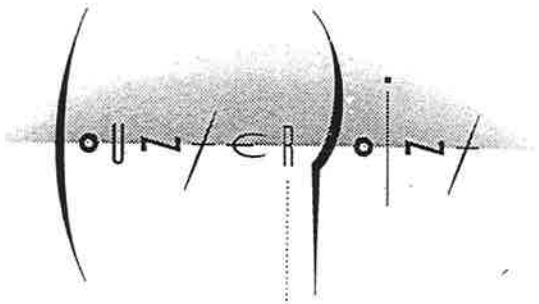


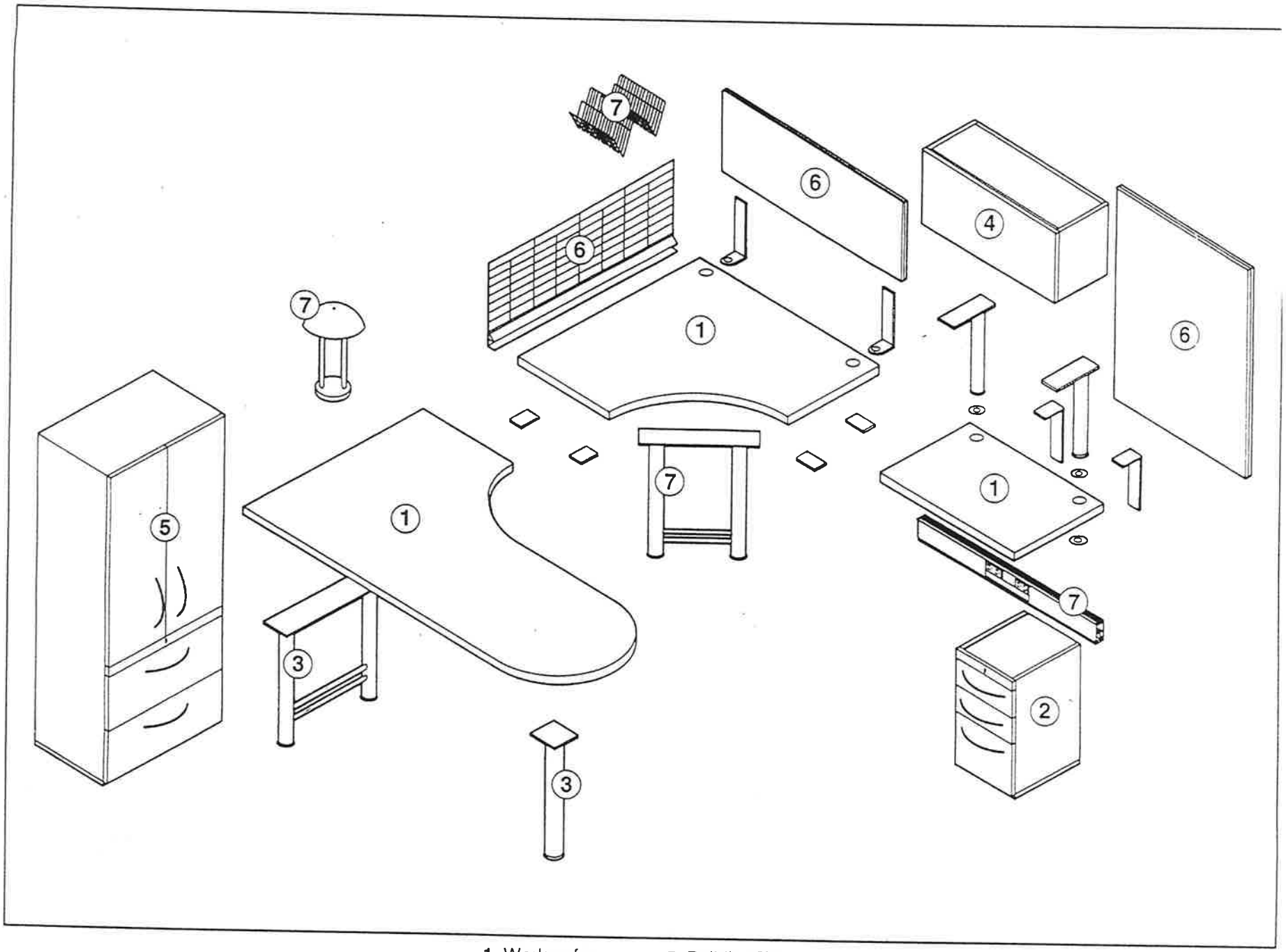
CounterPoint™ by HLF

A Worksurface-Based Office Furniture System

Design, Installation, & Specification Guide

*38 PAGES

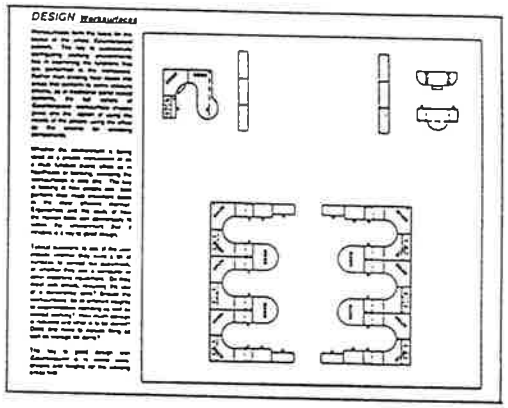
COMPONENTS



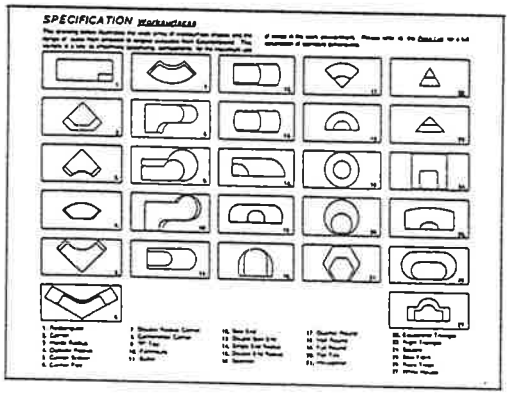
1. Worksurfaces
2. Lower Storage
3. Lower Support
4. Upper Storage
5. Building Tower
6. Privacy Screen
7. Lighting, Electrical and Accessories

HOW TO USE THIS GUIDE

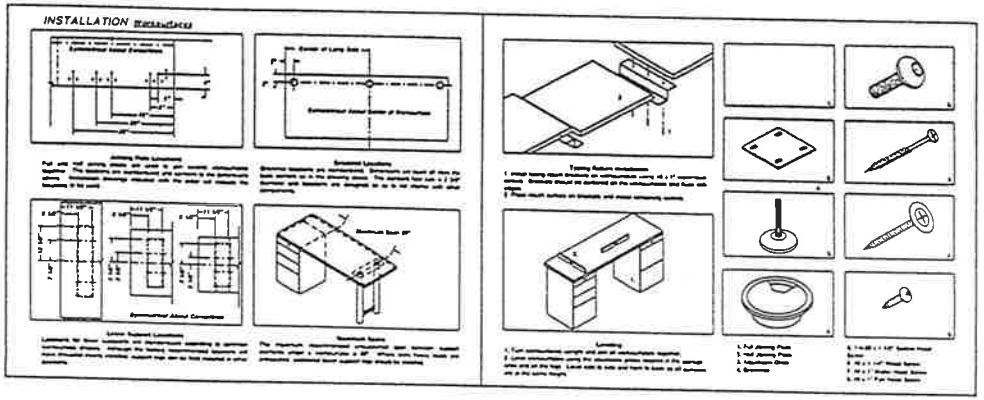
The *Design* portion of this booklet is intended to guide the Interior Designer, Specifier or Architect through the thought process used to create efficient working environments using ***Counterpoint***. Combining both text and graphics, the guide encourages you to explore ***Counterpoint's*** different possibilities for space division, task accomplishment, work sharing and for aesthetic qualities .



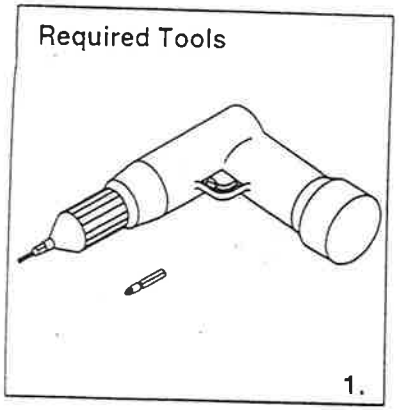
The *Specification* portion of this booklet covers the technical aspects of the ***Counterpoint*** products which the Designer, Specifier and Installer will find useful in completing their portion of the project. Additionally, end-users have the information necessary to carefully evaluate the merits and limitations of the parts which will create their workspaces.

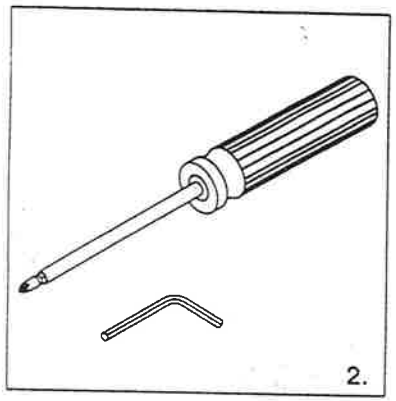


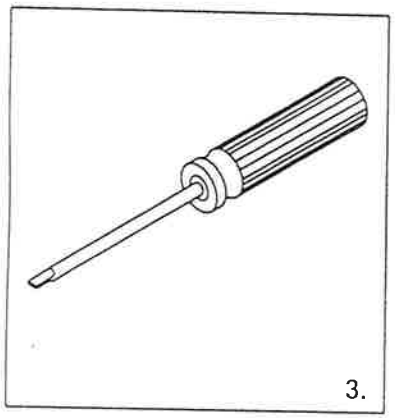
The *Installation* portion is designed using simple illustrations to describe the proceedures which will make the installation of ***Counterpoint*** simple and efficient. The drawings included here cover the most common situations but the principles will apply to more complex jobs too. Proper receiving, staging, and organizing will make the process of assembling most productive.

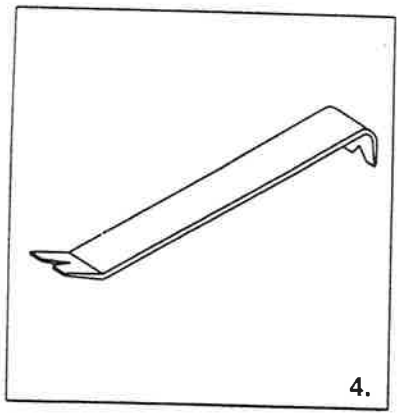


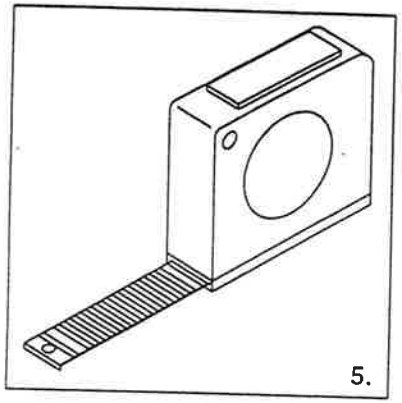
Required Tools

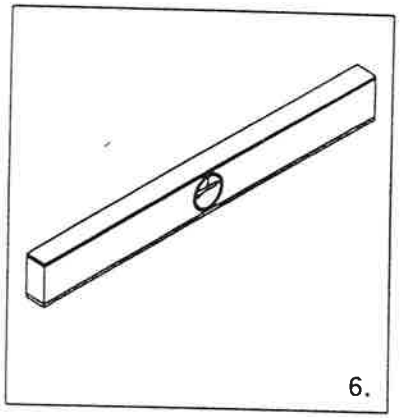








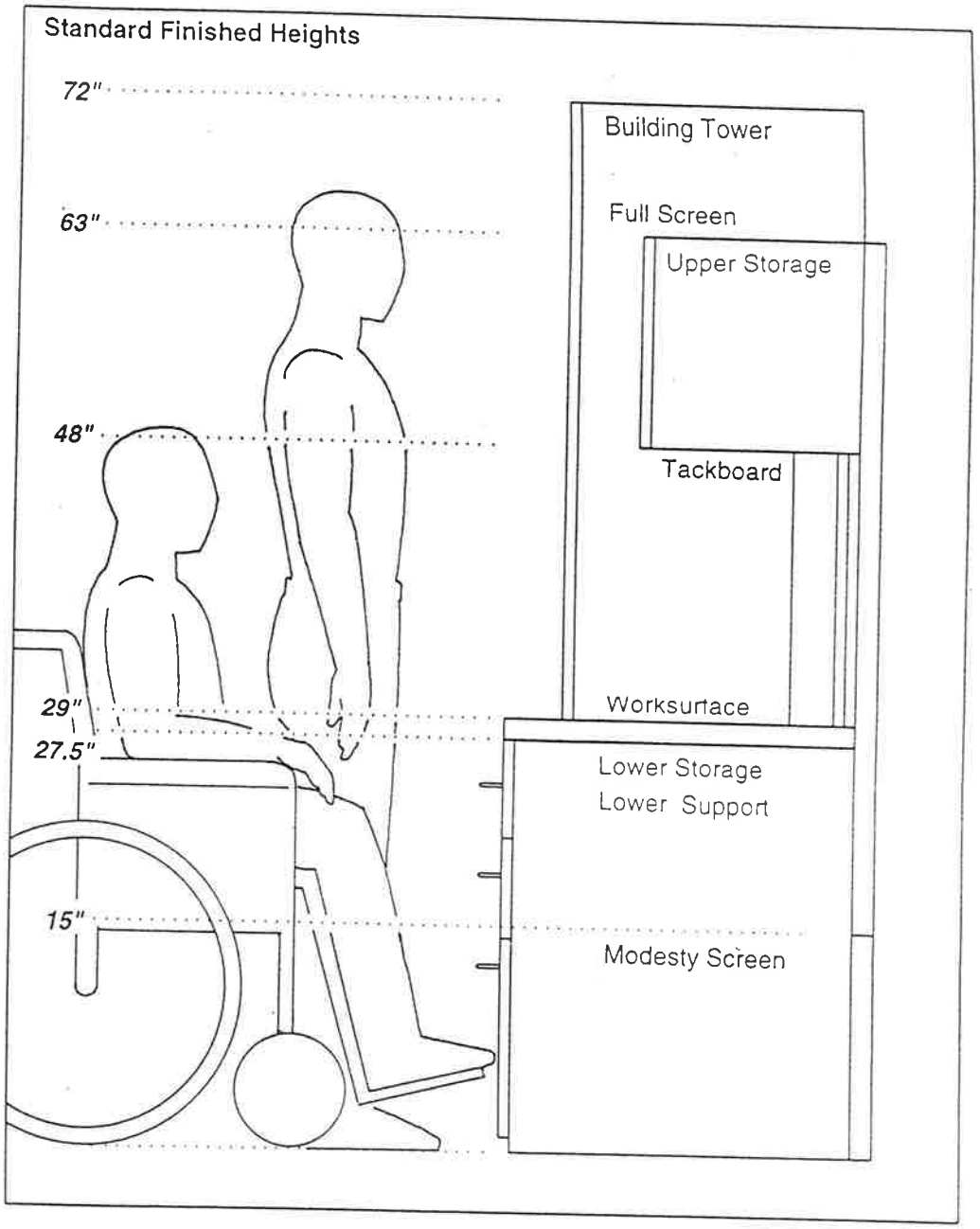




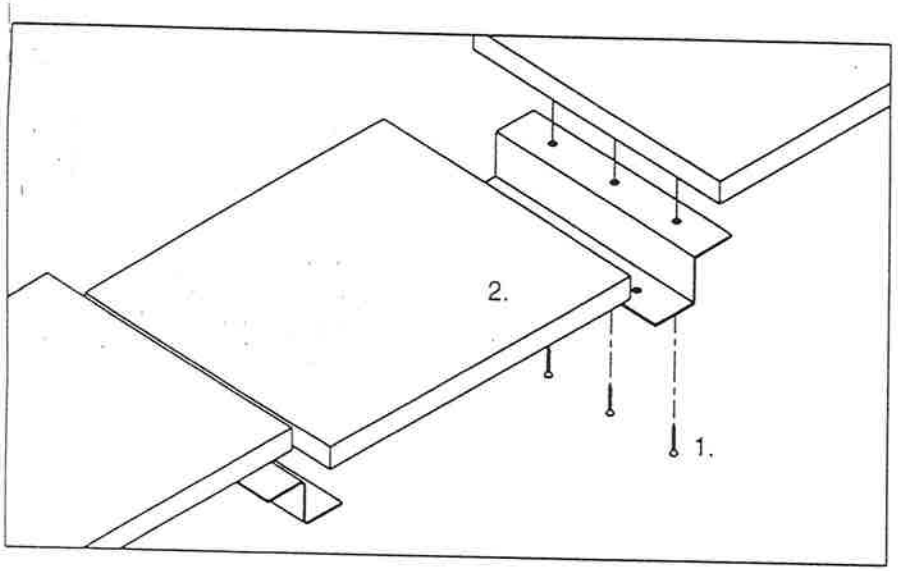
1. Cordless screwdriver with 5/32" hex and phillips bits.
2. #8 phillips screwdriver and 5/32" allen wrench.
3. Straight slot screwdriver.

4. Pry bar.
5. Tape rule.
6. Standard level 18"-24" long.

Standard Finished Heights

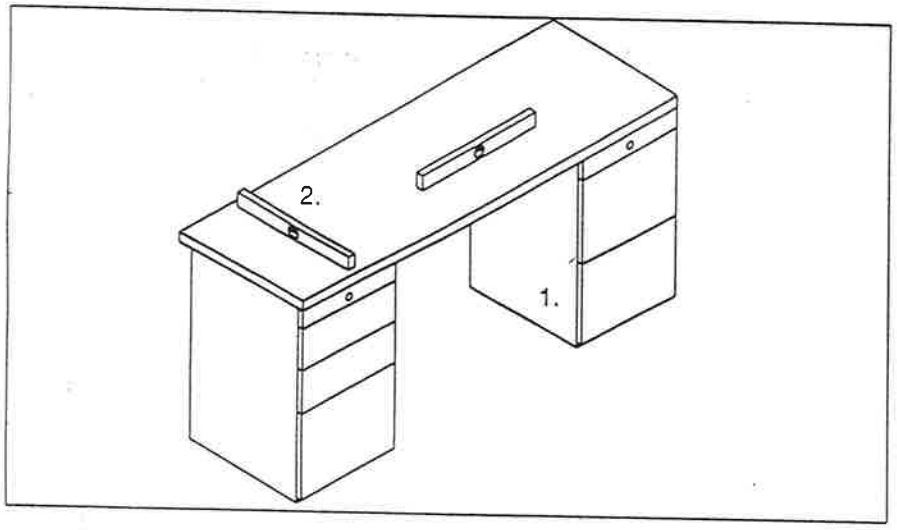


There are several ideal heights that are consistent throughout the products offered by ***Counterpoint***. As indicated in the drawing above, many items are standardized to ergonomic principles and will be compatible with other products found in the office environment.



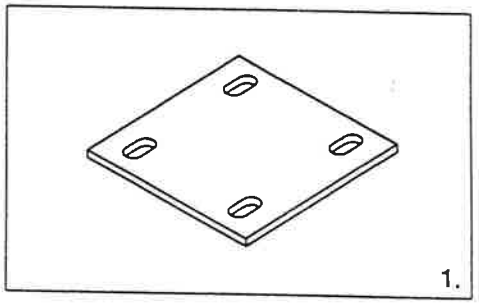
Typing Return Installation

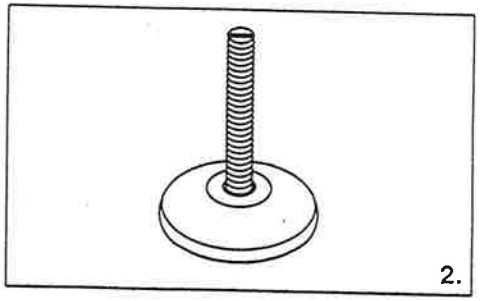
1. Install typing return brackets on worksurfaces using #8 x 1" waferhead screws. Brackets should be centered on the worksurfaces and flush with edges.
2. Place return surface on brackets and install remaining screws.

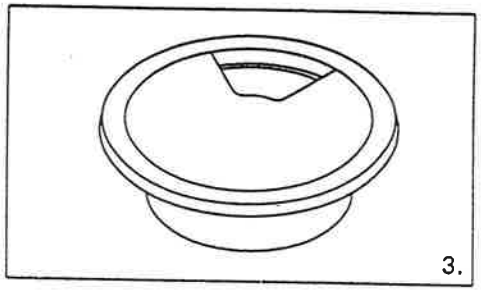


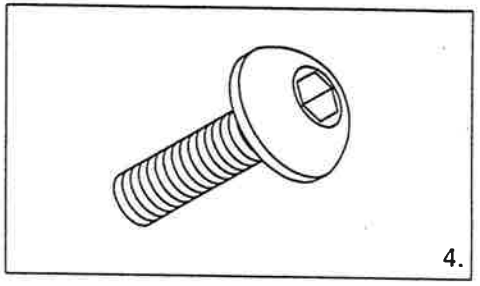
Leveling

1. Turn worksurfaces upright and join all worksurfaces together.
2. Level worksurfaces using the adjustable glides located in the storage units and on the legs. Level side to side and front to back so all surfaces are at the same height.

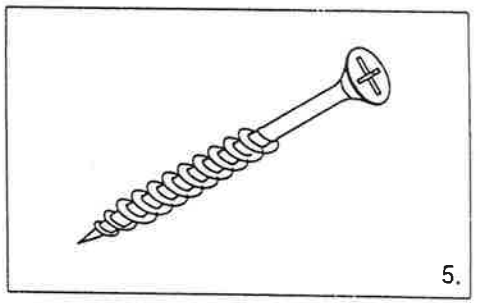


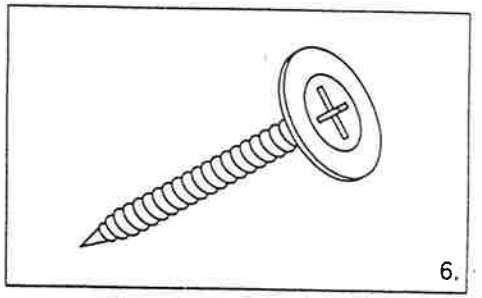


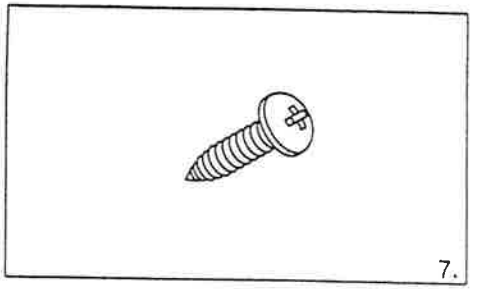




1. Joining Plate
2. Adjustable Glide
3. Grommet
4. 1/4-20 x 1 1/2" Socket Head Screw







5. #8 x 1 1/4" Wood Screw
6. #8 x 1" Wafer Head Screw
7. #8 x 1" Pan Head Screw

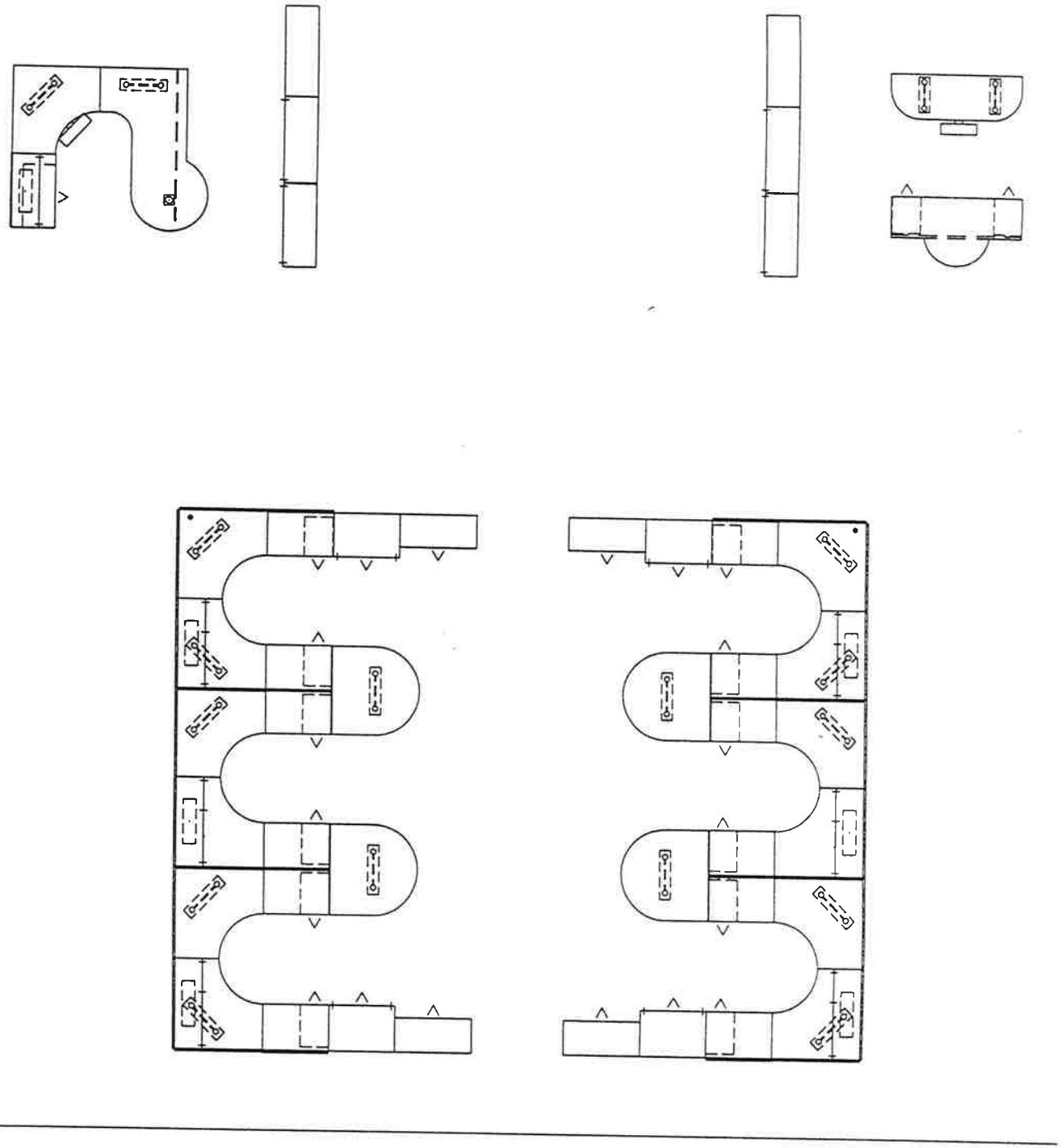
DESIGN Worksurfaces

Worksurfaces form the basis for the layout of the whole ***Counterpoint*** system. The key to successfully configuring working environments lies in examining the functions that are performed in the workspace. Rather than dividing floor space into areas that conform to some obscure criteria, as in traditional panel based systems, the full variety of ***Counterpoint*** worksurface shapes gives one the option of using the needs of the people using the office as the rationale for selecting components.

Whether the environment is being used as a private workstation or as a multi function public office as in healthcare or banking, selecting the worksurfaces is step one. The key is looking at how people can best perform their most important tasks in the most efficient manner. Ergonomics, the study of how the human body can comfortably fit within the environment that it inhabits, is a key to good design.

