

## Australian Acoustical Society Oueensland Division

## Technical Meeting Kilargo Test Facility & Factory Tour 6:00pm Tuesday 16<sup>th</sup> April 2013

Date: Tuesday 16<sup>th</sup> April 2013

**Time:** 6:00pm to 7:45pm

Venue: Kilargo

15 Wentworth Place Banyo QLD 4014

http://www.kilargo.com.au

Title: "Kilargo Acoustic Test Facility & Factory Technical Tour"

**Description:** The technical meeting will consist of a BBQ hosted by Kilargo from

6:00pm, followed by a tour of the facility. An overview will be provided of the testing methodology in addition to some live demonstrations.

The Kilargo Regional Sales Manager will present an overview of the Integrity range of seals and distribute samples, catalogues and

additional information to the attendees.

**Presenters:** Christophe Titry, Acoustic Engineer, Kilargo

Giles Newcombe, Technical Director, Kilargo

About Kilargo: Kilargo (formerly Lorient) provides simple and smart solutions to

maximise the safety, comfort and performance of commercial and multi-occupancy buildings. Our innovative products are designed to contain the spread of fire, smoke and sound with many also providing weather protection and energy savings. Our solutions are ideal for any commercial building, high-rise complex, health or education facility, and particularly for those in bush-fire prone areas and facilities looking to

gain energy efficiencies.

Our business is built on a 30-year commitment to be the best. We stand proudly at the forefront of the industry, driving standards and delivering products that lead the way in design, manufacturing and

quality.



And that commitment extends to our clients. We build solid partnerships through understanding, flexibility, seamless service and genuine enthusiasm. With Kilargo, it's about providing exceptional solutions for great buildings: making it easy for you to meet regulations, protect people and property, and enhance well-being.

**Test Facility:** 

The Kilargo acoustic test facility was designed by Peter Knowland and Associates to enable the measurement of sound transmission loss. The facility consists of two reverberant rooms that "float" on a 100mm thick foundation of CSR Bradford Quietel.

The ceilings and exterior walls of the two reverberant rooms were sheeted with three layers of 13mm Gyprock Soundchek plasterboard. The enclosure over the two rooms was also clad with three layers of Soundchek to enhance overall performance. CSR Bradford Glasswool was selected as the infill material for the cavity between the rooms and the outer enclosure.

The laboratory was commissioned with a symmetrical double steel stud separating wall with a total thickness of 300mm. The steel studs were 64mm standard Rondo partition studs separated by a 68mm gap. Each side of the wall was sheeted with 16mm Gyprock FyrchekMR, 10mm Gyprock plasterboard, 16mm Gyprock FyrchekMR and a final layer of 10mm plasterboard. The 196mm cavity was filled with CSR Bradford Glasswool.

The predicted performance was Rw 66 with a Ctr of -6. The actual results achieved were Rw 67 with a Ctr of -6.

To assess the flanking path limit, an additional wall was built to augment the separation wall. This comprised a 64mm steel stud that was sheeted with an additional three layers of 13mm Gyprock Soundchek with CSR Bradford Glasswool infill. The measurement of the flanking path limit provided a result of Rw 75 with a Ctr of -8.

To ensure that the facility was suitably equipped, Bruel & Kajer sound generation equipment and acoustic analysers were selected and installed.

Cost:

Free to current members and guests of the Australian Acoustical Society.

**RSVP:** 

By COB Monday 15<sup>th</sup> April to Richard Devereux <a href="mailto:rdevereux@acran.com.au">rdevereux@acran.com.au</a>