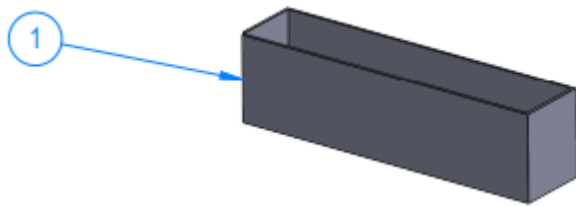
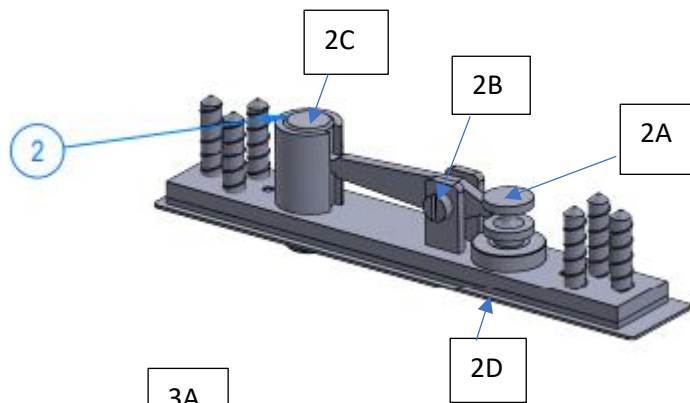


PS.260 & PS.190 Fitting & Adjustment

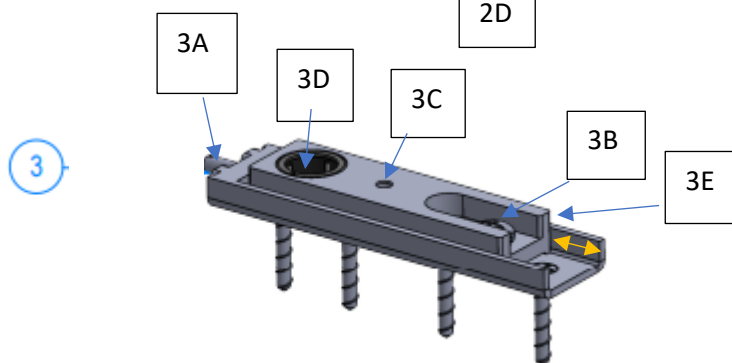
Parts



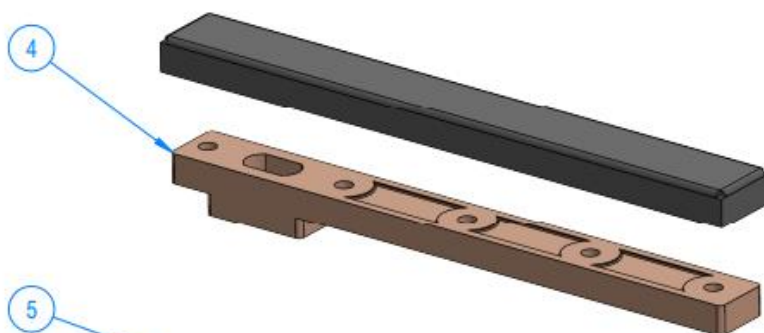
1. Intumescent (precut)



2 Retractable pin

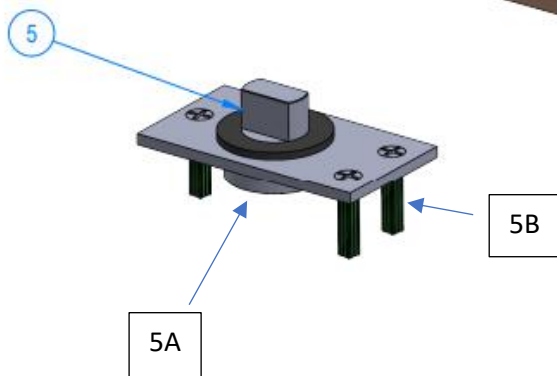


3. Top Strap



4. Bottom strap

(the grey box net is interdens precut to form intumescent box around the strap when in the door)



5. PS.260 bottom bearing spindle

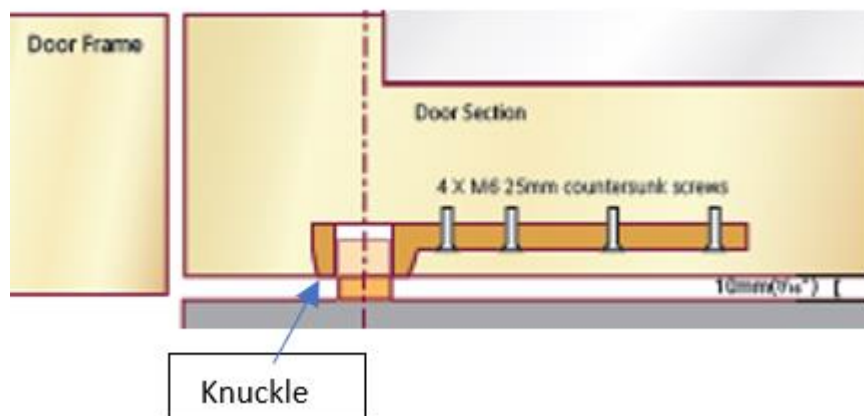
FACTORY STAGE

Morticing hardware is best done in door manufacture stage using CNC programmed machines for accuracy. CAD drawings are available on request however most door manufacturers prefer to do their own drawings from the actual pivot set to offer this up to the mortices.

