

# Steel Casework and Equipment Installation

Most installers prefer to hang wall cases first, which eliminates working over unit assemblies. Each wall case is attached to a horizontal wood cleat which is anchored to the wall and bolted together. See Figure A. If specifications indicate a different type hanger, please contact the Installation Department.

When a row of wall cases is indicated, a chalk line should be snapped to get all the cleats at the same level.

Toggle bolts, Rawl plugs, Red Devil plastic anchors, tap-in nylon fasteners and bolts are the various type fasteners used to anchor the wood cleats to the wall. Wall construction is the determining factor. Fasteners are furnished by the installer.

Wardrobes, tall cases and vanity cabinets should be checked to make sure they are not racked out of square by uneven floors. This is important to insure smooth operation of the drawers and doors.

Wardrobes, tall cases and vanity cabinets should be anchored to the wall and bolted together. See Figure A.

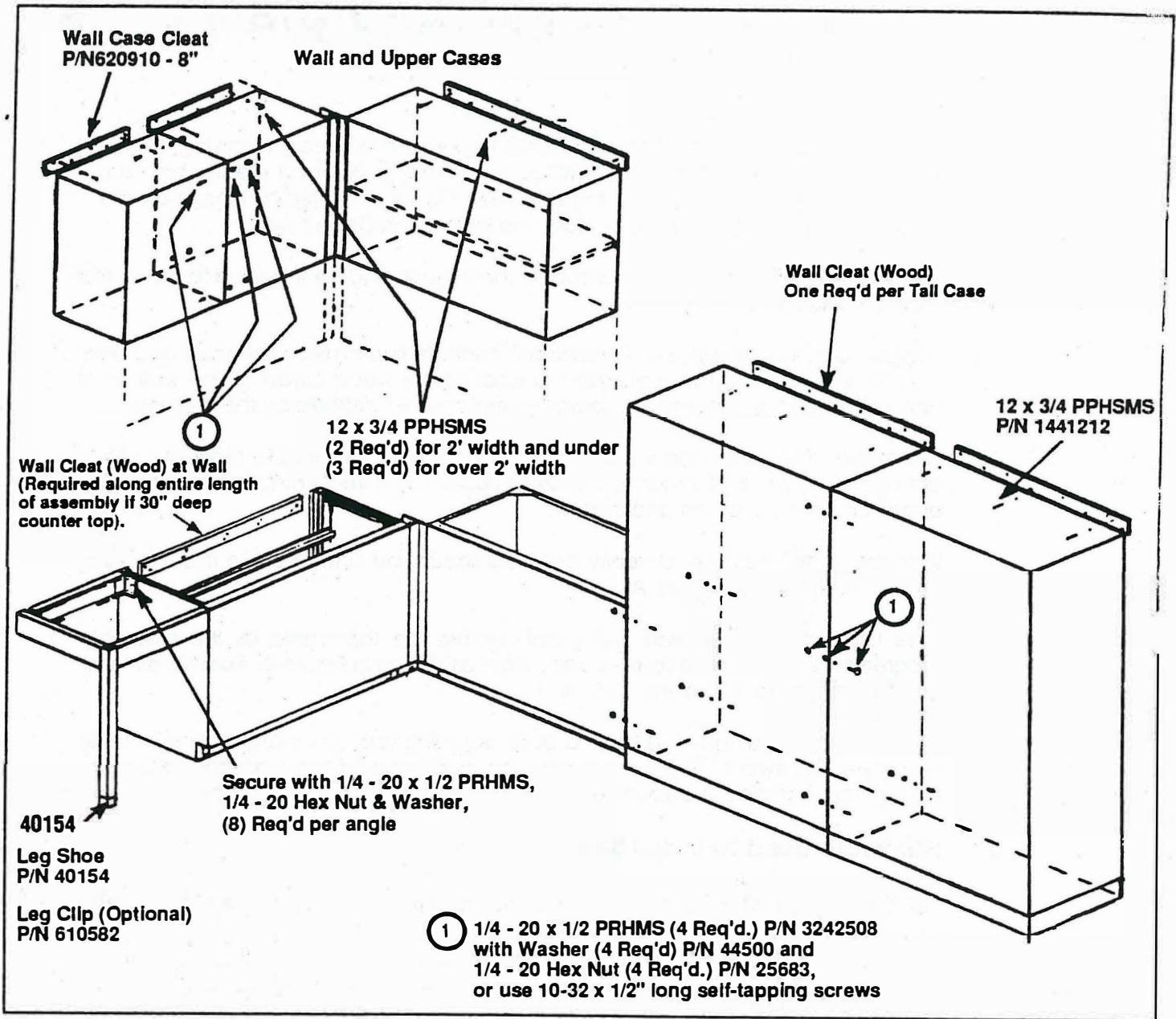
Base units must be leveled along and across the top frame as the assembly progresses. Units must be fastened together as shown in Figure B. Assemblies must also be anchored to the wall or floor.

It is imperative that installers have a base adjusting tool when attempting to level our Steel Casework. These tools can be purchased from Hamilton Industries through our Installation Department.

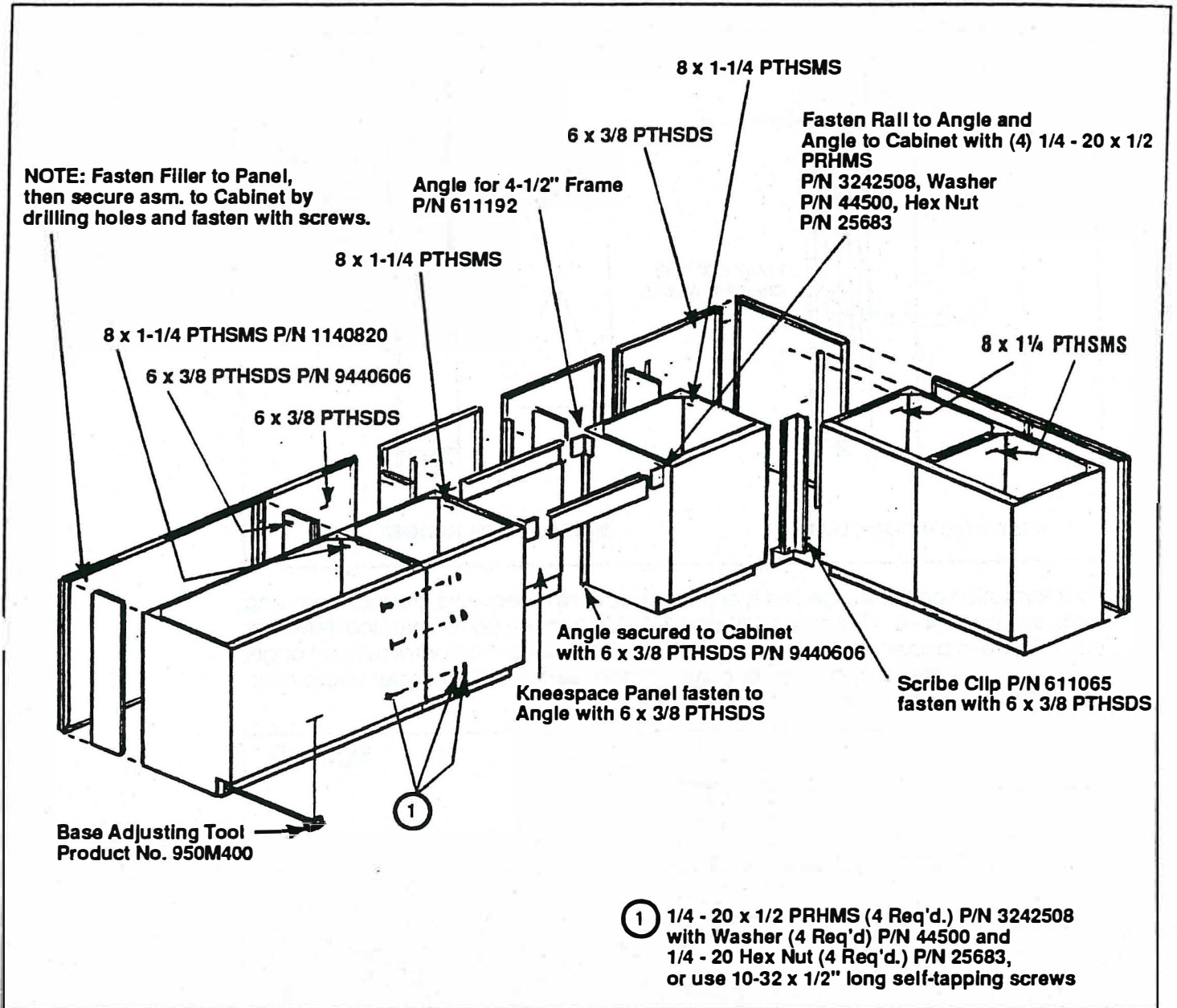
## Hardware Used To Install Steel Casework

|         |                         |  |
|---------|-------------------------|--|
| 3242508 | 1/4-20 x 112 PRHMS      | 4 per wall and tall case; 3 per base unit to fasten together.  |
| 3242508 | 1/4-20 x 112 PRHMS      | 4 per wall case and hiboy to fasten together.  |
| 44500   | Washer                  | 16 per frame to fasten between two units.  |
| 25683   | 1/4 20 Nut              | 12 per frame to fasten between unit and wall.<br>12 per frame to fasten between unit and leg assembly. |
| 611065  | Clip                    | For fillers  |
| 9440606 | 6 x 3/8 PTHSDS          | To fasten filler clip to unit.   |
| 42091   | Shelf Support ZP        | 4 per shelf  |
| 42092   | Shelf Support Strn. St. | 4 per shelf  |
| 611167  | Angle 2" frame          | 2 per rail, 4 per frame  |
| 611192  | Angle 4-1/2" frame      | 2 per rail, 4 per frame  |
|         |                         | Fasten angles to table frames or rails   |

