



ID ID PLUS CO.,LTD.

INDY-Hi

OPERABLE WALL

INDY-Hi Operable Wall

Introduction and Operation Manual for Acoustic Movable Wall Systems

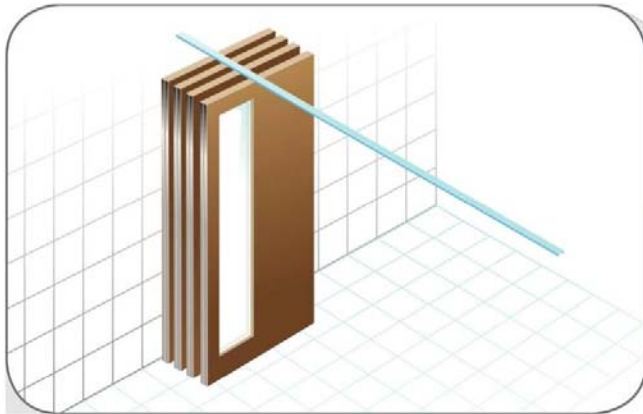
Your acoustic movable wall consists of standard panels, a telescopic panel and abutment posts. A pass door or double pass door may also be part of your system.

You will have received a hexagonal operating handle for locking the panels into position and unlocking them. You will find the operation hole for the handle in the panel edge of the vertical aluminium profile of every standard panel and on the face of the telescopic panel.

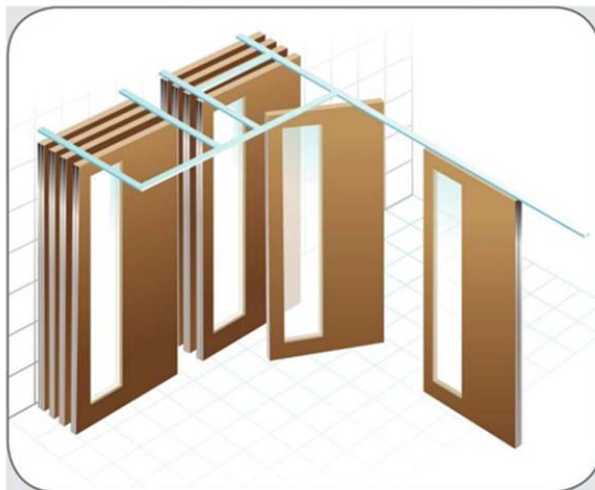
Ensure that the area is clear of any trip hazards or other obstructions before attempting to move the panels across the opening/room.

Single - and Twin-Point Suspended Systems

Single-point suspended panels are centrally hung and will always be stored at a 90 degree angle to the track. Place your hands at either side of the panel at shoulder height and move slowly backwards for approximately one metre to avoid damaging other panels. Keep the panel at 90 degrees until you are about to engage - take care not to rock the panel.



Twin-point suspended panels will be stored according to how the stacking area has been designed. You will need to guide the panel through the track junctions one at a time. Once the panel has been released from its stacking area, you may move the panel into its set-out position.

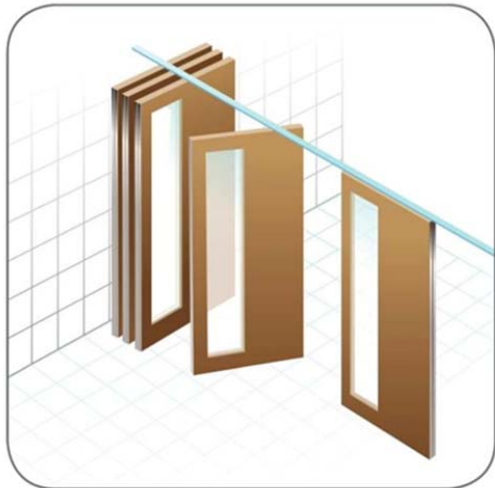


Operational Instructions to Close the Wall

Move the panel slowly up to the wall post at the opposite end of the track to the stacking area and locate the male profile nose into the female wall-post profile. Where magnetic strips are included in your specification, the panels will automatically pull together when the strips touch.

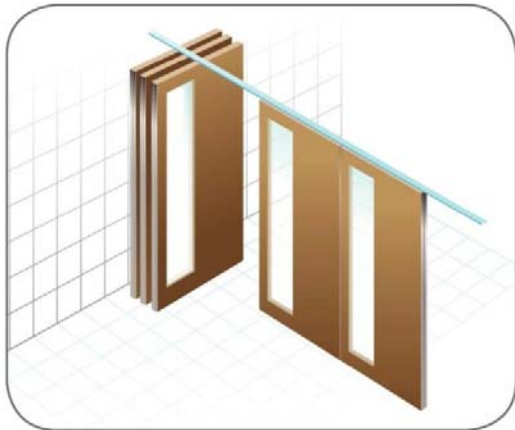
Locate the operating handle and insert the hexagonal end of the handle fully and securely into the hole under the name plate. Ensuring that the panel is upright and plumb, firmly hold the panel in position and with approximately 4 clockwise turns, the panel will lock into position.

The action of doing this will expand the top and bottom aluminium seals from inside the panel and lock them firmly against the underside of the track and floor surface.

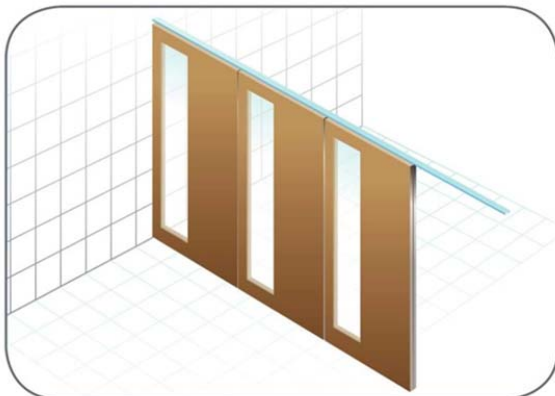


Important: When a positive stop is felt after approximately 4 turns of the operating handle, the process is finished and the handle can be removed. Do not force the handle past the point at which it cannot go any further or this will, in time, weaken and eventually break the internal mechanism.

The force exerted on the handle has nothing to do with the force required to lock the panel in position and no further locking strength will be gained.



