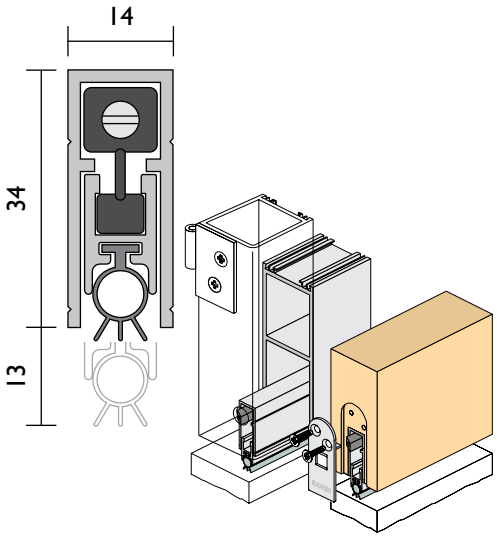
RP8Si

RAVEN

FITTING INSTRUCTIONS
Automatic Door Bottom Seal
Anti-microbial Silicon Gasket



CLASSIFIED UL R37913

Category J door bottoms are intended for application to/with Classified hollow metal and steel covered composite type fire doors rated up to and including 3 hrs. and wood and plastic covered composite and wood core fire doors rated up to and including 1-1/2 hrs.

DETAILS

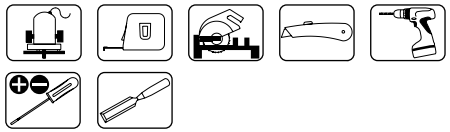
LOCATION
Single and double butt hinged doors.

MIN/MAX GAP
3mm/13mm.

SEAL MATERIAL
Silicon Rubber.

STANDARD FINISH
Aluminium anodised Satin Clear (Silver), Bronze or Black

TOOLS



ADDITIONAL DETAILS

REPLACEMENT SEAL
RP308Si.

DESCRIPTION

A concealed, acoustic automatic door bottom silicon seal for medium temperature smoke and fire door applications.

RP8Si is spring loaded to lift clear of the floor as soon as the door leaf is opened by a few millimetres. Mounted into a 15mm x 34mm groove that has been morticed into the bottom edge of the door, it is operated automatically by pressure against the door jamb on its adjustable strike block. **(FIG.2) PAGE 2**

RP8Si can also be fitted into the bottom hollow rail of an aluminium door by the fabricator.

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Designed and produced by Raven Products Pty Ltd (Australia)

Made by Raven in P.R.C.

Part No. ZSDSRP8Si

MINIMUM CUT BACK LENGTHS

WITHOUT ESCUTCHEON PLATES

Nominal Seal Lengths:	Cuts back to:
1500mm	1220mm
1220mm	1070mm
1070mm	920mm
920mm	820mm
820mm	600mm
600mm	380mm
380mm	295mm

WITH ESCUTCHEON PLATES
Total length of product is increased by 3mm.

Nominal Seal Lengths:	Cuts back to:
1503mm	1223mm
1223mm	1073mm
1073mm	923mm
923mm	823mm
823mm	603mm
603mm	383mm
383mm	298mm

NOTES

- If doors are exposed to weather, any untreated exposed timber should be sealed with a wood primer.
- When cutting RP8Si to length, cut back latch end only.
- For non-fire rated doors, refer installation method **PAGE 2**. For fire-rated doors, refer **PAGE 3**.
- Do not use power or battery driven tools to fit escutcheon screws.

TIMBER DOOR INSTALLATION

NON-FIRE RATED DOORS

STEP 1 Remove door and machine mortice bottom of door **34mm x 15mm. (FIG.1)**

STEP 2 Use Ø22mm or Ø7/8" router bit to machine rebate 1.2mm deep for escutcheon plates. **(FIG.1)**

STEP 3 Measure door width.

