Project Spotlight

White Rock Single Family Dwelling

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White Rock Single Family Dwelling

Lafarge's Agilia® provides value for residential home.

Project Details

Owner:
Miles Willetts

Location:
White Rock, British Columbia

General Contractor:
Willetts Contracting 2004 Ltd.

Placers and Finishers:
Willetts Contracting 2004 Ltd.

Innovative Product:
Agilia® Architectural

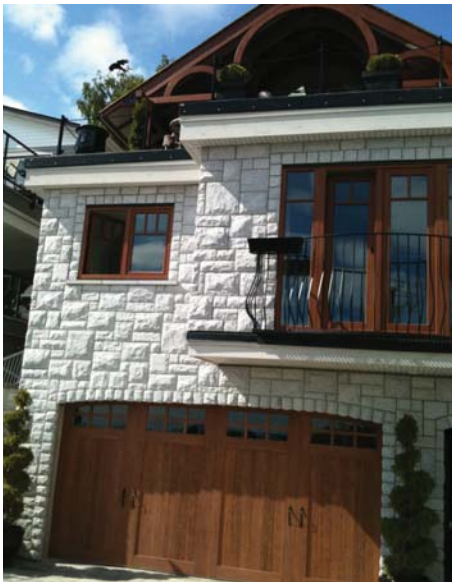
Volume of Project:
140m^3

Year of Construction:
2010

The Opportunity

The seaside community of White Rock, British Columbia is a popular resort destination for Canadians. Established at the turn of the twentieth century, the resort town is nestled amidst 8kms of sandy beach and features narrow, winding streets, Victorian architecture, and, of course, a 486 ton white rock from which it got its name. As charming as White Rock's narrow streets are, when you take into account the community's summer visitors, they can present a significant problem for residents: parking.

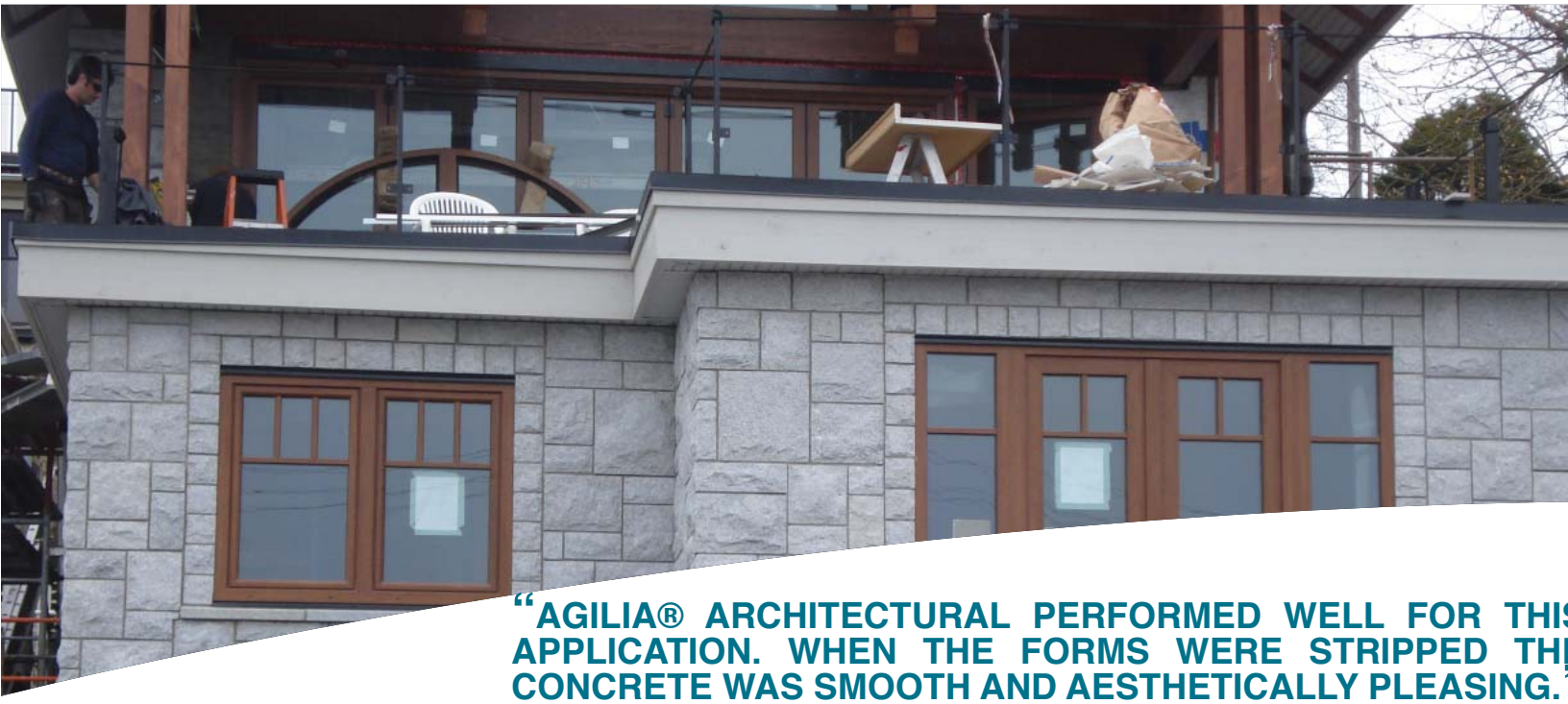
When the owner of Willetts Contracting 2004 Ltd. decided to renovate his 2 storey home located in White Rock, BC, he wanted to accomplish several things. First, he wanted to be able to preserve the home's unique architecture and style. Second, he wanted to add a garage.



This 3 1/2 storey single family dwelling in White Rock, British Columbia was originally 2 storeys. Built in 1926, it was renovated to include a garage.

The Challenge

The Willetts' home is located on a narrow sloped lot. In order to add a garage while still maintaining as much of the original structure as possible, the top floor of the house would have to be lifted while the bottom floor was demolished to make room for a new main floor and garage underneath. Then, construction crews would dig into the slope of the lot to create



"AGILIA® ARCHITECTURAL PERFORMED WELL FOR THIS APPLICATION. WHEN THE FORMS WERE STRIPPED THE CONCRETE WAS SMOOTH AND AESTHETICALLY PLEASING."

- MILES WITTELL
WITTELLS CONTRACTING LTD

The Challenge Continued...

To accomodate both the main floor and the garage, the foundation walls would need to be 19ft tall. This presented a challenge as the high forms would make it difficult for conventional concrete to be properly vibrated. In addition to this, the concrete used would also need to be poured around windows built into the forms. For this renovation to be a success, Willetts Contracting 2004 Ltd. needed a concrete with high flow properties that would not segregate when poured into the 19ft high foundation forms.

As you can see, Agilia® Architectural provides a smooth, unblemished surface for the entire span of the 19ft foundation wall.

The Lafarge Solution

Willetts Contracting 2004 Ltd. teamed up with Lafare to solve their construction challenge. After consulting with a local sales representative, they decided to use Lafarge's Agilia® Architectural for their forms. Agilia® Architectural was a good fit for this application because it allowed the construction crew to pour into the 19ft tall forms without having to worry about segregation. Agilia® Architectural also has high flow properties, this allowed it to be poured around the built-in windows without incident.

Using Agilia® Architectural for this application was a huge success. The project was completed on schedule and without incident. When the forms were removed, the concrete was smooth and aesthetically pleasing.

Below: The top floor of the original house is lifted and a main floor and garage are built underneath.

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