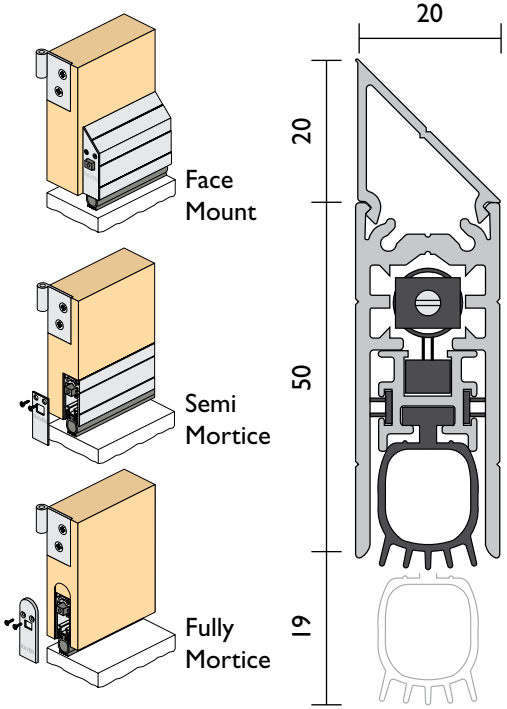
RP99Si

RAVEN

FITTING INSTRUCTIONS
Automatic Door Bottom Seal
Anti-microbial Silicon Gasket



ALL INSTRUCTIONS INSIDE

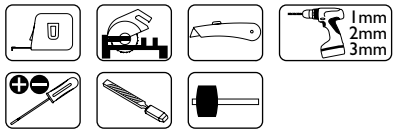
R37913

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
Solid core single and double, standard and butt hinged doors.

TOOLS



ADDITIONAL DETAILS

MIN/MAX GAP
1mm to 19mm.

SEAL MATERIAL
Silicon Rubber.

REPLACEMENT SEAL
RP347Si.

DESCRIPTION

RP99Si is a heavy duty automatic door bottom seal which is spring loaded to lift clear off the floor as soon as the door leaf is opened by a few millimetres.

RP99Si has an extruded silicon component for medium temperature smoke and is an acoustically designed seal for face mounted, semi morticed or fully morticed applications. The door bottom seal is operated automatically by pressure against the door jamb on its adjustment block (strike).

RP99Si conforms to the 200°C requirement of NCC S12C4 specification, for fire rated & medium smoke doors. Also tested to AS 1530.7, ISO CD 5925-1 & BS EN 1634-3 for Ambient and Medium temperature air leakage. All fitting options have been approved on proprietary fire doors to 120 minutes AS 1530.4 & AS/NZS 1905.1.

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Designed and produced by Raven Products Pty Ltd (Australia)

Made in P.R.C. by Raven

Part No. ZSDSRP99Si

Raven Products is an ISO9001 QMS company certified by SGS

MINIMUM CUT BACK LENGTHS

WITHOUT ESCUTCHEON PLATES

Nominal Seal Lengths:	Cuts back to:
1220mm	1070mm
1070mm	920mm
920mm	820mm
820mm	720mm
720mm	600mm
600mm	380mm
380mm	295mm

WITH ESCUTCHEON PLATES
Total length of product is increased by 4mm.

Nominal Seal Lengths:	Cuts back to:
1224mm	1074mm
1074mm	924mm
924mm	824mm
824mm	724mm
724mm	604mm
604mm	384mm
384mm	299mm

NOTES

» If doors are exposed to weather, any untreated exposed timber should be sealed with a wood primer.
» To remove cover strip once fitted, it is recommended to slide off or if tight, lever off with a large flat blade screwdriver under leg. **(FIG.4) PAGE 2**
» To suit hand of door simply turn the whole RP99Si around.
» Do not use power or battery driven tools to fit escutcheon screws.

FACE MOUNT INSTALLATION

NOTES

Aluminium Frame Only

» On aluminium door frames it may be necessary to remove a small section of the door stop to give a flat surface for the adjustment block to strike against.
» When fitting the seal to the full width of the door, the aluminium door stops can be checked out to suit seal profile.
» Measure the distance between the door jambs in **STEP 2**.

