



# ACOUSTIC DOORS

## Sontron Acoustic Doors

### FEATURES

- Excellent sound attenuation - up to STC 46
- Kiln dried hardwood or metal frames available
- Door and frame sets can be supplied fitted with acoustic seals
- Acoustic drop seal fitted to bottom of door
- Vision panels can be incorporated
- Door pairs feature acoustic seals at meeting stiles
- Fire rated acoustic doors are available
- Complete site installation



## Sontro Acoustic Doors and Frames are custom built in our Cheltenham and Forest Glen Factories.

For superior sound attenuation, we have developed the SONTRON range of Spence Acoustic Doors.

Designed for;

- Sound studios,
- Conference halls,
- Industrial facilities,
- School music rooms,
- Cinemas and theaters
- Multi occupancy buildings,
- Unit entry doors in hotels and
- Isolate noise created in corridors and stairwells.

These doors incorporate layers of insulating material to reduce noise transmission. Manufactured to the same high quality as all Spence doors, our

Acoustic Doors meet AS 2688 - 1984 and have been certified by the CSIRO. Ratings of up to STC 47 are available.

Featuring a KD Hardwood frame, these sturdy doors are available as singles or pairs. SONTRON door pairs can be supplied fitted with acoustic seals at the meeting stiles, and all doors can be supplied factory hung complete with frames, seals and hardware fitted.

A variety of finishes are available for both internal and external applications, although we recommend highly exposed doors be faced with metal

sheeting. Glass viewing panels may also be incorporated into any SONTRON door.

Spence have successfully tested a pair of escape doors for cinemas and public facilities combining 4 hour fire rating with high level acoustic performance - STC 39.

To ensure optimum design and performance of Spence Acoustic Doors, we offer an on-site measure and consultation service. A full on-site installation service is also available.

Wall linings can help reduce the amount of sound transmitted through a door.

\*Photos featured on the front and back cover were taken of door Spence Doors installed at the Yarra Arts Theater.

# FIRE DOORS

## Solid Core 35mm and 40mm doors with Lorient seal range

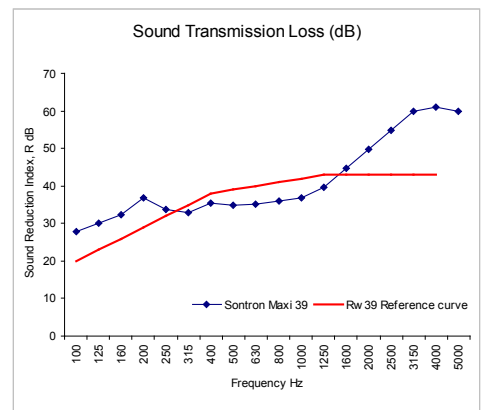
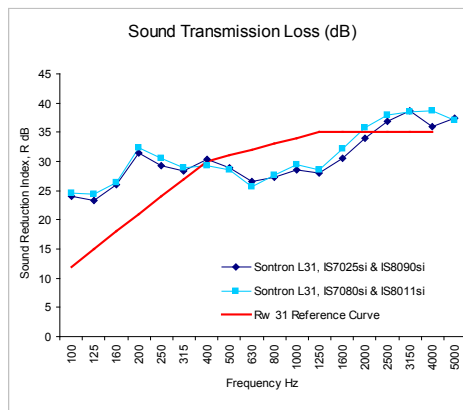
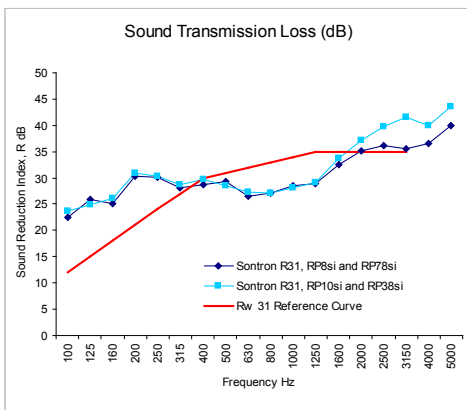
Model	STC/Rw	Door thickness	Single/pair	Perimeter Seal	Floor Seal	Threshold Plate
sontron 35SC-1	29	35	Single	LE1212	IS8010si	IS4130
sontron 40SC-1	31	40	Single	LE1212	IS8010si	IS4130
sontron 35SC-2	29	35	Single	IS7025	IS8010si	IS4130
sontron 40SC-2	32	40	Single	IS7025	IS8010si	IS4130
sontron 35SC-3	30	35	Single	IS7080	IS8090si	IS4010
sontron 40SC-3	32	40	Single	IS7080	IS8090si	IS4010
Sontron 35SC-4	31	35	Pair	IS7025, IS7061	IS8090si	IS4010
Sontron 40SC-4	31	40	Pair	IS7025, IS7061	IS8090si	IS4010

