

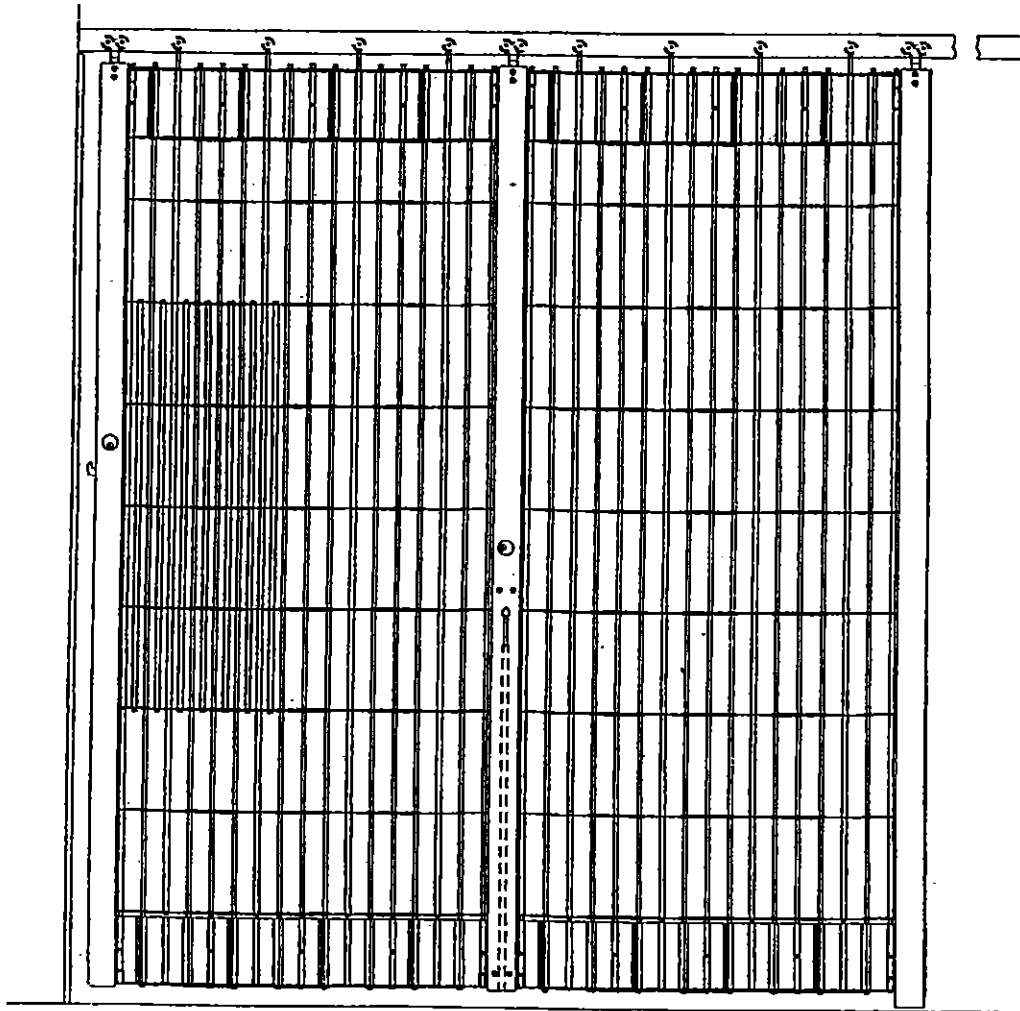
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# CORNELL IRON WORKS, INC.

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## Operation & Maintenance Manual

Products: Side Folding Grilles and Closures



**CORNELL**  
SAFE AND SECURE

For more information...  
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Please Call 800-233-8366  
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Crestwood Industrial Park, Mountaintop, PA 18707

