



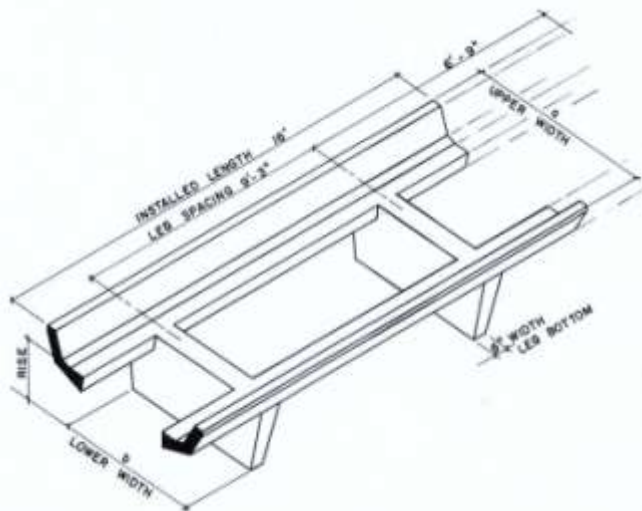
EVERGREEN SOUND WALL

The well proven EVERGREEN MACRO wall, has taken the EVERGREEN® technology to be the innovative wall leader:



EVERGREEN MACRO – Planted Wall along Blue Route, Philadelphia, Pennsylvania

- At left a retaining wall, at center a free standing sound wall - both walls connect easily.
- The big units (16 ft. long) handle easily for maximum efficiency: - for casting, - for handling, - for setting and - for filling



Single Frame Evergreen Macro units combine many functions:

- Stiff Structure,
- Gravity Wall,
- Planting Tray,
- Stacking
- Recesses for bigger Shrubs

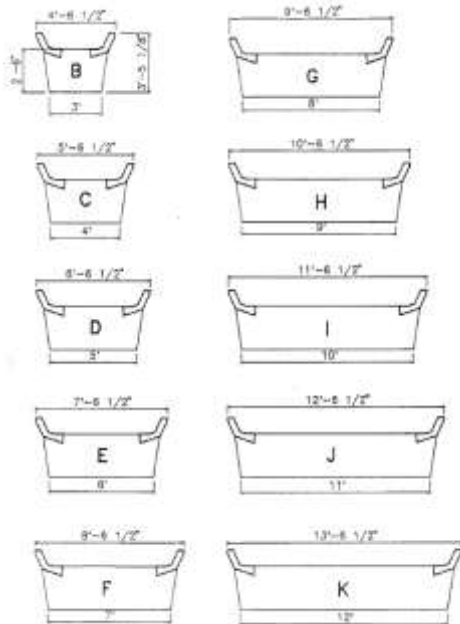


Dimensions			concrete weight per element	earth fill volume per element	total weight concrete + earth*
element	lower width	upper width			(design weight)
	b	a	kips	cu. yd.	kips per ft.
A	1'-5"	2'-3 1/4"	2.457	1.9	0.47
B	3'-0"	4'-6 1/2"	5.24	4.3	1.12
C	4'-0"	5'-6 1/2"	5.724	5.6	1.43
D	5'-0"	6'-6 1/2"	6.208	7.0	1.75
E	6'-0"	7'-6 1/2"	6.693	8.3	2.08
F	7'-0"	8'-6 1/2"	7.178	9.7	2.41
G	8'-0"	9'-6 1/2"	7.662	11.0	2.72
H	9'-0"	10'-6 1/2"	8.147	12.4	3.06
I	10'-0"	11'-6 1/2"	8.631	13.7	3.39
J	11'-0"	12'-6 1/2"	9.115	15.1	3.73
K	12'-0"	13'-6 1/2"	9.60	16.5	4.08



An excavator and three men set a unit in 3 minutes.

Design Table



Set of Evergreen Units



Spring Street San Diego I-92, for Caltrans

SOUND WALLS



Evergreen Sound Wall at Brussels International Airport,

60 ft., 18m high.

This is the highest sound wall ever built.

This wall protects the historical city center of Zaventem from the blasting noise of starting airplanes and it proves to be extremely satisfactory.

SPECIFICATIONS and INSTALLATION

Fabricate and deliver precast concrete units from the manufacturing plant to the site including transport for building retaining walls, separation walls beneath or above highways and railways and for bridge abutments, even for carrying bridge girders.

