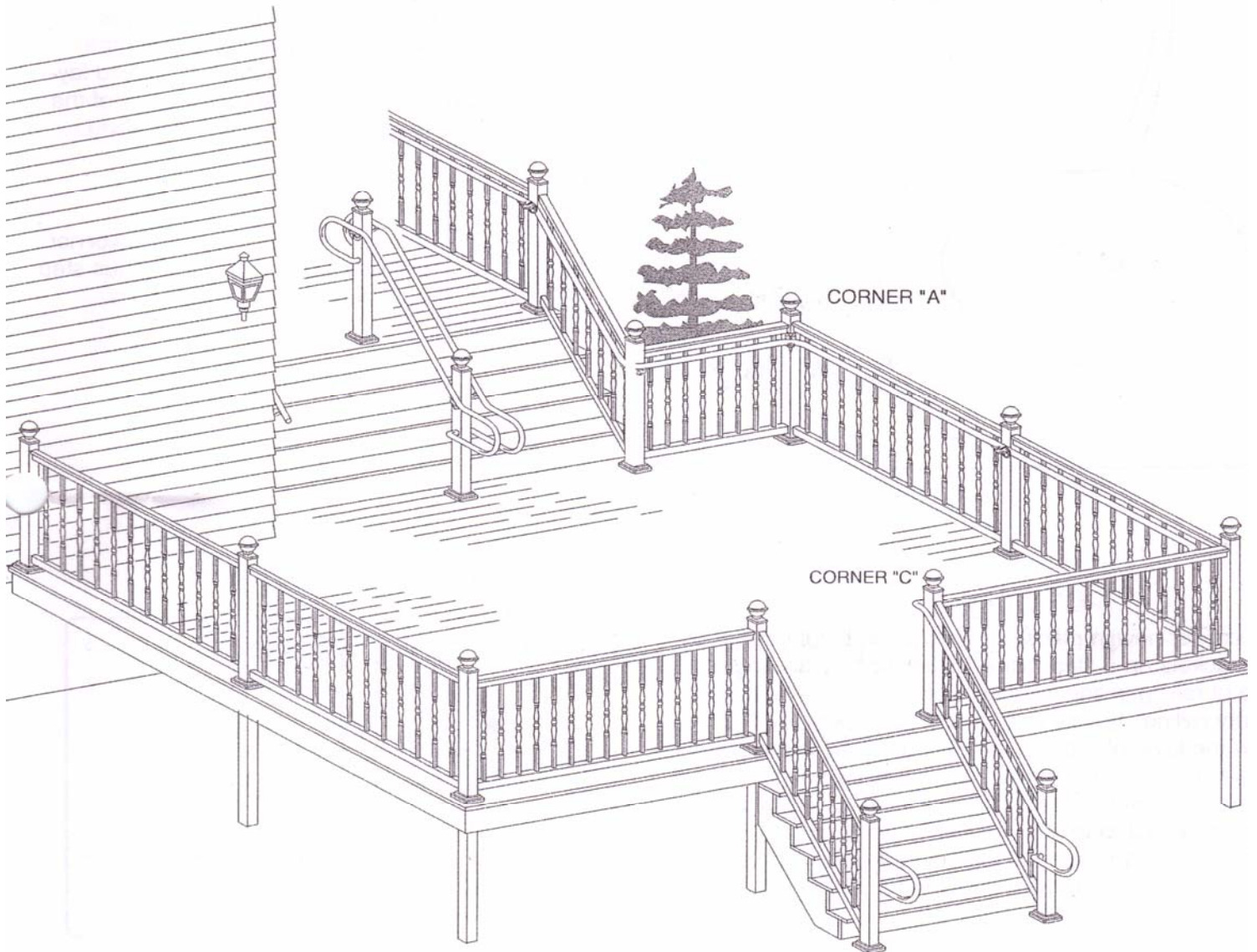


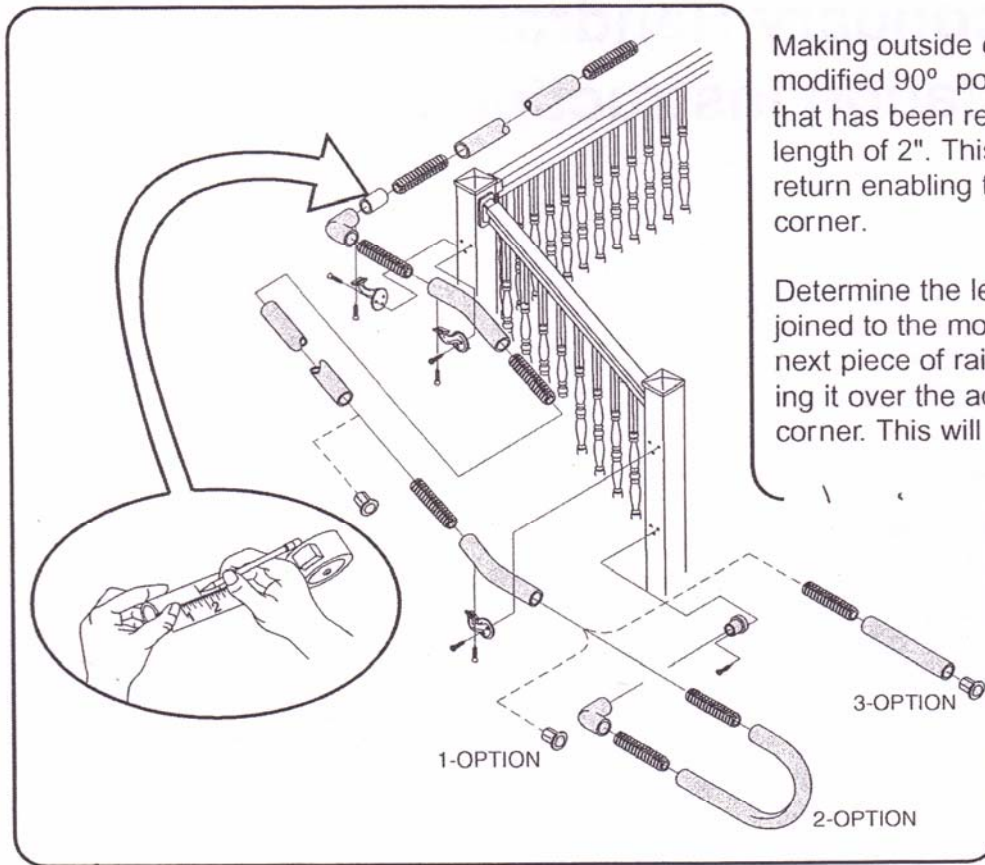
Secondary Handrail Installation Instructions



Sketch a layout of the new secondary railing in relationship to the existing railing noting the various pieces you will need and where you will need them. Check to see if you have all of the pieces that you will need.

Determine the height of the railing (35" to 38" to the top, for commercial applications) and check how that height works coming down or up steps.

CORNER "C"



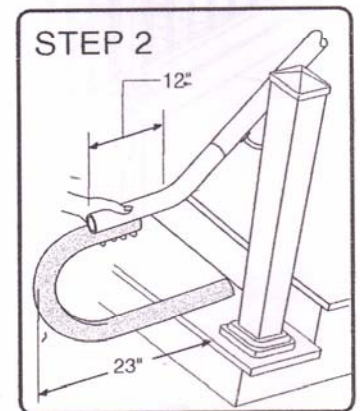
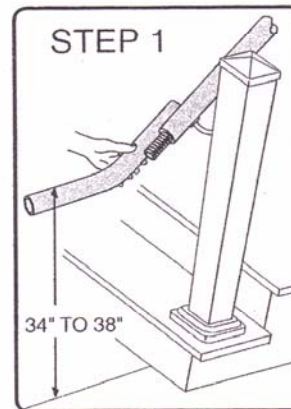
Making outside corners is best accomplished using a modified 90° post return. Cut a piece of aluminum that has been removed from scrap handrail to a length of 2". This piece is then inserted into the post return enabling the use of a connector to make the corner.

Determine the length to cut the handrail which is joined to the modified post return, by inserting the next piece of railing or elbow into the corner and laying it over the adjacent piece on the other side of the corner. This will establish a mark to cut the railing.

Using a connector, join the corner with the railing cut in previous step and secure to the bracket as shown.

"P" LOOP INSTALLATION

With corner now in place, determine the height of the in-line brackets on a step railing installation by holding a piece of railing in line with the elbow and parallel to the primary railing. Typically, the secondary railing will be below the level of the primary railing. Install in-line brackets with screws, putting brackets on every post. Continue until ground level post is reached. At this point railing will be terminated in one of a number of ways: either by end capping a straight rail, end capping an elbow, or by using the "P" loop return to meet certain municipal requirements (see options, above).



Establish a place to begin. Usually, that will be an inside corner.