

Gateway Village, Charlotte, NC

LOCATION

Gateway Village
Third Ward
Charlotte, NC

PROJECT

SPECIFICATIONS
15 Acre Mixed-Use,
\$450 Million Project.
65,000 sf Retail
583 Residential Units

DEVELOPER

Bank of America
Cousins Properties

CIVIL

ENGINEERS
ColeJenst & Stone

LANDSCAPE

ARCHITECTS
ColeJenst & Stone

LIGHTWEIGHT PRODUCER

Carolina **STALITE**
Company

LIGHTWEIGHT PRODUCT

PermaTill,
expanded slate by
STALITE

WATERPROOFING

American Hydrotech

LANDSCAPING & IRRIGATION

Southern Tree and
Landscaping

Lightweight *PermaTill*® Reduces Dead Load in Roof Garden

GATEWAY GARDENS IS CENTERPIECE OF GATEWAY VILLAGE

Gateway Village is a mixed use development by Bank of America and Cousins Properties. It is located in Third Ward neighborhood of downtown Charlotte, NC. ColeJenst & Stone provided landscape architecture and civil engineering for development which offers office, retail, single and multi-family residential space and a centerpiece garden connecting the two main office buildings.



Garden centerpiece. The gardens partially cover the underground parking facilities.

GATEWAY GARDENS COVER PARKING STRUCTURE

Gateway Gardens is a 1.5 acre park featuring a water garden containing fountains, a terrace with a cafe, and a central green area for outdoor concerts and events. The garden is located over a portion of the underground parking which serves both adjacent buildings. The portion over the parking deck needed special design considerations because it had to be waterproofed and the weight of all components had to be calculated and addressed.

American Hydrotech provided waterproofing. Carolina **STALITE** Company provided 2000 tons of lightweight fill and lightweight soil mixture featuring the expanded slate lightweight soil amendment, *PermaTill*. The mixture specified had to be designed and prepared not to exceed the weight limitations for dead and live loading of the underground structure, while still providing good in-place compaction and drainage. The soil mixture also needed to securely anchor the plant material and provide for sustained plant growth.

TELESCOPING CONVEYOR USED TO PLACE SOIL MATERIAL

The planters were filled using an ingenious piece of equipment called a Putzmeister Telebelt provided by Carolina Concrete Pumping. The Putzmeister is a telescoping conveyor system used to place material within a 60 foot radius. Southern Tree and Landscaping, a TruGreen Company, was the landscape contractor, and was responsible for soil placement, irrigation and planting.



Putzmeister telescoping conveyor used to place lightweight soil mixture over underground parking structure

A BRIGHT FUTURE FOR ROOFTOP GARDENS

Lightweight soil fills, especially in combination with structural lightweight concrete, is making rooftop gardens an attractive architectural alternative for designers around the world. In Europe, companies have developed and are marketing modular roof garden systems that employ Leca and crushed brick at a growing medium. In the U.S., Carolina **STALITE** has teamed up with American Hydrotech to provide lightweight soil mixtures containing PermaTill expanded slate. Carolina **STALITE** and American Hydrotech can provide the expertise, design criteria, products and installation of the latest roof garden and waterproofing technology.



Lightweight growing medium is easy to place and compact, and provides a secure anchor for plantings

For Additional Information About Lightweight Fills and Soil Mixtures
www.permatill.com / www.stalite.com

or contact

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