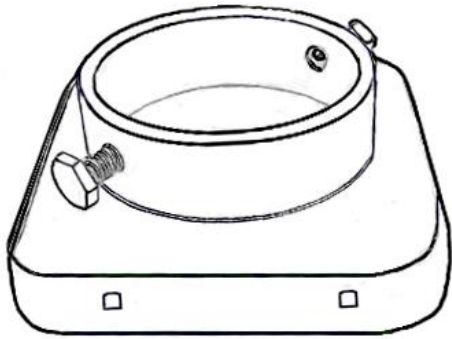
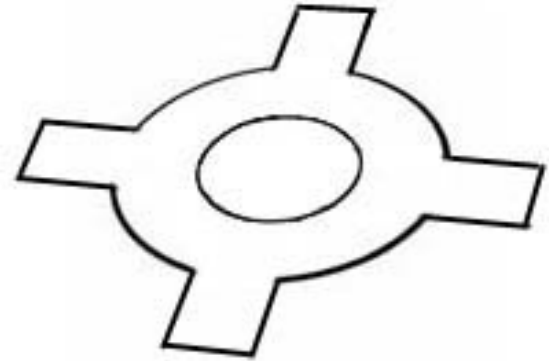


# STRUCTURAL PERGOLAS with COLUMNS

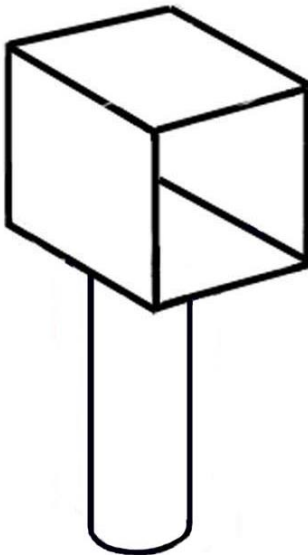
*Featuring THE STEEL INSERT SYSTEM<sup>®</sup>*



*Post Adapter*



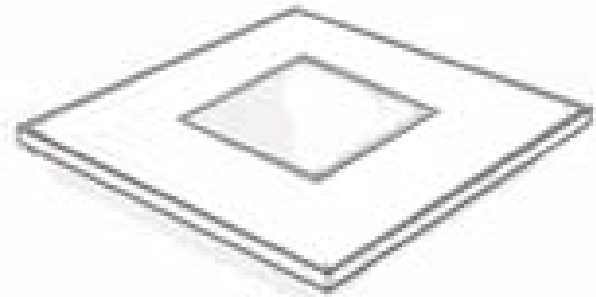
*Post Adapter Plate*



*Column Adapter*



A BEAM  
(optional)