The precast concrete units are made of high class standard 5000 psi standard compressive strength concrete BN 35 Mpa, with standard grade 60 reinforcing steel reinforcement type B450A and type B450C, or $f_c=412$. Use epoxy coated reinforcing steel in marine environment.

The actual retaining wall units are designed and dimensions selected for the local geotechnical conditions, the soil pressure loads, traffic loads, and foundation requirements for fulfilling the applicable codes: minimum safety factors against sliding, overturning, and bearing capacity.

Not part of the unit delivery are:

- Site surveying and geotechnical investigations.
- Site longitudinal and transverse sections.
- Drainage concept, scheme, specifications.
- Wall design calculations, typical sections.
- Wall elevations and plan views.
- On site construction control supervision on erection and filling and compaction.
- Quality control and surveying.

The wall structures must be fabricated and erected according to the Evergreen fabrication, transportation, and erection instructions.

The contractor must have a NPCA quality control certification.



**Bullet Train TGV Brussels - to Köln – Berlin
under Construction:**



After one year; the longest wall ever built: 9 Miles.

The separation wall keeps the roaring sound away from villages and most important: it protects the bullet train from accidental collisions with off the highway vehicles.



Paarl South Africa

**Sound Wall and Retaining Wall Combined
In Paarl, South Africa, Capetown Area.**



Bilbao Airport, Spain

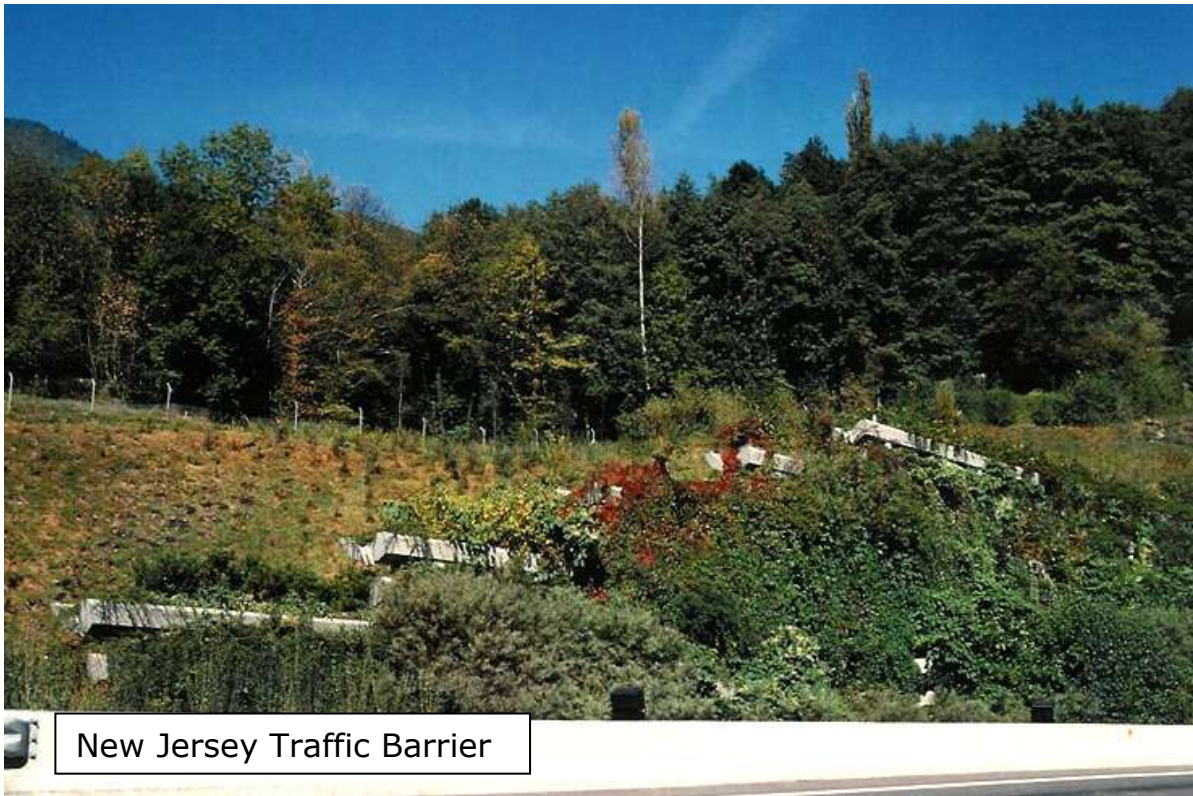
**This wall turns a slum like old industry section
into a park like environment.**



