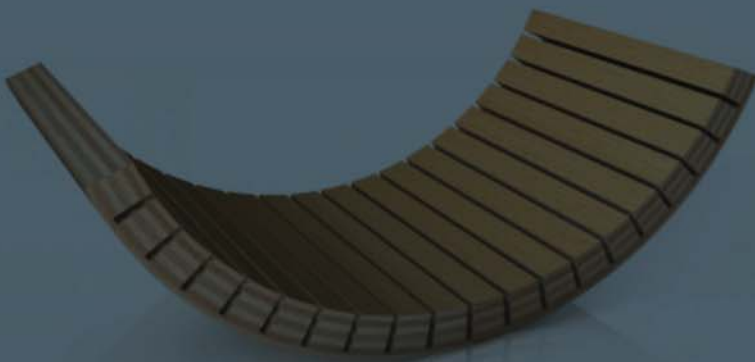


AKINCO

Akcoustic Insulation Contracting LLC
NOISE TO QUIET



إكسبو 2020
دبي، الإمارات العربية المتحدة
DUBAI, UNITED ARAB EMIRATES

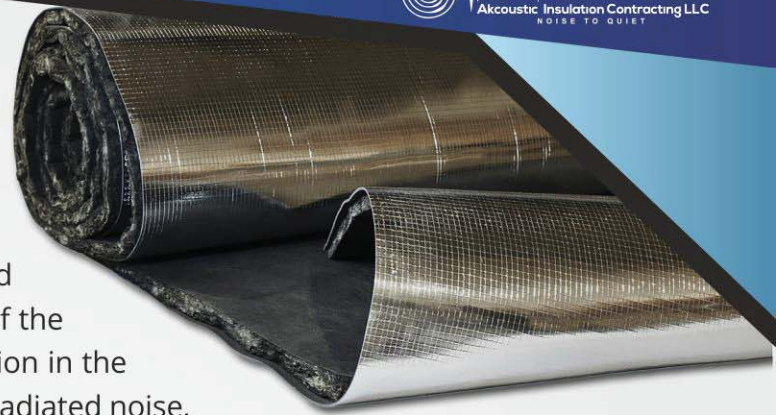
www.akinco.ae

PRODUCT CATELOGUE

ACOUSTIC LAGGING

DESCRIPTION

AKINCO acoustic lagging and Wraps are designed to block noise that transmits through the walls of the pipe or as well as to increase the sound absorption in the cavity. Designed to offer significant reduction of radiated noise, it consists of a loaded vinyl noise barrier with a scrim reinforced aluminum foil facing on one side bonded to a 1" sound absorbing decoupler. Our pipe and duct wrap offers excellent thermal and acoustical performance.



Our high-performance (Optional) composite acoustic pipe lagging product consisting of a reinforced aluminum foil faced, mass loaded flexible vinyl noise barrier bonded to a decoupling layer. The product was developed to reduce noise break-out from pipes, valves, fan housings and ductwork in commercial, industrial and domestic buildings. Ideal for both pipe and duct lagging applications.

The unique construction of lagging gives the dual benefits of a noise barrier and a noise absorber. The highly dense and flexible mass layer provides excellent sound reduction properties, whilst the decoupling layer breaks the vibration path between the substrate and the mass barrier, thus allowing the vinyl external wrap to remain flexible and thereby optimize its performance. The external foil facing offers a fire resistant covering and an excellent surface to join adjacent sheets.

→ ADVANTAGE

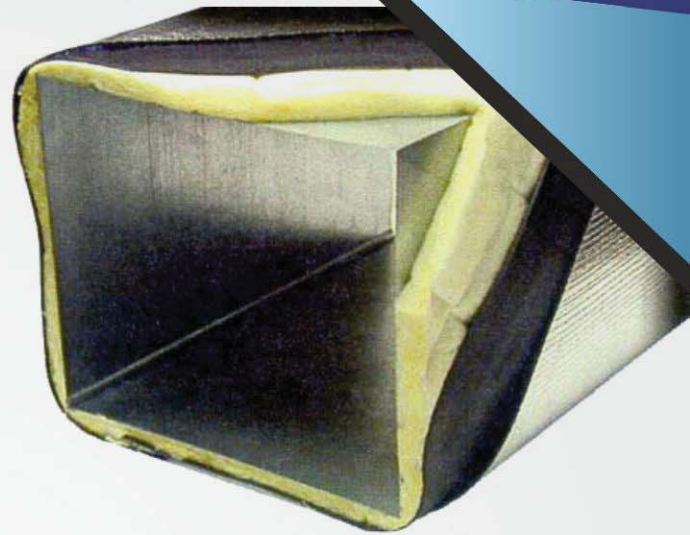
- Excellent Noise Control and Sound Proofing – STC Rating up to 34
- Class A Flammability Rating per ASTM E-84
- Passes UL-94 and FMVSS 302 standards
- Available in various surface densities – 1 lb / ft² and 2lb / ft²
- Maximizes noise control by providing high sound absorption (reverberation control) and superior transmission loss
- Excellent flame resistance
- Long useful life
- Easy to cut



ACOUSTIC LAGGING

→ APPLICATIONS

- Hydraulic and waste pipe lagging in all locations
- Air-conditioning duct lagging and shrouds
- Compressor wraps
- Spa motor wraps

