

technical specification

Hufcor Acoustic Operable Series 7000

Panel Construction

Faces substrate is MDF (medium density board) with appropriate backings to meet sound transmission class requirements. Panel frames are anodised or powder coated extruded aluminium formed to fully capture and protect the edges of the face material. No floor tracks or guides are required.

Retractable Mechanical Seals

Retractable mechanical seals that provide a nominal 25mm top clearance and 25 up to 100mm bottom clearance when retracted.

Mechanical top and bottom seals retract for easy movement on both single and paired panels. When extended, they exert a constant seal force for optimum sound control and panel stability. When retracted no seals drag on the floor or ceiling during movement.

Interlocking Vertical Seals

These tightly interlocking vertical seals prevent sound leaks and help to align panels during set up.

Lever Closer Panel

Hufcor's lever closer panel exerts a horizontal force of up to 113kgs for light panel to panel seal.

Full Perimeter Aluminium Frame

Provides edge protection and increases durability. It also provides handhold when moving the panels and helps keep panel faces clean.

Removable Operating Handle

Prevents unauthorised panel movement. An easy half turn of the handle sets and retracts the mechanical seals. Users will appreciate the convenience of waist height location of the activator. No bending and tedious cracking is required with Hufcor.

Finishes

A variety of fact finishes are available and these can include Fabrics, Wood Veneers High Pressure Laminates, Carpets, Vinyl's, Paints or any other custom finish made to specification and to match your décor.

Warranty

The product is guaranteed for two years against manufacturing defects and workmanship



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7000S Panel Details

1. **Panel Construction** shall be nominally 100mm thick and up to 1232mm in width.
 - a. Faces shall be of Class rated material assembled to appropriate acoustical backing to meet the STC requirement.
 - b. Frames shall be of aluminium designed to capture edges of face material.
 - c. Vertical edges of panels will be protected with full-height trim.
 - d. Hinges (for paired panels and continuously hinged) shall be recessed and project no more than 6mm from the face.

2. Seals

- a. Vertical Sound Seals shall be deep nesting tongue & groove type.
- b. Horizontal top seals to be retractable and provide 25mm nom. clearance and constant pressure when extended.
- c. Floor Seals 7500, 7600 Horizontal floor seals to be retractable and provide nom. operating clearance and constant force when extended. 7700: Horizontal floor seals to be retractable and provide a nom. 25mm up to 100mm bottom clearance.

3. **Suspension System** shall be life cycle tested 161km (approx. 10 years) and shall consist of:
 - a. Clear anodized architectural grade 6063-T6 extruded aluminium track.
 - b. Each panel shall be supported by polymer-tired, steel ball bearing carriers as follows:

4. Operation

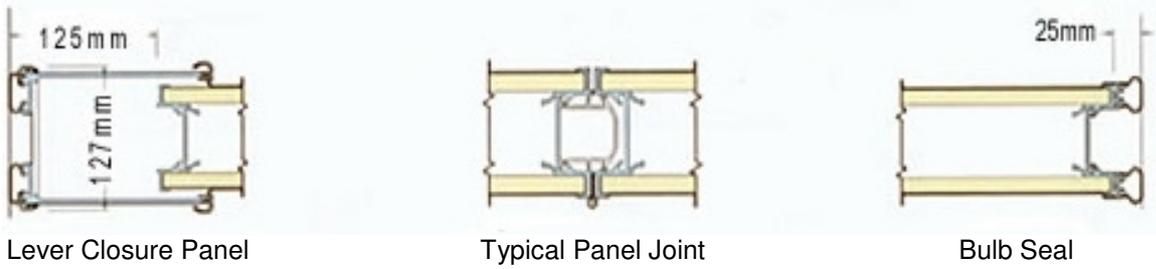
- a. Models 7000 shall be top supported and manually operated.
- b. Retractable seals for model 7000 shall be activated by a removable quick-set operating key located at waist height in panel edge.

5. **Final Partition Closure:** Lever Closure Panel with expanding jamb exerting min 114kg constant force against wall.