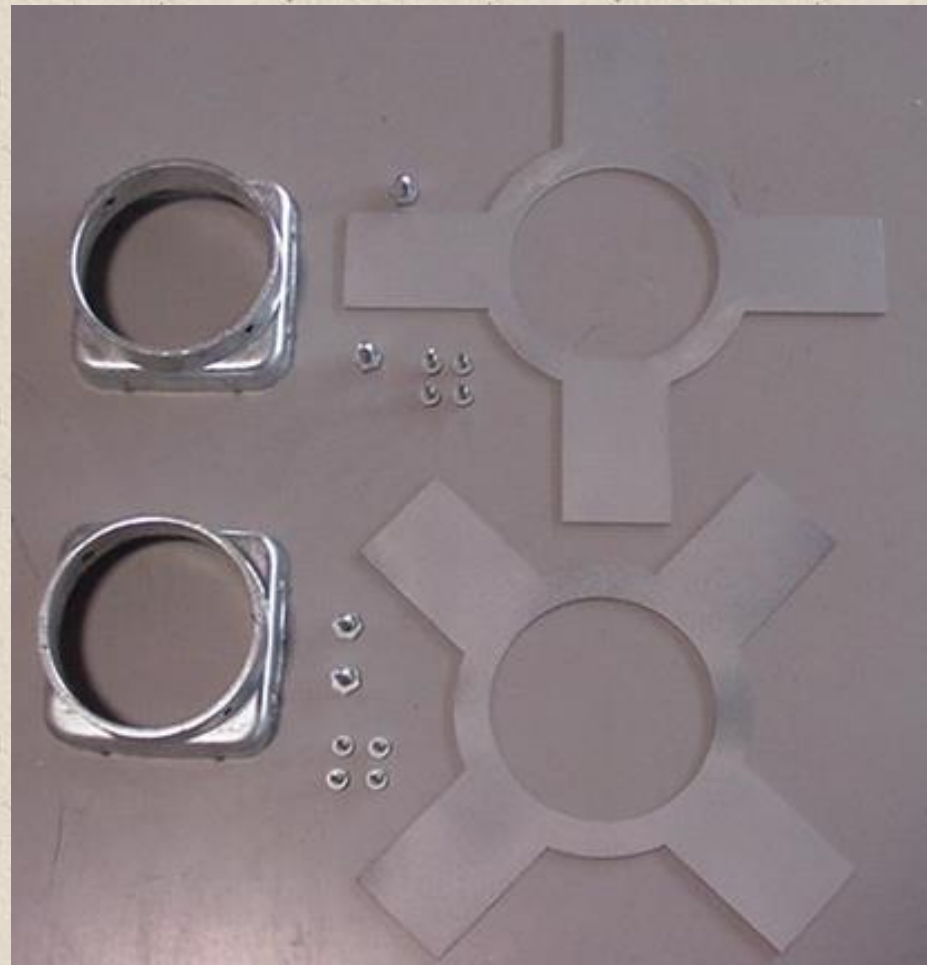
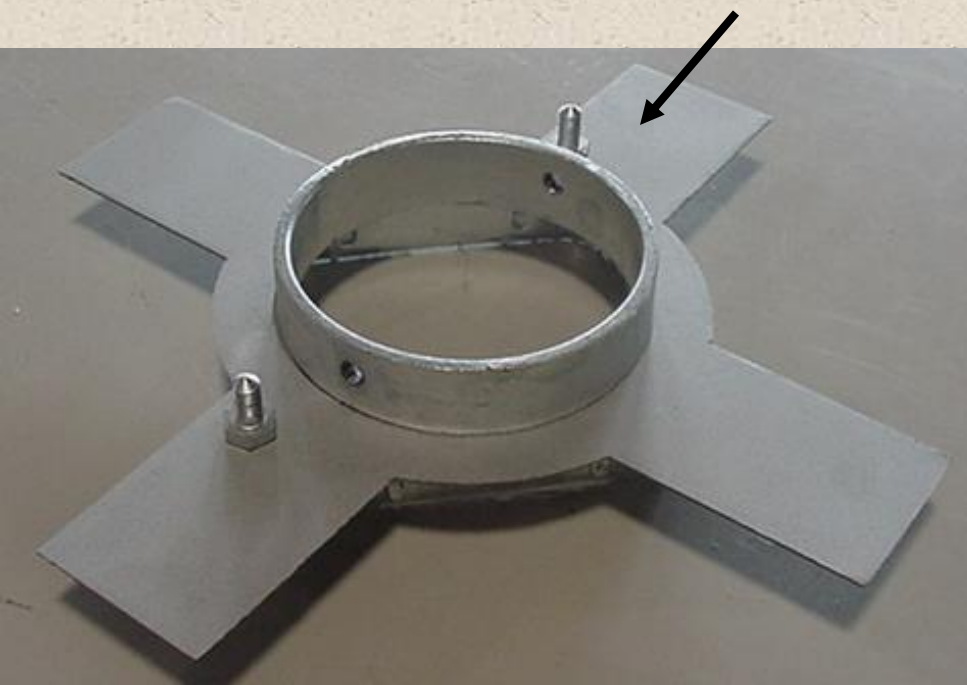
*Adjustable PVC  
Column Cap*



