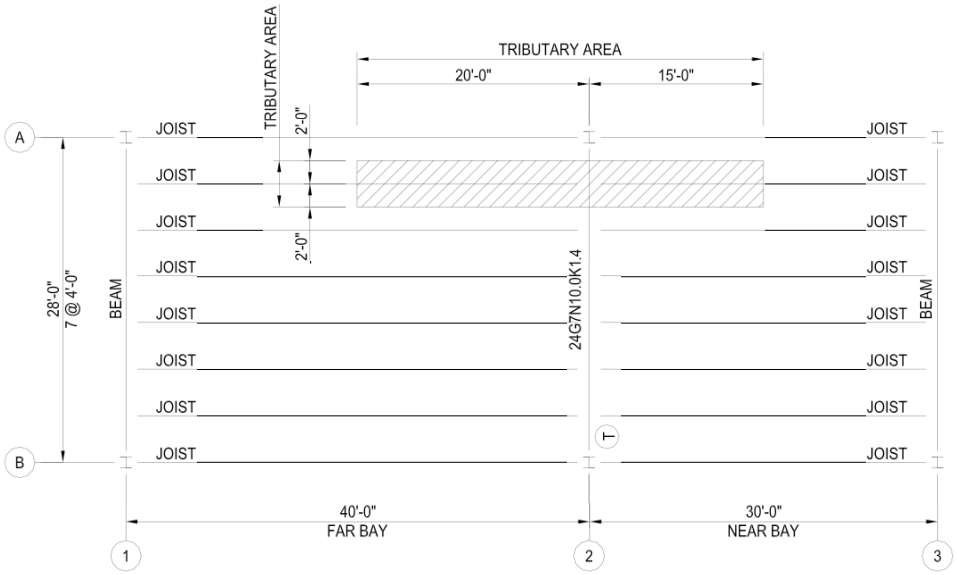
Bills of Material Instructions and Examples

CALCULATING GIRDER UPLIFT

Girder uplift is calculated by determining the amount of roof area (tributary area) supported by each girder panel point. It is applied in the form of a Kip load at each joist bearing location. To calculate girder uplift, use the formula and example supplied below. Net uplift equals 10 psf.

((1/2 Near Bay + 1/2 Far Bay) x Uplift in PSF x Largest Joist Space) / 1000
Example: ((20' + 15') x 10 x 4')/1000 = 1.4 Kips

Girder uplift should be included at the end of the girder designation - 24G7N10.0K1.4



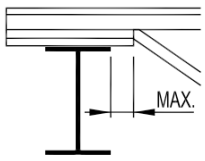
GIRDER SEAT TYPE

Standard girder seat type is "R"-Type (Full Depth) unless specified otherwise via special note.

OSHA HOLES

If OSHA holes are required for joists bearing on a girder, then specify which side requires holes. In the example shown below, a pair of holes will be provided at 3'-11 3/4" (A), from overall length at the left end, and then at every 4'-0" (N) intermediate panel location on far side as denoted by placing a "F" in the OH column. Unless noted otherwise, top chord holes are provided in the standard configuration listed next to the diagram on the girder bill.

A	N		B	OH	TCL	TCR	JST. GA.	BOLT (X/16)	NOTE #
	NO.	LENGTH							
3 - 11 3/4	5	4 - 0	3 - 11 3/4	F	1 1/2	1 1/2	3 1/2	9	



MINIMUM BEARING

Achieving minimum bearing (as per SJI) on lists provided by the customer, is the responsibility of the customer. The maximum portion of the seat that may hang off of the inside edge of the support, and still allow the member to achieve minimum bearing, is as follows: 1½" for K series joists, 2" for LH, DLH Series joists, and 2" for girders. These are maximum values allowed by SJI and require special design consideration for masonry bearing conditions. Please refer to SJI specifications provided in the appropriate sections of the NMBS catalog.