

TVS RESi – FF System

TECHNICAL INFORMATION



TVS ACOUSTICS
NOISE & VIBRATION CONTROL

Description

TVS RESi FF Systems are designed to create a floating floor or slab to dramatically reduce impact and airborne sound transmission within building structures. The system can be used to support lightweight floors and screeds through to heavy raft foundations, with typical air gaps between floors ranging from 50mm to 150mm plus.

TVS RESi FF Systems will be designed by TVS engineers to meet key project specifications for natural frequency, load/deflection, air gap and ultimately acoustic performance.

Applications

TVS RESi FF Systems provide a cost effective method of separating two masses in order to dramatically improve the acoustic and vibration isolation efficiency of the floor or slab build-up. Applications for such a system include, but are not limited to the following:



- Cinema Auditorium
- Bowling Alleys
- Recording Studios
- Music Rehearsal Areas & Classrooms
- Audiology Suites
- Theatres & Concert Halls
- Plant Rooms
- Gymnasiums
- Helipads
- Test Cells
- Night Clubs
- Hotels
- Apartments
- Hospitals
- Anechoic Chambers
- Dance Studios
- Machine Foundations
- Offices
- T.V. Studios
- Gyms & Sports Halls
- Multi-Use Rooftop Spaces
- Residential Dwellings

Advantages & Benefits

- Outstanding performance over lifetime of the building
- Natural frequencies down to 5Hz
- Floor thickness from 50mm to 500mm
- Minimal deflection under high loads
- Excellent shock and impact resistance
- Minimal creep
- Air gaps from 25mm to 150mm plus
- Suitable for concrete and timber floating floors
- Can achieve excellent impact and airborne performance
- P.I. backed design service
- Isolators can be custom made to meet project objectives



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www.TVS-Group.co.uk

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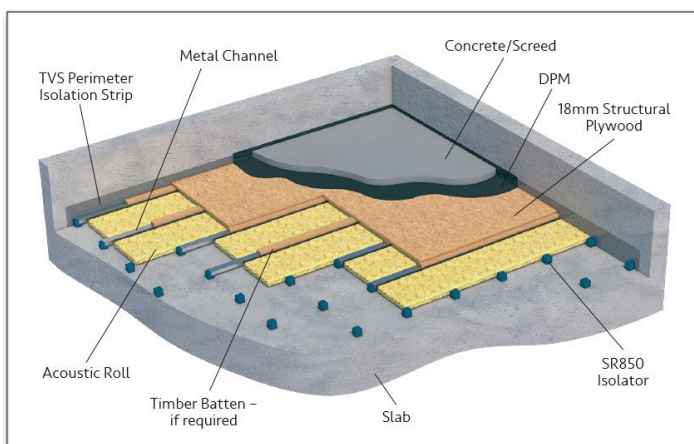
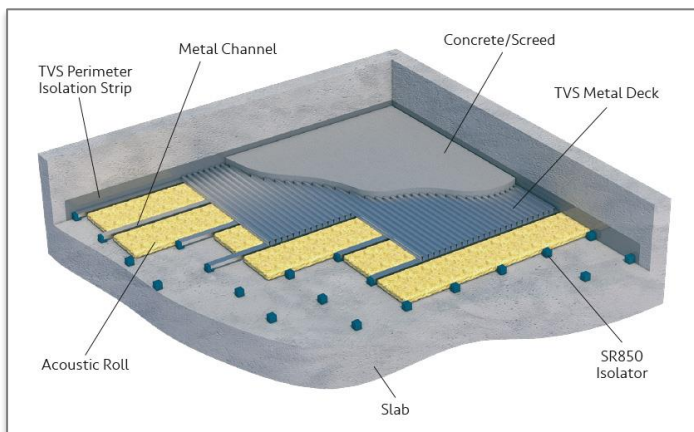


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TVS RESi Concrete Systems

Concrete floating floors are the most common type of floated build-up as the additional mass that this system provides offers the greatest acoustic benefit. These systems also offer the greatest strength, whilst the large dead load that the floated slab provides ensures minimal movement under the addition of any live loading.

The **TVS RESi FF System** allows for a 'pour in place' construction, where the acoustic formwork is built and then the concrete is poured at the final design height with no requirement for any additional levelling or 'jacking up'. This is very beneficial in terms of a projects programme and as such is often utilised in cinema auditoria where these floors are the last thing to be constructed before the shell is handed over to the fit-out contractors.



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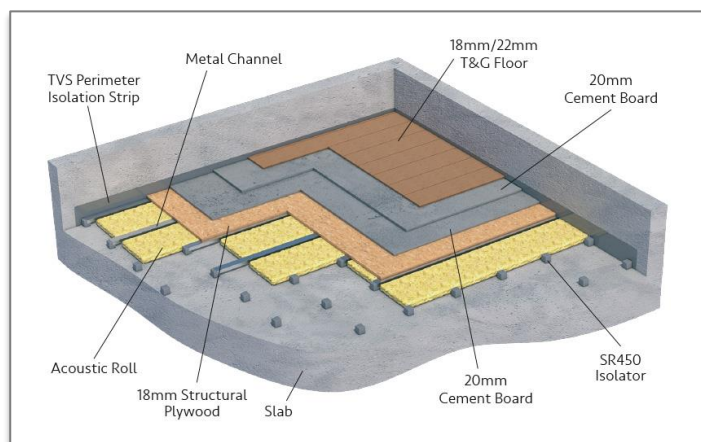
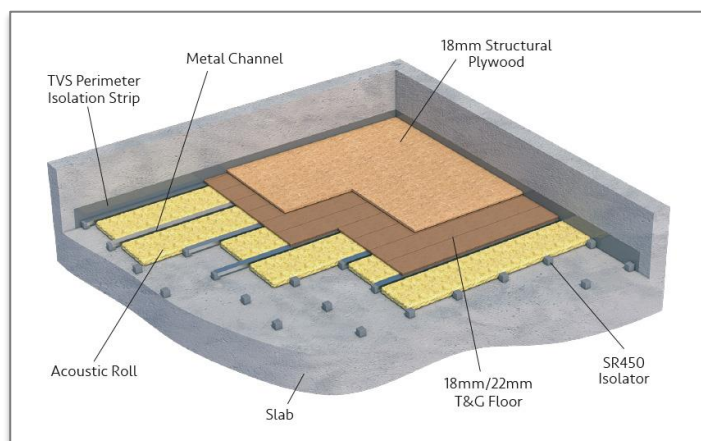
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TVS RESi Dry Systems