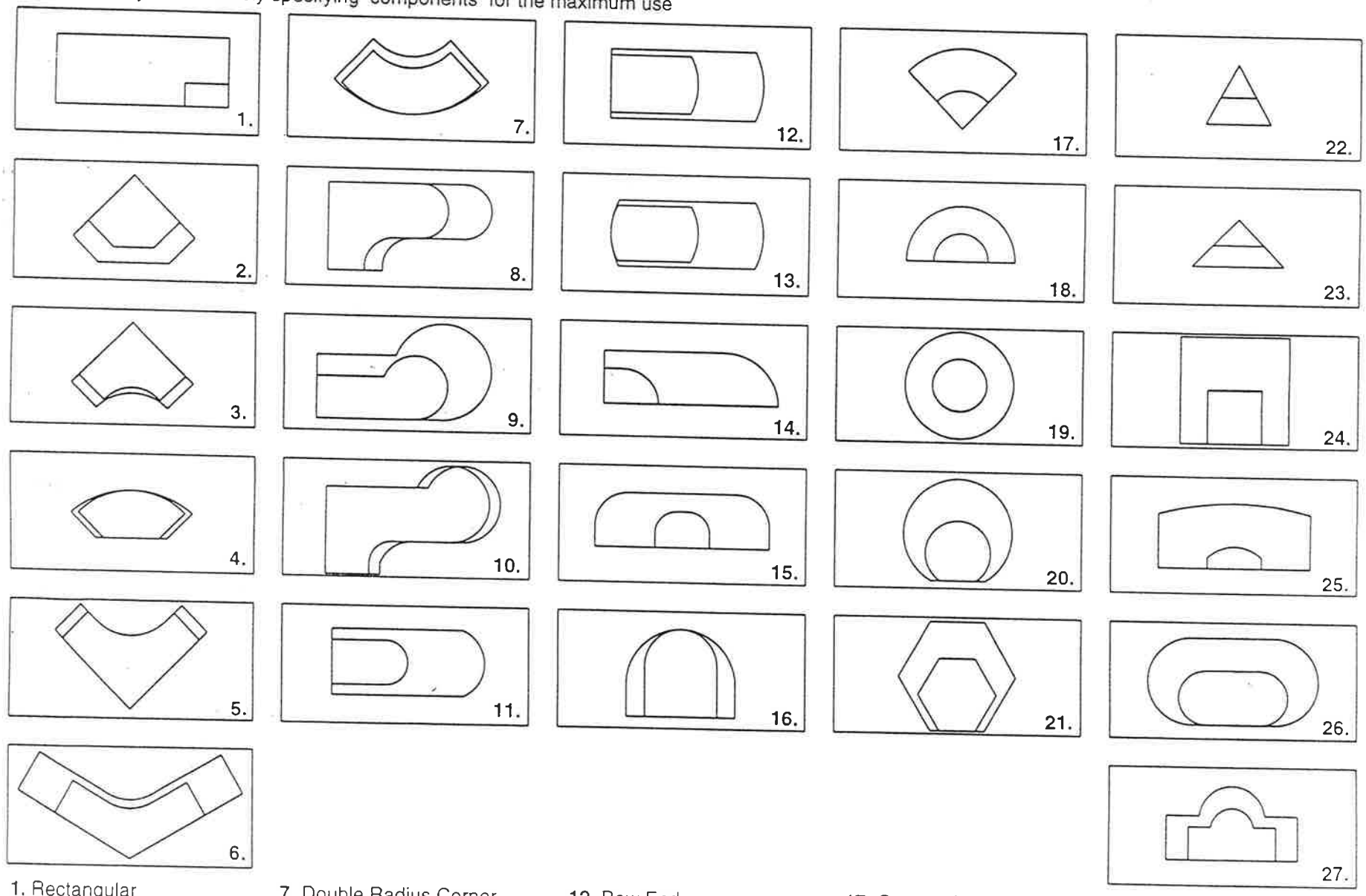
Typical questions to ask of the user include whether they need a lot of surfaces to spread out paperwork, or whether they use a computer or other electronic equipment. Do they meet with others, requiring the use of a conference area? Should the worksurfaces be at different heights to accommodate standing as well as seated working? How much storage is required and what is to be stored? Does one need to include filing as well as storage for items?

The key to good design with ***Counterpoint*** is to select sizes, shapes and heights for the working areas first.



SPECIFICATION *Worksurfaces*

The drawing below illustrates the wide array of worksurface shapes and the range of sizes from smallest to largest available from ***Counterpoint***. This variety is a key to effectively specifying components for the maximum use of space in the work environment. Please refer to the *Price List* for a full description of standard dimensions.



1. Rectangular
2. Corner
3. Inside Radius
4. Outside Radius
5. Corner Station
6. Corner Pod

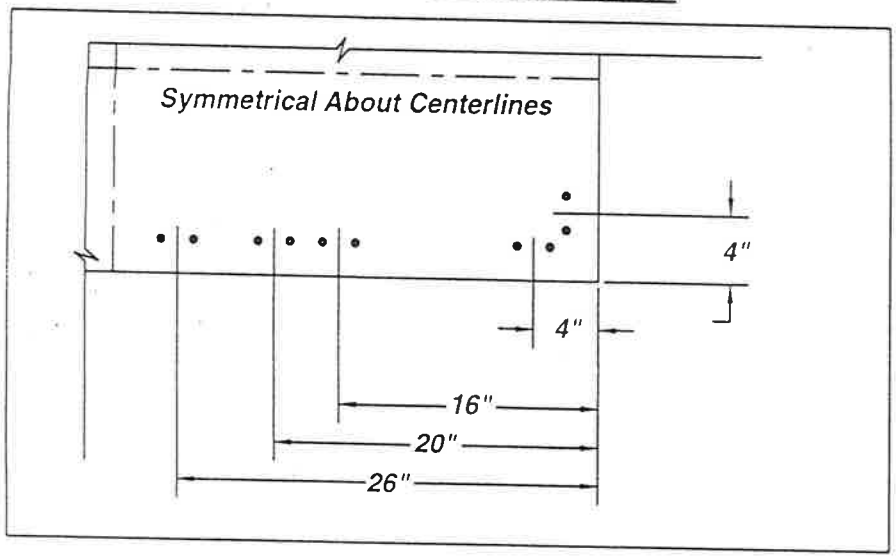
7. Double Radius Corner
8. Conference Corner
9. "P" Top
10. Peninsula
11. Bullet

12. Bow End
13. Double Bow End
14. Single End Radius
15. Double End Radius
16. Spanner

17. Quarter Round
18. Half Round
19. Full Round
20. Flat Tire
21. Hexagonal

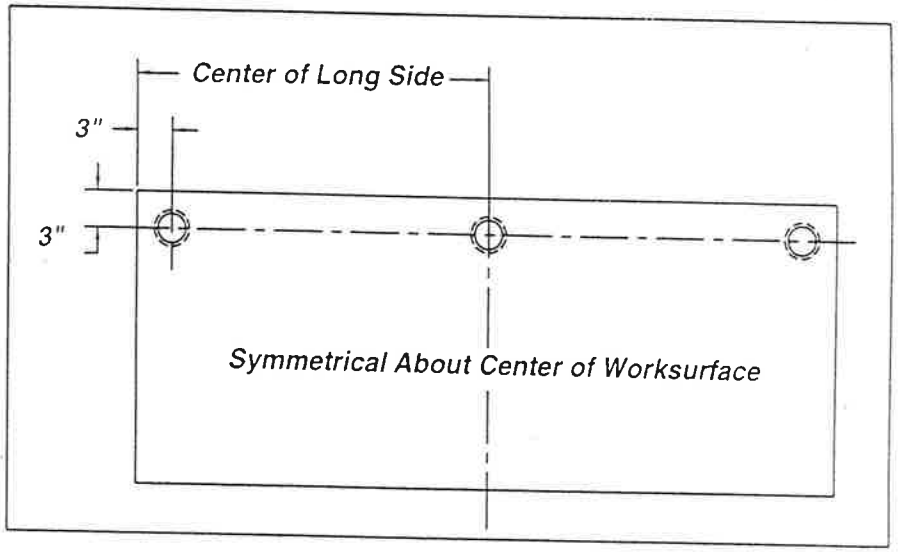
22. Equilateral Triangle
23. Right Triangle
24. Square
25. Bow Front
26. Race Track
27. White House

INSTALLATION Worksurfaces



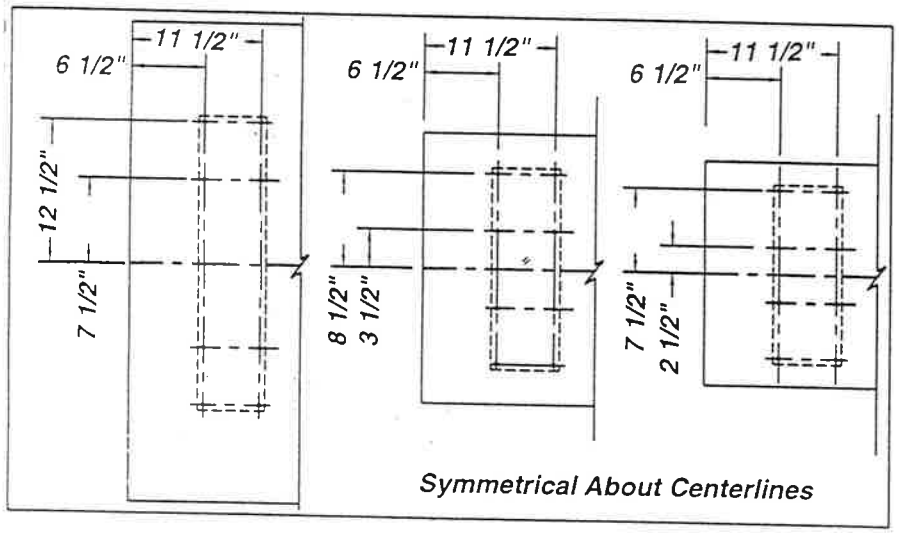
Joining Plate Locations

Joining plates are used to join several worksurfaces together. The locations are standardized and conform to the dimensions above. Installation drawings included with the order will indicate the locations to be used.



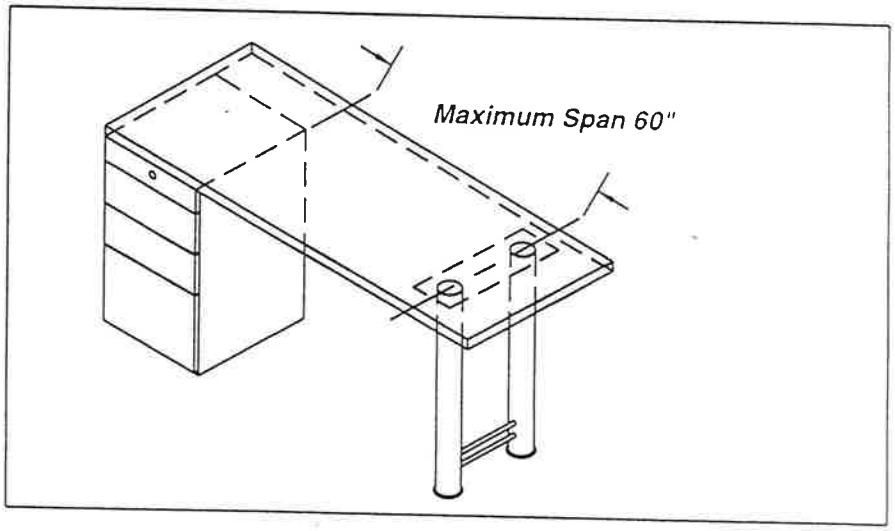
Grommet Locations

Grommet locations are standardized. Dimensions are layed off from the back corners as in the drawing above. The standard hole size is 2 3/8" diameter and locations are designed so as to not interfer with other components.



Lower Support Locations

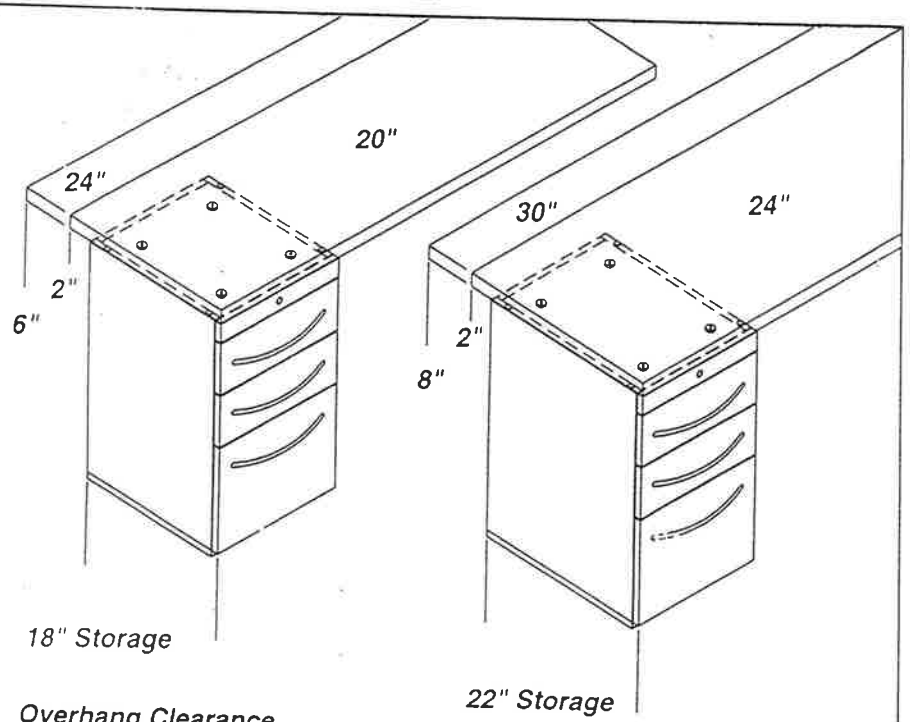
Locations for lower suppports are standardized according to common worksurface shapes. Although the factory recommended locations will have threaded inserts installed, support legs can be field installed in other positions.



Maximum Spans

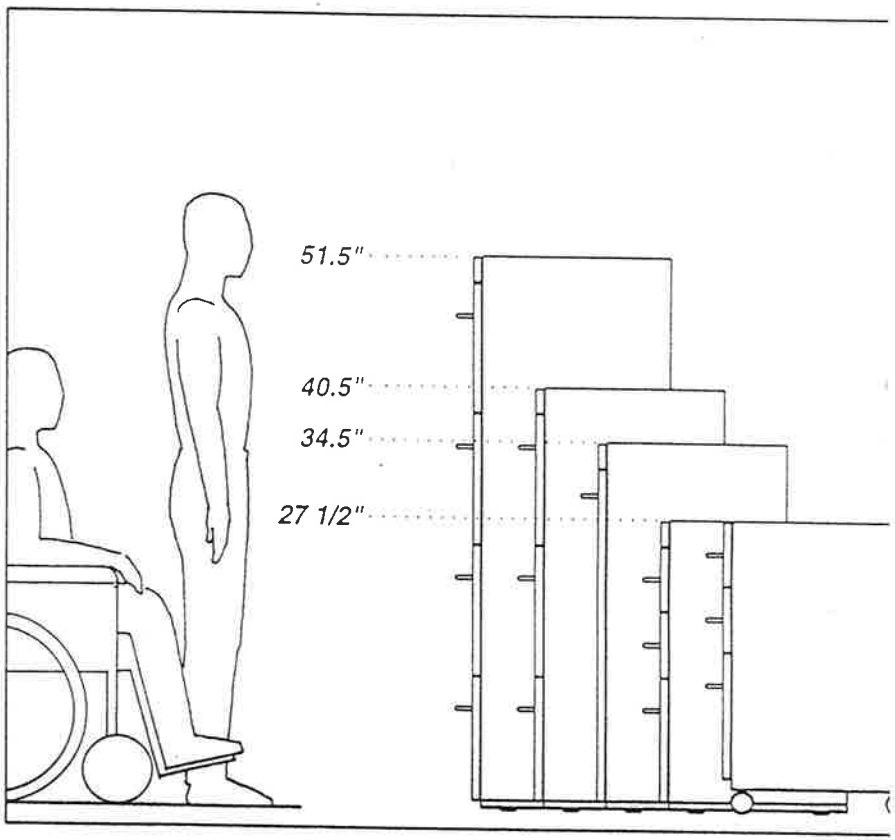
The maximum recommended unsupported span between support elements under a worksurface is 60". Where extra heavy loads are anticipated, additional lower support legs should be installed.

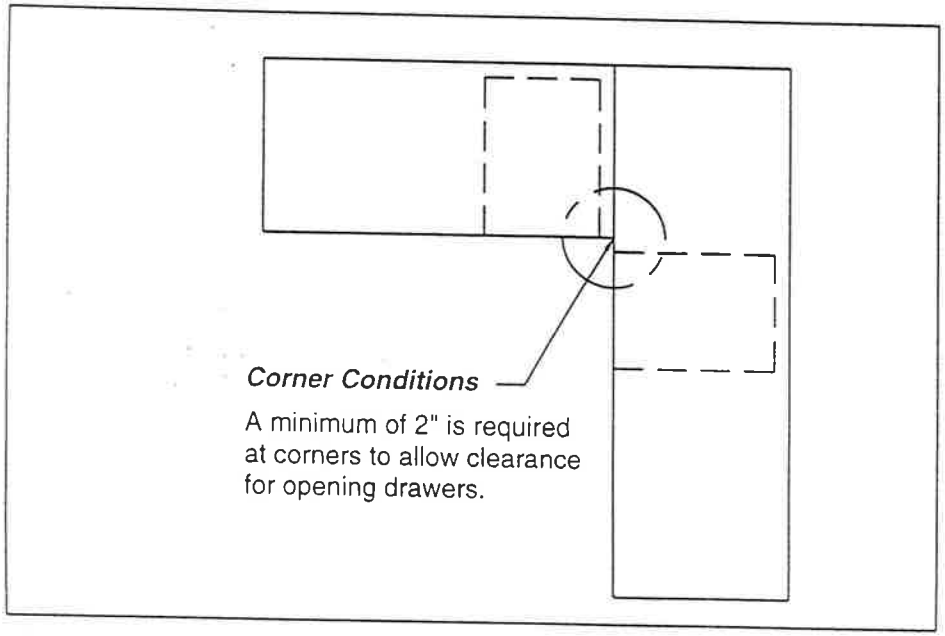
DESIGN Lower Storage



Overhang Clearance

Behind Lower Storage units is an allowance for wire management.



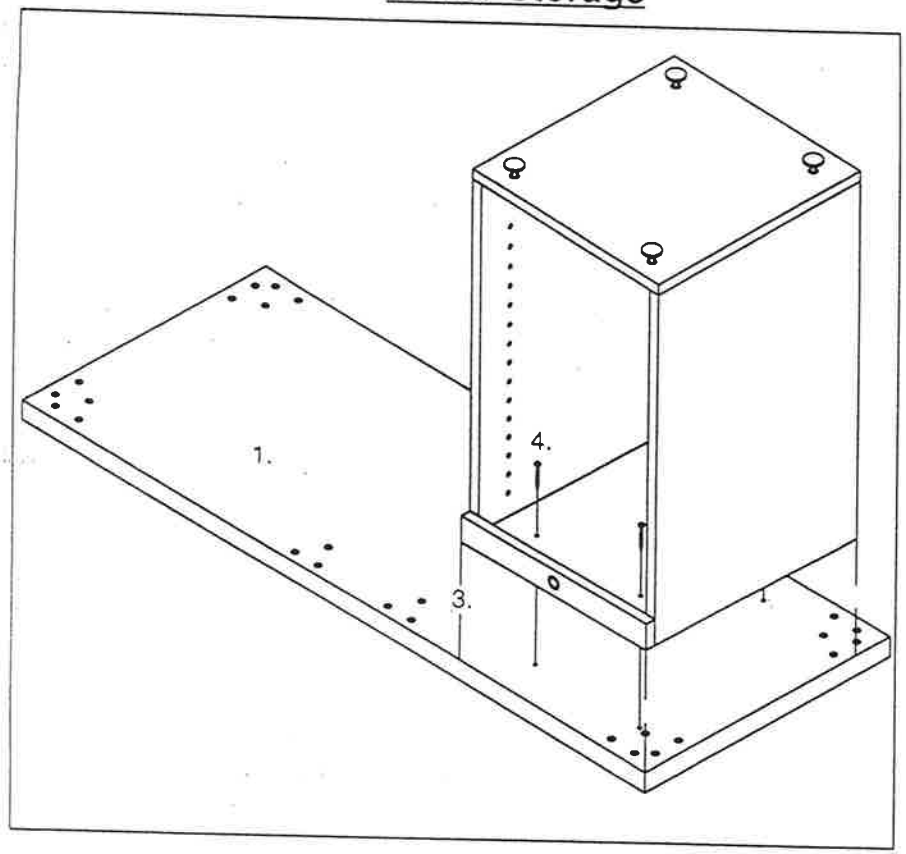


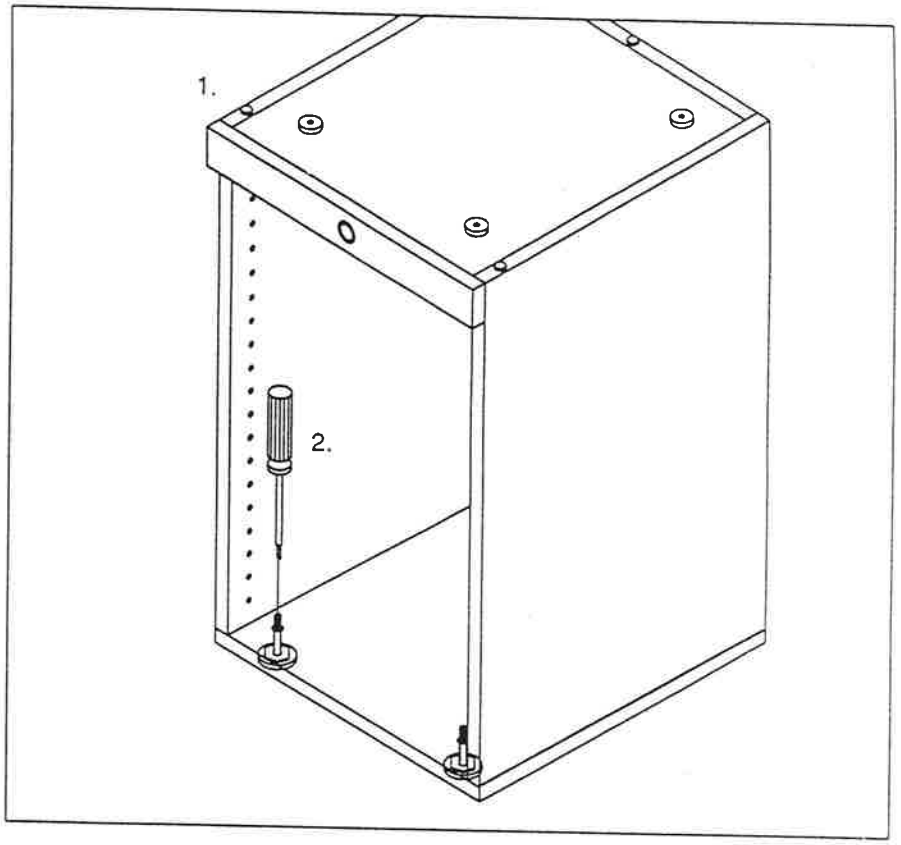
After selecting the worksurface sizes and shapes which will best provide working spaces for the project, storage applications and needs should considered. ***Counterpoint*** provides many options which, depending upon height of the worksurfaces, can be used for stand alone storage or for ur surface support as well. As shown in the illustration above, the four height lower storage units can be incorporated into the layout to aid in the design fully functioning environment.

A key issue in the selection of Lower Storage units is the ability to use the u to both support and level the worksurfaces. Whether the needs of the peop the workspace include paper storage, book and binder storage, comp component and media storage, or storage for personal items, ***Counterp*** has a component to solve the need. Depth options, whether 18" or 22", ca selected according to the depth of the worksurface which it supports.

Lower Storage units are not required to be installed in predetermined locat and, with few exceptions, flexibility in the layout of components is depen more upon the use than other requirements of the furniture. Fronts of storage units are installed flush to the worksurface edges.

INSTALLATION *Lower Storage*





Attaching a Worksurface

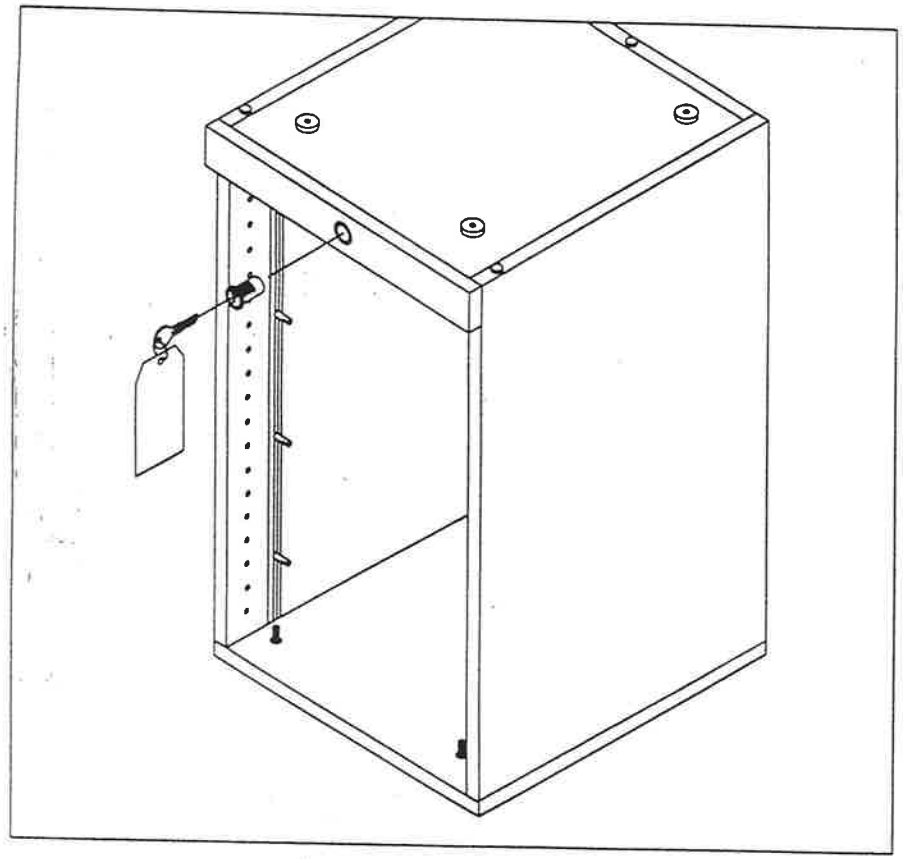
1. Lay worksurface upside down on the floor making certain to protect top surface.
2. Lay storage unit upside down on worksurface in approximate final position.
3. Align face of lock rail of storage unit flush with edge of the worksurface.
4. Attach storage unit to worksurface with (4) #8 x 2" flat head wood screws through the pre-drilled holes.
5. Turn assembled unit upright and level assembly with the glides that are located in the bottom of the storage unit.

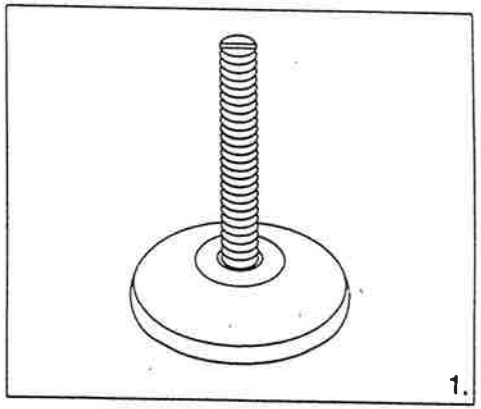
Note that in some instances it may be necessary to attach lower storage units to worksurfaces that are already upright. Storage units can be attached to worksurfaces that are attached to one another with joining plates by carefully raising the surfaces and sliding the pedestal under the worksurfaces. Care must be taken to avoid knocking the spacers from the top of the storage unit.

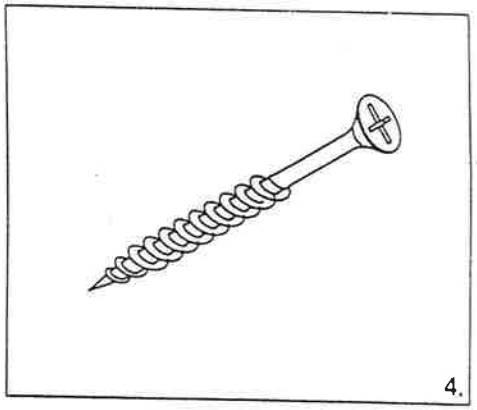
Leveling

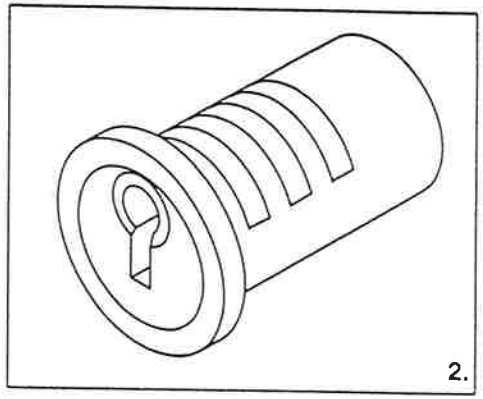
1. Turn all units upright and attach to one another.
2. Level assembly by using adjustable glides located in the bases of storage units and in the bottoms of support legs.

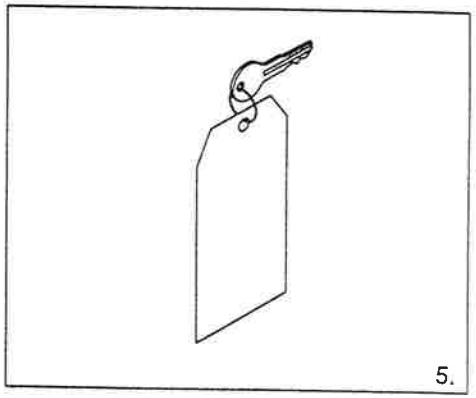
Leveling ***Counterpoint*** furniture assemblies is both easy and very important. Since all components attach to the worksurfaces, it is imperative that assembled units be finished at the same height. When working with large layouts, it will be easiest to locate the highest point of the floor and begin leveling from that point. As the installation of other components proceeds, any discrepancy in the floor levels will be immediately apparent. Adjustments can be made by using a pry bar to raise the corner of a storage unit or support leg in order to relieve pressure and then turning the glides.