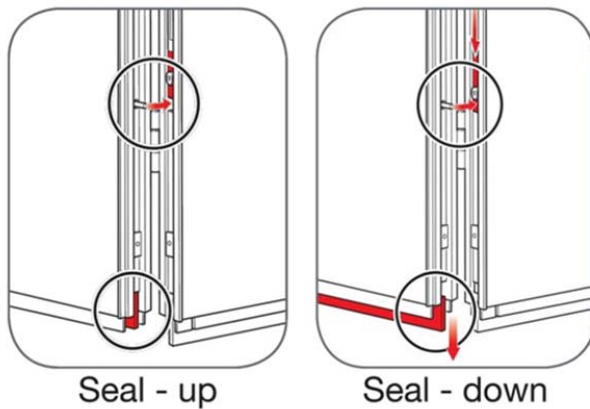
The final panel has a telescopic nose seal as well as operable seals top and bottom. The operation requires a little more effort to fully extend all of the seals (this can be checked usually during the operation), and care should be taken to avoid over-winding and potentially damaging the internal operation mechanism. To open the wall, reverse the above instructions.



Pass Door Panels

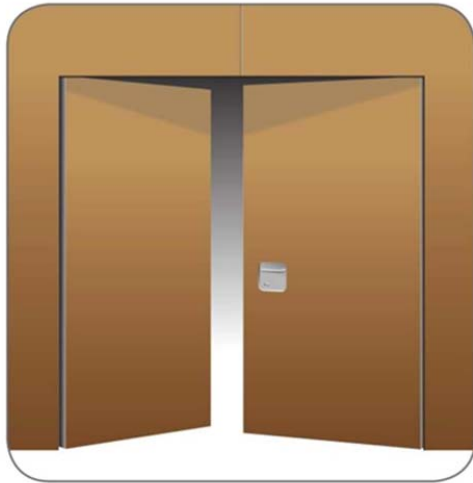
Single Pass Door Panels

Door panels are slotted into the desired position like previous panels. The deployment of the seals will require in excess of 6 revolutions of the operating handle. In some cases, there may be a shoot bolt situated at the bottom of the panel in the female profile. This is activated by inserting the crank handle and applying a downward pressure for about 4cm to locate the shoot bolt into the floor socket. To activate the acoustic seal in the hinge door, open the door and in the reveal adjacent to the lower hinge is a strike plate which should be closed, covering the 20mm hole. To deactivate the seal, raise the strike plate upwards to expose the 20mm hole. You must deactivate the door seal before moving the wall to its stacking area.



Double Pass Door Panels

Move the second pass door panel into position to engage with adjacent profiles. Extend the acoustic seals as normal; again this may take more than 6 rotations of the operating handle. To deactivate the seals, raise both strike plates upwards to expose the 20mm hole. You must deactivate the door seal before moving the wall to its stacking area.



Prevention of Accidents and Injury

Keep panels close to your waist

The panel should be kept close to the body. If a close approach to the panel is not possible, try to slide it towards the body before attempting to move it.

Adopt a stable position

Keep your feet apart with one leg slightly forward to maintain balance. Feet should be moved to maintain balance during the move. Avoid tight clothing and unsuitable footwear which might impair movement.

Avoid twisting

Avoid twisting the back or leaning sideways, especially while the back is bent. Shoulders should be level and facing the same direction as the hips. Turning by moving the feet is better than twisting the body at the same time.

Keep your head up when moving panels

Look ahead not down, once the panels is held securely.

Move smoothly

The panels should not be jerked or snatched as this can make it harder to keep control and can increase the risk of injury

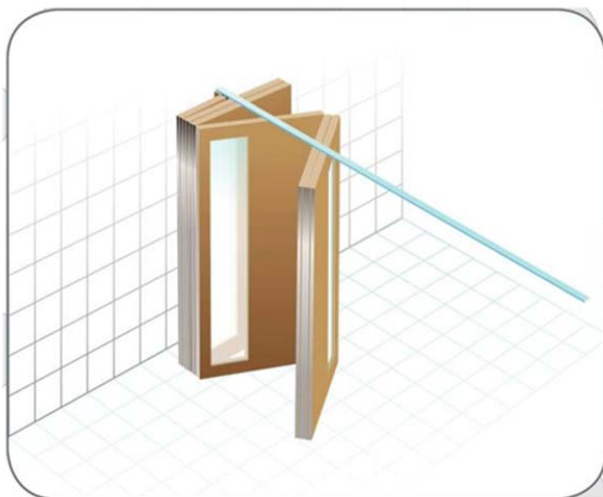
Sliding Folding Partitions

Operating The Partitions

Ease the first two or three panels forward from the stack, pulling towards you, and fold the pass door back on itself against the second panel. Ease the rest of the panels away from the stack until all panels are flat and in line with the track. Working your way from the hinged half panel at the stacking end, straighten each panel in turn and lock off using the operating key provided, ensuring all bolts are located either into the top track or into the floor accordingly. When all bolts are located, close the pass door.

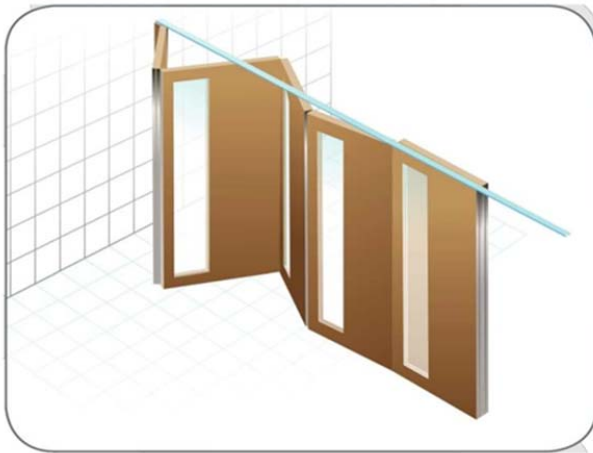
Caution Care

Should be taken not to trap fingers or feet when moving the panels. Please be aware that on the bottom-supported systems there will be a track fitted onto the floor.