**Figure A**  
**Installing Tall Cases, Wall Cases, Vanities, Leg Units to wall and floor**

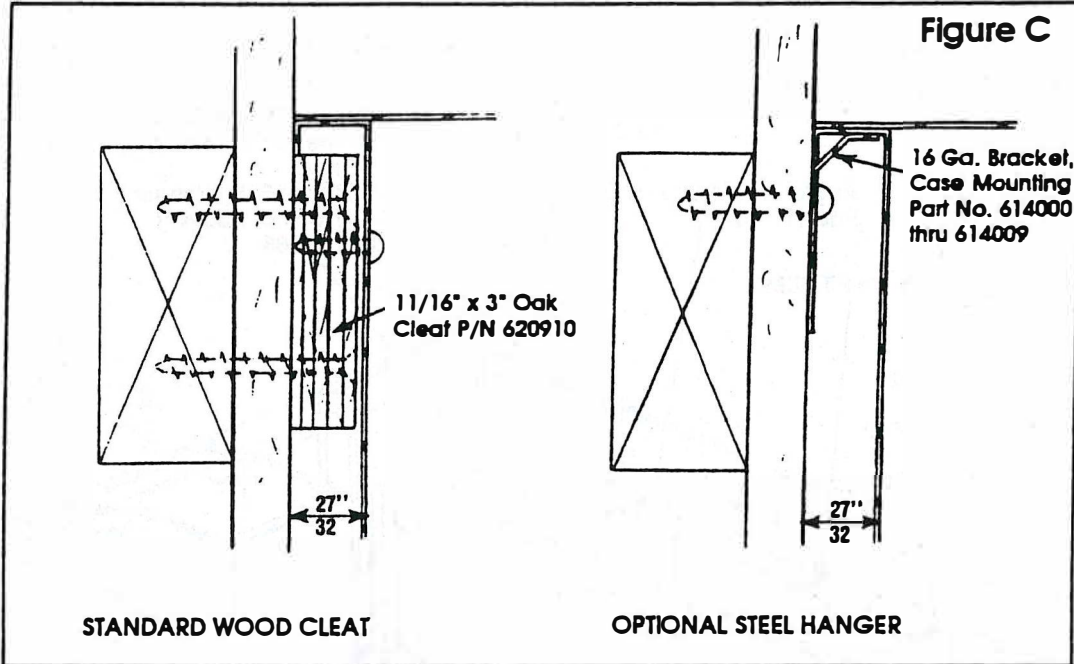


**Figure B**  
**Installing Base Units to wall and floor**

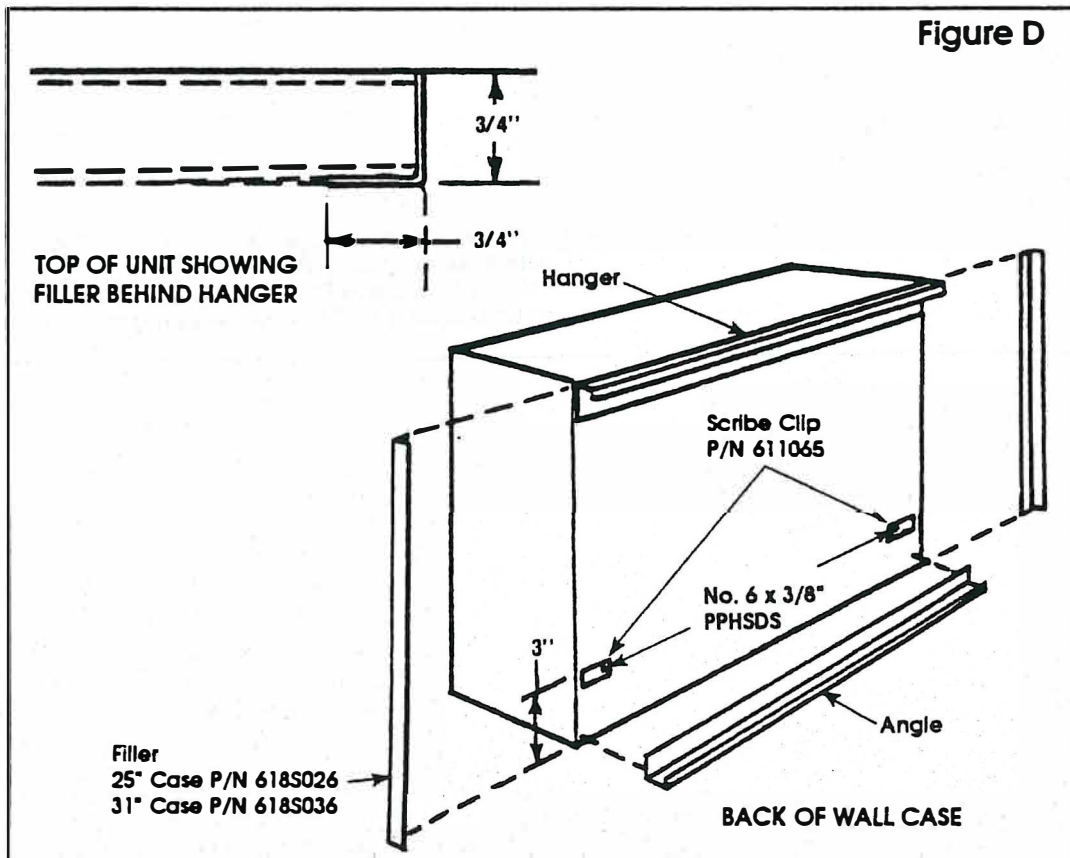


## Wall Case Installation

For proper and adequate installation of wall cases 25" and 31" high, the unit may be mounted with a wood cleat or a steel hanger.

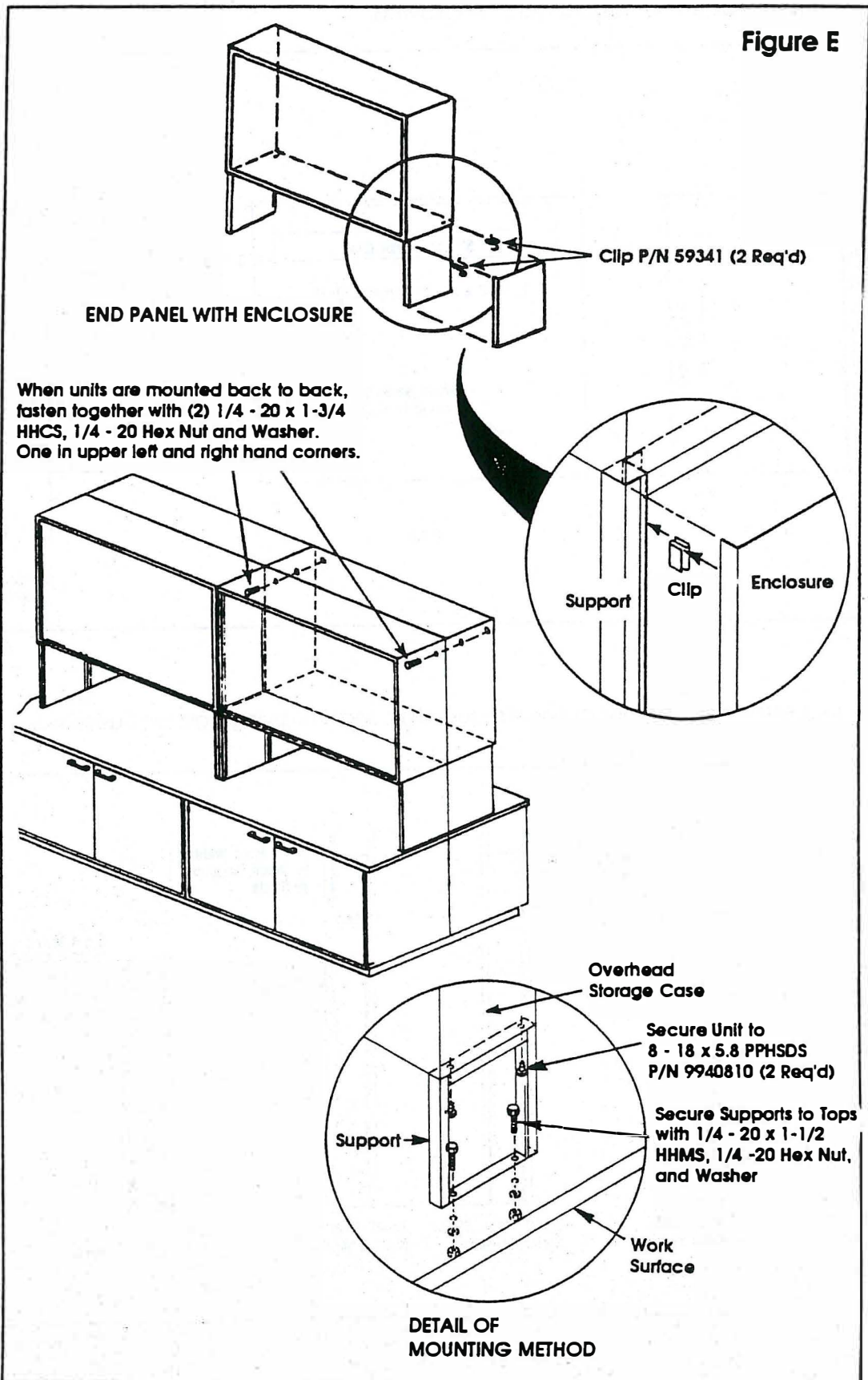


For information on the suggested types and locations of required grounds in varying walls, see page 4 - 6. Wall cases, 25" and 31" high, require (2) rear vertical fillers per case. Remove paper strip from double face tape on lower horizontal support angle and attach by pressing to back of case. Attach filler by sliding under scribe clips, hanger at top and support angle at bottom.



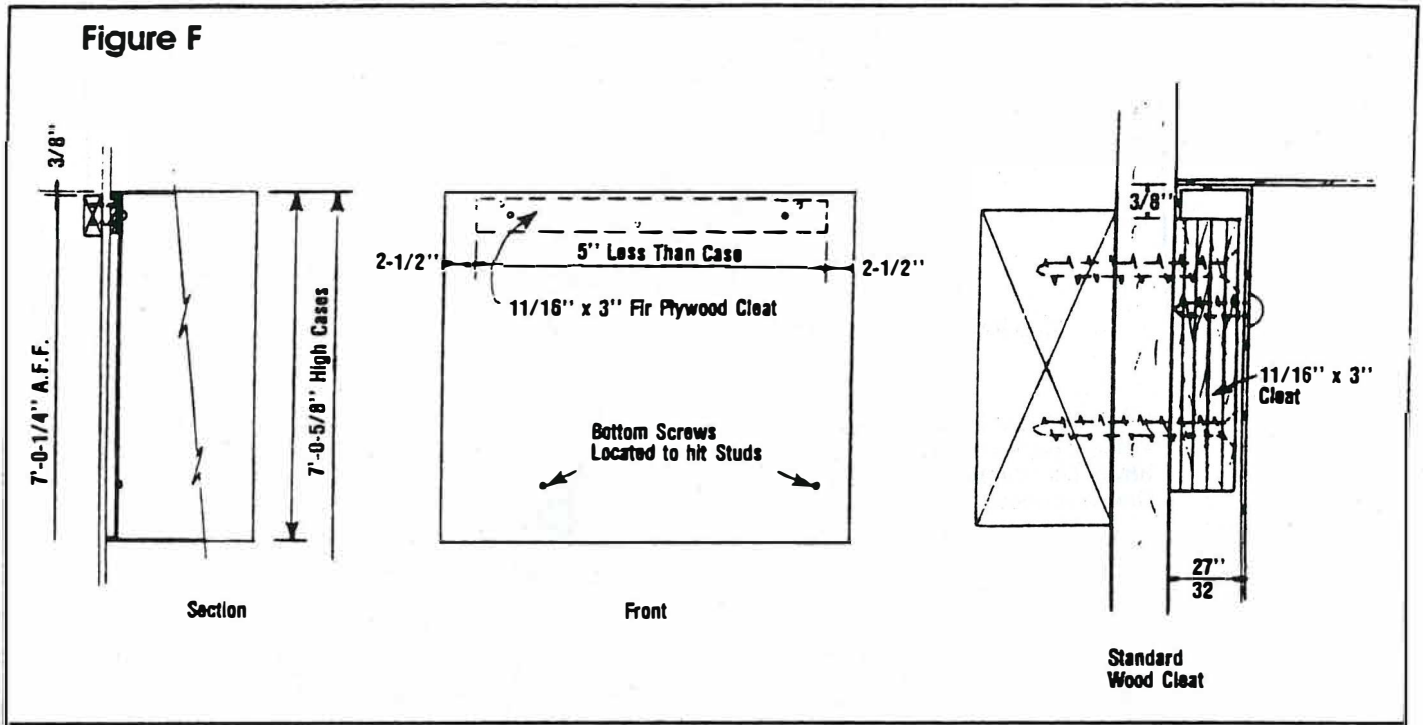
Island or peninsula assemblies can be designed with overhead case storage by mounting wall cases on case supports. Case is fastened to support, which is anchored to work surface. Cases back to back are fastened together.

