

ELEVATOR

ROOT PROTECTION

ELEVATOR

ELEVATOR is used to create underground tree root protection cells.

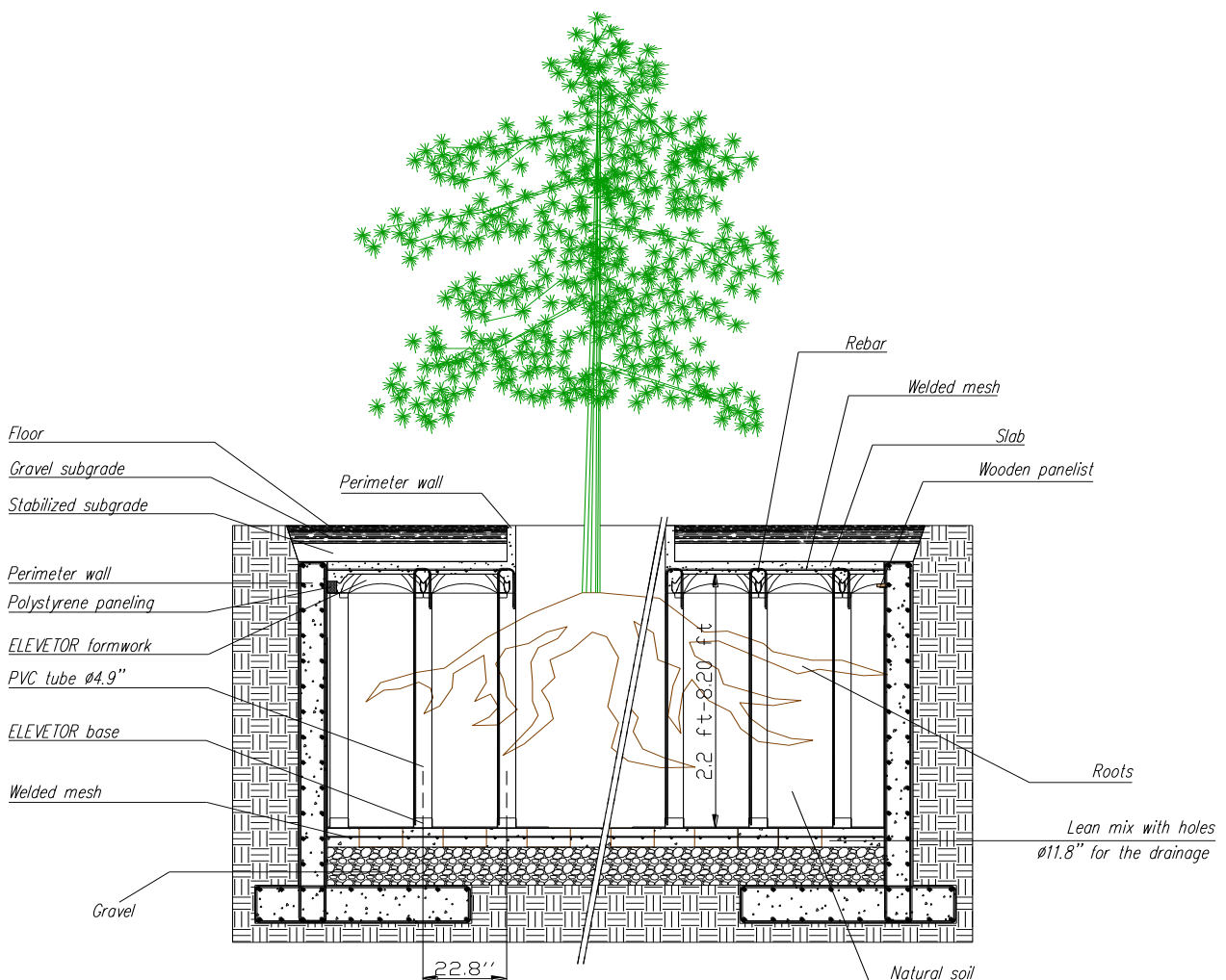
The system forms a r.c. slab resting on a matrix of pillars; the void created underneath the slab is filled with vegetation soil, and openings in the slab are left to for the trees to grow.

The soil around the trees is left free from the compression caused by vehicles and pedestrians, which ultimately may cause the trees to die; a few cm of air are left above the vegetation soli so that the slab is protected from root damage.

The slab is capable of handling the dynamic loads of vehicle traffic.

Advantages

- Roots grow freely
- Soil compression avoided
- Elimination of root damage to paving
- Irrigation is efficient and inaccessible to vandalism
- System depth of up to 8.2 in
- Creates a structure with high load-bearing capacity, handles dynamic load
- High job-site productivity
- Simple job-site logistics & handling
- Low concrete consumption
- Made with recycled material



FILL VOLUME

h	Fill volume	h	Fill volume
[ft]	[cuft/sqft]	[ft]	[cuft/sqft]
2.62	1.85	5.58	4.80
2.95	2.18	5.90	5.13
3.28	2.51	6.23	5.46
3.61	2.83	6.56	5.79
3.94	3.16	6.89	6.12
4.26	3.49	7.22	6.44
4.59	3.82	7.54	6.77
4.92	4.15	7.87	7.10
5.25	4.48	8.20	7.43

*h = inner depth of the system

** "fill volume" is the volume up to the top of the PVC pipes

LOAD CHART ELEVATOR H150

LOAD TYPE	Load	Slab thickness	Ground slab thickness	Gravel thickness	Pressure on the ground	Welded mesh	
	[lb _r]	[in]	[in]	[in]	[lb/sqin]	[in]	mesh [in]
1 th CAT.	132,240	5.91	7.87	13.78	12.37	doble Ø 0.3	7.9 x 7.9
2 nd CAT.	99,180	3.94	5.91	11.81	13.22	Ø 0.3	7.9 x 7.9

DETAILS

Fig. 1 – Polystyrene filler strip along perimeter wall.

Fig. 2 – cut form supported by wood panelist along the perimeter wall

Fig. 3 – pillar reinforcement

