

Assembly Instructions

by Clean Rooms International

Procedure for Erecting
CLEAN ROOMS INTERNATIONAL, INC.
Softwall Cleanroom (SWCR)

OVERVIEW

1. To assemble your Softwall Cleanroom you will need the following tools: Tape measure, level, chalkline, c-clamps, 9/16 socket wrench, 9/16 open/box end wrench, 5/16 socket wrench, step ladder and forklift. In most cases it is recommended that a minimum of three people be involved in the actual assembly process.
2. Review assembly drawing and detail sheets and familiarize yourself with general appearance and construction method of the finished SWCR. Your installation instruction package should include the following assembly drawing and detail sheets.
_____Assembly drawing _____Curtain detail drawing
3. Inventory all parts received. Check the number of parts shipped against the parts list supplied on assembly drawing. Arrange structural components and various hardware items within a reasonable distance in preparation for assembly. NOTE: Each structural component is marked with a number that corresponds with the number on the assembly drawing. Corner and intermediate legs typically are interchangeable and are not marked.

LAYOUT

4. Mark out the floor where the SWCR will be erected. The overall dimension shown on the assembly drawing refers to the outside of the legs. Baseplates, curtains or gussets with fasteners if applicable, extend beyond this dimension. After corners of the room layout are established and verified to be square, use the chalkline to snap a line between the corner marks. This line will be used to align any intermediate legs on the SWCR.

PERIMETER ASSEMBLY

5. The first step in the assembly process is to complete the perimeter of the SWCR. Begin assembly by supporting one of the perimeter beams at a level approximate to the finished height of the SWCR. Identify the corner leg that corresponds to one of the ends of the perimeter beam with 3/8-16 x 1 bolts and washers as shown on accompanying assembly detail sheet. Snug up bolts but do not tighten until entire assembly is completed. Install corner leg on opposite end of perimeter beam. NOTE: If the room has a two or more piece perimeter beam it will be necessary to install one or more of the intermediate legs to support the structure prior to installing the second corner leg. After both corner legs are installed, retrieve the next perimeter beam which will be fastened perpendicular to the beam that was just installed. Make sure that the numbers at the corner are the same and correspond to the assembly drawing. Continue with installation of the perimeter beams and legs as stated above until entire periphery is completed.
6. Upon completion of perimeter structure, including all intermediate legs, the joints can not be lined up and securely fastened. NOTE: At this point all the legs should line up with the chalkline marks, legs should be plumb and structure should be level and square. It may be necessary for you to shim the legs so that the room is level.

CEILING SUPPORT & T-BAR

7. Most rooms will have one or more 2 x 6 I-Beams used to support the ceiling system. These I-beams are marked with a number on each end corresponding with a number on the perimeter beams. The I-Beams are installed using the #10 x 3/4 screws supplied, (4) on each end. NOTE: On larger rooms there may be one or more 3 x 12 I-beams that will need to be installed prior to installing the 2 x 6 beams. Refer to assembly drawing and detail sheets for clarification.
8. After the ceiling and support beams are installed, the 4' Cross T can be put in place. Place the Cross T to sit on the perimeter 1 x 1 angle and on the edge of the 2 x 6 I-Beam. Cross T should be installed in 24-1/2" increments. Gasket can not be installed around the perimeter of each 2 x 4 grid opening. A continuous loop of gasket in each opening is preferred to four individual pieces.

CEILING COMPONENTS

9. After T-Bar and gasket is installed, the filter modules, lights and blanks can be set in place. The assembly drawing will illustrate a reflective ceiling plan showing the recommended location for each of these components. If the room has two or more 2 x 6 support beams you will notice that one side of the beam has a notch approximately 26" long in the upper flange, close to the center of the beam. This is where the light fixtures and filter modules need to be installed. Place one end of the module or light down into the beam that is not notched and carefully guide the module through the notched portion of the opposite beam. Slide the filter module or light fixture down between the beams to the respective locations shown on the ceiling plan. After all modules and lights are installed per the ceiling plan, install the ceiling blanks in the remaining openings.

CURTAIN

10. Several types of curtain, wall materials and configurations are available for CLEAN ROOMS INTERNATIONAL Softwall Cleanrooms. Because of the variations, a separate detail sheet will accompany your individual instruction package which will pertain to the type of curtain and/or wall system on your SWCR.
11. Standard curtain panels are 16 mil with velcro attached to the sides and top. Clean the legs and upper perimeter rails with a non abrasive cleaner such as Mr. Clean or 409. Peel off the protective seal on the velcro and attach the velcro to the legs and perimeter rails. Allow the velcro adhesive to cure for twenty four (24) hours. After the adhesive has cured, attach the curtain panels in the proper locations.

