**Beam Lateral Bracing Examples**

Brace must either prevent lateral displacement of the compression flange, or twist of the cross section.

Cross beam acts as a lateral brace since it will prevent lateral displacement of the girder’s compression flange.

Concrete slab provides continuous bracing for the compression flange, $L_b=0$, no LTB.

Note that if the bottom flange was in compression there would be no lateral bracing provided.

Lateral displacement of the compression flange is prevented by the diagonal members (typically angles).

Here there is no concrete floor slab. The cross frame prevents twist of each girder and therefore acts as a lateral brace for each girder. Either of the flanges may be in compression.