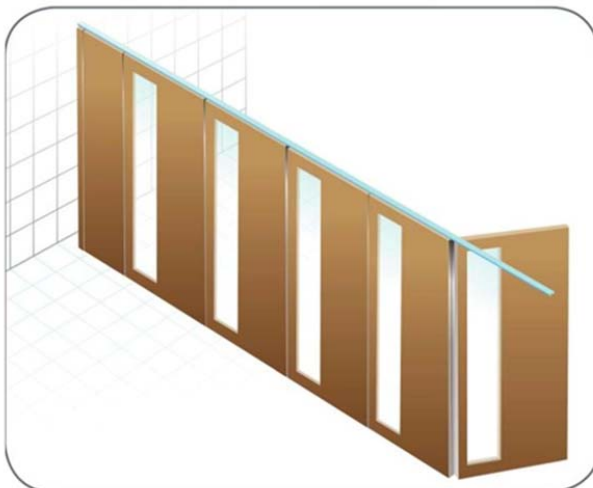
To Stack

Ease the first two or three panels of the stack open. First of all release all bolts and fold the pass door back on itself against the next panel. Push against hinges to kink and push panels back from the folding pass door to the stack. Always try to push at a steady pace, as this will aid the roller operation.



Maintenance

Systems supplied with a floor track should always be kept clear of obstructions and if possible, occasionally vacuumed. We would recommend that both top and bottom aluminium tracks are lubricated with a silicone spray intermittently. An annual service for these partitions is advised.

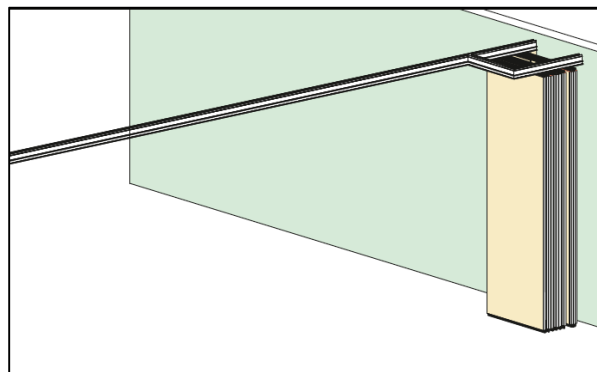
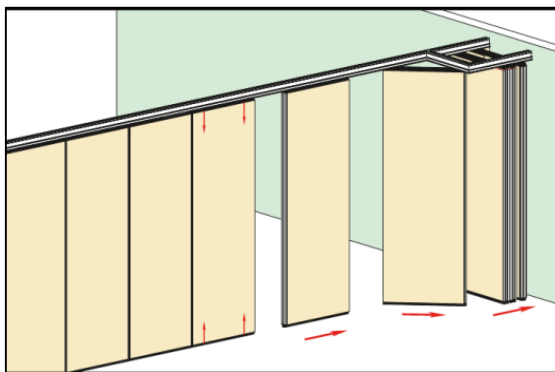


INDY-Hi Operable Wall

Offices, commercial centers, schools and hotels, the use of INDY Hi operable wall is apparent in various settings and it is not difficult to understand why. Being a highly efficient and clever solution to divide the space, the operable or movable walls have become a preferred choice among both residential and commercial property owners. These walls can prove to be an ideal option for you as well, if you wish to avail any of the several benefits mentioned below.

Enhance Your Design

1. Easily assembled on site.
2. Steel truss adjustable high and width installing covered and engineered specifically.
3. Storage with smart track with easy and smooth.
4. INDY Hi sound proofing from 44-57 dB laboratory test (According to the types).
5. Delivery within 30-45 days.
6. No ordinary maintenance is necessary.
7. The weight of partition is 45-70 kg/m.
8. Fire rating as high as 60 minutes.



Product Specification

INDY-Hi : Operable Wall

Product Name:	INDY-Hi Model 100
Size:	Made to order , Height max to 15m
Material:	Steel , AU , MDF Board
Acoustic Ratings:	37-56dB
Option:	Semi Automatic, Fire Safety





INDY-Hi : Operable Wall

INDY - Hi บานเลื่อนผนังกันเสียง เป็นระบบลูกล้อเลื่อนในรางแบบแขวน ตัวบานเลื่อนเคลื่อนตัวด้วยการใช้แรงดันโดยไม่ต้องใช้รางล่าง โครงสร้างภายในตัวบานเลื่อนใช้อลูมิเนียมและเหล็กปิดทับด้วย แผ่นไม้ MDF มีความหนา 16 ม.ม.

1. เหล็กเกลียวขนาด M10 เพื่อถ่ายต่อรับความสูงและต่ำ
2. แผ่นเหล็กหนา 9 ม.ม. ถูออกแบบมาเพื่อมาเชื่อมต่อกับระบบโครงสร้างด้านบน
3. รางอลูมิเนียมแบบขึ้นรูป แบบ 6005A F27
4. และลูกล้อเหล็กหล่อเย็นเกรด JIS STKM12 โดยมีตั้บลูกปืนแบบ Heavy Duty รับน้ำหนักสูงสุดถึง 250 กก.และ 500 กก. ต่อ 1 บาน
5. ยางซีลซับเสียงด้านบนควบคุมด้วยการหมุนด้วยแกนสปริง แรงอัด 1600 นิวตัน
6. โครงเหล็กหล่อเย็น เกรด JIS STKM12 และอลูมิเนียมเกรดALMG Si 0.7 F28
7. แผ่นอลูมิเนียมหุ้มสันบานและมีแถบแม่เหล็กซ่อนอยู่ในแนวตั้ง (แรงอัด 50 นิวตัน) เพื่อกันการรอดของเสียง
8. แผ่นซับเสียง น้ำหนัก 8 กก. ต่อ 1 ตารางเมตร ใช้เฉพาะรุ่นที่ระบุเท่านั้น
9. แผ่นใยแก้วซับเสียงหนา 50 มม. ความหนาแน่น 45K
10. แผ่นไม้ MDF หนา 16 ม.ม.ติดตั้งด้วยตั้วยึดแบบถอดออกได้ หากแผ่น MDF เสียหายสามารถถอดเปลี่ยนได้
11. บานผิวแผ่น MDF สามารถปิดผิวด้วยแผ่นลามิเนต วอลเปเปอร์ ผ้าหุ้ม และอื่นๆ ทั้งนี้มีความหนาและ น้ำหนักเป็นกำหนด
12. ยางซีลซับเสียงด้านล่างควบคุมด้วยการหมุนด้วยแกนสปริง แรงอัด1600 นิวตัน

