



**Cubicle
Advisor**

CUBICLES | OFFICE FURNITURE | BLOG

O₂TM

Installation Manual



Table of Contents

Introduction	2
Tools Required	3
Electrical Power Distribution & Wire Management	4
Pre-Installation Requirements	4
Installation Preparation	4
Installation Sequence	5
Panel Support	5
Load Capacities	6
Panel Installation	7
Connecting Panels to Connectors	7
Connecting Panels to Panels	8
Panel End Cap Kit	8
Panel Height Change—At Connector	9
Panel Height Change—In-line	10
Variable Height Filler Trim	11
Wall Hanger Strips	11
T-Connection Installation	13
Power Distribution	
Specifications & Installation	14
Duplex Receptacles	15
Power Entry	15
Wiring Guide	15
Panel Base & Connector Base Covers	16
Base End Caps	17
Work Surfaces	
Straight	18
Corner	19
Peninsula	21
Transaction Surface	22
Pencil Drawer	22
Overhead Storage	
Shelf	23
Flipper Door	24
Tack Board/Marker Board	24
Task Light	25
Storage Pedestals	25

Introduction

These instructions provide the necessary information to safely install Cubicles.com's following products:

- O₂ Series Corporate Office Furniture
- O₂NOW Series

O₂ is a time-tested office partition furniture system that includes a comprehensive vocabulary of panels, power/cabling management, work and storage components as well as accessories. These products also offer the distinction of being a family of modular furniture designed to provide a broad range of solutions for both open plan and private office requirements. O₂ is designed to provide inordinate flexibility and cost savings with the added ability to route, manage and store cables in accordance with the latest telecommunications industry standards.

The characteristics of the O₂ system require panel arrangements and panel supports as outlined in this manual for a safe and secure installation. Built to the same standards and specifications as Herman Miller AO2 Systems, an official installation guide for AO2 will also provide adequate guidance. Rearrangements and additions to any installation must be to the same standards for stability and installation guidelines to ensure continued safe use. Cubicles.com shall not be liable for product that is used or altered in any other way.

WARNING: *Failure to follow these instructions can result in personal injury, product damage or both.*

Tools Required

Many products are shipped assembled at the factory and need only to be installed. Some products are shipped in subassemblies requiring field assembly during installation. The following are tools necessary to properly install Cubicles.com O₂ products.

- 1/4" Allen Wrench
- #2 and #3 Philips Screwdriver/bits
- 25' – 30' Tape Measure
- Plastic/Rubber Mallet
- Slotted Screwdriver
- 6" long Philips Extension Bit (for pencil drawer bearers)
- 9"-long or longer Magnetic 'Torpedo' Level
- Utility Razor Knife

The following tools will speed-up larger installations or be handy in special circumstances.

- 12v – 18v Drill/Driver (with spare batteries and charger)
- Set of Drill Bits & Screw Bits
- 1/4" Ratchet Allen Wrench
- Chalk Line and/or 2" Masking Tape (to locate/mark panel run starts)
- 4' Carpenter's Bubble Level
- Hack Saw or Power Reciprocating Saw with Metal Blades
- Hammer
- Pliers
- 250-lb capacity Wonder™ Bar (pry bar)
- Aviator/Tin Snips (yellow handle)
- Continuity/Electrical Tester
- Panel Skates (for 10 work stations or more)
- Dollies & Panel Carts (for 10 work stations or more)
- Laser Leveler Device (for 10 work stations or more)

Electrical Power Distribution and Wire Management

Electrical power distribution components are modular and allow complete integration with the O₂ Series Corporate Office Furniture system products. Please read and follow this information carefully proceeding with any furniture installation requiring electrical components.

WARNING: *Disconnect power before servicing any component. Failure to do so can cause electrical shock and personal injury or property damage.*

Electrical power system is:

- UL-Listed/CSA-Certified and labeled
- Constructed with shielded conduit to provide an effective built-in EMF barrier
- Eight-wire, four-circuit design
- 15-amp capacity
- Three general-purpose circuits
- One dedicated circuit with isolated ground

Pre-Installation Requirements

The electrical power distribution system is an eight-wire/four-circuit modular system that can supply up to four circuits with single-phase or three-phase power. Each circuit is rated 125v/15-amps and can supply a maximum of 13 receptacles.

1. Before starting the electrical component installation, be sure to coordinate the layout with the building power supply sources.
2. Connection of the electrical components to the building electrical supply *must* be performed by a qualified electrician.

Installation Preparation

Take care examining contents of each box making sure small packages within boxes are not overlooked.

1. Sort and stage all items:
 - Panels
 - Connectors and End Trim
 - Wire Management Raceway
 - Power Components
 - Wall Tracks
 - Cable Poles
 - Work Surfaces and Support Components
 - Overhead and File Pedestal Storage Components
 - Pencil Drawers and Accessories
2. Review building drawings closely to determine exact location of panel runs.
3. Mark floors with chalk lines and/or tape to mark starting points and openings.
4. Start at high point of the floor, if possible.

Installation Sequence

Cubicles.com recommends the following sequence to assemble:

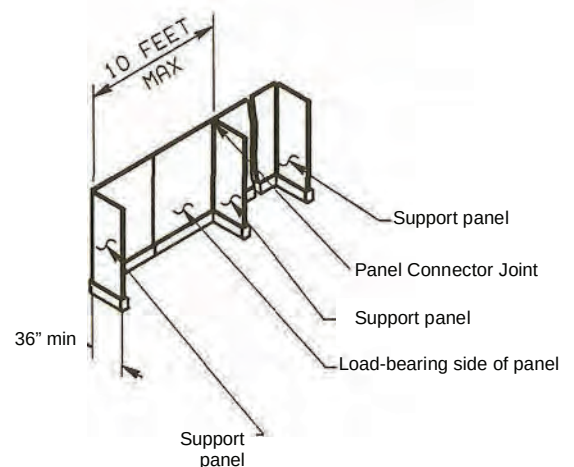
1. Install Panel End Trim at ends of panel runs.
2. Install Power Distribution and In-feeds (not wired to power supply).
3. Install Overhead Storage and Task Lights.
4. Install Work Surfaces and Floor-supported/hanging Pedestals and/or File Centers.
5. Install Tack Boards & Marker Boards.
6. Install Accessories.
7. Wipe down furniture.

Panel Support

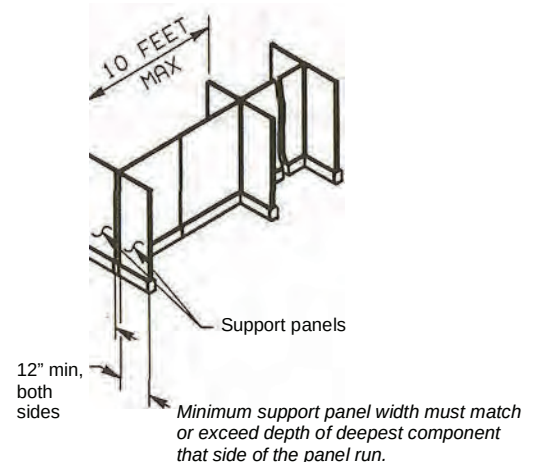
These panel installation instructions are written for user safety. Please follow them at time of planning and specification, initial installation and any addition or reconfiguration.

Definition and Application:

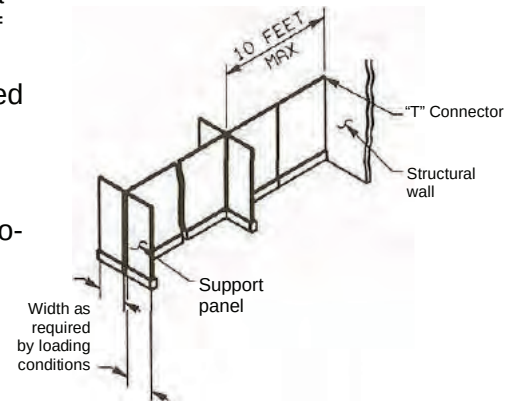
1. Panel runs are any two or more panels connected in a straight line.
2. Panels mounted at right angles to panel runs are called support panels. Height of support panels must be equal to the height of the panels in a run or
 - 62"/67"h for 80"/85"h panels
 - 48"/53"h for 62"/67"h panels
 - 42"/47"h for 48"/53"h panels
3. All support panels must be at right angles to run panels and on one or both sides of run panels, depending on the panel loading, and spaced no more than ten feet apart.
 - Panel runs loaded on one side with overhead storage and/or work surfaces must have support panels on the loaded side with 36" minimum width at the beginning and ending panels and at intervals not to exceed ten feet; for Acoustical, Glazed and Open-Frame panels, must not exceed eight feet.



- Panel runs loaded on both sides with overhead storage and/or work surfaces must have support panels on both sides of the run. Support panel width must correspond to the depth of the deepest component mounted to the panel run on that side of the run at the beginning and ending panels and at intervals not to exceed ten feet; for Acoustical, Glazed and Open-Frame panels, must not exceed eight feet.



- T-Connectors are used to connect panel runs to either a structural wall or building column or along a mid-point of another panel.
 - A structural wall is a load-bearing wall constructed of poured concrete, cement blocks or composite board attached to metal or wood studs.
 - Wood studs must be a nominal 2" x 4" size.
 - Metal studs must be 20-ga. "c"-channel, center-to-center dimension not to exceed 24" and be less than 14' tall, restrained at both ceiling and floor.