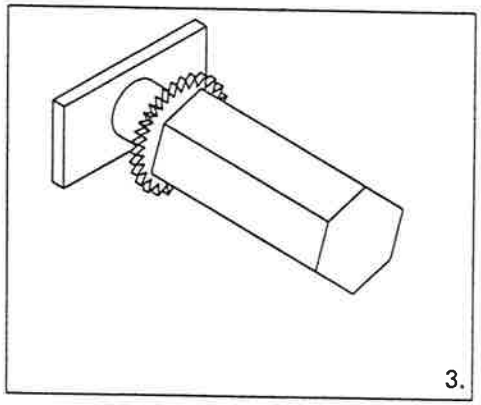


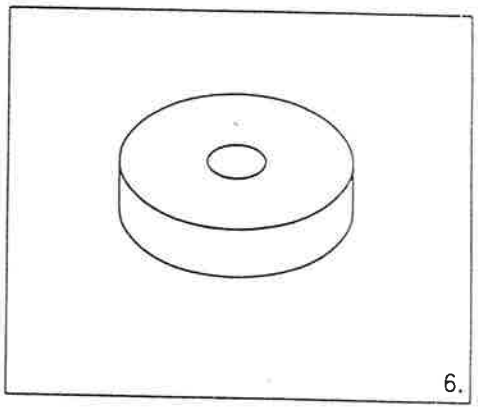












Installing Lock Cylinder

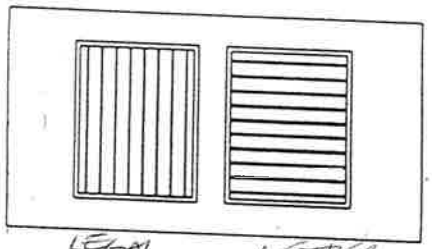
1. Insert lock change tool in lock core.
2. Insert lock core into cylinder and turn firmly in counter clockwise direction until core seats.
3. Remove change tool and insert key.

Installing or changing lock cores is simple and quick. Whether in lateral files or in storage units with doors, lock cores are all compatible with one another so they can be keyed alike or keyed differently. Since all ***Counterpoint*** storage units come with locks as a standard part of each unit, the simplest method to use when installing a large layout with many locks is to first assemble the whole job and then to install the lock cores as a final operation. Removing and changing the lock core is as easy as installing one. Simply insert the lock change tool and firmly rotate the core in a clockwise direction. Remove the core from the cylinder. Remove the change tool from the core and repeat the installation directions above. Adjustments to the drawer locking system may be made by moving the locking pins which engage the drawer stops located on the sides of the drawer boxes. For lock problems call: *1-800-LOCK-BAR.*

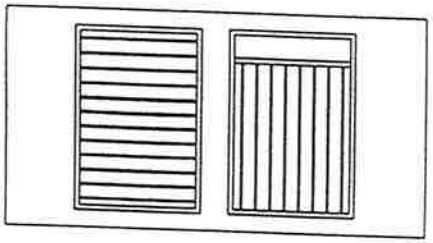
1. Adjustable Glide
2. Lock Core
3. Drawer Locking Pin
4. #8 x 2" Flat Head Wood Screw
5. Lock Change Tool
6. Spacer

SPECIFICATION Lower Storage

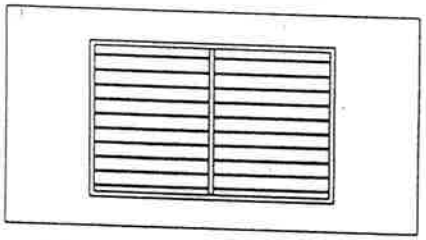
Filing Options



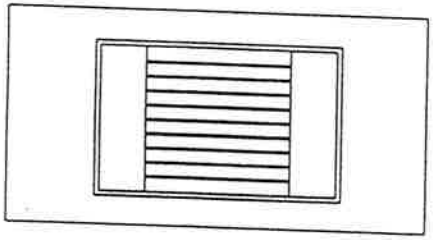
LEGAL LETTER
~~Letter~~ ~~Legal~~
18" Drawer Pedestal



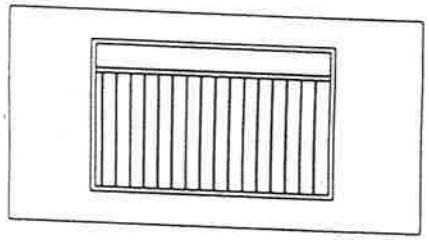
Letter Legal
22" Drawer Pedestal



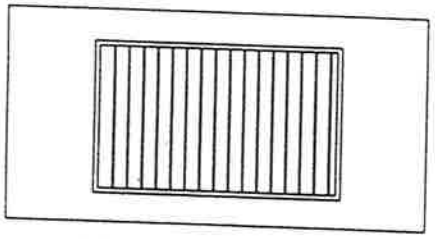
30" File Drawer - Letter



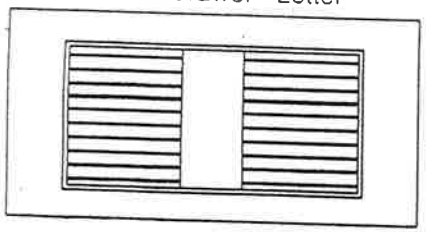
30" File Drawer - Legal



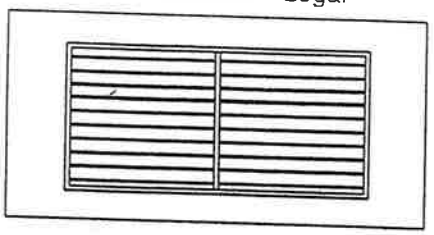
30" File Drawer - Letter



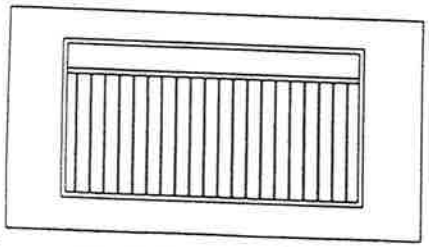
30" File Drawer - Legal



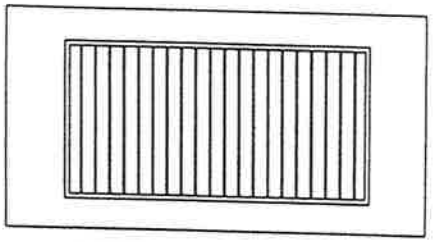
36" File Drawer - Letter



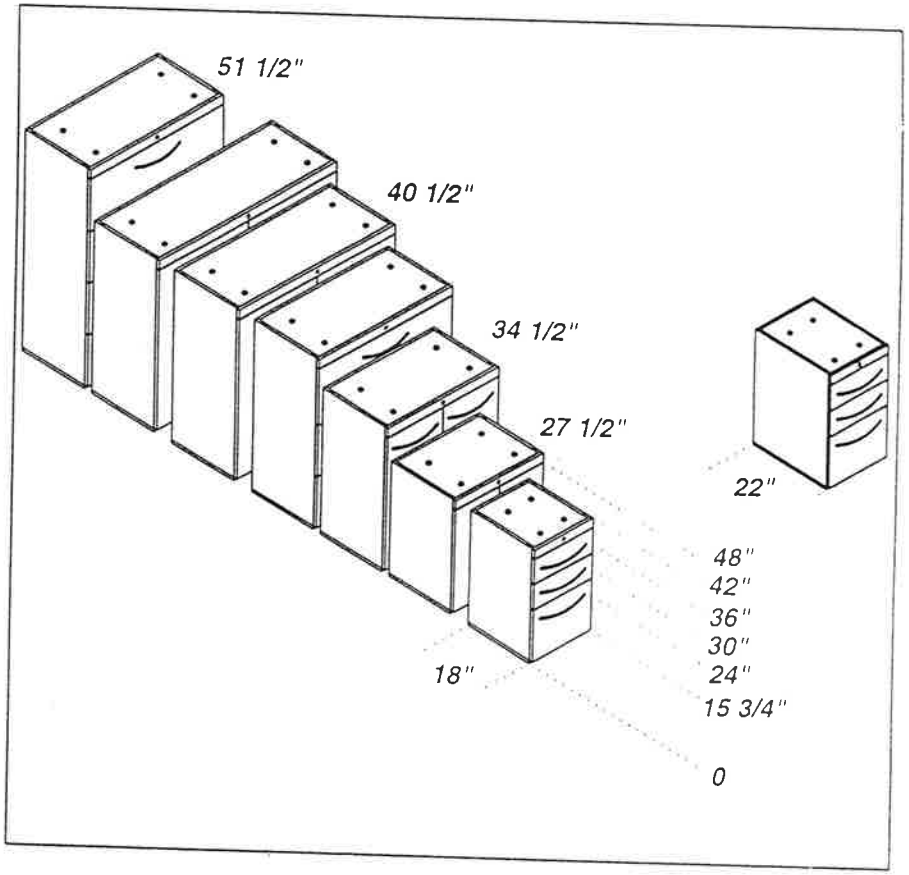
36" File Drawer - Legal

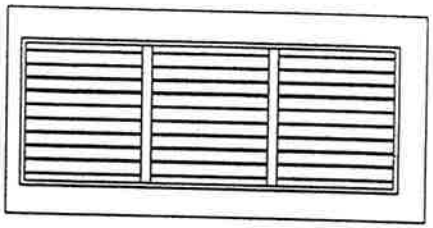


36" File Drawer - Letter

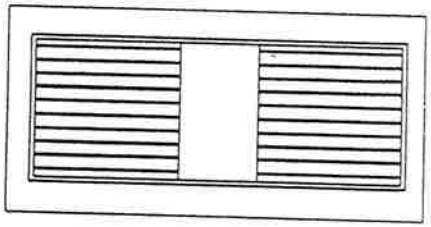


36" File Drawer - Legal

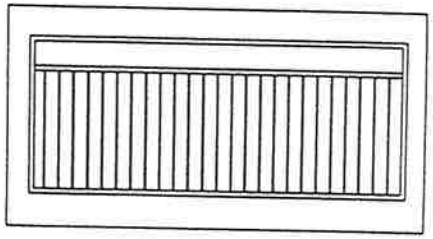




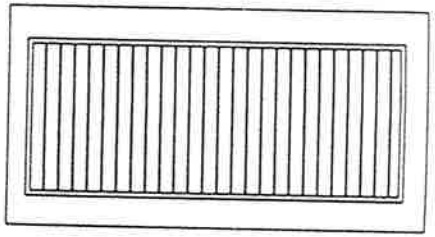
42" File Drawer - Letter



42" File Drawer - Legal

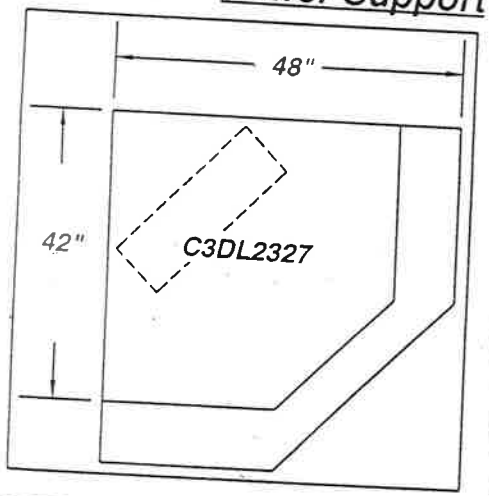


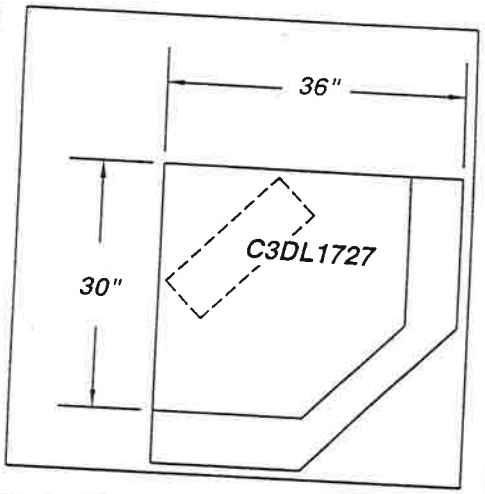
42" File Drawer - Letter

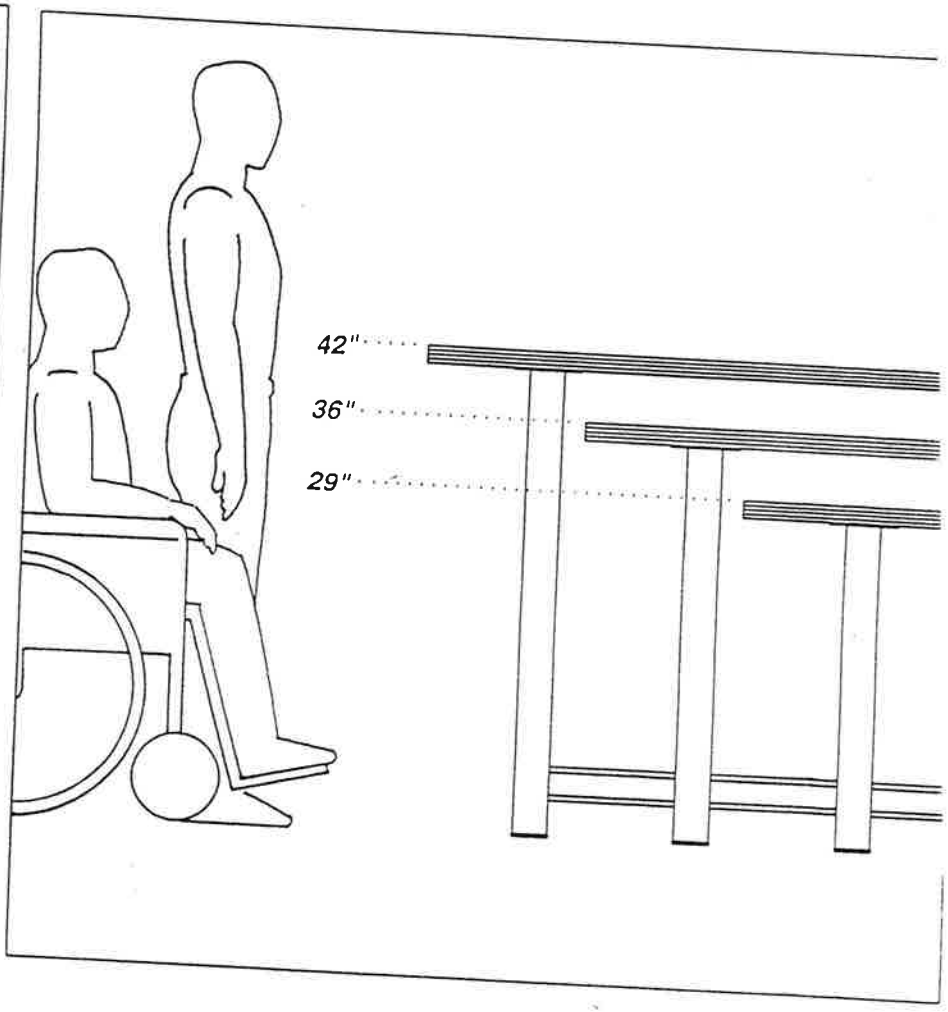


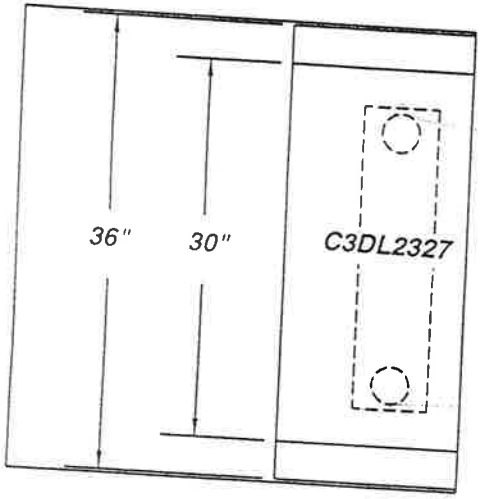
42" File Drawer - Legal

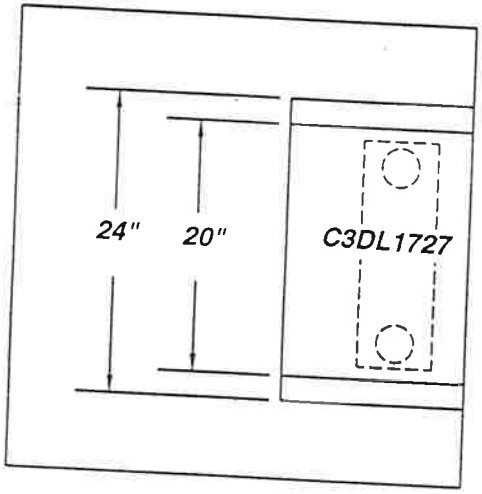
DESIGN Lower Support

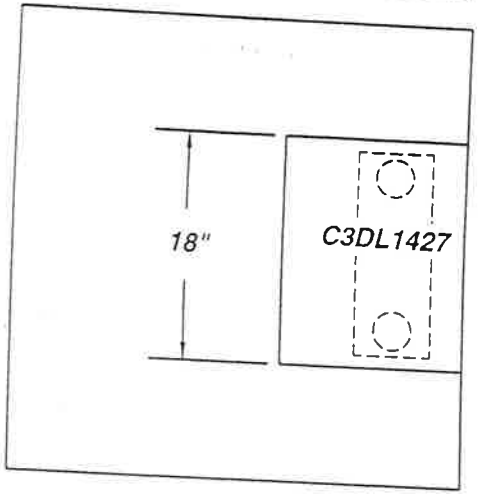












Lower Support Options

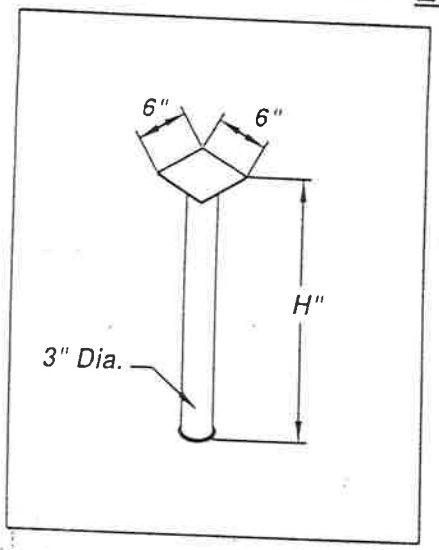
Standard Lower Support options for worksurfaces depend upon the depth of the worksurface. Leg placement for Corner and Rectangular worksurfaces is determined by the most common position of the appropriately sized double leg. Worksurfaces are shipped with the inserts installed in those positions. As illustrated in the drawings above, legs are placed parallel to the user's edge of corner worksurfaces and parallel to the ends of all other surfaces.

Height Options

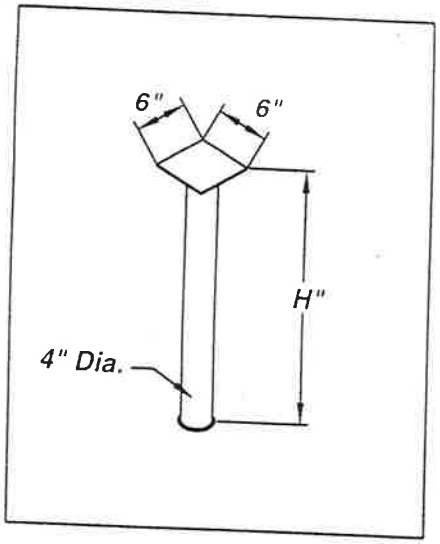
Three heights are available with ***Counterpoint*** Lower Support components. These coincide with the heights available for Lower Storage Units. As in the illustration above, the standard heights are oriented toward the many tasks performed in today's office environment; 29"- Standard worksurface, 36"- Stand up counter height, and 42"- Transaction and teller line worksurface height. Combining storage with economical support legs allows more freedom to be creative with the layout while still providing for maximum flexibility and strength.

In addition to the standard heights shown above, adjustable legs are available whereby one can increase the standard 24 1/2" height by up to 4". These legs are particularly useful when lower than normal worksurface heights are needed such as surfaces which are designated for typewriters or where wheelchairs may require extra clearance.

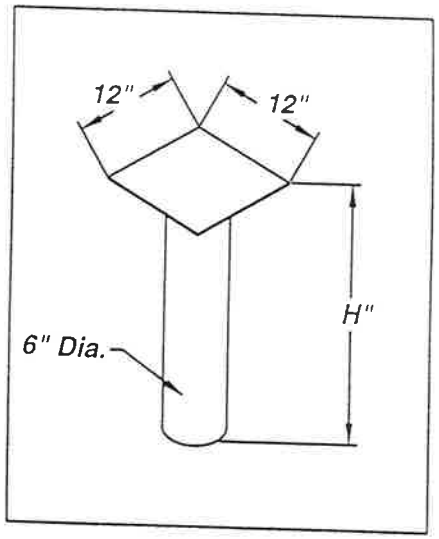
SPECIFICATION *Lower Support*



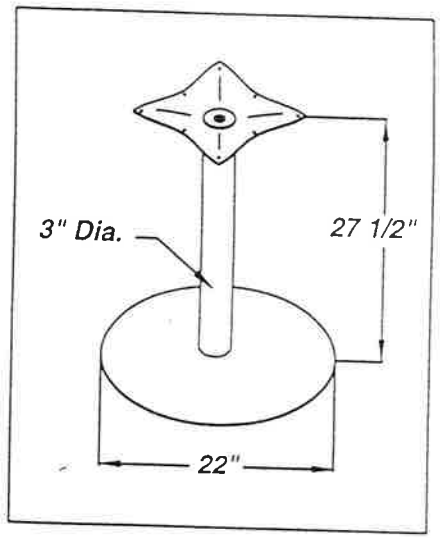
Model #	Ht.
C3SL3D27	27.5
C3SL3D34	34.5
C3SL3D40	40.5



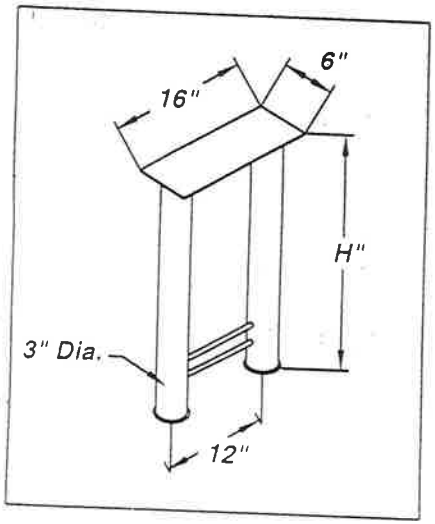
Model #	Ht.
C3SL4D27	27.5
C3SL4D34	34.5
C3SL4D40	40.5



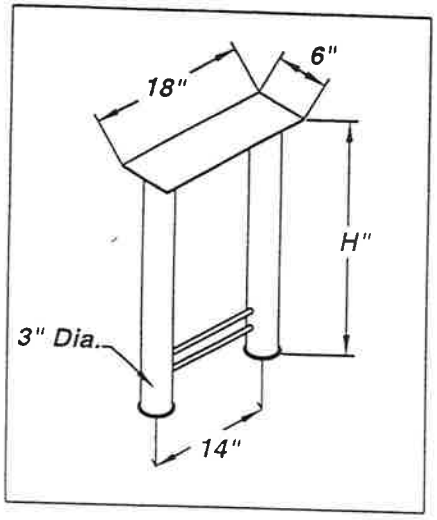
Model #	Ht.
C3SL6D27	27.5
C3SL6D34	34.6
C3SL6D40	40.5



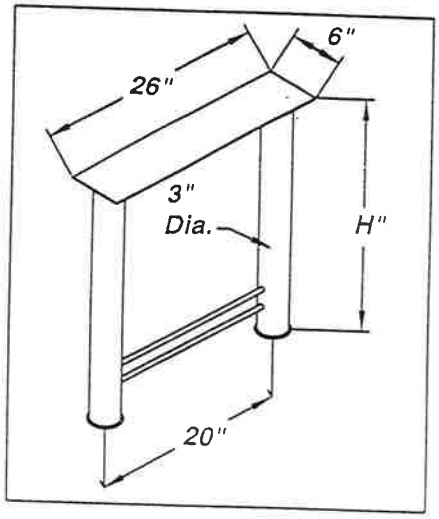
Model #	Ht.
C3TB22	27.5



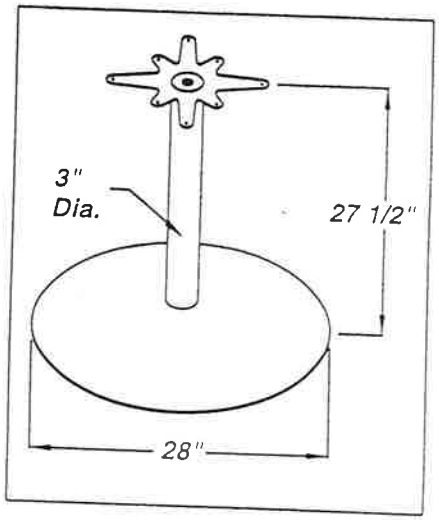
Model #	Ht.
C3DL1427	27.5
C3DL1434	34.5
C3DL1440	40.5



Model #	Ht.
C3DL1727	27.5
C3DL1734	34.5
C3DL1740	40.5



Model #	Ht.
C3DL2327	27.5
C3DL2334	34.5
C3DL2340	40.5



Model #	Ht
C3TB28	27.5

INSTALLATION *Lower Support*

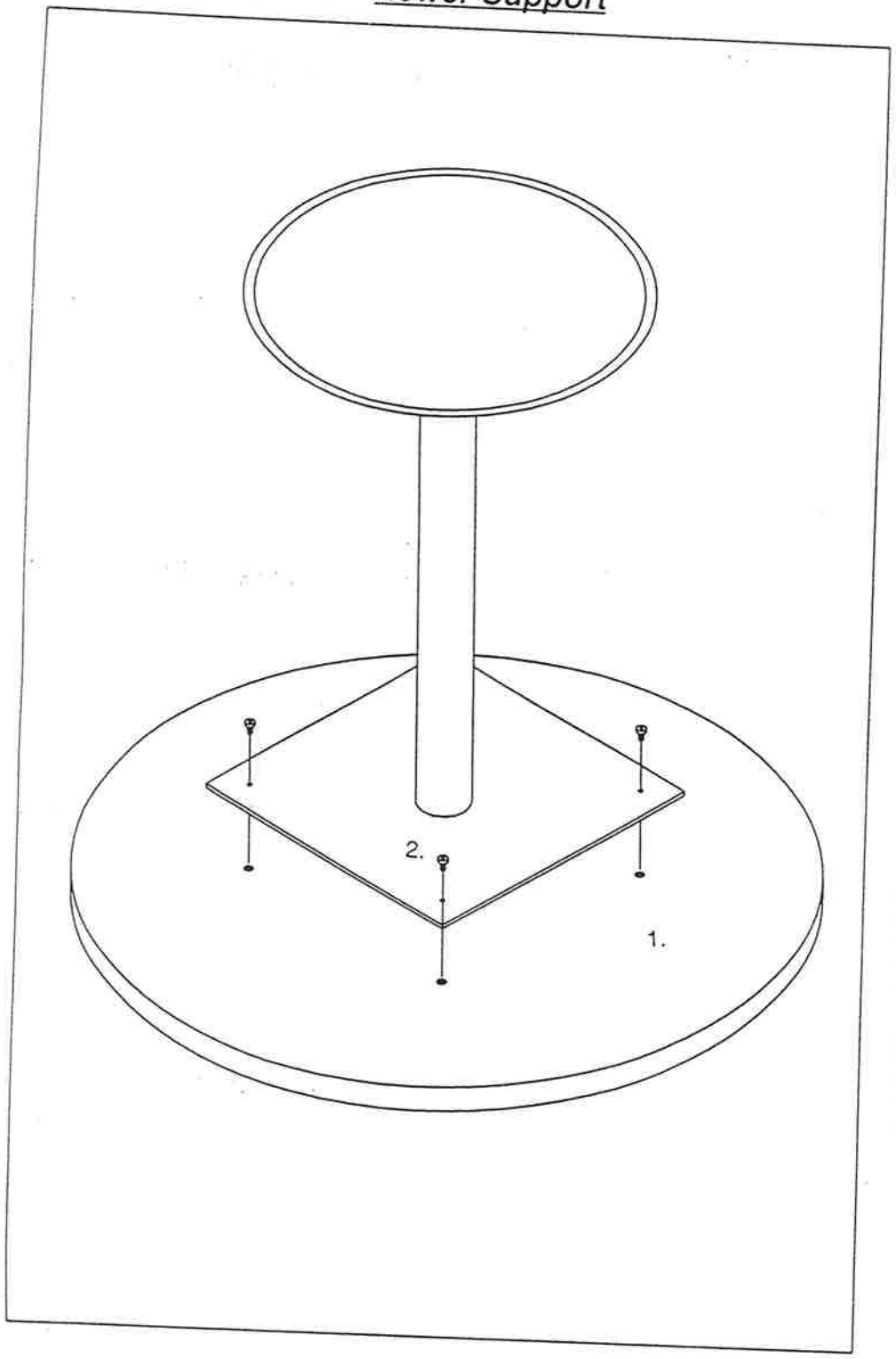
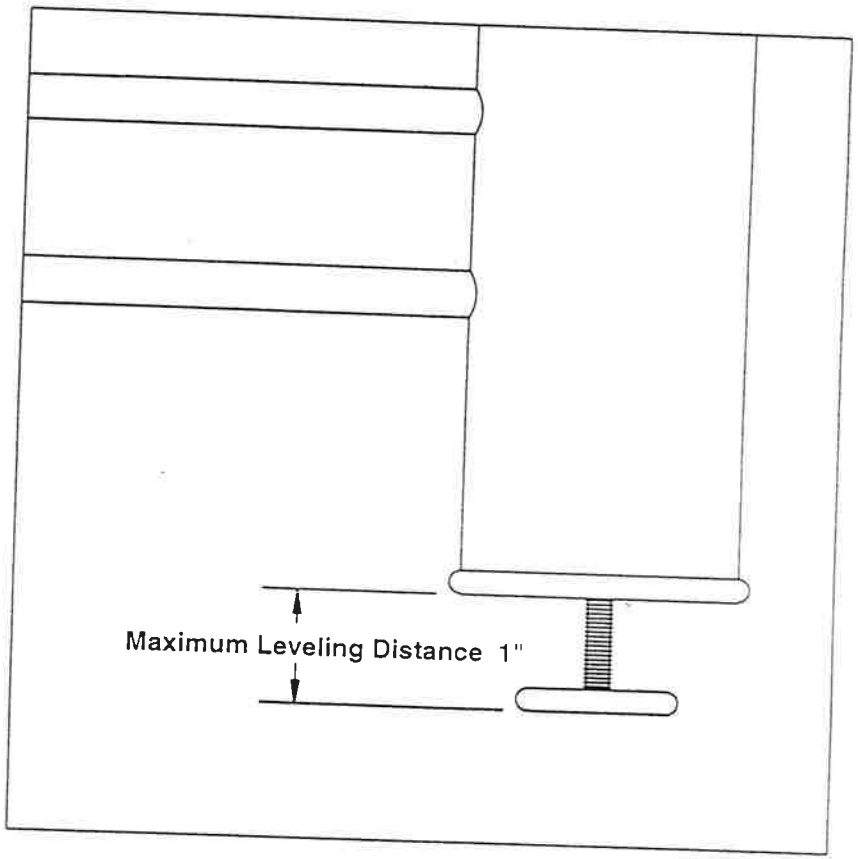


Table Base

1. Lay worksurface upside down on the floor making sure to protect the top surface of the worksurface.
2. Secure top plate to worksurface with (8) #8 x 1 1/4" flat head screws.