Specification Acoustic 100, Track Type CG2

Thickness :

ความหนาของบานเลื่อน 100 mm ,ความหนาเหล็กโครงสร้างผนัง 2mm , โครงสร้างแผ่นผนัง Galvanised Steel & Aluminium

Operation :

เป็นระบบบานเลื่อนในรางเดี่ยวทุกบานโดยใช้เหล็กหมุนบังคับ ระบบแม่แรงโครงสร้างด้านในมีตัวยึดยางซีลในแนวขวาง ทำให้อันเลื่อนยึดกับรางและพื้นโดยไม่มีช่องว่างเพื่อลดการลอดของเสียง

Flexible Spring Load System :

โครงสร้างของระบบจะมีแรงกด อยู่ที่ 1500 Newton เมื่อยกกดขึ้นและดันลงในแนวขวางจะช่วยให้การรองรับน้ำหนักของตัวบานเลื่อนอีกด้วย ทั้งนี้ถ้ามีการเคลื่อนตัวตามธรรมชาติจะช่วยลดการบิดเบี้ยวของโครงสร้างผนัง

Trolley CG2 :

ทำจากเหล็ก (Steel Cold JIS STKM12Ball Bearing , Maintenance Free) รับน้ำหนักได้ถึง 400 กิโลกรัมต่อบาน หมุนได้ 360 องศา

Track :

Aluminium Track Type 2 , วัสดุ Aluminium Extrusion – ALMG SI 0.7 F28

Front Panel :

แผ่นหน้าบานสามารถถอดออกได้เพื่อการตกแต่งใส่ผ้า ผนังหรือรองด้วยฟองน้ำ สะดวกไม่ต้องถอดบานลงจากรางเลื่อน

Aluminium Track :

รางเลื่อนทำจากอลูมิเนียม (Aluminium Extrusion ALMG SI0.7 F28) เป็นระบบ Cross Guidance และไร้การเสียดสีและมีเสียงน้อยมาก

Aluminium Protective Edging :

มีแถบแม่เหล็กเพื่อช่วยการอัดแน่น 55 Newton per linear meter บั๊งกันการลอดของเสียง ขอบข้างอลูมิเนียมรูปทรง

Convex แบบนูน และ Concave แบบเว้า เพื่อช่วยลดการลอดของเสียงเมื่อแต่ละบานปิดชนกัน

Seal Gap ระบบจะมีแรงกด อยู่ที่ 1500 Newton และยางซีลด้านบนยืดสุดได้ถึง 25 mm ยางซีลด้านล่างยืดลงสุดได้ถึง 75 mm

Sound Insulation :

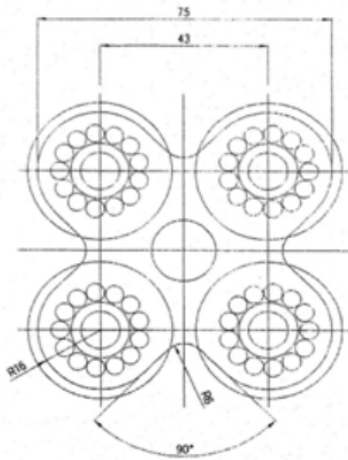
ใช้วัสดุ Rockwool211 density 45kg/M3 Sound

Certificate :

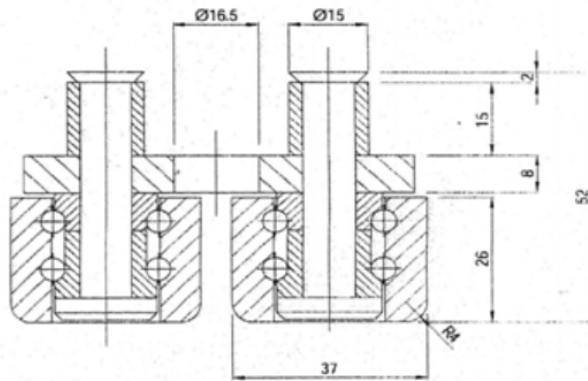
ได้รับการทดสอบมาตรฐาน INSTITUTE OF ACOUSTIC Wall Partition EN –ISO 140-3