## Fire Rated Acoustic Doors - Lorient Seals

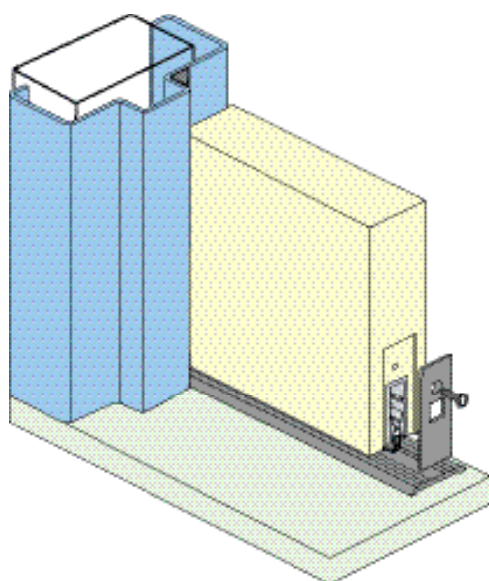
Model	STC/Rw	Door thickness	Rating	Seals	Perimeter Seal	Floor Seal	Construction
sontron L31	31	37mm	Fire Rated	Lorient	IS7025si	IS8090si	Ply faced fire door
					IS7080si	IS8010si	
sontron L35	35	49mm	Fire Rated	Lorient	LE1212	IS8090	0.9mm Thick Metal sheet faced Fire Door
					LE1515	IS8010si	
					IS7025si	IS8010si	
					IS7080si	IS8010si	
sontron L39	39	49mm	Fire Rated	Lorient	LE1212	IS8090	1.5mm Thick Metal sheet faced Fire Door
					LE1515	IS8010si	
					IS7025si	IS8010si	
					IS7080si	IS8010si	

## Fire Rated Acoustic Doors - Raven Seals

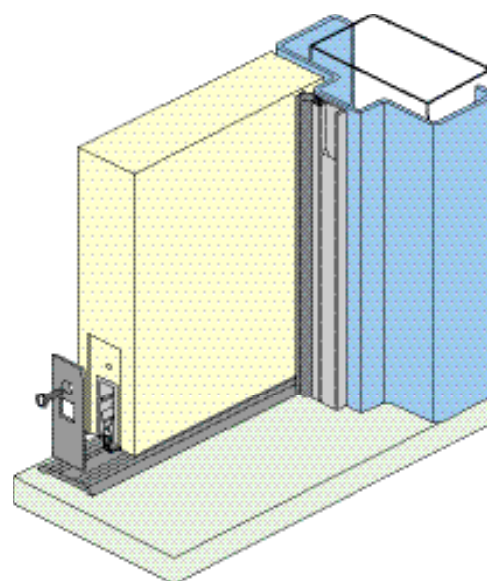
Model	STC/Rw	Door thickness	Rating	Seals	Perimeter Seal	Floor Seal	Construction
Sontron R31	31	37mm	Fire Rated	Lorient	RP78si	RP8si	Ply faced fire door
					RP10si	RP38si	
sontron L35	35	49mm	Fire Rated	Lorient	RP78si	RP8si	0.9mm Thick Metal sheet faced Fire Door
					RP10si	RP38si	
Sontron R39	39	49mm	Fire Rated	Raven	RP78si	RP8si	1.5mm Thick Metal sheet faced Fire Door
					RP10si	RP38si	