Sound Wall along Highway A2: After Construction and



Two Years Later: Totally Covered with Plants



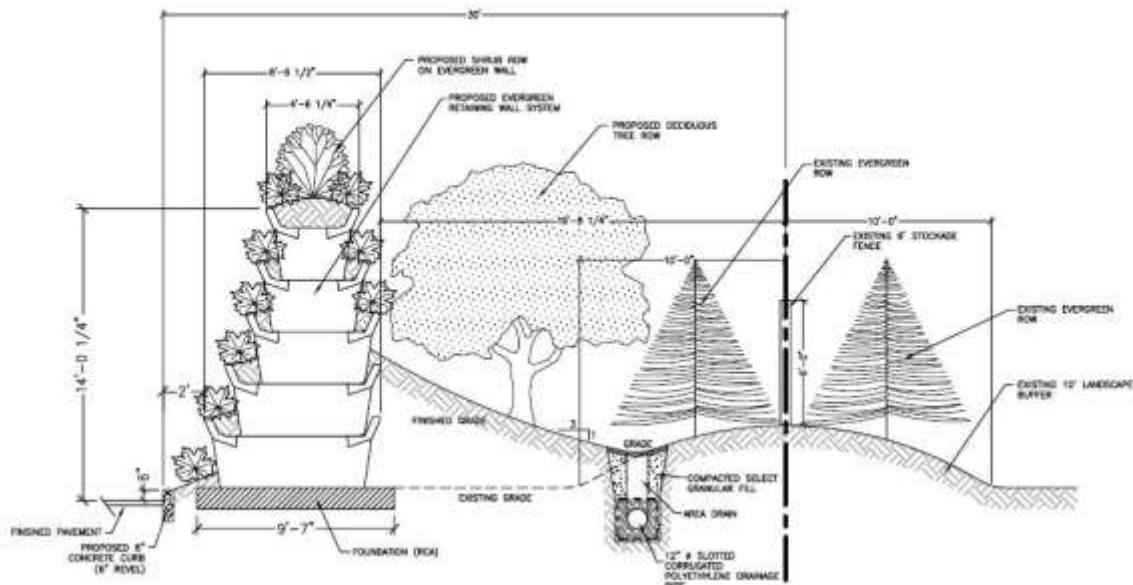
New Jersey Traffic Barrier

**Motorway 'La Maurine'
(France toward Italy):**

Safety Precaution:

**Tunnel Entrance
Smoke Safety Barrier case of a
Fire Inside the Tunnel**

- (Looks like a sound wall!)



**The WALLGREEN Pharmacy
got the building permit
only after submitting a sound wall on
the neighbor side to protect them
from early morning delivery noise.**



Sound Wall behind a Walgreen Pharmacy, Smithtown, Long Island, New York



Private Housing Development - This dramatically changes a noisy neighborhood into a cozy, safe place.
A Sound Wall Protects a Private Housing Development in Ehrendingen / Baden, Switzerland



Side to Highway **Village side**
A Sound Wall Along A2: protects the Village Grancia, Switzerland from Highway Noise



**A Sound Wall along the Highway A2 near Lucerne, Switzerland:
Any Graffiti on the Evergreen sound wall on the left? NO! only on the bridge abutment of course!**



Evergreen Sound Wall along the Motorway A1- in Switzerland



EVERGREEN®

EVERGREEN WALLS, INC.

www.evergreen-walls.com

Main Office: 6069 Oakbrook Parkway, Norcross, Atlanta/Georgia 30093, USA, 770 840 7060

Principal, Sales and Support, Cell: 404 372 5476, clay.warner@evergreen-walls.com

Inventor, Concepts, and Engineering

Geissbergstr.46, CH-5408 Ennetbaden/Switzerland

Phones +4156 222 0724, Cell +4179 356 0081

felix.jaecklin@evergreen-walls.com

Clay Warner

Felix P. Jaecklin, Ph.D., PE,

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