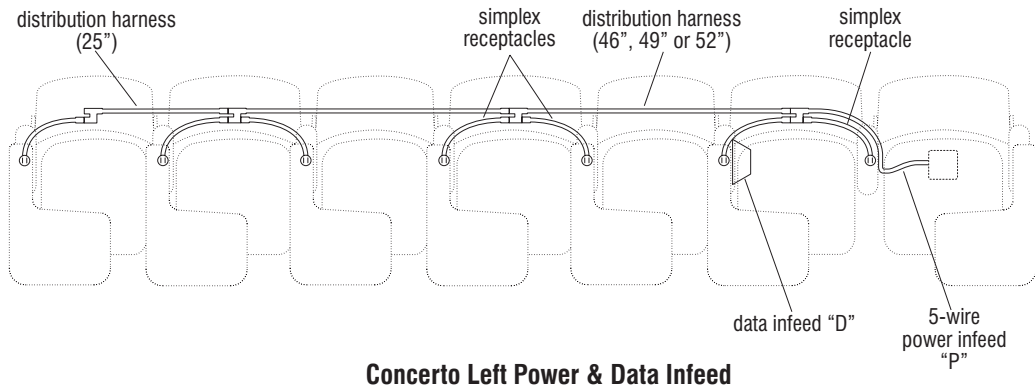
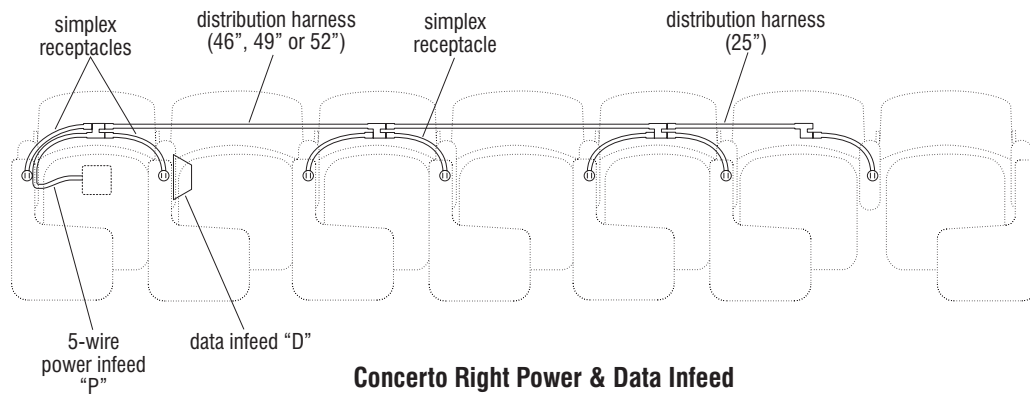
3. Wherever the space-planning layout specifies a bottom side cover bracket or data bracket, remove the existing anchors and install the appropriate brackets. Refer to the section "Upright Installation - Concerto Seating with Power & Data".

4. Skip the section "Back Attachment" and continue on with "Electrical Distribution Installation" and the rest of the assembly instructions.

# ■ Concerto® Seating with Power & Data Assembly Instructions



Assemble units as described herein only. To do otherwise may result in instability. All screws, nuts and bolts must be tightened securely and must be checked periodically after assembly. Failure to assemble properly, or to secure parts may result in assembly failure and personal injury.



## **Power Infeed**

The harness with 3-way modular connector end and exposed wires originates from the seat wireway, routes into the upright between a side cover and power infeed side cover, goes through a 90° metal connector inside

the covers and out through a ½" rigid straight coupler at the left-hand, exterior of the power infeed side cover (when seated). A 24" length of ½" liquid-tight conduit is supplied (to be cut to size) to house the wires and connect between

the rigid straight coupler and the building source power junction box on the floor, under the seat. The building source power junction box must be located under the end seat, ideally 10"

to 16" from the end upright, and 2" to 4" from the front-to-back centerline of the upright base.

