

Phi Group **FLORAWALL®** Environmental Noise Barrier

Advantages

- Full landscaping potential.
- 45 year expected service life with European timber or 125 year expected service life with our BBA certified Permacrib timber.
- Engineered for maximum strength.
- Exceptional noise absorption.
- Reflects as well as absorbs noise, unlike standard panel noise barriers which only reflect noise.
- Provides a barrier against highway dust, fumes and light from vehicles.
- Versatile continuous construction giving ability to step with slopes and undulations.
- Significant height capabilities.
- Natural Appearance.
- Graffiti resistant, especially if vegetated.
- Flexibility gives seismic and earthquake resistance.
- Environmentally friendly.

Description

The FlorAwall® Environmental Noise Barrier was designed to be an improvement on our Permacrib® Environmental Noise Barrier System. It is designed and manufactured to meet the needs of contemporary environmental landscaping. Produced from pressure treated timber the free standing walls up to 5m high, can be enhanced with endless variation of planting schemes to create visually stunning and acoustically impressive structures with a wide variety of applications.

It is constructed using timber components to form a series of silos and filled with suitable infill material.

Uses

- Highway verges and reservations.
- Railway stations and tracksides.
- Airports and heliports.
- Residential developments.
- Sports and recreation grounds.
- Theme parks.
- School Playgrounds.



Acoustic Performance

The FlorAwall®, by virtue of its shape and additional mass should have better sound insulation and absorption characteristics than our Permacrib® Noise Barrier system. The following data is extrapolated from results obtained from testing carried out on our Permacrib® Type 1 550 model.

Airborne Noise Insulation

This system is designed to provide adequate sound insulation so sound transmitted directly through the wall is not significant compared with sound diffracted over the wall. (STC = 30, RW = 31)

Sound Absorption

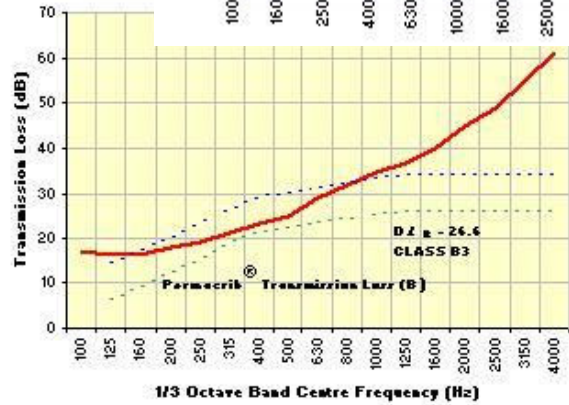
This system is designed to be effective as sound absorbing devices on the noisy side to reduce additional noise nuisance caused by reflected noise (NRC = 0.8 dB). Circumstances in which this treatment may be required include:

- Noise barriers, rocks or retaining walls that can reflect sound towards unprotected areas.
- Vertical cuttings or where reflective surface face each other.
- Tunnels and their approaches.
- Traffic passing close to barrier where reflection be-

Tests based on Permacrib Type 1 550 model:

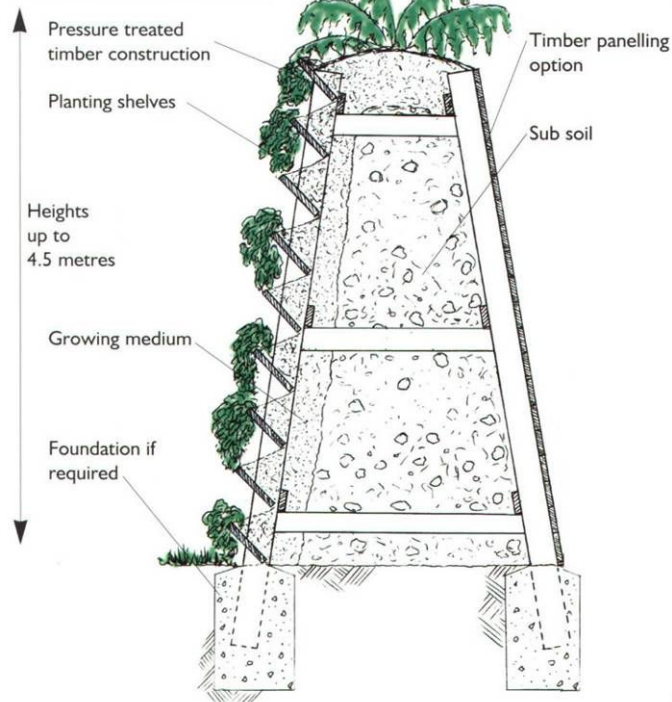
(A) VTT (Technical Research Centre of Finland) method ISO 354-1985 DL_n using PREN 1793-1 & 3

(B) AUCKLAND UNIVERSITY NZ method ISO 140/III DL_R using PREN 1793-2 & 3



Typical Configurations

FREESTANDING STRUCTURE



FACING STRUCTURE