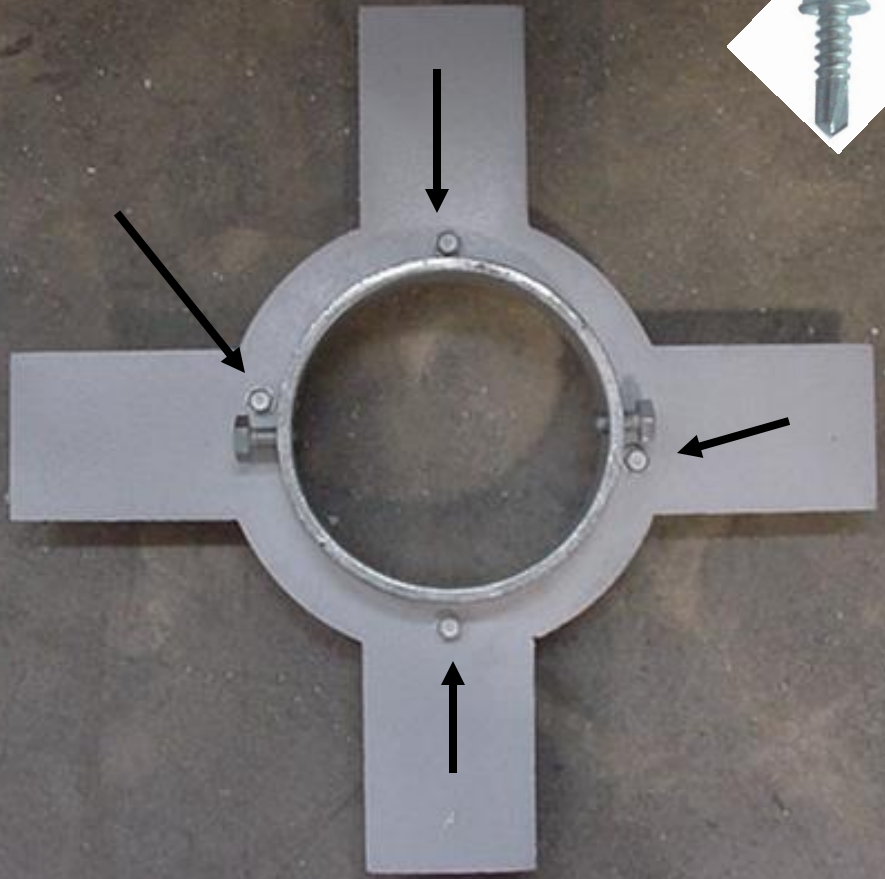
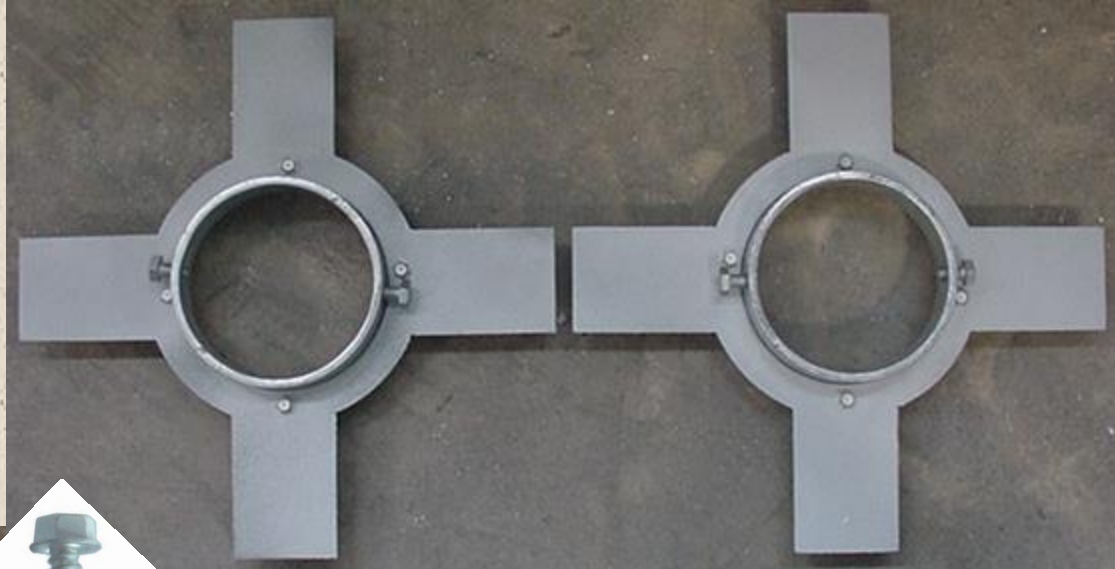
***This system is available for 3" or 4" steel pipe. 3" pipe is strong enough for most applications. 4" pipe is used for this project.***

