



Innovations that work.™

ACN 109 200 900

AUSTRALIAN SECURITIES EXCHANGE ANNOUNCEMENT

17 September 2020

EdenCrete®- Shotcrete Market Update

In spite of commercial activity having been slowed significantly during the past eight months due to the COVID-19 pandemic Eden has never-the-less continued to make encouraging progress with the sales and marketing of the EdenCrete® products in the USA (and elsewhere).

One of the great successes has been where EdenCrete® has been included in concrete that is applied as high-pressure shotcrete.

The added EdenCrete® delivers not only a range of performance benefits in the concrete, such as increased compressive and flexural strength, but also has delivered other advantages. In applications where fresh concrete must be pumped under pressure, primarily for shotcrete or pumping of fresh concrete up to high - rise construction projects, the added EdenCrete® reduces the friction enabling the required pumping pressure to be reduced, that in the case of shotcrete, results in:

- less wear on the pumps,
- safer working conditions due to reduced nozzle pressure being required where the concrete is sprayed on (see Figure 1 and Figure 2), and
- consequential cost savings through considerably less wasted concrete resulting from a reduction in re-bound of the fresh concrete falling of the wall face.



Figure1 Shotcrete trial without added EdenCrete®



Figure 2 Shotcrete trial with added EdenCrete®

These benefits have translated into significant growth in usage of EdenCrete® in shotcrete applications which now include:

- re-inforcement and buttressing of bridge piers /ground-anchored retaining walls (see Figure 3);

- road-cut stability to inhibit rock-slides and avalanches (see Figure 4);
- construction projects for concrete vertical surfaces and swimming pools (see Figures 5 and 6); and
- concrete aquatic structures such as water-slides (see Figure 7).



Figure 3. Re-inforcement and buttressing – Central 70 Project - I-70 Denver Colorado



Figure 4. Road-cut stability



Figure 5. Concrete vertical structures



Figure 6. Concrete swimming pools



Figure 7 Concrete aquatic structures

The Central 70 project on the Interstate Highway I-70 in Denver, Colorado that commenced in late 2018 (see Eden announcement (ASX:EDE) 15 November 2018) and is still continuing, in which EdenCrete® is being used

in all the shotcrete that is being used to assist in both buttressing and ground-anchored retaining walls along the 10 miles of highway re-construction, that is expected to require between 6,000 and 10,000 cubic yards of shotcrete in which EdenCrete® is being added at one half a gallon per cubic yard of shotcrete.

An indication of the size and importance of this project, which has now been ongoing for more than 20 months, can be gained from Figures 8-10 which are all from the Central 70 Project on the I-70 in Denver Colorado.



Figure 8. Retaining wall along Central 70 project constructed using EdenCrete® shotcrete.



Figure 9. Retaining wall being constructed along Central 70 project using EdenCrete® shotcrete



Figure 10. Retaining wall constructed under bridge using EdenCrete® on Central 70 project.

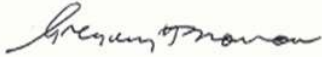
As a result of the significant benefits delivered on the Central 70 project, Eden anticipates that EdenCrete® will be likely to be included in a considerable number of future projects.

BACKGROUND

EdenCrete® is Eden's 100% owned, proprietary carbon-strengthened concrete additive that enhances a wide range of performance characteristics of the concrete including compressive strength, flexural strength, tensile strength, abrasion resistance, reduced permeability, increased modulus of elasticity, and reduced shrinkage, delivering stronger, tougher, more durable and longer lasting concrete.

EdenCrete® delivers not only a wide range of performance benefits in concrete, but also delivers economic advantages through many ways, including greater durability and service life for the concrete. Additionally, in applications where fresh concrete has to be pumped under pressure, including in shotcrete or pumping of fresh concrete up high-rise projects, it greatly reduces the friction enabling the required pumping pressure to be reduced, resulting in less wear on the pumps, and safer working conditions due to reduced nozzle pressure being required, which in turn results in cost savings through less wasted concrete resulting from reduced re-bond in the case of shotcrete applications.

One of the primary target markets for EdenCrete® is improving the performance of concrete used in the construction and maintenance of concrete roads, bridges and other infrastructure, particularly where it is subject to heavy wear, freeze/thaw weather conditions and/or high levels of added salt. Additionally, it has potential for use in most other concrete applications including high-rise building construction, marine and coastal applications, water storage and pipelines, hardstand areas, warehouses, shotcrete applications and pre-stressed and pre-cast concrete structures and products.



Gregory H. Solomon
Executive Chairman

This announcement was authorised by the above signatory.
For further information please contact Aaron Gates on +61 8 9282 5889.