

Equal constraint

An **equal constraint** is applied to [joints](#) such that equal displacement occurs along the translational DOF specified. No coupling occurs between translation and rotation, differentiating an equal constraint from a [body constraint](#). Equal constraints are useful for modeling expansion joints and locations where two elements connect to form a slot-pin connection, as described in the [Modeling pinned connections between crossing members](#) tutorial.

To fully connect [meshes](#) which do not share common joint locations, body constraints should be used, rather than equal constraints. Otherwise, the constraint may restrain the system against certain types of behavior, thus stiffening the model, and generating unrealistic moment values. This will affect analysis and may lead to the reporting of a lack of equilibrium among constraint forces.