



GEOQUEST

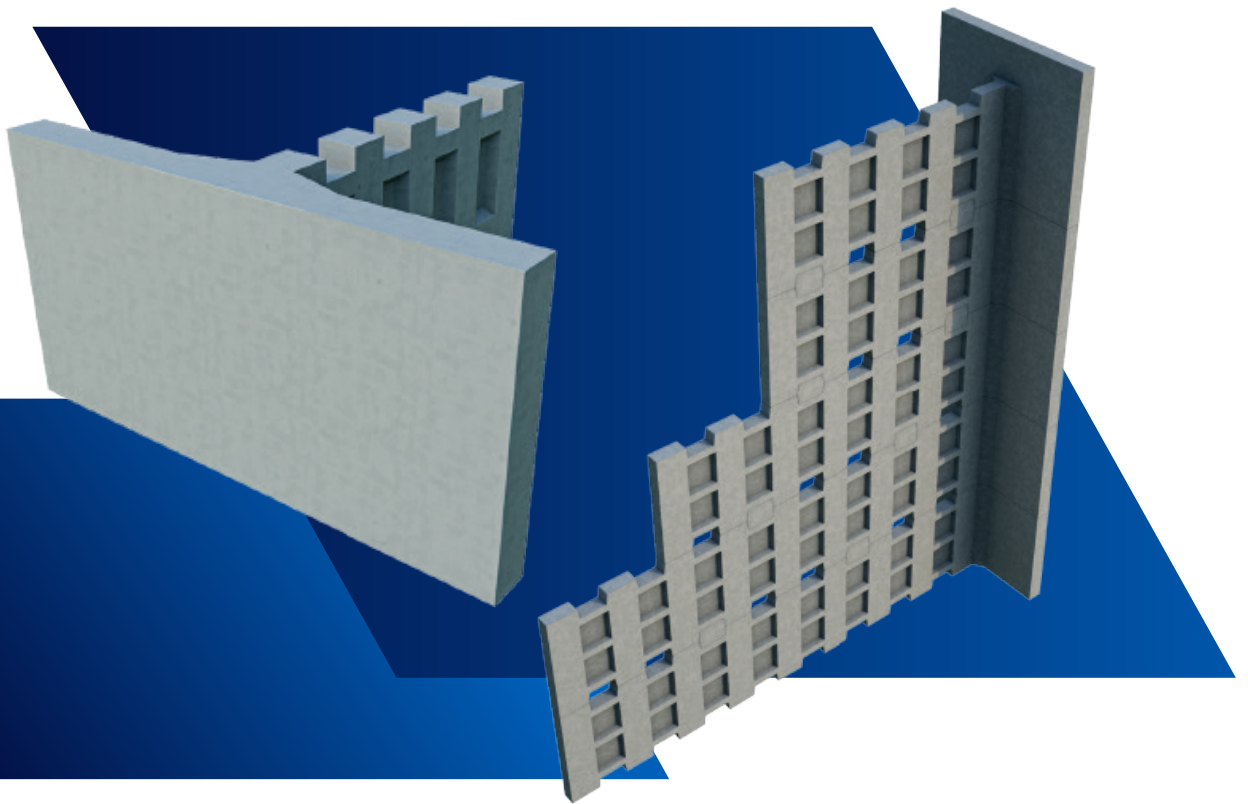
# T-Wall®

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 stabilise 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 m<sup>2</sup> 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 stabilisation



Canal channel



## ENVIRONMENTAL PRODUCT DECLARATION

In accordance with EN 15804+A2 & ISO 14025 / ISO 21930

# About Us



1968

established since



293 M€

2023 revenue



80

countries



70 million m<sup>2</sup>

of Reinforced Earth<sup>®</sup>  
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<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**.

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.



 [www.geoquest-group.com.au](http://www.geoquest-group.com.au)

 Geoquest Australia

 Geoquest Group

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



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