**Gather adapters and plates. Remove set screws from adapters, place plate over adapter, reinstall set screws.**

**Align plate so tabs are in line with set screws.**



**Using self tapping screws, attach plate to adapter, placing screws close to adapter base and just to one side of the set screws.**

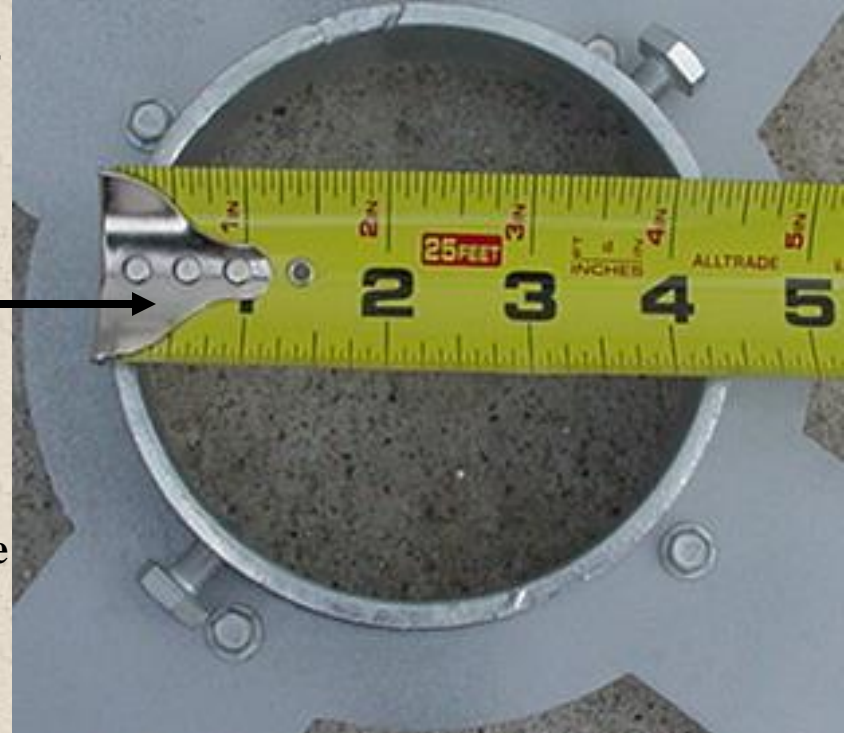


**Set one adapter aside. Use remaining adapter to prepare for bottom installation.**





Measure **inside** **diameter** of column bottom and **outside diameter** of adapter. **Subtract** diameter of adapter from column diameter, **divide** by 2 to determine plate tab length.