STEP 1 Slide off cover strip. **(FIG.2) Note:** If tight, lever off with a large flat blade screwdriver under leg. **(FIG.4)** Turn whole RP99Si around so adjustment block is on hinge side to suit hand of door. **(FIG.1 & FIG.2)**

STEP 2 Measure the distance between the door stops. **(FIG.1)** To allow for door opening clearance on the latch side and clearance for the escutcheon plates, **machine cut** RP99Si **shorter** by dimension "a". Cut latch end only.

Seal Unit	FIG.1 DIM "a"
380mm & 600mm	7mm
720mm & 820mm	5mm
920mm & 1070mm	5mm
1220mm	4mm

To allow for operating clearance, file the cut end of the inner extrusion 1mm shorter. Trim gasket. **(FIG.2)**

STEP 3 Fit the hinge side escutcheon plate with the shortest screws supplied. **(FIG.3) Note:** Do not use a powered driver.

STEP 4 Wind adjustment block all the way in. **(FIG.2)** Refer **STEP 10**.

STEP 5 Position the **base assembly** on the bottom of the door with **adjustment block** hard against the **hinge side** stop. Drill **2mm** diameter holes through the base assembly into the door at a 45 degree angle every 200mm. **Note:** Chock base assembly level with door bottom while drilling to prevent base assembly or holes moving out of alignment. **(FIG.2)**

STEP 6 Remove the base assembly from the door and re-drill the base assembly holes to **4.0mm diameter**. This allows clearance for the screw thread.

STEP 7 Re-position the **base assembly** on the door (still chocked) and screw into position using the **longest** screws supplied. **(FIG.4)**

STEP 8 Fit on the **cover strip** by hooking the front leg into position. Then with a rubber mallet, lightly tap the top of cover strip to snap in rear leg. **(FIG.4)**

STEP 9 **Orientate** the **adjustment block** correctly. **(FIG.5)**

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.2)**. 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.4)** **Note:** Adjustment is very sensitive. Screw clockwise to bias seal on **latch** side. Screw anti-clockwise to bias seal on **hinge** side.

STEP 12 Fit latch side escutcheon plate and blanking plug supplied. **Note:** Do not use a powered driver.

STEP 13 Open and close door to check clearances and correct sealing

FIG. 1

PLAN VIEW

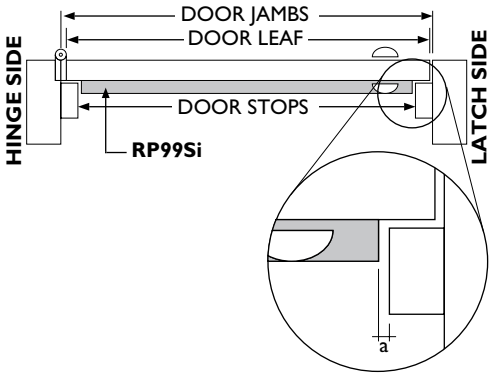


FIG. 2

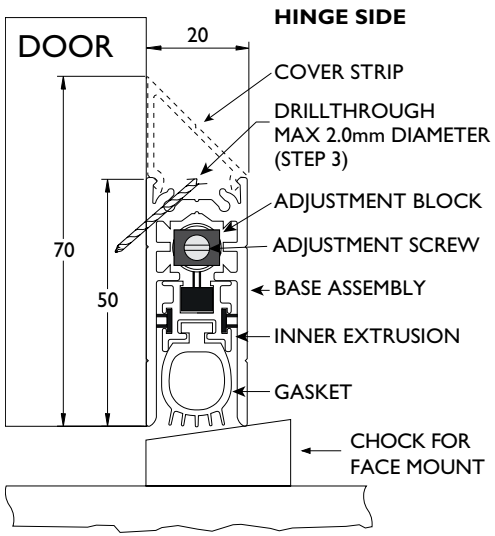
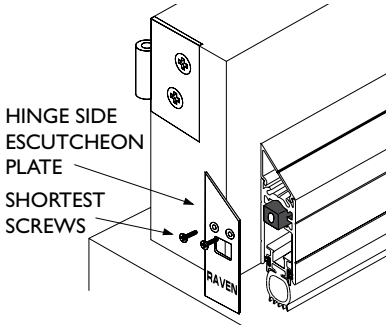