**Figure E**

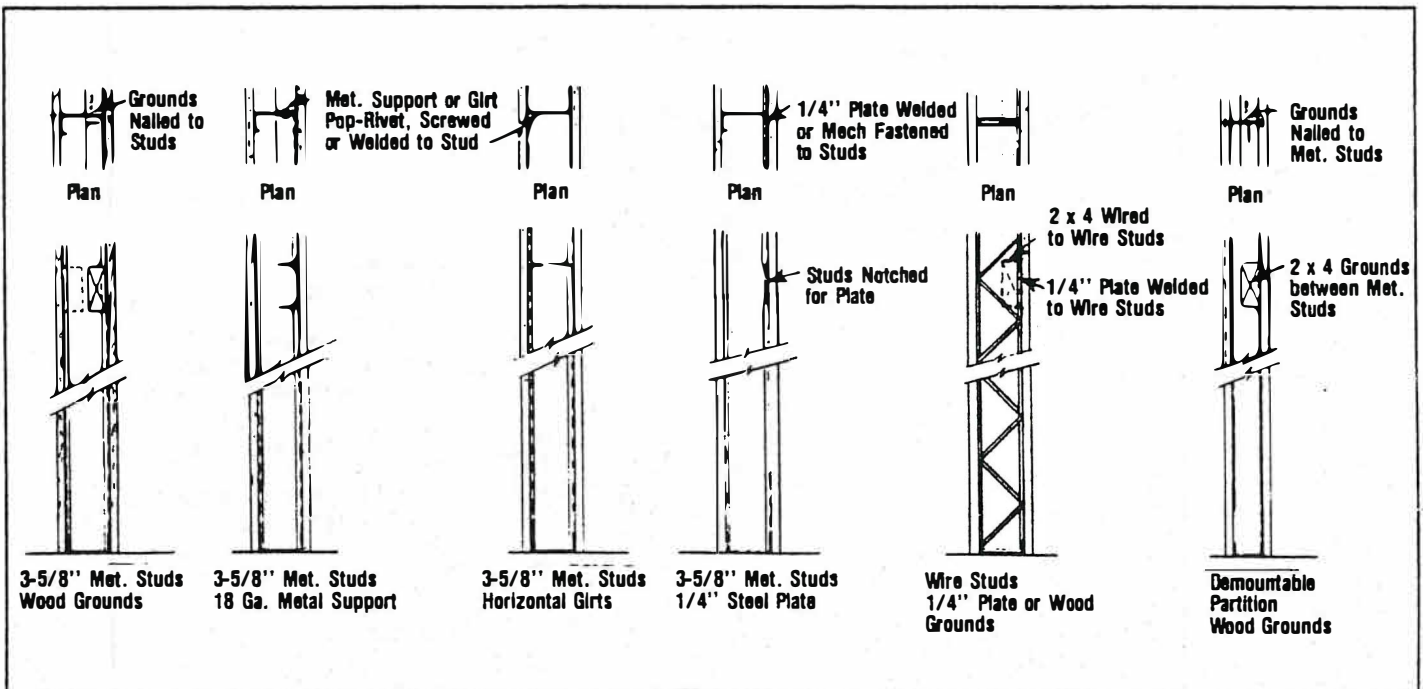


# Counter Mounted Upper and Tall Case Installation

For proper and adequate installation of upper and tall cases, the following illustrated methods of fastening cases should be followed.



The suggested types and locations of required grounds in varying walls are illustrated.



## Adjusting Steel Sliding Doors

Hangers (A) need not be loosened from surface of door. A blade type screwdriver is required to make the adjustment.

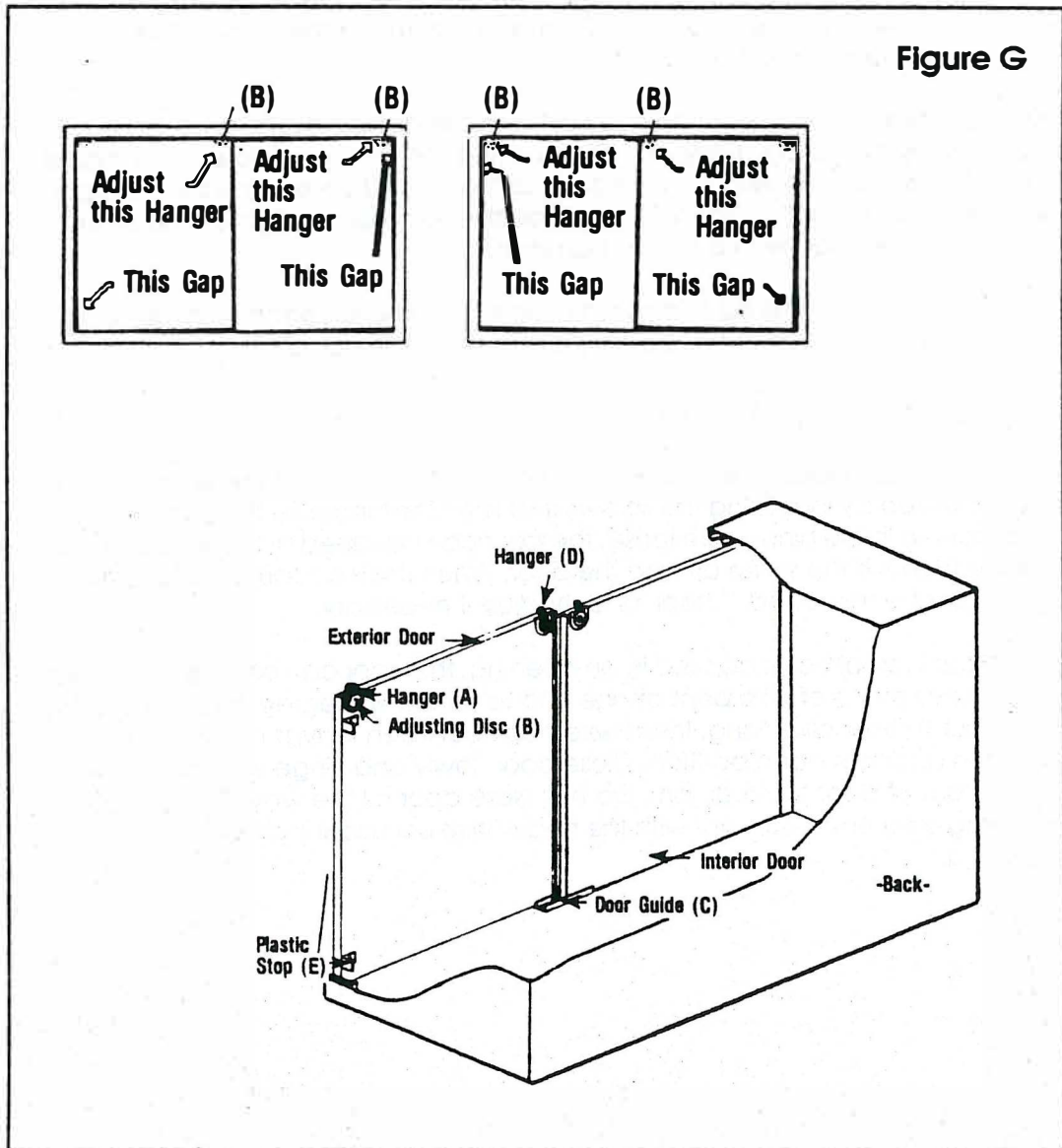
With the screwdriver turn the adjusting disc (B), in the center of the hanger, clockwise to lower the door and counterclockwise to raise the door.

To make the doors plumb with the unit side, adjust doors to the full up position or the full down position. If gap is not very great, a slight adjustment of one hanger or of both hangers may be sufficient.

When doors are plumb with unit side, make the up and down adjustment of the doors by equally adjusting both hangers to achieve proper clearance of bottom door guide (C).

Do not attempt to tighten hanger. Adjustment is self locking.

To adjust hanger (D) remove door stops (E). This will allow doors to pass giving access to adjusting disc.



## Removal of Framed Glass or Solid Sliding Doors

Loosen screws and remove bottom door guide. Tilt door to permit top of nylon roller to move out of track. **Do Not Force.** If door binds or hangs up, adjust rollers to provide more space between top of door edge and track. Repeat tilting procedure, lift and remove door. Repeat for second door. (It may be necessary to remove and lean lower shelf or shelves against cabinet back to provide adequate clearance for the door movement.) Clean glass and replace doors. Replace back door first. Tilt door to place bottom of nylon roller into track. Move door to vertical position and adjust to provide clearance for guide. Repeat for front door. Replace bottom door guide.

## Adjusting Steel Drawers

Prior to any adjustment of doors and drawers, base cabinets must be set plumb square and level. Use a carpenter's level and Hamilton leveling tool No. 950M400. With the cabinet set perfectly level, the drawers should move easily in and out and exhibit the self-closing feature. If drawer operation is not smooth, remove the drawer and check to see that each roller rotates freely. To free-up rollers, apply a drop or two of light oil or pack the bearings with grease. If the drawer binds, remove the drawer and spread the runs so that adequate clearance exists for the roller. If the drawer runs are spread to the maximum, move the back rollers on the drawer body closer together.

To adjust the drawer head position, raise or lower the drawer run at the front post of the cabinet, by loosening the screw and moving the run up or down. Additional adjustment is accomplished by moving the drawer head up or down, left or right. Loosen the head mounting screws, reposition the head and retighten the screws, or tap the drawer head with a rubber hammer.

**Note:** Each drawer is adjusted to a specific location within a certain cabinet. When drawers are removed, they must be replaced in the same location.

## Adjusting Steel Hinged Doors

When the hinged door is low or high in the opening of the unit, the door can be raised or lowered by loosening the screws that hold the hinges to the cabinet side. When all screws in the hinges are loose, the door can be raised or lowered enough so that the reveal is the same around the door. When this is accomplished, then all screws should be tightened. Check and readjust if necessary.

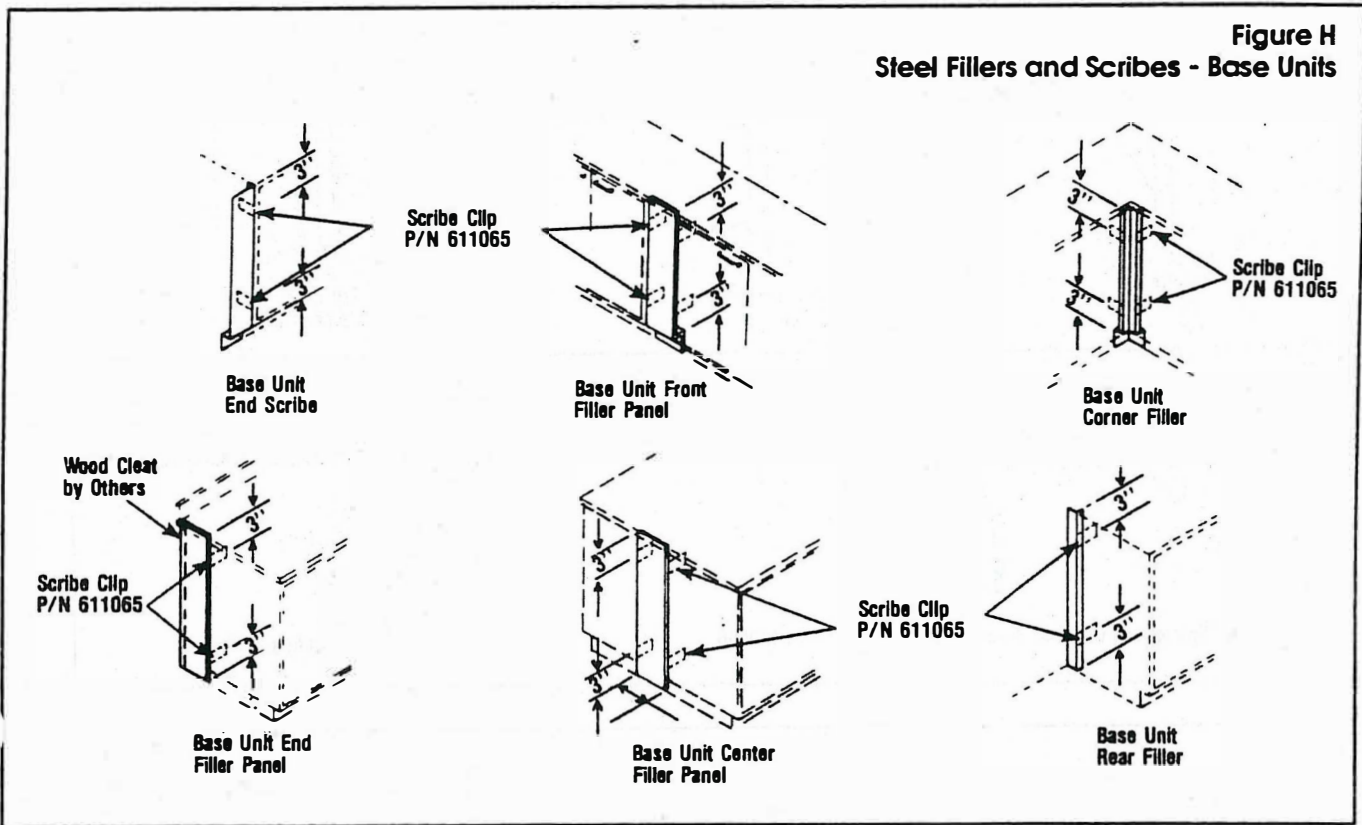
When a door is crooked or cocked in an opening, the door can be aligned by the use of a heavy piece of wire bent at one end to form a 90 degree angle. The bent piece about three inches long. Insert wire hook between leaves of top or bottom hinge when door is in open position. Close door slowly and hinge will open moving top or bottom of door towards jam. Do not close door all the way. Try the door in the opening after each attempt with the heavy wire until door is properly aligned in the opening.