## Installation Instructions for Side Folding Grilles and Closures

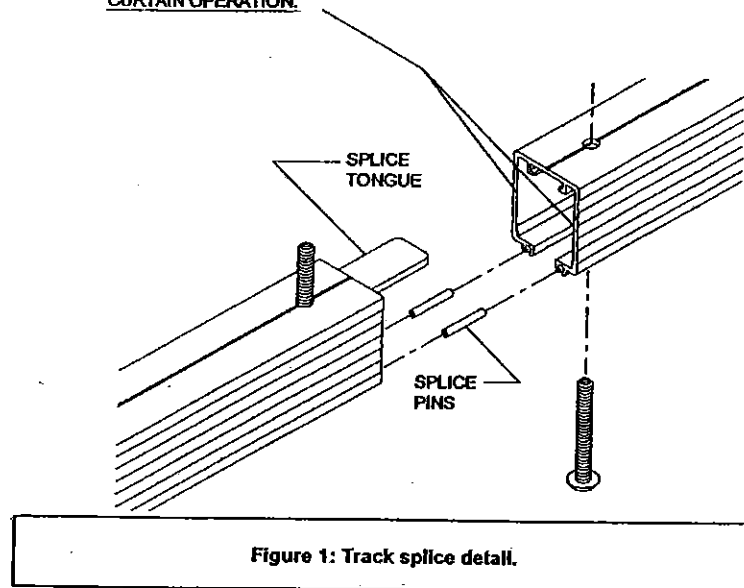
### Note:

Read these instructions carefully before beginning installation. Refer also to the shop drawings provided for general layout of the opening and any special requirements to assure proper installation and operation.

### 1. Track Installation

Track sections must be installed straight and level as shown on the installation drawing provided. Track fasteners are located at 12" on center maximum in pre-drilled holes in track sections, or 6" on center at stack section. All track-mounting holes must be used to properly secure track to mounting surface and support curtain weight especially at the stack areas. All track splices must be properly aligned by using track splice pins and tongues supplied with the hardware. These parts are essential for proper track alignment and smooth curtain operation, see figure 1. Track sections should be mounted starting with radius sections (when supplied) or straight sections in the stack or pocket area and working outward. Shim track if necessary as sections are installed to maintain level across the opening. Follow shop drawings carefully when mounting track sections to assure proper clearance of curtain sections past any obstructions (columns, walls, counters etc.) in the opening. Mark and drill holes for mounting final section of track but do not install until after the curtain assembly is fed into track. Final section may need to be trimmed to length in order to fit the remaining portion of the opening.

NOTE:  
WHEN SPLICING TRACK AT RADIUS SECTIONS, FILE DOWN  
THESE EDGES ON BOTH SIDES OF SPLICE FOR SMOOTH  
CURTAIN OPERATION.



## 2. Curtain installation

Uncrate and unwrap each curtain section and determine the location of each section by matching the tags on the sections to the shop drawings, see figure 2. The curtain assembly (when it consists of more than one curtain section) may be shipped split into individual sections that are fastened together after they are installed into the track. Carefully raise the first curtain section and feed the roller assemblies into the open end of the track being sure they are not twisted. Check each curtain section for ease of operation before installing the next section. Raise and install the next section of curtain and fasten it to the first section (if required) according to the details in these instructions. **Note:** The connector pieces and upright members must be drilled at the time of installation to insure proper line up of the individual parts.

After all sections are in position in the track the final section of track can be fastened in place.

**Note:** It is necessary to insert splice alignment tongue and pins completely into one portion of track and slide them into place with a screwdriver or similar tool to line up the final section of track.

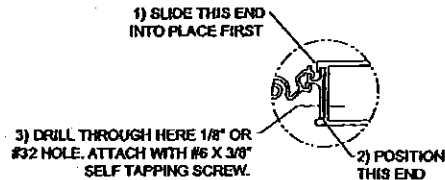
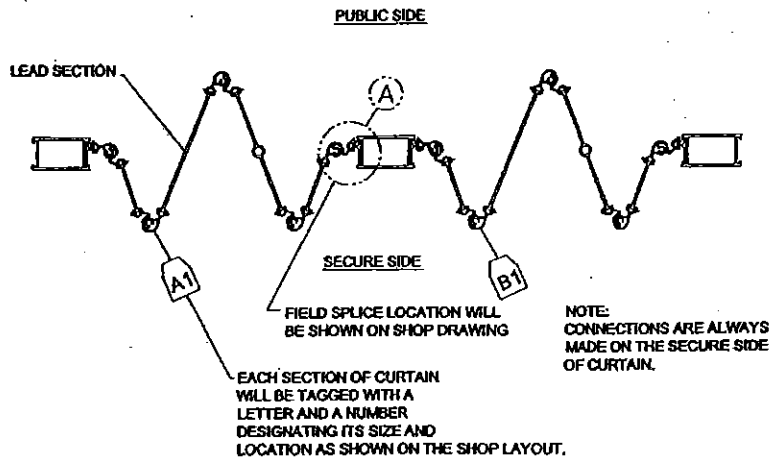


Figure 2: Field connection of curtain sections. Note: This feature may not be supplied on all curtain sections.