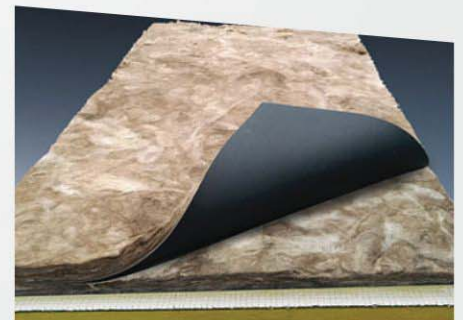


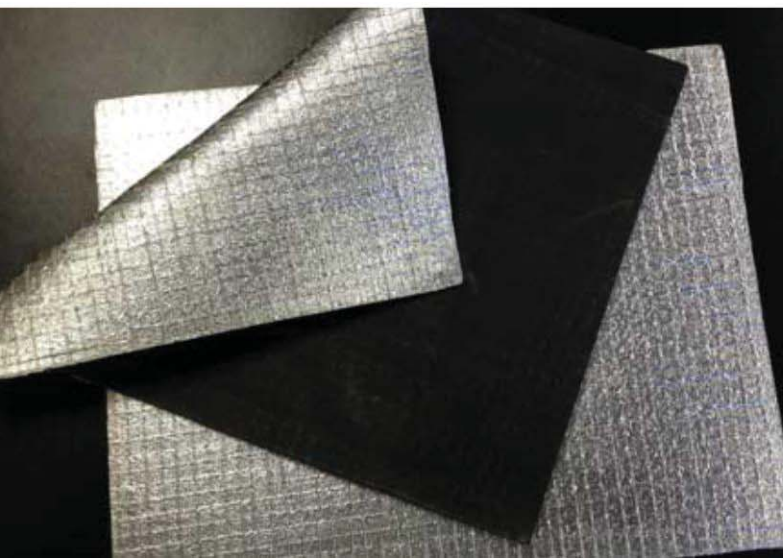
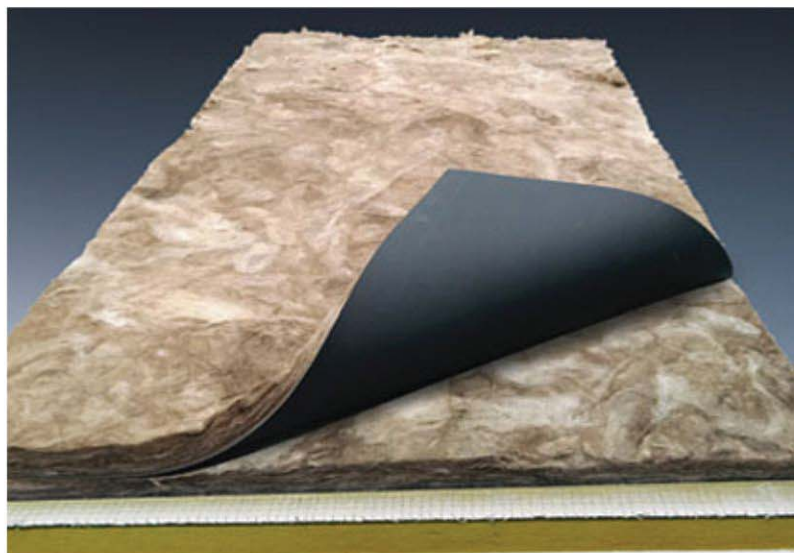
→ PERFORMANCE

Sound Transmission Losses/ Sound Reduction Index								
Freq (Hz)	125	250	500	1000	2000	4000	STC	Rw
Decibles(dB)	16	19	29	38	48	52	32	29

→ TECHNICAL DATA

- Vinyl barrier weight (1mm/ 2mm) 5kg/m²/2.9Kgm²
- Thickness 25mm, 35mm
- Maximum temperature 80 degC
- Fire performance (AS1530.3) 0,0,0,0-1
- Weighted Sound reduction index RW = 27 db





BOX IN BOX CONSTRUCTIONS

DESCRIPTION

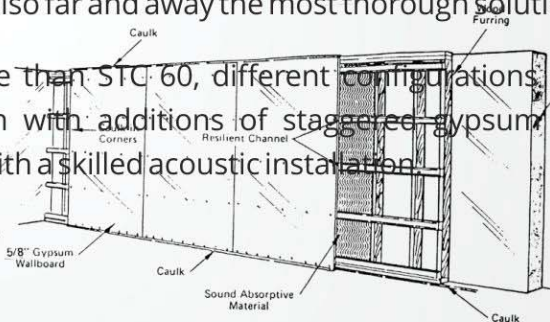
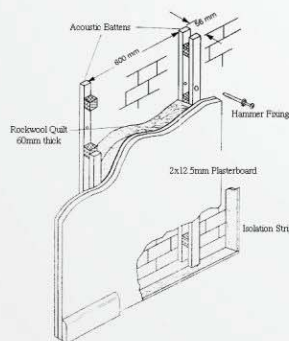
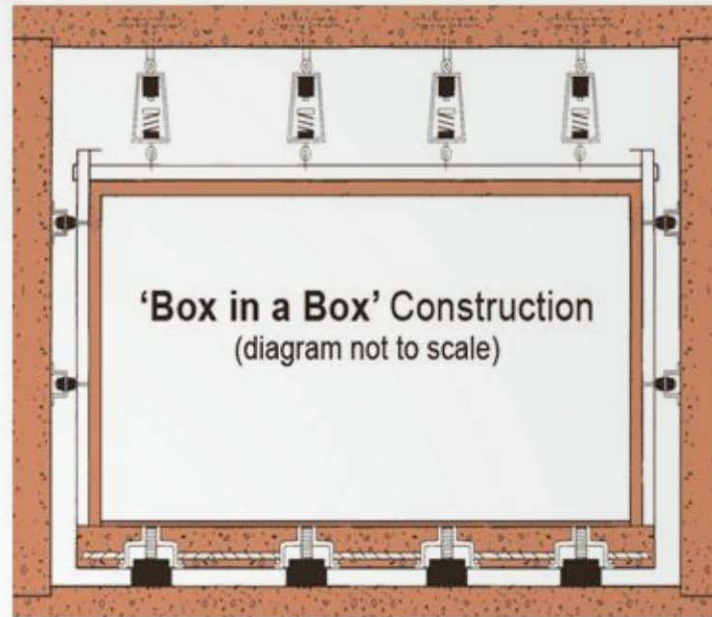
Hearing neighbor noise through your walls. Issues of night club noise transferring to the adjacent areas (guest rooms, meeting rooms etc.) Municipality's regulation to achieve criteria's (Example 65dB @ 3 meters) can only be achieved with additional acoustic treatments to existing concrete walls, floor and ceiling. Here is a basic list of approaches in order of effectiveness. Sound Transmission Class (STC) is a common measurement of sound isolation. A higher STC figure means more sound isolation.

The Better and Best Solutions have significantly better low frequency (bass) isolation. This makes them advantageous if music or sound systems are involved.

The most dramatic improvement from this technique comes from the introduction of competent decoupling via the use of Sound Isolation Clips and Drywall/ ceiling Furring Channel. This solution incorporates all 4 Elements of Soundproofing. You have Decoupling, Absorption, Mass and Damping. Certainly the most labor intensive, it is also far and away the most thorough solution.