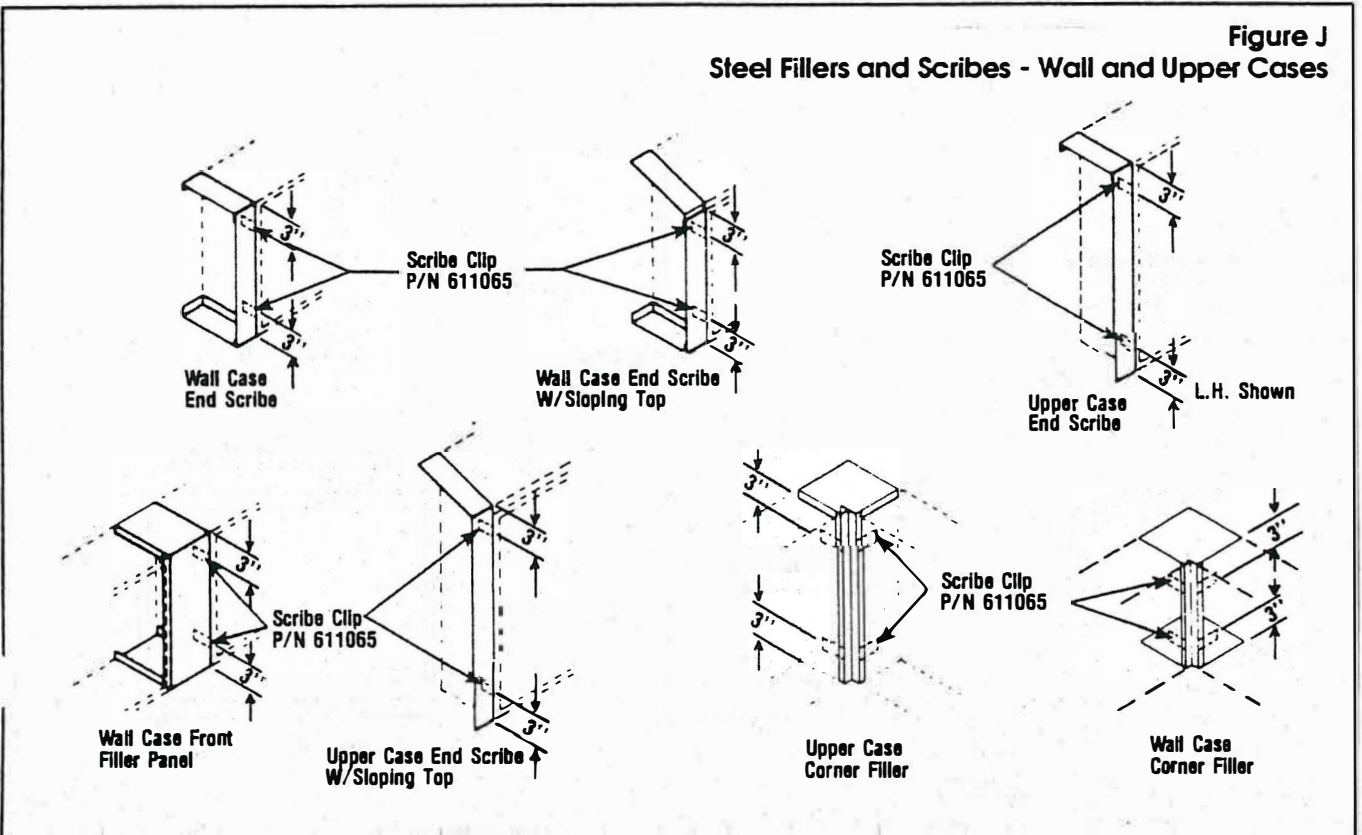
## Steel Filler and Scribe Installation

Scribe clips are attached to the steel unit with No. 6 - 18 x 3/8" PPHSDS Part No. 9440606. Slide filler or scribe under clips.

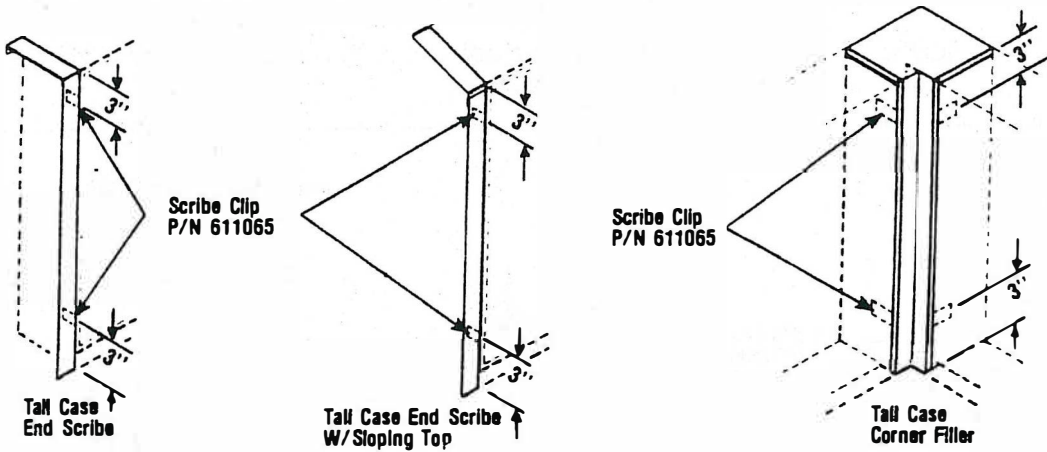
**Figure H**  
Steel Fillers and Scribes - Base Units



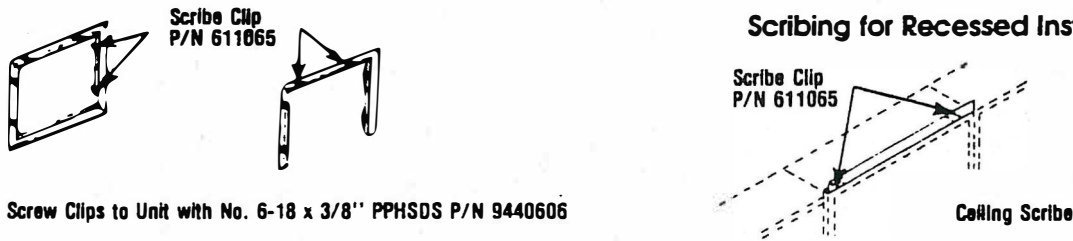
**Figure J**  
Steel Fillers and Scribes - Wall and Upper Cases



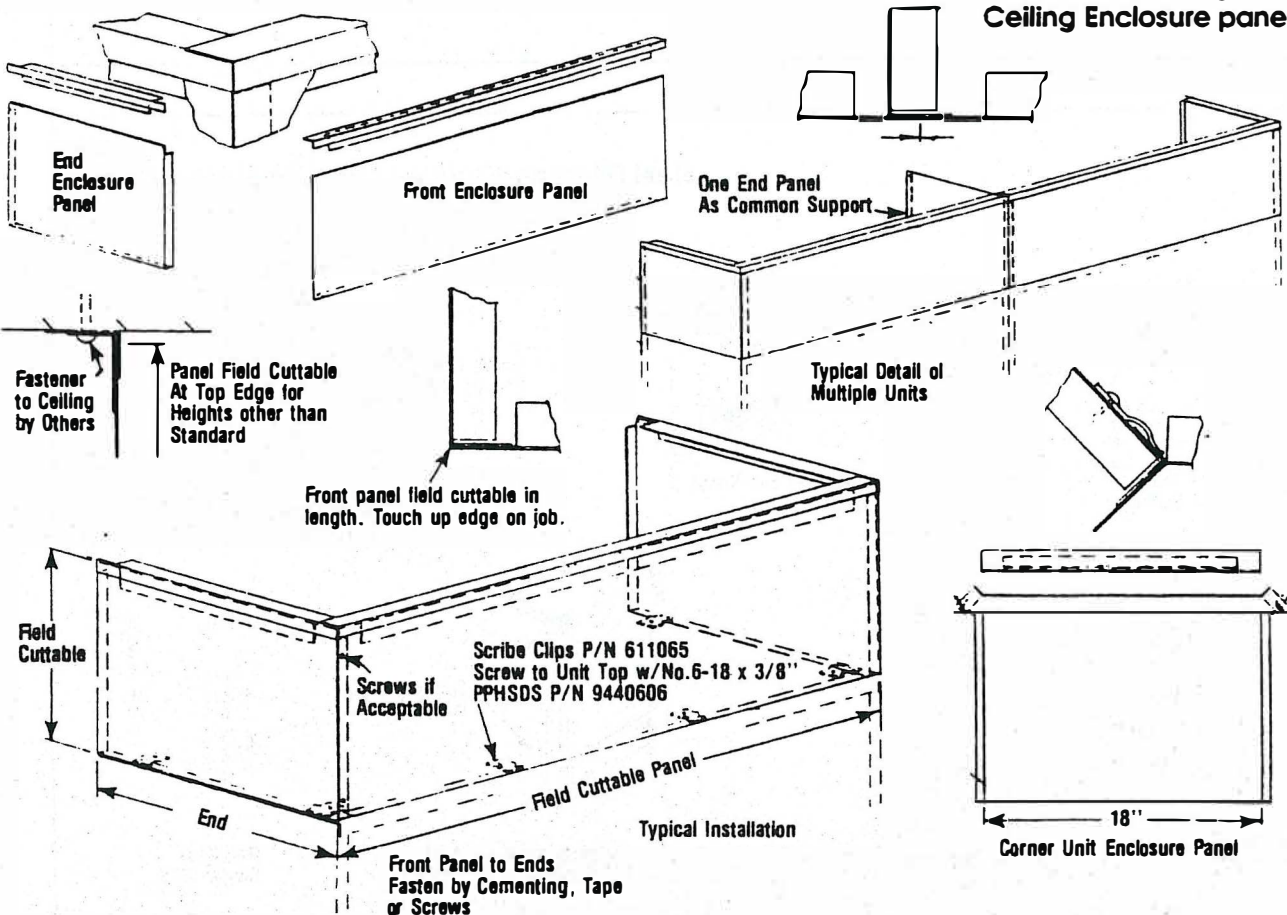
**Figure K**  
Steel Fillers and Scribes - Tall Cases