It is not always possible to install concrete floating floors. The additional mass and point loading that a floated concrete slab can provide often makes it unsuitable, particularly within existing structures. Often there isn't the floor height available to allow the addition of a concrete floated floor.

In these cases, layers of plywood, flooring grade chipboard and cement particleboard can be combined to provide a stable floated floor. The more mass that can be added to the floating floor the better the performance will be, however the build-up will often be limited by the available space and load capacity of the structure. These systems are often installed within pre-existing buildings with minimal disruption to adjacent areas.



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Standard Isolator Dimensions

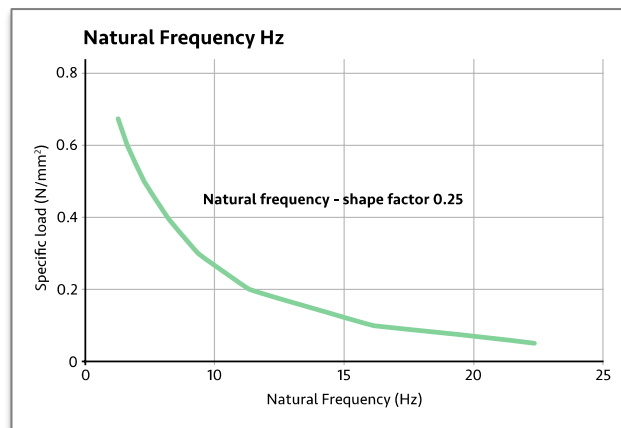
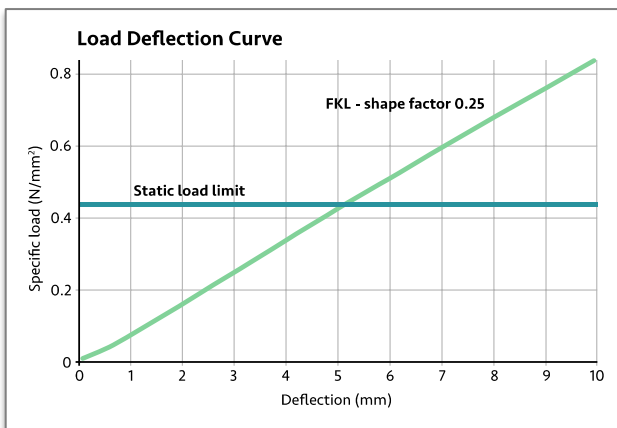
Elastomer: 50mm x 50mm x 50mm; 50mm x 50mm x 37.5mm; 50mm x 50mm x 25mm

Types: SR850 – Turquoise; SR450 – Grey

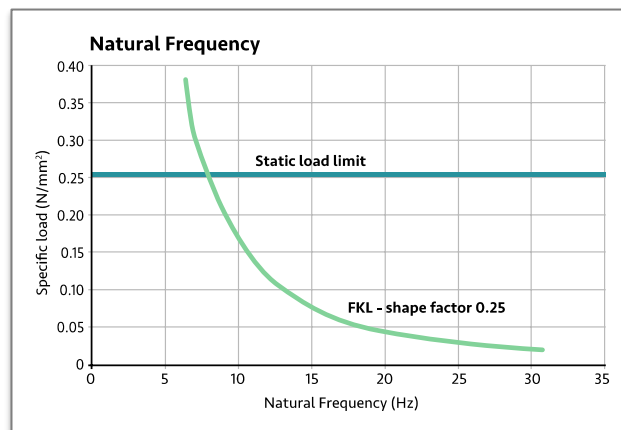
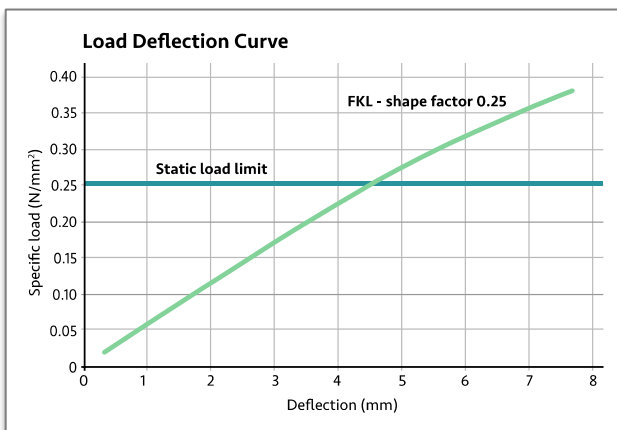
Material: 100% Polyurethane

Product Properties		Test Methods	Comment
Flammability	Class E	EN ISO 11925-2	Normal flammable EN 13501-1
Temperature range	-30°C to 70°C		higher temperatures possible for short periods

TVS RESi Concrete Systems – SR850 Performance graphs



TVS RESi Dry Systems – SR450 Performance graphs



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Product Data Sheet PDS 1.1 TVS RESi – FFS SYSTEM
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