

480 Hay Street

Perth, WA

Read about the installation of a high-quality diaphragm wall to tight construction tolerances with no leaks or damp patches evident on the final exposed wall.



The project

480 Hay is a 22-storey office tower at the eastern end of Perth's central business district. It is the impressive centerpiece of a new city precinct also featuring the five-star Westin Perth Hotel, a landscaped public courtyard, retail and dining facilities. Construction works included a 5600m² diaphragm wall comprising 600mm wide panels on an 85m x 85m square site. The 50No. panels extended between 16m and 21m below piling platform level.

The challenge

The relatively small inner-city construction site sloped by almost 3m from north to south, and the works were programmed to occur concurrently with demolition of previous building. Like any basement construction, watertightness and tolerance was vital.

The solution

Keller kept in close communication and collaboration with our client and the other contractors on site to meet the logistical challenges of multiple concurrent site activities. We used concrete guide walls to ensure tight verticality of the wall, while specially fabricated guide frames provided accurate installation of vertical plunge columns within the foundation piles.

Project facts

Owner(s)

BPI BGC Posco JV

Keller business unit(s)

Keller Australia

Main contractor(s)

BPI Self Performed

Solutions

Heavy foundations
Excavation support

Markets

Commercial

Techniques

Diaphragm walls / barrettes
CFA piles