The International Building Code (IBC) as well as many State and local codes require floors to be designed to support the dead loads (the actual weight of the floor and any permanent occupancy loads) and live loads listed in IBC Table 1607.1. Dead loads can be calculated manually from published lists of material weights and should be specified by the Building Designer. The typical minimum top chord dead load for floor trusses is 10 pounds per square foot (psf) and the typical bottom chord dead load is 5 psf. IBC Section 1607 specifies the prescribed minimum live loads based upon occupancy. For an office building, the minimum uniform live load is 50 psf over the entire floor area plus a concentrated load check of 2000 pounds over any 2'-6" x 2'-6" square space. This load should also be specified by the Building Designer. 2000 pounds is considered as non-concurrent with other live loads. Also, be aware that IBC Section 1607.5 requires that in office buildings and in other buildings where partition locations are subject to change, provisions for partition weight shall be made, unless the specified live load exceeds 80 psf. Such partition load shall not be less than a uniformly distributed live load of 15 psf. This partition load should also be specified by the Building Designer.

Thus, when designing trusses for office building and the construction documents specify: Total Live Load – 50 psf and Total Dead Load - 15 psf, see below an example of how these loads should be entered into MiTek Engineering when minimum partition loads are required.
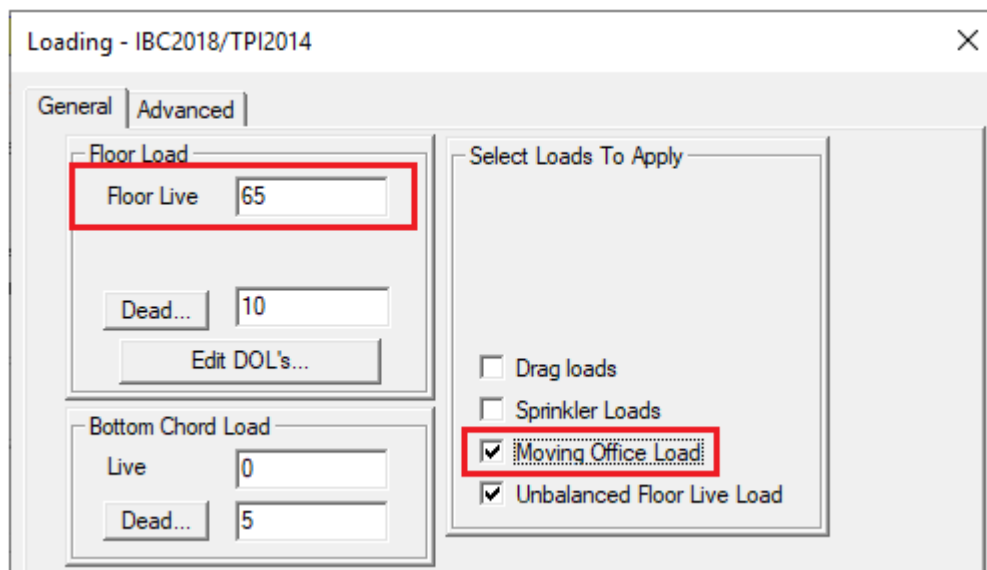
Moving Office Load check will generate separate load cases to account for the 2000 lbs. load being moved across the top chord and applied over a 2'-6" area.
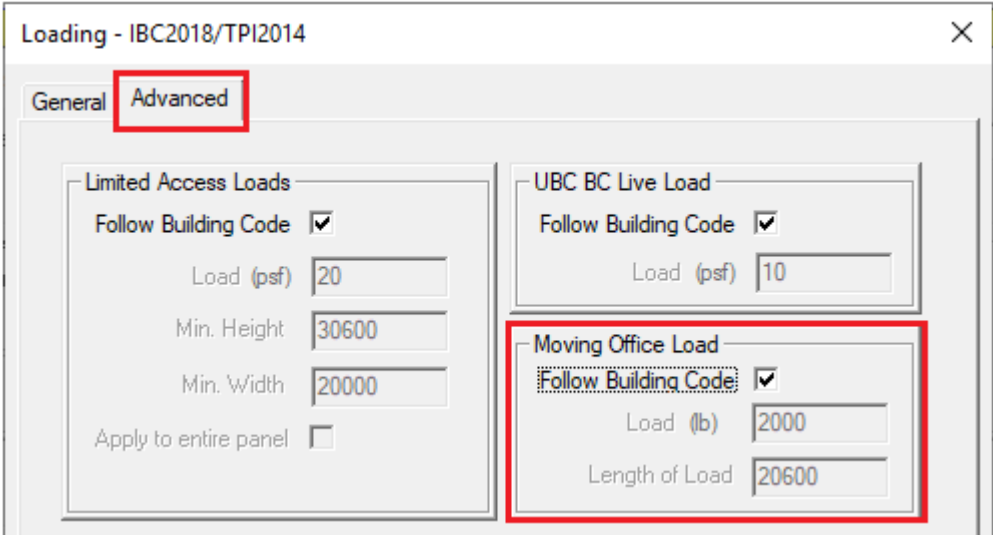
For additional information, or if you have questions, please contact the MiTek Engineering department.