

We've Got It Covered

AN EXPANSION JOINT COVER EDUCATIONAL SERIES

Types of Building Movement

Prior to selecting an expansion joint cover for a project, it is crucial to consider which type(s) of movement a building may be subject to so that the proper model can be selected.



Thermal movement

is the most common type of movement and is caused when the structure expands and contracts due to temperature changes.

Recommendation:

All expansion joint cover systems should be able to accommodate thermal movement, however, make sure that the selected cover meets the project's specific thermal requirements.



Wind sway

is caused by strong winds, which taller buildings are especially susceptible to.

Recommendation:

In conditions where wind sway frequently causes movement greater than 1", surface mounted plate systems for floors and rubber gasket systems for walls and ceilings are ideal because these types of systems do not disengage, which could cause a tripping hazard.



Seismic activity

is a dramatic movement caused by earthquakes.

Recommendation:

If your building is in an active seismic zone, you want to choose a cover that accommodates multi-directional movement (expansion, contraction, lateral shear, and vertical displacement) so that building occupants can safely exit when such an event occurs.



Building settlement

is caused by the dead and live loads of the structure on the supporting foundations. For example, if you have a project that requires new construction to be connected to an existing building, the new construction may settle at a different rate.

Recommendation:

It is important to have a plan for future expansion joint cover replacement should settlement occur.