CAUTION: If the curtains are installed before the adhesive is properly cured, the curtains might pull away from the legs and perimeter rails.

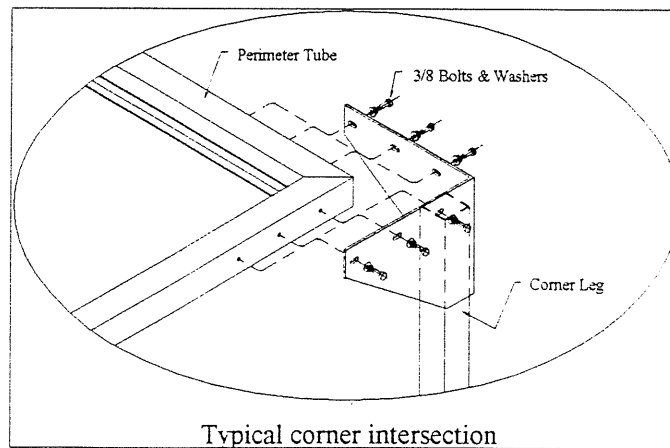
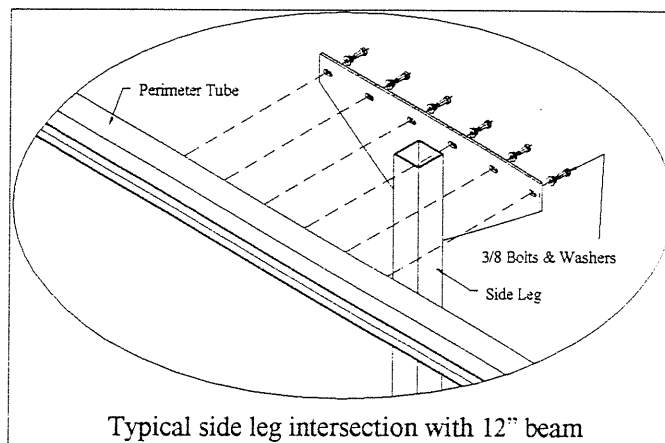
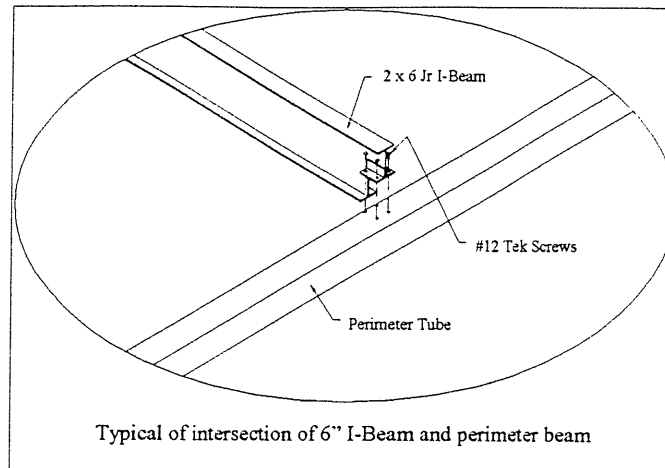
CONTROL/MONITOR PANELS

12. Control panel and/or monitor panel if supplied with your SWCR will have a separate detail sheet showing all pertinent information required for installation.

If you need further assistance or are missing any of the detail sheets or assembly drawing, please call us at (616) 452-8700. Please have the CLEAN ROOMS INTERNATIONAL Project Number ready as shown in the upper right hand corner of the packing slip.

