

# CASE STUDY

## Metals & Mining



Building the World to Last®

### Project Specs

**Location:** Saskatchewan, Canada

**Application:** Potash Belt Galleries

### Problem

Early in 2009, StonCor Group was contacted by AMEC and Potash Corporation of Saskatchewan to help solve a corrosion problem. This problem was discovered after the collapse of a large belt gallery in Esterhazy, Saskatchewan. This collapse was later discovered to be caused by severe corrosion of the steel floor support structure leading to catastrophic failure of the gallery.

It was determined that the floor system in the new galleries needed to be both corrosion resistant and waterproof, so that no potash or water could end up in contact with the steel structure and affect the structural integrity of the gallery. StonCor's Fibergrate and Carboline Divisions stepped up with an innovative design to solve this issue.



### Solution

Fibergrate designed, fabricated and installed a seamless floor and wall structure using a combination of existing and newly engineered FRP components. Components were fabricated in Fibergrate's 37,000 square foot fabrication facility in Oshawa, Ontario. Once completed, these components were shipped to B.I.D Ltd. in Woodstock, New Brunswick, where they were installed on the steel belt gallery frames and prepared for final assembly on site.



The structure of the gallery was painted with Carbozinc 859 high load zinc primer and two coats of Carboguard 890 high-performance epoxy. After these sections were built, they were trucked several hundred kilometers to site and raised into place where the final assembly was completed. The light weight FRP and high-performance coating allowed the customer to deliver a high quality product that will provide years of service in a highly corrosive environment. StonCor was pleased to partner with both PCS and AMEC to help reduce construction costs and improve design life through innovative engineering.

Phone: 800-527-4043 | Fax: 972-250-1530 | [www.fibergrate.com](http://www.fibergrate.com)

Fibergrate Composite Structures Inc. believes the information contained here to be true and accurate. Fibergrate makes no warranty, expressed or implied based on this literature and assumes no responsibility for the consequential or incidental damages in the use of these products and systems described, including any warranty of merchantability or fitness. Information contained here can be for evaluation only. The marks and trade names appearing herein, whether registered or unregistered, are the property of Fibergrate Composite Structures Inc. ©Fibergrate Inc. 2021