C4. Erection Column Design

As declared in Section B4.2 - for the purposes of design of the steel erection columns it will be assumed that – prior to concreting encasement and curing, the steel erection columns will be required to support a maximum of two completed concreted floors plus three floors with all framing, decking and reinforcement in place plus construction live loading.

In addition there shall be a construction requirement that external wall cladding shall not be installed until after concreting of the supporting columns. That is erection columns do not support cladding.

Erection column design is a straight application of AS4100 but requires a clear understanding of the loads present during construction.

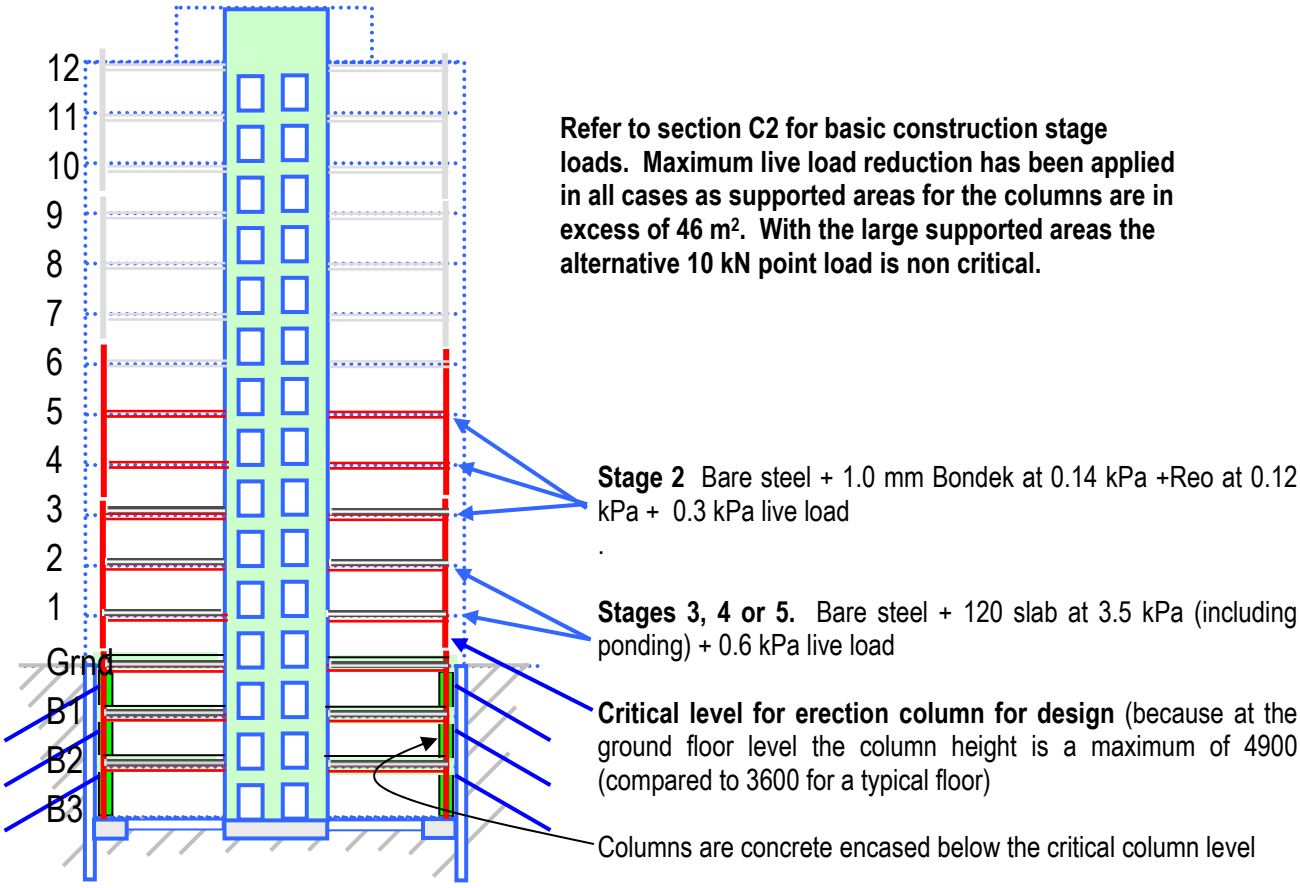

Illustration of the critical design condition for an erection column

For the purposes of design the 14 erection columns may be grouped as follows (refer defining diagram on following page):

- Corner columns **C1**, C4, C11 and C14
- Long wall columns **C5** to C10
- Short wall columns **C2**, C3, C12 and C13

Only columns C1, C5 and C2 being typical of these three groups need be designed.

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