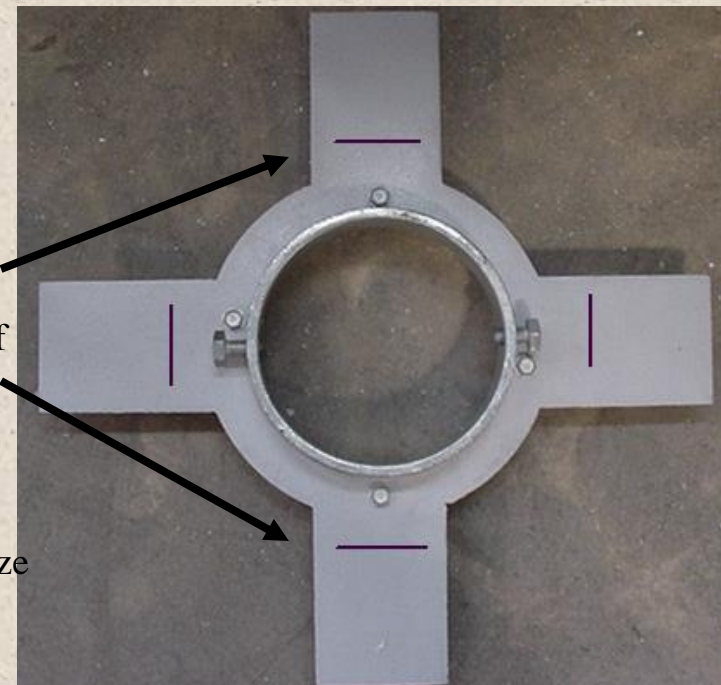


In this example:  
*column diameter* - 7 <sup>3</sup>/<sub>8</sub>  
*adapter diameter* - 4 <sup>3</sup>/<sub>8</sub>  
 Total remaining - 3"  
 Divide by 2 = 1 <sup>1</sup>/<sub>2</sub>"

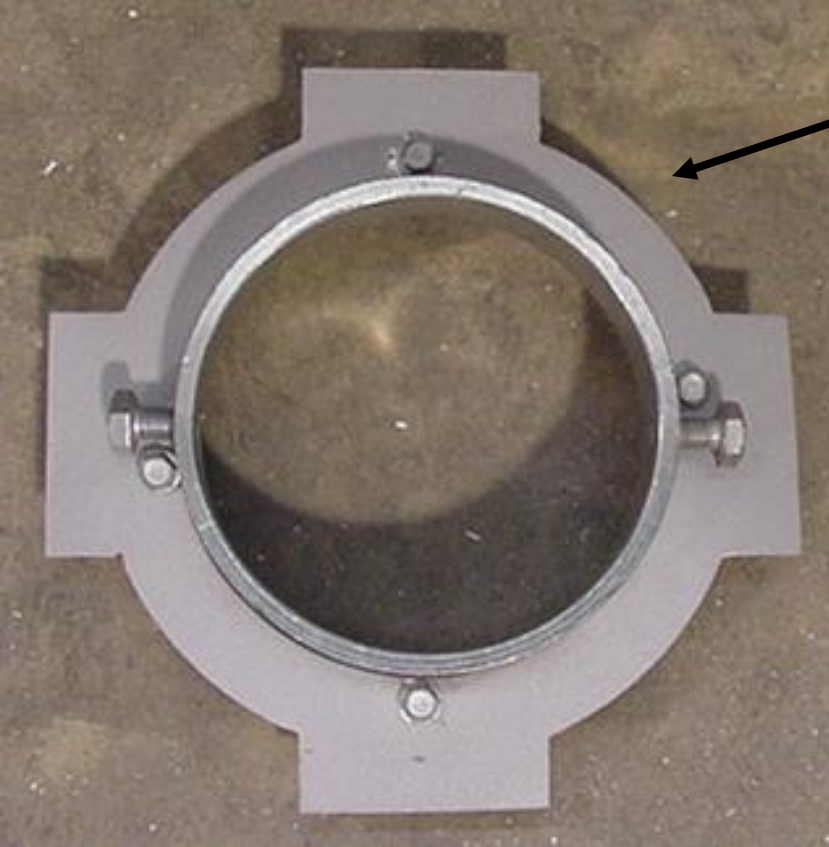
Measure and mark tabs 1 <sup>1</sup>/<sub>2</sub>" from outside wall of adapter.

Carefully cut plate tabs with band saw/jigsaw.

Columns will differ in size – measure carefully.