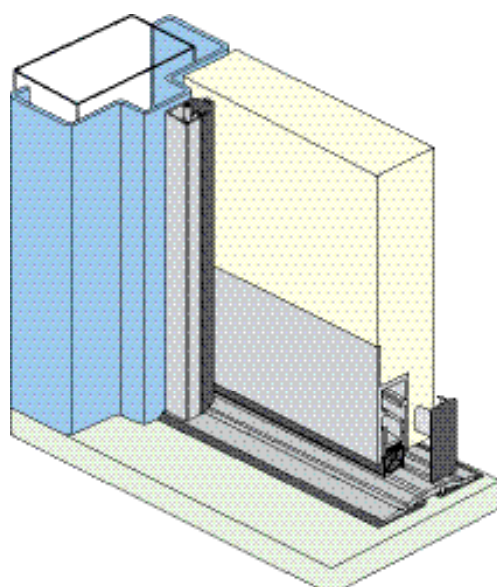
## Standard Seal Combinations - Solid Core and Fire Doors



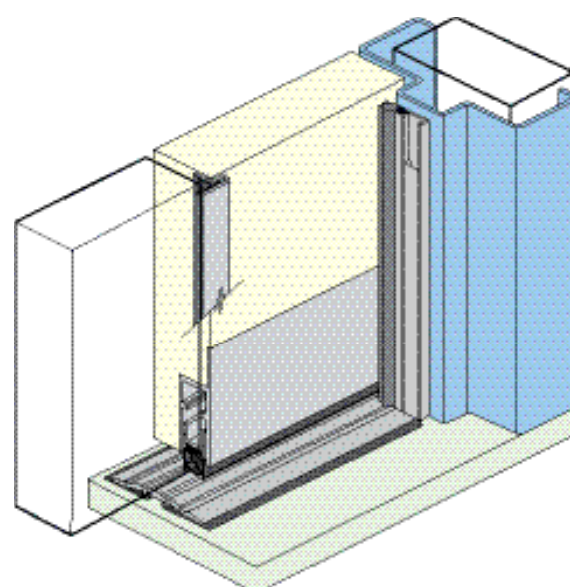
Perimeter Seal LE1212    Floor Seal IS8010si    Threshold Plate IS4130



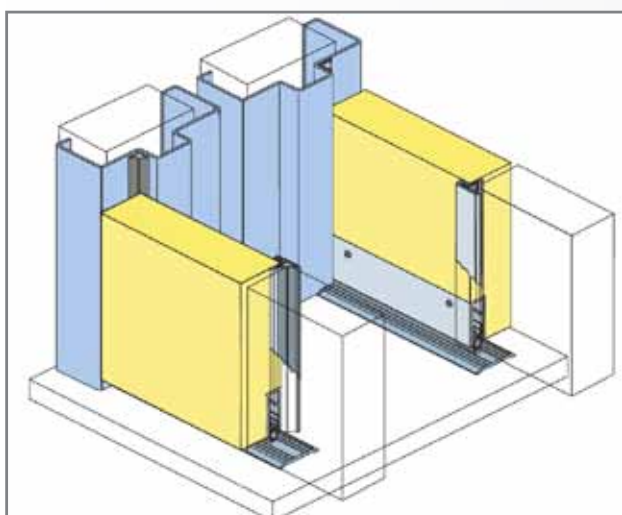
Perimeter Seal IS7025    Floor Seal IS8010si    Threshold Plate IS4130



Perimeter Seal IS7080    Floor Seal IS8090si    Threshold Plate IS4010



Perimeter Seal IS7025, IS7061    Floor Seal IS8090si    Threshold Plate IS4010



### Sound Lock Doors

The combination of a double door system to provide a sound lock generates a very high acoustic insulation. The addition of acoustic absorbent linings to the sound locks can also further enhance the sound insulation achieved.

