



**READY MIX
CONCRETE**

QUICK FACTS

**PROCUREMENT
MODEL:
COLLABORATIVE**

**LAFARGE'S ROLE:
READY MIX
CONCRETE
SUPPLIER &
CONTRACTOR**

**TOTAL VOLUME
3,000 M3**

**COMPLETION
DATE:
NOVEMBER 2018**

CHAIR LIFTS: POURING CONCRETE BY HELICOPTER

WHISTLER, BC

PROJECT OVERVIEW

In an historic announcement at ski resort, Whistler Blackcomb, Vail Resorts installed two new lifts and gondola for the 2018-2019 season, cutting wait times at the core of each mountain. On Whistler, the team installed a new six-person alongside a high-speed, four-person chair on Blackcomb. The new 10-person gondola, from the Upper Village to the PEAK 2 PEAK Gondola connection, created the first fully-sheltered route up Blackcomb year-round.

Pouring concrete for on the side of a mountain is no easy task. As concrete contractor, Lafarge's scope included mix design and supply to a remote and challenging location - bringing in helicopters to get our quality mixes to the right place, at the time, and without injury.

Only the Lafarge Canada team had the knowledge, quality, and experience to execute this dangerous and complex work.



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COMPLEX ENVIRONMENT AND ESSENTIAL TIMING

Moving material up a mountain through various spring and summer conditions required the cooperation of two separate helicopter services, the clients and resort operator, and Cardinal Concrete (a division of Lafarge Canada.)

Coordination with the contractor, helicopters, other contractors on the mountain, and third party testing involved excellent communication. The 6 month window from start to finish to open for the winter season required constant communication and tight scheduling.

The greatest challenge was ensuring that concrete met the specifications, and was ready to fly on a rapid helicopter schedule. Cycle times from the back of the truck to form and back to the truck were <2 minutes, and with the larger helicopter the trucks would empty in <15 minutes. Arriving at the specified slump and ready to pour was critical to ensuring that there were no delays to the helicopter. The highest pours for the top stations were approximately 10km up the mountain's private gravel roads, including many switchbacks and steep grades.

Our skilled and experienced drivers navigated challenging environments, including taking trucks off road and down the terrain park to complete a pour when there was too much fog for the helicopter to fly.

All pours met QC requirements, were completed on schedule, and ensured that this highly demanding and significant upgrade was completed on time for the resort operators.



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