

Piano Wall™

A Unique Composite Retaining Wall/Traffic Barrier System



A pre-engineered product from The Reinforced Earth Company

Piano Wall . . . A Unique Approach to a

Piano Wall patented composite retaining wall/traffic barrier system from The Reinforced Earth Company speeds up highway construction-and reduces the cost-on projects requiring low grade separations between opposite roadways. Or between a roadway and the adjacent non-traveled area.

The only Product of its Kind... Precast Retaining Wall and Safety Barrier in One Engineered Unit.

The lower portion of each 10-foot long Piano Wall module is in effect the concrete facing for a 5 to 10 foot-high Reinforced Earth retaining wall. The upper 2-feet, 8-inches of each unit is an integral traffic barrier, of typical Jersey or Texas T-5 profile.

In far less time and for far less cost than it takes to build any other type of retaining wall, a crew installing Piano Wall completes 50 to 100 square feet of retaining wall and 10 linear feet of safety barrier with each precast segment.

Daily installation rates average 17 Piano Wall units placed and braced: 170 linear feet of barrier and 1,700 square feet of retaining wall. One-day installation of over 300 linear feet has been achieved



Produced at our plants—or by qualified, licensed precasters-panels achieve a minimum 4,000 psi compressive strength



Piano Wall helps speed completion of highway construction

Lower Costs and Higher

Delivered to the job-site ready to install, precast Piano Wall eliminates the higher cost, the forming, pouring and curing delays, and quality control problems of cast-in-place construction. And there's no need for complicated, costly, and time-consuming anchoring mechanisms for separate traffic barrier segments.

Versatile Design

Specifically designed for projects with very low gradients, Piano wall is easily adapted to site geometry. It is ideal for retaining wall heights up to 10 feet, and provides a smooth transition to higher retaining walls or bridge abutments which may be con-

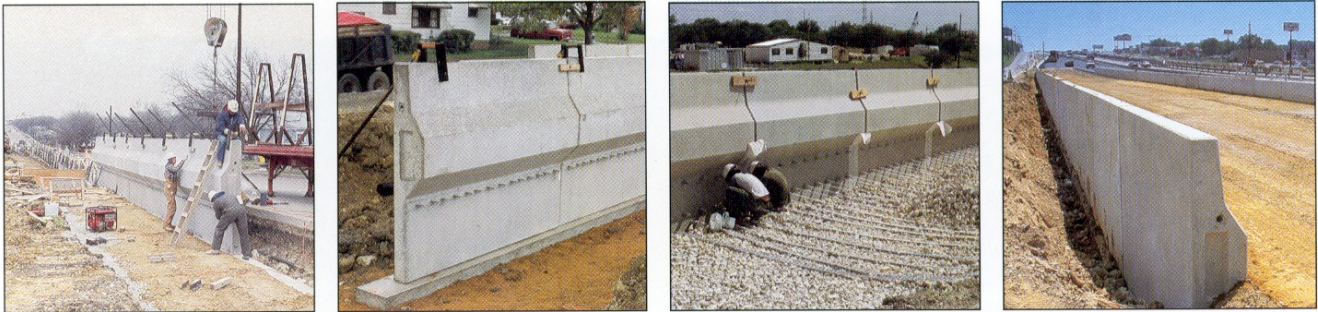


Piano Wall allows a smooth transition to other retaining walls on the same project

structed as part of the same project.

A variety of architectural treatments can be applied to the retaining wall surface. And the units can be designed and cast to accommodate electrical conduit, light posts ,signs, or other auxiliary fixtures.

Common Highway Construction Situation



Using ordinary equipment, a small crew installs Piano Wall quickly and easily: 10 linear feet of safety barrier and 50 to 100 square feet of retaining wall with each panel placed. Daily installation rates average 170 linear feet. Under good conditions daily rates over 300 linear feet have been achieved. Panels are temporarily braced until attachment of metal reinforcing strips and spreading of backfill completes the Reinforced Earth portion of the structure.