The distance between the two sets of doors influences the performance of a sound lock.

A double set of single doors is used to provide an increase in acoustic performance, these are commonly used as interconnecting doors for hotel apartments.

# FIRE DOORS

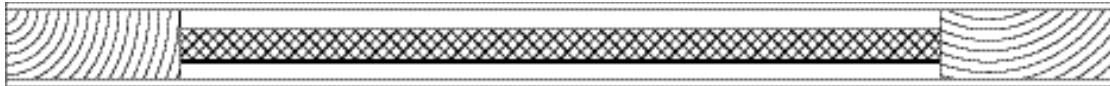
## Sontron 40 Series

Door	STC/Rw	Door width	Internal corner seal	Perimeter seal	Floor seal
Sontron 40	40	48mm	Raven RP 120	Raven RP 24	Raven RP38
Sontron 41	41	48mm	Raven RP 120	Raven RP 24	Raven RP38
Sontron 42	42	48mm	Raven RP 120	Raven RP 24	Raven RP38
Sontron Dbl	41	48mm	Raven RP 120	Raven RP 24	Raven RP38

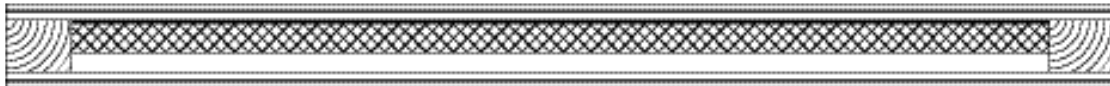
Frequency (Hz)	100	125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150	4000	5000
Sontron 40	26.8	26.5	27.8	29.4	31.9	35.6	35.6	36.7	37.7	38.6	38.7	40.5	42.4	42.7	43.5	43.3	44.2	45.5
Sontron 41	24.4	23.2	26.9	35	35.5	37.3	38.2	39.6	39.4	39.5	40.2	41.4	42.7	43.4	45.4	47.7	48.9	48.9
Sontron 42	23.5	26.2	27.7	32.5	34.4	36.1	37.3	37.9	40.2	41.3	41.6	42.5	42.8	43.3	46	47.9	48.4	49.6
Sontron Dbl	21.1	24.8	33.2	34.7	37.2	38	38	38.6	39.7	39.6	39.7	40.6	40.2	41	42.5	44.3	44.8	46.2

## Cross Section

### Sontron 40



### Sontron 41

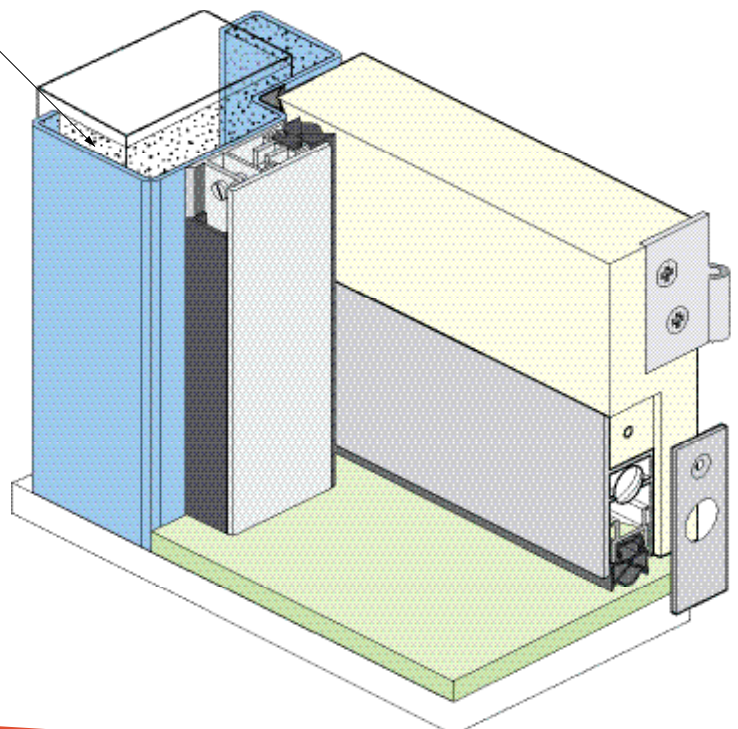
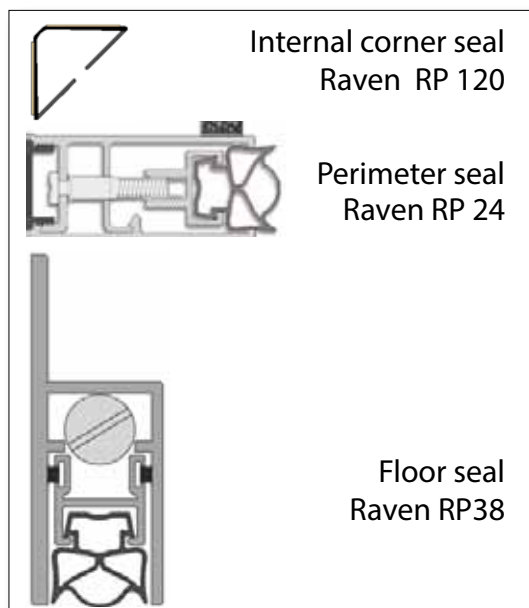