Load Capacities

Cubicles.com will not, under any circumstances, guarantee or assume responsibility for loading performance beyond the basic individual component capacities given below:

- Hanging work surfaces, 60" or less wide:
 - 250 lbs, 18" deep
 - 200 lbs, 24" deep
 - 200 lbs, 30" deep
- Hanging work surfaces, 66" – 96" wide:
 - 250 lbs, 24" deep (with three work surface supports)
 - 250 lbs, 30" deep (with four work surface supports)
- Shelves: 150 lbs
- Hanging storage pedestal (Box/File): 25 lbs
- Pencil drawers: 5 lbs

Load capacities as listed above for work surfaces include the total load of fully loaded hanging components attached to the underside of the work surface plus the load placed on the top of the work surface.

WARNING: Failure to observe the recommended practices such as loading beyond stated capacities can result in unsafe usage conditions and product damage or personal injury or both.

Before storage components and accessories are installed on panels, be sure to level panels and adjust each panel glide to make firm contact with the floor to maintain panel alignment and to distribute panel load uniformly to floor. Check panel stability after installation is complete and furniture components are attached; adjust any panel glides as may be necessary.

Panel Installation

Important:

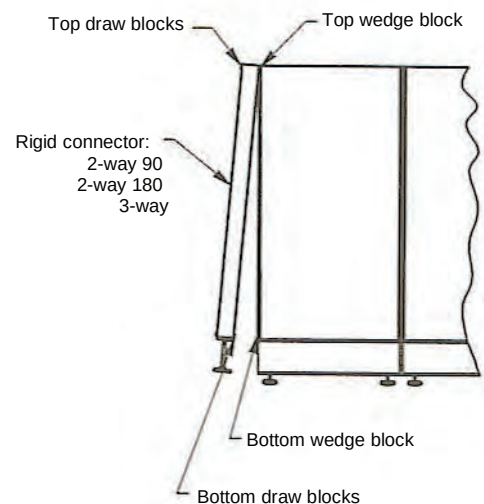
- **Start at a 2-way, 3-way or 4-way connector junction so that the initial panels, once connected, will remain free-standing; then build from there according to your layout print. Construct this connector junction at a locatable point from the layout print on the installation floor. Use chalk line or masking tape to mark the starting location.**
- **To connect adjacent panels of equal height, use a rod & block connector.**
- **Use a two-way 180 connector for equal or unequal height panels.**
- **Two-way 90 , three-way and four-way corner connectors provide the panel-to-panel connection necessary in either of the following situations:**
 - o Adjacent panels are unequal in height
 - o Adjacent panels are at a 90 angle to each other and of either equal or unequal height.
 - o A group of three or four equal- or unequal-height panels at 90 from a common point.
- **At each connector junction where there will be a panel height change, refer to Connector Change-of-Height procedure.**
- **Be sure to level panels before installing components.**

Connecting Panels to Connectors:

Equal Height Panels:

Note: Wherever your furniture plan calls for transaction counters mounted to panels, please review the section "Transaction Counter Installation" before connecting the panels beneath.

1. Place top draw block of connector on the top wedge block of the first panel.
2. Loosen screw in top draw block of connector, with $\frac{1}{4}$ " Allen wrench or hex bit, until the bottom draw block of the connector clears the panel's bottom wedge block.
3. Tighten the same connector draw block screw until panel and connector are securely attached.
4. Loosen an/the adjacent top connector draw block screw.
5. Move the adjacent panel to locate the bottom wedge block over the bottom draw block on the connector.
6. Lift up the loosened top draw block on the connector and position the panels top wedge block adjacent to the connectors top wedge block, drop connector draw block over the two adjacent wedge blocks.
7. Tighten connector draw block screw until panel and connector are securely attached.
8. Repeat steps 2 through 7 for any additional connector draw blocks (3-way and 4-way connectors).

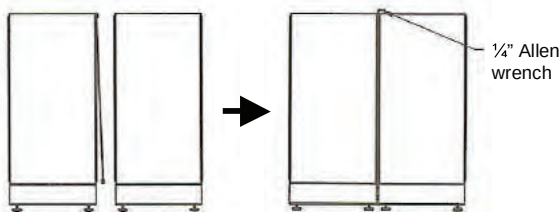
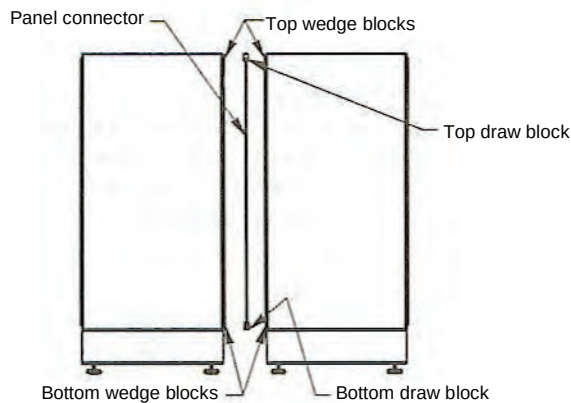


Connecting Panels to Panels:

A Rod & Block Panel Connector is required to connect two panels in a straight line.

Note: Wherever your furniture plan calls for transaction counters mounted to panels, please review the section "Transaction Counter Installation" before connecting the panels beneath.

Equal-height Panels:



1. Place top draw block of connector on top of wedge block of first panel.
2. Loosen the Allen screw in the top draw block of the connector rod until the bottom draw block of connector rod clears bottom wedge block of first panel.
3. Move and position adjoining panel's bottom wedge block adjacent to first panel's bottom wedge block within open half of connector rods bottom draw block. Then raise the connector rods draw block and position the adjoining panels top wedge block next to the first panels top wedge block, under the open half of the connector rods top draw block.
4. Tighten connector rods Allen screw until panels are securely attached.
5. After assembly of a run of panels, adjust panel glides in bottom of all panels to level panel run and to put equal weight on all panel glides.

Panel End Cap Kit

Use to trim the exposed hardware on the vertical end of a panel at the end of a panel run.

Note: Wherever your furniture plan calls for transaction counters mounted to panels, please review the section "Transaction Counter Installation" before connecting the panels beneath.

1. Place draw block of the End Cap over the top wedge block of the panel.
2. Loosen 1/4" hex/allen screw at top of End Cap until bottom draw block clears bottom wedge block of the panel.
3. Tighten hex/allen screw until End Cap is fastened firmly to the panel.

Note: Do not over tighten top Allen screw; it may cause Panel End Cap to bow.

Panel Height Change

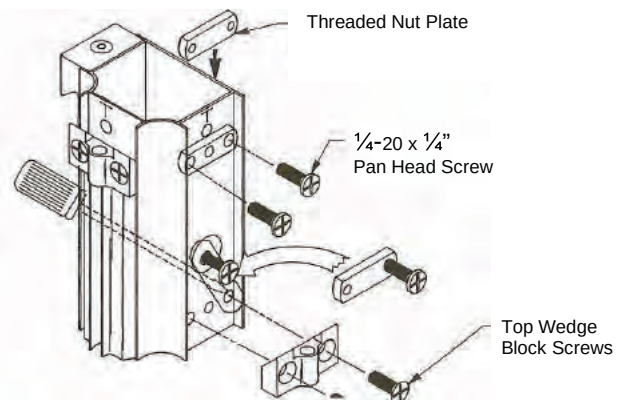
At a Connector

Note: Wherever your furniture plan calls for transaction counters mounted to panels, please review the section "Transaction Counter Installation" before connecting the panels beneath.

Follow the instructions below for changing the connector wedge block position on any 2-way 90 , 2-way 180 , 3-way or 4-way connector to attach a panel of lower height.

1. Lay connector on a flat, protective surface.
2. Remove connector Top Draw Block(s) to reveal top cap release port.
3. With a screwdriver, press both top cap extension tabs, as shown at right, while pulling on top cap to release it.
4. Remove connector wedge block (Top Draw Block and Top Wedge Block) by removing both wedge block screws. Remove the threaded nut plate that has dropped after removing the screws by tipping the connector so that it slides out either end.
5. Remove connector filler strip from the side to be adjusted; remove from bottom end first by prying or pulling end away. Filler strip is held in place with double-faced adhesive tape.
6. Install wedge block and threaded nut plate removed from top location to new height desired.
 - Begin by threading a screw into the threaded nut plate, making sure the raised ridge around threads faces screw head; this helps to properly locate the threaded plate.
 - Position one end of the threaded plate, as shown, through the access hole above the wedge block screw holes into place. While holding its position, place wedge block into place. Insert screw through wedge block and connector; do not tighten completely.
 - Remove wedge block screw used to position threaded nut plate. Use inserted screw to align nut plate into position. You may need to tighten or loosen the screw for better positioning control and/or hold connector for gravity to position nut plate. Once in place, finger-start a screw through the wedge block and connector into the nut plate.

Note: the hole in the adjacent or opposite side of the connector can be used to insert a screwdriver to hold the threaded nut plate in position for installing wedge block screws.



7. Cut filler strip at bottom end and install to fit between top and bottom wedge blocks.
8. Reattach the top draw block to the connector wedge block and replace top cap.

