Noise control helps pump station avoid disturbing neighbours.



Project Industry type

Manufacturing JMA Engineering Berri, South Australia

Noise control for water pumps

Industry type Client Location

Initial project requirements

South Australia-based JMA Engineering was contracted to complete the development of a pump building for Kingston Estate Wines, a family-owned and operated business that runs several SA vineyards.

The pump station, which houses five pumps supplying water to the vineyards, was located close to nearby residences. Clearly, there was a strong chance that its noise would disturb people living nearby – an assessment which was confirmed by an initial acoustic report by Wood & Grieve acoustic engineers.

The report stated, "An acoustic prediction model for noise emissions from the pump station site was established using CadnaA, a proprietary noise modelling software package. The model can be used to assess the impact of environmental noise from the site in the community according to the state EPP (noise)."

"The noise source contributions from the site at the residential properties can be quantified based on the prediction model. Therefore, the noise mitigation measure on the dominant sources can be designed."

Wood & Grieve sought an appropriate noise control solution from Flexshield.



Flexshield CASE STUDY

Flexshield solution

Based on their modelling predictions, Wood & Grieve specified Flexshield's Rw46 acoustic doors and 600mm deep acoustic louvres.

The fact that Flexshield's acoustic products are NATA tested for acoustic performance, including a 1/3 octave band spectrum, allowed the acoustic engineers to confidently specify our solutions.

Flexshield supplied a pair of large Sonic Access double doors to allow easy maintenance access. An acoustically sealed cut-out between the top centre leaves allows an overhead crane to move along a gantry rail, which protrudes through the top of the doorway.

The door package also included two personal access (PA) doors to allow staff access to the pump station. Flexshield also supplied 6 x SL1-60 acoustic louvres to meet Wood & Grieve's specification.

Flexshield acoustic doors are supplied as SonicFix format, which means the manufacturing team supply the doors pre-coated and with pre-fitted hardware and seals. This clever arrangement saves installers considerable time once the doors arrive on-site.

Results

Flexshield supplied the doors on time and on budget. Our client commented, "Your Sonic Access doors and louvres are an excellent product. Very easy to install, and the support service offered was fantastic. Thank you very much!"

It's clear to see why sonic access doors and louvres are used by water corporations and utilities companies across Australia to help achieve their DA and environmental noise compliance.

For more information about noise control solutions for manufacturing, contact Flexshield on 1300 799 969.



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