## 3. Strike channel mounting

Locate wall mounted strike channel (when supplied) and mark wall for fasteners, checking to see that the strike is plumb and level for proper nesting of the locking end member. For units with locking end members 1 1/2" above the floor, centerline of the cutout should be 46 7/16" above the floor. Mark the location of the strike cutout on the wall and drill or cut out wall. Wall cutout should be approximately 1" deep, 3/4" wide and 3/4" higher than the cutout on the strike channel in order to clear the hook bolt of the lock assembly. This step is not necessary on units with bi-parting construction.

**Note:** be certain that the strike channel is mounted securely to a stud or other structural member in the wall.

#### 4. Floor strike mounting for drop bolts

##### Single side folding curtain assemblies:

Extend curtain fully and lock end member into the strike channel at the wall. Work to nearest vertical upright member pulling slack out of first section of curtain. Drill holes in the floor as shown, mount the floor strike and set the drop bolt. Repeat this procedure along the full length of the curtain until all drop bolts are set.

##### Bi-parting curtain assemblies:

Extend both ends of the curtain sections to the center of the opening or the location shown on the shop layouts. Leave approximately the same amount of curtain projecting into the pockets or stacking areas on both ends. Lock lead members together with the hook bolt and drill holes in floor to locate the floor strike. After mounting the floor strike set the drop bolt. Work backward from bi-part to each end of curtain, pulling slack from each section and locating floor strikes at each intermediate member where supplied.

**Note:** when performing the above procedure the sections of curtain should not be pulled so taut as to prevent easy operation of the locks.

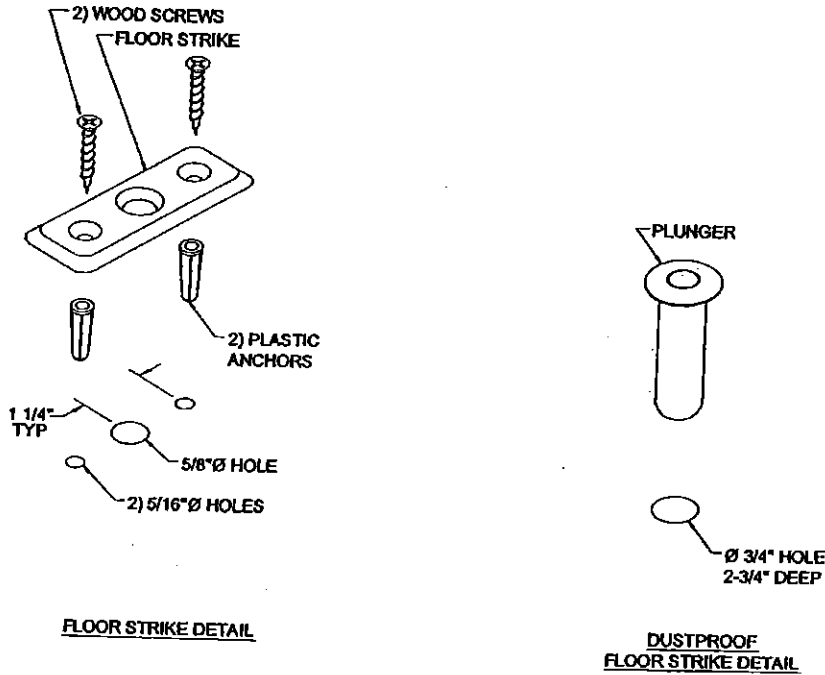
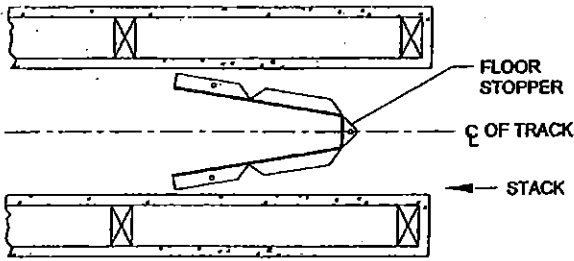


Figure 3: Floor strike details.