Panel Height Change

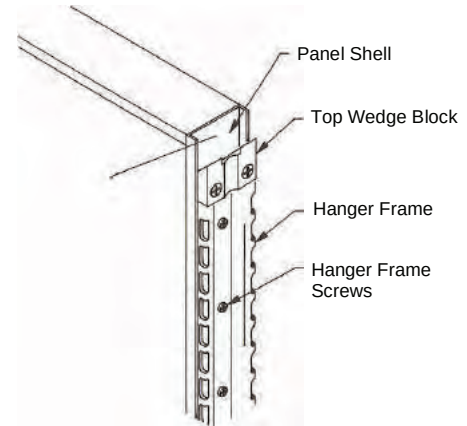
Panel-to-Panel, inline

Follow the instructions below for changing the wedge block position on a panel end to connect to it a panel of lower height.

1. Remove both top wedge block screws and wedge block.
2. Remove hanger frame screws and hanger frame.
3. Determine the length to cut off from the top ("CC" stamped at end) portion of the hanger frame by subtracting the nominal height of the shorter panel from the nominal height of the taller panel.

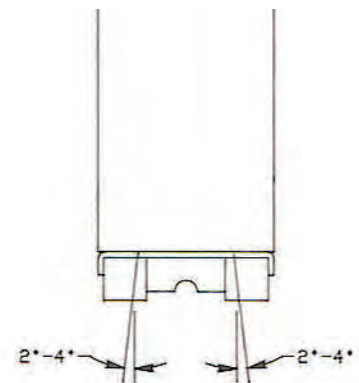
For example:

$$\begin{array}{r} 67'' \text{ Taller panel nominal height} \\ - 47'' \text{ Shorter panel nominal height} \\ \hline 20'' \text{ Amount to be removed from top} \end{array}$$



4. Use hacksaw or power reciprocating saw to cut hanger frame; be sure to cut squarely. Discard top portion of hanger frame.
5. Reinstall hanger frame and tighten screws; be sure to evenly align panel shell side-to-side.
6. Position top wedge block in new position, lowered the same distance calculated in step 3 above. Scribe a mark at the center point of each screw hole in the wedge block.
7. Remove hanger frame, bottom wedge block, and panel shell.
8. At each scribed mark, stamp a starting dimple using a starting punch or nail. Also stamp one between the two, inline with the two. At each of the three marks, drill a 5/16" hole through the panel shell.
9. Reinstall panel shell, bottom wedge block and hanger frame; be sure to evenly align panel shell side-to-side. Tighten all screws.
10. Position top wedge block in new position, lowered the same distance calculated in step 3 above. Scribe a mark at the center point of each screw hole in the panel frame. Remove wedge block.
11. Drill a 3/16" hole, at a 2 -- 4 angle, through the frame rail at the two screw locations (the centered hole is a relief for the boss on the back of the wedge block).

Important Note: *Holes must be drilled at a 2 -- 4 angle from the panel face; failure to do so could allow drill or wedge block screw to damage face of panel.*



12. Position top wedge block in new position and attach with two wedge block screws.
13. Attach top of panel shell to panel frame through any hanger frame screw hole near top with a flat-head drywall screw. Screw head must be large enough to hold panel shell down without going through and without being raised to hamper attachment of variable height filler trim.

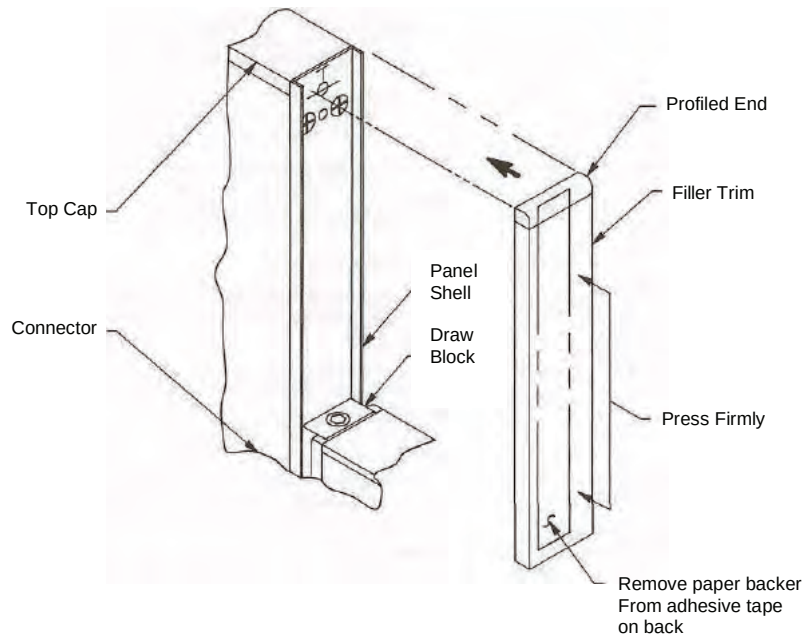
Variable Height Filler Trim

The 48" trim piece is designed to provide up to two pieces of trim for use on connectors with panels of unequal height or two panels in line of unequal height as described above. Each end is profiled to serve as a top, finished end.

1. Filler trim must be cut to required length. Measure the distance between the top of the panel/connector and the top of the top draw block of the lower panel. Then measure same distance from one end of the trim piece and scribe a line across the face at that point.
2. Use hacksaw or power miter saw; be sure to cut squarely.

Note: Do not discard other end; it may also be used as a filler trim in many cases.

3. Clean the area to be trimmed; make sure it is dry before positioning the filler.
4. Remove paper backer from adhesive tape on back side of filler. Position filler trim and press firmly into position. Make sure profiled end of filler trim is at top and positioned flush with top of connector or panel top cap.



Wall Hanger Strips

Note: Wall hanger strips must be used only on a structural wall constructed in either of the following manner, as a minimum:

- Composite Board (drywall) over Wood or Metal Stud: Drywall must be 5/8" minimum, on 2" x 4" studs minimum, 24" on-center maximum; 14' height maximum, retained at both floor and ceiling. Metal studs must be "C"-channel, 20-ga minimum thickness. Drywall must be attached by industry standards, minimum; ideally it should include appropriate adhesive bead on each stud, the full length of the stud.
- Poured cement wall
- Cement block wall

Acceptable fastener recommendations:

- Into drywall on studs:
 - o 3/16" hollow wall fastener or 3/16" wall toggle & bolt with #8 flat head machine screw located 29" and 60" from floor, minimum; other screw locations can utilize 1/8" fastener/wall toggle with #8 flat head machine screw.
 - o Directly into wood stud: #8 x 2 1/2" flat head drywall or sheet metal screw.
 - o Directly into metal stud: #8 x 2 1/2" flat head sheet metal screw.

- **Into concrete, cement block or brick:**
 - o #8 x 1 1/2" flat head sheet metal screw with screw anchor.
 - o 3/16" x 1 3/4" Tapcon™ or other brand concrete anchor screw. Must be used with recommended (5/32") masonry drill bit for pilot hole.

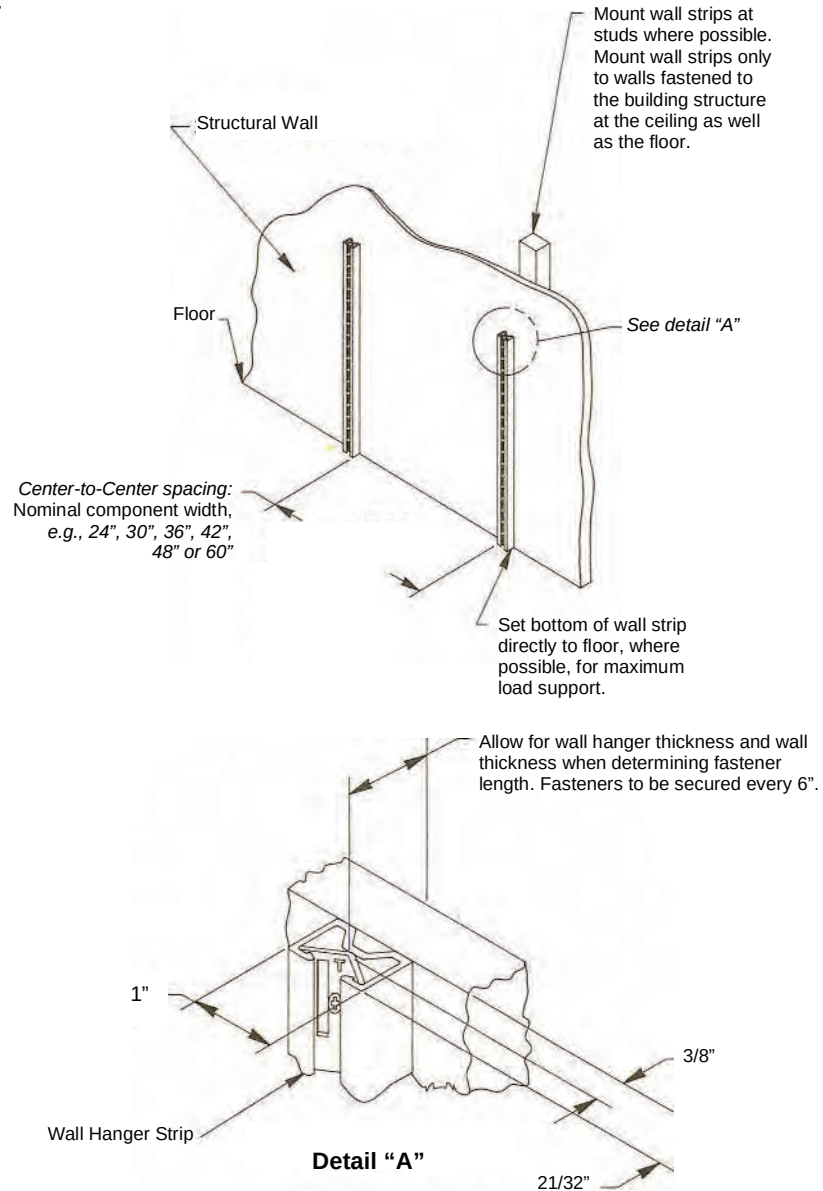
Note: Refer to fastener manufacturer's specifications and recommendations for application, load rating and pilot hole size. It is the installer's responsibility to determine and select the most appropriate fastener. Cubicles.com does not assume any liability for their use.