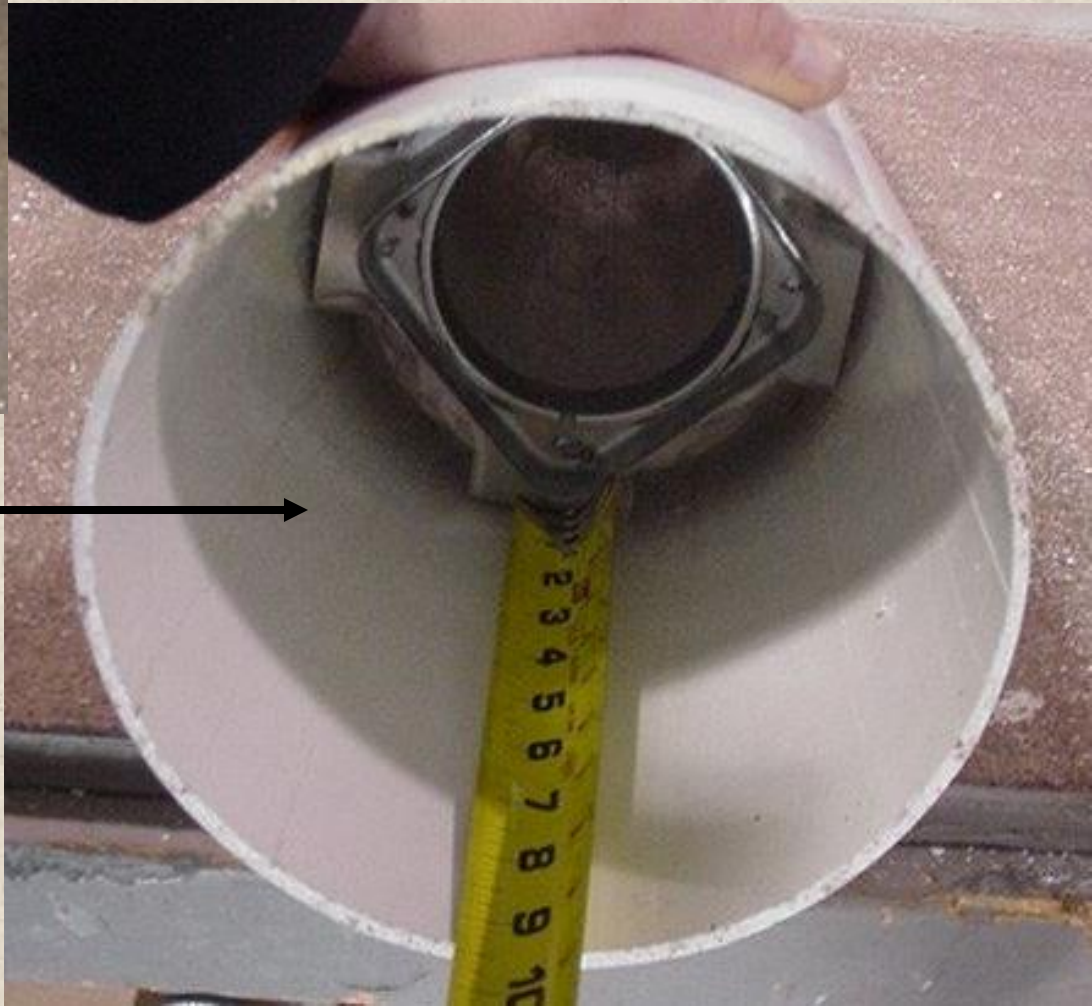




**Finished bottom column adapter.**



**Slide bottom adapter up inside column bottom until snug against column sides to establish finished adapter height. Trim if necessary. Measure distance. This will be where bottom adapter will be attached to the steel post.**



**For this example, the bottom adapter will be set 9 1/2" up from ground level.**



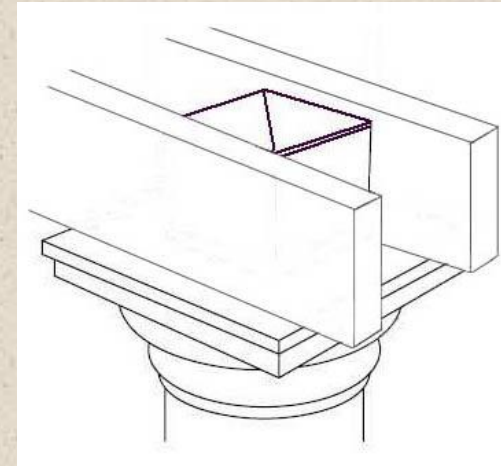
**Slide bottom adapter over steel post and set to correct height (example – 9 1/2”). Secure with set screws. Determine placement for top adapter (example – 16”), slide top adapter over steel post and secure with set screws. At this time, secure adapters to posts with Tek Screws.**