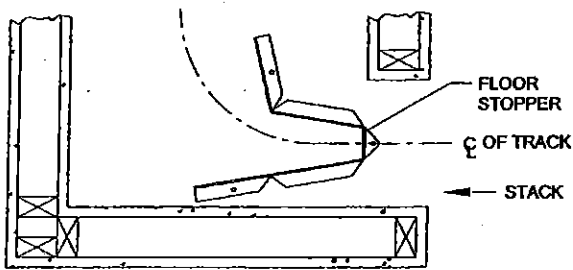
**5. Floor and track stopper mounting**

With all drop bolts still locked in place, feed slack into pocket or stack area. Determine location of floor stopper; bend if necessary to conform to pocket and to allow minimum of side to side movement of trailing end member. Mount to floor, see figure 4. Next; mark location of track stopper, unlock end member and all drop bolts and stack curtain into pocket or stack area to allow access for drilling and mounting track stopper, see figure 5.

**Note:** Be certain that tension in curtain of trailing end section is correct before mounting stoppers. End member should hang plumb in the opening and contact stoppers at the same time.

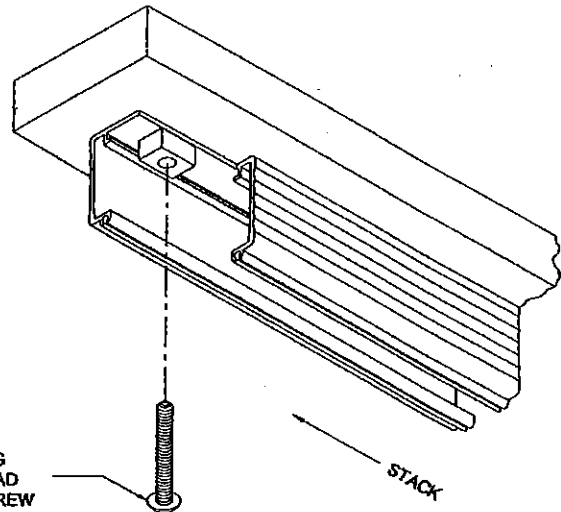


**STRAIGHT POCKET**



**RADIUS POCKET**

**Figure 4: Floor stopper installation. Note: Locate floor stopper back far enough in pocket to hold trailing end member firmly and keep curtain taut when unit is in the locked position.**



**Figure 5: Track stopper installation.**

**6. Adjustable trailing end member stopper**

All curtains supplied with floor mounted stoppers are also equipped with an adjustable stopper on the trailing end member. This stopper is normally stored up inside the end member. When unevenness in the floor or track-mounting surface allows the upright to bypass or be worked out of the floor mounted stopper this stopper should be used. To operate loosen the self-clinching nut at the bottom of the upright on the store side of the curtain. Drop the stopper angle down to the desired location and re-tighten the nut so the teeth on the underside bite firmly into the upright and hold the stopper firmly in place. Refer to the detail sheet in these instructions for additional information.