Warning! Failure to properly attach wall hanger strips to a structural wall and, where possible, to rest wall hanger strips directly on the floor may cause dislodgement of wall strip and/or attached components causing personal injury and/or property damage.

Location and installation:

Note: Wall hanger strip must be secured to wall with appropriate fastener every 6".

1. Position the first wall hanger strip at the required location, per furniture layout drawing. Note that the end with the hole located closest to the end is the top. Attach at top with fastener.
2. Use a level to 'plumb' wall hanger strip; mark hole locations on wall through holes in wall hanger strip.
3. Drill holes, at each marking, in wall according to fastener manufacturer's recommendation.
4. Insert fastener and complete attachment of wall hanger strip.
5. Measure or use a spacer to locate and mark the next wall hanger strip location.
6. Repeat steps 2 –5 for remainder of wall hanger strips.



Helpful Hints:

- Spacers may be used to position subsequent, sequential wall strips. Cut spacers to 1" less than nominal component dimension +/- 1/32", e.g., 47" (48" - 1") +/- 1/32". Be sure to keep ends square.
- Installers are responsible to install wall strips at a uniform height and level relative to one another. Often, if a drop ceiling is present, their perimeter track has been installed with a laser level. Because floor levels vary, especially cement floors, the ceiling tile track may be a better reference for locating wall strip's vertical position. Installer must determine best method for keeping wall strips level because their location is critical to the subsequent outcome of the furniture installation.

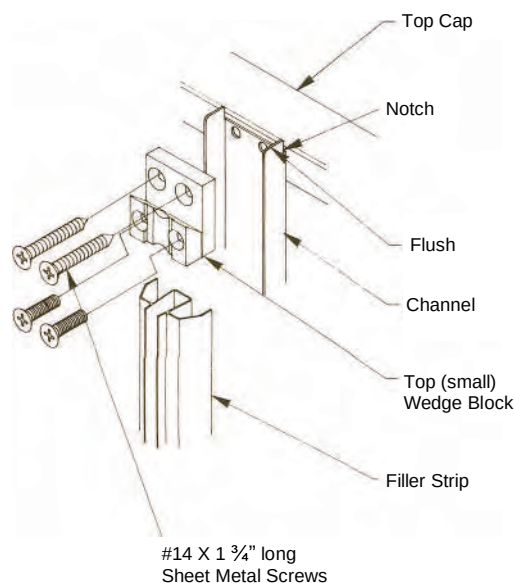
"T" Connection Installation

Use to connect a panel at a right angle to a structural wall or to another, non-steel frame, panel of the same height.

Notice: It is the installer's responsibility to select and install the proper fasteners in the structural wall or panel frame. Cubicles.com does not assume liability for their use.

For attachment to all panels, except tubular steel frame:

1. Position the T-Connector channel at the desired location, flush with top of panel and parallel to its vertical edges, with notch up for clearance of panels top cap.
2. Use holes in channel for template, bore $\frac{3}{16}$ " diameter hole $1\frac{1}{2}$ " deep into panel frame; two at the top, two at the bottom.
3. Securely fasten wedge blocks and channel to panel surface with #14 X $1\frac{3}{4}$ " long Sheet Metal Screws.
4. Remove paper cover from adhesive strip on back of filler strip and position filler in channel, between wedge blocks, and press firmly in place.
5. Assemble panel to T-Connector with a standard panel connector.

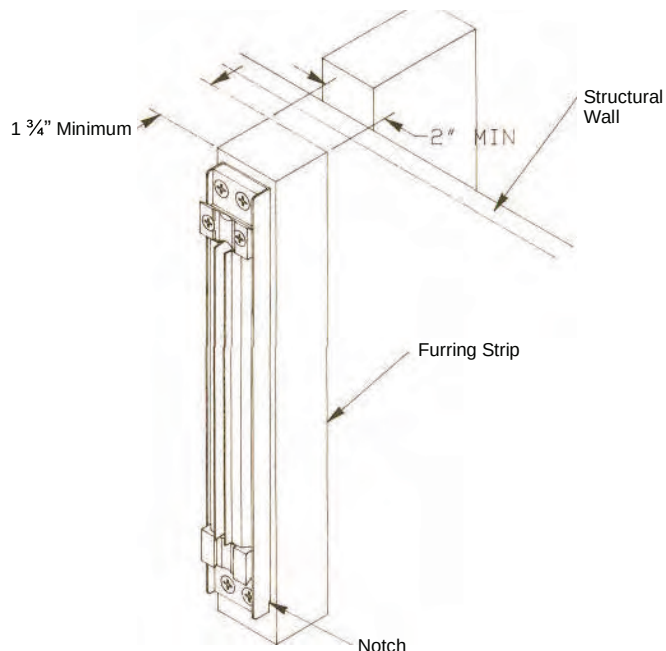


For attachment to structural wall:

Note: Structural wall should be constructed in either of the following manners, as a minimum:

- Composite Board (drywall) over Wood or Metal Stud: Drywall must be $\frac{5}{8}$ " minimum, on 2" x 4" studs minimum, 24" on-center maximum; 14' height maximum, retained at both floor and ceiling. Metal studs must be "C"-channel, 20-ga minimum thickness. Drywall must be attached by industry standards, minimum; ideally it should include appropriate adhesive bead on each stud, the full length of the stud.
- Poured cement wall
- Cement block wall

1. Select a wood furring strip, straight and sound, with minimum cross section dimensions of $1\frac{3}{4}$ " X 2". The length must match the nominal height of the T-Connection.
2. Bevel or plane the back of the furring strip so that face of furring strip will be plumb.
3. Select appropriate fastener for type of structural wall and mount the furring strip to the structural wall, perpendicular and resting on the floor.
4. Locate channel vertically, with notch at bottom.
5. Follow steps 2 – 5 above to attach T-Connector to furring strip.



Power Distribution

Cubicles.com eight-wire/four-circuit power system specifications:

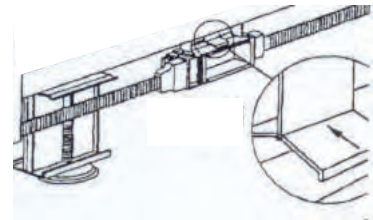
- o UL-Listed/CSA-Certified and labeled
- o Constructed with shielded conduit to provide an effective built-in EMF barrier
- o Eight-wire, four-circuit design
- o 15-amp capacity
- o Three general-purpose circuits
- o One dedicated circuit with isolated ground

Cubicles.com O₂ series panels specified with power come with the power distribution harness already attached to the panel.

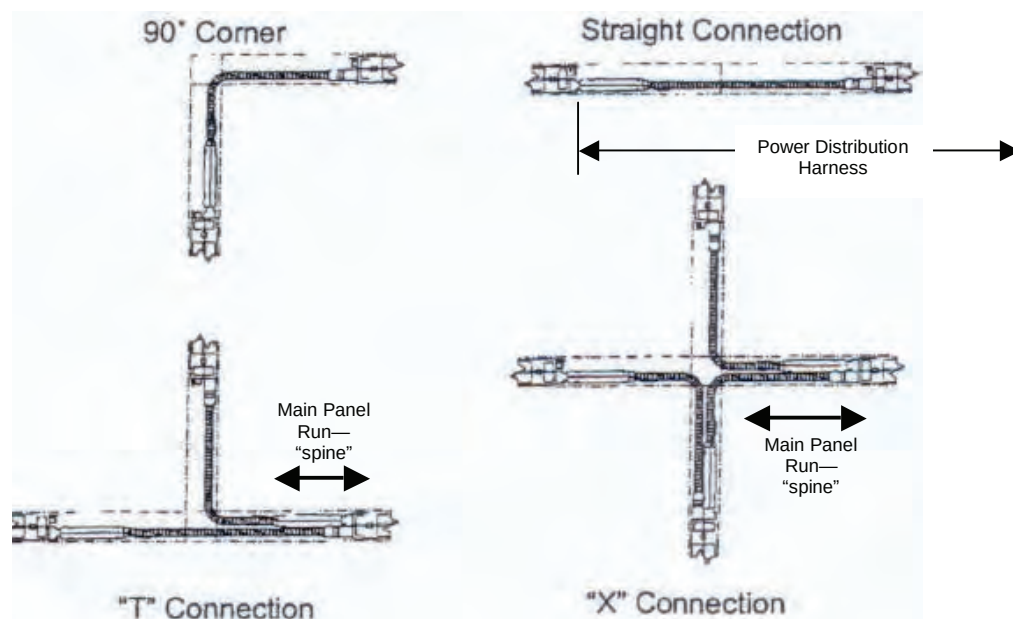
To connect power distribution harnesses and/or pass-thru cables together or between one or another

1. The flexible conduit/connector is polarized so that it can only connect to the appropriate end of a pass-thru cable or to the male terminals on the power block of a power distribution harness (one terminal on the male end of the connector is crowned).

