COLUMNS
SLIDE SHOW
Columns are brought in with a crane and placed on over their respective base plates and fastened once they are plumbed, tie down cables are attached to keep the column from swaying during erection. Without the tie downs it would be a cantilevered column that is fully unsupported.
As the columns are erected, beams, trusses, and girders are connected. These members begin to provide lateral support and take the place of the tie downs.
Note the column splice at the far left of this picture. Also note that it is about three feet above the floor height. This is introduced to add a column with a different section size or to add another column of size to progress the building upward. The connection typically made with plates on the flanges (as shown) and on the web using bolts.
Completed column installation is with the last horizontal member. It is these members that act as the horizontal restraint of the column and in the determination of the AISC K-factor that is applied in with slenderness ratio.