

TIPS FROM ENGINEERING

December 2018

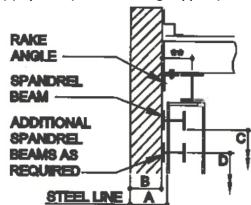
Tips from Engineering – Wall Support Conditions

Specifying horizontal support for "Wall by Others" subjected to wind and seismic loads can have a significant impact on the design of a project. This can influence the ability to have the most economical solution, particularly when working with tilt-up and concrete masonry walls which can support themselves in certain scenarios. The main support types defined in eQuote are **Spandrel(s) by MBS (Metal Building Supplier)**,

Support at Columns Only, and Independent.

1. Spandrel(s) by MBS

Spandrel beams and rake angle can be used to horizontally support many different walls, such as brick on stud, CMU, and both non-load bearing and load bearing precast or tilt-up walls. The quantity and location of these members are dependent on the capacity of the wall material, so it is vital to receive the minimum support requirements from the wall design professional or the EOR.

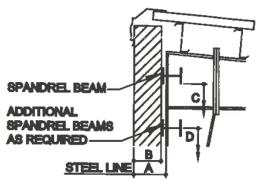


2. Support at Columns Only

This support type is typically only used for material that can support itself between frame lines or columns, such as certain tilt-up walls and CMU walls that contain bond beams. When bidding projects that may be able to span between supports, it is important to understand the needs for the wall design so that spandrel beams are not added unnecessarily. This is also the case if spandrel beams will be provided by others (not by MBS).

3. Independent

Walls that are independently supported have adequate capacity so neither support at columns nor spandrel beams are required. If this is the case, the material provided by MBS resists none of the horizontal loading in the area that these walls exist, which can provide weight and cost savings when known during the quote process. This support type is uncommon, but can exist on certain load bearing systems.



Also, offsets from steel line and where steel line falls in relation to face of wall, face of spandrel, and face of column are important factors that may impact schedule, price, and quality. Consulting with the estimating team is recommended to determine how this should be dimensioned. If special conditions beyond these are required, sketches and Special User Notes can provide additional insight.