### Sontron 42 / Sontron Dbl



## Seal Arrangement

Metal door frames will require packing with plaster, concrete or mortar to achieve desired acoustic and fire rating.

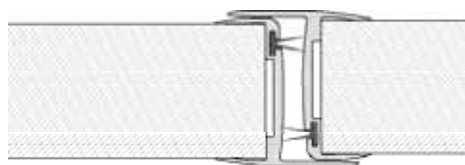
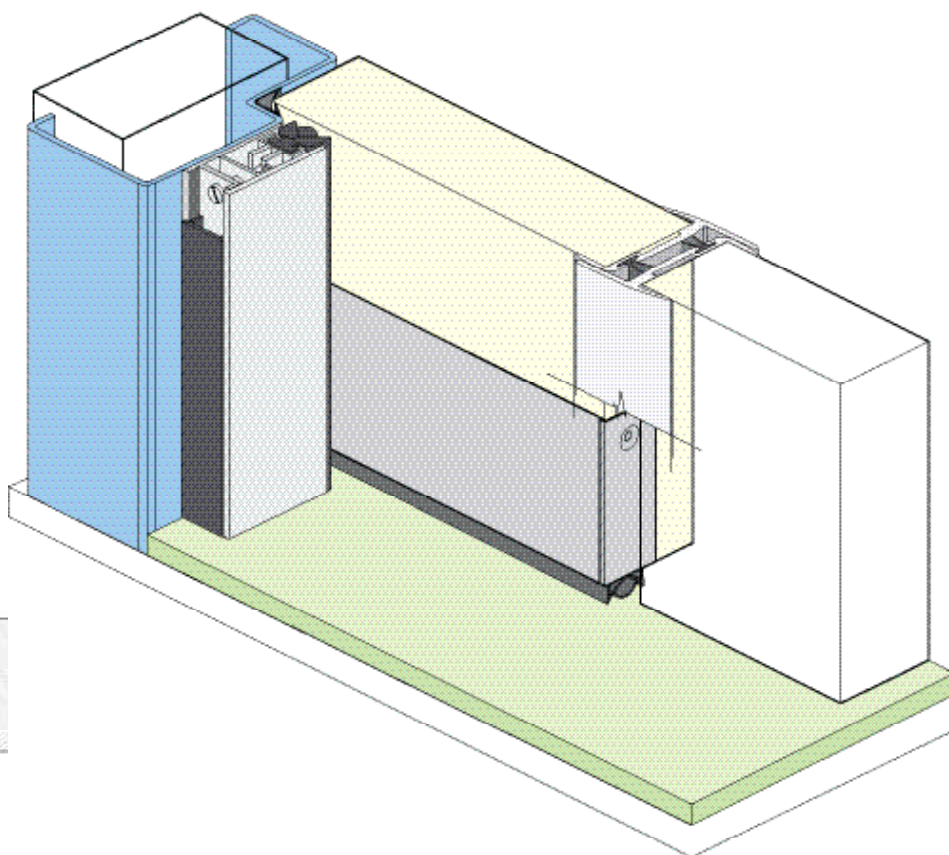