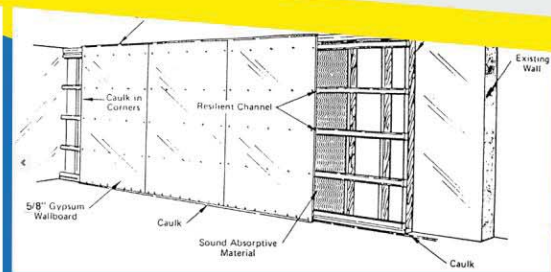
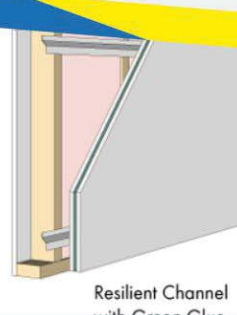
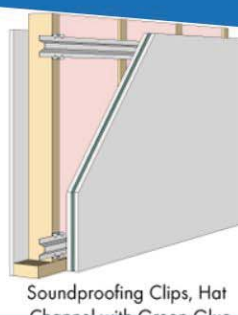
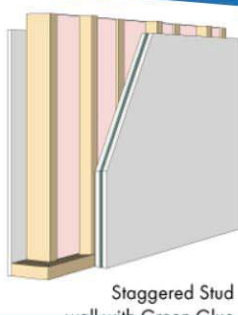
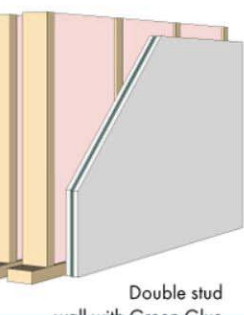
For achieving sound transmission class of more than STC 60, different configurations can be installed in ceiling and walls. This configuration with additions of staggered gypsum layers, insulations of various densities can be achieved with a skilled acoustic installation.

Mass Law – More density = more sound Reduction



METHOD OF OBTAINING A SUBSTANTIAL INCREASE IN SOUND INSULATION FROM AN EXISTING WALL

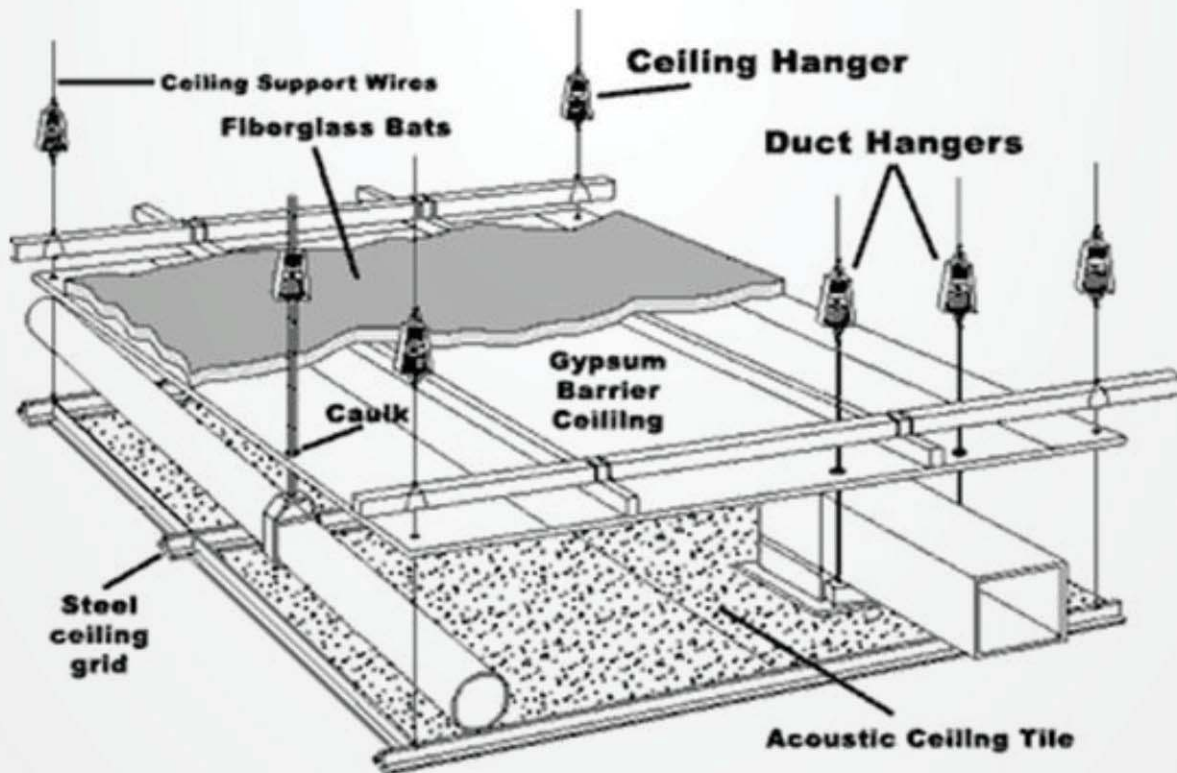
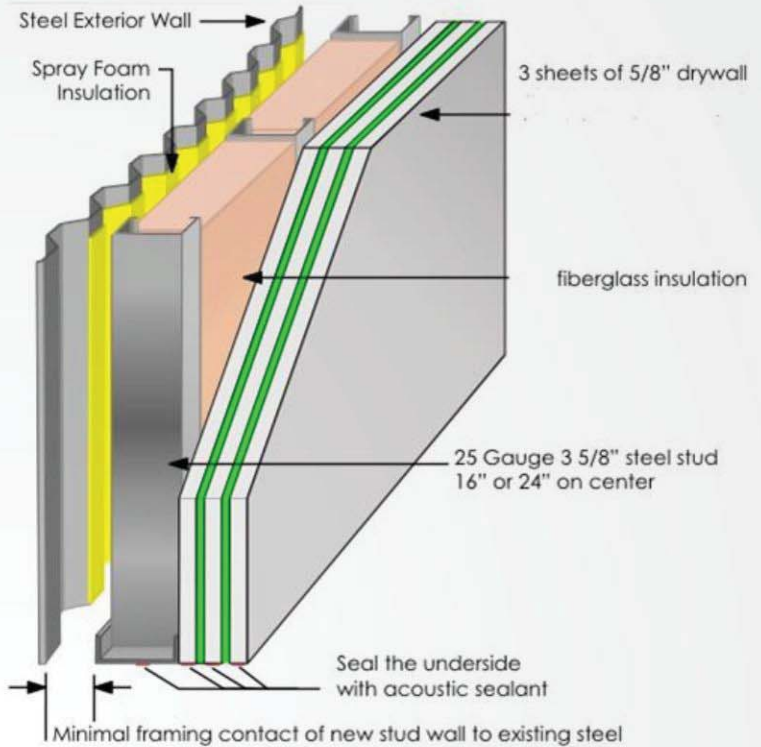
4/5 Tweet



BOX IN BOX CONSTRUCTIONS

→ AREAS OF APPLICATIONS

- Night Club, Dance Bars, Sports Bars etc.
- Cinema Rooms, Auditorium, Home Cinema
- Recording Studios, TV/FM Stations etc.