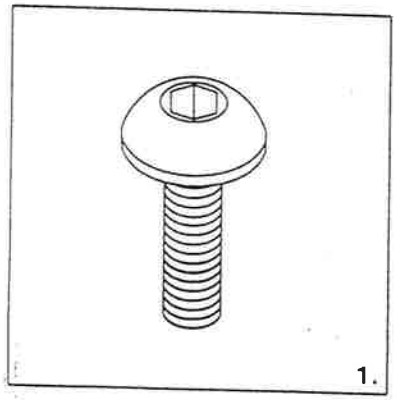


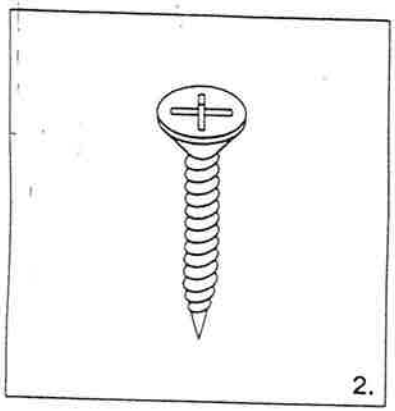
Leveling

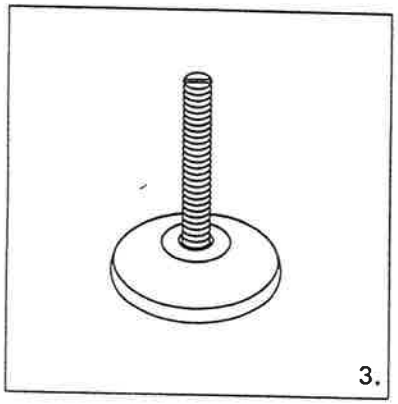
1. Turn worksurfaces upright and join all worksurfaces together.
2. Level worksurfaces using adjustable glides in storage units and on legs.

Lower Support

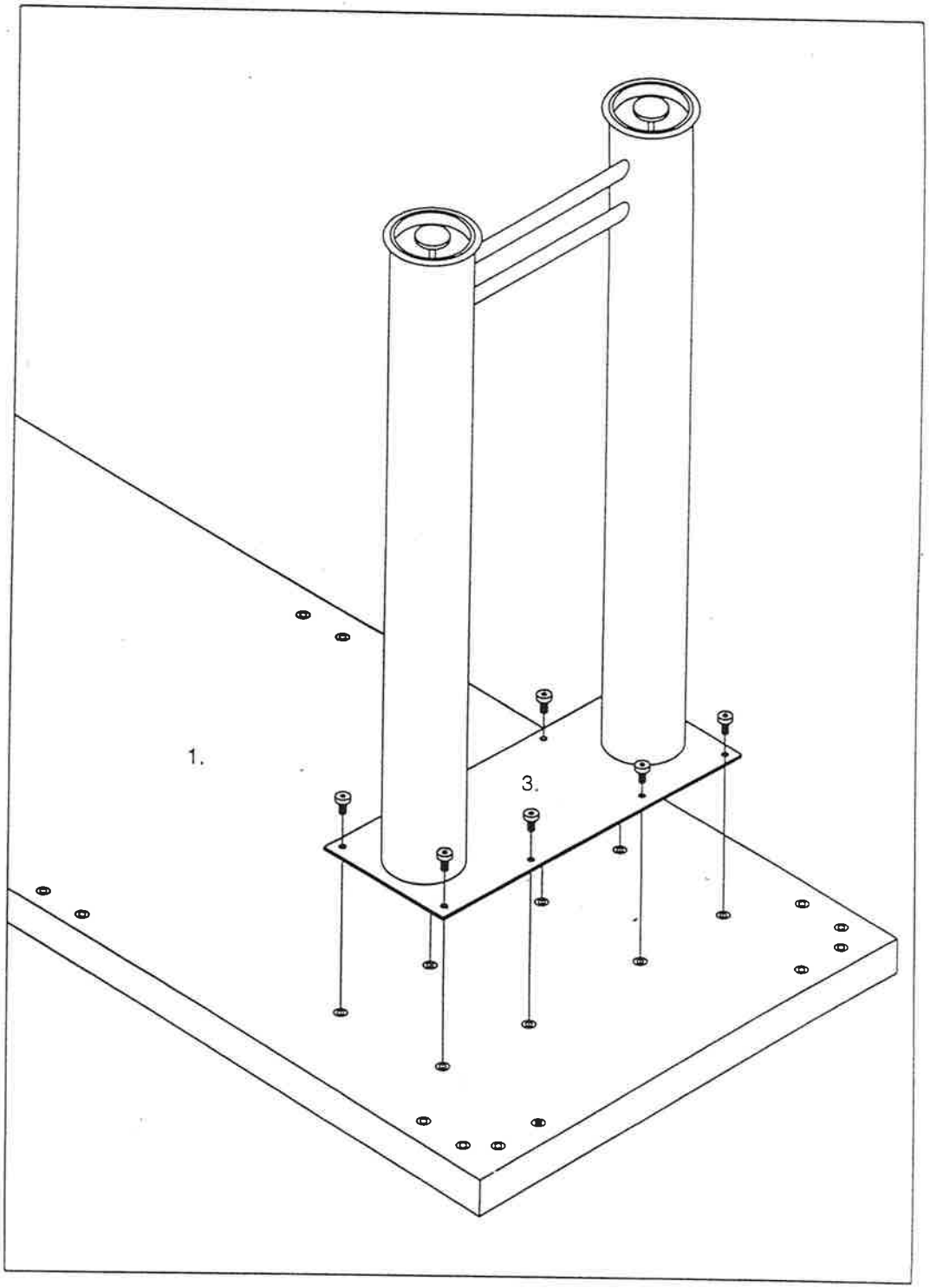
1. Lay worksurface upside down on the floor making sure to protect the top surface of the worksurface.
2.Locate inserts in bottom of worksurface that correspond to the hole pattern in top plate of leg.
3. Attach leg with (8) 1/4-20 x 5/8" socket head screws.



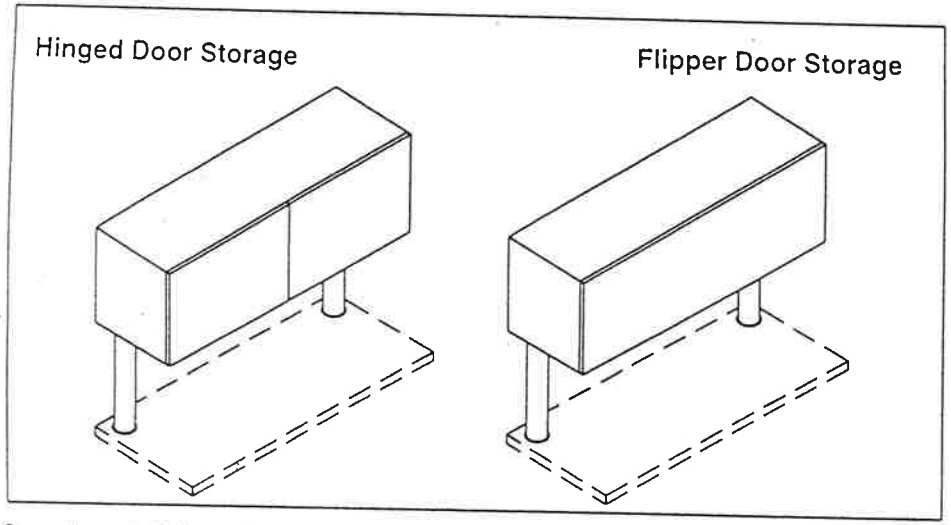




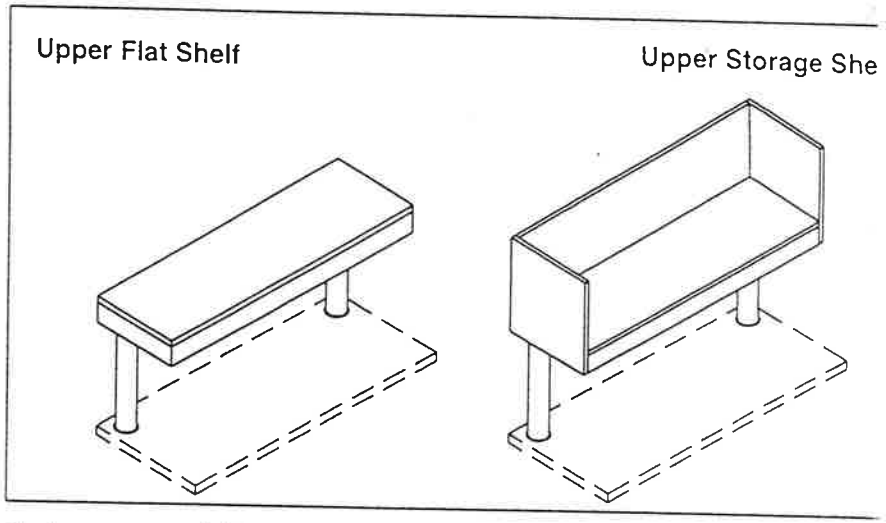
1. 1/4-20 X 5/8" Socket Head Screw
2. #10 X 1 1/4" Flat Head Screw
3. Adjustable Glide



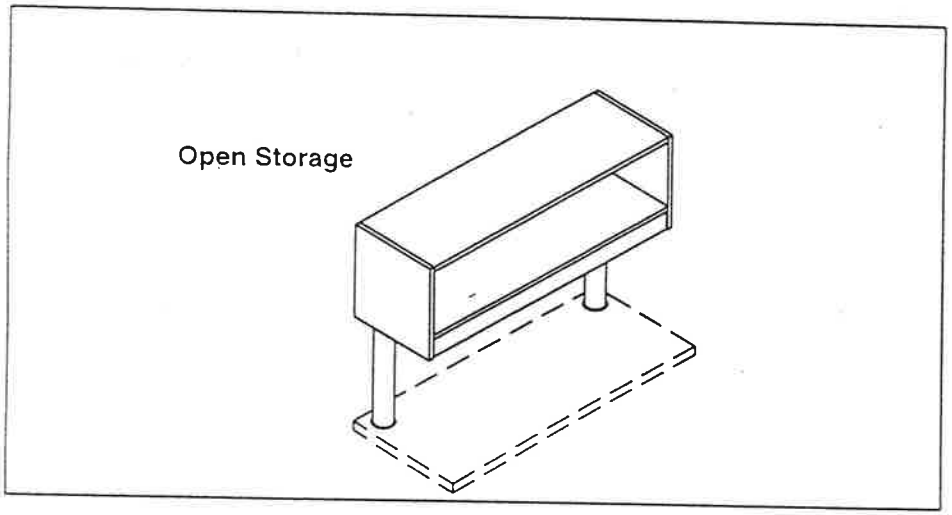
DESIGN Upper Storage



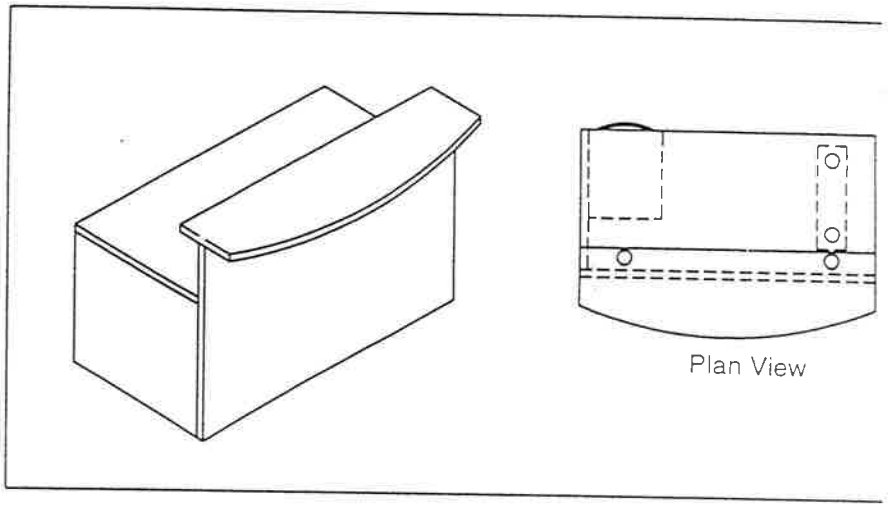
Counterpoint closed storage units are available with either swing doors or with over the top flipper style doors. Design considerations include whether the user needs frequent access to the contents or whether they only need occasional entry. Do they have large items to store or are they using the space for papers and books? Do they want to place items on top of the unit?



Shelves are available either with sides and a back or as an open flat surf Both units come pre-drilled for wire shelf brackets. Shelves are constru like other Upper Storage units with a valance and an area in which to mou task light as well as openings through which to route electrical communication wires.

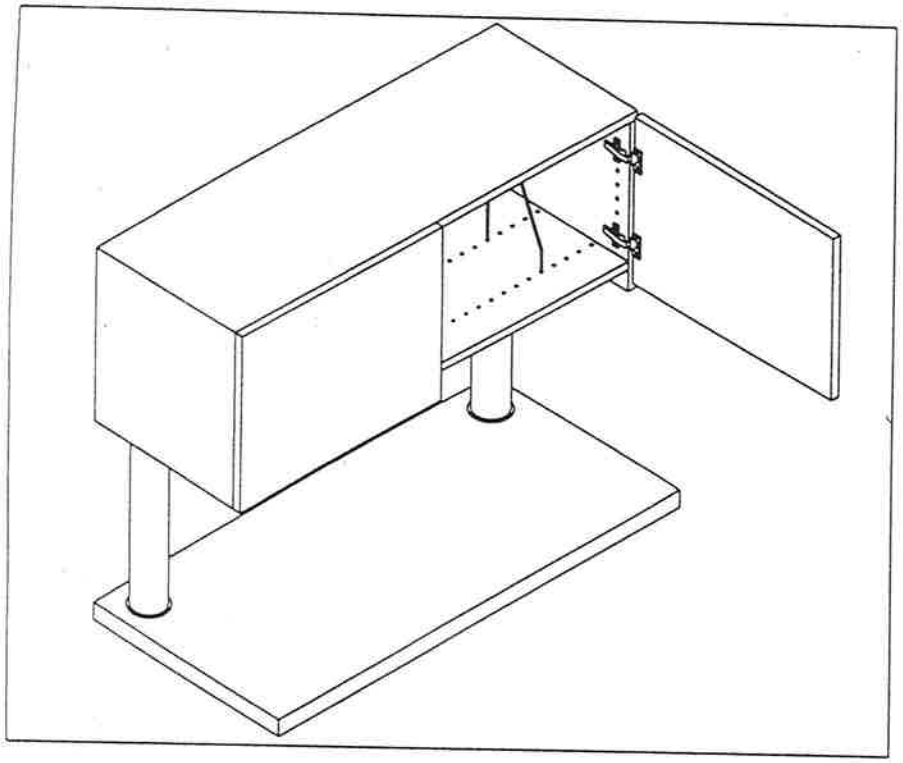


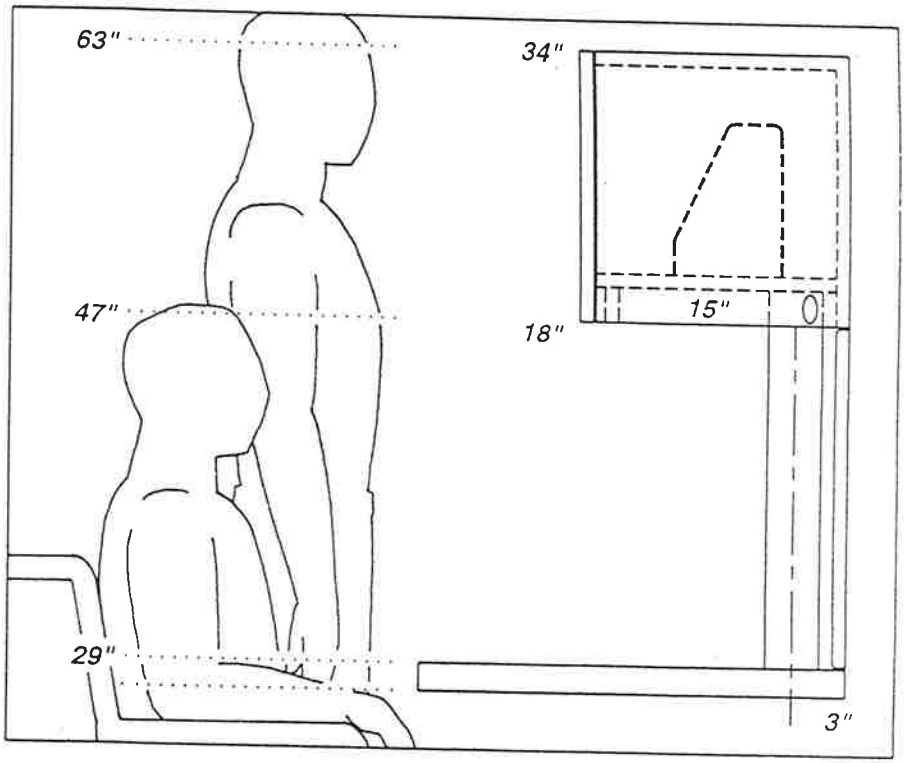
When Upper Storage units are required but the user needs full-time access to the contents, Open units can be specified. All interior dimensions and accessories are identical to Closed unit options. The unit top provides some protection from dust and also provides an additional area that can be used for setting items.



Counterpoint Transaction tops are worksurfaces which mount to spe height posts. Areas with reception desks, nurse's stations and banks especially appropriate spaces where transaction surfaces can facilitate t standing and seated tasks. Transaction surfaces generally overhang surfaces to which they are attached.

SPECIFICATION *Upper Storage*





Counterpoint Upper Storage Units can be installed on a worksurface which coincides to the length of the storage unit or they can be independently wall mounted. Constructed with dowelled and glued joints, Upper Storage Units include all mounting posts, hardware and fasteners with each unit.

Upper Support Posts mount through the standard 2 3/8" diameter grommet holes located at the ends of the worksurfaces to which they are attached. Placement of the unit is restricted by the worksurface that its mounted to and factory pre-drilling of the worksurface is suggested. When the floor plan is submitted to the factory, indications for the placement of Upper Storage Units will notify the plant to pre-drill the worksurface. When wall mounting or custom placement is to be considered, specify it in writing when the order is placed.

Hinged doors open to 108 degrees while flipper style doors retract over the top of the unit. Both styles allow for full use of the interior height of the unit. Sufficient finger space is provided at the bottom of the door to act as a pull.

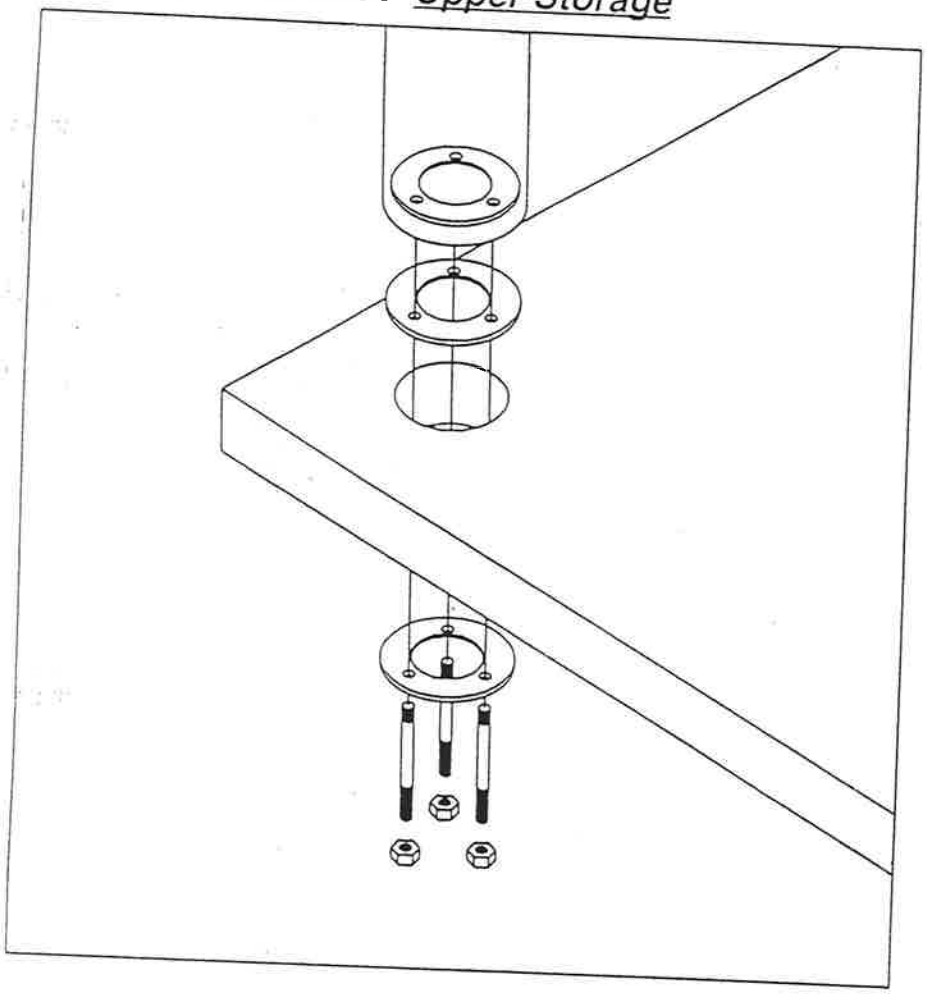
Dimensions for Upper Storage Units are indicated in the above drawing and are ergonomically calculated to allow for the most efficient access and use of the components. Dimensions given are for a standard installation of a Upper Storage Unit mounted on a worksurface installed at a working height of 29" above the floor. When accessories such as lights and tack panels are installed, most working functions are easy to perform.

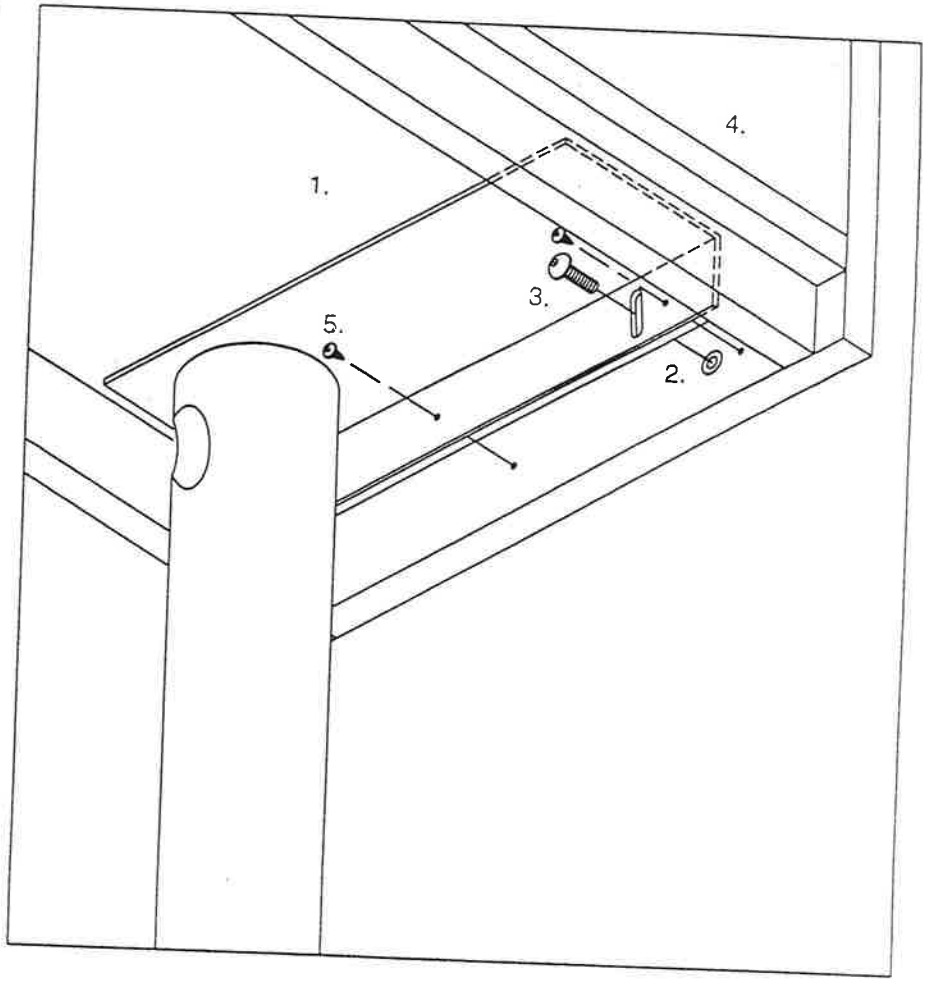
Care should be taken when Upper Storage Units are installed where computer monitors are to be used as the clearance between the worksurface and the bottom of the storage unit is critical. Situations where a distance greater than 18" is needed may be accomodated by wall mounting.

Wire management access is provided through openings at the top and above the worksurface in the support posts. Wires from the task lights will enter through the top hole and exit from the bottom of the support post beneath the worksurface. Wires from desk equipment will enter above the worksurface and exit in the same location as the task light wires. Both left and right handed post have wire management holes.

See the ***Counterpoint Price List*** for additional general specifications.

INSTALLATION Upper Storage





Attaching Upper Support Posts

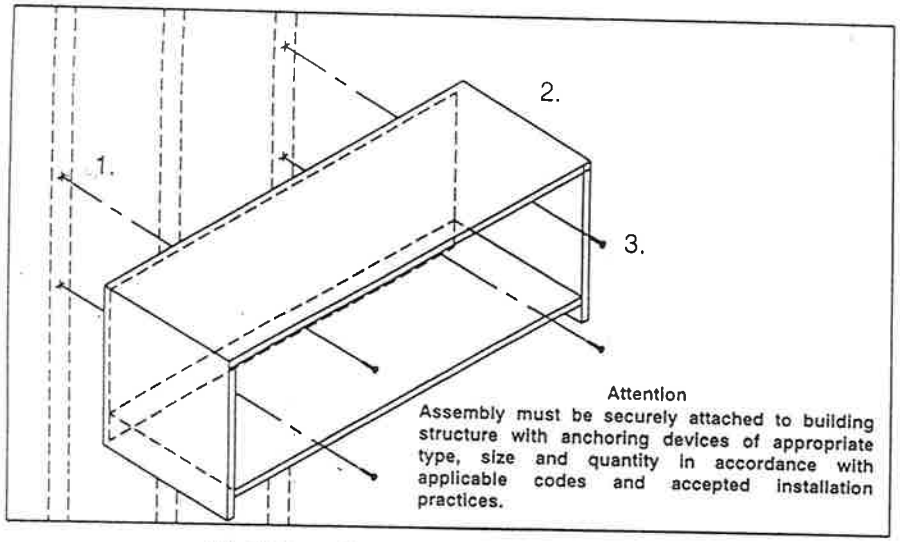
1. Select the Upper Support Posts with the longest side facing the end of the worksurface.
2. Attach the post with (3) 1/4-20 x 3" bolt making certain the side with the flange is parallel to the edge of the worksurface.