Laboratory Measurement of Airborne Sound Insulation of Building

TROLLEY - CG2

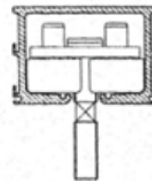


Cross Section



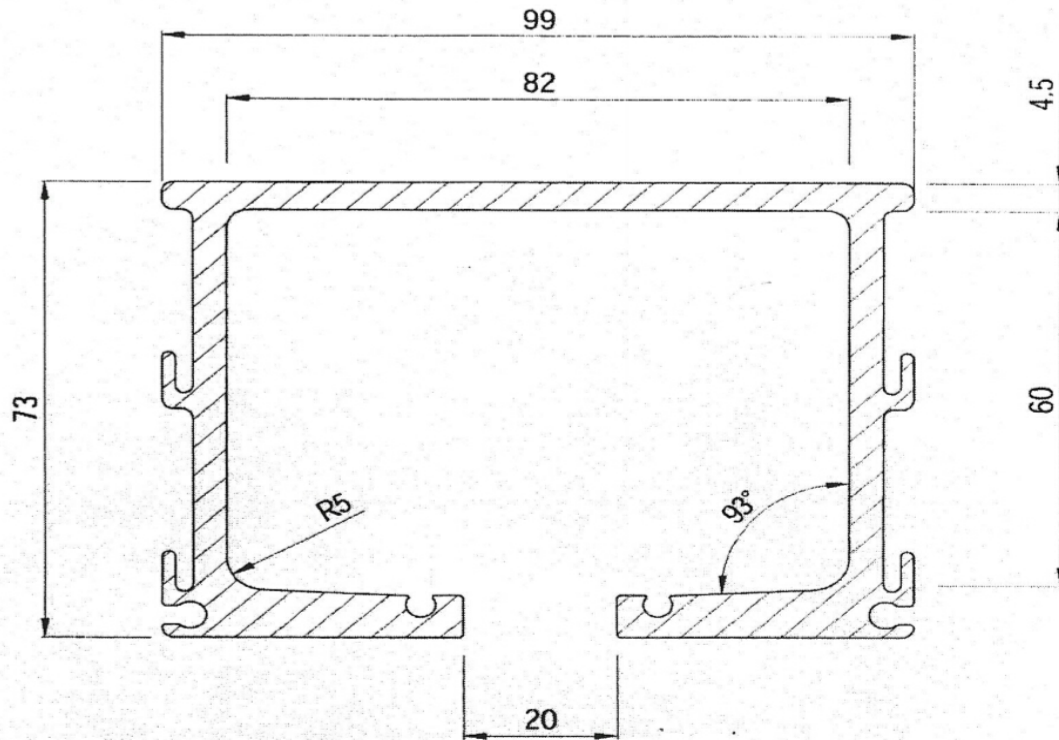
Side View Section

Trolley	Type CG2
Material	Gavanised Steel Cold JIS STKM12 a multiple Ball Bearing Type
Dimension	width 75 x 75 , height 52 mm.
Weight load	400 kgs per 1 trolley
Use with	Track type 2 The executions are available in 1 point guidance 2 points Forced - guidance 2 points Cross - guidance



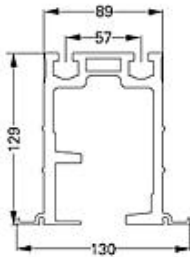
Every panel is suspended by two trolleys which run in an aluminium ceiling track. These maintenance free trolleys are of a multiple ball bearing type. The trolleys are connected to the panel by means of a steel trolley bolt.

TRACK TYPE 2



Track Profile	Type 2
Material	Aluminium 6005A F27
Dimension	width 99 mm. height 73 mm. thickness 4.5 mm.
Colour	Aluminium Natural
Executions	1 point guidance 2 points Forced guidance 2 points Cross guidance