ACOUSTIC STRETCH FABRIC WALL SYSTEM

DESCRIPTION

In this digitized, amplified, surround sound world, traditional building methods fail to provide for acoustical control of sound. The twin problems of reflection and reverberation may require that surfaces be acoustically treated and covered with fabric as a decorative finish. Acoustically treating walls has become as much a necessity for helping one listen to sound as quality speakers and systems are to transmitting sound.



Our Stretch Wall System is a virtually seamless acoustic panel system, configured and installed on site at your facility. Any number of available fabrics are stretched over acoustical substrate and tucked into the high-impact, extruded PVC track. This track allows us to cover large spans of space, create curves or shapes and easily installs around existing obstacles in the room.

A stretch wall system is the obvious choice for a clean looking, flexible system that will surely meet the design and acoustic goals for any project.

AKINCO high tension fabric mounting system that revolutionizes the way fabric can be applied to walls as both a decorative and acoustical wall finish.

→ PERFORMANCE

Performance and sound absorption(HZ)							
Thickness	125	250	500	1000	2000	4000	NRC
1/2"	0.08	0.17	0.41	0.70	0.91	1.01	0.55
1"	0.11	0.32	0.79	1.03	1.08	1.08	0.80
2"	0.22	0.81	1.24	1.30	1.21	1.16	1.15

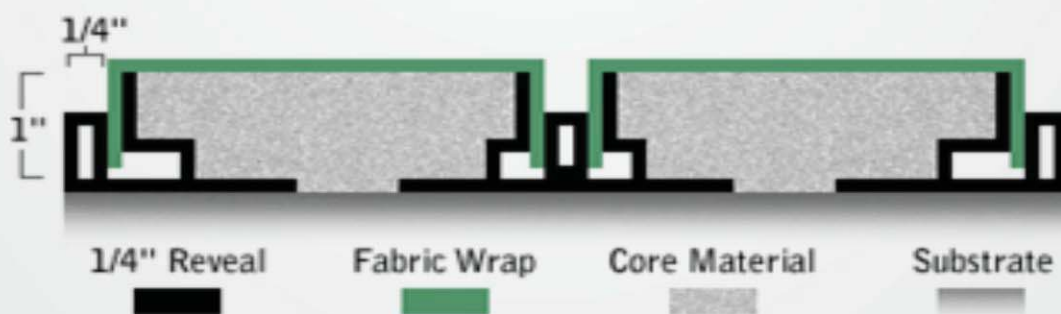
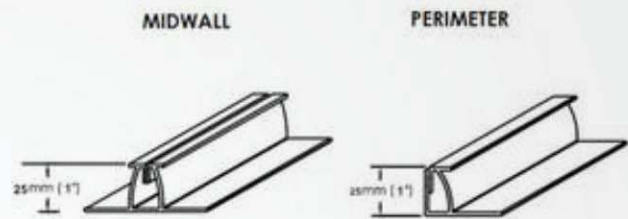


ACOUSTIC STRETCH FABRIC WALL SYSTEM

→ FEATURES

- Covers Any Size Wall
- No Wall Preparation
- No Lath
- No Staples
- No Welting/Gimp
- Excellent Acoustical Control Finish
- Flexible Choice of Fabrics
- Choice of Installer or Do It Yourself
- Removable & Replaceable Fabric
- System is Reusable
- Completely customizable
- Seamless appearance
- Maximum Flexibility
- Unlimited Design Possibilities
- Ability to Cover long spans of wall space
- Absorb, Block or Diffuse Sound
- Variable Acoustical Substrates
- Fabric is Interchangeable
- Reduce reverberation and echo
- Improves speech intelligibility
- Whisper Walls authorized dealer
- All Whisper Walls Wall and Ceiling systems are installed free of adhesives and sealants.

Fabric Wall Track (PVC Profile)



DANIEL SECTION VIEW - THIS DIAGRAM IS NOT TO SCALE



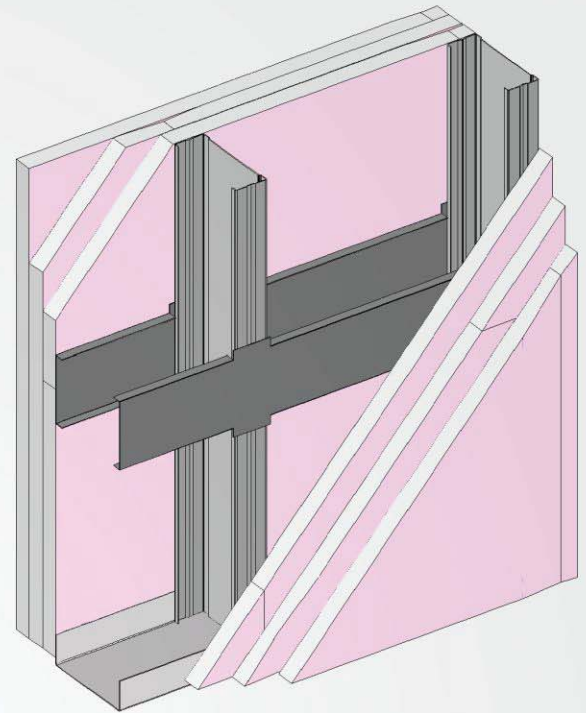
ACOUSTIC PARTITIONS

DESCRIPTION

AKINCO Partition Wall System is formed by fixing Gypsum board of single-layer or multi-layer on single-layer stud frame, which can provide the most concise and economic space dividing solution.

