### About us



**Engineering expertise**, innovation and excellence in client care to deliver sustainable solutions.

As global specialists we operate as **designer** and supplier of civil engineering solutions that retain, cross, protect and strengthen. As the inventor of the **Reinforced Earth**<sup>®</sup> **solution**, our strength is the result of an unrivalled combination of expertise with over 60 years of experience in the fields of soil-structure interaction and engineered backfills.

Terre Armée delivers its leading technologies to serve clients' projects, from the simplest to the most extraordinary. Guided by our focus on **innovation** and our **culture of excellence in client care**, we offer suitable and durable solutions. We build on our global expertise, which is applied by our **local companies** to develop new applications to address localized challenges that ensure sustainability of our offer.







To contact a regional manager and learn more about RECo products and services please visit reinforcedearth.ca/contact



### T-Wall PRECAST MODULAR GRAVITY WALL

## **T-Wall**

#### Precast modular gravity wall

T-Wall is a precast concrete, modular gravity wall solution designed for heavy and light rail, highways, hydraulic, and site development applications.

A proven solution for grade separations and typical **earth retaining structures**, the solution is composed of structurally reinforced, monolithic T-Wall units and select backfill. The concrete facing units have monolithic perpendicular stems, forming the shape of a "T".

The stems internally stabilize the wall, providing **pullout resistance** against the lateral earth pressure exerted on the back of the facing.

The T-Wall design methodology allows for a stem length that varies over the height of the wall. For routine applications, as the courses of units are stacked, the stems decrease in length and therefore require less select backfill than alternatives.

For special and permissible applications, the shortest possible T-Wall units are placed at the bottom of the retaining wall structure with successively longer units stacked above. This is referred to as "Inverted T-Wall".

T-Wall meets AASHTO service life design requirements (up to 100 years for bridges and 75 years for retaining walls) and can be designed for a service life of up to 150 years.

#### **Benefits**

- Essentially maintenance-free
- No mechanical connections or external bracing required
- bottom ash, slag, sand, flowable fill, and cellular concrete
- Variable length stems reduce **backfill quantities**
- Can be built **vertical** or **inclined**
- conduits and catenary systems

# **T-Wall**

Since 1986, more than 900,000 m<sup>2</sup> of T-Wall has been constructed, and together with wall heights exceeding 15 m give confidence to stakeholders in the performance of T-Wall structures. Terre Armée engineers work closely with developers and builders from project inception to completion. Discover some of our T-Wall applications or applications inception to completion. Discover some of our T-Wa contact Terre Armée for a list of project references.

# 11198-144 HILFEP Roadway access ramp









**ENVIRONMENTAL PRODUCT DECLARATION** In accordance with EN 15804+A2 & ISO 14025 / ISO 21930

• In addition to using imported granular backfills, a wider range of backfills are possible such as on-site granular soils, recycled crushed concrete,

• Allows choices for architectural treatments, copings, barriers, utility

Robust T-Wall units efficiently provide the **stability** needed for building concrete gravity retaining walls that require performance under extreme **loading conditions**, for instance railways and bridges.