## Sontron 40 Series - Double doors

Meeting styles like the Lorient one pictured (right) allow for a pair of doors to be hung without significant loss in acoustic rating.

The styles incorporate a rubber seal to stop sound and smoke as well as an outer flange to create a seamless profile.



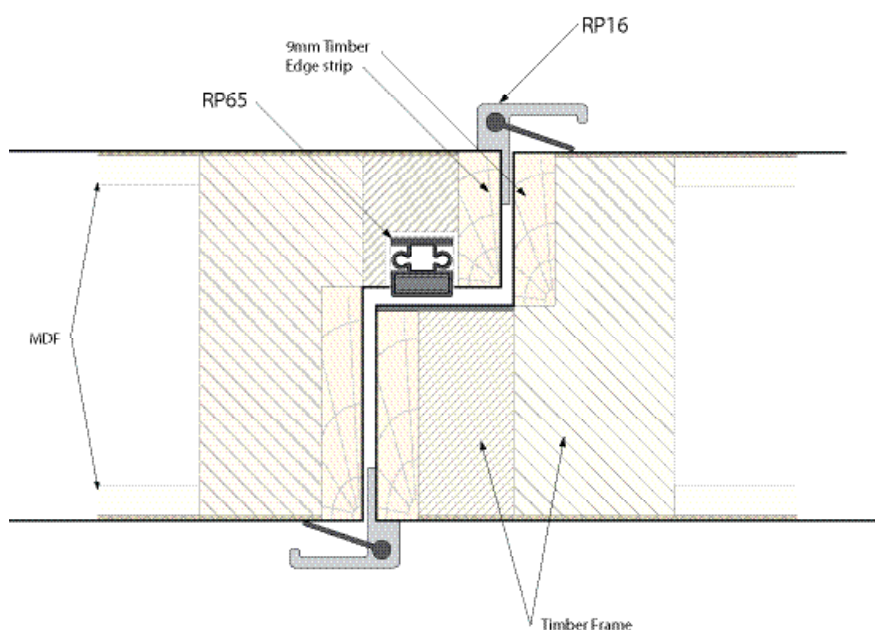
## Sontron 46

Model	STC/Rw	Door thickness	Single/pair	Seals	Perimeter Seal	Floor Seal
sontron 46	46	77mm	Both	Raven	RP24 and RP85	Two x RP38

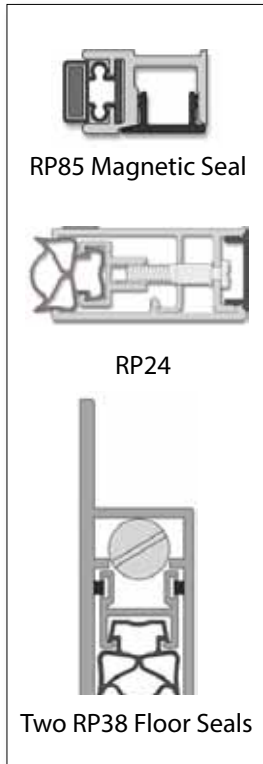
Frequency (Hz)	100	125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150	4000	5000
<b>Sontron 46</b>	33	30.2	36.3	41.4	39.8	39.4	40.8	41.4	43.6	45.6	47.2	47.9	49.4	50	49.9	51.5	52	52.6

## Double Sontron 46 Doors

In order to create a pair of doors that achieve an STC 46 rating, Spence Doors has developed a unique meeting style (left) that incorporates their seals to stop any sound leaking through.