FIG. 3



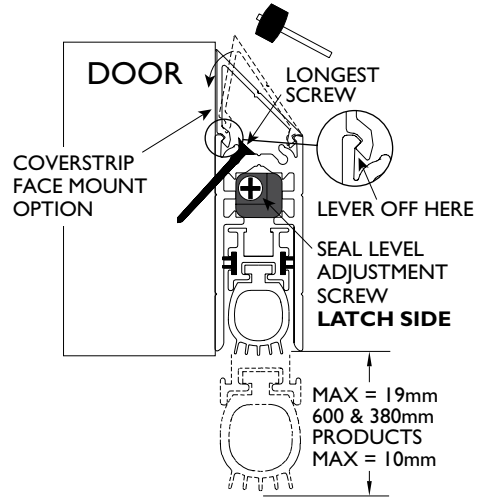
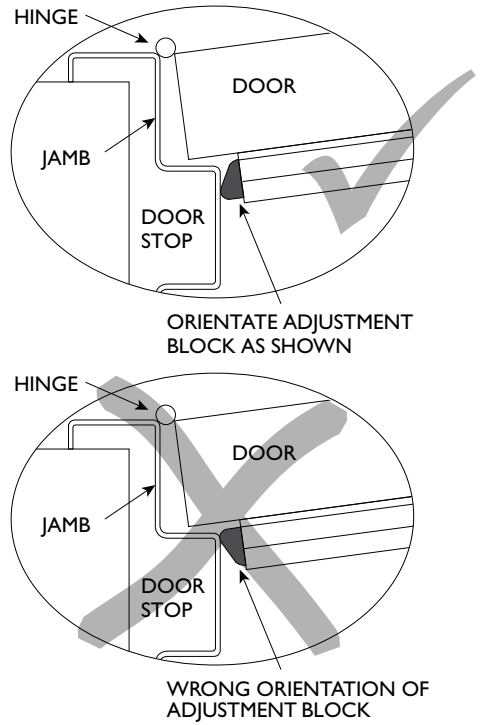


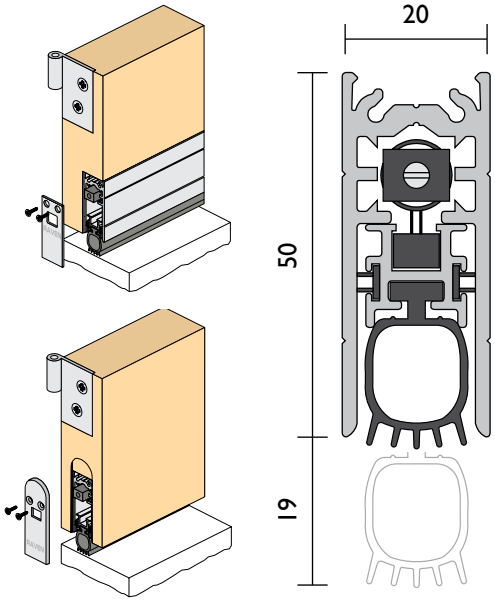
FIG. 5



RP99Si

FITTING INSTRUCTIONS

Automatic Door Bottom Seal
Fully & Semi-Mortice Installation



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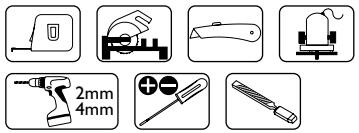

DESCRIPTION

RP99Si is a heavy duty automatic door bottom seal which is spring loaded to lift clear off the floor as soon as the door leaf is opened by a few millimetres.