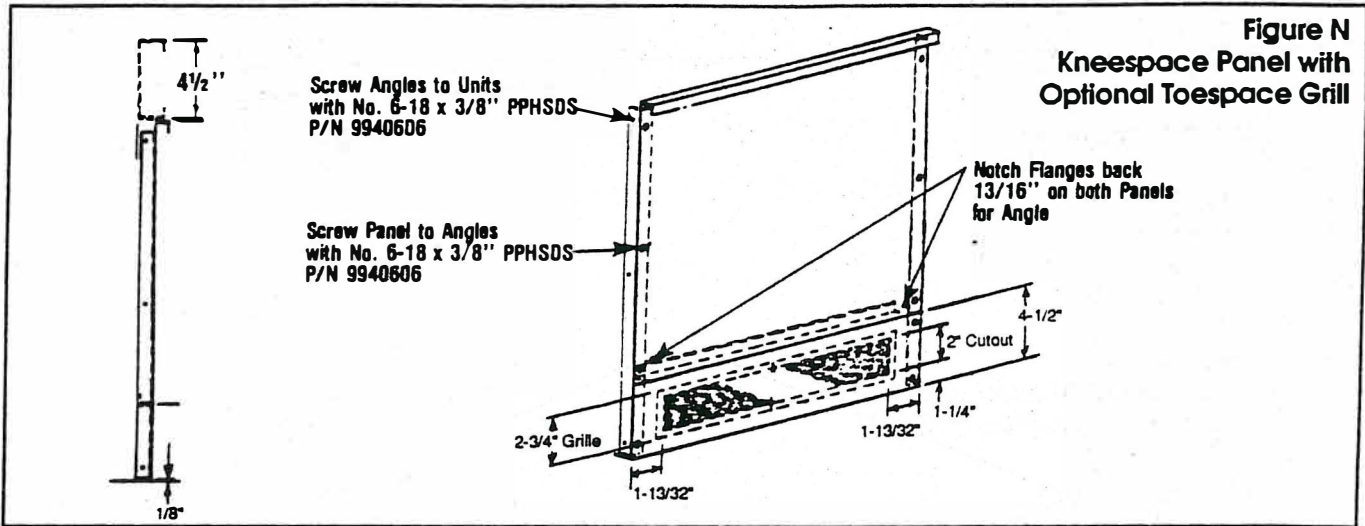


**Figure L**  
Scribing for Recessed Installations



**Figure M**  
Ceiling Enclosure panels

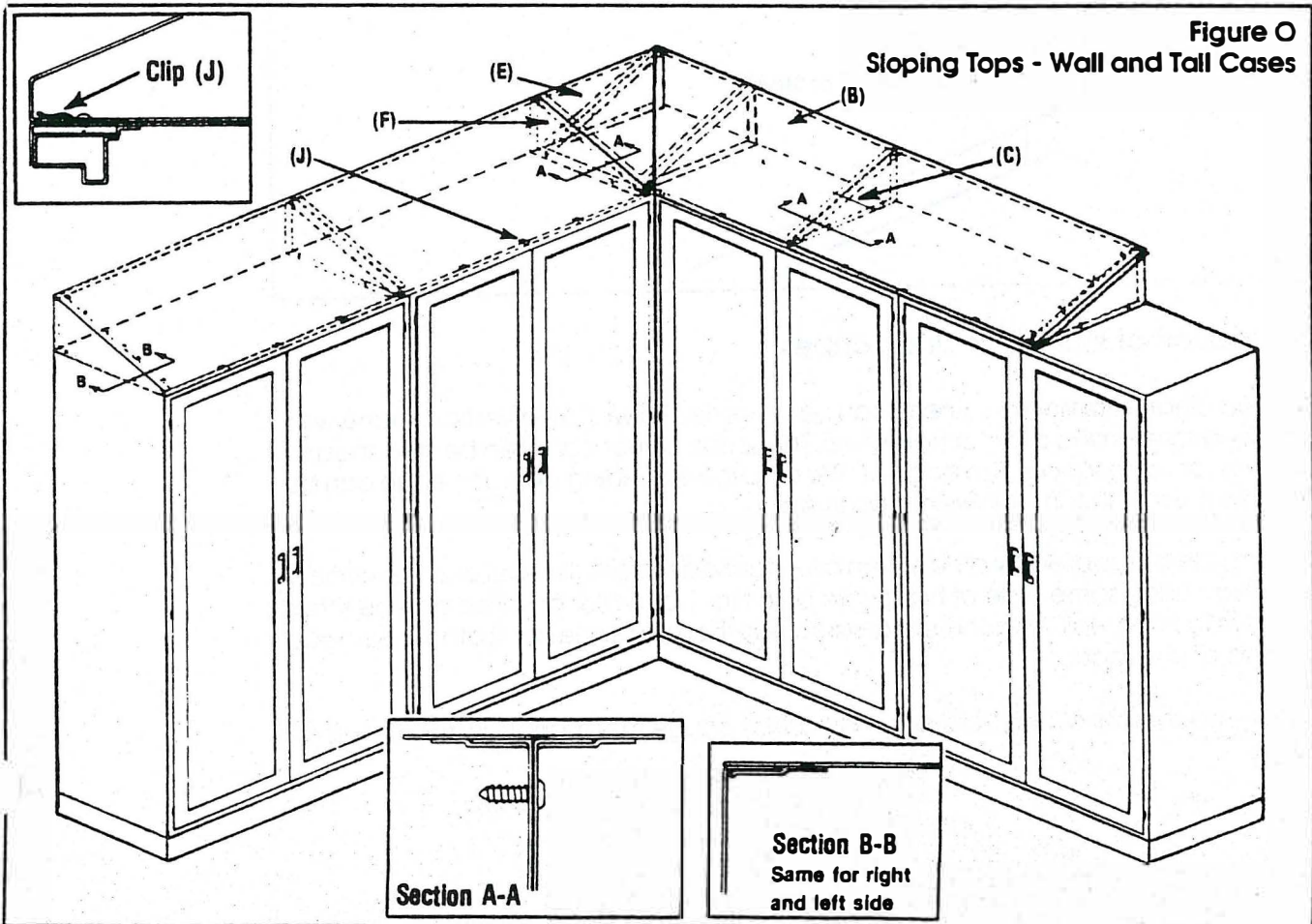




### Sloping Top Installation

Assemble corner filler (E) and splice support (F), see Figure O. Set entire corner assembly on top of previously installed sloping top panel (B). Make certain joint where corner filler (E) and top panel (B) meet is tight. Now drill two 3/32" diameter holes through top of cabinets and brackets (C), secure with screws from inside of cabinet up through cabinet top and into bottom flange of bracket.

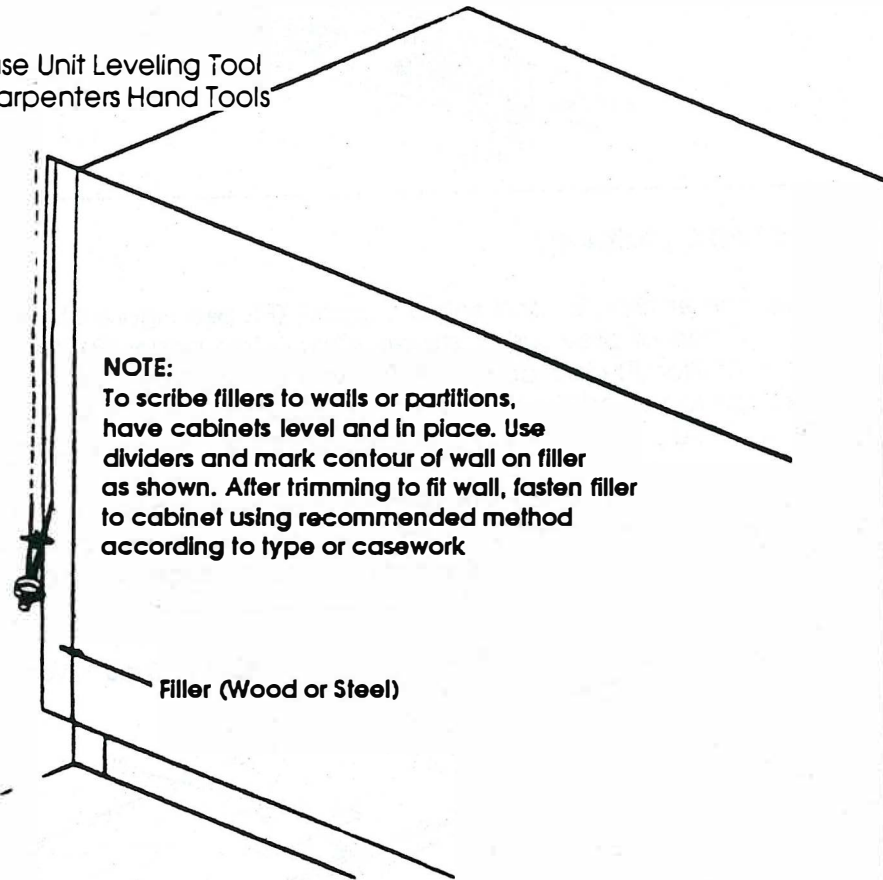
Proceed as indicated above in installing additional sloping top panels. Care must be taken to ensure that the clips (J) do not twist when moving any sloping tops into place so the front of the sloping top will remain flush to the face of the cabinets.



## Scribing Fillers to Walls Figure P

### Tools To Install Scribing

Drill Motor  
Screw Gun  
Chalk Line  
Sheet Metal Shears  
3' Level  
Square  
950M400 Base Unit Leveling Tool  
Standard Carpenters Hand Tools



