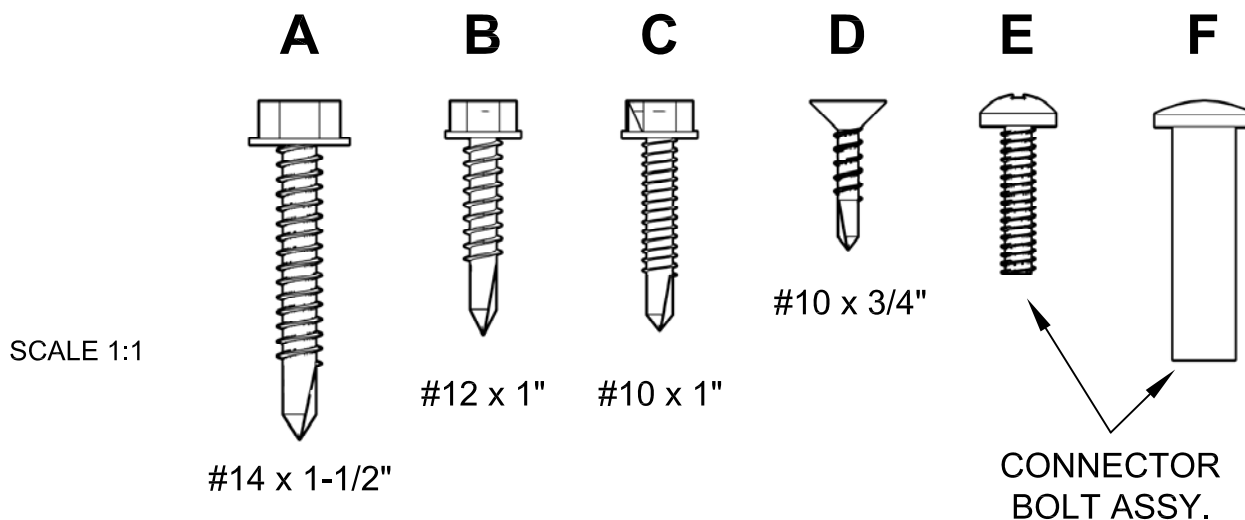


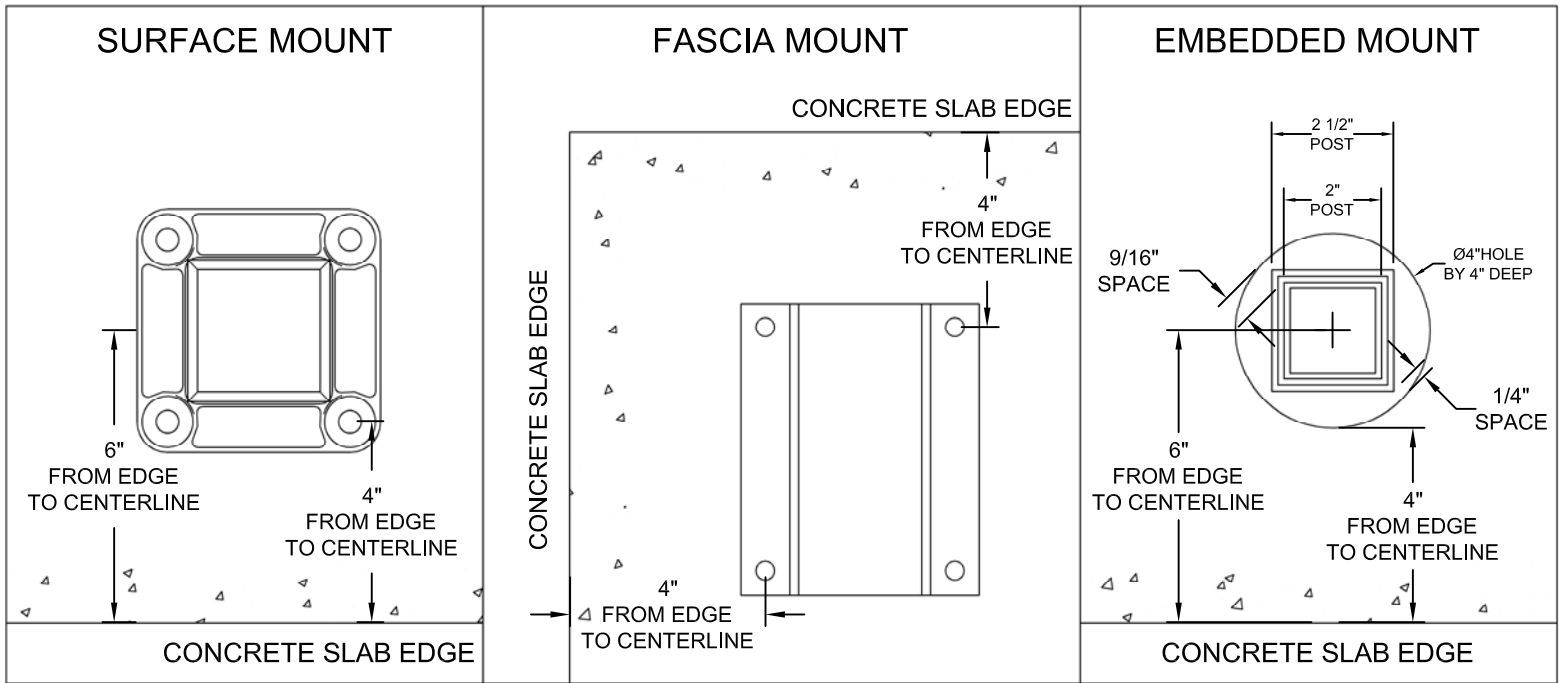
## RAILING INSTRUCTIONS

- The Alumi-Guard Guardrail System has been designed to meet or exceed the 2009 International Builders Code (IBC) and the 2009 International Residential Code. It is recommended that the Contractor install in compliance with local codes.
- These instructions have been written for installations where the posts are embedded, surface mounted or fascia mounted to a structural concrete area.
- For embedded installation, Alumi-Guard guardrail is engineered with a hydraulic cement or epoxy. (4000 PSI min)
- For surface and fascia mounted installations Alumi-Guard guardrail is engineered with TITEN HD 3/8" Screw Anchors - or equal - with a minimum embed of 3" into solid concrete.
- Guardrail should be installed at or above minimum heights per applicable commercial codes. 48" high for BOCA pool code, 42" high for fall hazards of 30" or more, and 36" for elevations less than 30" high.
- **Check contents of order: Make sure all the parts match the order in type, size and quantity.**

