FINISHES & INTERIORS SECTOR

BEST PRACTICE GUIDE

SERVICING OPERABLE WALLS

www.thefis.org

FINISHES & INTERIORS SECTOR

BEST PRACTICE GUIDE
SERVICING OPERABLE WALLS

First edition published September 2021

SCOPE AND CONTENTS

This best practice guidance is aimed at facilities managers and owners of operable walls to help them understand the importance of regular servicing to:

- Ensure the correct operation of the walls
- Ensure the ongoing safety of everyone
- Meet any guarantee and warranty requirements.

The guide will help identify:

The type of wall that has been installed 4

Its fire and acoustic performance 8

What servicing is required..... 9

Competent service engineers..... 12

IDENTIFY THE TYPE OF WALL THAT HAS BEEN INSTALLED

Operable walls in general are installed by the manufacturer or their specific agent and are delivered to site in their finished state ready for final installation.

The name of the manufacturer along with the model number and the company (Authorised Distributor) who installed the wall should be available in the Operations and Maintenance (O&M) manual provided when the walls were installed.

Some suppliers mark the product name and model on the edges of the panel or the escutcheon that accepts the manual operating handle or the key switch control panel for semi-automatic and fully automatic systems.

During the installation process an acoustic baffle may be installed above the partition to maintain the fire and/or acoustic performance of the partition. This will typically be done using a single or double layer of 12.5mm or 15mm plasterboard either side of a 50mm stud and 50mm insulation to provide the required level of airborne sound insulation to reduce flanking sound by installing a barrier which has the same or greater sound performance evidence than the operable wall.

The baffle should require little or no maintenance but should be regularly inspected. The baffle should not include any service penetrations which may impact its performance where these occur additional measures will be required to reduce the possibility of flanking sound transference.

OPERABLE WALLS ARE GENERALLY DIVIDED INTO FOUR PRODUCT TYPES

MOVABLE WALLS

Top hung panels with various finish options including veneer, vinyl, melamine, paint, laminate fabric and sound absorbing boards, but can also be made up of single- or double-glazed panels (with the option of integral blinds).

IDENTIFY THE TYPE OF WALL THAT HAS BEEN INSTALLED

FOLDING WALLS

Offer a sliding and folding wall system with similar finishes available that can be hung from a ceiling track or supported by a low-profile surface mounted or recessed floor track.

IDENTIFY THE TYPE OF WALL THAT HAS BEEN INSTALLED

VERTICALLY RISING FOLDING WALLS

Fully automated and retract the partition into the ceiling void with no wall or floor tracks and are available in vinyl, glass, fabric, stainless steel, veneer, and tapestry.

IDENTIFY THE TYPE OF WALL THAT HAS BEEN INSTALLED

FOLDING SCREENS

Mainly manufactured from vinyl coated fabric on a steel framework that runs on a steel track or top hung with no floor track.

Operable walls can be manually operated using a locking handle to set the acoustic seals, semi-automatic systems where the seals set automatically but the elements are moved manually or a fully electric automated system.

IDENTIFY THE WALL'S FIRE AND ACOUSTIC PERFORMANCE

TYPE	FIRE PERFORMANCE	ACOUSTIC PERFORMANCE
MOVEABLE WALLS	30 minutes but reference to the manufacturer must be made and clear evidence of a test report or third party certification must be provided	Solid panels - up to 60dB R_w* Double glazed systems - up to 52dB R_w
FOLDING WALLS	30 and 60 minutes can be achieved but reference to the manufacturer must be made and clear evidence of a test report or third party certification must be provided	Solid panels - up to 48dB R_w* Double glazed systems - up to 32dB R_w
VERTICALLY RISING FOLDING WALLS	Up to 59dB R_w*	
FOLDING SCREENS	Flame retardant materials should conform to BS 6868	Between 15-32dB R_w*

* All acoustic performance data given relates to laboratory tests and not on-site performance.

FIS ACOUSTIC VERIFICATION SCHEME

In a bid to curb growing incidents of 'passing off' FIS has teamed up with Cundall Acoustics to develop an acoustic test certificate verification scheme. The scheme takes test data and reports and runs a series of checks to verify information is accurate and genuine. Details can be found at the end of this guide or at the FIS website thefis.org/knowledge-hub/specifiers/acoustic-verification-scheme/

IDENTIFY WHAT SERVICING IS REQUIRED

SERVICE AND MAINTENANCE OF ACOUSTIC OPERABLE WALL SYSTEMS

The service and maintenance of a moving partition system is an important item within the fabric and structure of any business, education, teaching, industry and entertainment or conference centres where the welfare of those using the partition, those indirectly affected at an event or meeting, or the general public who may be using the facility can be directly affected under health and safety legislation if the system is not maintained.