RP99Si has an extruded silicon component for medium temperature smoke and is an acoustically designed seal for face mounted, semi morticed or fully morticed applications. The door bottom seal is operated automatically by pressure against the door jamb on its adjustment block (strike).

RP99Si conforms to the 200°C requirement of NCC S12C4 specification, for fire rated & medium smoke doors. Also tested to AS 15030.7, ISO CD 5925-1 & BS EN 1634-3 for Ambient and Medium temperature air leakage. All fitting options have been approved on proprietary fire doors to 120 minutes AS 1530.4 & AS/NZS 1905.1.

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NOTES

- If doors are exposed to weather, any untreated exposed timber should be sealed with a wood primer.
- To remove cover strip once fitted, it is recommended to slide off or if tight, lever off with a large flat blade screwdriver under leg. **(FIG.4) PAGE 2**
- To suit hand of door simply turn the whole RP99Si around.
- Do not use power or battery driven tools to fit escutcheon screws.

FULLY & SEMI-MORTICE INSTALLATION

NOTES

» If fitting to double doors with rebated meeting stiles refer **(FIG.6) PAGE 5.**

» Minimum 40mm thickness doors are recommended.

STEP 1 Slide off cover strip and discard. **(FIG.1) Note:** If tight, lever off with a large flat blade screwdriver under leg **(FIG.4) PAGE 2**. Turn whole RP99Si around so adjustment block is on hinge side to suit hand of door **(FIG.1 & FIG.2) PAGE 2**.

STEP 2 Measure the width of the door/s. **Machine cut** RP99Si to this length less 4mm shorter. Cut latch end only. To allow for operating clearance, file the cut end of the inner extrusion 1mm shorter. Trim gasket. **(FIG.1)**

STEP 3 Remove door. **Machine groove** the bottom of the door/s. **(FIG.2 & FIG.3)**. For fully mortice installation rebate with Ø22 or Ø7/8" bit to suit rounded escutcheon plate.

STEP 4 At locations shown in the drilling plans **(FIG.5) PAGE 5**, drill **4.0mm** diameter holes through top of **base assembly** aluminium in groove supplied. **(FIG.1A)**

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

STEP 6 Position base assembly on door bottom with **adjustment block** on **hinge side** of door. **(FIG.2 & FIG.3)**

STEP 7 Caution: Carefully withdraw moveable assembly just far enough to allow screw fixing. Over extension may void warranty. Screw fix using **longest** screws supplied. **(FIG.1 & FIG.1A)**

STEP 8 Position the hinge side escutcheon plate on the base assembly and screw fix, using the **shortest** screws supplied. **(FIG.2 & FIG.3)** Re-hang door. **Note:** Do not use a powered driver.

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.1A) Note:** Adjustment is very sensitive. Screw clockwise to bias seal on **latch** side. Screw anti-clockwise to bias seal on **hinge** side.

STEP 12 Fit latch side escutcheon plate. **Note:** Do not use a powered driver.

STEP 13 Open and close door to check clearances and correct sealing operation of the RP99Si.

FIG. 2

FULLY MORTICED

Single or double doors (plain meeting stiles)