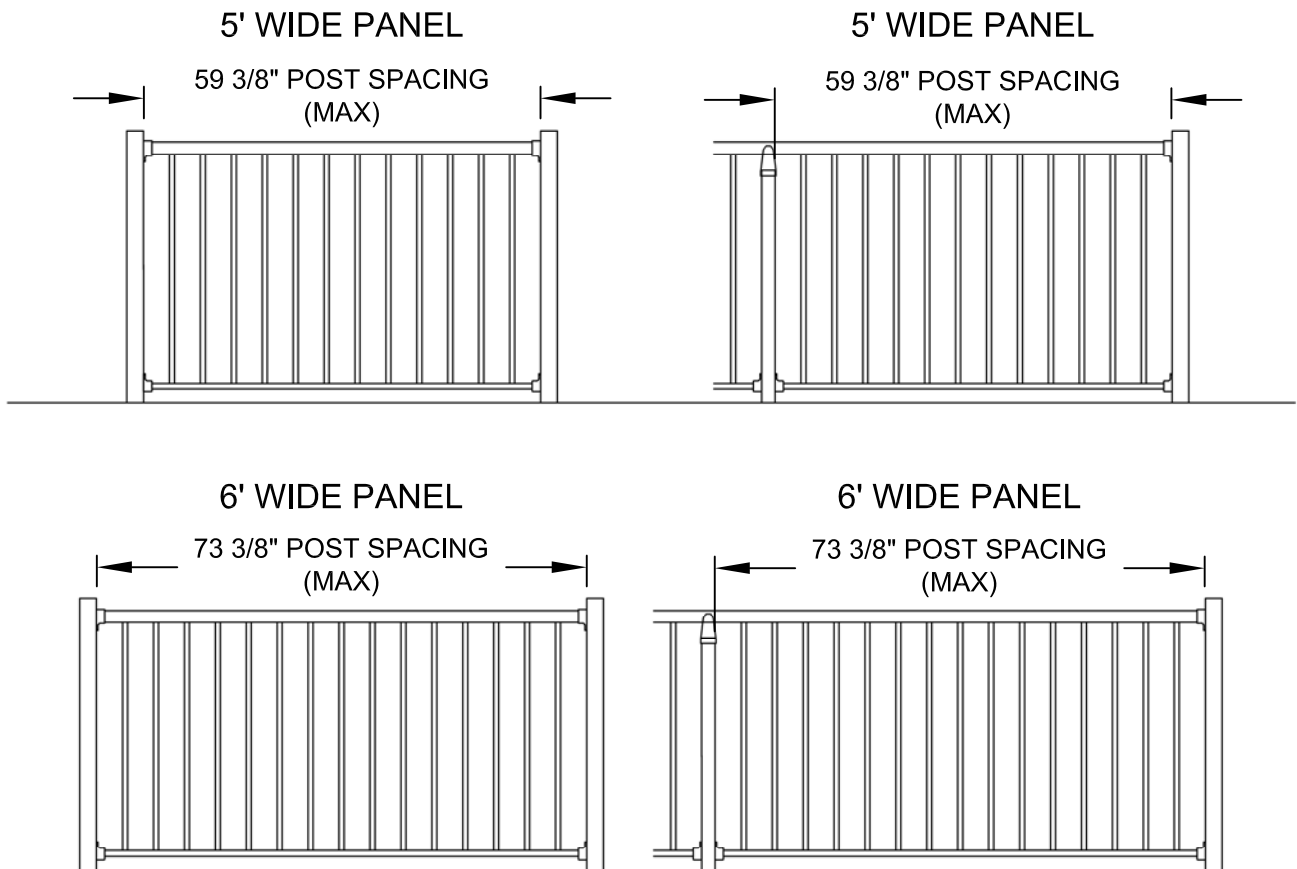
### GUARD RAILING - LEVEL

- 1.) Install the posts plumb with the desired installation type (See Diagram **A**). For straight runs, install posts a maximum of 73 5/16" apart - inside of post to inside of post for 6' sections and a maximum of 59 3/8" apart - inside of post to inside of post for 5' sections (See Diagram **B**). All posts should be placed on a centerline. With the post spacing above, the railing sections will not need to be trimmed and should be installed with the standard wall mount brackets (See Diagram **E & F**). Post height above the railing should be trimmed to a height of 1" - 2" then install the post cap.