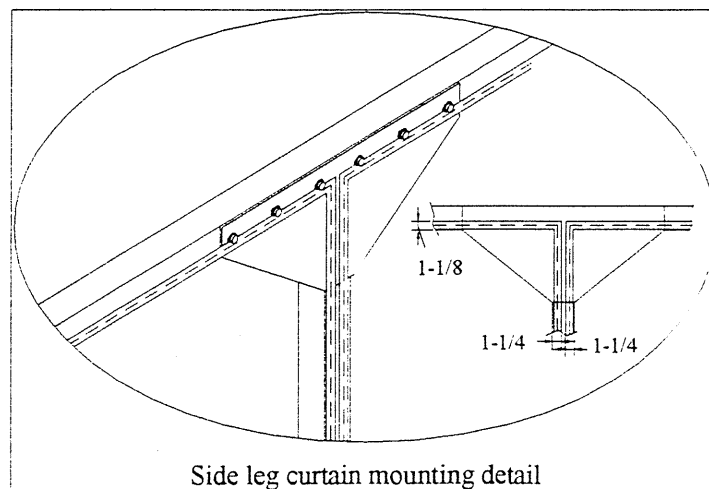
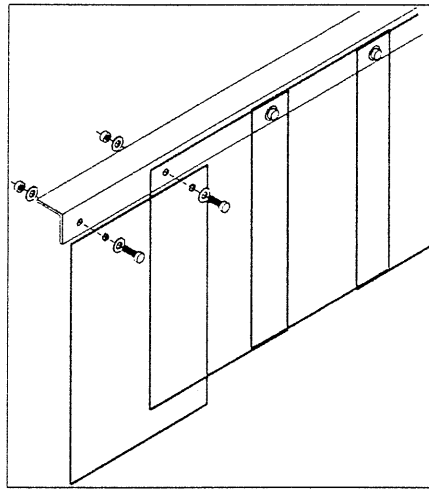
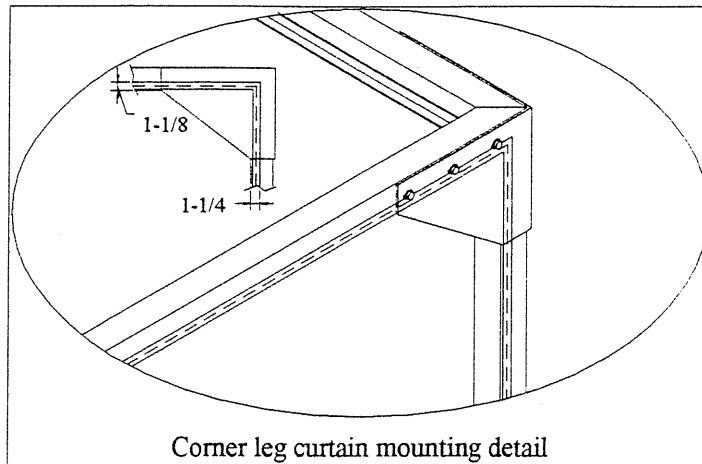
Frame Construction

by Clean Rooms International



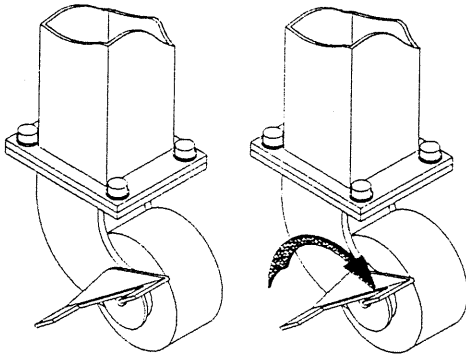
Typical Curtain Detail

by Clean Rooms International



Castor Option

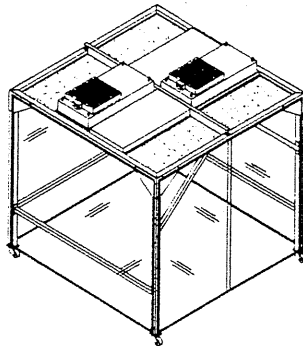
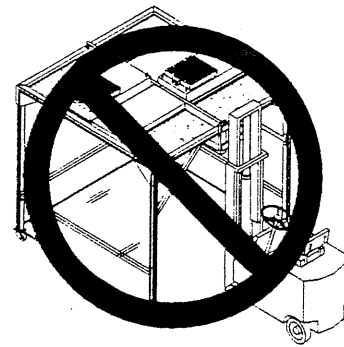
by Clean Rooms International



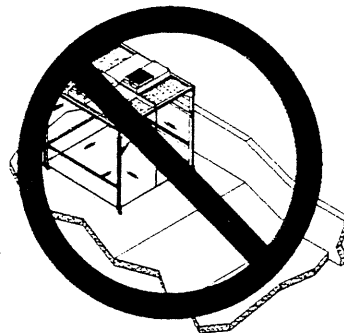
Typical Illustration

Moving a portable Softwall Cleanroom (SWCR) may involve some risk and danger to the equipment and personnel. Please observe the following suggestions for safely moving a SWCR.

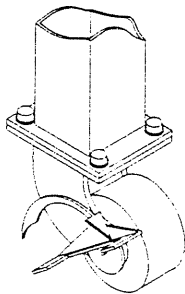
1. When moving a portable SWCR, do not use a fork lift, portable hoist, pallet jack or other lifting devices. Use at least one person per leg when moving the SWCR.



2. Do not allow personnel to be inside the SWCR during the moving process.



3. Portable SWCR's are designed to roll on level surfaces. Do not roll down a ramp or over bumpy surfaces.



4. Portable SWCR castors are equipped with brakes. Set the brake or lock when in a stationary position.