Hinge installation hints

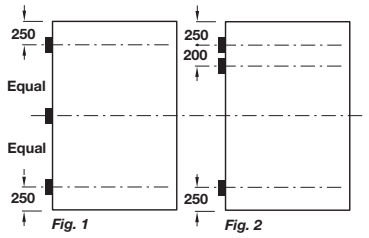
Important information:

- Fire doors must be fixed using a minimum of three 100 mm hinges, which if spaced equally will resist door deformation as ***Fig. 1***
- These recommendations do not usually relate to hinges used with folding door systems where other factors apply
- Good practice generally observes the hinge leaf with the greater number of knuckles fitted to the frame

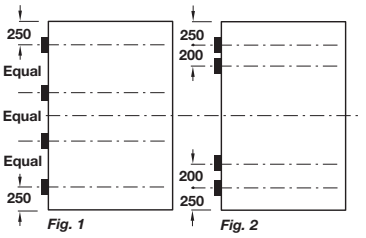
Fig. 1 To compensate warping tendency/for fire doors

Fig. 2 For maximum weight carrying capacity

Doors up to 1250 mm wide (3 hinges)

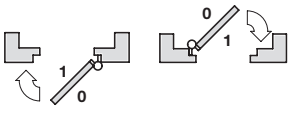


Doors over 2100 mm high (4 hinges)

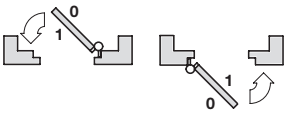


Handing guide for hinges:

- The terms 'right hand' and 'left hand' have proven to be ambiguous
- We have therefore followed the I.S.O. system of handing, which uses the Closing direction and the Face of the Door to determine the handing of all Ironmongery fitted to that particular door



ISO 5.0 = Clockwise closing doors / Opening face = Left hand hinge (RH DIN)



ISO 6.0 = Anti-clockwise closing doors / Opening face = Right hand hinge (LH DIN)

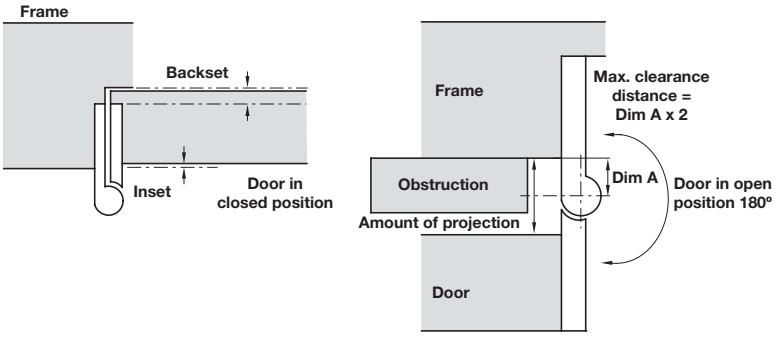
Guide to installation of projection hinges

- Projection hinges are drilled with holes towards the edge of a broad hinge leaf enabling the hinge to clear obstructions when fully open beyond 90°
- Recommendations for installation are as follows:

  It is recommended that the backset should not be less than 12 mm (14 if using an intumescent strip)
- When a door is to be opened beyond 90° the width of hinge required can be calculated as follows:

  Door thickness plus inset (normally 1/8" or 3.2 mm) less backset

  Double this and add clearance required



Lift-off hinges - fixing instructions:

- Lift off hinges are handed
- Always fit the hinge part with the pin to the door frame, and with the pin pointing up:

1) Mark out and cut mortice

2) Drill pilot holes, sized to suit the fixing screws and type of door frame material being screwed into (see table right)

3) Ensure screws are fully tightened

4) No lubricant or maintenance is required

Clearance and pilot holes for wood screws

Screw size		Imperial (inch)			Metric (mm)		
Imperial	Metric	Clearance hole	Pilot hole		Clearance hole	Pilot hole	
swg	mm		softwood	hardwood		softwood	hardwood
0		1/16	Bradawl	1/32	1.60	Bradawl	0.80
1	2.0	5/64	Bradawl	1/32	2.00	Bradawl	0.80
2		3/32	Bradawl	3/64	2.40	Bradawl	1.20
3		7/64	Bradawl	1/16	2.80	Bradawl	1.60
4	2.5	7/64	Bradawl	1/16	2.80	Bradawl	1.60
5	3.0	1/8	Bradawl	5/64	3.20	Bradawl	2.00
6	3.5	9/64	1/16	5/64	3.60	1.60	2.00
7		5/32	1/16	3/32	4.00	1.60	2.40
8	4.0	11/64	5/64	3/32	4.50	2.00	2.40
9	4.5	3/16	5/64	7/64	5.00	2.00	2.80
10	5.0	3/16	3/32	7/64	5.00	2.40	2.80
11		13/64	3/32	1/8	5.50	2.40	3.20
12	5.5	7/32	7/64	1/8	5.50	2.80	3.20
	6.0	15/64	7/64	1/8	6.00	2.80	3.20
14	6.5	1/4	7/64	9/64	6.50	2.80	3.60
16	7.0	17/64	9/64	5/32	7.00	3.60	4.00
18	7.5	19/64	9/64	3/16	7.50	3.60	5.00
20	8.5	21/64	11/64	13/64	8.50	4.50	5.50
24	9.0	3/8	3/16	7/32	9.00	5.00	5.50

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