Counterpoint Upper Support Posts come in pairs with a right handed post and a left handed post. Two large washers are provided with each post. The unfinished washer goes beneath the worksurface and the powder coated one is "sandwiched" between the end of the post and the top of the worksurface.

Attaching Upper Storage Unit

1. Place the Storage Unit on top of the Support Posts.
2. Align the slots in the side flange of the post with the inserts located in the side panels of the storage unit.
3. Loosely install (4) 1/4-20 x 5/8" socket head screws.
4. Level the unit front to back and tighten the screws.
5. Install (2) #8 x 5/8" waier head set screws.

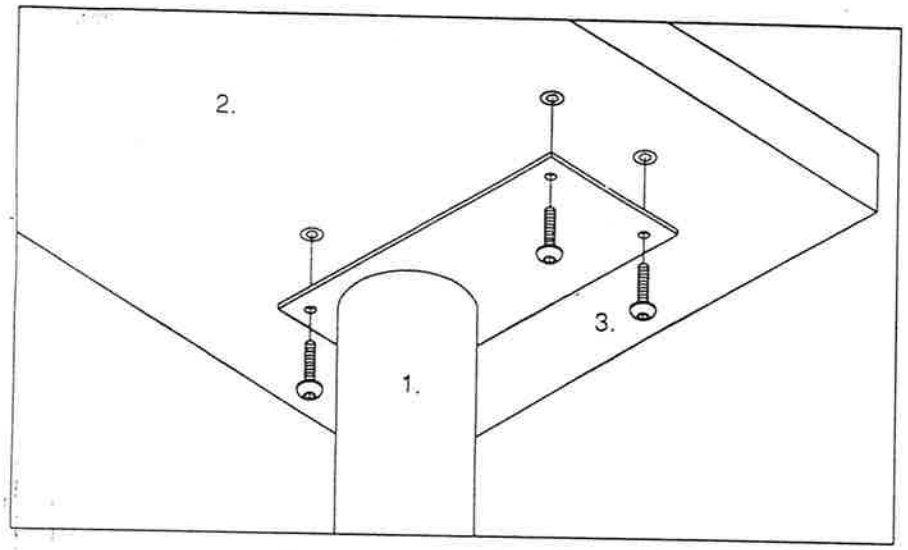
Upper Storage units are fully supported on the Upper Support Posts and do not require any additional support. Leveling from side to side is not necessary since the height is fixed by the worksurfaces. Fine tuning adjustment of the doors can be accomplished by adjusting the hinges. Wire shelf brackets are inserted into the holes provided in the bottom of the shelf.



Attention
Assembly must be securely attached to building structure with anchoring devices of appropriate type, size and quantity in accordance with applicable codes and accepted installation practices.

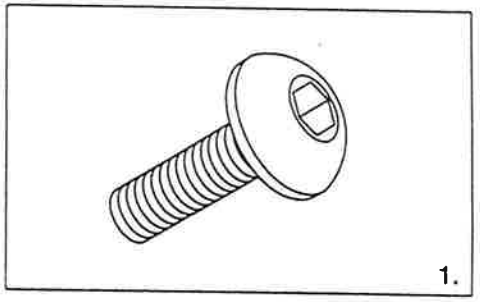
Wall Mounting Upper Storage Units

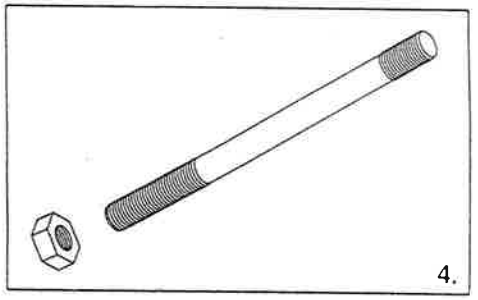
1. Locate the walls studs within the span of the unit.
2. Support the Upper Storage Unit in the proper position.
3. Install a minimum of (4) anchor screws through the back of the unit into the wall studs. (Installer must select and provide the proper anchors for the site conditions.)

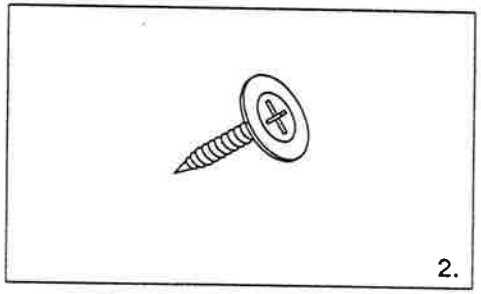


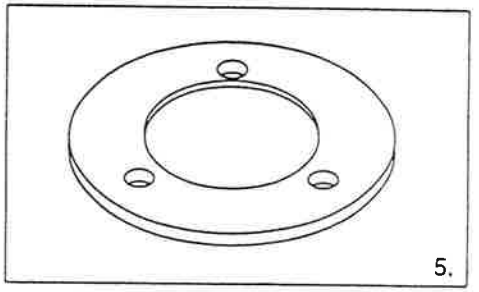
Mounting Transaction Tops

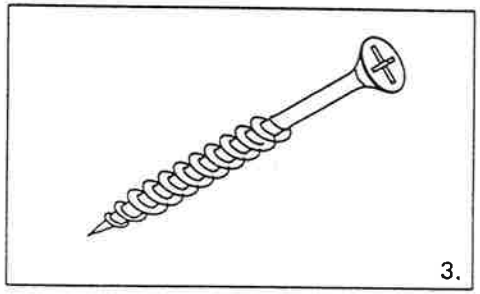
1. Install transaction support posts on worksurface using (3) 1/4-20 x 3" socket head screws.
2. Place transaction worksurface on top of the support posts and set in final position.
3. Fix in place with (4) 1/4-20 x 5/8" socket head screws.

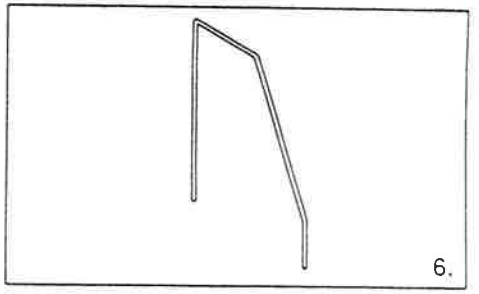






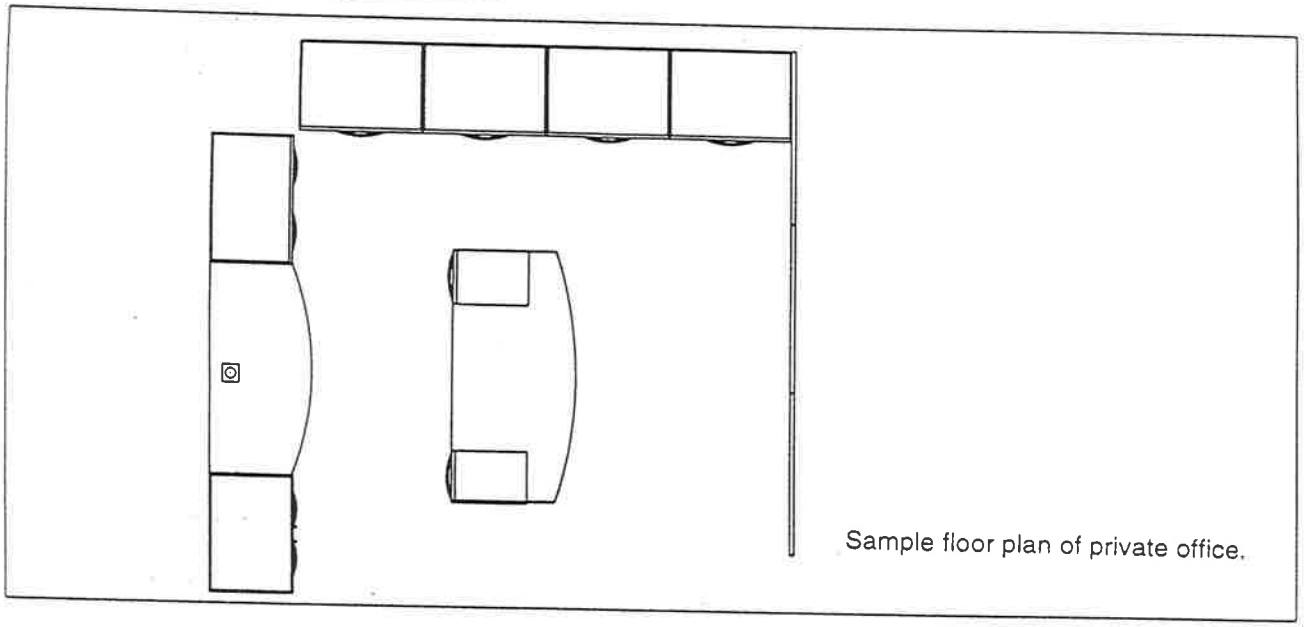




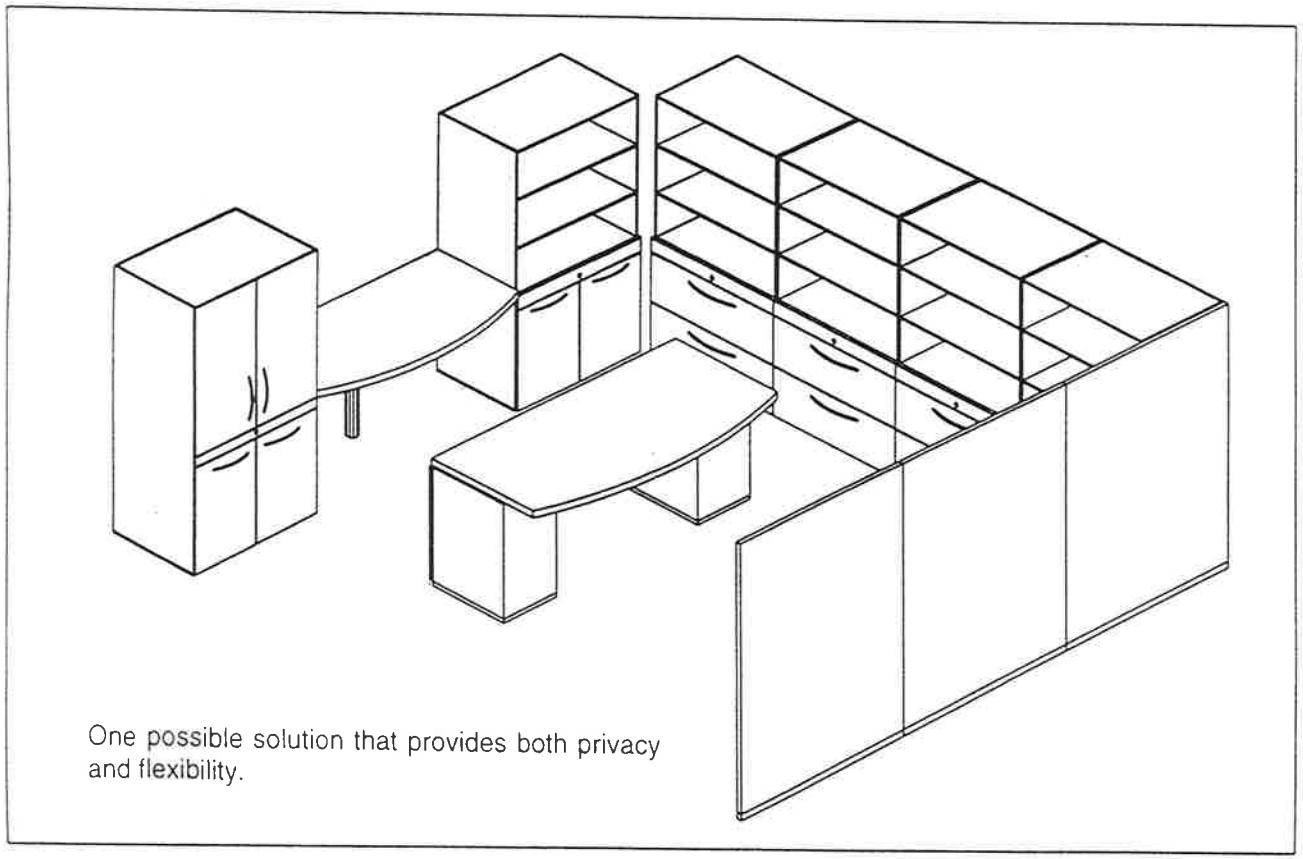


1. 1/4-20 x 5/8" Socket Head Screw
2. #8 x 1" Wafer Head Screw
3. #8 x 1 1/2" Flat Head Wood Screw
4. 1/4-20 x 3" Bolt
5. Support Post Washer
6. Wire Shelf Bracket

DESIGN Building Towers



Sample floor plan of private office.



One possible solution that provides both privacy and flexibility.

Creating privacy and storage with ***Counterpoi*** Building Towers is an easy and effective way make flexible space arrangements. Start examining the tasks to be performed a determine what level of privacy is necessa After selecting the worksurfaces, storage a support components needed, Building towe either bookcases, wardrobe towers, open or closed units can be used to divide one area frc another.

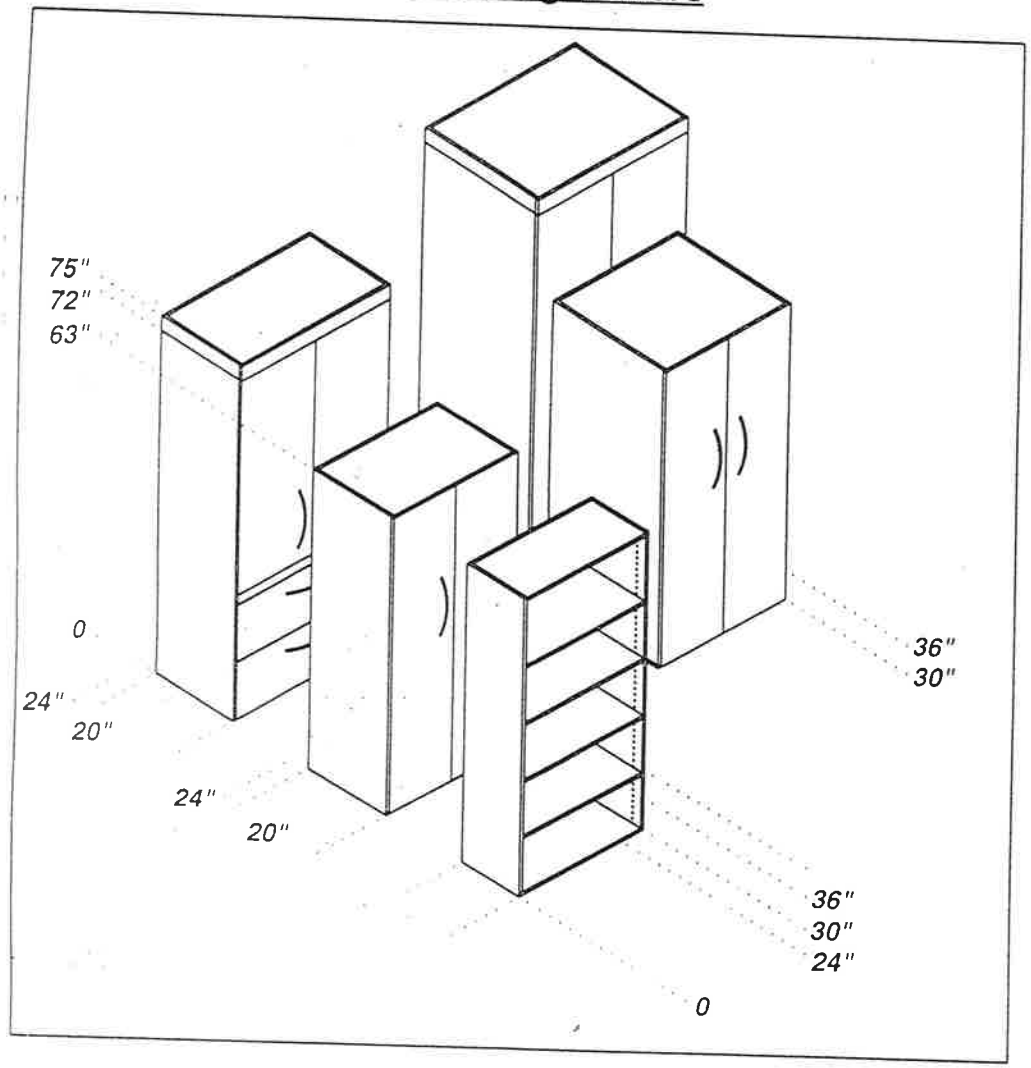
When using Towers along with Privacy Screen the full potential of privacy can be achieve Because of the wide variety of Tower style available, one can incorporate functions such a filing, book storage, open and closed storag along with providing a place for coats ar umbrellas. The privacy screens can be adde onto a group of Towers where the full depth a Tower might interfere with an aisle or do opening.

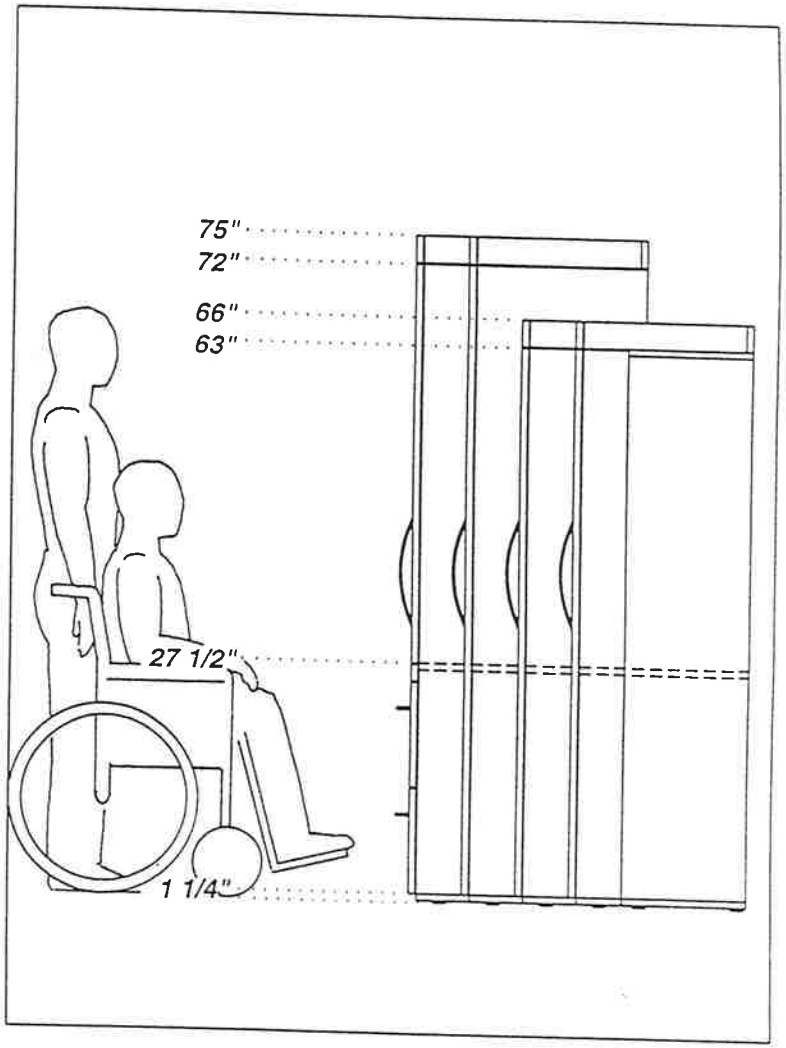
A worksurface suspended between Towers ca provide additional desk or work space in an are where more storage is needed than can b provided by a credenza or lateral file. Th addition of a Tower Bridge gives a place for task light while also supplying some privacy This is also an excellent place for a compute monitor and work area.

Building Tower heights conform to othe ***Counterpoint*** standards for Worksurfaces wit Upper Storage unit tops at 63" above the floo A unit height of 72" will allow Building Towers t be used with free standing panel systems fror other manufacturers. The additional height wi also give another measure of visual and acousti privacy.

The use of Towers is especially effective whe creating executive and conference areas. Th use of ***Counterpoint*** components is a means c planning for future growth since, as furnitur rather than permanent walls, the spaces ca always be reconfigured.

SPECIFICATION *Building Towers*



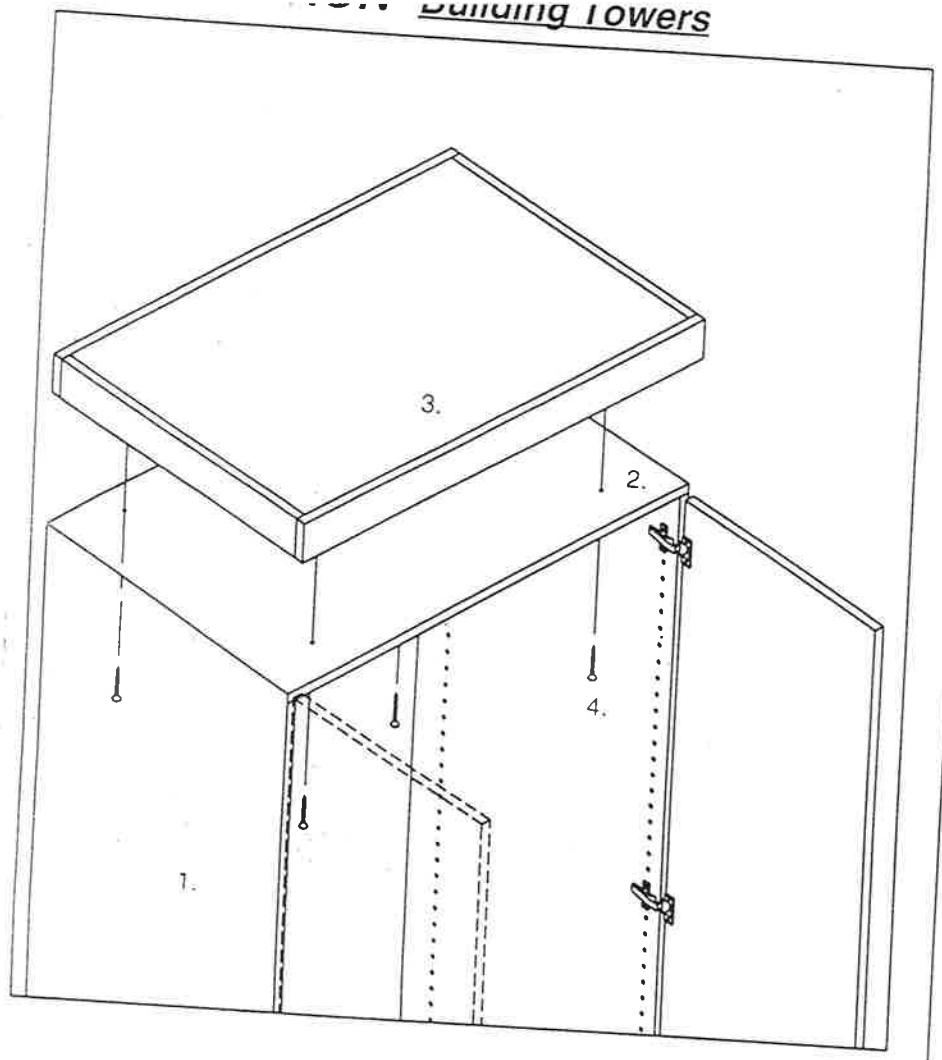


Unlike other storage units, ***Counterpoint*** Building Towers have two standard depths, 20"" and 24". The depth is a full 20" and 24" so that Towers can be used at the end of a side by side arrangement of storage units to close off the wire management space that exists behind Lower Storage units. This also allows for full depth worksurfaces to be used next to or between Tower elements. Bookcase Towers are also available in a standard bookcase depth of 14" for storage of standard binders.

When specifying the Tower Mounted Ambient Luminare, consideration should be given for management of the cord. The standard 72" cord may require an additional extension cord to reach the power supply. It is suggested that the light cord be routed through the interior when the back of the unit is exposed.

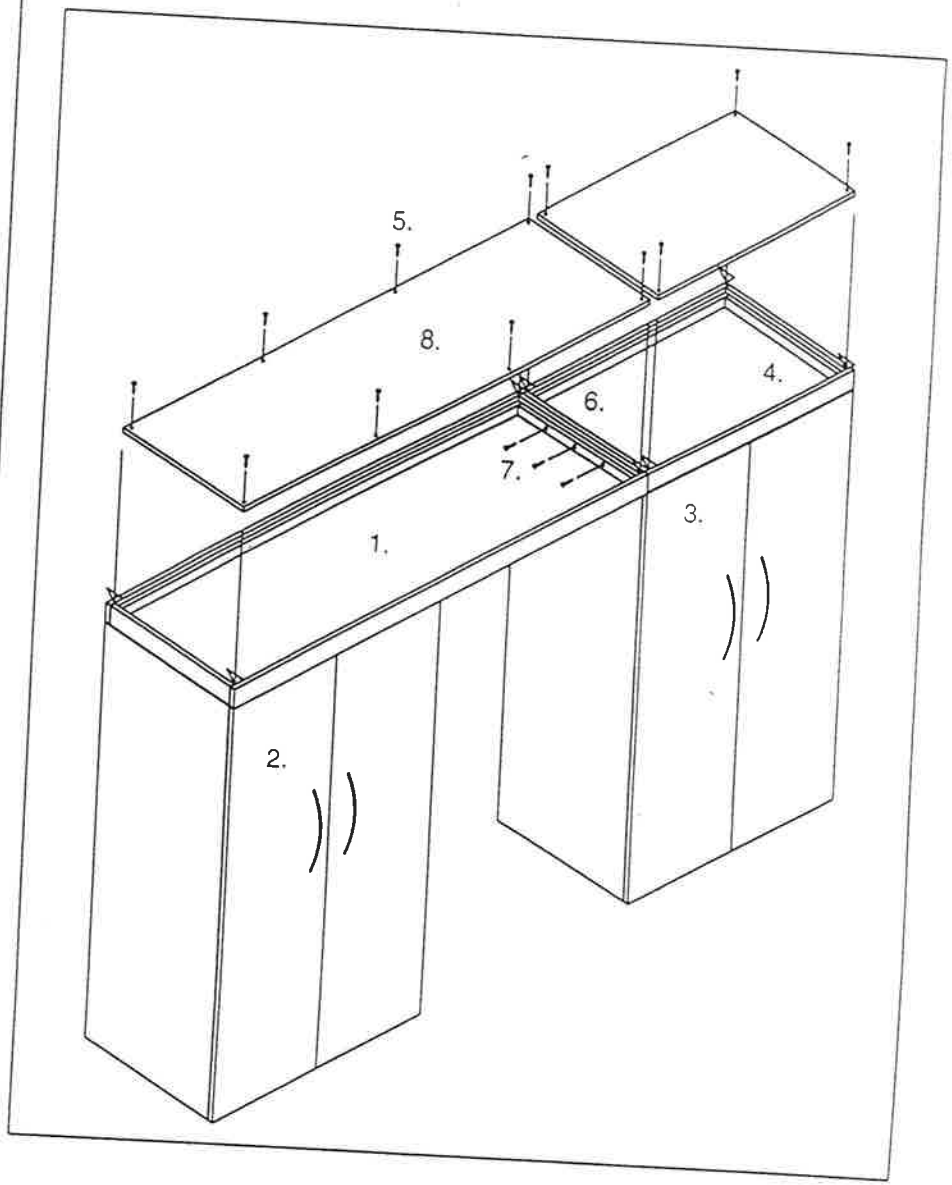
Building Towers are available in two heights, 63" and 72" and with the addition of Tower Bridges or Tower Tops, 66" and 75". With the exception of Wardrobe Towers, all Tower units have a fixed shelf at the same height as the tops of lower storage units, 27 1/2". When used in combination with Worksurfaces and Lower Storage units, Towers will provide a visually integrated group. Tower Tops and Bridges are constructed like Towers with full bottoms and tops. Faces are similar in appearance to door and drawer faces and finishes must be specified when ordering. Wardrobe interiors include a full width hanging rod which must be removed when the optional Wardrobe Accessory is installed.