If the power distribution harness needs to be removed, remove the power block from mounting bracket, use a small prybar or flat-blade screwdriver to press down plastic tab of power block on either side of the mounting bracket center tab until you can push the power block through.



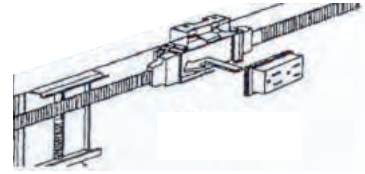
2. Simply make sure the polarized ends are appropriately matched and press together. You should hear an audible 'click' when they have made a proper connection. If not, please examine carefully to make sure the two are fully connected by firmly pulling apart.
 - The shielded cable of each Power Distribution Harness and Pass-thru cable can be stretched up to 3" to round 90-degree corners; firmly grab shielded cable only at each end and pull sharply until fully stretch.
 - Separate adapters are required only to pass through a 3-way or 4-way connector.
3. Follow the schematic below for routing power distribution harnesses and/or pass-thru cables at connector junctions.



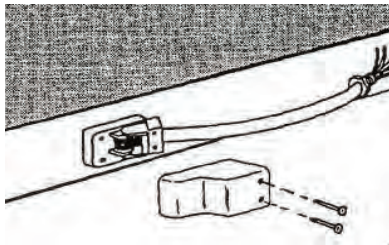
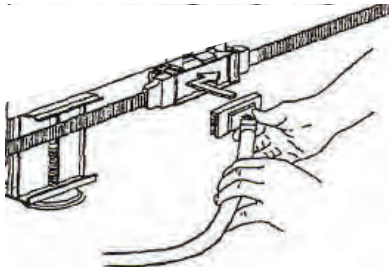
To install Duplex Receptacles

Slide and snap duplex receptacles into each Power Distribution block where indicated according to electrical plan. Knock out appropriate duplex covers on each base cover.

To remove duplex receptacle, press release tab on power block and slide duplex receptacle out.



Power Entry



1. Insert end into power distribution harness block and slide into position until you hear an audible 'click'; thread free end through panel base side cover and install base side cover.
2. Rotate conduit to the right or left and add Power Entry cover, Secure with two screws provided. *Power Entry is now ready for electrician to hardwire the connection to the building supply.*
 - End Feed and Ceiling Feed cables connect to power distribution block male terminals on end of block.

WARNING

- *Risk of Fire or Electrical Shock. Each panel must be connected to only one source of electrical supply. Be sure to turn off panel board switch while installing or removing power entry.*
- *Power Entry must be installed by a licensed electrician.*

Wiring Guide

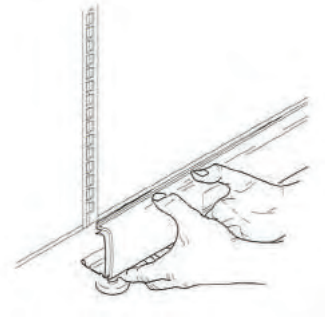
Gray	Neutral 2
White	Neutral 1
Green/Yellow	Isolated Ground
Green	Ground
Pink	Hot Circuit 4
Blue	Hot Circuit 3
Red	Hot Circuit 2
Black	Hot Circuit 1

Base & Connector Raceway Management

Opening Panel Base Side Covers:

Side covers are retained by the top channel and pivot at the baseplate.

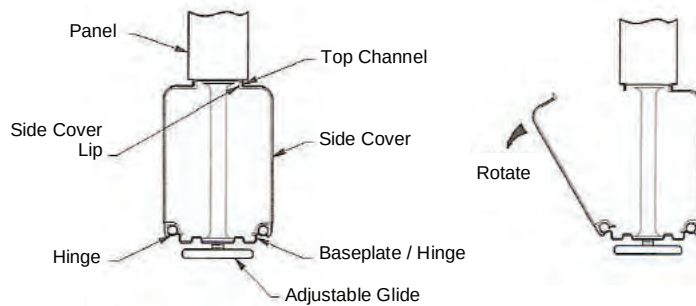
1. To remove side cover, start at one end and press down on the top edge of the side cover to clear the lip from the top channel; pull toward you as your finger continues pressing down on the top edge as it slides along toward the other end.
2. Rotate side cover down toward you to allow access to the cable management channel.



Closing Panel Base Side covers:

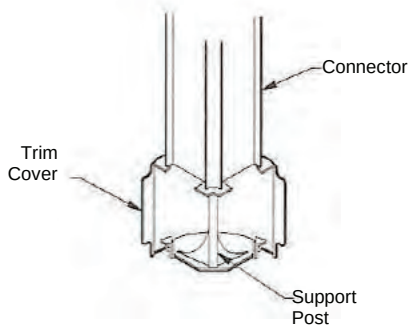
Note: Connector trim covers must be closed before closing side covers.

1. Start at one end of the side cover and press down on the top edge until the lip is under the top channel.
2. While holding that end in position, press and run finger along the top edge seating the rest of the lip under the top channel.

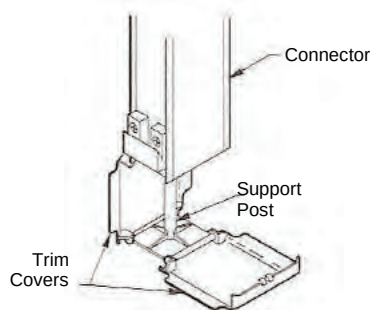


Connector Trim Covers:

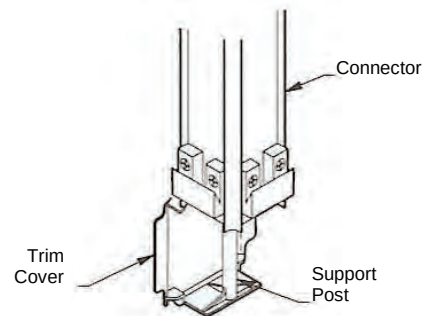
- Trim covers are completely installed on all post connectors, except 4-way connectors which have a base post but no trim cover.
- Trim covers pivot at the base and hold their position with a latch that engages the connector.
- To release the trim cover, press down and in with a flat blade screw driver, near the center at top. When the trim cover latch clears the edge of the connector, rotate the trim cover back.



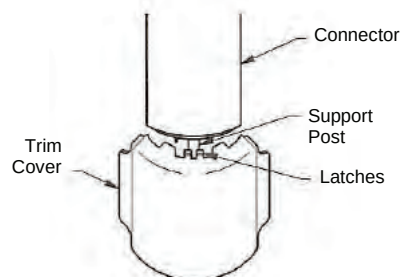
2-Way 90 Connector



2-Way 180 Connector



3-Way Connector



2-Way 90 Connector--
Closed

Wire Management End Cap Installation and Removal:

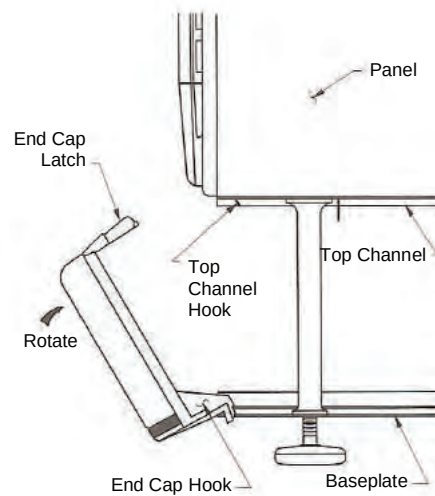
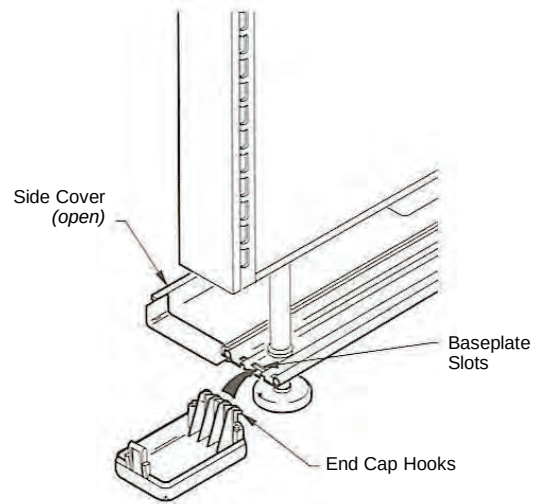
Note: End caps must be installed before closing panel base side covers.

To Install:

1. Insert end cap hooks into the baseplate slots, as shown at right.
2. Rotate the end cap upward until the end cap latch catches the top channel hook. Confirm, by pulling back on the top of the end cap.

To Remove:

1. Use a flat-blade screw driver to pry down on the end cap latch beneath the panel end trim.
2. When the latch clears the top channel hook, pull back on the top of the end cap until the end cap hooks disengage from the baseplate.



Work Surface Installation

O₂ utilizes separate 'button' and 'pin' screws.