Most suppliers who installed the system should be able to offer a maintenance programme after installation, and this is likely to be a condition on maintaining the product guarantee or extended warranty supplied with the system.

There are also maintenance programmes offered by industry and a list of companies vetted by FIS are available from the FIS website thefis.org/member-directory/?businesstype=contractors-specialist

Typically, a service visit should address the following:

- Check the current operation of the system making a note of any areas of concern.
- Check track fixings, track suspension for movement and or any structural faults.
- Tighten track fixings and any suspension brackets as required.
- Clean track if there is any excess grease and then lubricate the track (only clear silicone lubricant should be used and not grease).

Inspecting the track

- Inspect panel/track carriers and carrier bolts, clean, lubricate, adjust, and lubricate bearings.

Checking any track junctions and guide blocks

- Check where appropriate any track junctions and guide blocks for any signs of visible damage. Add to your report any major issues with track junctions.
- Check each abutment or wall post is level, check fixings, tighten all fixings and replace any that are missing.
- Check on any pass door within the system that the door closes properly, adjust where necessary any hinges and check all the ironmongery is working satisfactorily.

Pass door

IDENTIFY WHAT SERVICING IS REQUIRED

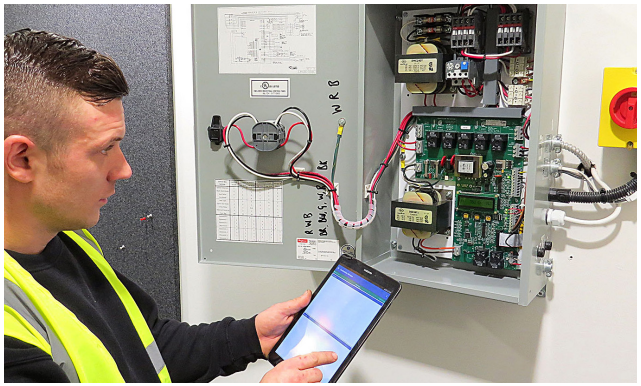
- Acoustic checking will comprise of all seals top and bottom and between panels. To do this all panels must be operated giving special attention to the closure panel. Where possible replace any missing or damaged seals.

Check for damaged panels and seals

- Once all previous steps are complete then, where required, all panels will need to be re-levelled and aligned to ensure correct gaps and maximise acoustic seal performance.
- Complete report form highlighting any areas of concern and demonstrate the working partition to the customer.
- Complete the log book, which is a requirement of HSE legislation and provide a completed report and service certificate in due course.

In addition, where electronic and semi-automatic systems require servicing the following steps should be included however for any electrical systems, it is a specific requirement to provide evidence that the engineer has been trained accordingly for the system that is being worked on.

Replacing the PCB on a semi-automatic wall



240V control panel

Any specific product training requirements for staff/operatives and including where required, any necessary work within the 240v control panel should be booked alongside the visit.

Under health and safety legislation and the Provision and Use of Work Equipment Regulations (PUWER) the facilities manager/owner must ensure that all operatives of the system are correctly trained to be compliant with the health and safety legislation.

Note that:

- This work can only be carried out by someone who can demonstrate their competency and qualifications and ongoing training records
- Any replacement parts needed should be supplied from the original manufacturers
- Should carriers require replacement, but the original manufacturer has ceased trading then the carrier must be load tested.

IDENTIFY WHAT SERVICING IS REQUIRED

HEALTH AND SAFETY REGULATIONS AND RISK ASSESSMENTS

Repairs and service are covered by HSE legislation and the company should carry out specific risk assessments prior to starting work.

Note: There should be at least one engineer who has been suitably trained and has the necessary training certification to be able to carry out a site-specific risk assessment.

5 BASIC RISK ASSESSMENT STEPS

1. Identify the hazard
2. Decide who might be harmed and how
3. Evaluate the risks and decide whether the existing precautions are adequate or whether more should be done
4. Record your findings
5. Review your assessment if necessar and revise it.