Applicable Scope: It is applicable for various commercial and residential buildings. Features:

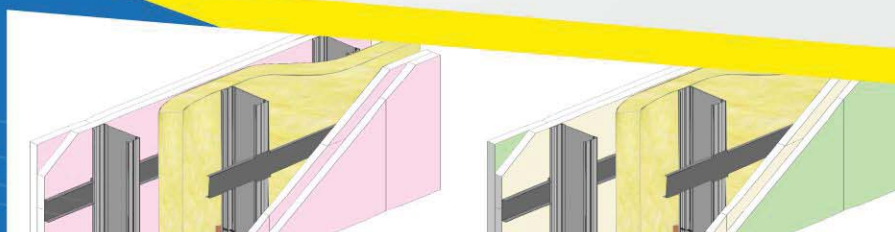
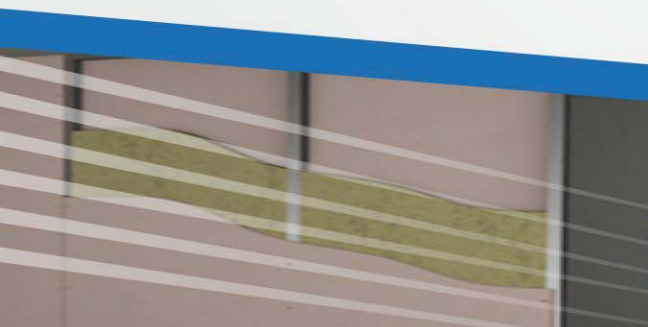
- To meet different performance requirements through selecting different layers and Gypsum boards of various types.
- Non-ancillaries system, the minimum components required, featured with simple and rapid installation.
- Convenient installation for wall pipelines.
- Dry construction, easy and convenient installation and requires low labor intensity, which effectively shortens the construction period.



The range of drywall partitions is the result of decades of experience in developing, testing and supporting warranted systems that meet the needs of the modern building.

Quickly and simply constructed from high quality, components, our partitions are guaranteed to perform. With construction technology moving towards fast pace and light weight construction, drywall partition has been widely adopted across residential, commercial, industrial and warehouse buildings. Besides the lightweight construction, drywall partition is versatile in creating interior spaces while enabling high building performances in thermal, acoustic and fire properties.

Insulation for good building performances: Typically, drywall system comprises of galvanized steel stud frames lined with gypsum, cement or calcium silicate boards on each sides of the frames. However, to provide good performances to the drywall partition such as acoustic, thermal and fire properties, non-combustible stone wool insulation is employed inside the cavity of the wall system. Our range of wool insulation provides the ideal solution as it is designed to give a perfect fit within the wall frames. Drywall partition with AKINCO is fast and easy to install, helping to reduce the time taken and labor needed for installation work, hence increasing overall speed of construction.



ACOUSTIC PARTITIONS

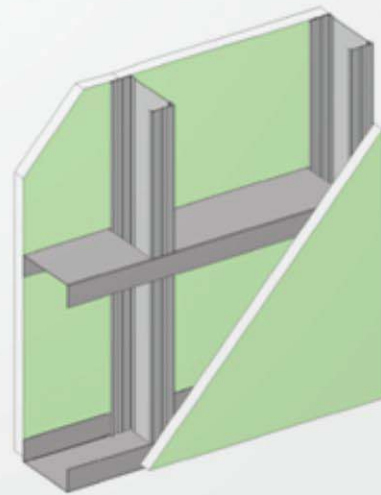
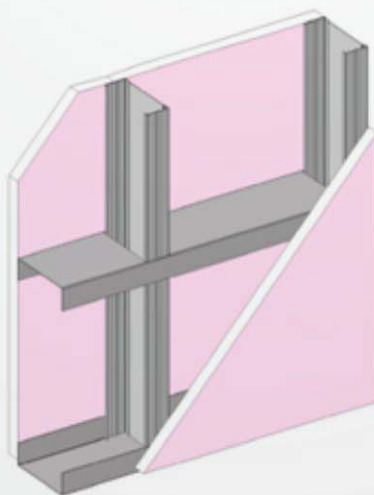
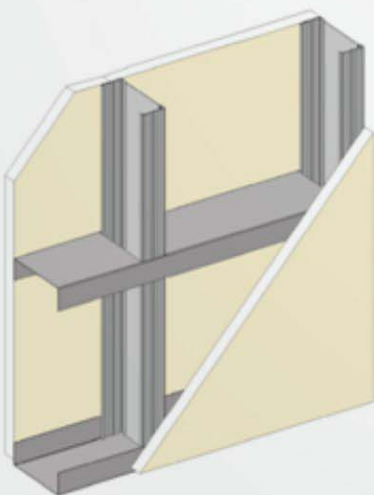
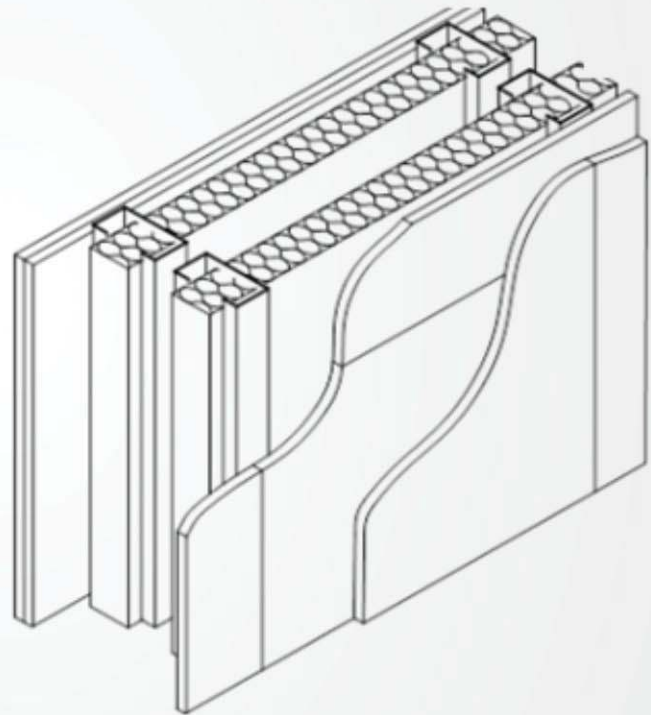
Safe & durable

AKINCO partition is fire rated and achieves the highest European fire classification, A1, according to EN13501-1. Therefore it is able to meet building code requiring drywall insulation to be non-combustible; providing a fire safe environment for buildings and its occupants

This higher density material provides superior sag resistance and fit. It can be easily cut and trimmed for the best possible fit into the partition wall cavity, assuring there will be no gaps that may compromise the performance of the system.

They cover all applications, from simple space division, through to high performance walls designed to meet the most demanding fire resistance, sound insulation, and impact and height requirements.