7000S Product Selector								
Configuration	Model	Max. Height	Max. Opening Width	Horizontal Seals		Stack Size	Track Type	Panel Type
Top				Floor				
Paired Panels	7500SP	7.366m	Unlimited	Retractable	Retractable	100mm per panel + 25mm	38 or 40	Paired
Individual (Omni)	7000SO	7.366m	Unlimited	Retractable	Retractable	100mm per panel + 25mm	26 or 36	Single

Chart B Classic 7000

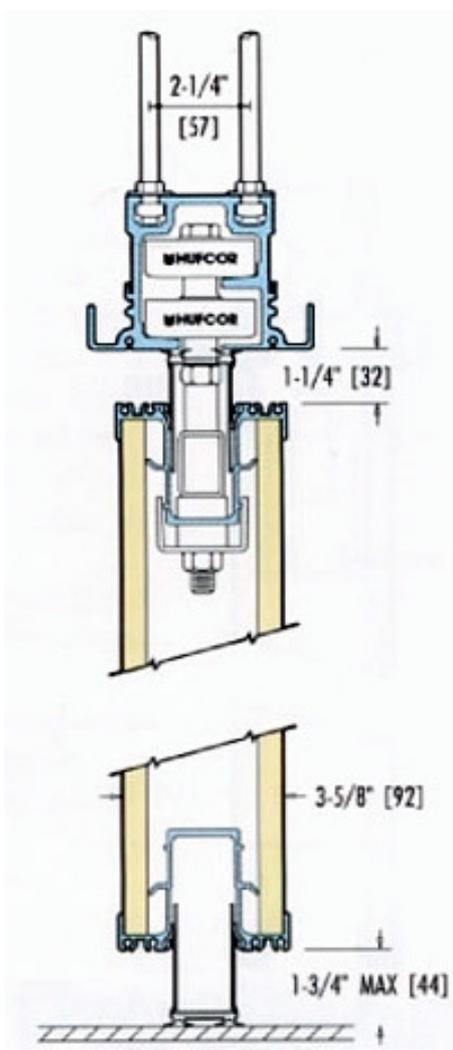
Model	Sound Transmission Class (STC)	Hanging Weight (Kg/m ²)
7000S	53	46.4 Kg
7000S	50	41.6 Kg
7000S	48	41.6 Kg



Lever Closure Panel

Typical Panel Joint

Bulb Seal



Series 7000 Omni-Directional sectional detail

Panel Options

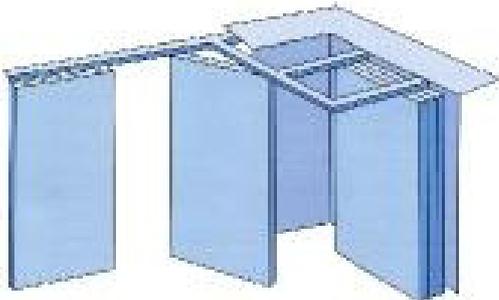


Centre Stacking Individual Panel - Individual, single panel system. Panels are parked at the end of the run of track when the wall is open. The panel has a single carrier. The system is best utilized in areas where the centre stacking of panels might be the most feasible and practical option for parking of the panels and when parking of panels of the main track is not a possibility.

This panel option is available in our 3000SC series.

Paired Panels - Panels are hinged in pairs. The hinged paired panel system cuts down set up and take down time as sets of two panels can be operated together. The panel has a single carrier suspension. Panels are parked at the end of the run of track when the wall is open. The system is best utilized in areas where centre stacking of panels might be the most feasible and practical option for parking of the panels and when parking of panels of the main track is not a possibility.

This panel option is available our in 5000SP & 7000SP series.



Individual Omni-directional Panels - Individual, single operated panels offer maximum room flexibility. The track system enables panels to be set at angles and alternate location and remotely parked. The panel has a two counter rotating carriers it offers flexible solution for public facilities such as religious multi-use areas, hotel ballrooms and convention centres, meeting and training areas.

This panel option is available our 3000SO, 5000SP & 7000SP series.