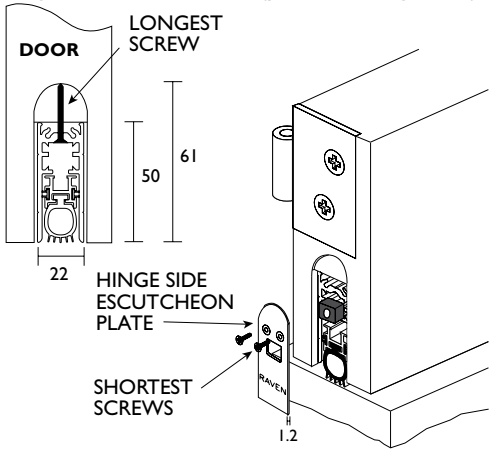


FIG. 1

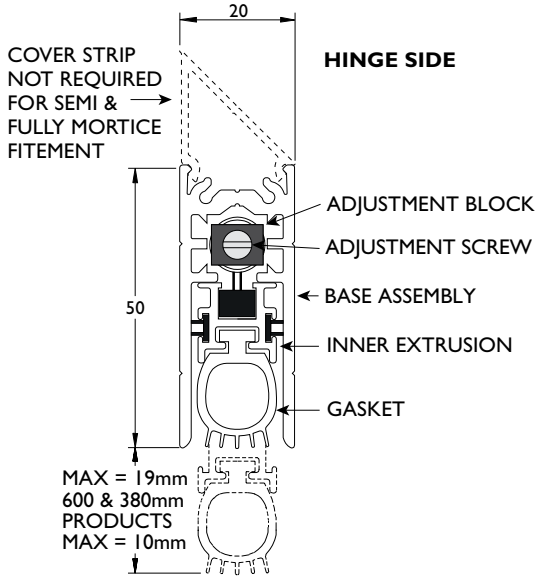


FIG. 1A

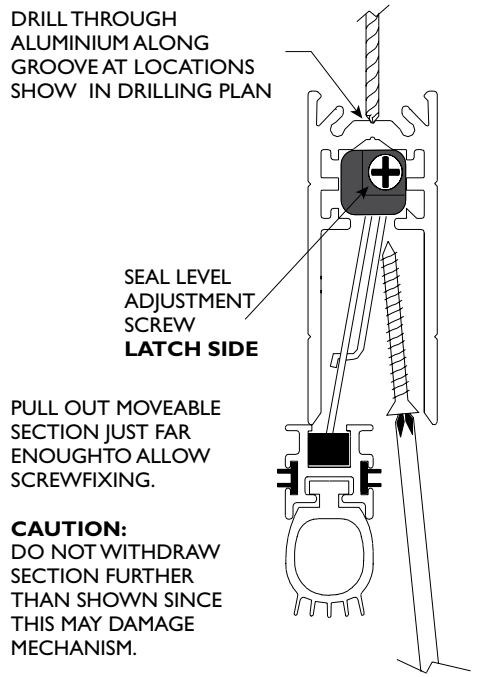


FIG. 3

SEMI-MORTICED

Single or double doors (plain meeting stiles)
Ideal for concealed flush bolts **(FIG.6) PAGE 5**