- Partitions systems, double stud
- Double layer Two metal studs
- Decoupled by insulation strip
- Sound protection $RW,R = \sim 59\text{dB}$
- Fire rating up to 120 minutes
- Static wall heights



ACOUSTIC PARTITIONS

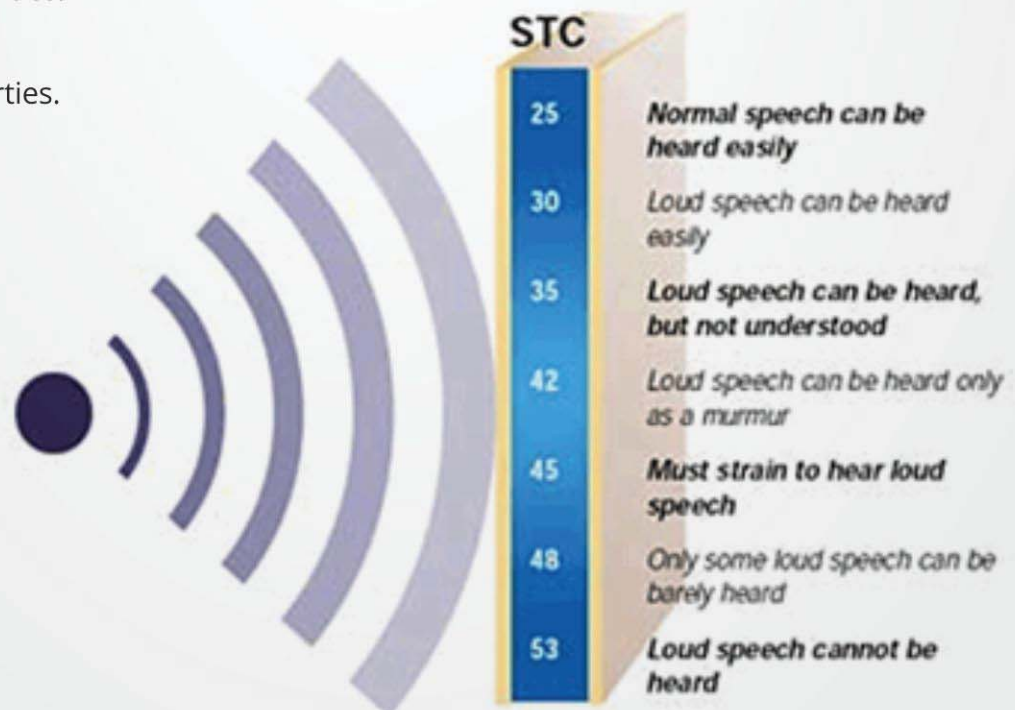
Gypsum Plaster board	Based on the performance requirement, the plasterboard needs to be selected – RG for general applications; MR for humid and aerated area application; FW for enhanced fire resistance; TF for enhanced Impact resistance etc.
Tracks	Horizontal member of UC metal structure with equal 32mm minimum flange heights. In case of deflection the Top tracks have a flange height of minimum 50mm
Studs	Vertical member of UC metal structure with unequal flange heights(suitable for boxing of studs)
Anchors/plugs	Used for fixing the tracks to the slabs and floor respectively
Drywall screws	Used for screw fixing the boards to the metal structures; available as self tapping or self drilling
Joint tape and Filler	Used to get a even smooth and homogenous surface at the joints
Sealant	Applied at the perimeter areas, to achieve the necessary fire and acoustic performance
Insulation	Used as cavity infill to enhance sound insulation
Fixing channel / Noggins	Used as backing for horizontal edge cut joints in fire rated partitions

→ PERFORMANCE

- Sound insulation airborne:49 – 63 (Rw dB)
- Fire resistance:30 – 90 (mins)

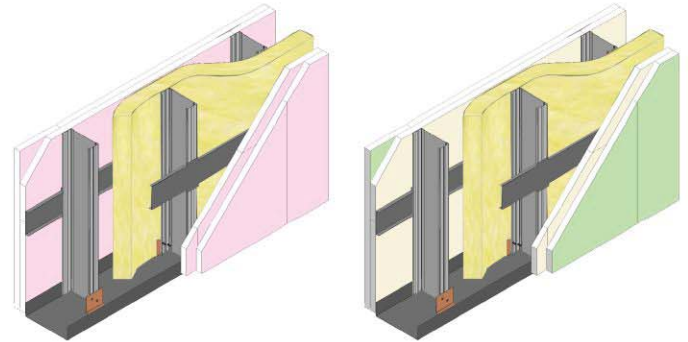
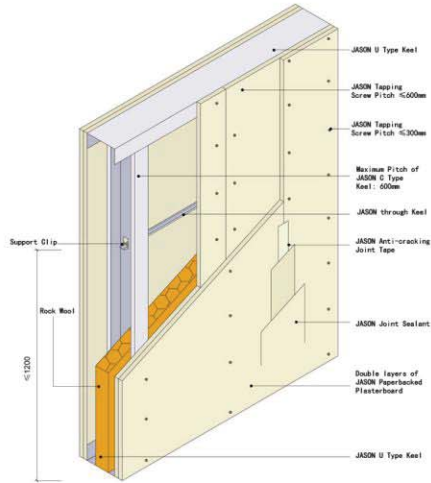
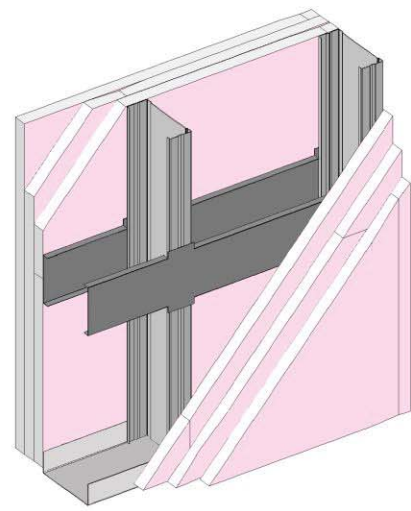
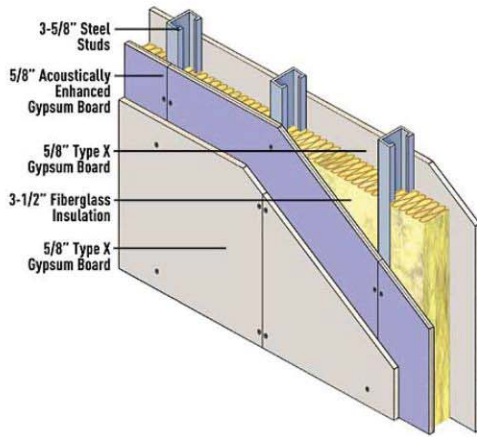
→ AREAS OF APPLICATIONS

- Private and social housing
- Apartments.
- Healthcare.
- Educational Facilities.
- Recreational .
- Industrial Properties.