STEP 4 Machine cut RP8Si less 1mm for operating clearance if escutcheon plates are not rebated or less 3mm if rebated. Cut back latch end only. Shorten inner assembly of seal 1mm more each end for free travel up and down.
Note: For rebated meeting stiles on double doors refer **(FIG.6)**.

STEP 5 Wind adjustment block all the way in. **(FIG.1)** Refer **STEP 10**.

STEP 6 Fit seal into groove with adjustment block on **hinge** side of door and secure escutcheon plate with screws supplied **(FIG.2)**, making sure tongue is firmly supporting seal housing. **(FIG.3)**
Note: Do not use a powered driver.

STEP 7 Fit second escutcheon plate on **latch** side. **(FIG.3)**

STEP 8 Re-hang door. For soft timber jambs, position striker button where adjustment block meets door jamb. **(FIG.2)**

STEP 9 **Orientate** the **adjustment block** correctly. **(FIG.4)**

STEP 10 Adjust seal travel to make full contact with sill. To adjust seal travel **either** pull out **adjustment block** to clear escutcheon plate. Firmly holding metal threaded rod, turn adjustment block **anti-clockwise** to increase seal travel and **clockwise** to reduce seal travel. **Or** turn adjustment screw with a flat blade screwdriver **(FIG.1)**. Turning screw **clockwise** increases seal travel, **anti-clockwise** reduces seal travel. **Note:** Only turn adjustment half a turn at a time then close door to check seal travel before further adjustment. To compress seal is not necessary since this will increase seal wear.

STEP 11 The seal is factory set to seal a door bottom that is parallel with the floor (excludes 600mm unit length). To adjust, screw **level adjustment screw** with a Phillips head screwdriver. **(FIG.3)**
Note: Adjustment is very sensitive. Screw clockwise to bias seal on **latch** side. Screw anti-clockwise to bias seal on **hinge** side.

FIG.1

MORTICE 34mm x 15mm

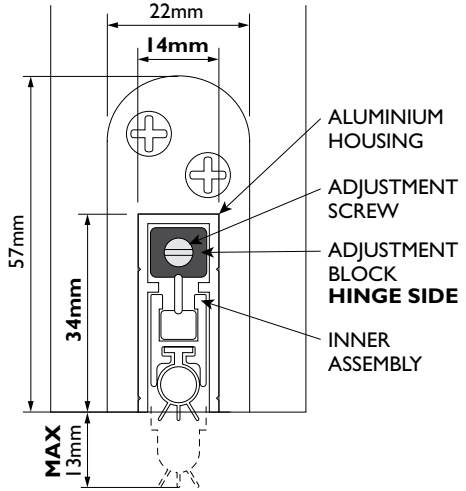


FIG.2

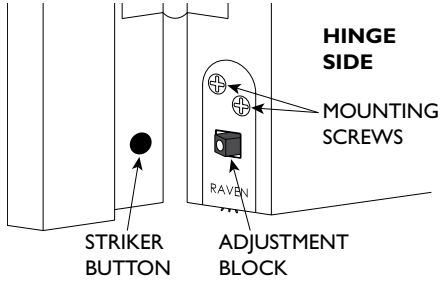


FIG.3

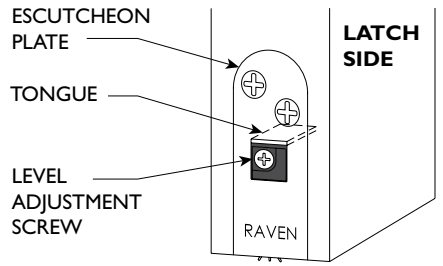
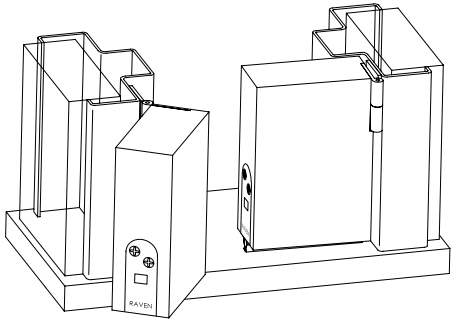
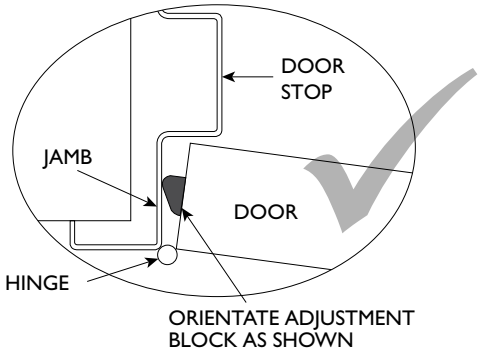


