



First Delta Beam Project in US



Mid-States Concrete Industries is proud to announce the installation of the first Delta Beam system in the

US. Dwell Bay View, designed by Engberg Anderson Architects, is a mixed use building in Milwaukee, WI and is the first in the country to use the Delta Beam system.

"Mid-States use of the innovative Delta Beam system is an essential component to our Dwell Bay View project. The shallow design of the Delta Beam allowed us to overcome a complicated design issue as it relates to our underground parking beam heights. With the Delta Beam we were able to achieve necessary clear heights, without compromising our budget or layout - two essential components to this very innovative apartment project" commented Joe Klein, Principal HKS Holdings, LLC.

The Delta Beam is a composite beam designed for slim-floor construction. The beam is completely concreted after installation to create the composite action between



Why are weep holes needed?

When a hollow core slab deck is exposed to weather for a long period of time during construction, water can accumulate in the cores. The primary source of water infiltration is at the butt joints. This water can accumulate in the core. In cold weather, this water can freeze and expand causing localized damage. One remedy for this situation is to drill weep holes at the slab ends under each core. The need for such weep holes is generally known only after a

concrete and steel. The composite action enhances the capacity of the beam significantly and enables long clear spans with shallow floor depth. Delta Beams are commonly used with hollow core plank.

“We were very pleased that Mid-States brought the Delta Beam option to the table early to help solve the head room issues in the parking structure. Additional precast beams, nestled steel beams, footings would have been required if the Delta Beam was not used, which would have dramatically changed the parking structure layout completely.” Said Pat Reynolds of Structural Dimensions.

According to Tom Schuchardt, President of KBS Construction, the Delta Beam system saved the project a minimum of \$35,000.

The Delta Beam has been used on over 6,000 projects throughout Europe and Canada since 1989. This system offers several advantages. Design flexibility, reduced cost of mechanical systems, provides fire rating without requiring fireproofing, cost effectiveness and sustainability to name a few.

“Confronted with the requirement of expanded clearance for accessible parking spaces and a limit on the overall building height had the project team looking for a cost effective solution. Thankfully Mid-States Concrete offered up a creative solution that no one had heard of before, the Delta Beam. The design team, skeptical at first, are now believers. The Delta Beam system solved our clearance issue and proved to be a cost effective solution that worked well with the construction schedule.” Eric Ponto, Principal at Engberg Anderson Architects.

The Delta Beam is produced by the [Peikko Group](#). The team at Peikko was great to work with. Their engineering team partnered with the Mid-States team to help make this project successful. We look forward to a long successful partnership.

construction schedule is established. The specifier and the slab supplier are not usually in a position to know of such a need in advance. Mid-States preconstruction team will discuss this with your team during the precon phase.



Composite Beam System

Check out pictures of the Delta Beam installation on our [flickr](#) page.