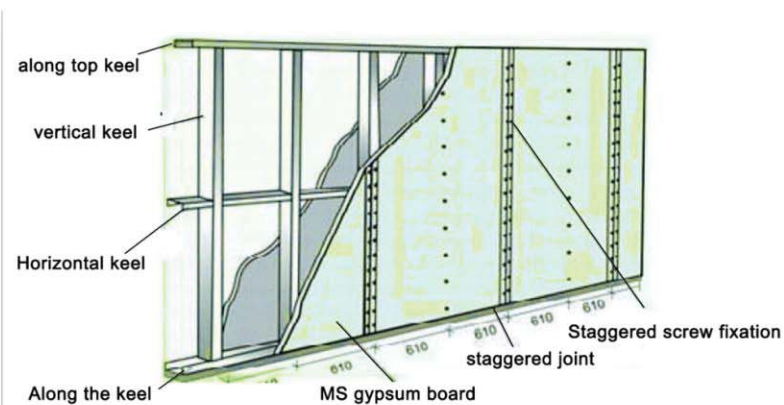
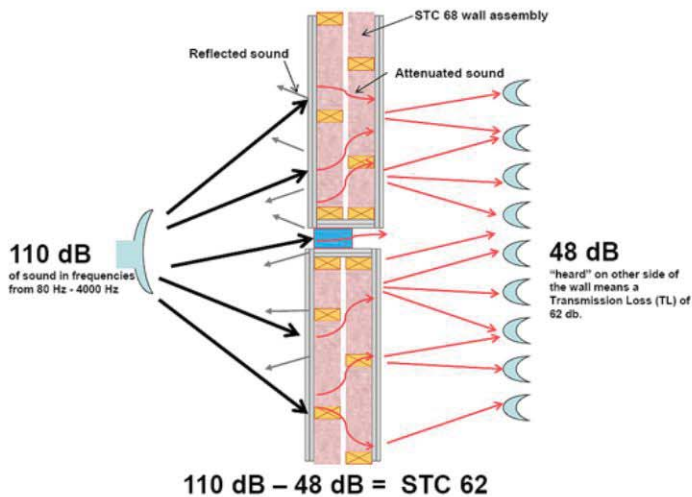
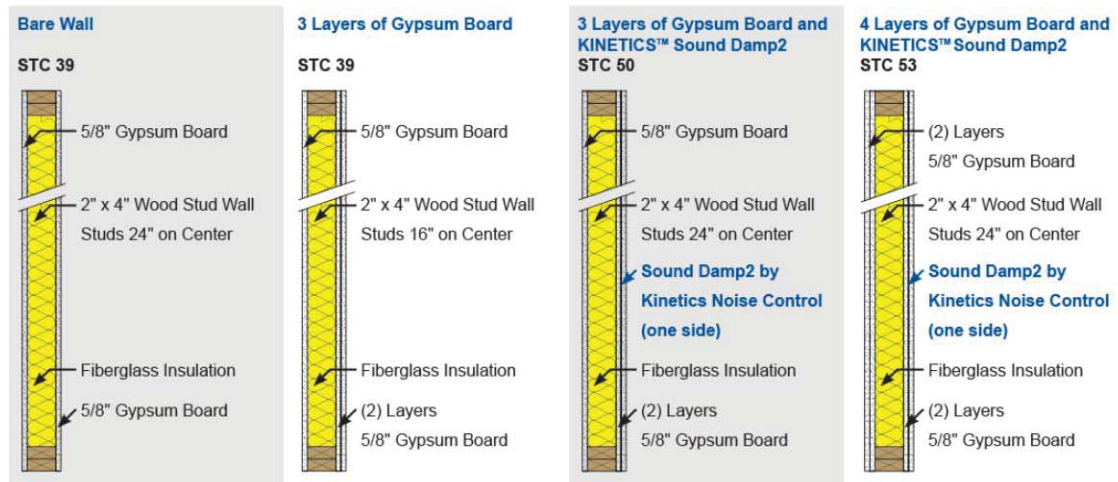


Featured Design — UL U465

STC 57 [1-HOUR FIRE-RATED ASSEMBLY — 5-1/2" WALL THICKNESS]



STC Sound Test Results



ACOUSTIC DOORS

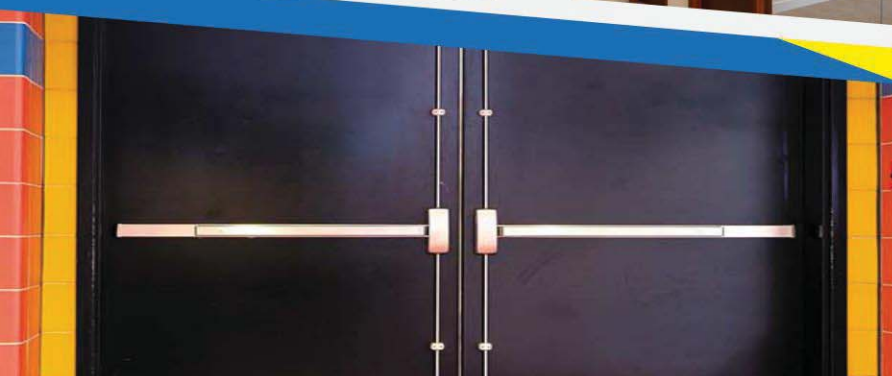
DESCRIPTION

AKINCO manufactures and install high performance acoustic doors. With an acoustics range from Rw40dB to Rw 55dB our single and double-leaf acoustic door sets are the most efficient, user friendly on the market.

The acoustic range of steel door sets has been developed using mineral wool cores to meet specific acoustic performance requirements. The range has been tested independently third party tested to ensure the performance characteristics of the door set. The doors consist of door leaves that contain an acoustic infill in the form of mineral rock wool, selected to provide high damping and minimum acoustic coupling to ensure high transmission loss. The doors come in complete sets that include frames, latch, locking system, hinges and door closer where applicable. Due to the heavy weight of the door leaves, a special designed adjustable ball bearing hinges are used to ease the opening and closing of the door. High quality powder coating finish is used to ensure best performance and aesthetic appearance.