### Installation of Flat Fillers and Scribes

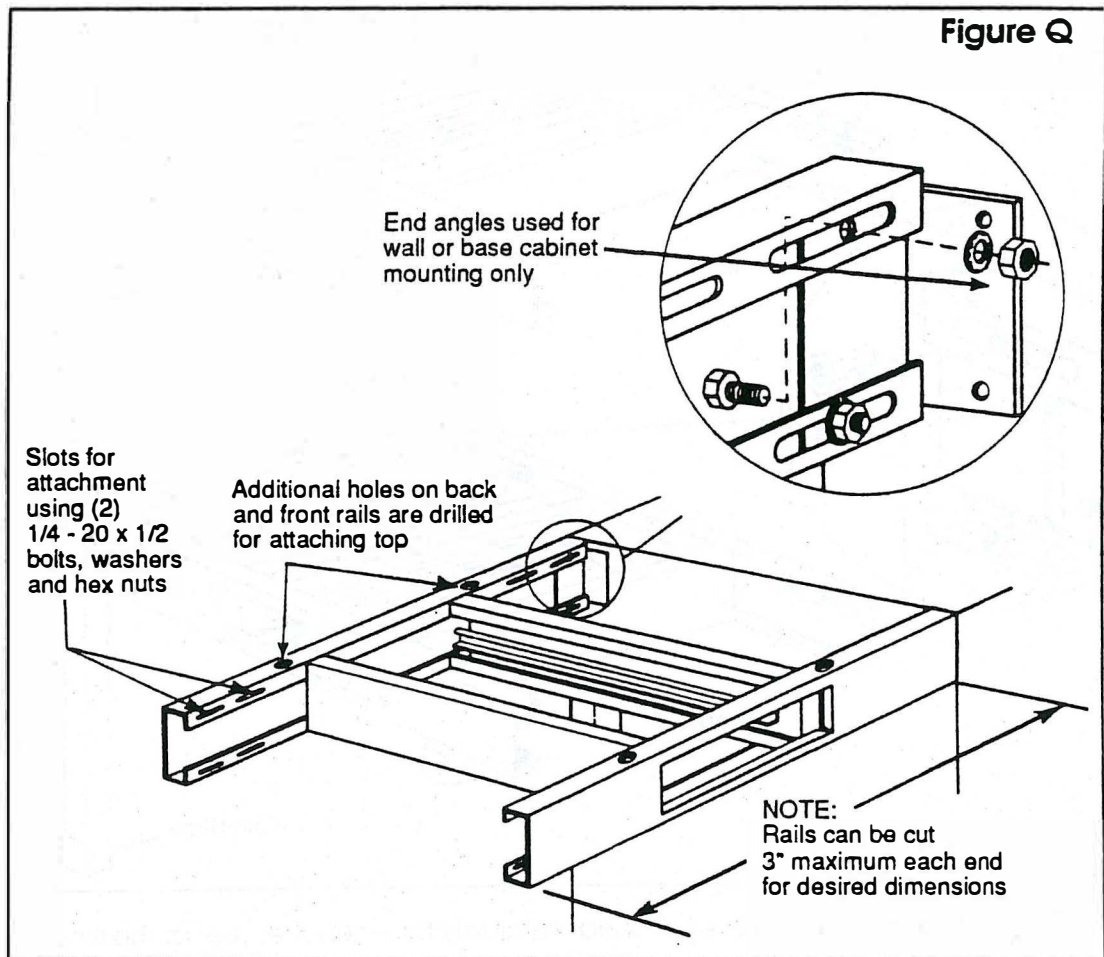
A wood cleat (supplied by others) can be attached to wall on a vertical plane with unit using screws and or other hardware. The scribe or filler can then be attached to same cleat using screws. The edge of filler or scribe extending over unit edge can be attached using silicon, screws or pop rivets.

A wood cleat (supplied by others) can be attached to both the wall and the vertical unit edge using same type of hardware as in No. 1 and filler or scribe can be fitted to unit edge and wall. Attachment of same can then be made into both wood cleats instead of unit face.

Same attachment as No. 1 or 2 but using a light gauge metal angle instead of wood cleat.

## Knee Space Frame Assembly

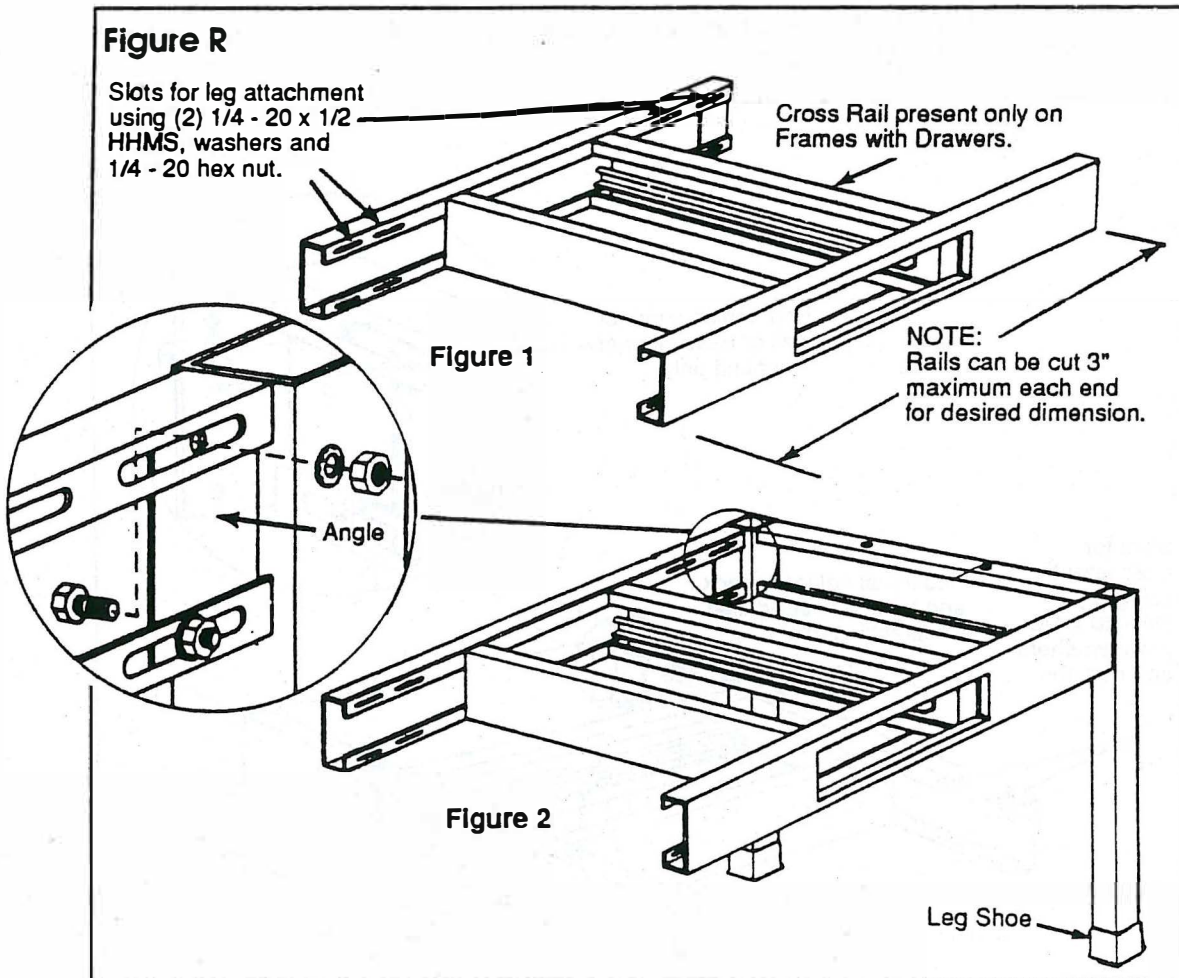
1. Determine length required and cut rails to size. A maximum of 3" can be removed from each end.
2. Install end angles on frame using nuts, bolts and lock washers from hardware kit.
3. Place frame upright and position in desired location. Mark angle mounting holes locations on wall or cabinet.
4. Drill 1/4" mounting holes in cabinet and mount frame to cabinet with 1/4 - 20 x 1/2 bolts, nuts and lock washers. If mounted to wall, drill pilot holes and attach with 1/4 - 10 x 1-3/4 lag bolts.



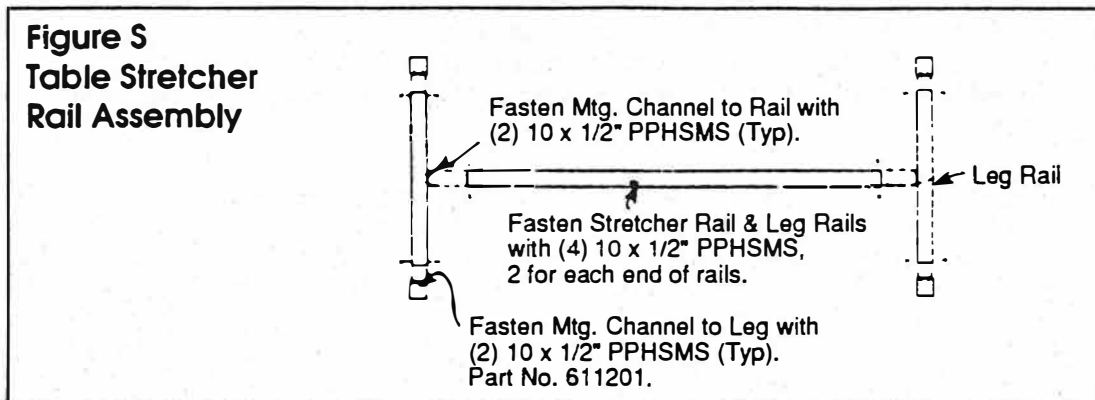
5. Install work surface. Wood tops may be attached with screws. Additional screw attachment to front and back rails requires rails to be drilled on 16" - 18" centers. Avoid interference with cross rails and drawers. Use epoxy cement to install stone tops.
6. Install and adjust drawer (if present) for proper operation.

## Steel Table Assembly

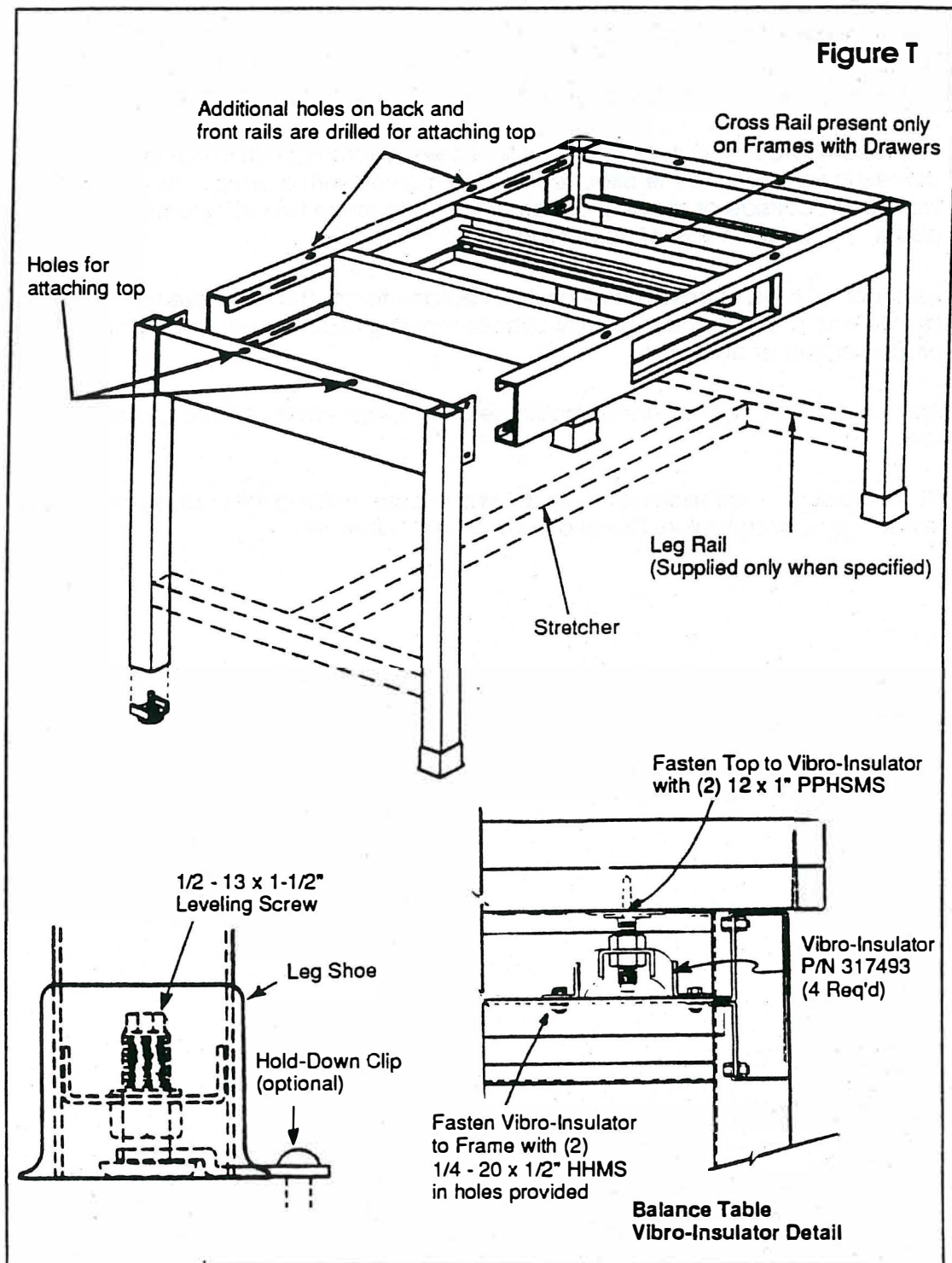
1. Identify frame top and bottom by drawer or drawer run position. Remove drawer and place top side down on padded surface. (End angles are not required for table assembly.)
2. Install leg and leg assemblies per Figure 1 and 2, using nuts, bolts and lock washers from hardware kit.
3. Slide angles into frames until solid contact is made of leg to frame end. Tighten nuts. Install leg shoes.