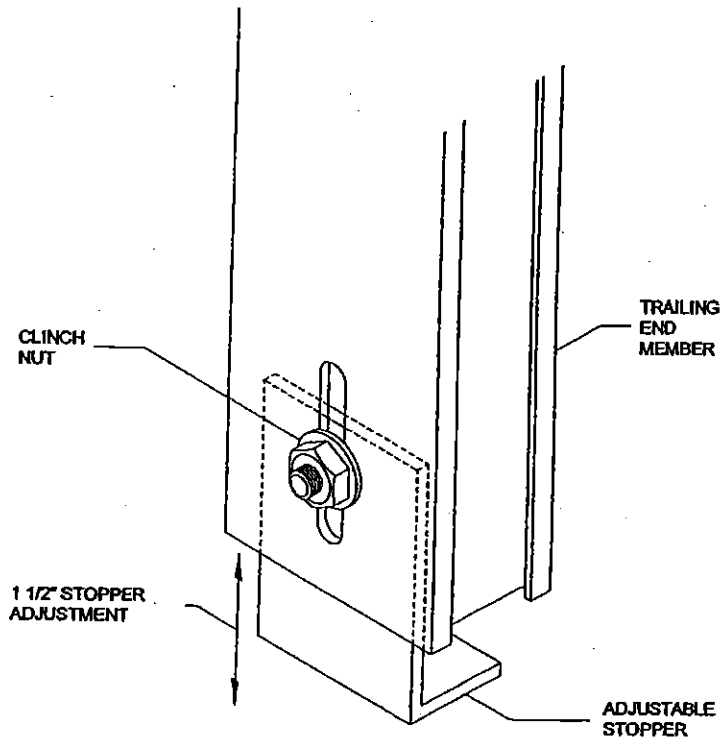


Figure 6: Adjustable trailing end member.

### 7. Intermediate member drop bolt adjustment

The drop bolts on these units are pre-adjusted at the factory to stop flush with the bottom of the upright member. When uneven floor or other conditions require additional drop bolt throw, the following adjustment can be made. Refer also to the detail drawing in these instructions, see figure 7.

#### To adjust the drop bolt:

1. Turn the key and unlock the member to bring the lock knob up to the top of the slot and expose the set screw in the drop bolt.
2. Loosen set screw in the drop bolt to allow bolt to turn freely around the lock rod.
3. Push down on the lock knob to expose the lock bolt at the bottom of the member.
4. Grasp lock bolt at bottom of member and rotate in the direction of arrow shown on drawing until required length is obtained. **Do not adjust bolt more than 1" downward.**
5. Return the knob to the top of the slot and re-tighten the set screw into the groove in the lock rod only to avoid damaging the threads.

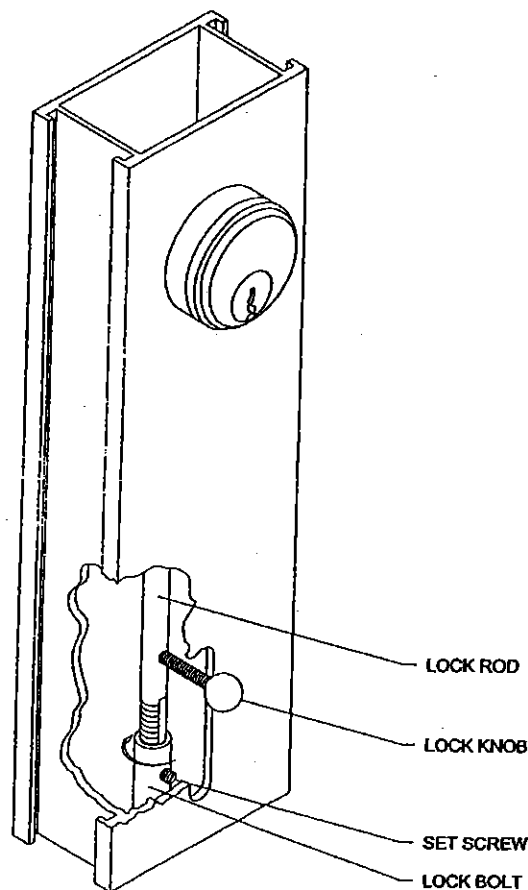
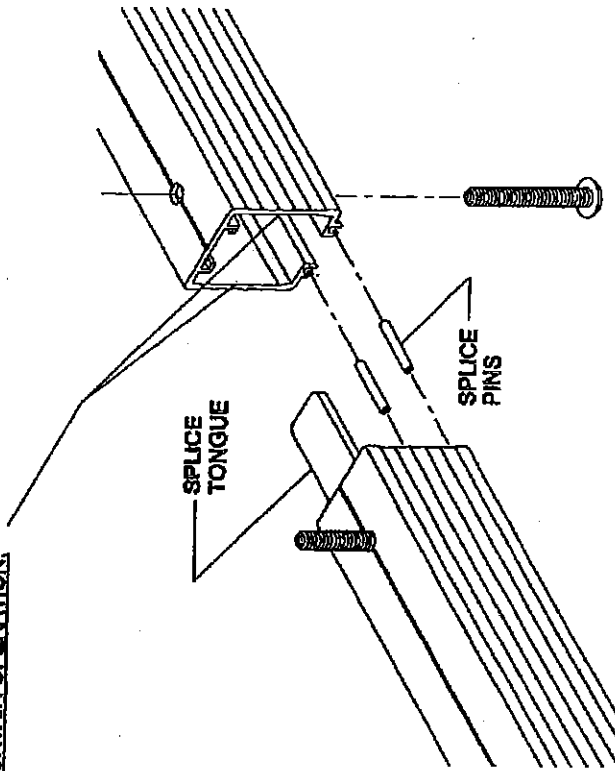