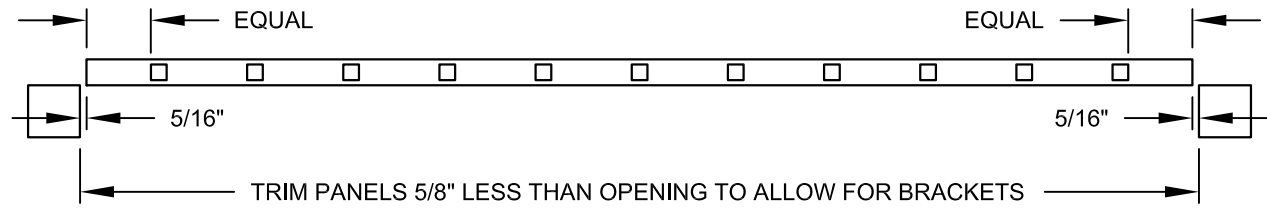


**DIAG. A**



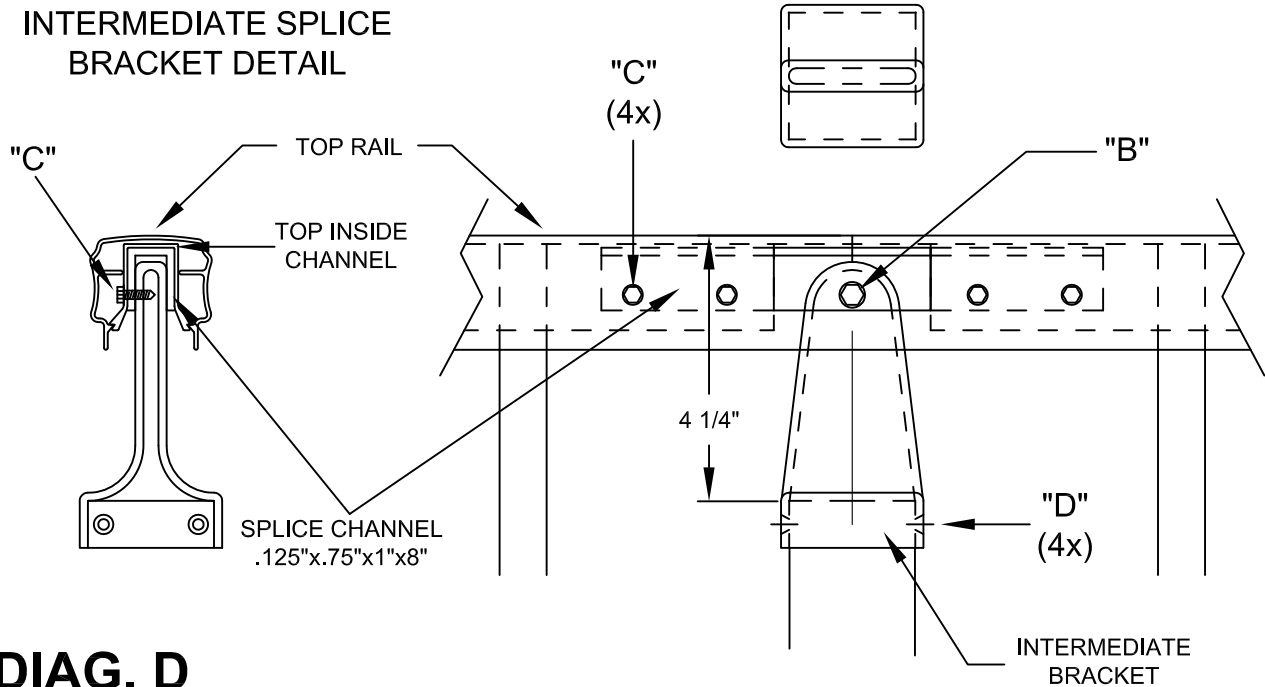
**DIAG. B**

2.) For installations where the posts are less than the above noted distance apart, panel lengths must be cut to fit. Position the panel against the sides of the posts (See Diagram C). Mark and cut panels  $5/16$ " shorter than the