

9<sup>th</sup> May 2024

**Our reference**

22-541

**Client**

Balance Power

**Project**

Newburn Haugh BESS

## RE: Specification for Acoustic Screen

### Introduction

The following specifications for acoustic barriers are provided as indicative for the installation at the Newburn Haugh BESS project, in order to reduce the adverse impact of environmental noise from the proposed plant.

### Performance Specification

The acoustic screen shall be constructed from a combination of materials as described below that provide a minimum mass of 15 kg/m<sup>2</sup> or a minimum sound insulation index as specified in the following table when tested in a laboratory in accordance with BS EN ISO 10140-1:2021.

TABLE 1: SOUND REDUCTION PERFORMANCE, R (dB)

	Octave Frequency Band (Hz)						R <sub>w</sub>
	125	250	500	1000	2000	4000	
	Sound Reduction Performance, R dB						
Minimum Sound Reduction Index of Screen Panel	16	21	26	32	32	32	30

The screen could be built from any of the following materials:

- Concrete;
- Masonry block;
- Brick;
- Close boarded timber fence; or
- Specialist acoustic barrier design.

### Constructional Specification

The core of the screen shall comprise a material with a minimum mass of 15 kg/m<sup>2</sup> or alternative specification achieving the SRI performance requirements identified above.

Panels, support channels and finishing strips shall be manufactured as necessary to provide adequate protection against external conditions. Any penetrations of the acoustic screen for ventilation ducts, pipework and electrical cables, etc. shall be sealed to maintain the acoustic integrity of the screen. All doors shall be provided with compressible seals to the door frame and threshold. All elements of the system shall comply with the required fire safety performance requirements.