

Movement Accommodation

As the leading association representing installation companies in the United States for ceramic and natural stone tile, the National Tile Contractors Association actively participates in the development of standards and methods to improve the quality of workmanship and performance in both commercial and residential applications. We urge all of our contractor members to follow these standards and methods to ensure quality installations on their projects.

One of the most important standards our industry recommends to be followed is EJ-171, allowing for movement accommodation in tile assemblies. EJ-171 is recognized by the entire tile industry, and can be found in the Tile Council of North America Handbook for the proper installation of ceramic and stone tile. Failure to account for movement in a tile or stone assembly is considered to be one of the leading causes of installation failure. This applies to both commercial and residential applications. By not accounting for anticipated movement in a ceramic or stone tile assembly, you run the risk of many problems with the installation, such as grout cracking, loss of bond of mortar to the tile, and in some instances, lifting or “tenting” of the tile as pressure pushes onto the material towards the center of the room.

Because of the limitless conditions and structural systems on which ceramic and stone tile can be installed, the architect or designer shall show the specific locations and details of movement joints on project drawings. The tile and stone industry recommend that movement joints be installed every 20-25 feet in each direction in interior applications, and every 8-12 feet in each direction on exterior projects. If interior jobs are exposed to direct sunlight or moisture, it should be treated as an exterior project and have movement joints every 8-12 feet in each direction. The same applies to above-ground tile and stone projects on concrete slabs.

The NTCA feels very strongly that it is not the responsibility of the tile contractor to decide where to locate movement joints in the installation. However, it is a tile contractor’s responsibility to make all parties aware of Method EJ 171, and to not take on liability by proceeding with work that does not address movement accommodation and expansion joint placement and location.