mark on each end. A minimum space of  $1-1/2$ " from the end of the panel to the picket to allow for the mounting bracket. It may be necessary to move a picket to achieve this.

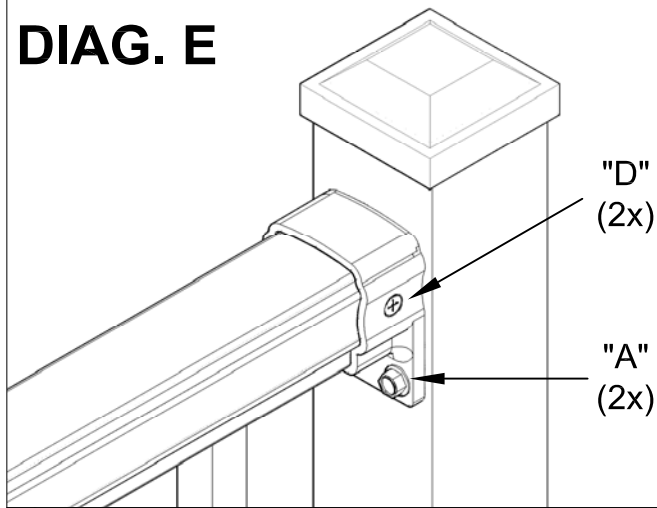
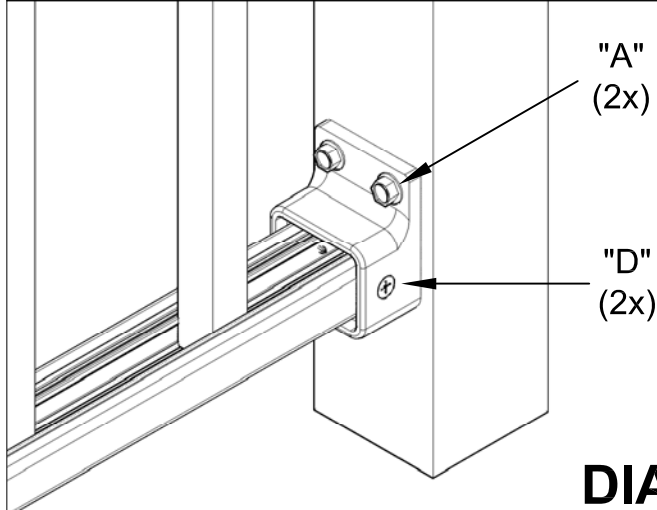
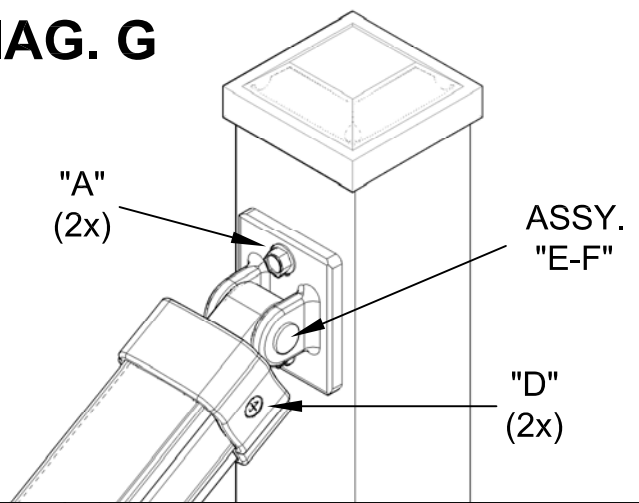
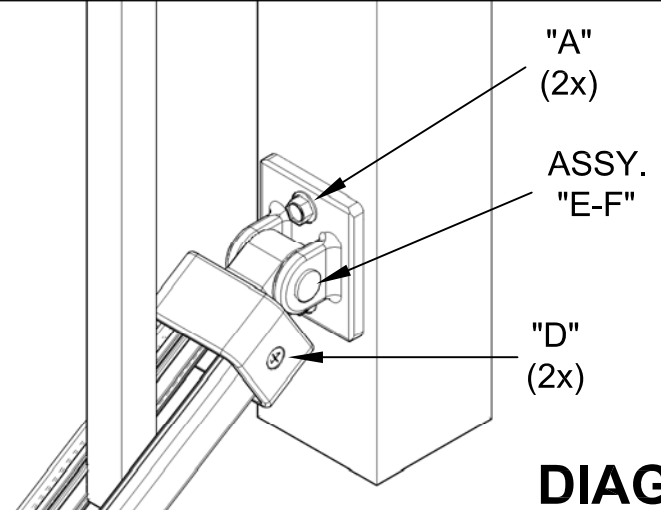