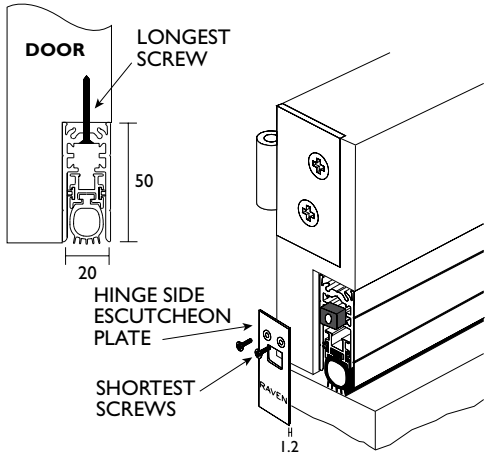
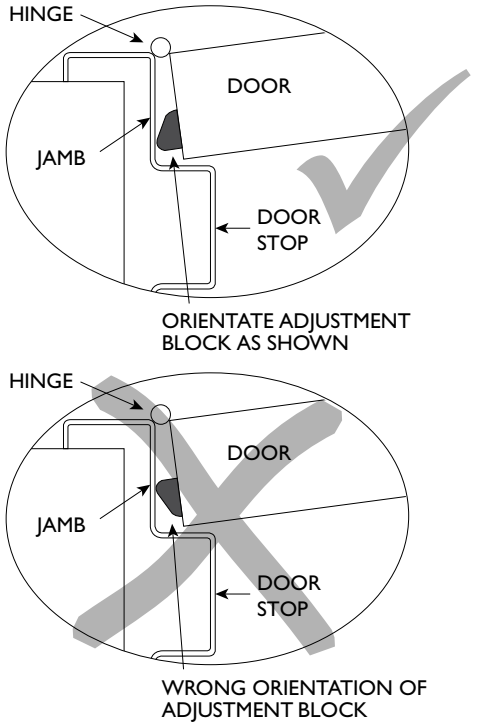
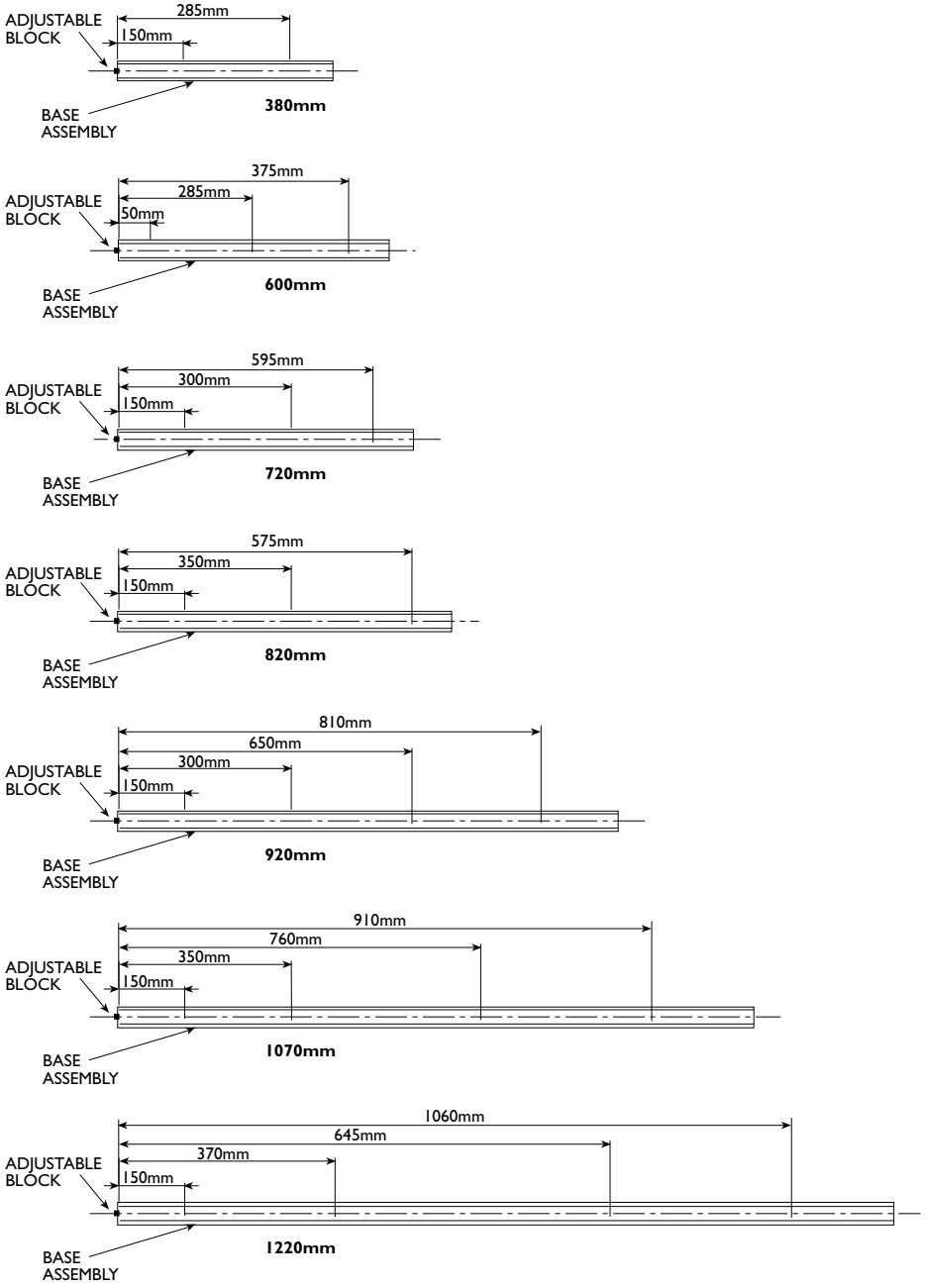


