



MP
MANSFIELD POLLARD



Power Generation Plant Room Enclosure

NEXT GENERATION
ENCLOSURES & CONTAINERISED SOLUTIONS

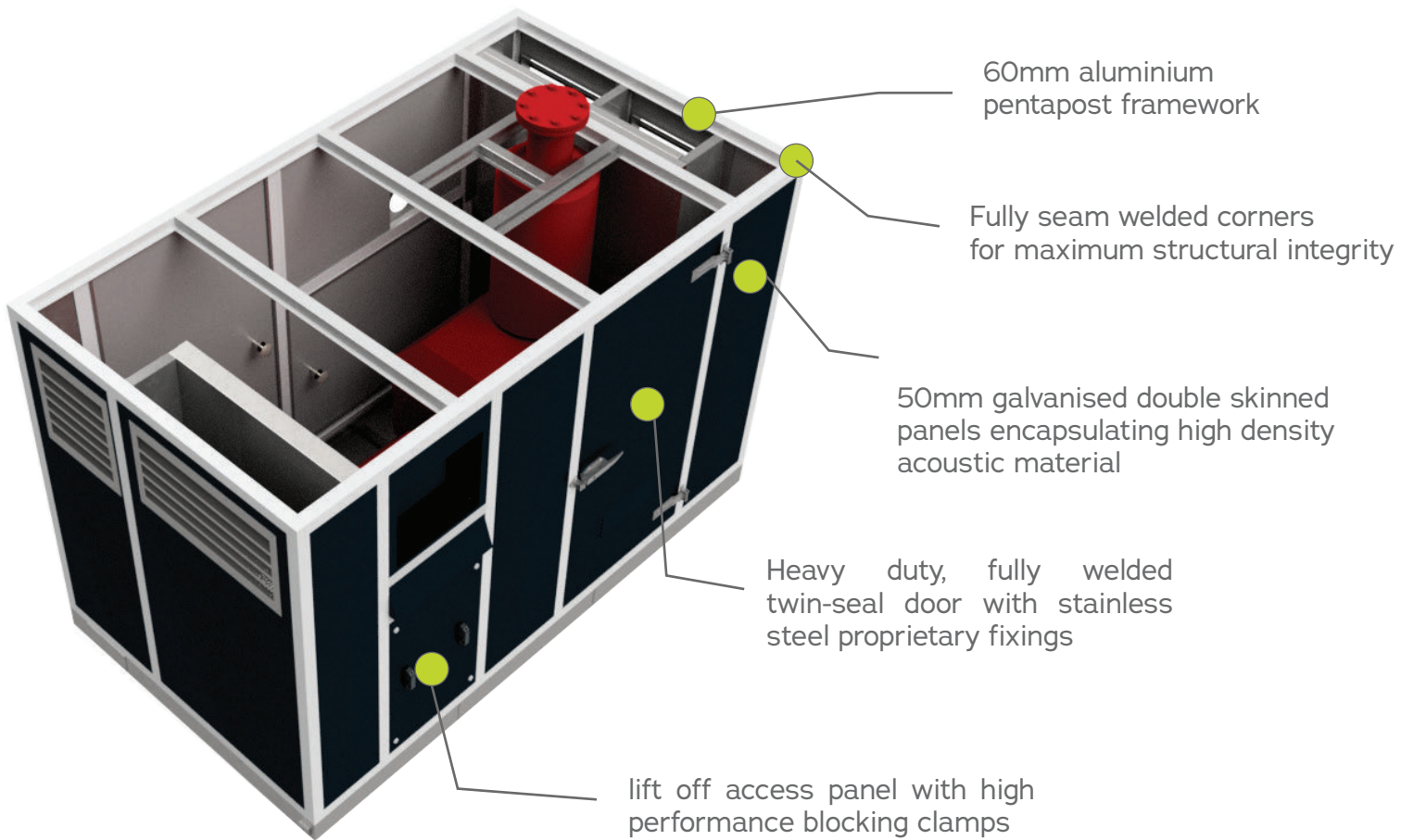


MODULAR ALUMINIUM ENCLOSURE

by Mansfield Pollard



a modern alternative to traditional enclosures & containers



With a design based on our industry leading air handling units, the modular aluminium enclosure provides a real alternative to traditional enclosures, with all the quality you would expect from a Mansfield Pollard product



Cost Efficient

Material cost efficiencies compared to specialist enclosures & containers



Flatpack Build

Reduces preliminary site work and simplifies transport & installation



High Performance

Superior build quality, corrosion resistance & acoustic performance



Customisable

Choice of load bearing bases, lift off panels and specialist door furniture

PROJECT HIGHLIGHTS



EFFECTIVE NOISE CONTROL

reduce the noise level of a Volvo TAD733GE back up diesel generator



ULTIMATE FLATPACK BUILD

plantroom access and limited space required flatpack solution



INDEPENDENTLY TESTED

Independently tested to guarantee equipment and noise levels.



MAINTENANCE FRIENDLY

access doors and removeable acoustic panels

THE CHALLENGE

As an industry leading acoustic solutions provider, our experts were engaged to design, manufacture and install an acoustic plant room enclosure, with integral exhaust system and attenuation, to reduce the noise of a Volvo TAD733GE back up diesel generator.

Located within a residential building, it was essential that our engineers achieved a reduction in noise levels to 65dB(A) @1m from the exhaust silencers and 55dB(A) @ 1m from wall mounted inlet attenuator and canopy mounted outlet attenuator

THE SOLUTION

With limited access and available space within the plant room, the perfect solution was our unique ALX modular aluminium enclosure, with separated frame and individualised double skin acoustic panels, to house a diesel standby generator and deliver on both specified noise reduction levels.

Access doors were incorporated into the design to facilitate future maintenance of the generator, while our high-specification acoustic panels were designed to be removable to provide additional access.

Due to inconsistencies within the plant room floor the enclosure was constructed on a neoprene bed to minimize any noise leakage.

A steel silencer system, comprising of a heat resistant primary and secondary exhaust silencer, utilised the existing ceiling strutwork and the extended tailpipe terminated through the plant room wall.

The necessary cooling was provided by free-flow ventilation, driven directly from the generator with airflow regulated through remote cooling air inlet attenuator and the roof mounted outlet attenuator.