FIG.5 - PLAIN MEETING STILES





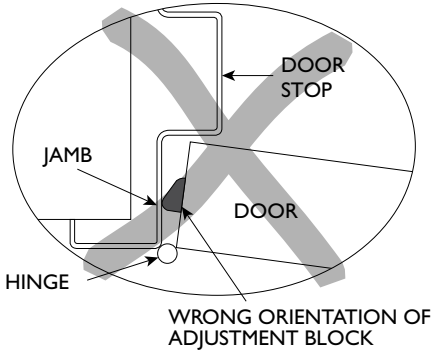
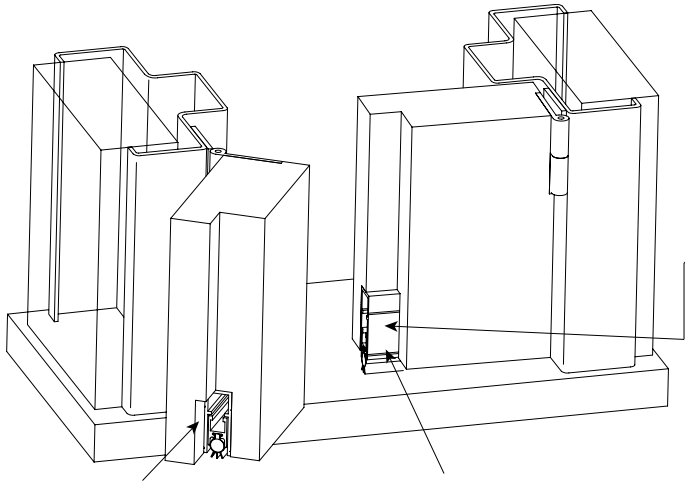
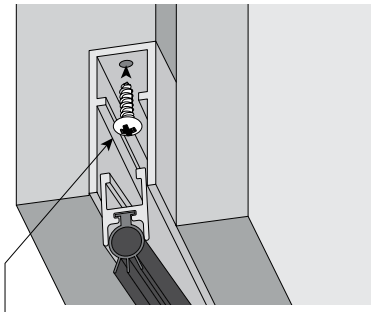


FIG.6 - REBATED MEETING STILES





Mortice through width of door bottom provides a check clearance at rebate for exposed end of RP8Si on other leaf.

NOTE:
For thin doors RP8Si is visible on one leaf only. Seal can be offset, door thickness permitting.

To secure RP8Si seals at rebate side of door, drill RP8Si aluminium housing 10-15mm in from exposed timber edge, use 1/2" x 6 gauge screw supplied and fix. **Note:** The inner assembly of the RP8Si will need to be carefully lifted clear to make fixing possible. Skip **STEP 7.**

TIMBER DOOR INSTALLATION

FIRE RATED DOORS

STEP 1 Remove door and machine mortice bottom of door **34mm x 15mm. (FIG.1)**

STEP 2 Use Ø22mm or Ø7/8" router bit to machine rebate 1.2mm deep for escutcheon plates. **(FIG.1)**
Note: For soft timber lipping or timber lipping less than 10mm thick, DO NOT rebate the escutcheon plates.

STEP 3 Measure door width.