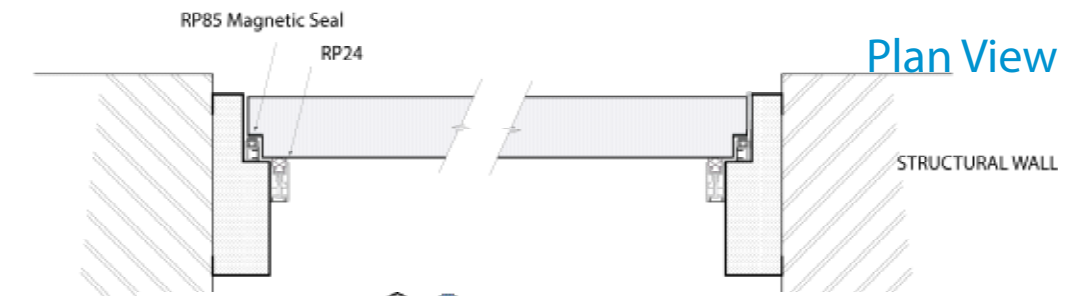


### Side Profil



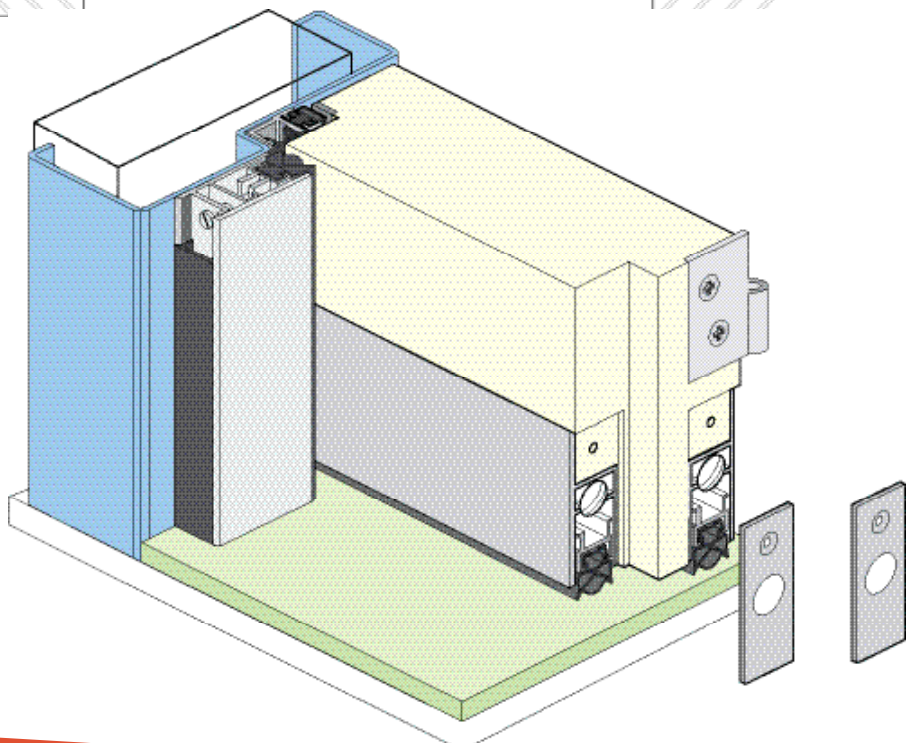
### Installation

Metal door frames will require packing with plaster, concrete or mortar to achieve desired acoustic and fire rating.



### Plan View

Sontron 46 is specially designed to achieve a very high acoustic rating. It uses two RP38 floor seals and two perimeter seals; RP24 and RP85. This combination of seals ensures that there is very little sound penetration, giving it the highest acoustic rating in the Spence range.





NOISE, ENERGY, LIGHT,

SMOKE AND FIRE SEALING



**FIRERATE**  
Fire Door Supply, Repair & Servicing

Postal Address

PO Box 224, Narrabeen, NSW 2101

1300 850 960