**DIAG. C**

3.) For long continuous runs, see Diagrams **B & D** for the Intermediate Splice Bracket details. For continuous runs, the 2" intermediate posts should be cut  $4-1/4$ " below the installed height of the railing (Example: installed top cap height of 42" from grade; cut the 2" intermediate post to  $37-3/4$ " from grade =  $4-1/4$ " shorter). Attach lower rail to intermediate post with standard wall mount bracket (See Diagram F).

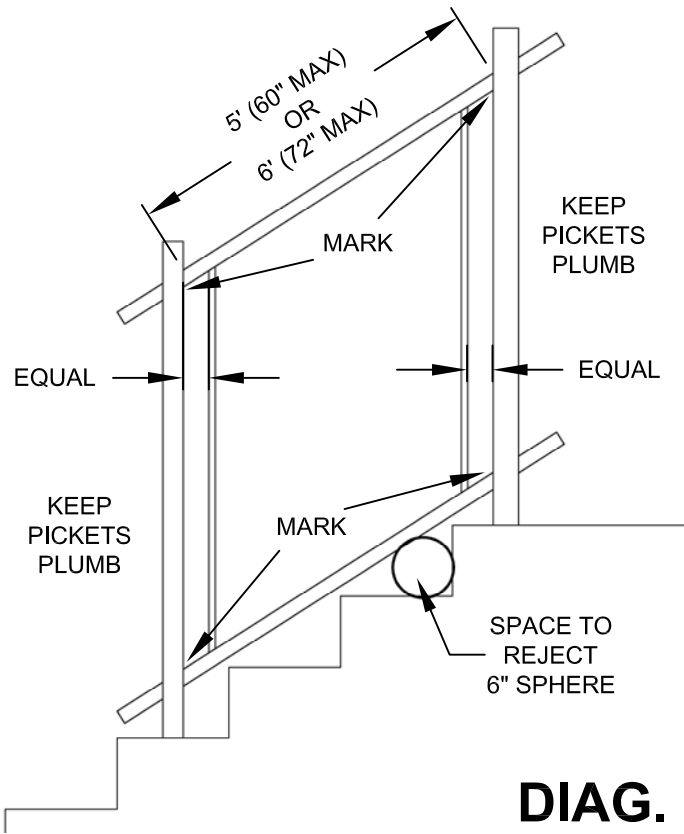


**DIAG. D**

**DIAG. E****DIAG. G****DIAG. F****DIAG. H**

## GUARD RAILING - STAIRS

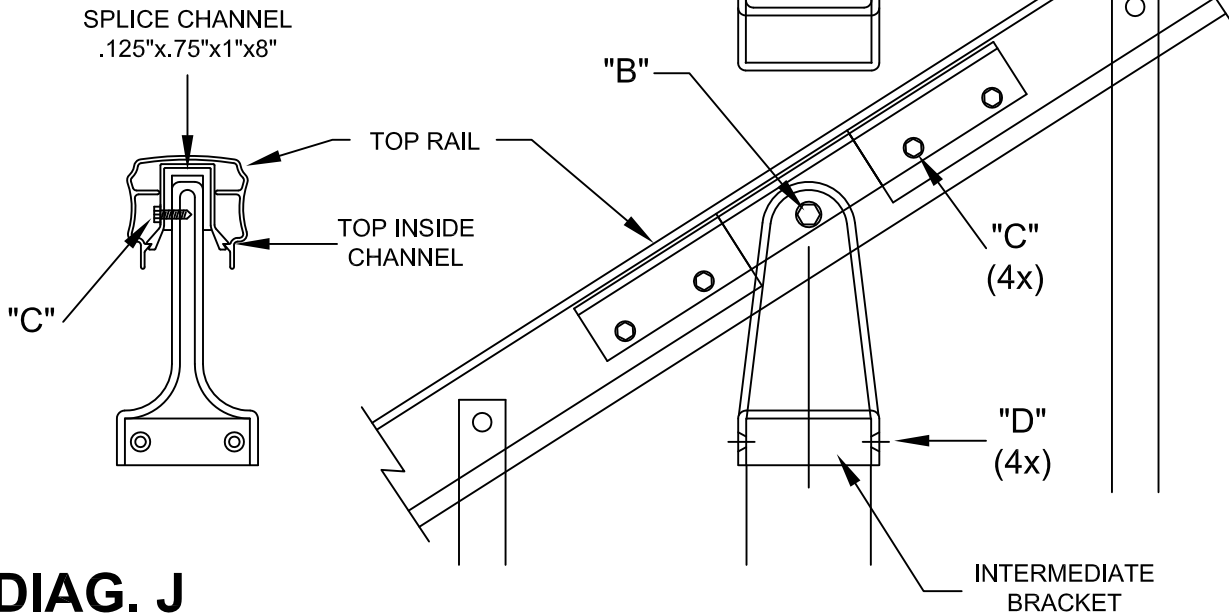
- 1.) Install the posts plumb with the desired installation type (See Diagram A). Posts that install on stair treads should be placed in the middle of the tread. Install posts a maximum of 72" apart - on stair angle - inside of post to inside of post for 6' sections and a maximum of 58" apart - on stair angle - inside of post to inside of post for 5' sections (See Diagram I). All posts should be placed on a centerline. With the post spacing above, the railing sections will need to be trimmed and should be installed with the Vertical Swivel Mount Brackets (See Diagram G & H). (**NOTE:** Depending on the size and pitch of the tread, longer length posts may be required on the treads and at the bottom of the stairs.)