STEP 4 Machine cut RP8Si less 1mm for operating clearance if escutcheon plates are not rebated or less 3mm if rebated. Cut back latch end only. Shorten inner assembly of seal 1mm more each end for free travel up and down.
Note: For rebated meeting stiles on double doors refer **(FIG.6 PAGE 2)**.

STEP 5 Wind adjustment block all the way in. **(FIG.1)** Refer **STEP 11**.

STEP 6 Drill RP8Si aluminium housing 10-15mm in from exposed timber edge on latch side, use 1 1/2" x 6 gauge screw (not supplied) and fix. **(FIG.5) Note:** Inner assembly of the RP8Si will need to be carefully lifted to make fixing possible

STEP 7 Secure RP8Si hinge side escutcheon plate with screws supplied **(FIG.2)**, making sure tongue is firmly supporting seal housing. **(FIG.3) Note:** Do not use a powered driver.

STEP 8 Fit second escutcheon plate on **latch** side. **(FIG.3) Note:** Do not use a powered driver.

STEP 9 Re-hang door. For soft timber jambs, position striker button where adjustment block meets door jamb. **(FIG.2)**

STEP 10 **Orientate** the **adjustment block** correctly. **(FIG.4)**

STEP 11 Adjust seal travel to make full contact with sill. To adjust seal travel **either** pull out **adjustment block** to clear escutcheon plate. Firmly holding metal threaded rod, turn adjustment block **anti-clockwise** to increase seal travel and **clockwise** to reduce seal travel. **Or** turn adjustment screw with a flat blade screwdriver **(FIG.1)**. Turning screw **clockwise** increases seal travel, **anti-clockwise** reduces seal travel. **Note:** Only turn adjustment half a turn at a time then close door to check seal travel before further adjustment. To compress seal is not necessary since this will increase seal wear.

STEP 12 The seal is factory set to seal a door bottom that is parallel with the floor (excludes 600mm unit length). To adjust, screw **level adjustment screw** with a Phillips head screwdriver. **(FIG.3)**
Note: Adjustment is very sensitive. Screw clockwise to bias seal on **latch** side. Screw anti-clockwise to bias seal on **hinge** side.

FIG.1

MORTICE 34mm x 15mm

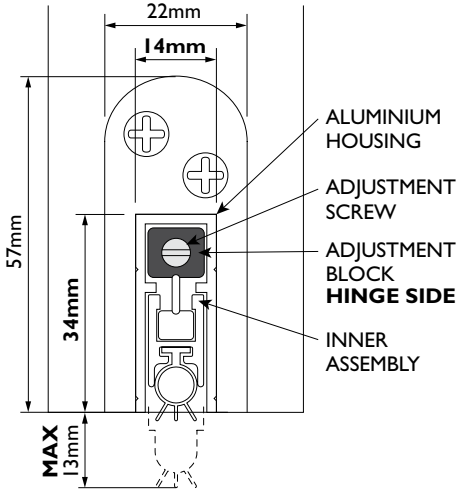


FIG.2

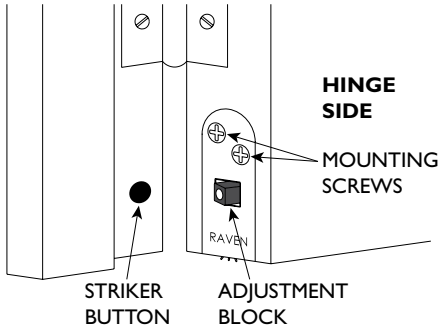
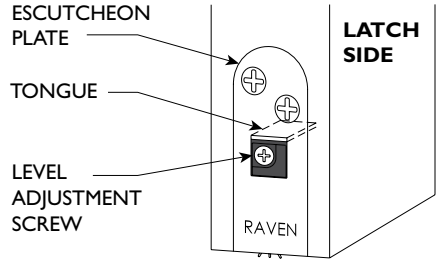