Figure 7: Intermediate member drop bolt adjustment.

**NOTE:**  
 WHEN SPLICING TRACK AT RADIUS SECTIONS, FILE DOWN  
 THESE EDGES ON BOTH SIDES OF SPLICE FOR SMOOTH  
 CURTAIN OPERATION.



TITLE

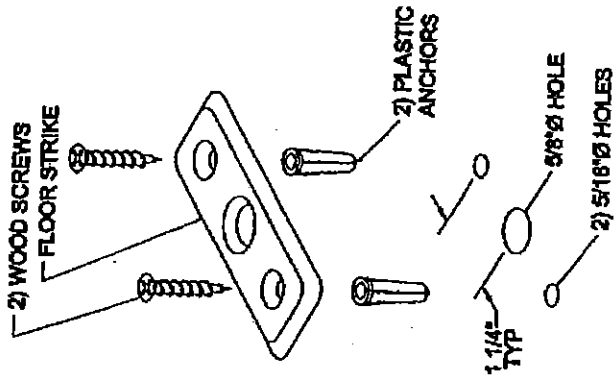
**TRACK SPLICE DETAIL**

UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES,  
 LINEAR TOLERANCES ARE  $\pm 1/32$  (0.031),  
 ANGULAR TOLERANCES ARE  $\pm 1/2^\circ$  (0.5°)

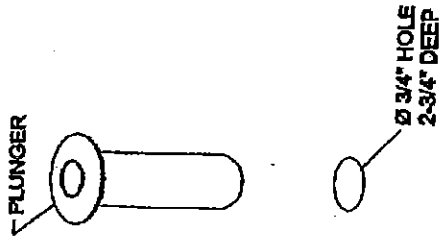
DATE	10/27/98	DESIGNED BY	D. CLARK	REV.	13
SCALE		CHECKED BY			

**CORNELL** INCORPORATED  
 A Division of **ES** Engineering Solutions Since 1928  
 10000 **ES**10-50





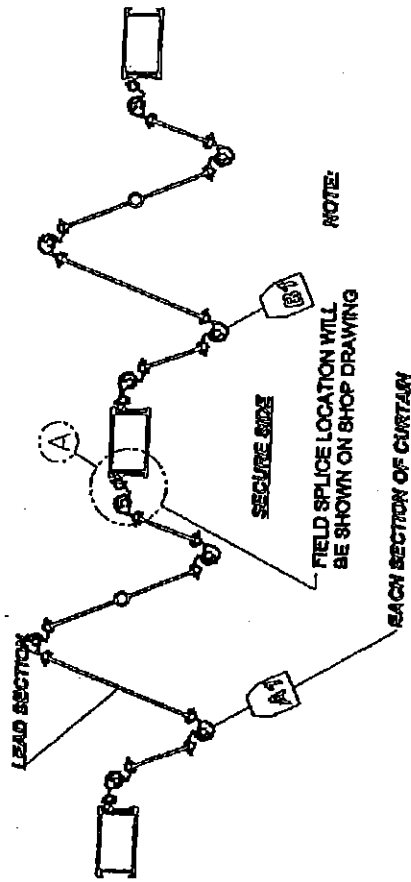
**FLOOR STRIKE DETAIL**



**DUSTPROOF FLOOR STRIKE DETAIL**

NO.	REV.	DATE	BY	CHKD.
1				
PROJECT: DRAWING NO.: SHEET NO.: TOTAL SHEETS: SCALE: DRAWN BY: CHECKED BY: APPROVED BY: DATE:				