The following are risks that will be common to the service or installation of an operable wall:

- Access to the opening where your partition(s) is to be serviced
- Manual handling of equipment and goods to the opening
- Mechanical handling of goods or equipment to the opening
- Making sure there are no trip hazards from cables and the like
- Erecting of ladders, tele tower, or scaffolding within the working area (Working at Height Regulations 2005 and subsequent addendums of 2018 must be adhered to)
- Ensuring the working area is safely managed and cordoned off if necessary
- Safe operation training of the system must be given to all persons who will move the partition and this must be logged and recorded by the employer
- Ensure that when moving the partition the area is clear and that no person or persons are at risk when opening or closing the partition
- Ensure that any access door within the system is opening and closing correctly, if not report to service company
- Any issues in moving system along the track (do not jamb panel into floor)
- Any issues with movement of panels into stacking areas, as a result of track issues
- At all times carry out visual checks and report any anomalies
- Any potential electrical works that will be required.

IDENTIFY COMPETENT SERVICE ENGINEERS

FIS members all agree to a strict code of conduct, and they are vetted when they apply for membership and again every three years. A list of members offering operable walls can be found on the FIS website

thefis.org/member-directory/?businesstype=contractors-specialist

Use correct and safe methods when handling panels

IDENTIFY COMPETENT SERVICE ENGINEERS

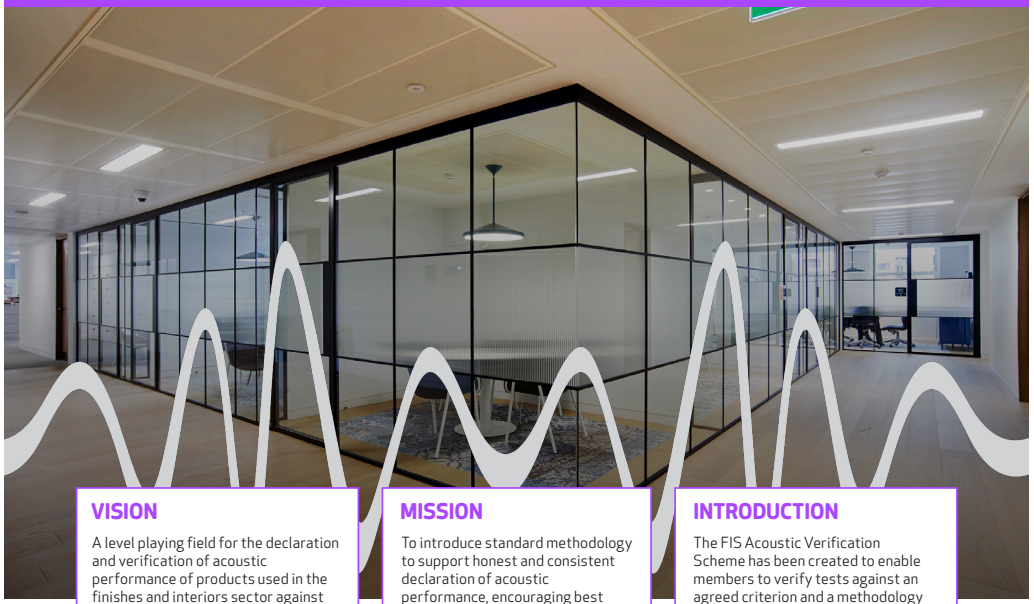
CONSTRUCTION PRODUCTS COMPETENCY MATRIX

Objective: to apply competence ratings to each actor with the appropriate roles and responsibilities at each relevant stage of the plan of work, thus creating a matrix of expected competence, and to allow individuals to recognise their own level of competency/limitations and identify where they need to develop.