FIG.3



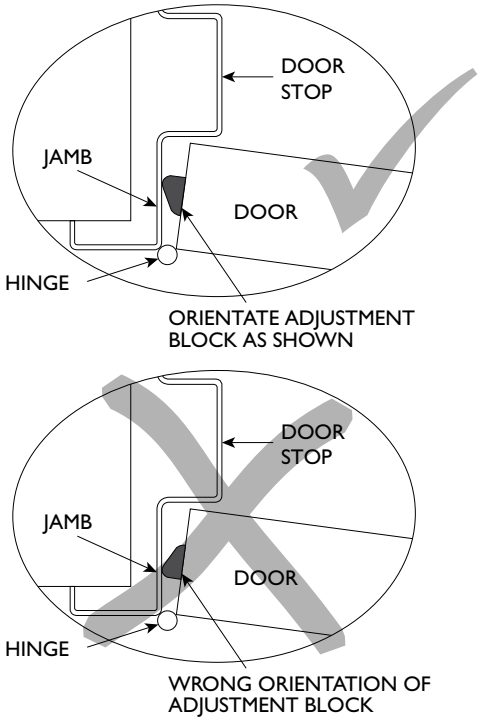
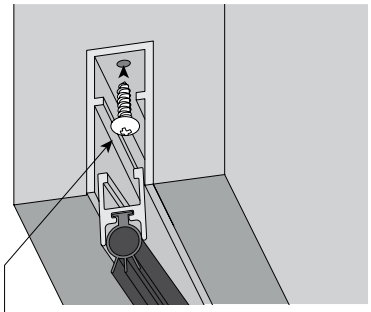


FIG.5



To secure RP8Si, drill aluminium housing 10-15mm in from exposed timber edge on latch end, use 1 1/2" x 6 gauge screw (not supplied) and fix.
Note: The inner assembly of the RP8Si will need to be carefully lifted clear to make fixing possible.

CONCEALED INSTALLATION WITHIN HOLLOW BOTTOM RAIL OF BUTT HINGED ALUMINIUM DOORS, BOTH SINGLE AND DOUBLE.

- FOR METAL DOOR FABRICATORS

STEP 1 Remove door. Cut out metal in stiles, so that the seal mounts on inside face of bottom rail furthest from hinge pin **(FIG.1 & FIG.2) OR** in centre of rail **(FIG.3 & FIG.4)**. Machine inside of stile to suit.

STEP 2 **For inside face mounting:** Drill 12.0mm dia. hole in **hinge** side stile for adjustment block. **(FIG.1)** **Latch** side drill hole to suit 6 guage x 12mm screw. **(FIG.2)**
For centre mounting: Drill 12.0mm dia. hole in **hinge** side stile for adjustment block. **(FIG.3)** **Latch** side drill hole to suit 6 guage x 12mm screw. **(FIG.4)**

STEP 3 Machine cut RP8Si to exact length between inside faces of stiles. Cut latch end only. Shorten inner assembly of seal 1mm more each end to allow operating clearance. Cut gasket with a sharp wet knife. **(FIG.5)**

STEP 4 Wind adjustment block all the way in. **(FIG.5)** Refer **STEP 8**.

STEP 5 Insert **adjustment block end** of RP8Si into bottom rail so adjustment block protrudes through drilled hole. Push other end of seal into bottom rail. Fasten screw so shank of screw supports seal housing.

STEP 6 Hang door.

STEP 7 **Orientate** the **adjustment block** correctly. **(FIG.6)**

STEP 8 Adjust seal travel to make full contact with sill. To adjust seal travel **either** pull out **adjustment block** to clear escutcheon plate. Firmly holding metal threaded rod, turn adjustment block **anti-clockwise** to increase seal travel and **clockwise** to reduce seal travel. **Or** turn adjustment screw with a flat blade screwdriver **(FIG.5)**. Turning screw **clockwise** increases seal travel, **anti-clockwise** reduces seal travel. **Note:** Only turn adjustment half a turn at a time then close door to check seal travel before further adjustment. To compress seal is not necessary since this will increase seal wear.

