environ

SPECIFICATION OF COMPONENTS

ENVIRON ELV ACOUSTIC ENCLOSURE – Air Conditioning & Heat Pumps

Environ ELV is a proprietary high performance acoustic housing specifically designed to DIN ISO 8015 standards.

Acoustic housing consists of the following components.

1) Intake & Discharge Airways
2) Ventilation Grilles
3) Acoustic Foam
4) Plenum Panels
5) Anti-Vibration Mounts
6) Drain Tray
7) Standard RAL7015 (can be specified)

Enclosure Construction

Acoustic enclosure panels are fabricated in Zintec Cold Rolled sheet steel to DIN ISO 9001 manufacturing standards. All exterior panels have a Polyester Powder Coat finish. All relevant internal faces have 25mm FT-70 high performance acoustic foam applied.

Structure Walls/Panels

All external & Internal panelling is fabricated using 1.8mm galvanised steel sheet applied with 25mm FT-70 high performance acoustic foam.

Typical Panel Performance;

Octave Band Centre Frequency Hz	**63**	**125**	**250**	**500**	**1k**	**2k**	**4k**	**8k**
Insertion Loss dB	18	21	27	33	40	40	43	42

Anti-Vibration Base Assembly

M8 30x20 Anti-vibration mounts integrated into base design.

ELV Enclosure System – Acoustic Performance

Octave Band Centre Frequency Hz	**63**	**125**	**250**	**500**	**1k**	**2k**	**4k**	**8k**
Insertion Loss dB	10	12	18	27	34	36	36	37

In-situ sound reduction performance 18-22dBA (free field)

Test Standard:

BS EN ISO 140-3 Acoustics - Measurement of Sound Insulation in Buildings and of Building Elements - Part 1: Airborne Sound Insulation

Sound Level Measuring Equipment:

Norsonic 830 RTA Precision Sound Analyser Type 1
CEL 284/2 Acoustic Calibrator Type 1
JBL Loudspeaker driven by CEL Loudspeaker driven by 830 White Noise Source

Support Information:

Measurement carried out using the BS3740 technique, insofar as measurements were taken in each quad- rant and the results averaged. Test Room: W 6m x D 16m x H 5m. Background noise in the semi-reverberant test room was such as not to interfere with the practical measurements