When using pivot sets top and bottom lipping of hardwood is recommended for door leaf fixings to be secure and durable, but also for fire performance as specified in Field of Application reports for each door type and fire rating.

MORTICING DOOR LEAF FOR PS.190

1. Determine correct lippings to top, bottom and jambs of door leaf and fabricate the door using approved adhesives as specified in system house field of application
2. Programme dimensions of pivot straps into CNC
3. Mortice the PS.190 bottom strap into the base of the door. To achieve a 10mm gap under the door the strap knuckle should be set flush with the bottom of the door. To achieve a 3mm gap under door, recess the strap Knuckle 7mm deeper into the bottom of the door. We recommend a scallop when using floor spring closer to maintain the 3mm gap after the cover plate (call Rutland on 01246 261491 for training on this)

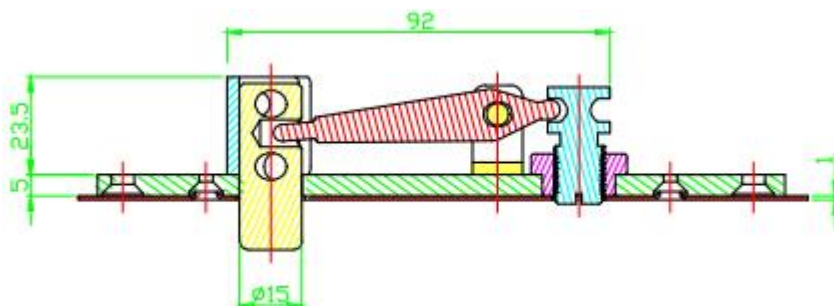
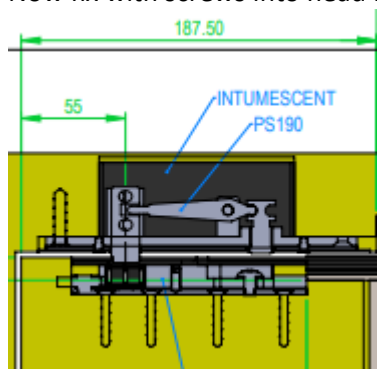


MORTICING RETRACTABLE PIN INTO HEAD FRAME

Depending on the frame profile and door profile, the Rutland pS190 retractable pin can be adjusted in length of projection. There are 3 holes in pin 2C at different levels. These allow adjustable length of pin for example, the top hole location will allow the maximum length pin projection when engaged into top strap 3D.

This adjustment can be achieved by;

1. Releasing screw 2B on the rocker pin
2. Lift the rocker pin section out of the housing and locate the rocker arm into the desired hole in pin 2C
3. Now Mortice the head frame for the retractable pin (Part 2) into the head frame
4. Fit intumescent around the mortice before fitting the retractable pin section
5. Now fix with screws into head frame

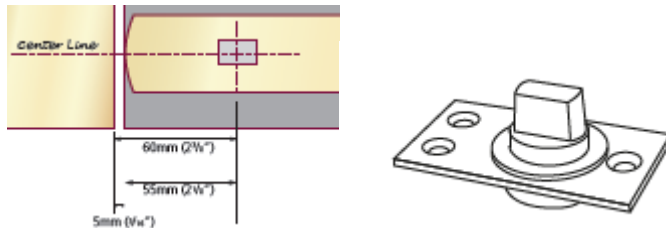


ON SITE STAGE – FITTING & ADJUSTING PS.190 PIVOT (WITH PS.260 OR FLOOR SPRING)

STEP ONE - FIT PS.260

To fit PS.260 (Part 5);

1. Mark out on floor to locate centre of spindle maximum of 60mm from frame/55mm from edge of door to achieve a 5mm gap between frame and door. Recommended gaps for fire doors are between 3mm and 5mm and tested smoke and fire seal intumescent should be used in the frame and/or door edge.