	Skills	**Knowledge**	**Experience**	**Sector specific example** Operable partition maintenance engineer
E	Have a **foundation** in theoretical and practical skills required to use relevant information in order to carry out tasks and to solve routine problems using simple rules and tools.	**Basic** factual knowledge within a field of construction.	Demonstrating experience relative to the subject.	Specific factory manufacturer training.
D	A range of theoretical reasoning and practical skills required to accomplish tasks and **solve problems** by selecting and applying basic methods, tools, materials and information.	**Factual and theoretical knowledge** in broad contexts within a field of work or study	Demonstrating experience relative to the subject, the **ability to work under supervision and the ability to contribute to a team.**	Understanding the system and how it has been installed and its operating sequence.
C	A range of theoretical and practical skills required to **generate solutions to problems** in a field of work or study.	**Comprehensive, specialised,** factual and theoretical knowledge within a field of work or study and an **awareness of the boundaries of that knowledge.**	Demonstrating experience relative to the subject, and the **ability to work unsupervised and lead an element of the project.**	Understanding the system and how it has been manufactured and assembled.
B	A comprehensive range of theoretical and practical skills required to develop **creative solutions to more complex problems.**	**Advanced knowledge** of a field of work or study, involving a critical understanding of theories and principles.	Demonstrating experience relative to the subject, and the **ability to supervise/ lead a team with assistance.**	Having access to the original construction drawings and installation methods used and O&M manual.
A	A comprehensive range of theoretical and practical skills required to develop **creative solutions to more complex problems, to integrate knowledge from different fields and to develop new best practice.**	**Highly specialised knowledge**, some of which is at the forefront of knowledge in a field of work or study.	Demonstrating experience relative to the subject and the **ability to lead a project.**	Knowledge of the system or direct contact with the OEM to ensure that all operations and operatives are aware of the systems and its capabilities.

FACT SHEET

Acoustic Verification Scheme



VISION

A level playing field for the declaration and verification of acoustic performance of products used in the finishes and interiors sector against a commonly agreed third-party standard.

MISSION

To introduce standard methodology to support honest and consistent declaration of acoustic performance, encouraging best practice and preventing inaccurate or misleading information from undermining the market and responsible manufacturers.

INTRODUCTION

The FIS Acoustic Verification Scheme has been created to enable members to verify tests against an agreed criterion and a methodology to present these to market in a consistent and transparent manner.

The framework is based on the thinking behind the FIS Product Process People framework for quality.

PRODUCT
PROCESS
PEOPLE

It's all in the badge, look for the Acoustic Verification Scheme Logo to provide reassurance.

0121 707 0077
www.thefis.org
@fisorg

FACT SHEET

Acoustic Verification Scheme

Good acoustics are essential to wellbeing and in creating the right atmosphere to improve productivity and creativity in the workplace - they can be key to the success of a building. FIS has grown over the past 50 years to become the leading trade association for the finishes and interiors sector of the construction industry, representing companies involved in the manufacture, supply and installation of all aspects of interior fit out and refurbishment. FIS members through this scheme are looking to improve the landscape and support effective specification of products that control sound.

Key questions you need to ask when looking at acoustic performance:

Is the acoustic performance data that you have been provided based on an acoustic test or is it for a predicted test using computer software?

Testing products or producing assessments from data from a UKAS or recognised independent test facility where the installed products met the recommended minimum dimensions and conditions in the scheme provides a level playing field for comparison of data.

Does the test certificate clearly identify the scope of the test?

It is critical that the test certificate provides details of how the test was conducted, if you are comparing two products, were they tested to the same standard in the same conditions? There have been instances where suppliers have used smaller glass samples or reduced air paths on operable walls to increase performance claims.

Is the name of the systems supplier clear on the test report and has the systems supplier authorised that the certificate can be used to support the product for applications and sizes as per your specification?

Even though a certificate has been produced it is invalid unless the testing manufacturer confirms it can be used by the supplier or in the context of the specification.

Is the system supplier providing the full acoustic test data that includes drawings and photos of the products acoustic claim?

This scheme is providing a clear framework to build trust in the supply chain. Through consistency of test and declaration, FIS is working to ensure that the market is transparent and competing on the right things, in the right way. The clearer and more transparent our information, the better for all.

FIS appointed acoustics experts Cundall LLP to verify the performance data to ensure that products displaying the Verified Data Logo meet the criteria set out in the scheme. Look for the logo to provide reassurance that you are working with a responsible supplier.

"There is a growing understanding of the intrinsic link between good acoustic management and wellbeing for occupants and this scheme helps to deliver what our customers expect from us and our industry." Kevin Dundas, Supply Chain Manager (Products) at Willmott Dixon

0121 707 0077
www.thefis.org
@fisorg

NOTES

FINISHES & INTERIORS SECTOR

BEST PRACTICE GUIDE

SERVICING OPERABLE WALLS

FIS
Olton Bridge
245 Warwick Road
Solihull
West Midlands
B92 7AH

+44(0)121 707 0077
info@thefis.org
thefis.org