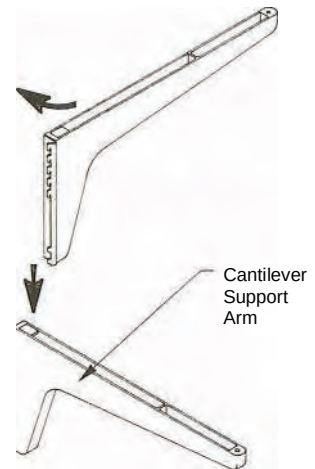
- Work surfaces include pilot holes for standard location at each end.
- Work surface spans should not exceed 48" without proper depth support such as cantilever support arm, clear-access support panel, C-leg or dual-tube peninsula support leg. Sagging and warping of work surface will occur without a reinforcing channel attached beneath.
- Load capacities:
 - o Up to, and including, 48"w (24"d, 30"d): 200lbs.
 - o Less than, and including, 96"w (25"d, 30"d): 250lbs.
- Warning: Load capacities, as listed, include the total load of the work surface, including storage components hanging from the work surface such as pencil drawers and box/file hanging pedestals. Failure to observe the recommend loads and applications will result in unsafe usage conditions which could result in product failure and/or personal injury.
- Work surfaces can be adjusted in 1"-inch increments on either panels or wall tracks. Typical work surface heights are:
 - o Machine usage/full-time keying: 25" from floor to top surface
 - o Sit-down/Typical desk usage: 28" –30", depending on size of person; 29" most normal
 - o Stand-up height: 36"--42"
 - Set top of cantilever at 1" below desired work surface height

To install cantilever support arms:

1. Engage either left-hand or right-hand support arm in the appropriate panel side or wall hanger strip at the desired height. See illustration. The cantilever support arm must rest fully beneath the work surface and flush to the end.

Important note: O₂ support arms and hanging brackets which attach to panels and wall hanger strips have a built-in anti-dislodgement feature—the bracket 'teeth' are curved requiring the bracket to be engaged in the following manner:

- a. Tip the top, back of the bracket into the slotted track of a panel or wall hanger strip so that the top tooth will engage first.
- b. Position the bracket slightly offset to the outside of the components location and, with the top tooth engaged, drop the rest of the bracket against the slotted channel and into position.
- c. **Tap the bracket firmly downward to securely seat the bracket.**

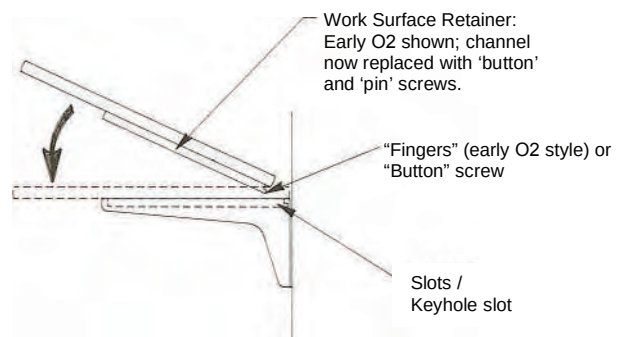


2. In the same manner, engage the opposite side support arm.
3. For standard end-mount you'll need to drill holes for the work surface retainer/guides. 'Button'-style screw goes to rear location; 'pin'-style screw goes in forward location.

4. "Tip" work surface into position, as shown below right, guiding rear of retainer or "button" screw into the slots/keyhole slot of cantilever.

Note: early O2 retainers are used with cast-aluminum cantilever support arms; button/pin screws are used with pressed steel cantilevers.

5. Adjust hex screw at front of cantilever to level work surface, front-to-back.



Corner Work Surface Installation

O₂ utilizes separate 'button' and 'pin' screws instead of "skate" retainers; "Button" is mounted rear-most on the work surface and fits into the keyhole slot of the cantilever while "pin" is mounted ahead of the "button" and fits into the hole just behind the leveling screw at the front top end of the cantilever support arm.

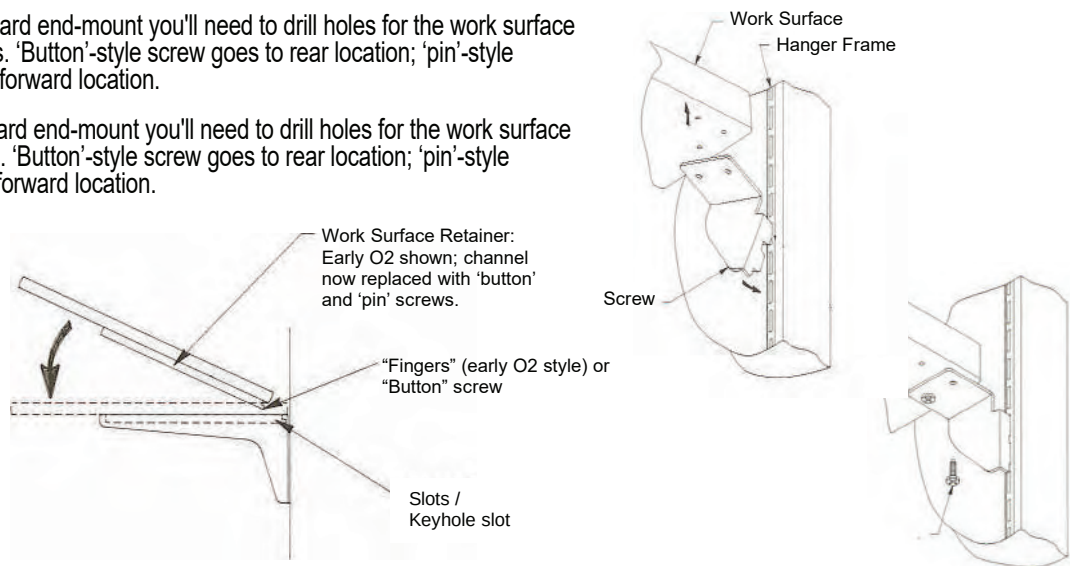
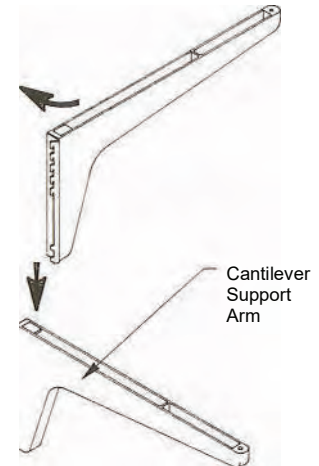
- Work surfaces include pilot holes for standard location at each end.
- Load capacity: 200lbs. total load of the work surface, including weight of any component attached to the underside such as a keyboard tray.
- Failure to observe the recommend loads and applications will result in unsafe usage conditions which could result in product failure and/or personal injury.
- Work surfaces can be adjusted in 1"-inch increments on either panels or wall tracks. Typical work surface heights are:
 - o Machine usage/full-time keying: 25" from floor to top surface
 - o Sit-down/Typical desk usage: 28" –30", depending on size of person; 29" most normal
 - o Stand-up height: 36"--42"
 - Set top of cantilever at 1" below desired work surface height

To install cantilever support arms and work surface support bracket:

1. Engage either left-hand or right-hand support arm in the appropriate panel side or wall hanger strip at the desired height. See illustration. The cantilever support arm must rest fully beneath the work surface and flush to the end.

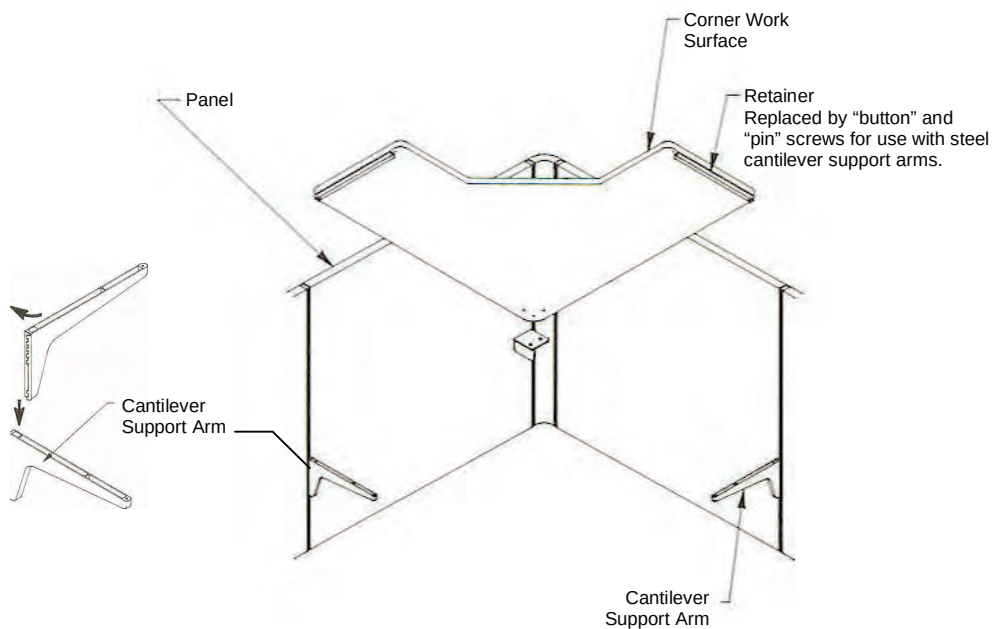
Important note: O₂ support arms and hanging brackets which attach to panels and wall hanger strips have a built-in anti-dislodgement feature—the bracket 'teeth' are curved requiring the bracket to be engaged in the following manner:

- a. Tip the top, back of the bracket into the slotted track of a panel or wall hanger strip so that the top tooth will engage first.
 - b. Position the bracket slightly offset to the outside of the components location and, with the top tooth engaged, drop the rest of the bracket against the slotted channel and into position.
 - c. **Tap the bracket firmly downward to securely seat the bracket.**
2. In the same manner, engage the opposite side support arm.
 3. Insert Work Surface Support Bracket in either panel slot at the rear corner connector or wall hanger strip, depending on whether the bracket is a 'left'- or 'right'-hand bracket as shown below, right.
 4. For standard end-mount you'll need to drill holes for the work surface retainer/guides. 'Button'-style screw goes to rear location; 'pin'-style screw goes in forward location.
 5. For standard end-mount you'll need to drill holes for the work surface retainer/guides. 'Button'-style screw goes to rear location; 'pin'-style screw goes in forward location.