At AKINCO, we strive for design excellence and flexibility, whether it be in unique design features or specialist fire rated or sliding acoustic applications, our high performance steel doors solve problems of noise transfer, loss, interference or pollution in a manner you would expect from a global innovator.

We are also committed to ensuring we deliver safety and aesthetic excellence. Whether it be our unique new powder coat wood grain finish or a polyester powder coat or Stainless Steel, Finished/Brushed steel, Galvanized or surface clad preparation our eye for detail ensures perfect environmental tie-in.

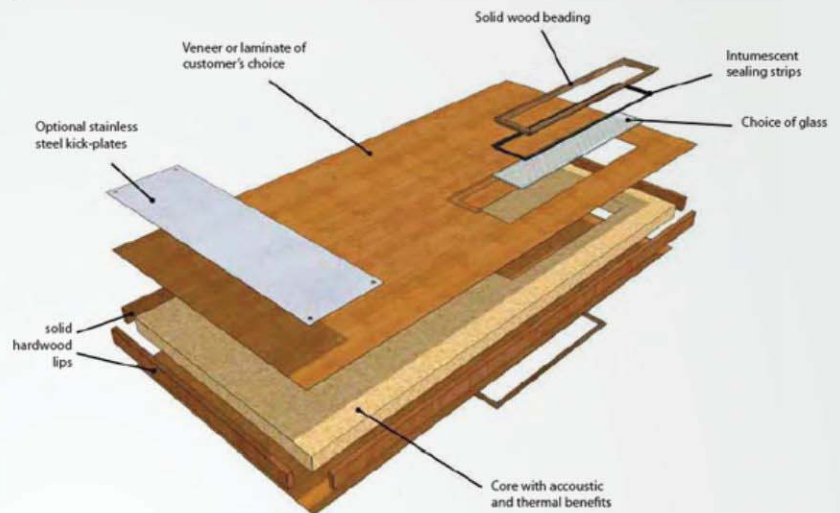


ACOUSTIC DOORS

→ APPLICATIONS

- Airport Services
- Broadcasting
- Building Services
- Education
- Entertainment and Leisure
- Healthcare
- Industry
- Law Enforcement
- Manufacturing
- Power Generation
- Typical Acoustic Door Applications

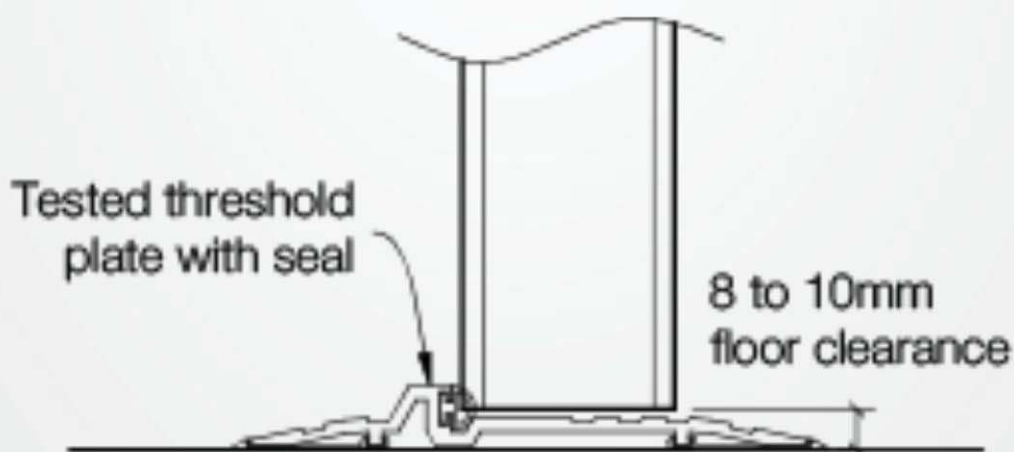
Typical Fire Door and Components



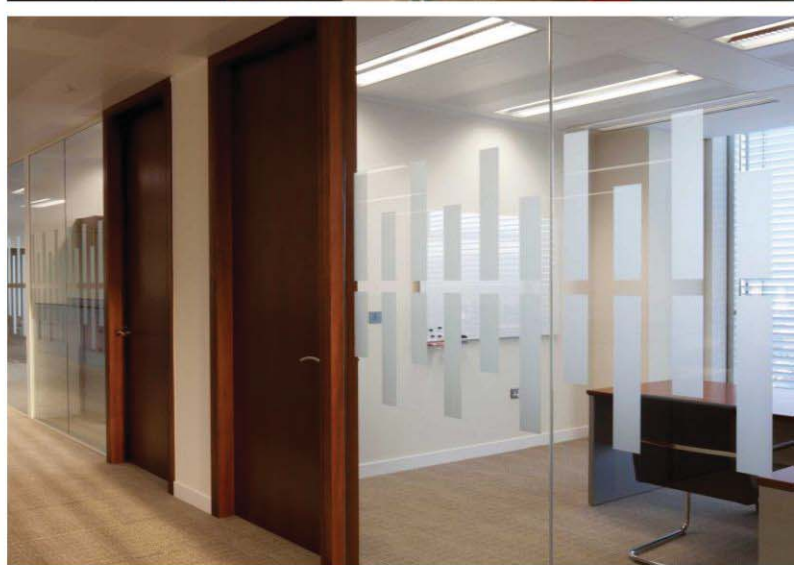
The perimeter frame seals are self-adhesive seals mounted in the frame rebate, so are hidden when the door is closed.

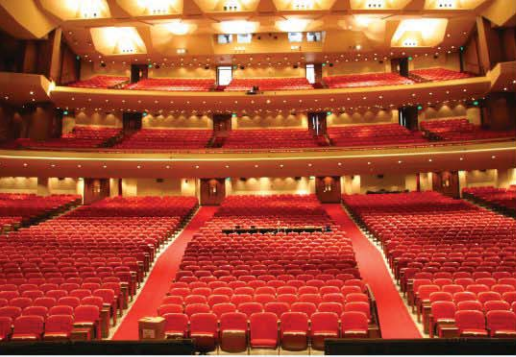
The bottom seal (Type T) is an aluminium threshold (natural anodised) with integral seal.

The height of the gap between the finished floor level and the bottom of the door must be set up carefully during installation of the door set so that the door will engage with the threshold seal as intended.



The doorset must be installed to suit the setup and clearance required for the threshold plate





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