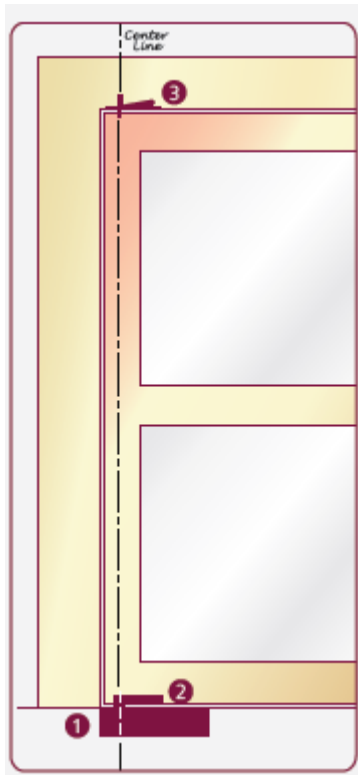


2. Cut a hole in the floor beneath this centre point, the hole should be made to hold the depth and diameter of the projecting bearing housing (5A) under the PS.260 fixing plate
3. Fix the PS.260 plate to the floor using 4 no. fit-for-purpose¹ fixings (5B) depending on the floor material and construction – we advise that you obtain expert advice from fixing specialists. Fixing used should be those provided or of same length and diameter as a minimum
4. The centre of the top pin (2C)/top strap drive hole should line up with the centre of the PS.260 spindle. E.G. to achieve a 5mm gap around the door, set this centre point at 55mm from the edge of the door, and central in the door width e.g. 54mm thick door leaf will require a centre point of 55mm from the edge of the door and central in the leaf at 27mm from each edge of the leaf.



Bottom Door Fitting (Bottom View)

5. Work with the door manufacturer to make sure the top and bottom strap are easy to align with the centre line taken from the PS.260 spindle centre point. The retractable pin in the head frame should align with this for example if requiring a 5mm door gap, the centre of this top strap will also be 55mm from the edge of the door and central in the leaf.

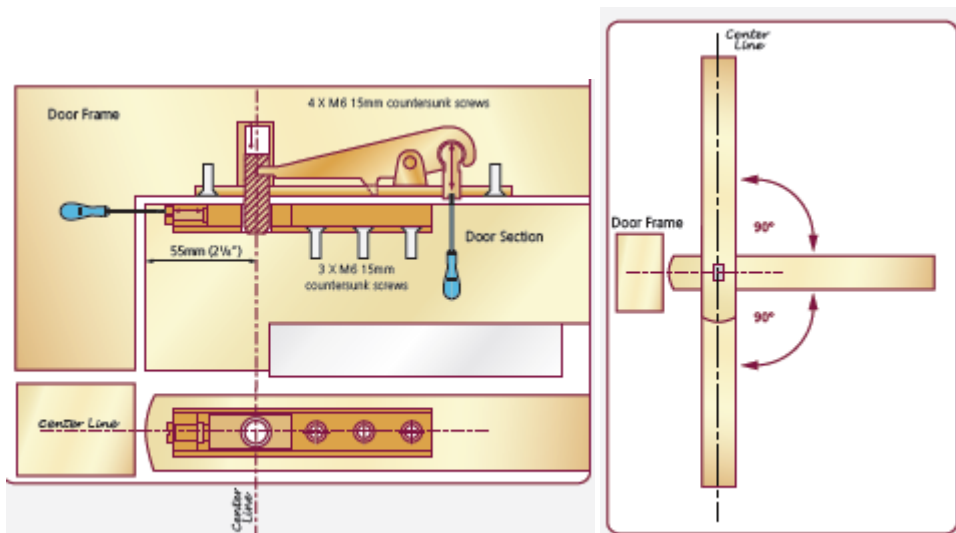


STEP TWO – PS.190 PIVOT SET ON SITE - DOOR ALIGNMENT

Health & Safety

Before lifting the door a manual handling assessment should be carried out and a method statement and Risk assessment completed.

1. Fit top strap (Part 3) into mortice in head of door leaf
2. Slacken off the double locking screws (3B and 3C) screws
3. Now carefully lift the door leaf at 90 degrees to frame using at least two person lift and locate bottom strap onto the PS.260 spindle (or floor spring spindle)
4. Now offer up the door, still at 90 degrees to the frame, to meet head frame
5. The top strap (3D) in the head of the leaf is now aligned with the retractable pin (2C) in the head frame
6. With the door leaf at 90 degrees to frame will allow you access to the frame mounted top pivot adjustment (3A).
7. Using a screw driver turn the screw (2D) until the retractable pin (2C) is fully engaged into the top strap hole bearing (3D).



8. Now set position of meeting stiles by tightening the locking screw (3A) in the hinge edge of the door – this locks the strap into position and keeps the door level so you can achieve correct gaps at the frame and at meeting edge if double doors.
9. Now open the door to 90 degrees
10. Now fully retract the top pin (2C) again
11. Lower the door to access the door top strap (3)
12. Push the inner section (3E) to lock against the adjuster screw 3A
13. Now tighten locking screw 3B
14. Then tighten double locking screw 3C
15. Now offer the door back into position
16. Engage the retractable pin 2C fully into the top strap 3D

KEY

¹Fit for purpose fixings – each floor type is different from concrete to timber and therefore professional independent advice should be taken from fixing suppliers to consider the building type, users, structural material, weights and all other considerations.