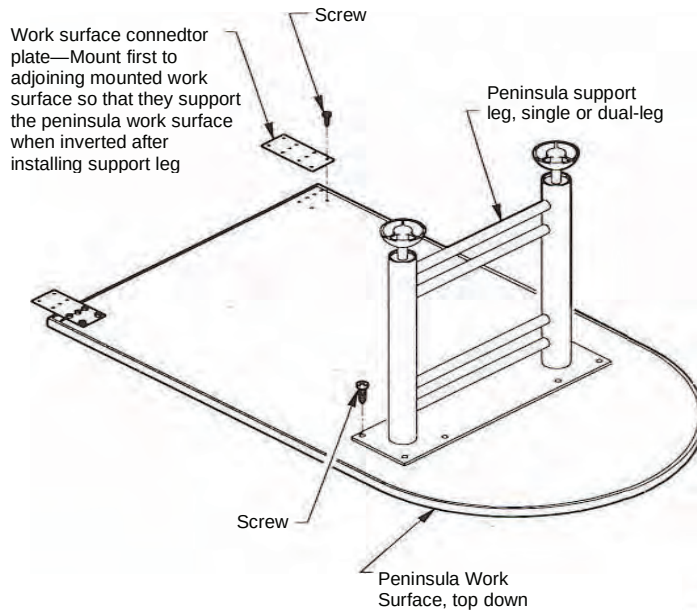
Corner Work Surface Installation--*continued*

6. Position the corner work surface over support hardware as shown below. Engage the retainer or "button" and "pin" screws of one side into the cantilever support arm as shown below, right. On the other side, eliminate the "button" screw, using the "pin" screw to locate it on the support arm.
7. Lower corner work surface fully into position and be sure it is securely seated on all three support brackets.
8. Attach the work surface to the rear corner bracket with two screws; tighten screws securely.
9. Use work surface connecting plates to join corner work surface to adjoining work surfaces.
10. Adjust hex screw at front of cantilever to level work surface, front-to-back.

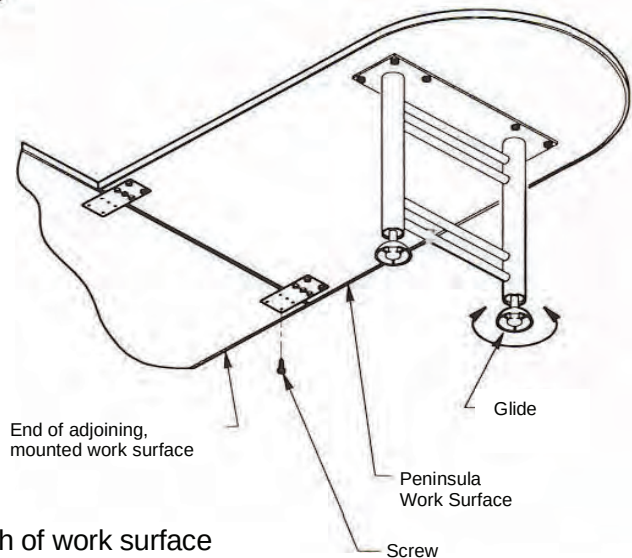


Peninsula Work Surface Installation

Work Surface-supported Installation:

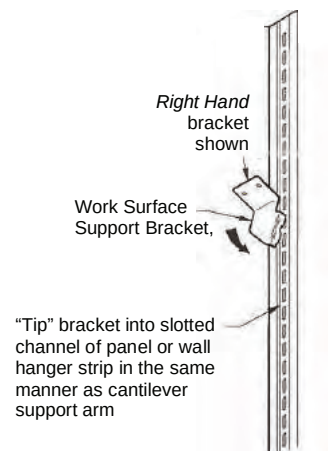


1. Lay work surface, underside up, on a clean, padded surface.
2. Center support leg, whether single or dual-leg, set back from end $\frac{1}{2}$ the depth (radius) of the surface. Secure with screws.
3. Mount two work surface connecting plates to the adjoining, mounted work surface as shown below.
4. Place peninsula work surface over the connecting plates and secure with screws.
5. Adjust glides to level peninsula work surface.

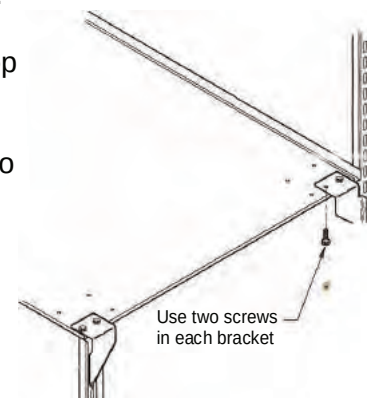


Peninsula Work Surface Installation

Panel-supported Installation:

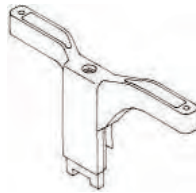


1. Engage top tooth of work surface support bracket (brackets are *handed*) into slotted channel of panel frame or wall hanger strip, as shown at right. Then rotate bottom of bracket down into position of slotted channel. Typical height for installation is approximately 28" from floor to the top of the support bracket.
2. With the panel clips firmly seated, lower the peninsula work surface onto the brackets as shown, below right.
3. Drive two screws into each bracket until tight.

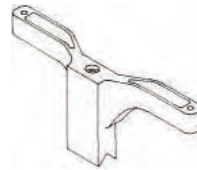


Transaction Surface Installation

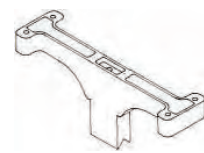
1. Turn out allen screw of finished end top block or panel-to-panel connector draw block, depending on application.
2. Remove top block or draw block and replace with appropriate transaction counter bracket. *See description of each application at right, below with respective transaction counter support bracket.*
3. Install connector or finished end as described in "Panel Installation" above.



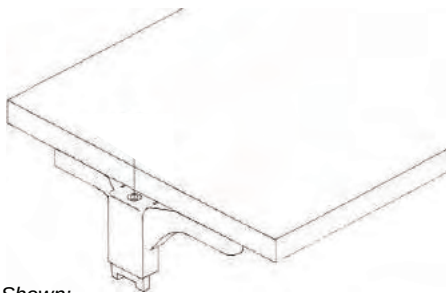
End Support:
Use to replace finished end top block at the end of a panel run which will support a transaction counter.



Mid End Support:
Use to replace panel-to-panel connector top draw block where a transaction counter ends at a panel junction.



Center Support:
Use to replace panel-to-panel connector top draw block where a transaction counter spans across a panel junction.



Shown:
End Support

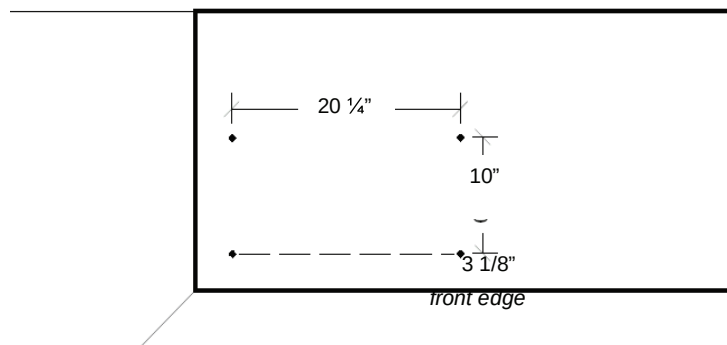
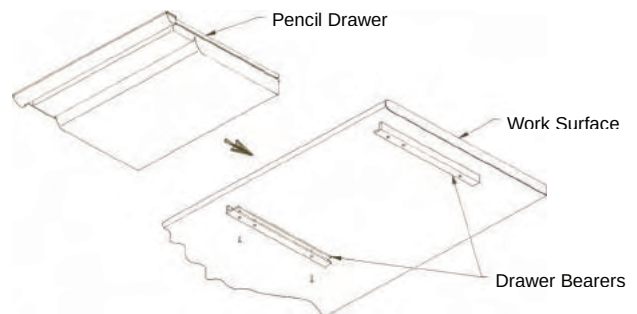
4. Position transaction counter over supports and align in both directions. Attach counter to supports with #12-10 x 1 ¼ Flat Head Philips screws.

Pencil Drawer Installation

1. Attach drawer bearers to work surface as shown at right with flat-head wood screws supplied.

Note: Closed-end of drawer bearers face rear of work surface.