100 Series Track System



L Junction

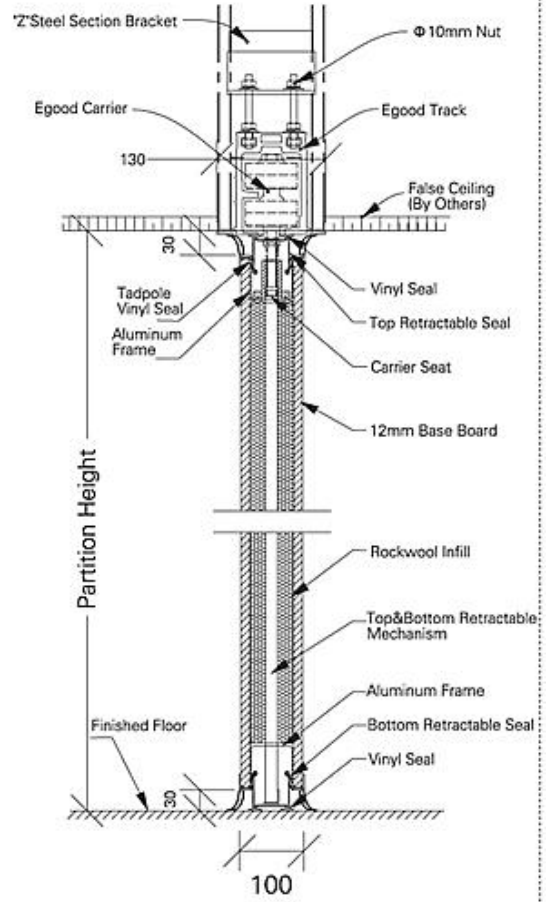


T Junction

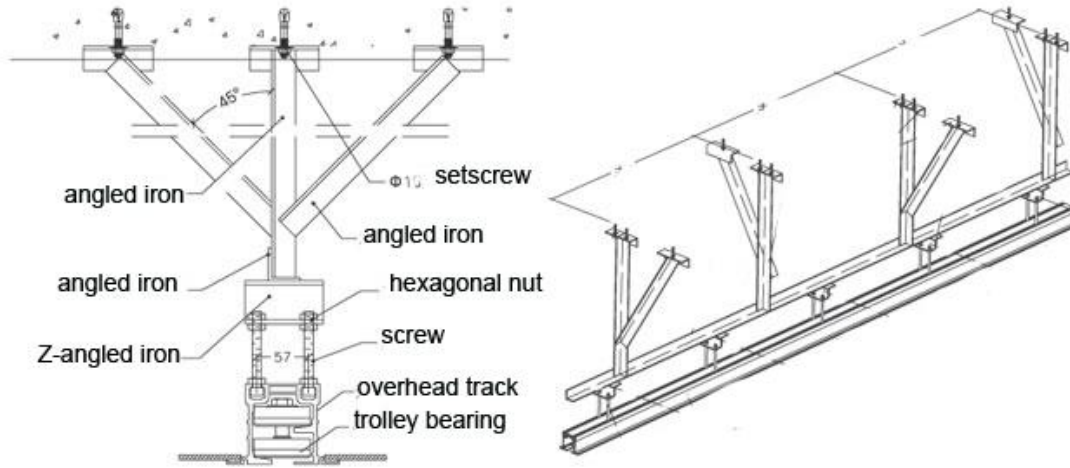


X Junction

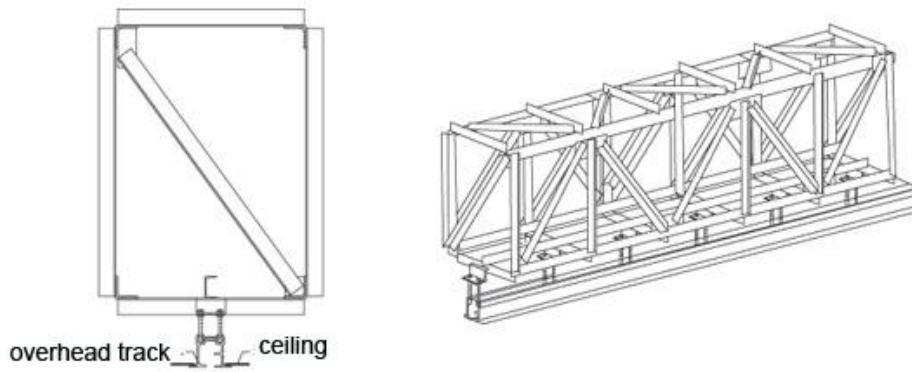
100 Series Vertical Section Drawing



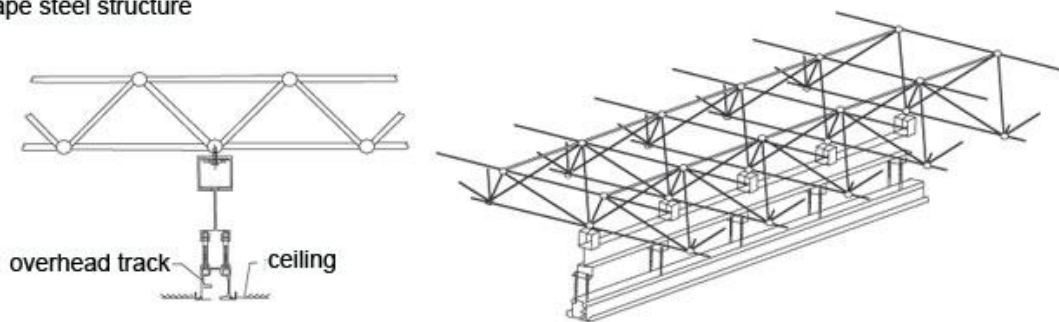
Angled steel structure



Truss steel structure



Ball shape steel structure



AIRBORNE SOUND INSULATION WALL PARTITION

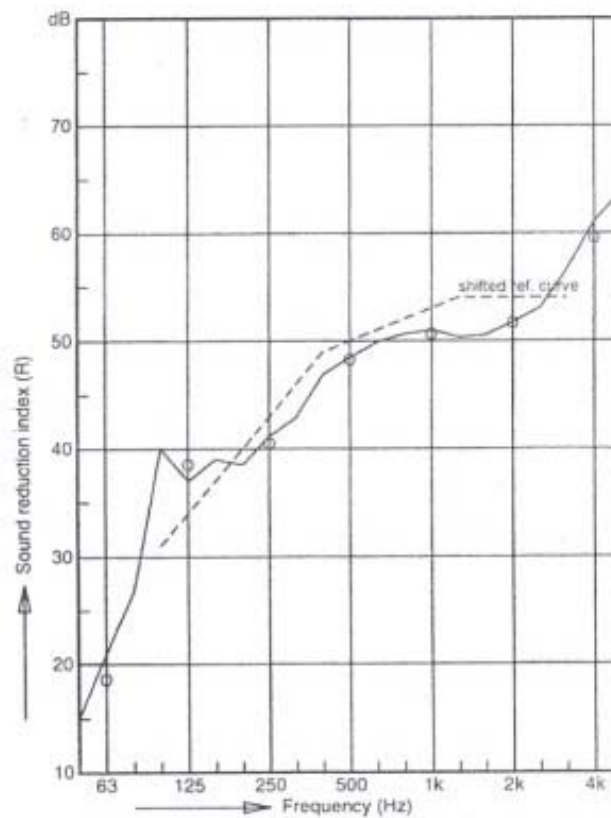
Laboratory measurements in accordance with EN-ISO 140-3

Client	: Paneles Asia	Product	: Acoustic 100
Projectnumber	: 008.01487/01.02	Test room	: Transmission rooms 1-2
Mounted by	: Paneles Asia	Testdate	: 2000-11-27
Description specimen	: 16 mm particle board with sound dampening mats suspended on a steel frame Aluminium nose and counter profile with magnetic strips Aluminium pressure seals with plastic profiles and sound dampening mats		

Mass : 51,0 kg/m²
 Surface area : 10 m²

Source room volume : 109 m³
 Receiving room volume : 99 m³

Frequency (Hz)	R 1/3 oct (dB)	R 1/1 oct (dB)
63	26,4	11
100	40,0	
125	37,0	38,5
160	39,0	
200	38,5	
250	41,2	40,5
315	42,9	
400	46,9	
500	48,5	48,3
630	49,9	
800	50,6	
1000	51,0	50,6
1250	50,3	
1600	50,5	
2000	51,7	51,6
2500	53,0	
3150	56,6	
4000	61,1	59,5
5000	63,8	



Rating in accordance with EN-ISO 717-1

$$R_w (C; C_{tr}) = 50 (-1; +3) \text{ dB}$$

$C_{50-3150} = -3 \text{ dB}$	$C_{50-5000} = -2 \text{ dB}$	$C_{100-5000} = 0 \text{ dB}$
$C_{tr,50-3150} = -13 \text{ dB}$	$C_{tr,50-5000} = -13 \text{ dB}$	$C_{tr,100-5000} = -3 \text{ dB}$

INDY-Hi Operable Wall

Project Reference

The Extremely User of INDY-Hi Operable Wall

Huawei	@ G Tower
Huawei	@ GPF Building
Huawei	@ Mueang Thai Pathara
NOKIA	@ Metropolitan Building
Apple	@ Central World Building
Boston	@ Sathon City
Bayer	@ Bayer Building Sathon
Lear Rayong	@ Eastern Seaboard Rayong
Medtronic	@ Chamjuree Building
AXA	@ G Tower
AXA	@ Pitsanulok
Thai Ger Tech	@ Rungrojthanakun Building
Shopee	@ G Tower
Shopback	@ Grammy Place
Varifone	@ Sathon City
GM Tour	@ AIA Sathon
JustCo	@ AIA Sathon
NTL	@ Ari Building
Varifone	@ Thanaphumi Building
Honeywell	@ Muaengthai Insurance
Mandom	@ Sathon Square
BP	@ Rajanakan Building
BAF	@ Ocean Tower
Honda	@ Piraj Bangna
Huawei	@ AIA Ratchada