**Drill hole through steel post between 4" and 8" from the top. Insert column adapter into steel post. IMPORTANT: Before drilling through adapter, adapter MUST be aligned correctly. Carrying beam placement will be parallel to the closed sides of the adapters.** →



**When column adapter is aligned correctly, drill through adapter and through bolt.**







**Bend plate tabs downward to correspond with inside column diameter and the height of adapter.**

**Do not bend tabs too much. Leave tabs slightly larger than inside column diameter. This will allow column to fit snugly against post adapter.**





**IMPORTANT:** It is very important that the column is the same height as the steel post. Double check column and steel post heights before installing column. Place column over steel posts and lower onto post adapter. Push downward to make tabs bend inward to accept column. When column touches bottom post adapter, move column so it will fit over adapter correctly. Guide column the remaining distance to ground level.







**Place bottom trim over column, then set top trim in place. Trim placement varies according to column size, type and manufacturer.**



**This top trim was cut out to match adapter size.**







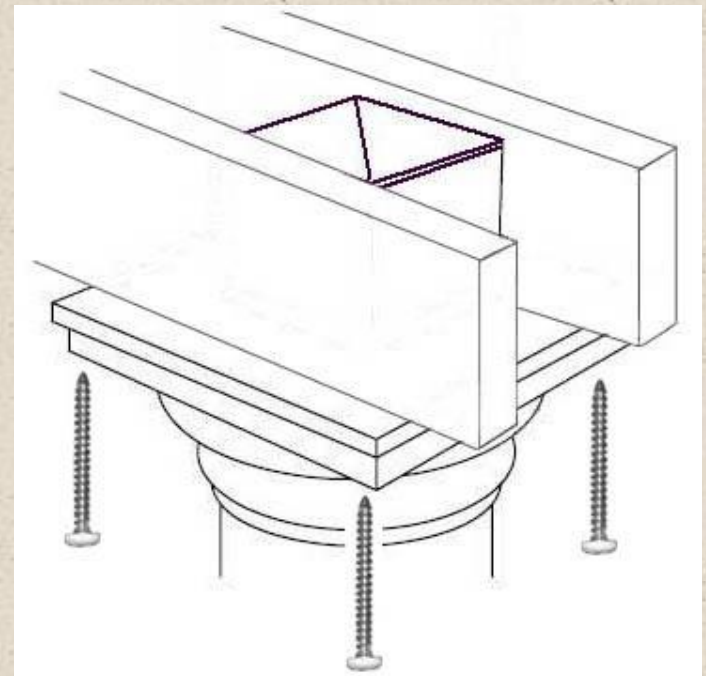
**Modify PVC  
column cap to  
fit top trim.  
Place over  
column  
adapter.**



**Place 5x5 PVC  
sleeve over  
column  
adapter, and  
add post cap.  
Trim**

**attachment  
depends on  
column  
manufacturer.**

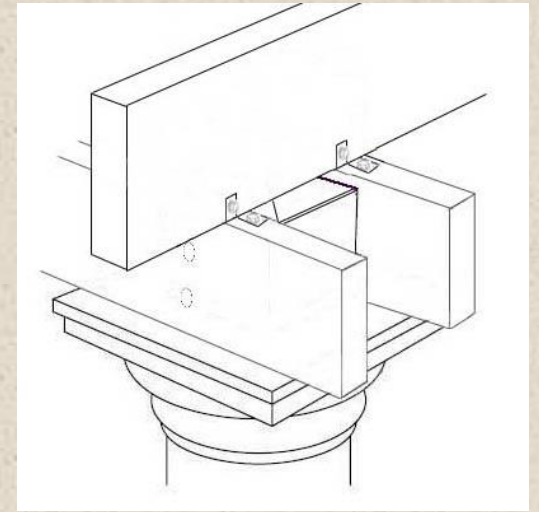
***Preferred method:  
attach trim and PVC  
column cap to  
carrying beams.***



# Finished Column

**The column is now ready for beam attachment. If the span between columns is greater than 8', the beams must be filled, either with aluminum, steel or wood.**

**The carrying beams are placed on each side of the adapter, drilled and through-bolted.**



**PVC sleeve height on the column adapter may be modified depending on cross beam placement, single (above), or double (below).**