FIG. 4

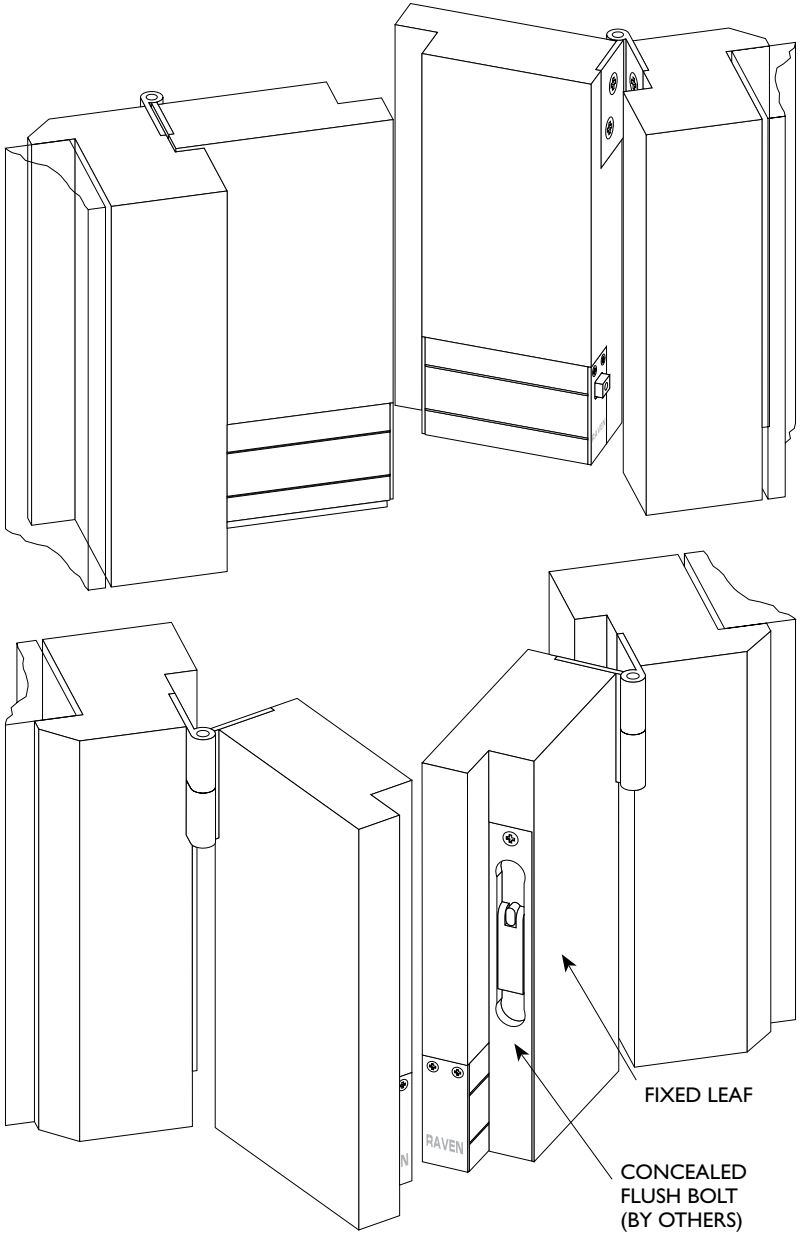


DRILLING PLAN BASE EXTRUSION
PLAN VIEW (FIG.2 & FIG.3 PAGE 4)



SEMI-MORTICED

Double doors (rebated meeting stiles)
Minimum 40mm thickness doors are recommended.



ALUMINIUM DOOR INSTALLATION

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

- FOR METAL DOOR FABRICATORS

NOTE

» Where there is a cavity around the RP99Si, this should be filled with expandable foam or similar.

