



PARADOX

# PARADOX TOUGH CELL® SOLUTIONS



Need a permanent access solution to cross through muskeg, reach a remote location, or hold up to frost boils? No matter the size of your project, Paradox's team of experts will deliver an optimized geosynthetic solution designed to meet your exact needs. Our Tough Cell® product is the only geocell approved by Alberta Transportation for load support applications. We pride ourselves on jobs done right the first time - no matter the challenges.

## TOUGH CELL® APPLICATIONS

### PLATFORMS

Tough Cell® provides unrivaled strength for load-bearing applications

### ROADS

Build strong, durable roads using local aggregates that outlast and outperform conventional alternatives.

### SLOPES

Tough Cell® is a great solution for soil stabilization and erosion control applications

## TOUGH CELL® TECHNOLOGY

Tough Cell® is a high-performance NPA cellular soil confinement and reinforcement system made from Neoloy, a novel polymeric alloy. In load support applications, Tough Cell® assists via three proven load transfer mechanisms:

- Lateral and Vertical Confinement:** Stops the material spreading and base course deterioration that saves in operation and maintenance cost of the road.
- Wider Stress Distribution:** Transfers applied pressure to wide area on the subgrade. This allows road construction on weaker subgrade (having smaller bearing capacity).
- Beam Effect:** Behaves like a slab and weaker areas are supported by transferring the load to the competent adjacent areas.

## TOUGH CELL® BENEFITS



### LESS AGGREGATE

Reduces structural infill requirements by 50% or more.



### FAST AND EASY

Simple and fast all-season construction



### LOWER COST

Transportation & logistics



### PATENTED TECHNOLOGY

Neoloy material is 2-5x more dimensionally stable than HDPE.

**LONGER LASTING LESS EXPENSIVE ROADS**

## ABOUT PARADOX

Paradox Access Solutions is a design-build contractor providing safe, reliable access across Canada with our matting, geosynthetics, earthworks, and engineering services. Since 2004, we've provided temporary and permanent access solutions that outperform and outlast conventional alternatives, while protecting the environments and communities that we work in.

## HEALTH & SAFETY

Paradox leads the industry in our commitment to safety. We reported a TRIF of 0 in 2021 and we're a member of several top safety organizations:



## INDIGENOUS INCLUSION

Paradox is committed to establishing and maintaining authentic, mutually respectful, and meaningful relationships with Indigenous Nations. Some of our valued partners include:



## OTHER SOLUTIONS



### ACCESS MATTING

Wood mats, rig mats, and crane mats cleaned and installed for temporary roads, pads, and more.



### EARTHWORKS

Road building, demolition, job site maintenance, culverts, site preparation, and more.



### ENGINEERING

Structural design, geotechnical services, surveying, and more through Stratum Logics.