



Gatlinburg Town Square is a mid-rise building consisting of residential units. The lower level of the building is used as a parking garage. Portions of the first floor extend out beyond the condominium building to form a plaza space that has a reflecting pool, fountain, and other amenities, as well as additional parking spaces.

The original portion of the development was constructed in 1986. Subsequently, an additional phase of the project was constructed in late 1990's. The building structure in the original portion is primarily comprised of a cast-in-place concrete frame with post-tensioned structural slabs. The addition has been primarily constructed with conventionally-reinforced cast-in-place concrete slabs.

There are elevated walkways on each level that provide access to the residential units.

The original plaza area had been rehabilitated in 1988. The plaza surfaces primarily consist of 2-foot by 2-foot concrete pavers as a wearing surface. These pavers are placed over pedestals and a waterproofing membrane, and the joints between them have been sealed with sealant.

BTC was retained to perform an overall assessment of the condition of the plaza, elevated walkways, and the parking garage. Our involvement was triggered by ongoing water leakage issues and distress in the concrete components.

Our evaluation revealed significant deterioration in the concrete components of the garage and elevated walkways. The deterioration of garage components were primarily due to water leakage through the plaza waterproofing system. Lack of concrete protection had resulted in localized deterioration of the elevated walkways.

Project Name:

*Evaluation of Plaza, Elevated Walkways and, Parking Garage
Gatlinburg Town Square*

Project Location:

*414 Historic Nature Trail
Gatlinburg, Tennessee*

Client:

*Gatlinburg Town Square Condominiums
414 Historic Nature Trail
Gatlinburg, Tennessee 37738*

Approximate Construction Cost:

NA

Year Completed:

2006

Nature of Services:

*Condition Evaluation of Plaza, Elevated Walkways, and Parking Garage,
Assessment of Leakage Sources,
Conceptual Repair Recommendations*