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 holes in stiles on **latch** and **hinge** side to suit two 4 gauge countersink screws. **(FIG.1 & FIG.2) Hinge** side only drill 12mm dia. hole for adjustment block. **(FIG.1)**
For centre mounting: Drill holes in stiles on **latch** and **hinge** side to suit two 4 gauge countersink screws. **(FIG.3 & FIG.4) Hinge** side only drill 12mm dia. hole for adjustment block. **(FIG.3)**

STEP 3 Machine cut RP99Si to exact length between inside faces of stiles. Shorten inner extrusion 1mm more each end to allow for 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 RP99Si into bottom rail so adjustment block protrudes through drilled hole. Push other end of seal into bottom rail. Line up holes in base assembly **(FIG.5)** with the two drilled holes on **latch** side stile and fasten countersink screws. Now do the same on **hinge** side.

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** with a Phillips head screwdriver. **(FIG.4) 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

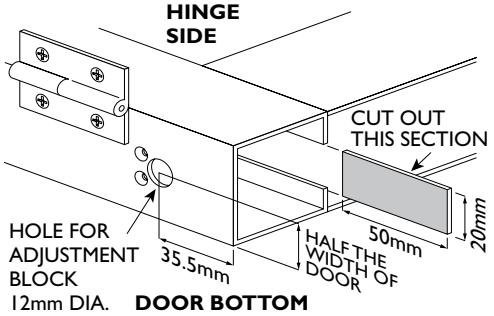


FIG.1

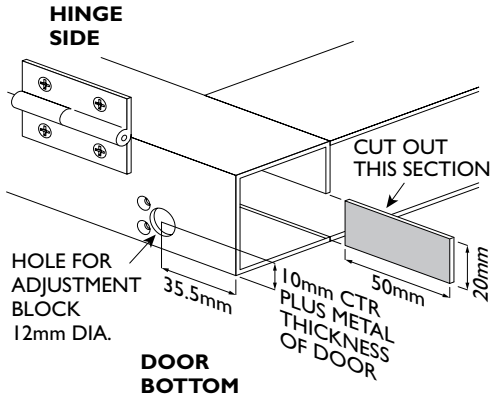


FIG.2

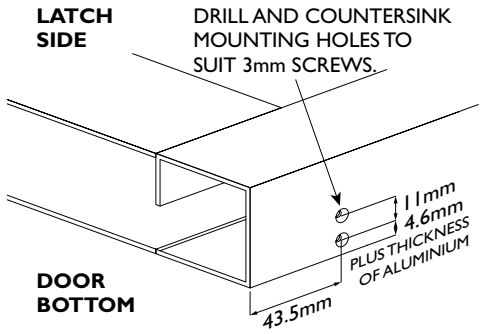
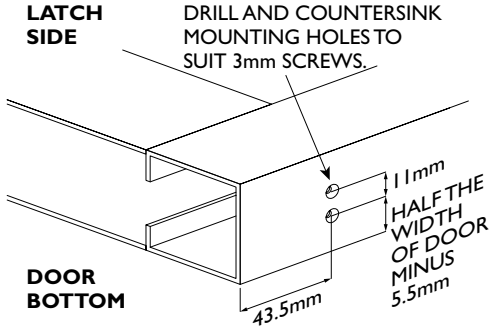


FIG.4



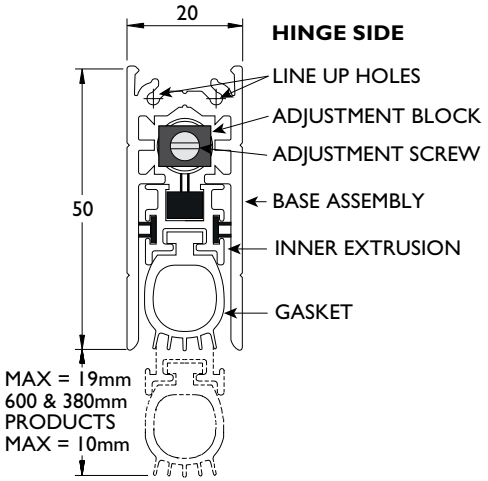


FIG.6