

Southwest Calgary Ring Road

Calgary, AB, Canada (2021)

PRODUCT USED:
Con-Fume®

OWNER:

Alberta Transportation

READY-MIX SUPPLIER:

BURNCO Rock Products Ltd.

DISTRIBUTOR:

Kryton International Inc.

BACKGROUND

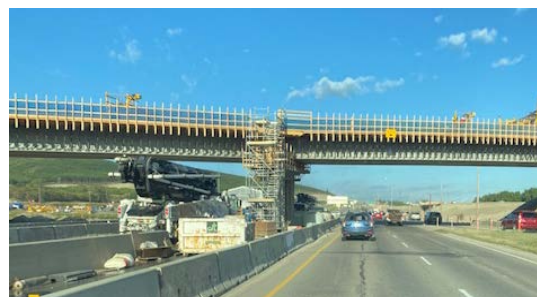
Since the 1970s, Alberta Transportation has been planning the development of the Calgary Ring Road. Designed to provide 101 km (63 mi) of free-flow travel around Calgary when complete, the road will ease traffic congestion and create better travel routes for both businesses and residents.

While not all sections of this massive development are complete just yet, Alberta Transportation has made progress in a number of areas. One of these areas in particular is for the southwestern part of the Calgary Ring Road. And it was only made possible through the assistance of the Tsuut'ina Nation.

With the Nation's agreement to transfer 1,058 acres of their land to the Alberta government, Alberta Transportation would have the property rights to construct the Southwest Calgary Ring Road. In return for this benefit, the Government of Alberta agreed to provide the Tsuut'ina Nation with 5,018 acres of Crown land. They also offered \$340.7 million for the Nation's land and for any impacts from the construction, approval for the Nation to purchase an extra 320 acres of Crown land for \$1.6 million, and the relocation of a high-pressure gas line and overhead electrical lines from Weaselhead Park to the transportation and utility corridor.

Once this agreement was finalized in 2013, Alberta Transportation was able to properly prepare for constructing the road. As part of that preparation, they planned for 31 km (19 mi) of highway, one road flyover, one railway crossing, 49 bridges, one tunnel, and three river crossings.

Each part came with its own challenges. For instance, Alberta Transportation specified silica fume as part of their strict requirements for concrete performance and durability, which must also meet specific requirements for quality, consistency, and reliability.



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SOLUTION

Kryton was able to neatly satisfy the need for such silica fume with their Con-Fume solution. After all, it meets all the requirements of *CSA A3001* as well as *ASTM C1240*. It was also designed specifically to enhance bulk material flow and handling characteristics, making bulk transportation and pneumatic unloading more efficient. To make its transportation even easier, Kryton delivered the Con-Fume in bulk to the ready-mix supplier for the Southwest Calgary Ring Road. That way, there would be less effort needed to add Con-Fume to the concrete.

All of which allowed Alberta Transportation to add a quality form of silica fume to their bridges' concrete mix, producing a dense, strong, and durable form of concrete that could resist corrosion. As a result, the bridges that are part of the Southwest Calgary Ring Road are able to endure traffic exposure, wreathing, and de-icing salts while creating a quality driving experience for those going through the Calgary Ring Road.