4. If leg rails and stretchers are furnished, install rails first, then stretcher at this time.



**Figure T**



5. Place table in upright position and attach top. Wood tops may be attached with screws using existing holes on end leg assemblies. Additional screw attachment to front and back rails requires rails to be drilled on 16" - 18" centers. Avoid interference with cross rails and drawers. Use epoxy cement to install stone tops.
6. Move table to final location and adjust leveling feet for dead level work surface.
7. Attach table to floor using hold-down clips, if specified.
8. Install and adjust drawer (if present) for proper operation.

## **Installation of Base Molding**

To insure adhesion of molding to toes pace, clean dust off back of base molding.

To properly wrap an outside corner, it is necessary for the base molding to be placed in position and the exact corner line marked with a pencil. Using a sharp knife, kerf backside of molding at corner line. Also make two additional slices about 1/4" on each side of corner line.

Heat corner area of base molding with a butane torch. This will make the molding flexible and alleviate the possibility of base molding cracking when wrapping around corner of base unit.

Apply base molding cement on backside of molding with a cement spreading tool.

Place molding in toe space area and, using a base molding roller, apply pressure to insure proper adhesion. Clean off any excess adhesive.



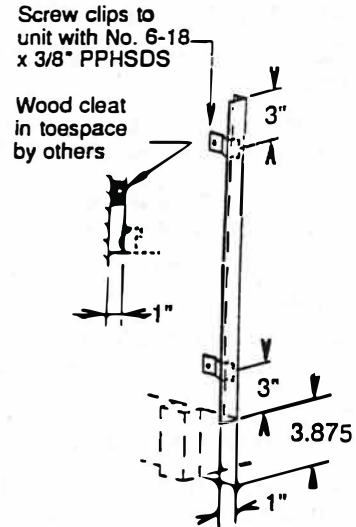
## Laboratory Casework Fillers

## Installation Instructions

**GENERAL NOTE:** All fillers can be used both Left Hand and Right Hand.

### 1. Base Unit Filler (1" wide) . Figure 1

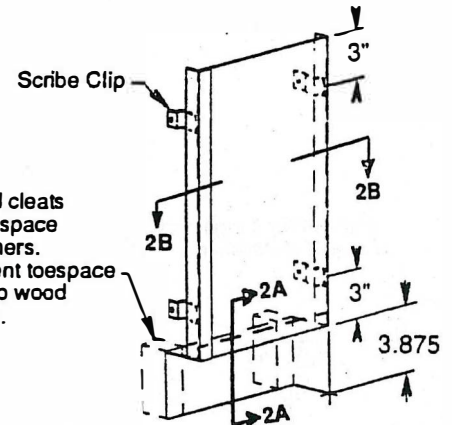
- Attach wall clips No. 611065 to end of base unit.
- Attach wood cleat (by others) in toe space.
- Snap filler in place.
- Move unit against wall.



**Figure 1**  
Base Unit End Filler

### 2. Base Unit Filler (6" wide or wider). Figure 2, Section 2A & 2B.

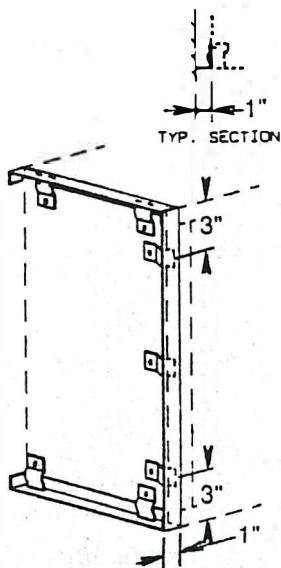
- Attach wall clips No. 611065 to end of base unit.
- Locate and attach filler clips No. 611065 to the wall.
- Snap angle assembly (two angles welded together) into clips on the wall.
- Attach toespace wood cleats (by others) to base unit and wall.
- Cut toespace panel to correct width and cement to wood cleats.
- Cut filler panel to correct width (1/4" less than opening). See Section 2B.
- Apply 1/8" bead of Silicon full length of flange on toespace panel. See Section 2A.
- Slide cut edge of panel into double angle on the wall and snap flange on other edge of filler into clips on base unit. See Section 2B.
- Press panel securely into Silicon and tape in place until the Silicon sets.



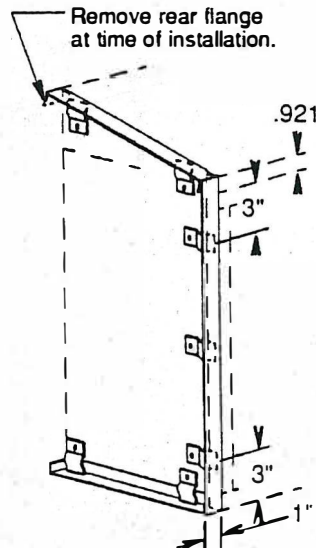
**Figure 2**  
Base Unit Front Filler

### 3. Wall Case Filler (1" wide). Figure 3 & 4.

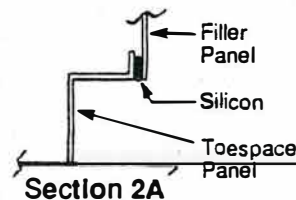
- Attach filler clips No. 611065 to end of wall case.
- Snap top and bottom fillers in place on wall case.
- Snap front filler in place on wall case.
- Hang wall case with filler against wall.



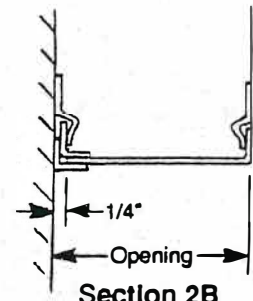
**Figure 3**  
Wall Case End Filler



**Figure 4**  
Wall Case End Filler with Sloping Top



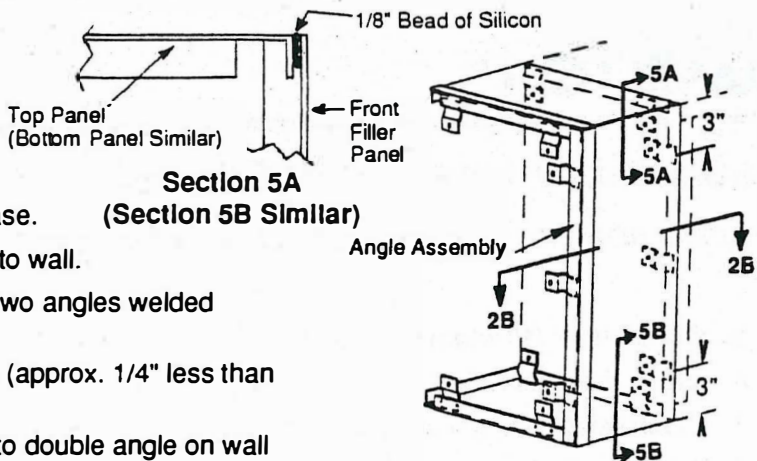
**Section 2A**



**Section 2B**

**4. Wall Case Filler (6" wide or wider)  
Figure 5 & 6 and Sections 5A, 5B, & 6A.**

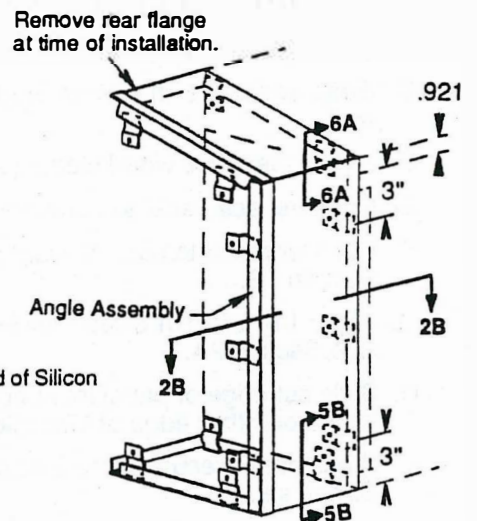
- A. Attach filler clips No. 611065 to end of case. (Section 5B Similar)
- B. Locate and attach filler clips No. 611065 to wall.
- C. Snap top and bottom angle assemblies (two angles welded together) into clips on wall.
- D. Cut top and bottom fillers to correct width (approx. 1/4" less than opening).
- E. Slide cut edge of top and bottom fillers into double angle on wall and snap flange on other edge of filler into clips on wall case.
- F. Snap front vertical angle assembly (two angles welded together) into clips on wall.
- G. Cut front filler panel to correct width (approx. 1/4" less than opening).
- H. Apply 1/8" bead of Silicon full length on front flange of top and bottom panels. See Section 5A, 5B & 6A.
- I. Slide cut edge of filler into double angle on wall and snap flange on other edge of filler into clips on wall case. See Section 2B.
- J. Press top and bottom edge of front filler panel into Silicon and tape in place until the Silicon sets.



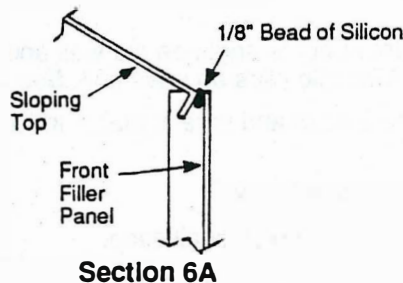
**Figure 5  
Wall Case End Filler**

**5. Upper Case Filler (1" & 6" wide). Figures 7, 8, 9 & 10.**

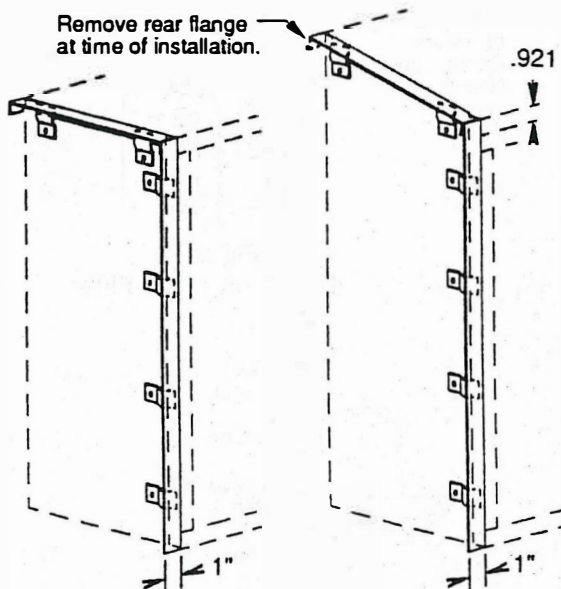
- A. Similar to wall cases (Steps 3 and 4) but without bottom filler.