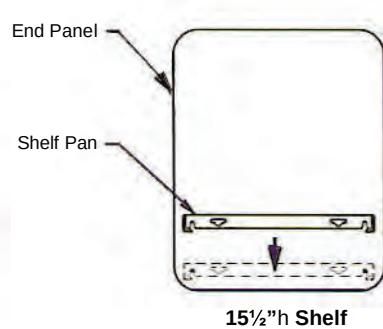
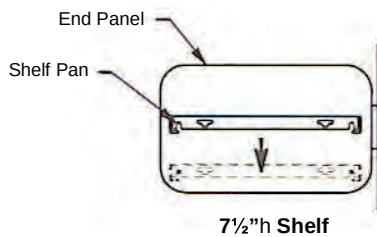
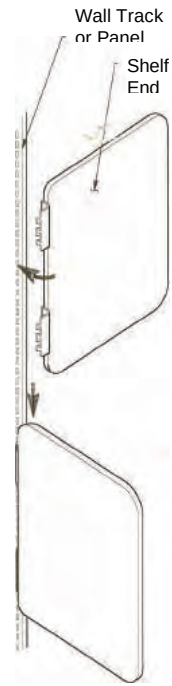
2. Use drawer bearer dimensions/spacing shown below wherever pencil drawer is desired.



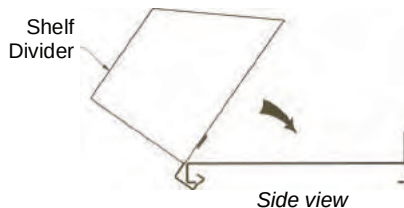
Shelf Installation

Note: All screws must be firmly tightened. Failure to do so may cause the shelf to fall, causing product damage or personal injury.

1. Loosen both bottom shelf mounting screws on each end panel to reveal approximately 1/8" of screw thread. Bottom screws are for the shelf; top screws are for the flipper door assembly or additional shelf, if specified.
2. Engage shelf end panel at desired height in slotted hanger frame of panel or wall track channel as show at right, top.
3. Swing shelf end panel to perpendicular with panel or wall and lock shelf end panel in place by pushing down on end panel to seat the bracket. Tap firmly with plastic mallet to ensure end panel is fully seated on hanger frame or wall hanger strip.
4. Position end panels perpendicular to wall and slide shelf straight in between shelf end panels, just above the mounting screws. Seat shelf pan securely on the mounting screws and tighten with a Philips screw driver; be certain to tighten all screws firmly.



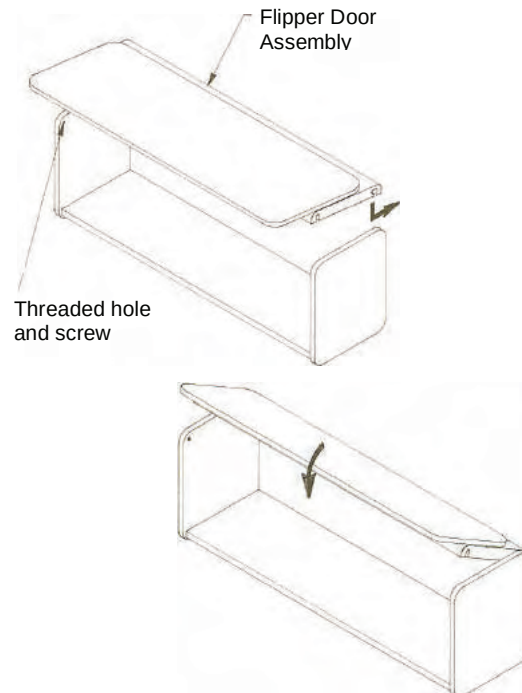
Shelf Divider



1. Install shelf divider by tilting divider forward and hook under lip of shelf as shown.
2. Pivot divider so that it rests flat on the shelf.

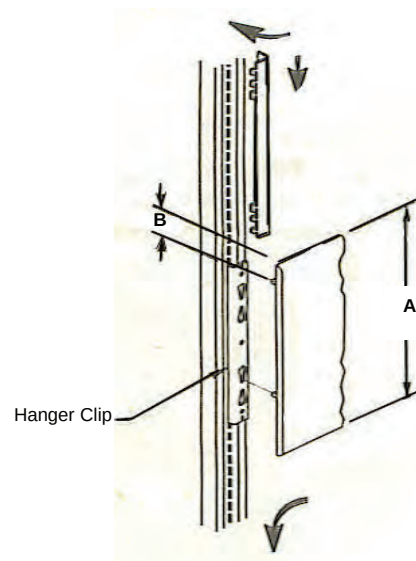
Flipper Door Installation

1. If a flipper door cover is to be installed, first install the shelf unit but do not tighten the screws to the shelf end panel.
2. Loosen top mounting screws on both end panels to reveal approximately 1/8" of screw thread.
3. With the flipper door assembly in the 'open' position (shown), position the rear slots of the flipper door assembly over the rear screws of the shelf end panel.
4. Slide the flipper door assembly back until the front slots drop over the front screws.
5. Seat flipper door assembly firmly over the four top shelf end panel screws then securely tighten all four flipper cover screws then all four shelf pan screws.



Tack Board & Marker Board Installation

1. Position and engage the hanger clips in panel joint or on wall hanger strip (*hanger clips are universal*) at desired height. See table below right for typical locations.
2. Position board with the mounting screws just above the hanger clips in the slots of the hanger clips as shown at right.
3. Press board against hanger clips and down to engage the mounting screws securely into the hanger clip notches.



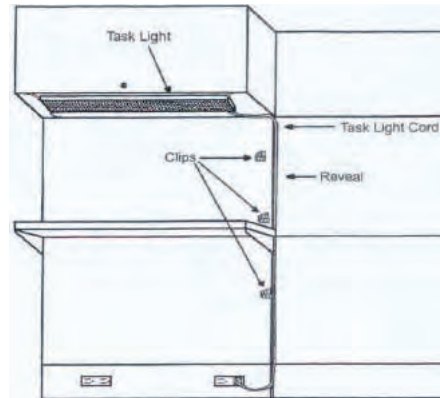
Marker Board Maintenance Notes:

- Use only dry erasable markers; never use permanent markers!
- If permanent marker is accidentally used, remove marks by writing over the marked area with dry erasable marker and immediately wiping it clean.
- Board can be wiped clean with a standard felt eraser. Use specifically-designed white board cleaner to aid cleaning and to minimize marker residue.
- If necessary, clean marker board with lacquer thinner to eliminate any residue left on the board from permanent markers or other non-approved writing instruments.
 - Note: Lacquer thinner is extremely flammable and harmful, or fatal, if swallowed. Vapor is harmful and is an eye and skin irritant. Avoid contact with skin or eyes; do not use near a heat source—fire or personal injury may result.
- Never use an abrasive cleanser on this surface which will cause the surface to deteriorate rapidly and deliver poor performance.

Dimension A Tack Board Height	Dimension B Mounting Screw Dimensions (from top)	Dimension from floor to top of hanger clip (approximate)
11 1/2"	1", 8"	40"
15 1/2"	4", 11"	41"

Task Lights

1. Install Task Light according to manufacturer's instructions, included with the light.
2. If using optional cord management clips, align task light cord inside reveal between panels. Plug light cord into outlet in panel base.
3. Use at least 3 cord clips per light to hold in place.



Storage Pedestals

1. Position storage component under work surface at desired location.
2. Remove pedestal drawers by fully extending drawer and slightly prying the drawer slide mechanism away from the drawer box using a slotted screw driver or mini Wonderbar/prybar from the bottom of the slide mechanism just behind the drawer front. Simultaneously lift the drawer box slightly away and repeat on the other side of the drawer.
3. Now hold both sides of the drawer box and pull toward you to disengage the tabs supporting the rear of the drawer box; pull drawer away entirely. Remove each drawer.
4. Level storage cabinet by adjusting each of the four glides until the top surface of the storage cabinet is flush with the work surface.
5. Use screws supplied with storage component to secure its four corners to the work surface through holes in the top frame.
6. Replace the drawers in the reverse sequence: align and insert tab/bayonet on side/rear of drawer box to slot on drawer slide; then attach in the same manner at front.
7. Test drawers for smooth operation; adjust if necessary.

INSTALLING BASE TRIM (2, 3 OR 4 WAY)

ASSEMBLY TIME

2 to 5 minutes

(Time of length depends on the installation of the 1, 2 or 3 way compression fits)

TOOLS NEEDED TIME

No tools needed

PARTS

2 Way Base Trim
(Requires one inside)

or

3 Way Base Trim
(Requires two inside)

or

4 Way Base Trim
(Requires four inside)



INSTALLATION EXAMPLES

STEP 1 (3 WAY OUTSIDE TRIM)



Place three way bottom trim tabs into metal track and push down until top lip on trim seats into the connector tube.

STEP 2 (3 WAY OUTSIDE TRIM)



Attach base covers to track.

STEP 1 (2 WAY OUTSIDE CORNER TRIM)



Place two bottom trim tabs way bottom trim tabs into metal track and push down until top lip on trim seats into the connector tube

STEP 2 (2 WAY OUTSIDE CORNER TRIM)



Attach base covers to track

STEP 3 (2 WAY INSIDE CORNER TRIM)



Place two inside bottom trim tabs way bottom trim tabs into metal track and push down until top lip on trim seats into the connector tube.

STEP 4 (2 WAY INSIDE CORNER TRIM)



Attach base covers to track.