Quality Rapid, Predictable Construction

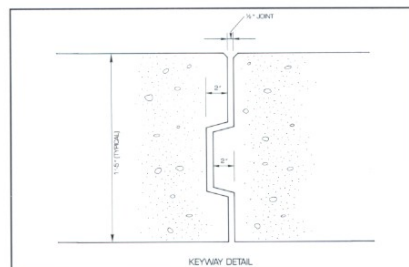
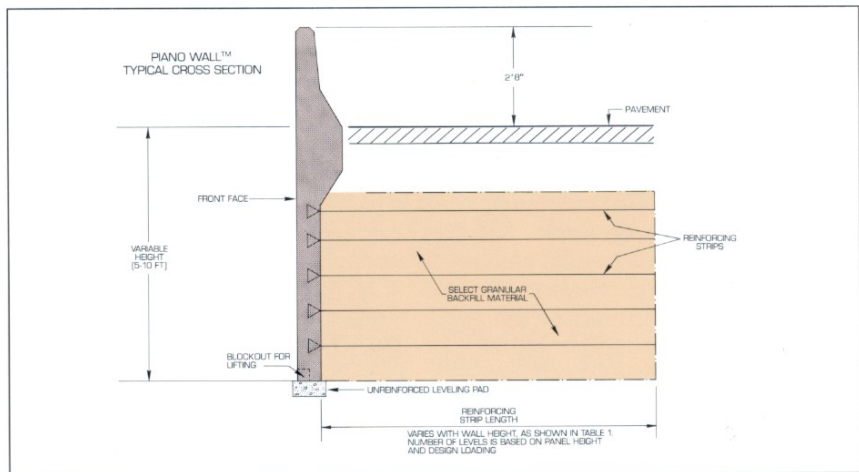
Installation of Piano Wall is a quickly learned, simple, repetitive process.

It begins with simple site grading and pouring of an un-reinforced leveling pad.

Then, using a crane, panels weighting about 10,000 pounds are placed in position and braced. A keyway design provides positive connection along the vertical joints.

Following the procedures of Reinforced Earth construction, lifts of backfill are spread up to the first level of tie strips on the back of the panel. Reinforcing strips are attached. Then, spreading and compacting backfill over the strips creates the frictional bonding of soil and strips that is Reinforced Earth.

This process repeats until com-



WALL HEIGHT (H)	STRIP LENGTH BELOW TOP 2 LEVELS
7'-8"	8'-0"
8'-8"	10'-0"
9'-8"	10'-0"
10'-8"	10'-0"
11'-8"	12'-0"
12'-8"	12'-0"

Each one-piece Piano Wall unit serves as the precast concrete facing for a low-height Reinforced Earth retaining structure of 5-10 feet in height (from leveling pad) and 2-foot, 4-inch high Jersey or Texas T-5 traffic barrier.

pletion of the reinforced volume at the level of the roadway base. Alternatively, the top level of reinforcing strips can be embedded in the concrete pavement. However

the project is designed, using the Piano Wall system results in a retaining wall and safety barrier Strong and stable, assured to meet project requirements

Comprehensive Services Help You Put our Pre-engineered Products to Work

No other company puts so much effort into helping make your job a success

At the Reinforced Earth Company, we understand what it takes to make a highway project successful: firm price, reliable delivery, predictable construction, and standards for quality the owner will accept.

We've built our reputation on products like Piano Wall that combine innovative approaches to highway construction, creative use of quality-assured precast elements and significant time and cost savings.

The professional engineers and experienced field service managers of The Reinforced Earth Company are ready to help you get the full benefit of our 15 years experience. Our firm-price contract for delivery of precast Piano Wall units includes these comprehensive services.

Design

We'll meet with you to discuss your project's requirements, design the Piano Wall structure, prepare construction drawings, and provide a preliminary cost estimate. If you're a contractor, we'll answer your questions and describe the time and materials



More than 40,000 linear feet of Piano Wall is in service on highway projects throughout the United States.

involved in Piano Wall construction, so you'll be able to bid this system as accurately and competitively as possible.

Manufacture

Whether in our own plant or at qualified pre-casters licensed by The Reinforced Earth Company, Piano wall units are produced to our strict quality control standards. Every unit is thoroughly inspected before delivery, and tested to certify compressive strength of 4,000 psi.

Delivery and Construction

Our experienced field managers coordinate delivery of all components and provide your contractor expert on-site technical assistance where necessary. And during construction, we can show the owner and local official how to properly inspect the structure, to demonstrate it is being built properly.

It's because of this commitment that more than 40,000 linear feet of Piano Wall has been installed on projects throughout the United States. Contractors value our ability to deliver; owners recognize our significant cost savings and assured quality.

To learn more about the time-and cost saving benefits of the patented Piano Wall system, please contact the nearest regional office of The Reinforced Earth Company or visit.

www.reinforcedearth.com

Corporate	703 281 1175
Atlanta	770 242 9415
Boston	978 664 2830
Chicago	630 898 3334
Dallas/Ft Worth	817 283 5503
Lake Forest	949 587 3060
Orlando	407 226 2840
Seattle	425 391 0111