PUBLIC SIDE

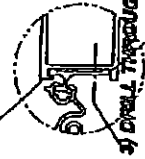


NOTE:

FIELD SPlice LOCATION WILL BE SHOWN ON SHOP DRAWING

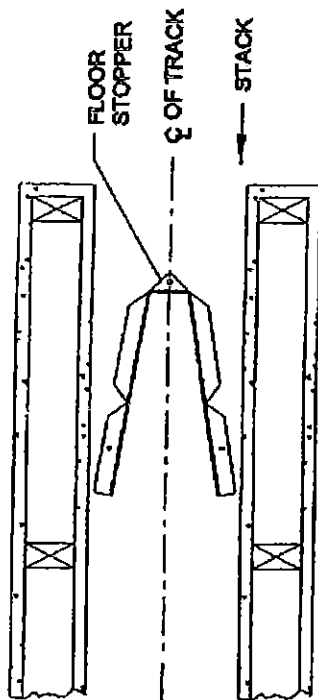
EACH SECTION OF CURTAIN

1) SLIDE THIS LEAD

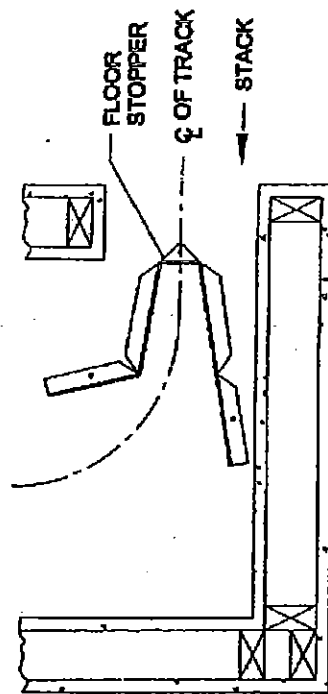


2) DRAIL THROUGH HERE 1/8" OR 2) POSITION

DATE	BY	CHK'D	APP'D
CHECK FOR CORRECTNESS OF THIS DRAWING			
DATE: 11/15/11			
DRAWN BY: [illegible]			
SCALE: 1/8" = 1'-0"			
PROJECT: [illegible]			
SHEET NO. 1 OF 1			
D			