Operable Wall

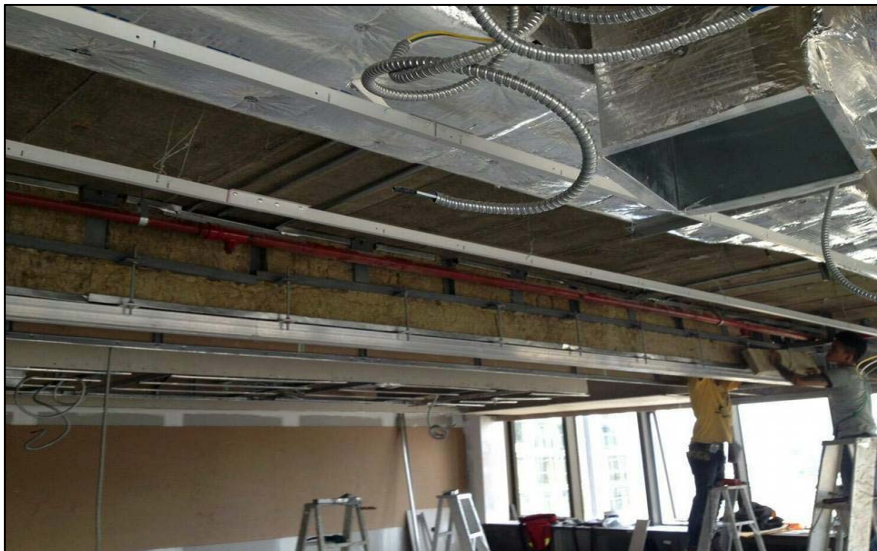
Medtronic @ จามจุรี





Operable Wall

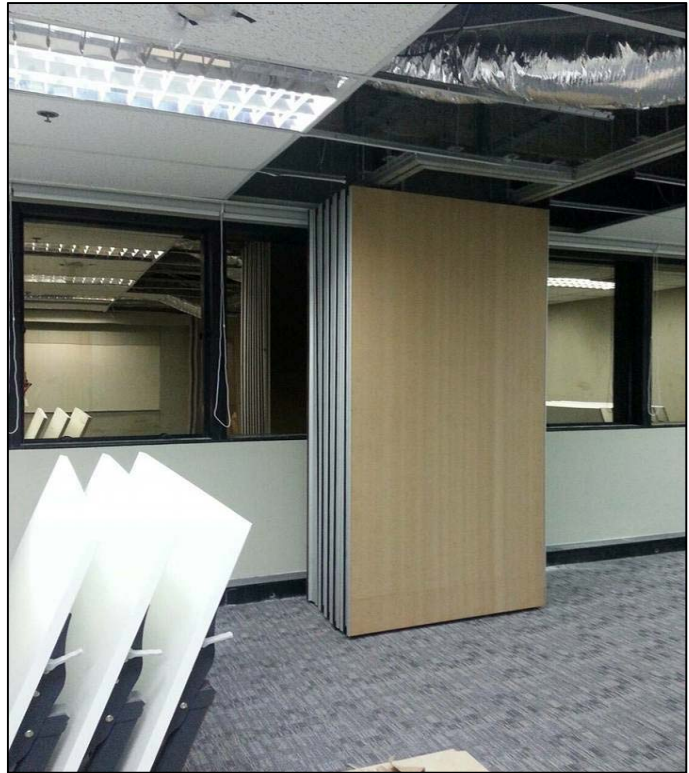
BAF @ Ocean Tower



Operable Wall

Huawei @ เมืองไทยภัทร





Operable Wall

Huawei @ GPF





Operable Wall

AXA @ G Land Tower



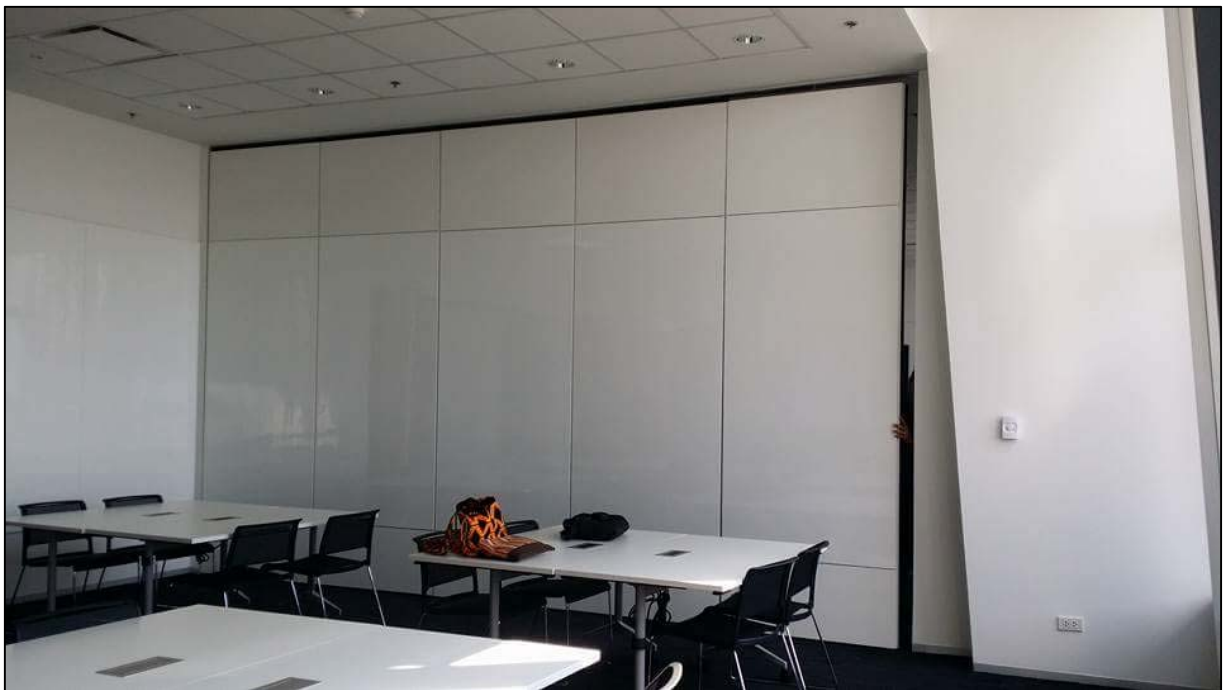


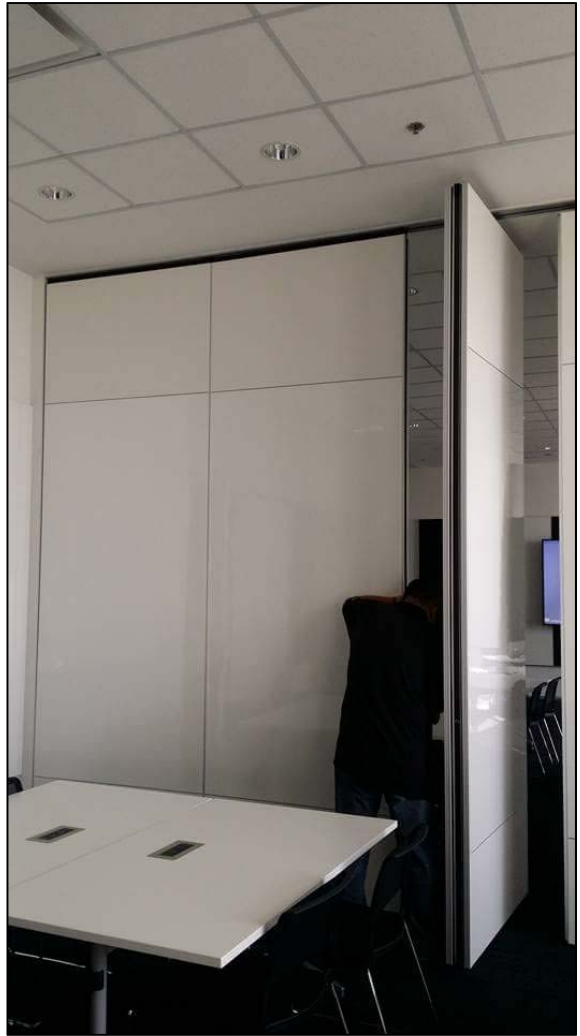
