



Alley 111 Mixed Use Condo Building

Bellevue, Washington, USA



Architect
GGLO, LLC

Building Envelope
**CONSULTANT MORGAN
DESIGN GROUP LLC**

Shotcrete Contractor
AIR PLACED CONCRETE

GC
EXXEL PACIFIC

Ready Mix Provider
**CADMAN INC.
(HEIDELBERG CEMENT
GROUP)**



The design-build contractor for the new 12-storey Alley 111 mixed-use high-rise in downtown Bellevue, Washington included a LEED-point eligible water retention vault to capture and store stormwater per the city's building code. This structure was constructed using a blind-side shotcrete method with Xypex Admix C-500 to ensure that it is water-tight.

The fire suppression vault, located at one corner of the high rise structure was constructed using the more conventional double-formed method on the interior walls. The structural walls also form two sides of the suppression vault, and were constructed by shotcrete placement. The contractor used Xypex Admix C-500 in the batch mix for waterproofing the two structural walls as well as the interior walls and the slab.



The developer's confidence in the Xypex waterproofing solution helped the project team save forming costs and accelerate the project schedule. The retention vault will collect water from the exterior building envelope so this gray-water can be metered, stored or repurposed for non-potable water uses.