Quality Track Systems

Hufcor's quality track systems are the key to years of fast and easy partition movement. It will save money by minimizing set-up and takedown as well as downtime for repairs. Job site conditions vary which is why we offer a wide selection of track systems to meet your needs. Each has been life cycle tested for a minimum of 100 miles (approximately 10 years of use) - further assurance of proven quality. Hufcor track systems, like our panels, may be modified to meet specific job site conditions. Flush mounting or challenges with the existing overhead structure can be accommodated. Hufcor's durable corrosion-resistant aluminium track systems are easy to install and easier to maintain. Extruding enable each section to have a uniform shape for superior end-to-end alignment. Each capacity-certified track is extruded architectural grade clear anodised aluminium and includes these features and benefits:

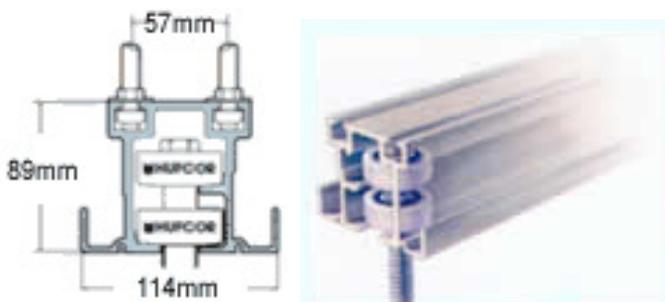
- Rated at 31,000 psi
- 204R-1 anodised coating ensures a smooth, hard running surface, and prevents oxidation
- Unitised design prevents sound leaks, protects the ceiling, and provides for suspension components. Plenum enclosure and alignment pins.
- Alignment pins tightly align track joints, important for long carrier life.
- Quiet carrier operation.

Tracks

Hufcor Track Type 26 is designed to accommodate the track type 26 for Omni directional stack configuration.

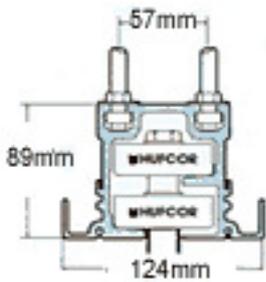
Hufcor Track Type 28 is designed to accommodate both the Omni carrier and 'Manual Train' Carriers are polymer-tired, steel ball bearing: 3000SO Omni carrier - Two 2-wheeled carrier assemblies. 3000SC Manual Train - One 4-wheeled carrier assembly.

Each wheel has precision ground bearings, encased with Delrin for quiet operation. Carriers easily negotiate square or angled corners.



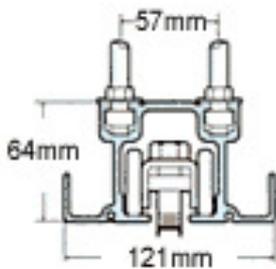
Type 26 Omni-Directional to 227Kg

For Omni-Directional panels up to 227Kg. Two carriers are provided per panel. Each carrier has two horizontal counter-rotating wheels that roll (not slide) in the track. Each wheel has precision ground bearings, encased with Delrin for quiet operation.



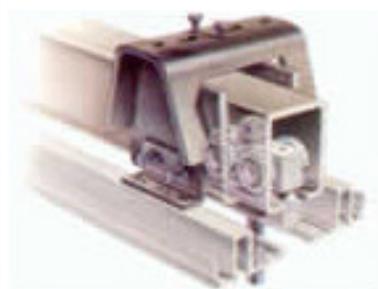
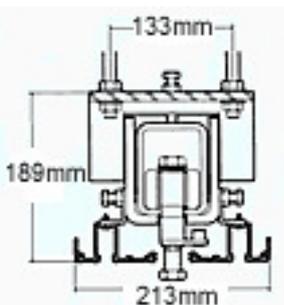
Type 36 Omni-Directional to 455Kg

For Omnis weighing up to 455Kg. Patented by Hufcor, this unique track and carrier system is the world's most imitated. Two carriers are provided per panel. Each carrier has two horizontal counter-rotating wheels that roll (not slide) in the track. Each wheel has precision ground bearings, encased with Delrin for quiet operation. Carriers easily negotiate square or angled corners without switches. Minimum dimension from the ceiling to the structure is 203mm.