Building Towers

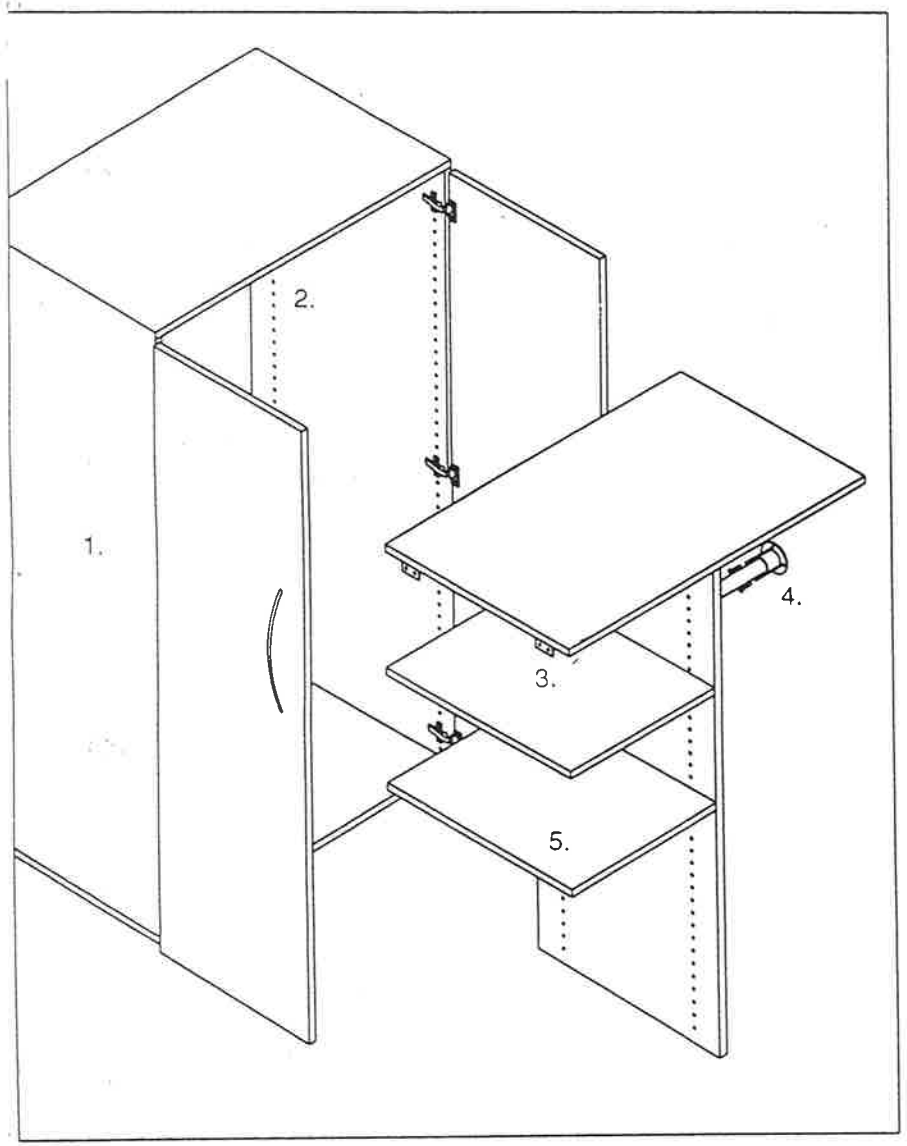


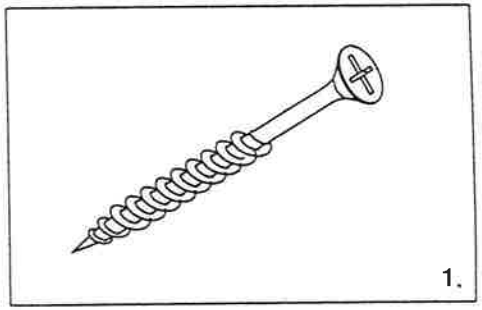
1. Install Tower units and properly level and adjust door faces.
2. Drill and countersink (4) 1/8" diameter holes through top of the Tower from inside of unit. Locate holes approximately 2" from each inside corner.
3. Place Tower Top on top of unit and align so that the face of the Top is flush to the face of the door.
4. Secure Top to Tower using (4) #8 x 1 1/2" flat head wood screws.
5. Remove the tops of the Bridge and Top by removing the screws located along the edges of the top panels.
6. Drill a 3/8" diameter hole through the abutting sides of the Bridge and Top approximately 2" from each end and in the center of the sides.
7. Install 1/4-20 x 1 1/2" sex bolt in each hole.
8. Replace tops.

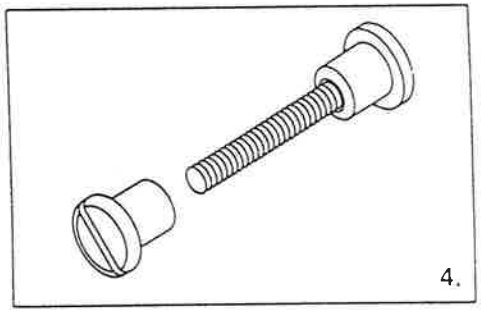
1. Install Tower unit and properly level and adjust door face.
2. Drill and countersink (4) 1/8" diameter holes through top of the Tower from inside of unit. Locate holes approximately 2" from each inside corner.
3. Place Tower Top on top of unit and align so that the face of the Top is flush to the face of the door.
4. Secure Top to Tower using (4) #8 x 1 1/2" flat head wood screws.

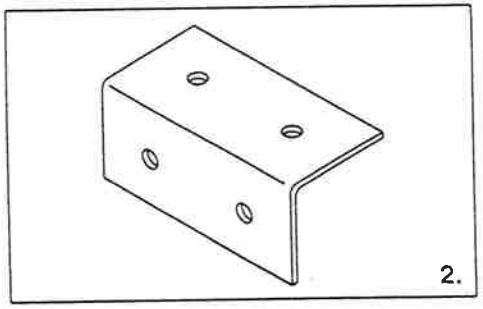


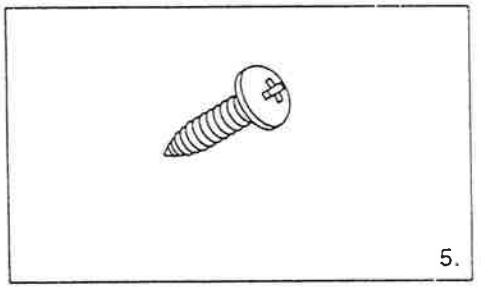
Install Tower unit and properly level and adjust door face.
Remove full width hanging bar.
Slide Wardrobe accessory into Tower and attach (6) 1" x 3" angle brackets using #8 x 5/8" wafer head screws.
Reinstall hanging rod.
Insert adjustable shelves as required.

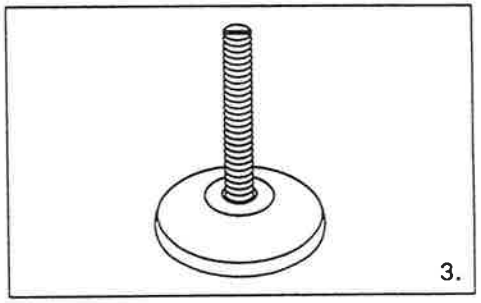


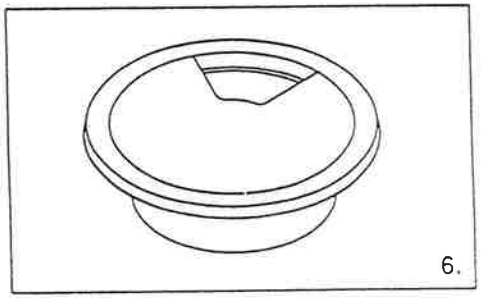






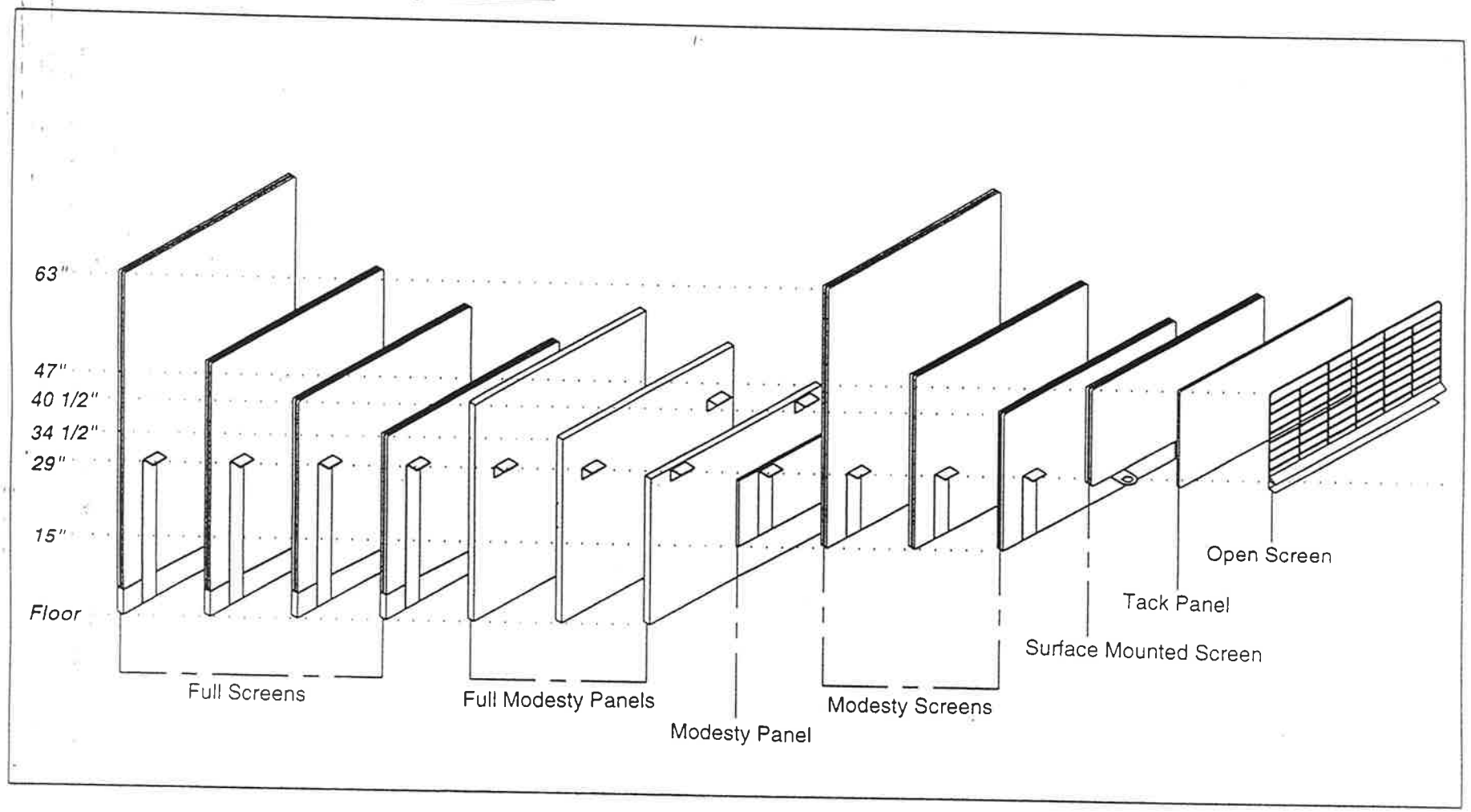






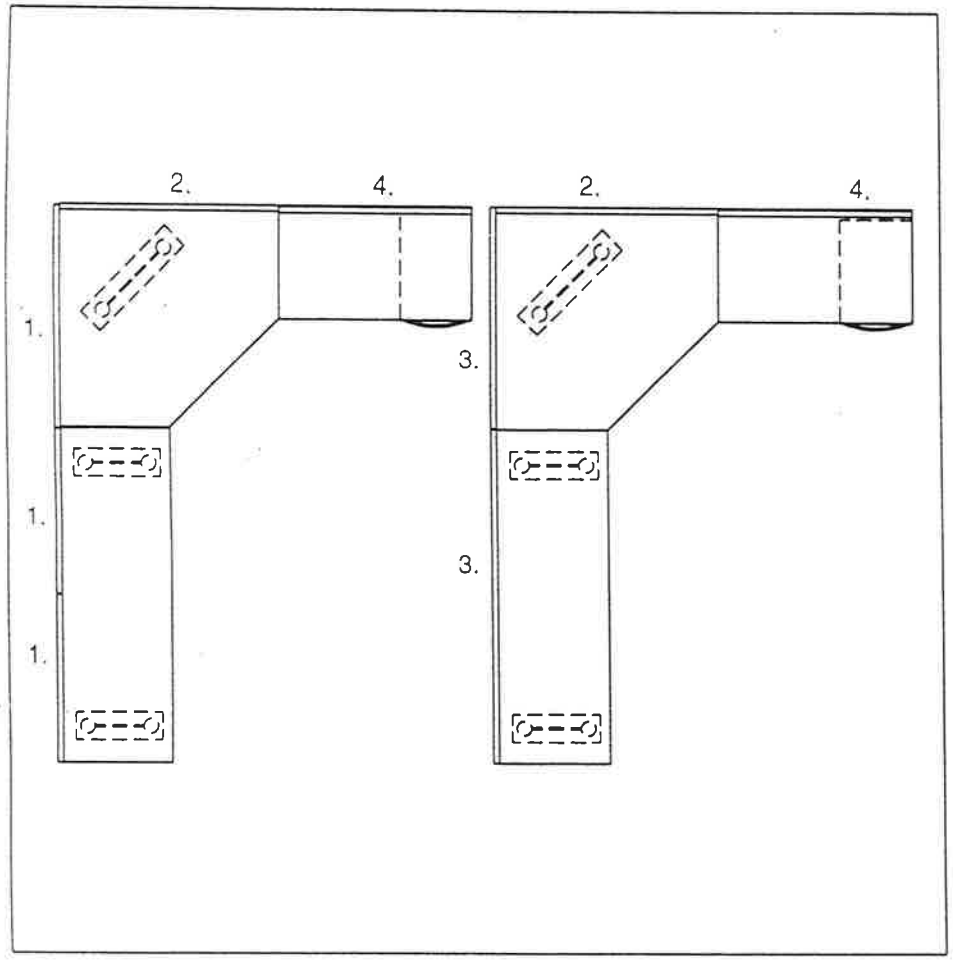
1. #8 x 1 1/2" Flat Head Wood Screw
2. 1" x 3" Angle Bracket
3. Adjustable Glide
4. 1/4-20 x 1 1/2" Sex Bolt
5. #8 x 5/8" Wafer Head Screw
6. Grommet

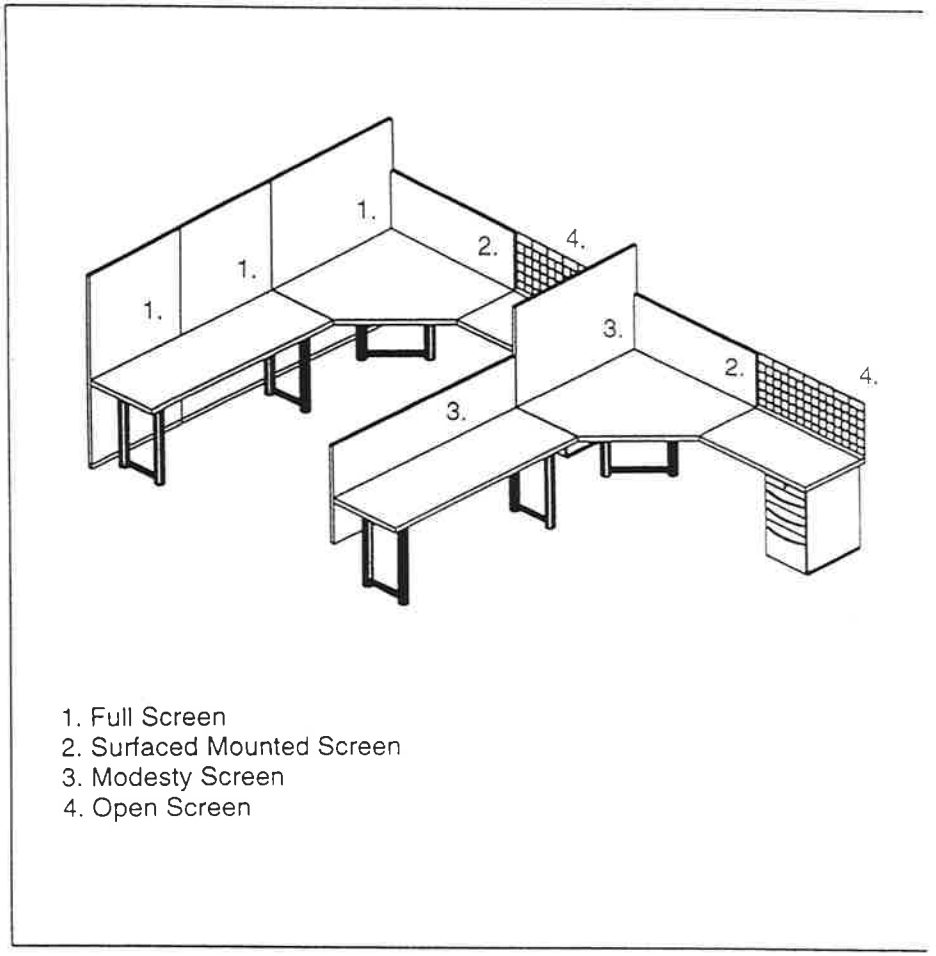
SPECIFICATION *Privacy Screens*



Privacy Screens are key elements when successfully utilizing ***Counterpoint***'s powerful capabilities. Designed to coordinate with the many structural elements, Screens are free from the restrictions of traditional office panels. Screens are not used for supporting worksurfaces so they are free to be used where needed for privacy, both acoustic and visual. As indicated in the illustration above, there are screens to provide almost any level of separation as well as additional functions like tackable surfaces and work area tool management. Most of the screen elements use the worksurface as a baseline height. Screens are designed to give privacy in the right place and in the correct amount, whether above the worksurface or below it.

DESIGN *Privacy Screens*





1. Full Screen
2. Surfaced Mounted Screen
3. Modesty Screen
4. Open Screen

The wide variety of options for producing privacy conditions where they are needed is one of the outstanding features of ***Counterpoint***. With seven different screen types the design possibilities seem almost endless.

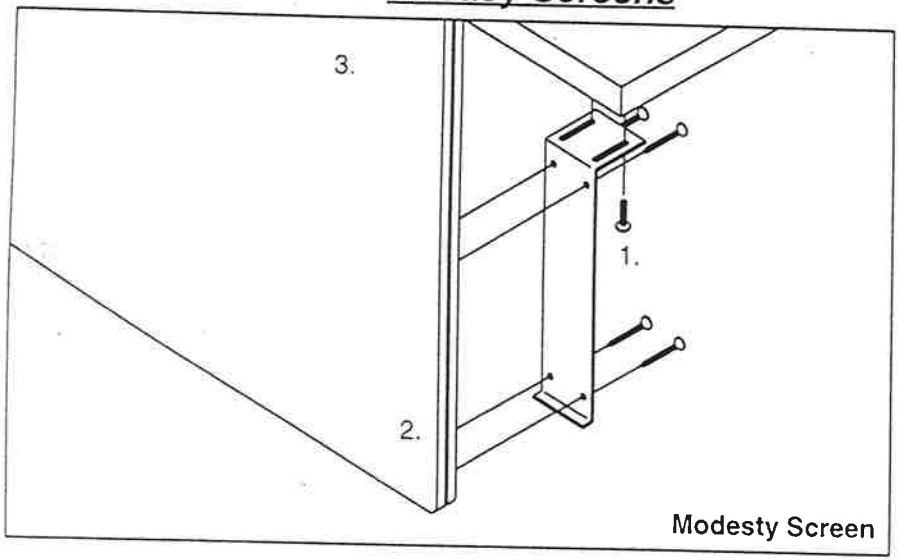
As the layout for the work area develops, a major consideration is the creation of privacy and security to meet the requirements of the situation. Depending upon the site conditions, privacy can range from a simple Modesty Panel for a desk to a fully functioning conference area which might be used by many people. The simplest way to begin is to look at the individual workstation and determine how much interaction between people is necessary and how best to provide for quiet areas. In many cases the addition of a tack panel beneath an Upper Storage unit is all that is necessary. In other circumstances, it may be more cost effective to provide full screens between stations.

A very cost effective option for separating work areas is the use of Modesty Screens. This style of screen allows for full access to electrical outlets if used against a wall and when used in open areas, provides for better HVAC movement since it eliminates panels that keep air from circulating at the floor level.

The variety of finished heights is another bonus. Because privacy needs may vary within a workstation, screens can stop at levels that aid the work processes.

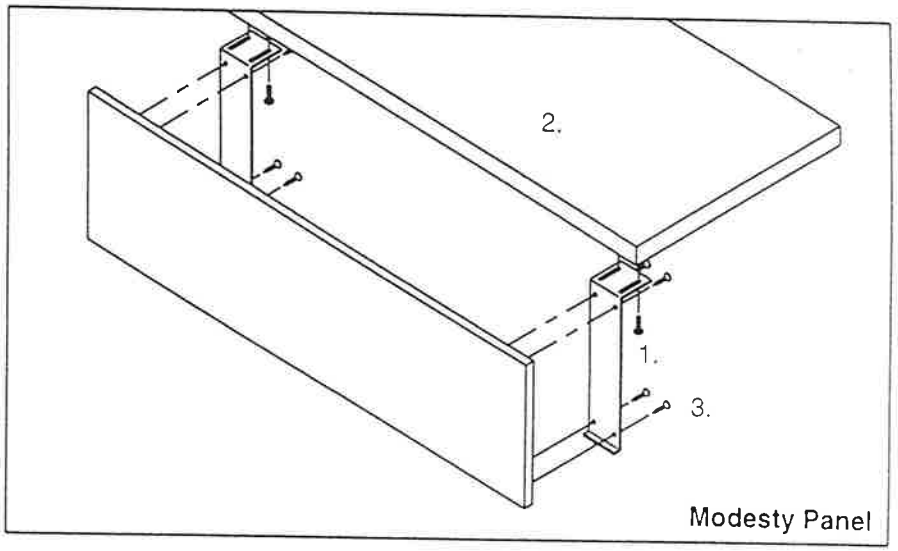
One key to successfully designing with the ***Counterpoint*** system is to make use of the privacy screens just where privacy is needed and not to include panels simply because they're needed to hold up a worksurface as is the case with traditional panel systems.

INSTALLATION Privacy Screens



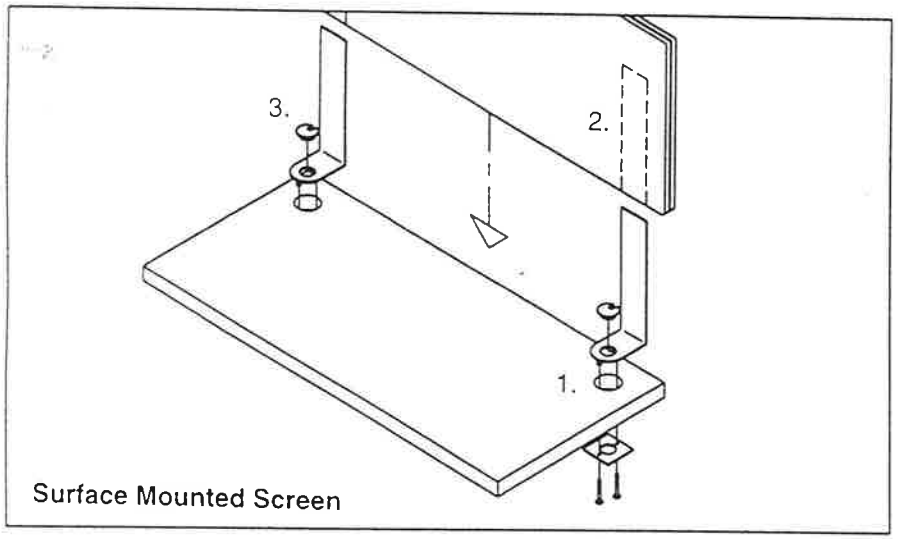
Modesty Screen

1. Attach modesty screen brackets to the worksurface with (2) 1/4-20 x 5/8" socket head screws.
2. Place the screen in its proper location and attach it to the brackets using (4) #8 x 1 1/4" wafer head screws.
3. Install alignment and corner brackets if required.



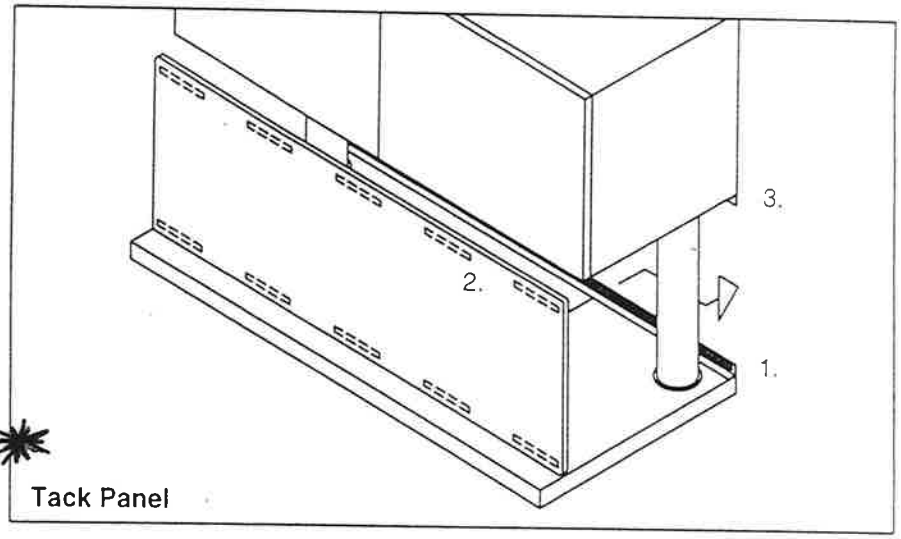
Modesty Panel

1. Attach modesty panel brackets to the worksurface with (2) 1/4-20 x 5/8" socket head screws.
2. Adjust bracket so panel face will mount flush with edge of worksurface.
3. Place the panel in its proper location and attach it to the brackets using (4) #8 x 5/8" wafer head screws.



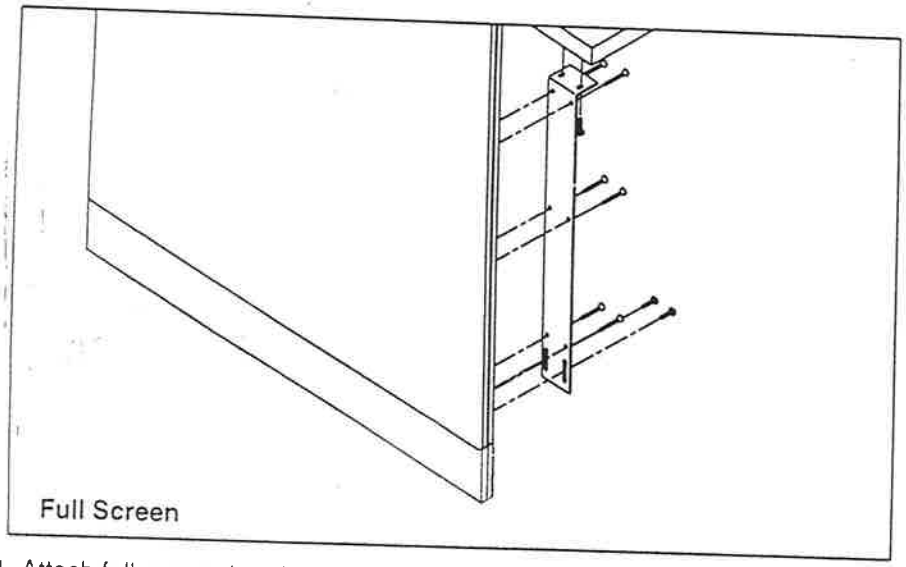
Surface Mounted Screen

1. Attach screen brackets through 2 3/8" diameter grommet holes with (2) 1/4-20 x 1 1/2" socket head screws. Do not over tighten.
2. Slide screen over brackets until it rests on worksurface.
3. Install wire management grommet caps.

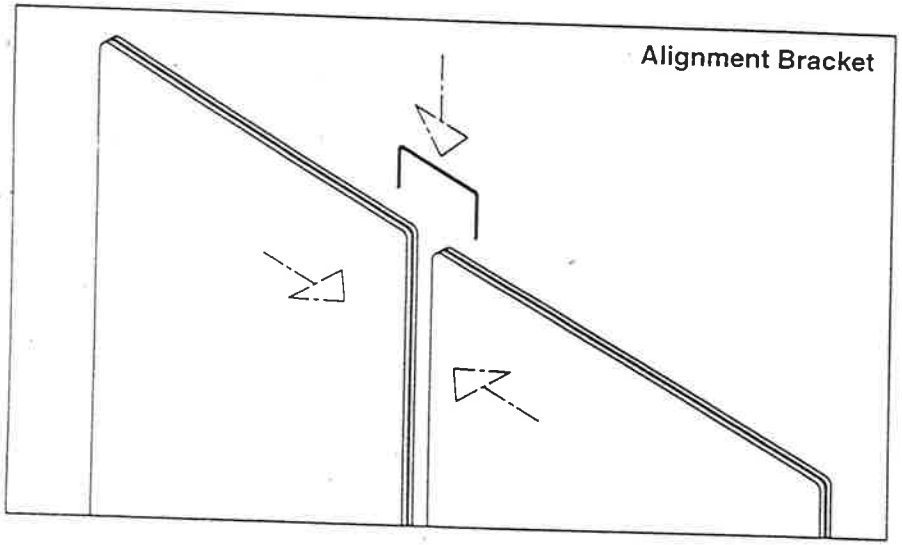


Tack Panel

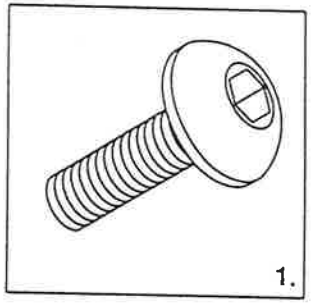
1. Attach 1 1/2" x 3/4" plastic mounting angles to back edge of worksurface and edge of storage unit using self adhesive tape.
2. Remove protective strip from Velcro fasteners on back of panel.
3. Push panel firmly against mounting track.