Operable Wall

Apple @ Central World





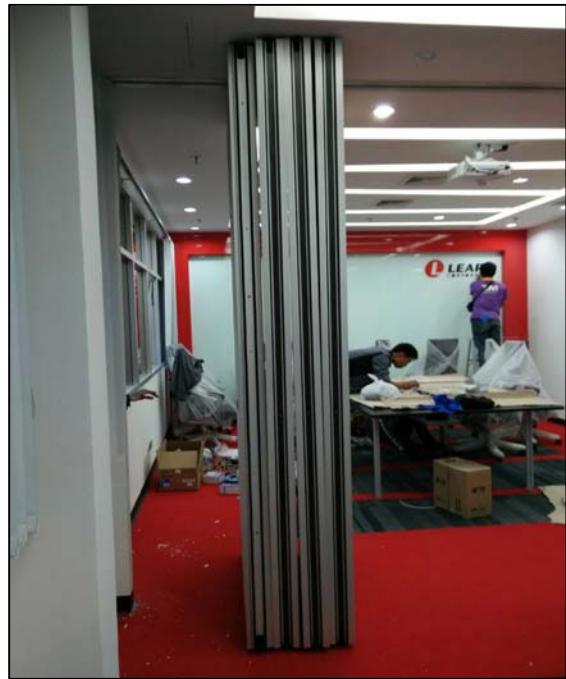




Operable Wall

Lear @ Rayong





Operable Wall

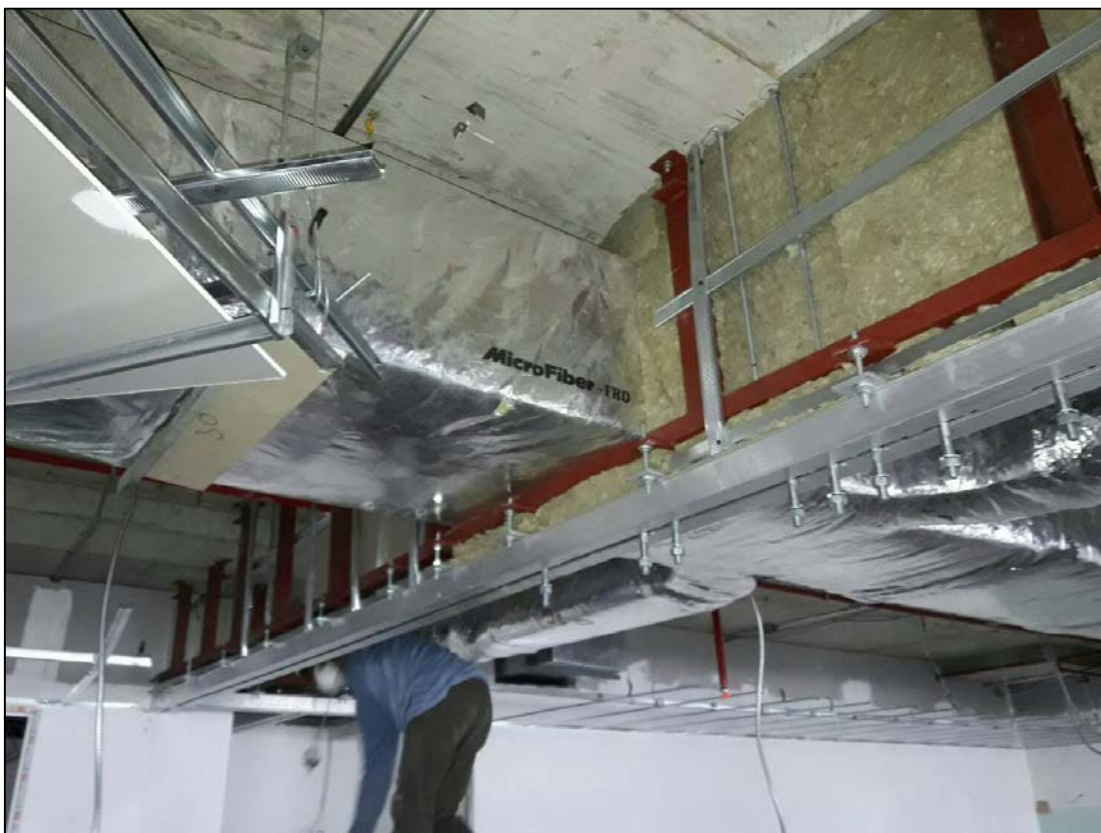
Boston @ Sathorn Square





Operable Wall

Bayer @ Bayer Building





Operable Wall

Mandom @ Sathorn Square





Operable Wall

Huawei Gland Tower 39th