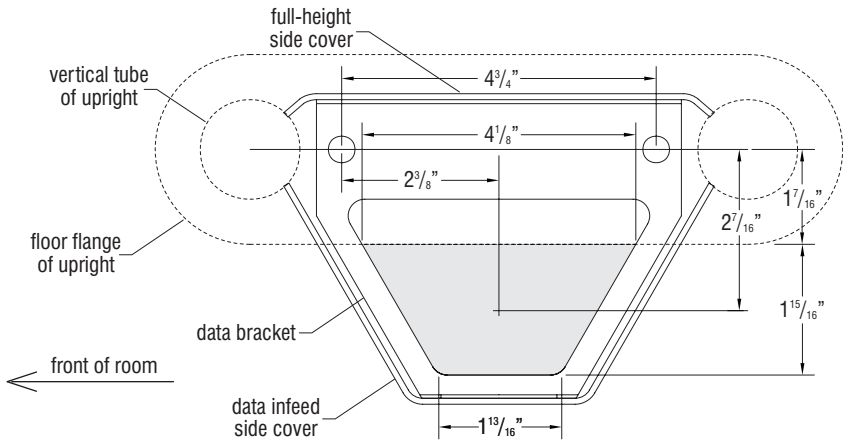




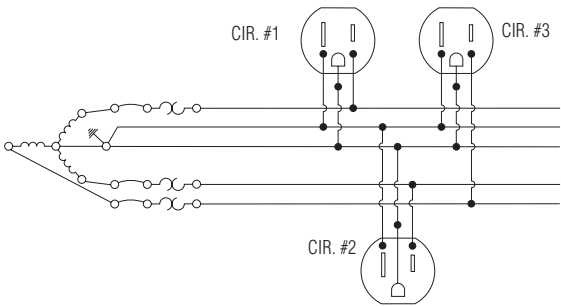
Assemble units as described herein only. To do otherwise may result in instability. All screws, nuts and bolts must be tightened securely and must be checked periodically after assembly. Failure to assemble properly, or to secure parts may result in assembly failure and personal injury.

**Data Infeed Location**

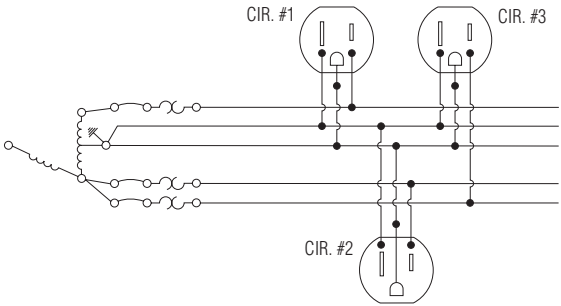
The dimensions on the section view show the location of the data infeed in relation to the footprint of the upright. The shaded trapezoid area represents the usable data infeed area within the housing and data infeed bracket. This area will accommodate twenty-four category 5 or category 7, four pair twisted data wires per infeed location.



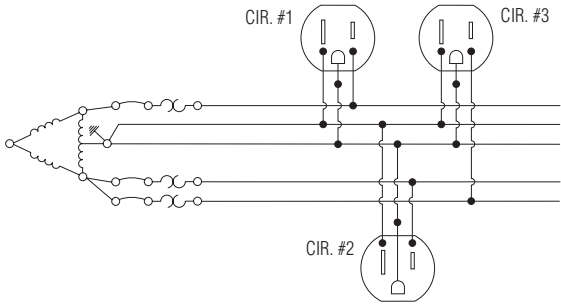
**Section view at 3" above floor**



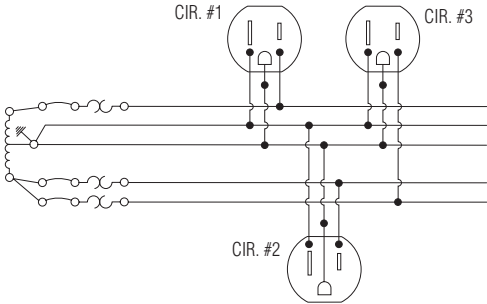
**120/208V WYE Three Phase**



**120/240V Open Delta Single Phase**



**120/240V Delta Single Phase**



**120/240V Single Phase**

**5-Wire Installation  
Power Infeed to Building  
Connections**

Have a certified electrician hard-wire the system power infeed to the building power source according to the National

Electrical Code and any other applicable local codes. See the chart above for proper wiring connections to available power.





KI  
1330 Bellevue Street  
Green Bay, Wisconsin 54302  
1-800-424-2432  
[www.ki.com](http://www.ki.com)

KI is a registered trademark  
of Krueger International, Inc.

© 2025 Krueger International, Inc.  
All Rights Reserved  
Code KI-60323R13/KI/PDF/0325