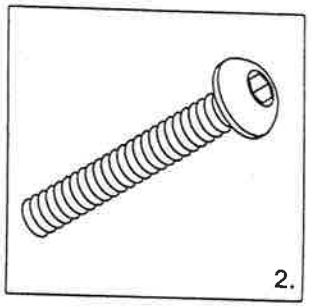


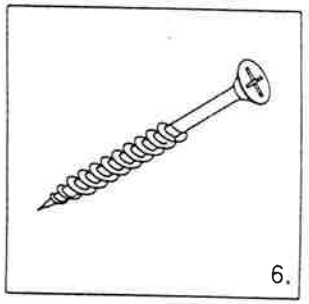
1. Attach full screen brackets to worksurface using (2) 1/4-20 x 5/8" socket head screws.
2. Loosely attach screen with (2) #8 x 1 1/4" wafer head screws.
3. Attach screen to bracket with (6) #8 x 1 1/4" wafer head screws.

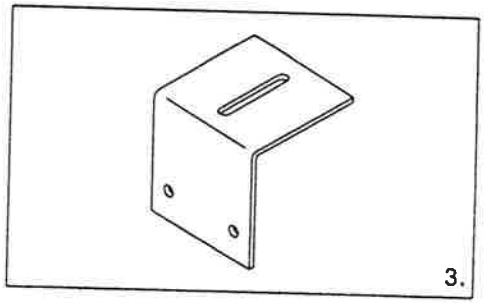


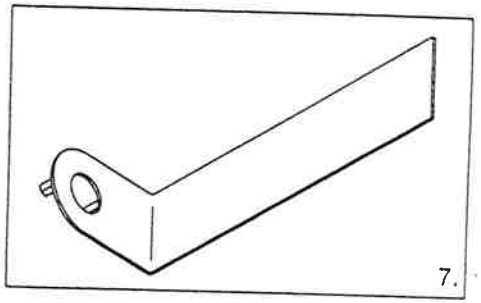
1. Align and level Screens.
2. Remove 3" section of rubber cord from top corner of panel.
3. Insert alignment bracket into holes in center of screen and drive into groove until bracket is below top of panel.

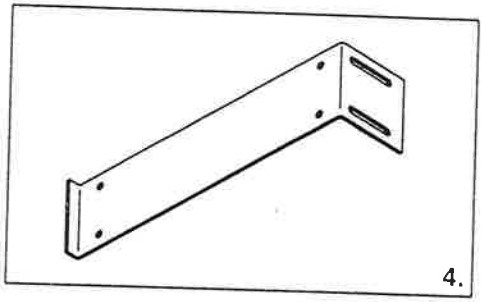


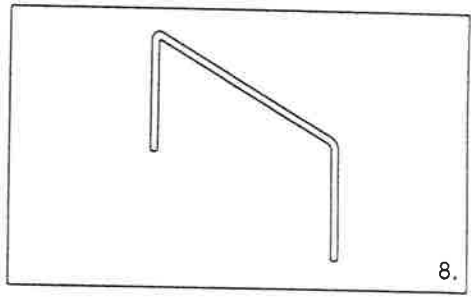


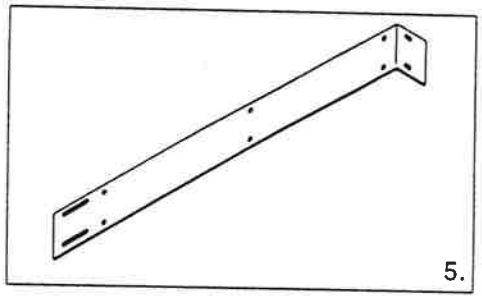


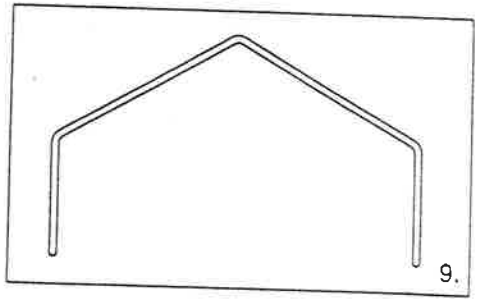






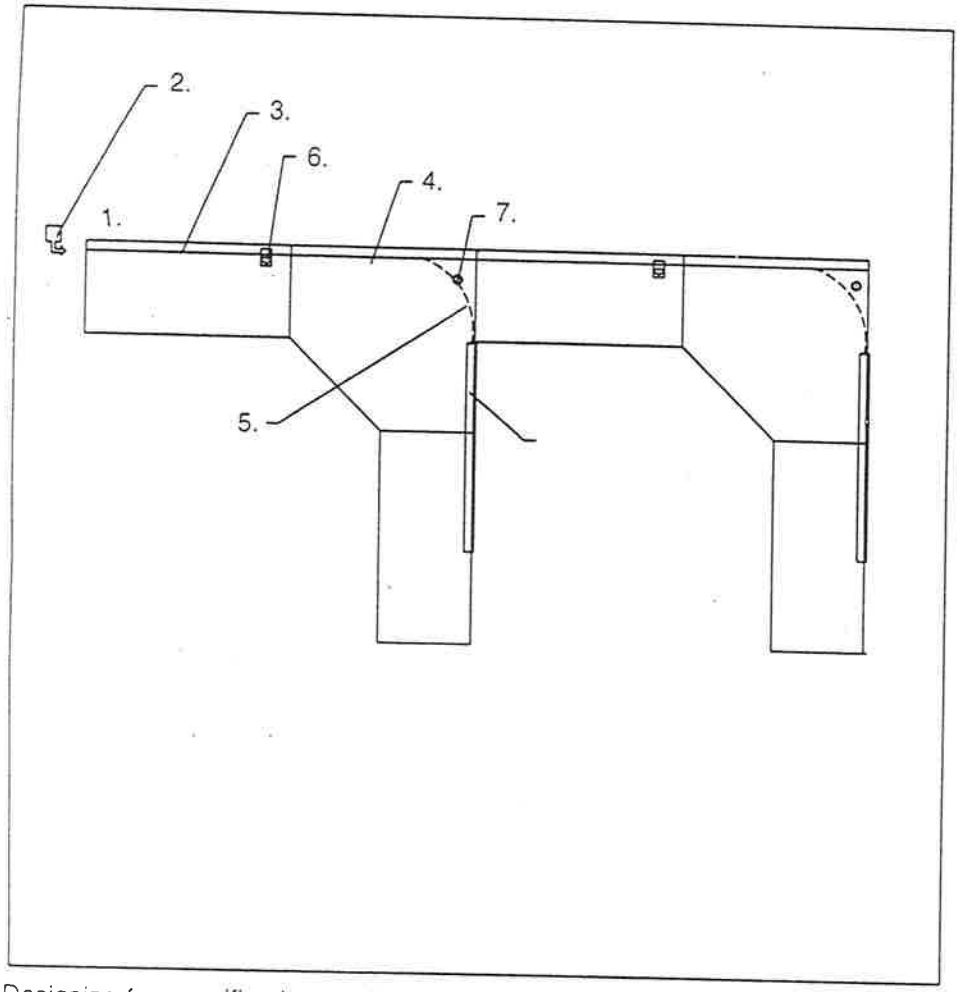


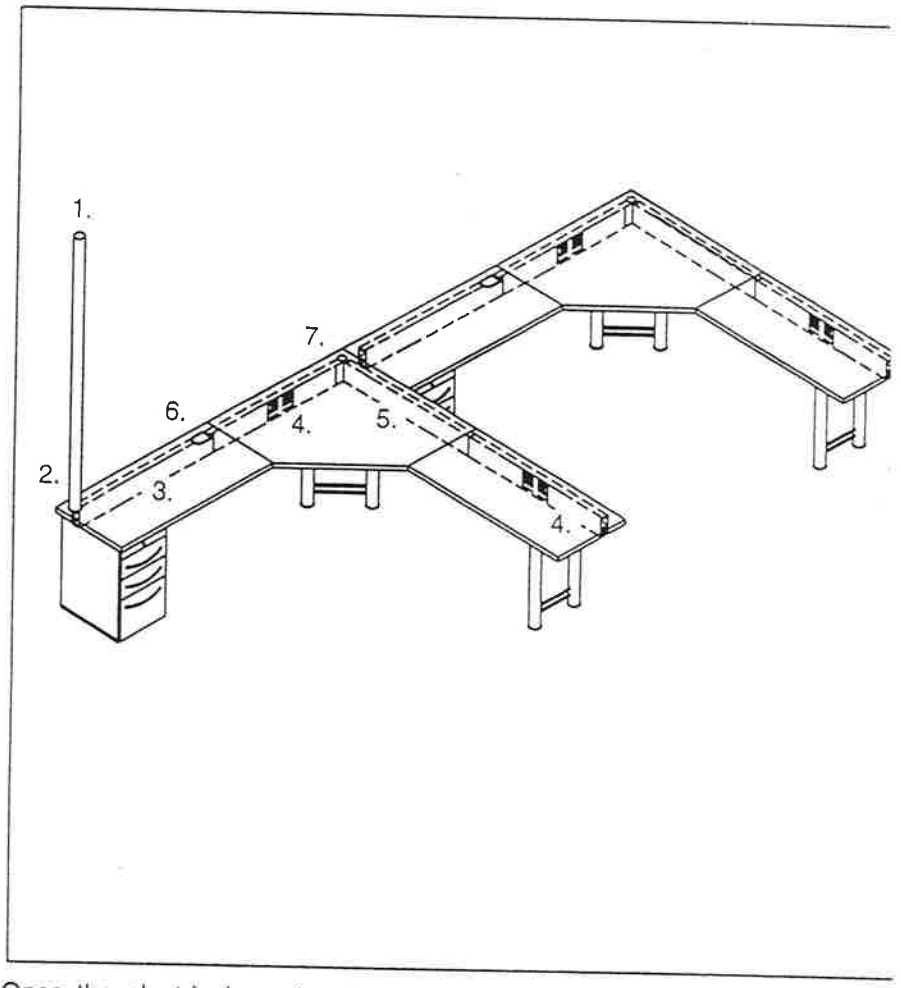




1. 1/4-20 x 5/8" Socket Head Screw
2. 1/4-20 x 1 1/2" Socket Head Screw
3. Full Modesty Panel Bracket
4. Modesty Screen Bracket
5. Full Screen Bracket
6. 1 1/2" Flat Head Wood Screw
7. Surface Mounted Screen Bracket
8. Screen Alignment Bracket
9. Screen Corner Bracket

DESIGN *Electrical*





Designing for specific site conditions is a process of determining the electrical needs of each individual workspace and devising a system that can accommodate the needs of several spaces.

The electrical and wire management system offered by ***Counterpoint*** is a powerful tool used to bring electrical and communication tools within the easy reach of the worksurface. The electrical package has 8 wires with 4 circuits. Two circuits, designated for technology use, share a separate neutral and isolated ground to serve desk top computers, word processors and memory typewriters. The other two circuits provide utility power for lighting and specialized use for pencil sharpeners, portable heaters, etc.

As a part of the electrical system a self contained electrical and communication wire management component is included. This element which attaches to the underside of the worksurface is available in lengths that correspond to the length of the worksurfaces.

Once the electrical needs within the space have been determined, the n thing to discover is where the power supply will be accessed. If powe available in the ceiling, a power pole and a ceiling power entry kit are requir Usually site conditions provide power at a wall or floor outlet located near work stations and can be accessed through a shorter, standard power entry When the route of the power is determined, the next step is simply to determ power boxes in the quantity and configuration that will meet the needs of ea station.

Communication and electronic device wire management can occur through same system provided for the electrical system. In a dedicated chase bene the electrical system components, space and entry/exit points are convenier located so that unsightly wires can be routed in an efficient and unifc manner.

SPECIFICATION *Electrical*

Power entry kits, power boxes, pass through cables and wire management tracks are the parts. Assembly, as outlined in the Installation section of this Guide, can be accomplished by any skilled installer with only the power entry to building power requiring the services of a licensed electrician. The only tools required are those necessary to attach the wire management track to the worksurface and those needed to hook into the building power. All other components snap together.

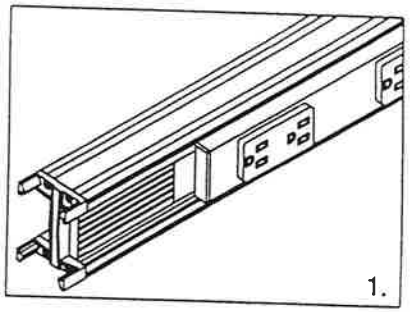
Starting with the power entry, the entire system is directional. The exclusive safety detail that makes the system so innovative is the feature that insures that no combination of power entry, pass through or power boxes can be inadvertently interconnected, even on reconfiguration. Connections are positive latching and a visual stripe indicator aids orientation of the mechanical polarization.

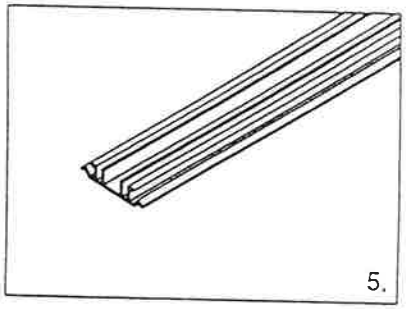
The 8 wires in the electrical system are color coded using the International Color Code throughout the system and an electrician can readily understand the function of each and how it relates to wiring connections. The National Electrical Code permits 13 receptacles per circuit x 4 circuits = 52 per power entry. Voltage drop, local code, or known load requirements may be more restrictive. The primary reason for four circuits is to permit the highly specialized use of these outlets. Circuits are marked on the face of each receptacle. Therefore, circuits Red I and Black II are used for utility and task lights. The Orange IIII and Blue III circuits are suggested for dedication to technology use, computers, printers, etc. The green with the yellow stripe is the isolated ground wire and it can be used to ground sensitive electronic equipment.

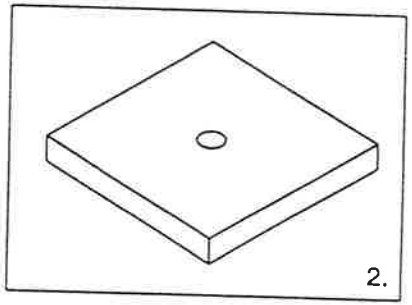
Partly because electrical code mandates balance, the duplex receptacles provide access to two circuits. These circuits may be switched at the panel box. Therefore, every duplex can offer switched and/or continuous power. Ambient lights, heating devices, etc. may be switched off at night while task lights, clocks, etc. remain powered at the same duplex.

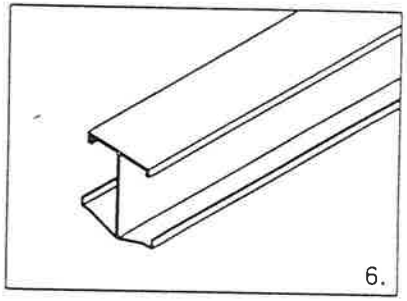
Tracks are manufactured in lengths proportional to the lengths offered for worksurfaces. However, the system offers some flexibility so that corner conditions special shapes of worksurfaces and crossing conditions can be accommodated. The power box allows the male connector to plug in anywhere along a given area, or even to slide for several inches. This allows cables to turn corners without snaking or applying pressure against side covers .

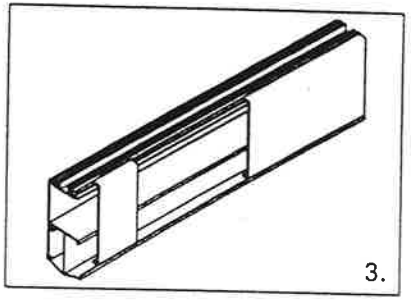
The wire management portion of the component features full access to the power receptacles and lay in capability while covering the connectors and the extra communication wires. Access for other cables and wires is in the same general area as the receptacles.

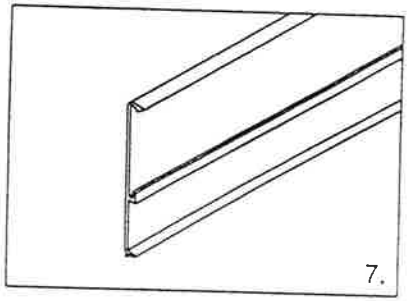

1.

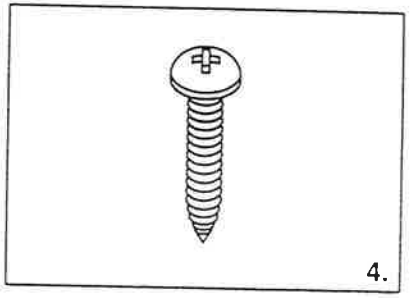

5.

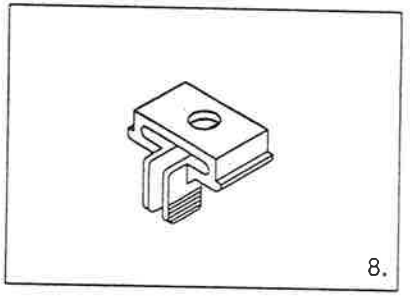

2.


6.


3.

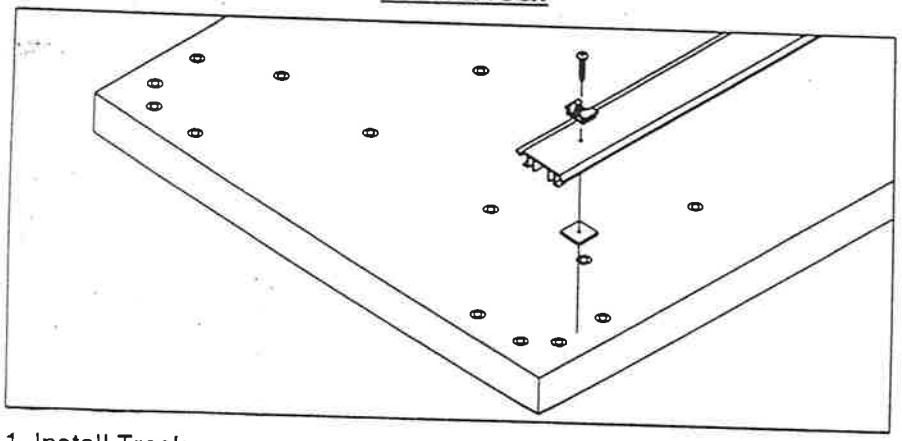

7.


4.

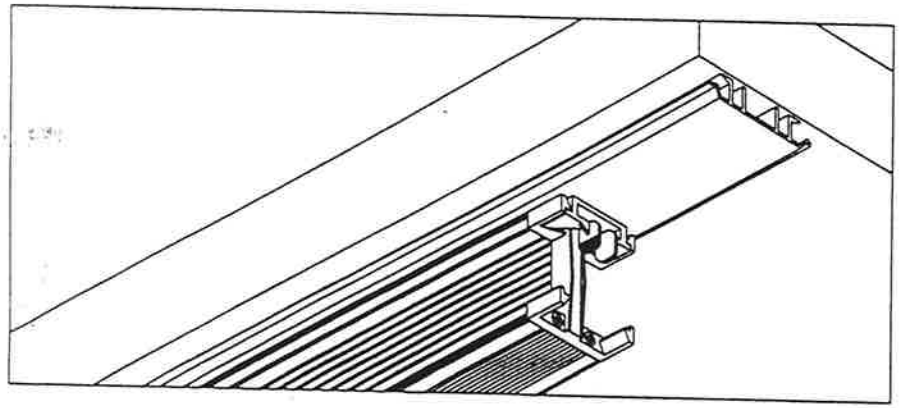

8.

1. Power Box
2. 2" x 2" x 1/4" Track Spacer
3. Wire Management Track
4. #8 x 1 1/4" Pan Head Screw
5. Track
6. Anchor Beam
7. Side Cover

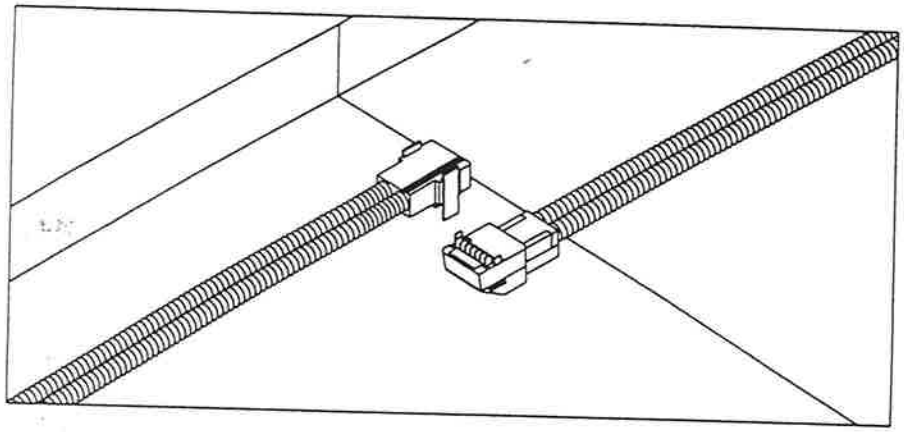
INSTALLATION *Electrical*



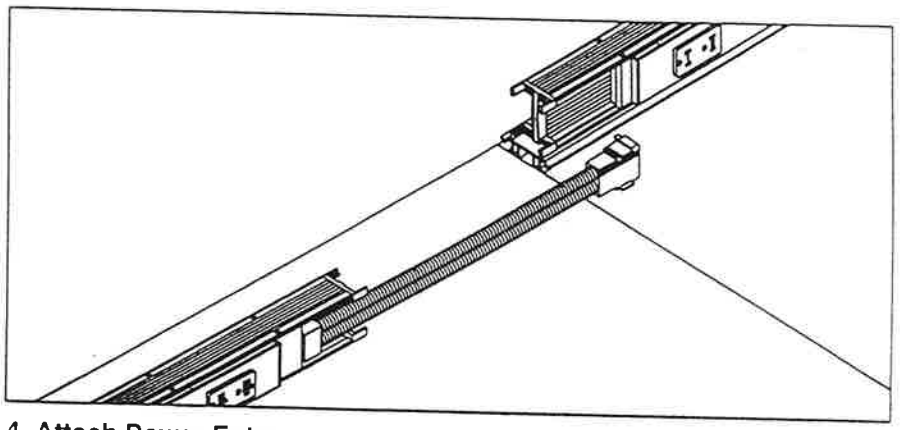
1. Install Track



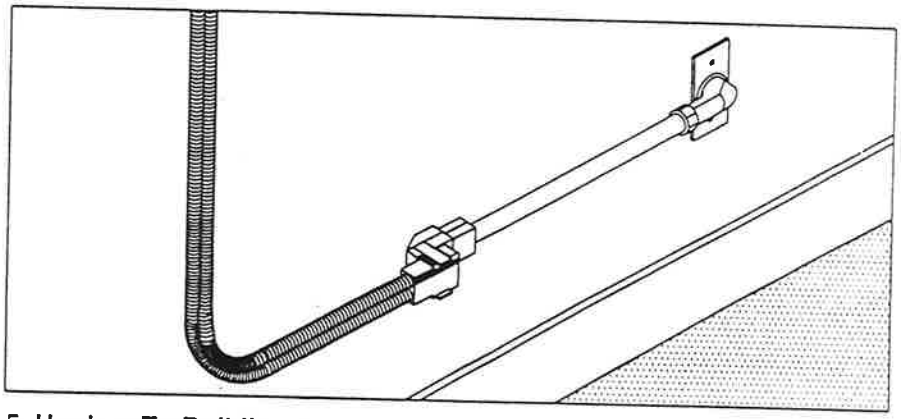
2. Install Power Boxes



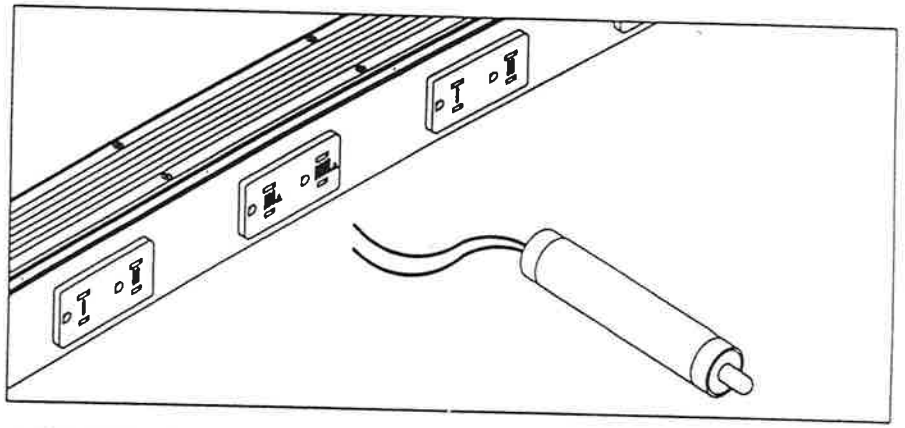
3. Attach Pass Through Cables



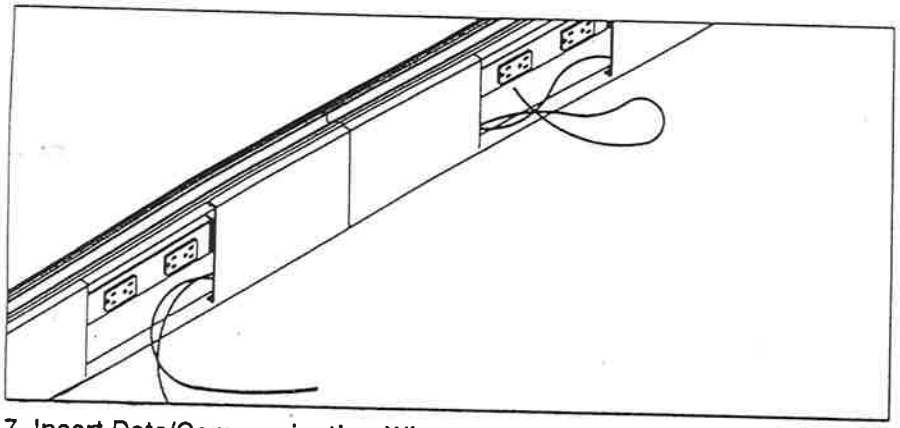
4. Attach Power Entry



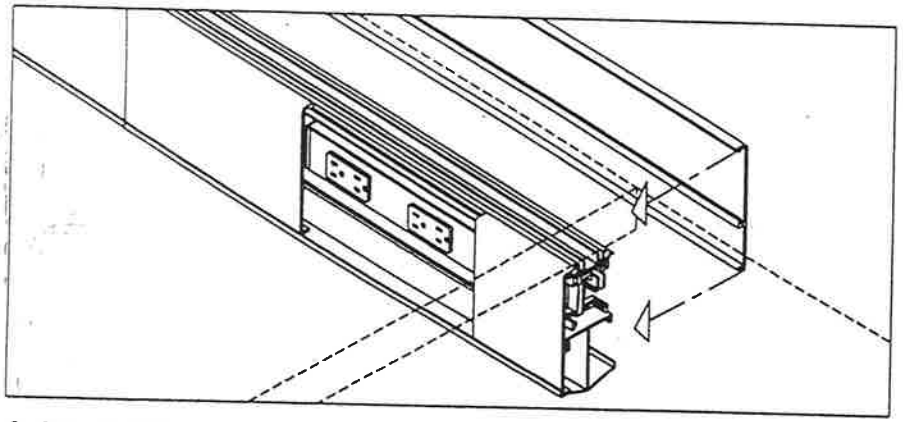
5. Hookup To Building Power



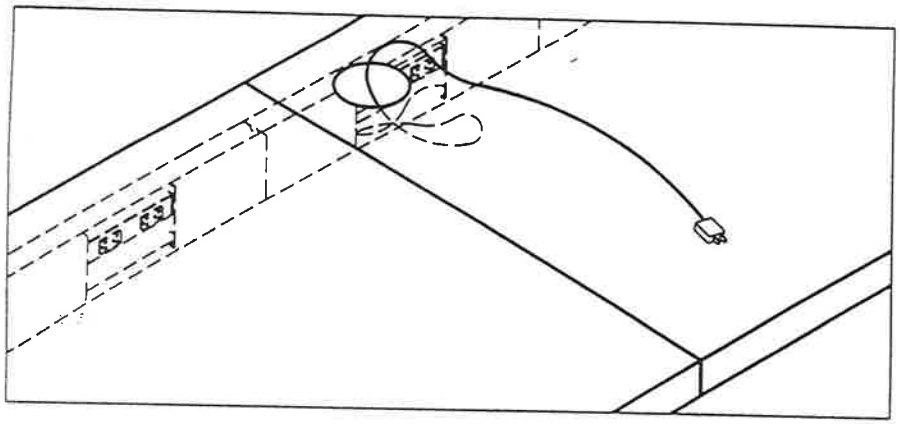
6. Test Circuits



7. Insert Data/Communication Wires



8. Attach Side Covers



9. Finish Details

1. Install Track

1.Attach aluminum tracks to worksurfaces using (2) #8 x 1 1/2" pan head screws. Screw should run first through mounting clip, then the track, then the spacer and into the worksurface.