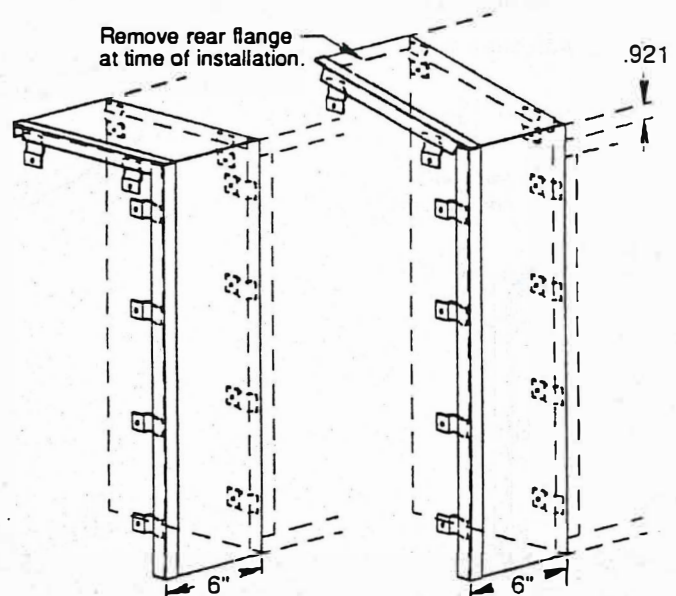
**Figure 6  
Wall Case End Filler  
with Sloping Top**



**Section 6A**



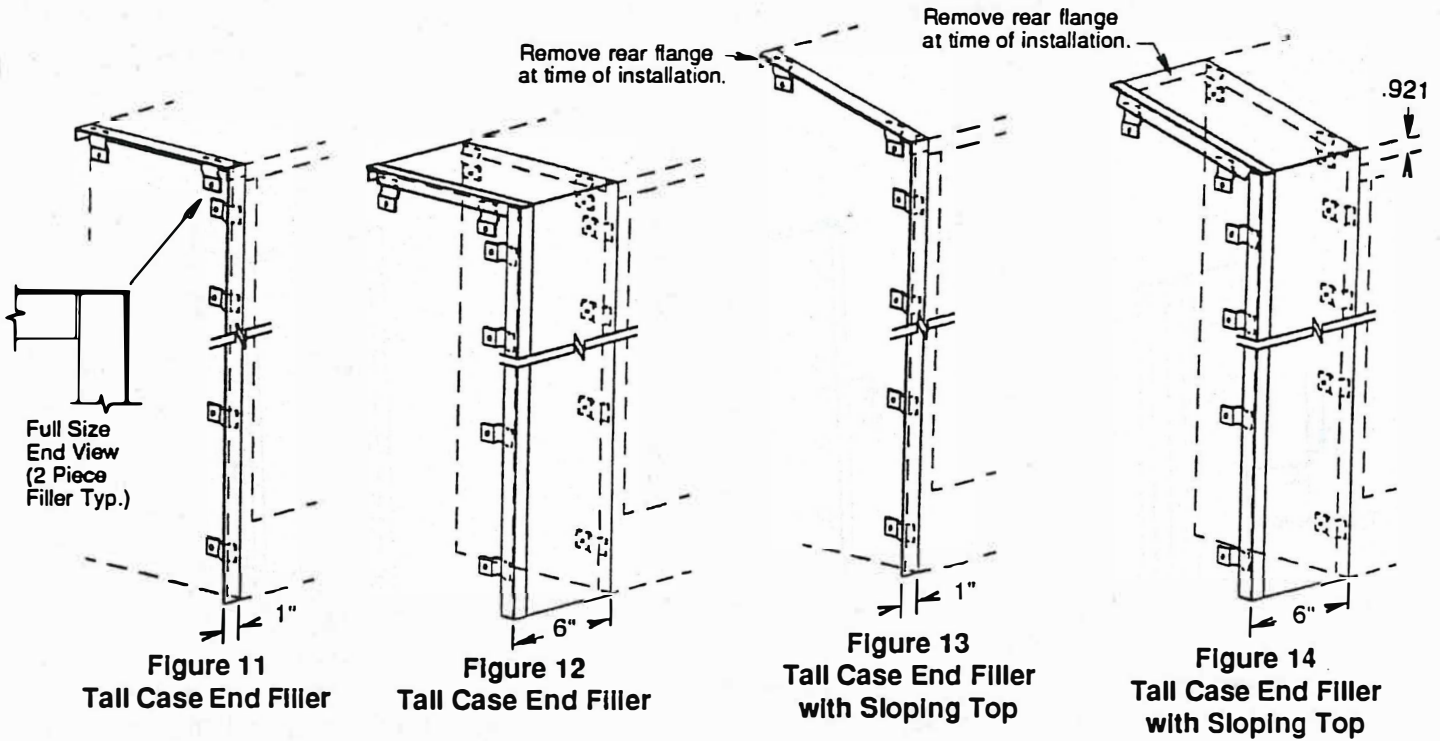
**Figure 7  
Upper Case End Filler**      **Figure 8  
Upper Case End Filler with  
Sloping Top**



**Figure 9  
Upper Case End Filler**      **Figure 10  
Upper Case End Filler  
with Sloping Top**

**6. Tall Case Filler Without Toespace (1" & 6"). Figures 11, 12, 13 & 14**

A. Similar to wall cases (Steps 3 & 4) but without bottom filler.



**Figure 11**  
Tall Case End Filler

**Figure 12**  
Tall Case End Filler

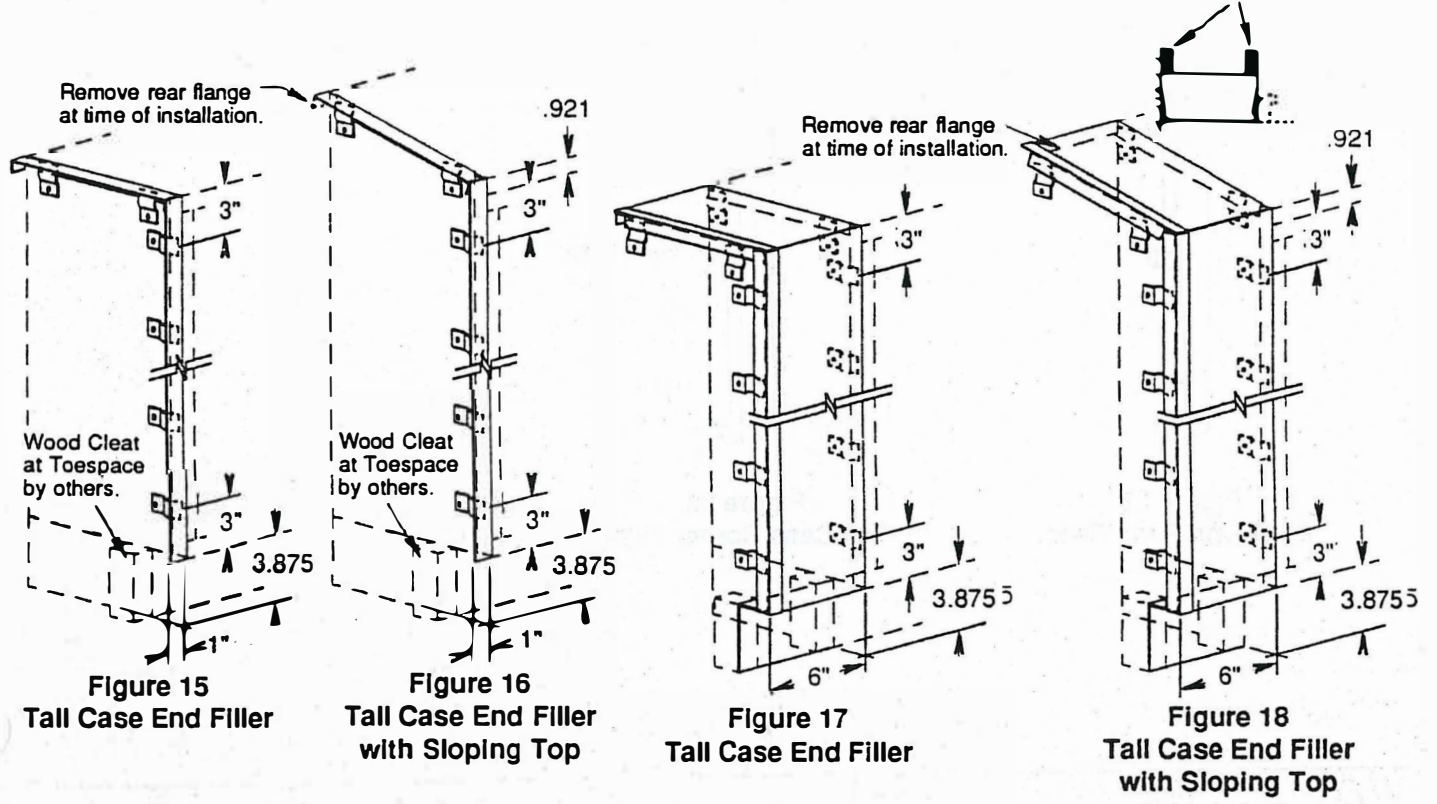
**Figure 13**  
Tall Case End Filler  
with Sloping Top

**Figure 14**  
Tall Case End Filler  
with Sloping Top

**7. Tall Case Filler With Toespace (1" & 6"). Figures 15, 16, 17 & 18.**

- A. Install top filler, similar to wall case, (Steps 3 & 4).
- B. Install front filler, similar to base unit, (Steps 1 & 2).

Two Wood Cleats  
at Toespace by  
Others. Cement  
Toespace Filler  
to Wood Cleats.



**Figure 15**  
Tall Case End Filler

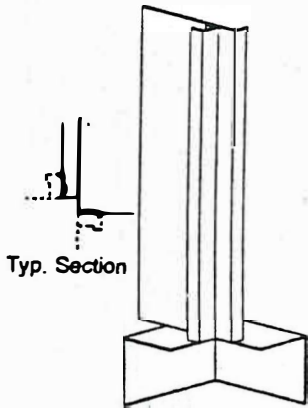
**Figure 16**  
Tall Case End Filler  
with Sloping Top

**Figure 17**  
Tall Case End Filler

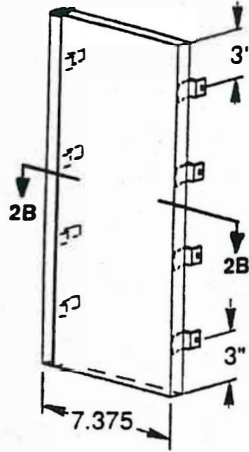
**Figure 18**  
Tall Case End Filler  
with Sloping Top

**8. Other Miscellaneous Fillers.**

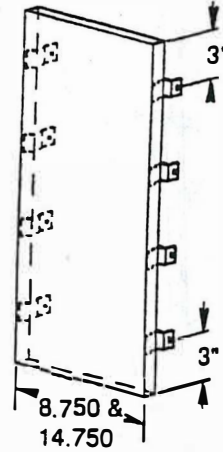
A. See Figures 19, 20, 21, 22 and 23.



**Figure 19**  
Base Unit Corner Filler



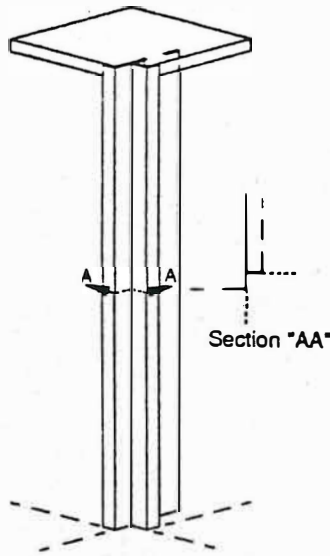
**Figure 20**  
Base Unit Wall End Filler Panel



**Figure 21**  
Base Unit Center End Filler Panel



**Figure 22**  
Base Unit Rear Filler



**Figure 23**  
Tall Case Corner Filler