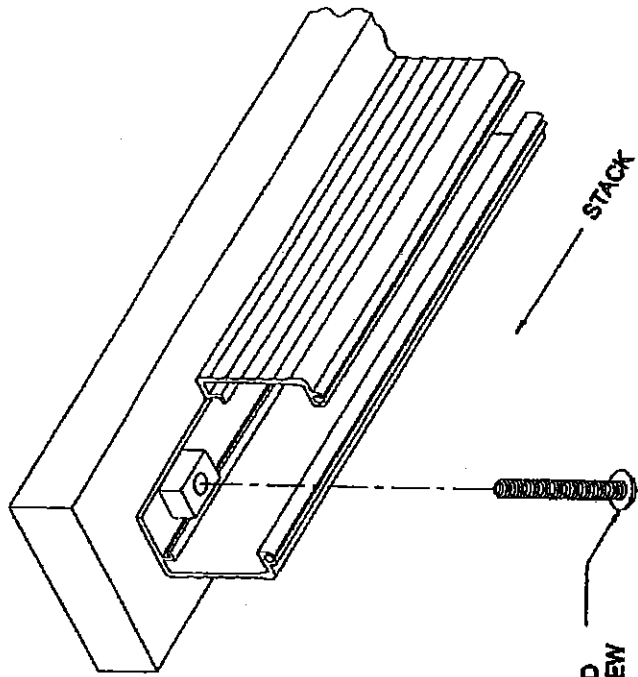


**STRAIGHT POCKET**



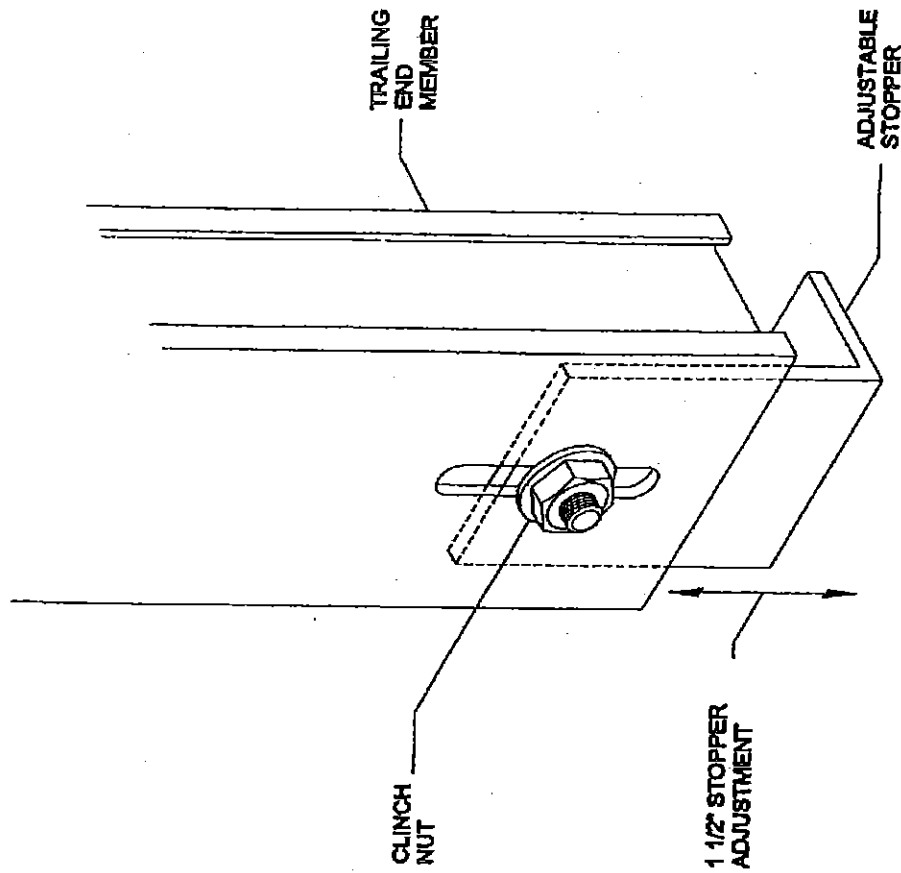
**RADIUS POCKET**

INV. NO.	PART NO.	DESCRIPTION	QTY	ITEM NO.
<b>FLOOR STOPPER INSTALLATION</b>				
UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES. LINEAR TOLERANCES ARE ±1/32 (0.031). ANGULAR TOLERANCES ARE ±1/2° (0.87°)				
REV. FULL	DATE 10/27/88	BY D. CLARK	REV. 3	ITEM NO. B
<b>CORNELL</b> <small>INCORPORATED</small> New Solutions. Strong Results. Manufacturing Performance				
				Drawing No. <b>ES10-50</b>



#12 x 2" LONG  
PHILLIPS HEAD  
TAPPING SCREW

INVT. NO.	PART NO.	DESCRIPTION	QTY	ITEM NO.
		<b>TRACK STOPPER INSTALLATION</b>		
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES. LINEAR TOLERANCES ARE ±.001 (0.001). ANGULAR TOLERANCES ARE ±1/2° (0.5°)				
SCALE	DATE	DRAWN BY	REV.	ITEM NO.
FULL	10/27/88	D. CLARK		B
<b>CORNELL</b> <small>1 0 0 0 0 0 0 0 0 0</small> <b>INC.</b> <small>New Solutions. Since 1928.</small>				



INV. NO.	PART NO.	DESCRIPTION	QTY	ITEM NO.
		<b>ADJUSTABLE TRAILING END MEMBER STOPPER</b>		<b>B</b>

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES.  
 LINEAR TOLERANCES ARE ±1/32 (0.031).  
 ANGULAR TOLERANCES ARE ±1/2° (0.8°).  
 SCALE: (DATE) 10/27/98 (DRAWN BY) D. CLARK (REV.) 1 B

**CORNELL** INCORPORATED  
 New Solutions. Since 1928.  
 Mountaintop, Pennsylvania

Drawing No. **ES10-50**