GEBERIT

GEBERIT CONCEALED TANK AND CARRIER SYSTEM A GAME OF INCHES

DESIGN MEETS FUNCTION



HOTEL RENOVATION **PROTECTING A LANDMARK** CHICAGO, ILLINOIS

The Geberit wall-hung carrier protects a Chicago historic building's integrity, solving a major problem for this landmark renovation.

THE CHALLENGE

Located in the epicenter of Chicago's financial district, directly across the street from Willis Tower, the historic building once known as the headquarters of the Chicago and North Western Railway will take on a new life with the creation of the dual-branded Canopy by Hilton Chicago Central Loop (Canopy Chicago) and Hilton Garden Inn Chicago Central Loop (HGI Central Loop).

Accorded Landmark status by the Commission on Chicago Landmarks, the 117-year-old building will include 350 guestrooms and suites between both properties, along with food and beverage outlets for each – Depot 226 and Garden Central, respectively. Each hotel is designed to maintain its own distinct identity and offer unique amenities to serve guests.

Careful planning is essential to balance requirements of a hotel franchise, building regulations, and the requirements (and potential benefits) of historic preservation. One common challenge when repurposing historic structures and landmarks is unforeseen obstacles arising from structural limitations. Such was the case during the design coordination of the guestroom bathroom spaces in the HGI Central Loop hotel located on the first six floors.

The original HGI Central Loop guest room bathroom design called for floormounted toilets in the converted spaces. "During coordination with this gray block



building structure, after the limitations on tolerances were determined by the structural engineer for floor penetrations to the floor, we needed to confirm that the bathroom design would work out," explains Michael Souchet, Plumbing Engineer at R. Carrozza Plumbing. "With the floor-mount toilet layout, there are two bigger size cores required: the stack and vent behind. With this structure, the design plus the duct work behind wall, we found using BIM modeling that the structure tolerances on the lower floors would not be met using a floor-mounted toilet."

As with many such structures, the steel and clay tile construction limits penetrations and dictates corresponding tolerances. Planning efficient floor space for the bathrooms proved to be a significant challenge. In addition to the inadequate tolerances, a floor-mounted toilet would eat up too much of the limited space.

In the remodeling of any historic building, the solution to every design challenge must be not only financially feasible and efficient; it must also preserve the landmark character of the structure. The goal of everyone involved is to respect the architectural history while integrating new designs and modern conveniences.

THE SOLUTION

The design team addressed the challenges of structural limitations and design integrity by dropping the original idea of installing floor-mounted toilets and switching instead to Geberit Concealed Tank and Carrier Systems – systems that were already being used on the floors above.

After determining that the Geberit system for wall-mounted toilets specified in the Canopy Chicago upper floors would meet the required tolerances, Souchet suggested using the Geberit system throughout the entire building, not just in the Canopy Chicago. "We were challenged. Because of the layout confirmation already started on the upper floors, we determined the mechanical and technical feature of the Geberit in-wall system specified would be the perfect solution for the bottom floors too."



"Because of the limited space and structural limitations, regular floorstanding toilets would not have allowed opportunities for design flexibility," adds Stephen Embree, Central Region Sales Manager at Geberit. "When you design with Geberit, you get the flexibility to overcome these design challenges."

The Geberit in-wall system opens up more space in the bathroom by enclosing the unsightly toilet tank and other plumbing hardware inside the building's walls. The sound-insulated tank helps deaden the flushing noise, which can reach 75 dBA on a standard toilet, especially important in luxury hotels.

The installation flexibility of the Geberit System was an additional asset in the bathroom design. "Every inch counts, especially in tight spaces with little or no wiggle room" Embree explains. "Using a wall-hung system helped to move toilets five or six inches here and there, which is crucial when you are trying to deal with entries."

The system's flexibility and adaptability are also designed for installation ease: The carrier system attaches easily to wall framing studs, and draining and venting are no different from a conventional floor-mounted toilet. Embree notes, "the Geberit system includes adjustable fixture heights from 15" to 19" (381 to 483 mm), ADA compliance, and a Duofix II Frame that supports up to 800 lbs (400 kg)."

Together, the design team found a way to effectively use the Geberit system throughout the entire building to create one-of-a-kind bathroom designs without compromising structural limitations.

Chicago Train Travel Gets New Lease of Life as Luxury Hotel

Developed by Chicago-based Phoenix Development Partners, designed by Hartshorne, Plunkard Architecture and operated by Aimbridge Hospitality, the Canopy Chicago and HGI Central Loop share an impressive grand entrance and feature interior designs by Anderson/ Miller, Ltd. that highlight the golden age of train travel.

Some unique elements of the building will remain, including the original staircase and tile remnants that will be incorporated into the lobby space. Various mixed media works, historical pieces, and architectural fragments will also be featured on the property, celebrating travel, cartography, and Chicago's rich history.

Canopy Chicago will offer 215 guestrooms, including 23 spacious king suites, and 675 square feet of meeting space that can comfortably serve up to 48 guests. The modern, boutique-style concept is designed as a natural extension of the neighborhood and will provide guests with a variety of local experiences. These is also an on-site fitness center, two unique event spaces, and an outdoor terrace space that is shared between guests at both hotels.

With its prime loop-centric location, guests at Canopy Chicago can hop on a complimentary Canopy Bike stationed on property and explore nearby attractions such as Millennium Park, the Art Institute of Chicago, the Shops on State Street, or the Chicago Riverwalk for access to world-class entertainment and culture in minutes.

HGI Central Loop will have 135 guest rooms for travelers to retreat to, including six king suites, each complete with a separate living room area. Guests can start their day with a cooked-toorder breakfast or unwind with shareable small plates, handcrafted cocktails, or craft beers at the end of the day. The onsite 624-square-foot meeting space will accommodate up to 40 guests.

The complex is also a prime destination for travelers, located in close proximity to many major corporate offices and coworking spaces such as Convene.

Geberit

2100 S. Clearwater Drive Des Plaines, IL 60018 USA

P 800-566-2100 F 847-803-5454

www.geberit.us