



What is the difference between lane element and cross beam method for vehicular load distribution? When should each be used?



The difference between lane element and cross beam element for vehicular load distribution is in considering the transverse rigidity of the system and the kind of model generated (line, plate or grillage model)

In case, the structure is modelled as a line element and is assigned whole transverse cross-sectional property, lane element for vehicular load distribution option is used.

For grillage models, live load distribution occurs as per the rigidity of transverse members (slab/diaphragm), hence cross beam method for vehicular load distribution is used.

In cross beam method, a cross-beam structure group (transverse elements group) has to be defined and selected for transverse distribution of vehicular load as shown.

A structure group consisting of all transverse elements



Define Design Traffic Line Lane ✕

Lane Name :

Traffic Lane Properties

a : Eccentricity

Eccentricity : m

Wheel Spacing: m

Impact Factor :

Span Length : m

Vehicular Load Distribution

Lane Element Cross Beam

Cross Beam Group

Cross beams ▾

Skew

Start End [deg]

Moving Direction

Forward Backward Both

Selection by