

# About Us



1968

established since



293 M€

2023 revenue



80

countries



70 million m<sup>2</sup>

of Reinforced Earth®  
walls



+100.000

structures around  
the world



102,8 m

tallest structure

As global specialist we operate as **designer** and **supplier** of civil engineering solutions that **Retain, Cross, Protect and Strengthen**. As the **inventor of the Reinforced Earth® 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**.

Geoquest 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 **durable solutions**. We build on our **global expertise**, which is applied by our **local companies** to develop new applications to address challenges and ensure sustainability of our solutions.

Watch our Retain, Cross,  
Protect, Strengthen video.



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



To contact us and learn more about Geoquest products and services  
please visit [geoquest.ca/contact](https://geoquest.ca/contact)

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T-Wall®

PRECAST MODULAR GRAVITY WALL

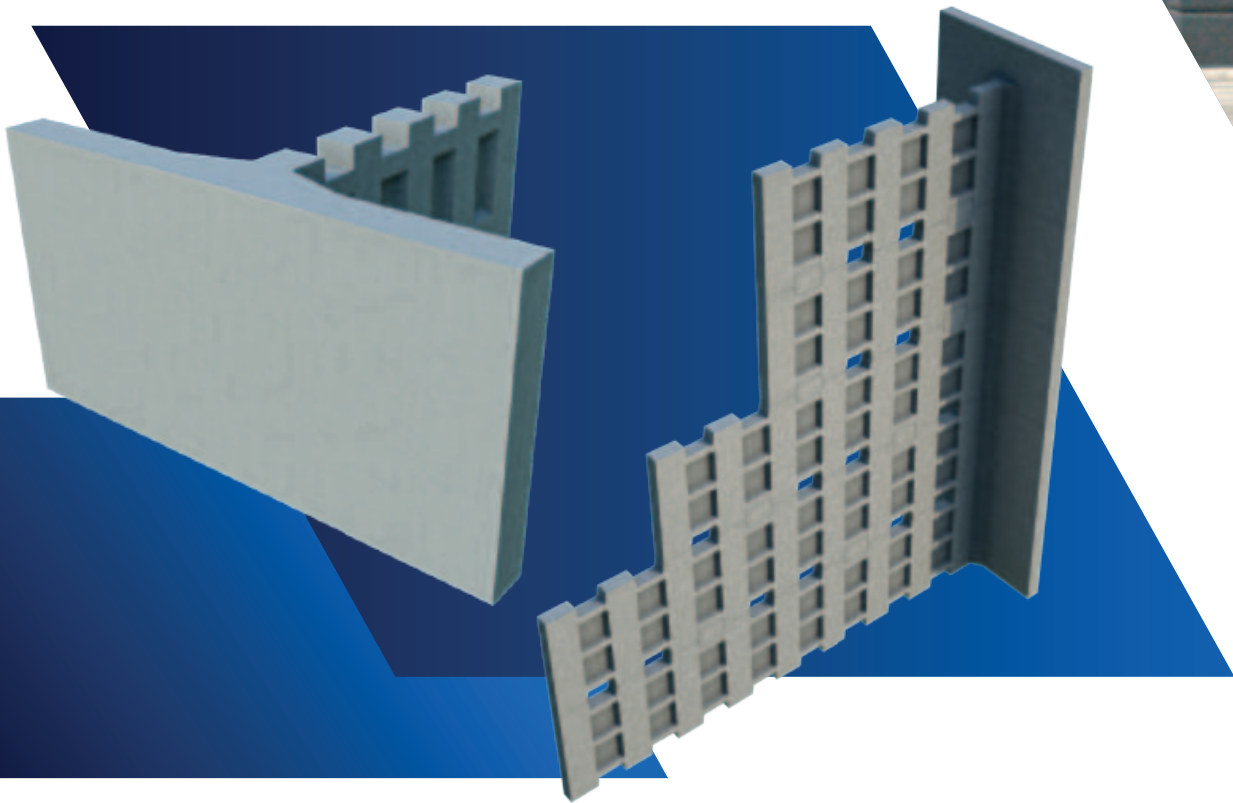




# T-Wall®

## 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
- In addition to using imported granular backfills, a wider range of backfills are possible such as on-site granular soils, recycled crushed concrete, bottom ash, slag, sand, flowable fill, and cellular concrete
- Variable length stems reduce **backfill quantities**
- Can be built **vertical** or **inclined**
- Allows choices for **architectural treatments, copings, barriers, utility conduits** and **catenary systems**



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.

## T-Wall® Applications

Since 1986, more than 900,000 m² of T-Wall® have been constructed, and together with wall heights exceeding 15 m give confidence to stakeholders in the performance of T-Wall® structures. Geoquest engineers work closely with developers and builders from project inception to completion. Discover some of our T-Wall® applications or contact us for a list of project references.



Roadway access ramp



Heavy rail grade separation



Waterfront promenade structure



Bridge abutment



Riverbank stabilization



Canal channel



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