2. Install Power Boxes

1.Lay power boxes and pass through cables near the appropriate worksurfaces with male connector facing towards the power source.
2. Snap power boxes to track.

3. Attach Pass Through Cables

1. Attach pass through cables and power boxes to one another by snapping the male connector to the preceding power box or the female end of a pass through cable.

4. Attach Power Boxes to Each Other

1.Attach the power entry cable to the first power box in the line and then attach the rest of the power boxes together.

5. Hookup To Building Power

1.Hook power entry cable to building power. (This should be performed by a licensed electrician.)

6. Test Circuits

1.Test circuits and connections.

7. Insert Data/Communication Wires

1.Attach outside cover and install wire management section.
2. Insert data and communication wires.

8. Attach Side Covers

1.Install front covers, making sure to allow data/com wires to exit at the appropriate locations.

9. Finish Details

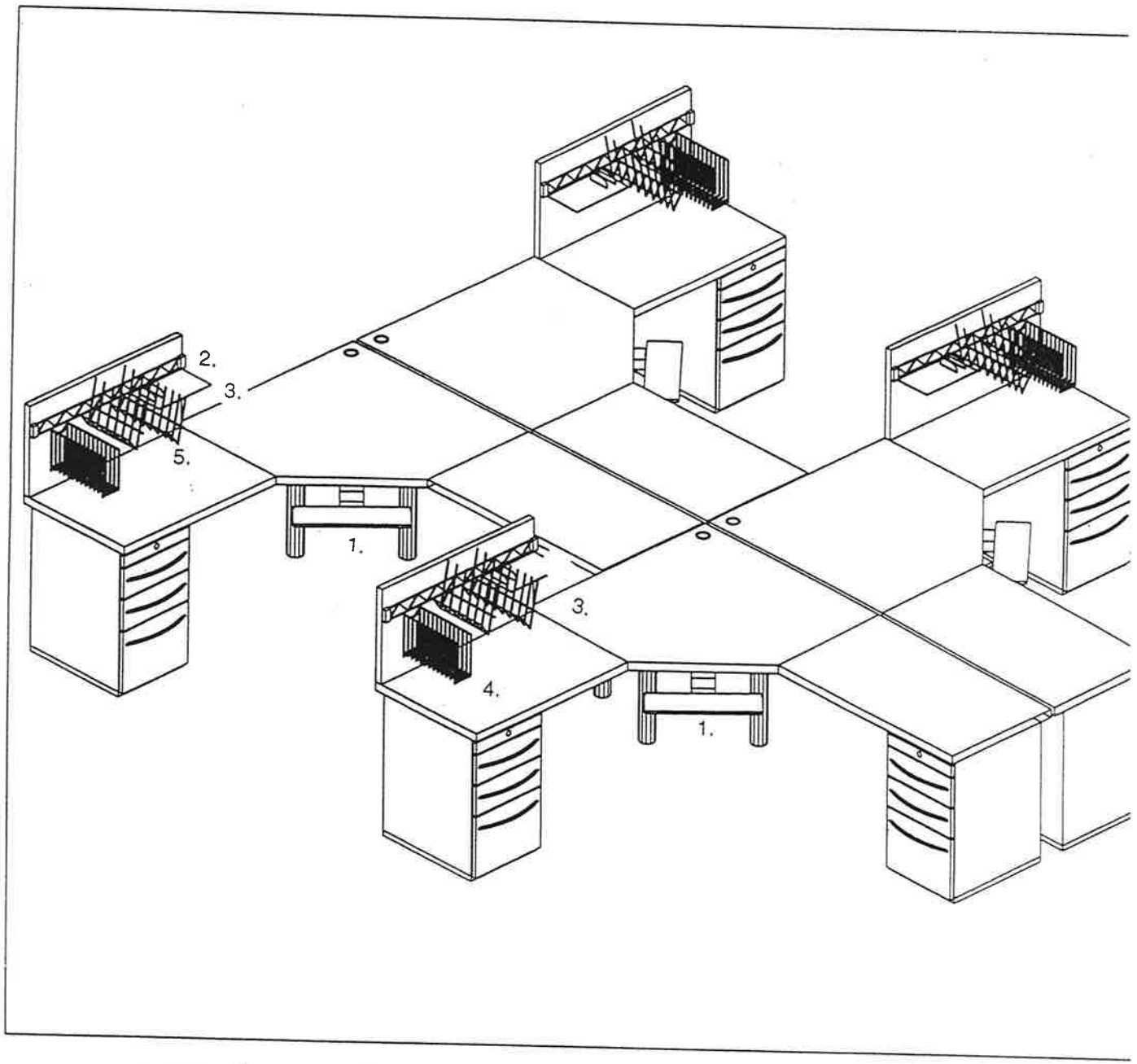
1.Run wires through grommets in worksurfaces and hook up to equipment.
2. Tuck excess cords and wires behind the front covers of the wire management component.

Design Accessories

When the layout is efficiently organized, the final part of the design process should include the selection of accessories that will make the work area even more productive. This begins with an analysis of the general lighting conditions and a look at the specific needs of each person in the space. ***Counterpoint*** lighting components include task lights that illuminate small areas with controlled light levels as well as ambient and portable fixtures that can be use to supplement building lights.

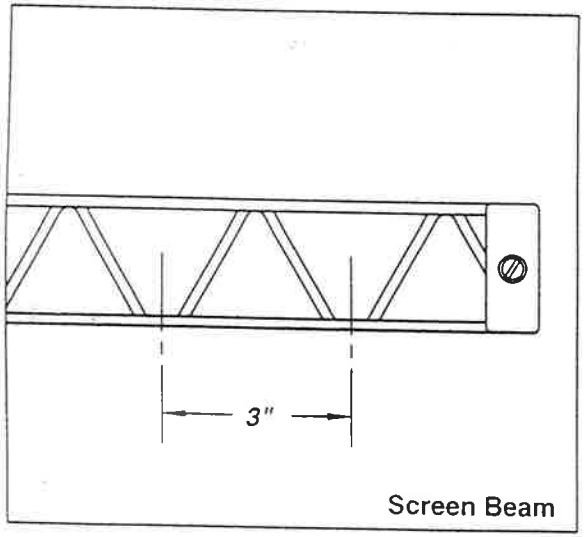
The analysis and resulting designs that are developed will take into account the ways that people interact within the work area. Key components in making the most efficient workspace are the accessories that allow for customizing the individual's environment. Articulating Keyboard Trays, Pencil Drawers, Grommets and a full array of products for organizing paper supplies are available. Using the Screen Beams either mounted to a screen or to a wall can put a variety of paper management accessories within easy reach. Electrical and wire management components, used with the grommets and desk accessories, are the tools necessary to fine tune the environment.

Whether a private office or an open landscape, a bank or health care, a classroom or a telemarketing situation, the use of accessory components will enable the client to keep the project cost effective while making it fully productive.



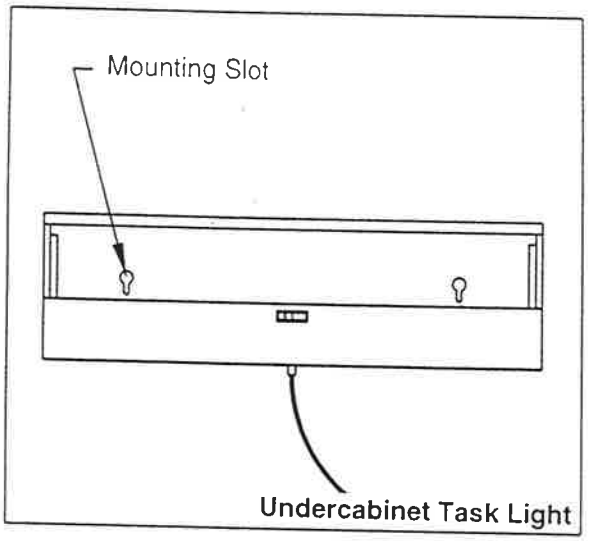
1. Articulating Keyboard Tray
2. Screen Beam
3. Storage Shelf
4. Vertical Binder Storage
5. Diagonal Organizer

SPECIFICATION *Accessories*



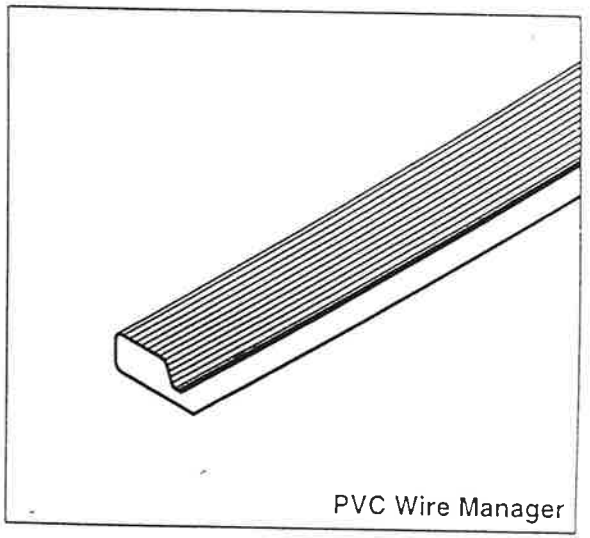
Screen Beam

Model No.	*Slots*	*Model No.*	*Slots*
C7SB18	3	C7SB20	3
C7SB24	5	C7SB30	6
C7SB36	7	C7SB42	9
C7SB48	10		



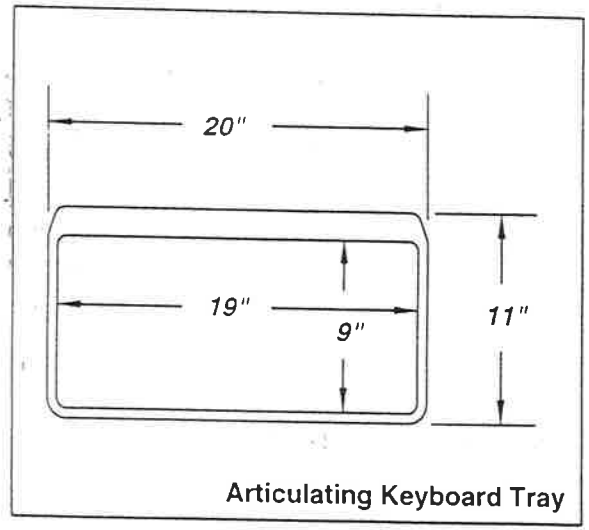
Undercabinet Task Light

Undercabinet Task Lights can be mounted to either transaction worksurfaces or to Upper Storage units. The optimum distance from worksurface to light fixture is approximately 18".



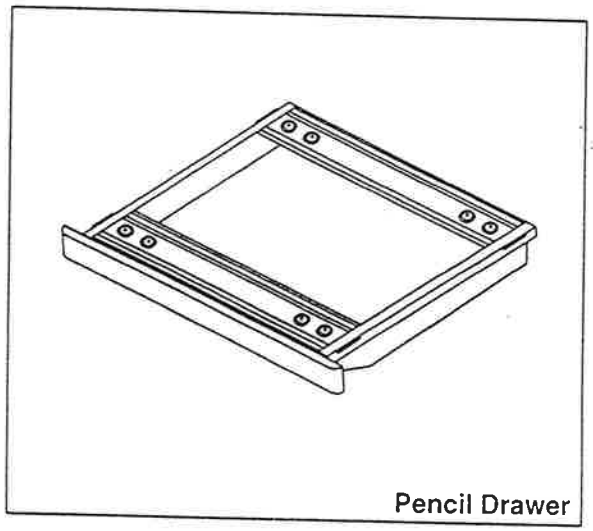
PVC Wire Manager

The PVC Wire Manager is extruded plastic and can be mounted to the underside of the worksurface in any appropriate position. The flexible edge allows for wire to enter or exit at any point.



Articulating Keyboard Tray

The Articulating Keyboard Tray can be used on most ***Counterpoint*** Worksurfaces. However, the Tray will not fully adjust to worksurface height on some Inside Radius Worksurfaces with a radius smaller that 18".



Pencil Drawer

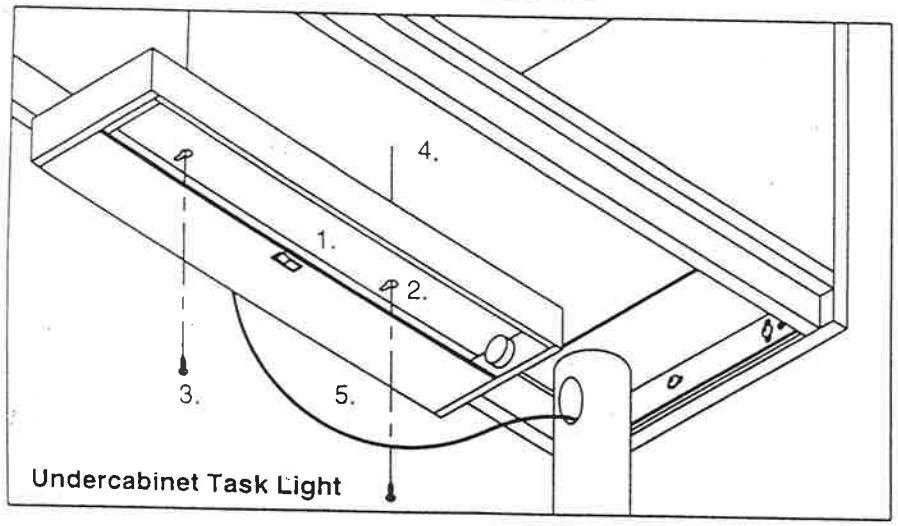
Clearance below the face of the drawer to the floor is 24 1/2". Check with chair manufacturer for arm height to insure allowance.

Paper Management Accessories

Paper management accessories can be installed where efficient access to papers, files, binders, and books is required. Care should be exercised to insure that there is adequate clearance between the accessories and the worksurface. Under normal conditions, screen beams are able to support a weight that is appropriate to the material that the accessory was designed for. However, when used on Open Screens. paper management accessories should be specified so as to not overload the screen. If possible, balance the screen by hanging accessories on both sides.

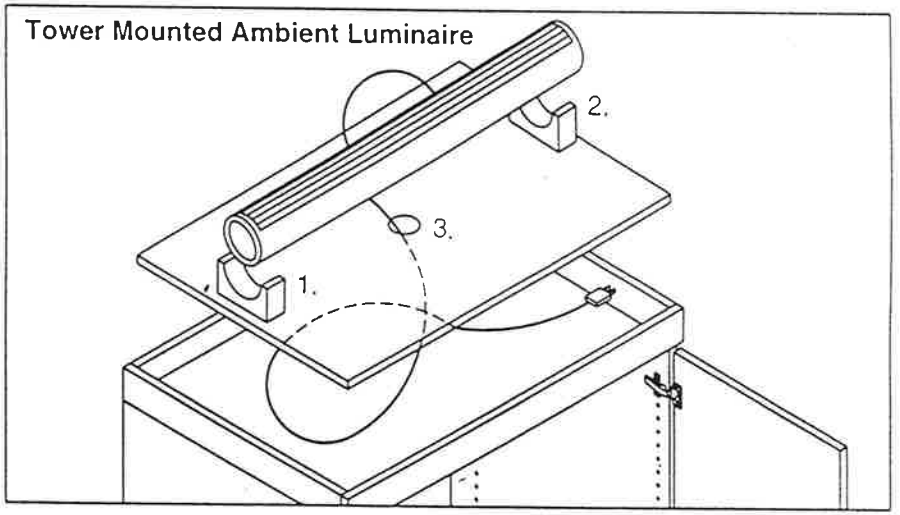
The Calendar Base is not supplied with the calendar refill which is available at most stationers.

INSTALLATION *Accessories*

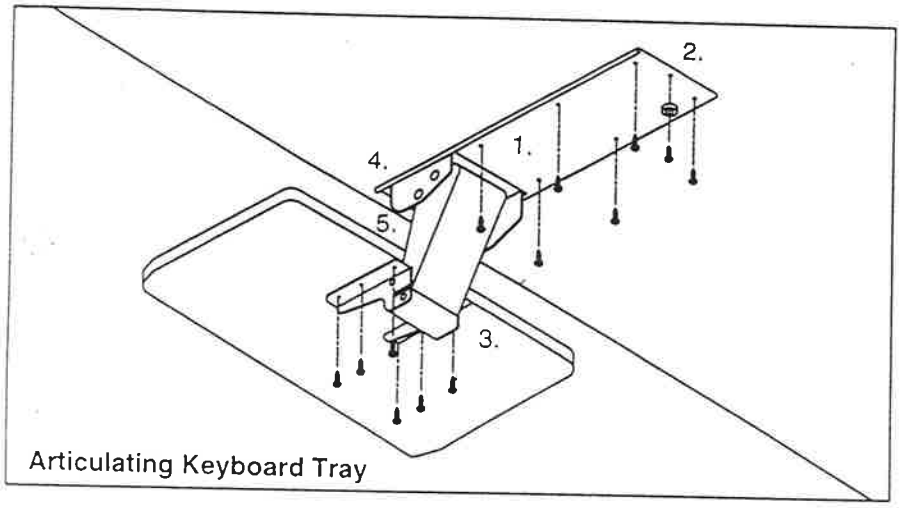


Undercabinet Task Light

1. Remove plastic lens and bulb from fixture.
2. With the front of the light towards the user, mark the location of the two keyhole slots on the bottom of the shelf.
3. Drill pilot hole and partially insert the (2) #10 x 5/8" pan head screws.
4. Mount fixture and tighten screws.
5. Install bulb, lens and cord clip.

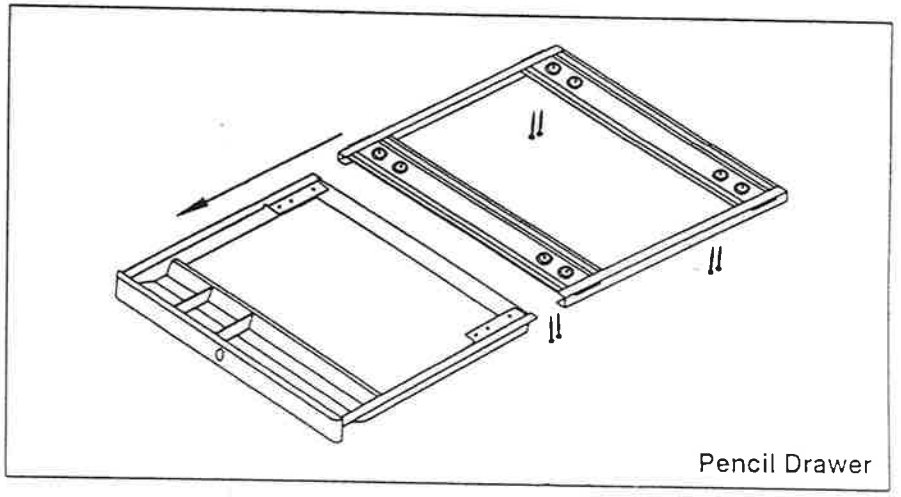


1. Locate the center of the grommet according to the illustration above.
2. Drill 1 1/2" or 2 1/2" diameter hole through worksurface depending on grommet to be installed.
3. Using saber saw, cut out remaining worksurface as required.
4. Install grommet sleeve and cap.



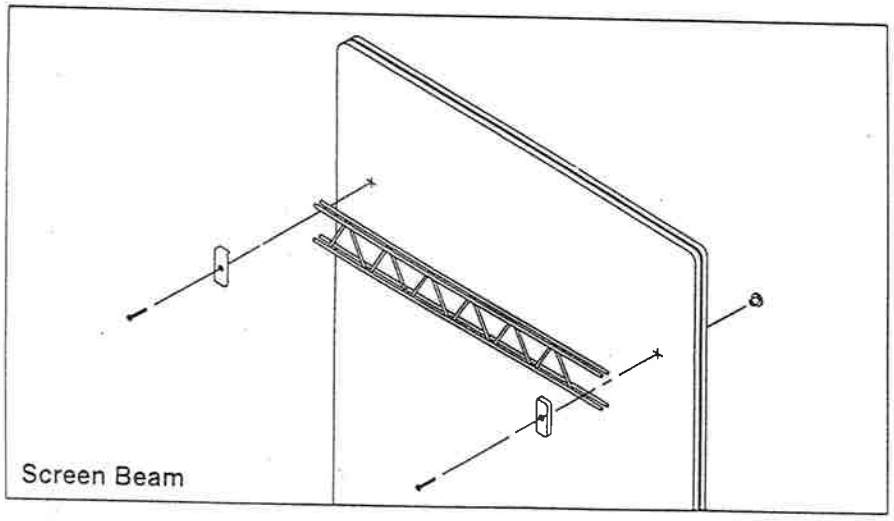
Articulating Keyboard Tray

1. Mount track 1/2" from front edge of worksurface using provided hardware.
2. Attach back bumper with # 8 x 5/8" pan head screw.
3. Mount keyboard tray to mechanism with back edge flush to back edge of bracket.
4. Insert mechanism into track.
5. Install front bumper with # 8 x 5/8" pan head screw.

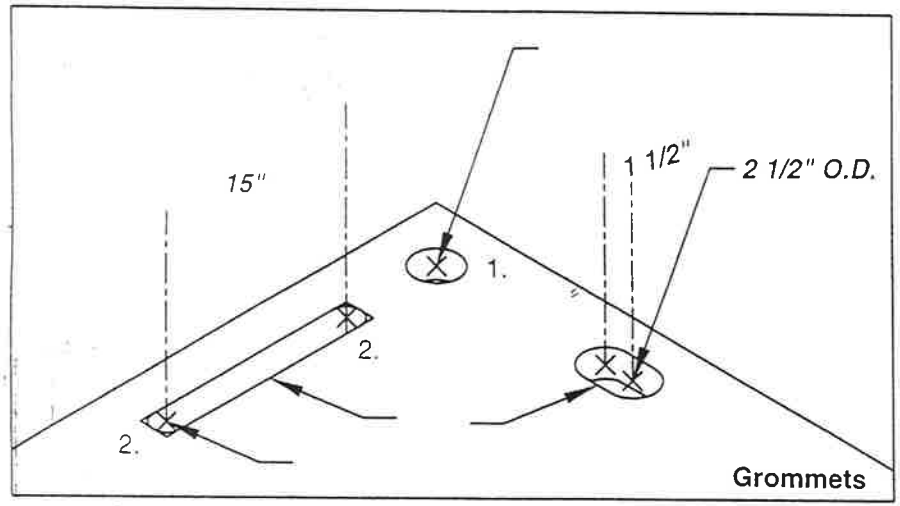


Pencil Drawer

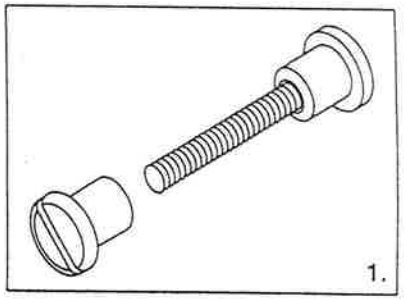
1. Locate the center of the Pencil Drawer face and position it flush to the front edge of the worksurface.
2. Mount slides to worksurface with (8) #8 x 1 1/4" wafer head screws.

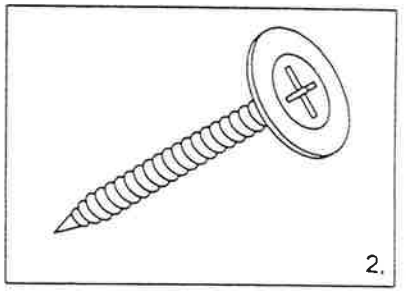


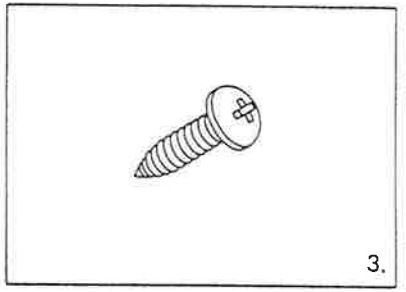
1. Place beam on screen and mark positions of mounting brackets.
2. Cut small X in fabric and drill through the screen.
3. Loosely install one bracket with 1/4-20 x 1 1/2" sex bolt.
4. Insert the beam and attach the other bracket in the same manner.

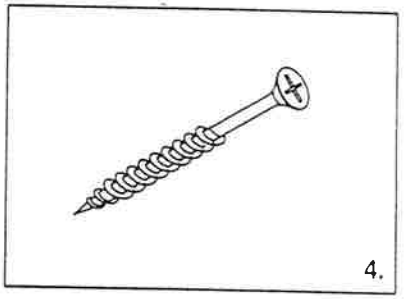


1. Locate tha center of the grommet according to the illustration above.
2. Drill 2 3/8" or 1 1/2" diameter hole through the worksurface depending on the grommet to be installed.
3. Using a saber asw, cut out the remaining work.
4. Install grommet sleeve and cap









1. 1/4-20 x 1 1/2" Sex Bolt
2. #8 x 1" Wafer Head Screw
3. #8 x 5/8" Pan Head Screw
4. #8 x 1 1/2" Flat Head Screw

REFERENCE

FINISH APPLICATIONS

Worksurfaces
Door and Drawer Faces

Laminate - Any Standard Laminate by *Wilsonart, Formica, Pionite, Nevamar*
Composite Veneer - Ash, Cherry, Mahogany, Classic Mahogany, Ebony
Edge Treatment - 2mm PVC Edgeband in Fog, Folkstone, Beige, Black
- 2mm Composite Veneer to Match Veneers

Modesty Screens
Surface Mounted Privacy Screens
Tack Panels

Fabric - Network Style Fabric by *Guilford of Maine*

Lower Support Legs
Handles
Open Screens
Locks
Structural Hardware

Metal Finish - Satin Black Powder Coat

LAMINATE REFERENCE LIST

C 961 Fog	*Formica* 961 Fog
C 241 Gray Jaguar	*Pionite* Gray Jaguar
C M33 French Blue Matrix	*Nevamar* MR-3-3T French Blue Matrix
C M36 Teal Slate Matrix	*Nevamar* MR-3-6T Teal Slate Matrix
C M35 Navy Matrix	*Nevamar* MR-3-5T Navy Matrix
C 241 Folkstone	*Pionite* SG241 Folkstone
C 627 Maritime Gray	*Nevamar* S-6-27T Maritime Gray
C 621 Nebula	*Wilsonart* 4621-8 White Nebula
C S62 Charcoal Essence	*Nevamar* ES-6-2T Charcoal Essence
C 623 Graphite Nebula	*Wilsonart* 4623-8 Graphite Nebula
C 263 Natural Beige	*Nevamar* S-2-63T Natural Beige
C 506 Beige Grafix	*Formica* 506 Beige Grafix
C466 Porcelain	*Formica* 466 Porcelain
C M61 Grey Matrix	*Nevamar* MR-6-1T Gray Matrix
C 261 Grey Ethos	*Pionite* AG261 Gray Ethos
C 101 Black	*Pionite* SE 101 Black
C M53 Sage Matrix	*Nevamar* MR-5-3T Sage Matrix
C P52 Jade Patina	*Nevamar* PT-5-2T Jade Patina
C P51 Verde Patina	*Nevamar* PT-5-1SM Verde Patina
C 627 Hunter Nebula	*Wilsonart* 4627-8 Hunter Nebula

See the *Counterpoint Price List* for other details concerning finishes.

CARE AND MAINTENANCE

Laminate: The standard laminates offered by the four manufacturers indicated to the right are nearly indestructible under normal conditions found in work environments. Cleaning can usually be accomplished with mild detergent and water. Tough stains can be removed with a mild abrasive however this may affect the quality of the finish and is not covered by warranty.

Composite Veneer: Wood veneer products are finished using the highest standards for industrial catalyzed lacquer coatings. Although these are the best coatings available, they are not to be confused with laminates for toughness and durability. Clean with a damp cloth and occasionally, a very mild detergent. Do not use alcohol or other solvent based products on wood finishes.

Fabrics: The Network Panel fabrics offered as a standard for Screens and Tack Panels can best be maintained by an occasional vacuuming to remove surface dust. Do not apply solvent based cleaning fluids to panels as this will release the adhesives used to adhere the fabric.

Metal Components: Clean metal components with a mild detergent on a damp rag. Powder Coated components can be cleansed with mild solvents however care should be exercised not to touch other surfaces as this may damage other finishes.

PROBLEMS

Returns and Restocking: Merchandise will not be accepted without the prior written consent of the factory. HLF will not restock items as all goods are made to order.

Claims: Claims for damage occurring in shipment must be filed with the carrier within seven days of receipt of the product. In case of damage all shipping and crating materials must be retained until the goods are inspected.

Consult with the ***Counterpoint*** factory representative if problems occur regarding receiving, installing or using any of HLF's products. Questions regarding the procedures outlined in this *Design, Specification and Installation Guide* should be addressed to the HLF Representative in the area where the product was ordered or to factory representatives at HLF.

HLF Furniture, Inc.

44001 Van Born Road Belleville, Michigan 48111 734 697-3000 Fax: 734 697-3008