Type 38 Pairs & Manual Train Panels to 182Kg

For Paired Panels and Manual Trains up to 182Kg. One 4-wheeled carrier is provided per panel. Each wheel is of moulded polymer tires on hardened steel ball bearings. Minimum dimension from the ceiling to the structure is 203mm. The Type 38 track is also available with an omni carrier for panels weighing up to 182Kg. Two carriers are provided per panel. Each carrier has one horizontal wheel that rolls in the track. The wheel has precision ground bearings and is encased with Delrin for quiet operation.



Type II Pairs, Omnis, and Electric Trains

For Pairs & Electric Trains weighing up to 680kg and Omnis weighing up to 1364Kg per panel. The track is of 6mm slotted structural steel tubing painted black. The track trim is clear anodized aluminium. All intersections are factory assembled and welded. Curves, diverters or switches are available. One carrier is provided per panel for pairs and trains; two carriers per panel for Omnis. Each carrier has four steel wheels with precision ground radial bearings. Bearings are inserted into a steel tire. The steel tire trim fully captures the bearing. Carriers may be programmed for self directing and sorting. Minimum dimension from the ceiling to the structure is 305mm; the minimum becomes 406mm when used with electric partitions.

Acoustics

HOW GOOD IS AN STC (Sound Transmission Class) RATING? Use the following chart to get a rough idea what various STC levels mean in terms of privacy afforded. Note that this is only a very rough guide.

STC	PRIVACY OFFERED
25	Normal speech easily understood
30	Normal speech audible, but unintelligible
35	Loud speech understood
40	Loud speech audible, but unintelligible
45	Loud speech barely audible
50	Shouting barely audible
55	Shouting not audible

WHY THE BIG DIFFERENCE BETWEEN LAB AND FIELD RATINGS?

STC ratings can be used, you can use it for comparison but your actual acoustics will probably be worse. Generally, it is not a good idea to design a building to be as good acoustically as a laboratory. Purely and simply, it costs too much.

FLANKING PATHS

Sound, like water, follows the path of least resistance. If there are leaks in the surrounding construction, even the best movable partition will not provide a good sound barrier. Shoddy construction, customary construction practices, or poor installation of the partition can all contribute to the leaks, known as 'flanking paths'.

KEEPING AN EYE ON DETAILS

Flanking paths can be present even when the surrounding construction is of good quality. Direct HVAC ductwork between rooms, common lobbies and corridors, and open plenums above suspended ceilings are all perfect escape routes for sound. The ceiling tiles themselves, whose porous properties help prevent reverberation, allow sound to pass through easily. Uneven floors and out-of-plumb walls also contribute to leaks as do recessed lighting, access panels, projection and lighting booths, and other design details.

STCs OF FAMILIAR CONSTRUCTIONS

Listed on the right are some typical building items and materials to give you an idea how the typical operable or accordion partition compares.

STC	CONSTRUCTION
18	Hollow
22	Metal door without seals
26	Solid wood door without seals
32	6.38mm glass
41	12mm plate glass
42	100mm painted concrete block wall
46	16m drywall on steel studs, both sides
48	230mm hollow concrete block
50	305mm painted concrete block wall
53	Double 16mm drywall on steel studs, insulated 305mm poured solid concrete wall

Operable Partition Accessories

1. **Pass Door** Available in single or double doors. Hufcor pass doors are of the same construction and finish as the panels
2. **Work Surfaces** Chalkboard, Dry Marker Board, Tackboards.
3. **Pocket Doors** The finishing touch to your installation, pocket doors cover the opening of the partition storage area. The doors may be factory finished to match the partitions. When designing a pocket to store a partition, allow enough width for easy access and panel movement. Prevent pinched fingers and scraped knuckles by adding a minimum of 254mm to the width of the widest panel - more if you can spare it.