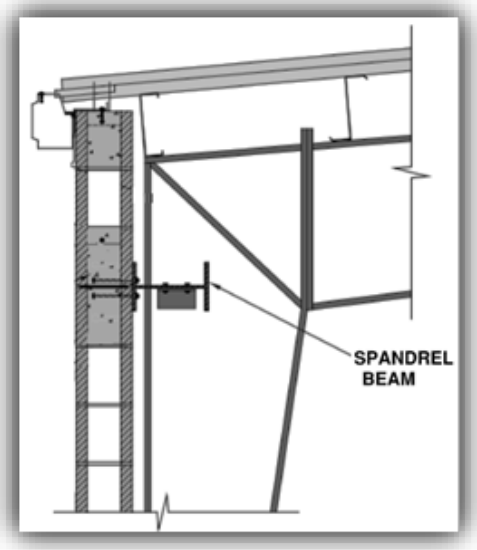
June 2022

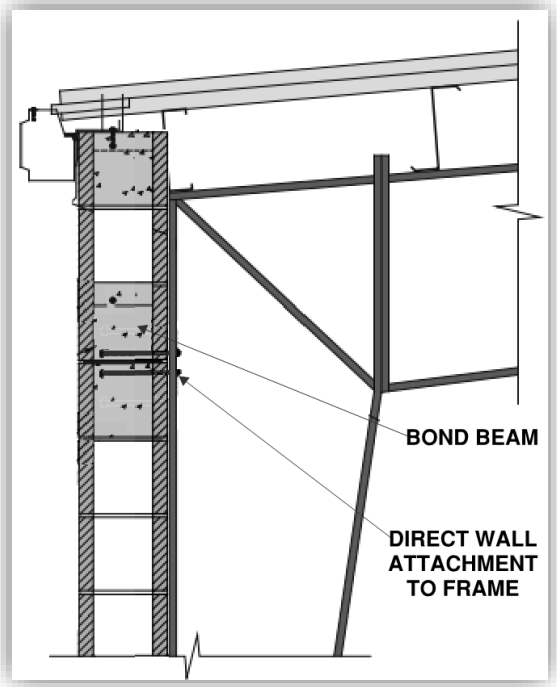
Walls by Others: Do you Want our Support?

Specifying horizontal support for "Wall by Others" subjected to wind and seismic loads can have a significant impact on the design of a project. It is important to recognize the different wall support conditions that are available and to ensure that proper support type is specified on the contract. The main Support Types defined in eQuote are **Spandrel(s) by CBC, Support at Columns Only**, and **Independent**.

Spandrel by CBC

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 concrete walls. The quantity and location of these members are dependent on the capacity of the wall material, so it is vital to verify the minimum support requirements from the wall design professional or the EOR.

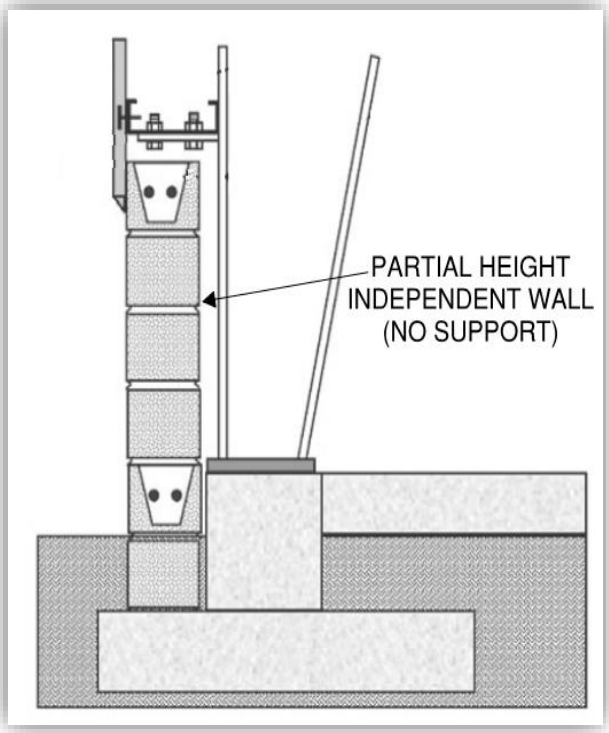




Support at Columns Only

This support type is typically only used for when spandrel beams are provided by others (not by CBC) or when the wall can support itself between frame lines or columns. Self-supported wall are certain concrete walls and CMU walls that contain bond beams (internal spandrel beam-part of the wall design). When bidding projects with walls 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.

Independent



Walls that are independently supported are considered free-standing and have adequate capacity so neither support at columns nor spandrel beams are required. To better understand this wall type, these types of wall systems are truly independent and can stand on their own without the metal building structure. When independent walls are specified on a project, CBC does not supply any structural support and there should not be any structural attachment to CBC's Structure. With independent walls, the CBC structure does not resist the wind or seismic loading in the area that these walls exist. This wall type can be used with shorter wall applications but uncommon with taller or full height applications. When this type of wall system is considered, horizontal deflection and structural separation between the wall and the structure may need to be considered to keep the two systems completely independent of each other. Furthermore, for instances where the independent wall is partial height and wall sheeting is utilized above, the independent wall system may also need to be designed for additional loads from the CBC wall panel depending on the transition details.

For all conditions described above, offsets required from steel line and where steel line falls in relation to inside face of the wall, face of spandrel, and face of column are important factors that may impact schedule, price, and quality. Consulting with your estimating team is encouraged to determine how this should be dimensioned. For walls supported by CBC structures, CBC design require proper wall weights to be specified based on thickness and type of material used. If any special conditions are required beyond what has been described in this article, sketches and Special User Notes can provide additional insight.