- 2.) Run a string line between the first post and the last post on the nose of the treads. Use this as a guide when locating the railing and the Swivel Brackets above the treads. Position bottom rail 1-1/2"(minimum) above the nose of the steps (use spacers) and mark where the brackets are to be attached to the posts.(See Diagram I). Position the panel against the sides of the posts (See Diagram I). Mark and cut lower rails 2-1/4" shorter than the mark on each end. Where the upper rail is continuous, cut rail 5/16" shorter than the mark and assemble as shown in Diagram J. Where upper rail connects to a 2-1/2" posts, cut 2-1/4" shorter than the mark. A minimum space of 1-1/2" from the end of the panel to the picket to allow for the mounting bracket. It may be necessary to move a picket to achieve this.



**DIAG. I**

- 3.) When installing the cut panels, attach the lower swivel brackets to the rail first. Then place the upper brackets assemblies on the upper rail with a small peice of top cap in each cup. Mark where the yokes mount to the posts (See Diagrams **G & H**) and make sure there is enough length on the post height. Mount the lower brackets first, then install the top cap on the upper channel and mount the upper brackets.
  
- 4.) Repeat steps 2 & 3 as the installation continues down the stairs to the end post, keeping the guardrail at the same angle of the stairs.

**INTERMEDIATE SPLICE  
BRACKET DETAIL**



**DIAG. J**