STEP 9 The seal is factory set to seal a door bottom that is parallel with the floor (excludes 600mm unit length). To adjust, screw **level adjustment screw** located on **latch** side of door with a Phillips head screwdriver **(FIG.3) PAGE 2**. The seal will need to be removed to make this adjustment.
Note: Adjustment is very sensitive. Screw clockwise to bias seal on **latch** side. Screw anti-clockwise to bias seal on **hinge** side.

FIG.3

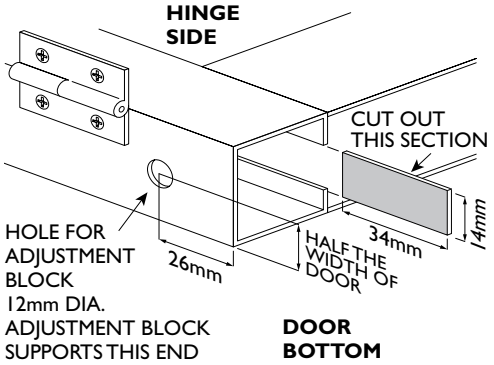


FIG.1

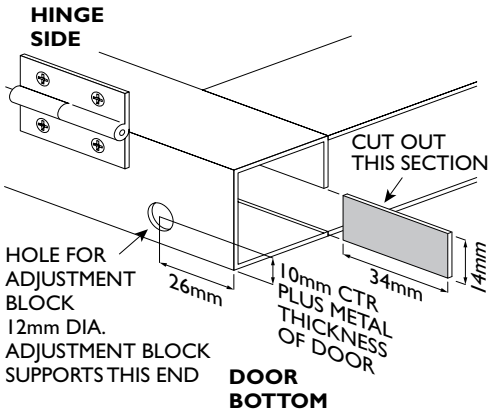


FIG.2

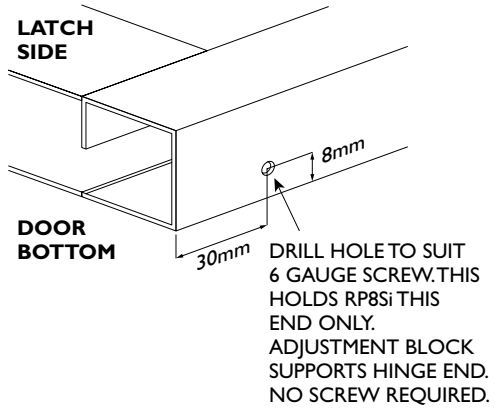
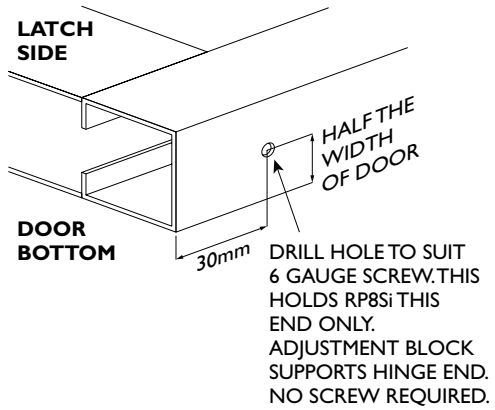


FIG.4



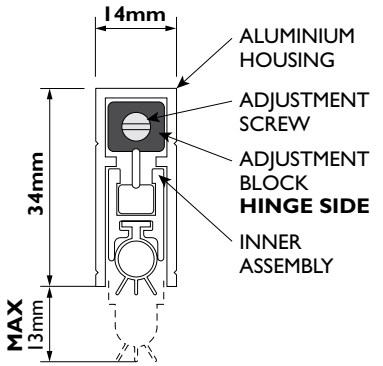


FIG.6