FlowChart for Determining Column Slenderness Effects

1st Order Analysis

Sway or Non-Sway?

Sway
Non-Sway

Slenderness Consideration

Neglect Slenderness?
Sidesway
Slenderness always considered

Yes
No

Neglect Slenderness?
10.15.2

Only 1st order analysis required
10.14.1.1

Slenderness Effects at Column Ends
1. Moment Magnification Method: 10.16.2/10.16.3.2/10.16.3.3/10.14.4 /10.15.3.1
2. Elastic 2nd Order Analysis 10.16.3.1
3. Nonlinear 2nd Order Analysis 10.13.1

Slenderness Effects along Column Length
1. Moment Magnification Method: 10.15.3.1/10.15.3.2/10.15.3.3
2. Elastic 2nd Order Analysis 10.16.3.1
3. Nonlinear 2nd Order Analysis 10.13.1

Laterally Stable?
10.16.5

Yes
No

Revise Structural System

Design Column for 2nd Order Moment

Reference: CSA A23.3-14