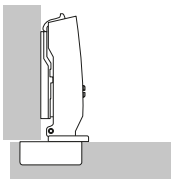
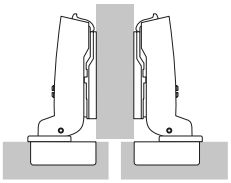
Full overlay door



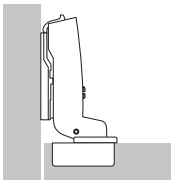
The door is in front of the carcase side and only a small gap remains at the side within which the door can open reliably. Alternatively, the door can also be overlaid fully. In this case sufficient space must be allowed at the side for the required minimum reveal. Straight hinges are used.

Half overlay door



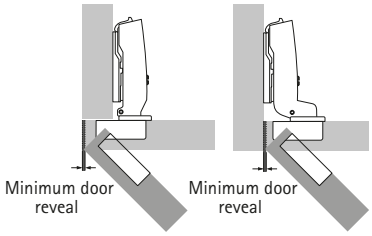
This is where two doors are positioned in front of a carcase centre panel, with the required overall reveal between them (at least 2 x minimum reveal). In other words, each door has a smaller overlay and cranked hinges are therefore used.

Inset door



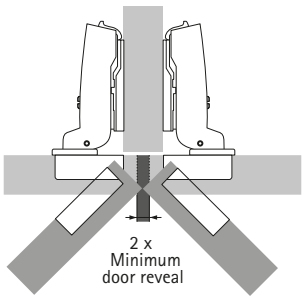
The door is positioned inside the carcase, i.e. next to the carcase side. Here too, a gap is needed so that the door can open reliably. Highly cranked hinges are used here. For an inset door, the mounting plate must be set back by the door thickness + 1 mm as well as by any any chosen door offset.

Minimum reveal



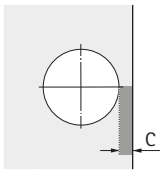
For full overlay and inset doors
The minimum reveal (also known as the door clearance or minimum clearance) is the space required at the side so that the door can open. The size of the minimum reveal depends on the cup distance C, the door thickness and the type of hinge selected. Radii on the door edges reduce the door clearance. The minimum reveal is shown in the table for the respective hinge types.

Minimum reveal



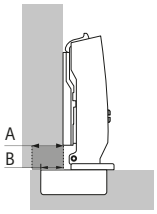
For half overlay doors
The total reveal selected between the doors must be at least twice the door clearance. Both doors can then be opened at the same time.

Cup distance C



Cup distance C is the distance between door edge and the edge of the cup drilling. The greater the distance selected for cup distance C, the smaller the door clearance will be, i.e. the minimum reveal required.

Overlay / base



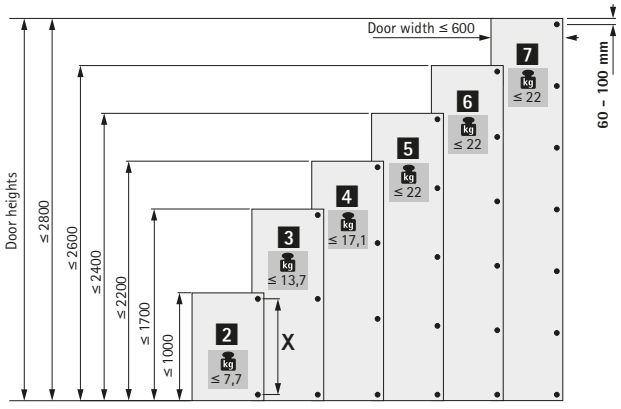
A = Overlay
B = Base

Overlay refers to the projection of the door in front of the carcase side. Base refers to the projection of the cup in front of the carcase side for a mounting plate distance of 0 mm.

Number of hinges per door

Door width, height and weight as well as the material quality of the door are decisive factors determining the number of hinges required.

The factors encountered in practice differ widely from case to case. For this reason, the number of hinges specified in the diagram must be understood as a guide only. If in doubt, it is recommended to carry out a trial installation and adjust the number of hinges as necessary. For reasons of stability, space X between the hinges must always be made as large as possible. The space X must be at least 280 mm.



General calculation of distances

Mounting plates are available in various distances. The effective height of the mounting plate is defined by distance D. Distance D is embossed on the top of each mounting plate. A larger distance D reduces overlay for full and half overlay applications. On inset doors, a larger distance D increases the door reveal. Before determining the required distance, check whether the desired reveal is equal to or greater than the required minimum reveal. If the desired reveal is less than the required minimum reveal, the required minimum reveal can be reduced by increasing cup distance C or by producing radii on the door edges.

Calculation of distances

For full overlay and half overlay doors
The required distance D can be determined after checking the minimum reveal. Ideally, the door reveal and cup distance should be selected to produce a distance D that is available as mounting plate.

Example: Working out distances according to the table
Overlay = 14 mm and cup distance C = 4.5 mm yield a distance D equal to 3.0 mm.

Example: Working out distances using the calculation formula
Hinge for full overlay door, base B = 12.5 mm
Distance D = Cup distance C + base B - overlay A
Distance D = 4.5 mm + 12.5 mm - 14 mm = 3.0 mm

Intermediate distances not available as mounting plate distances are achieved by adjusting the hinge overlay.

Overlay	Cup distance C mm					
mm	3,0	4,0	4,5	5,0	6,0	7,0
	Distance D mm					
10	5,5	6,5	7,0	7,5	8,5	9,5
11	4,5	5,5	6,0	6,5	7,5	8,5
12	3,5	4,5	5,0	5,5	6,5	7,5
13	2,5	3,5	4,0	4,5	5,5	6,5
14	1,5	2,5	3,0	3,5	4,5	5,5
15	0,5	1,5	2,0	2,5	3,5	4,5
16		0,5	1,0	1,5	2,5	3,5
17			0,0	0,5	1,5	2,5
18					0,5	1,5
19						0,5

Calculation of distances

For inset doors
When calculating the mounting plate distance using the table for the inset, allowance is automatically made for the reveal to be designated as the minimum reveal in relation to cup distance C and the door thickness in the minimum reveal table. If a reveal is is to be produced that is larger than this minimum reveal, select a mounting plate distance of the appropriate size.

Example: Working out distances according to the table
According to the table, a door thickness = 20 mm and cup distance C = 4.5 mm produce a mounting plate distance of 1.5 mm. This gives the required minimum reveal, for example, of 1 mm. If a reveal of 2.5 mm is preferred instead, select a mounting plate distance which is 1.5 mm larger. In this example, therefore, a distance of 3 mm instead of 1.5 mm.

Example: Working out distances using the calculation formula
Hinge for inset application, base value B = - 4 mm
Distance D = cup distance C + base B + reveal F
Distance D = 4.5 mm - 4 mm + 1 mm = 1.5 mm

Intermediate distances not available as mounting plate distances are achieved by adjusting the overlay adjustment of the hinge.

Door thickness	Cup distance C mm					
mm	3,0	4,0	4,5	5,0	6,0	7,0
	Distance D mm					
15		0,2	0,7	1,2	2,2	3,2
16		0,3	0,8	1,3	2,3	3,3
17		0,4	0,9	1,4	2,4	3,4
18		0,6	1,1	1,6	2,6	3,5
19		0,8	1,3	1,8	2,7	3,7
20	0,1	1,0	1,5	2,0	3,0	3,9
21	0,4	1,3	1,8	2,3	3,2	4,2
22	1,2	1,8	2,2	2,6	3,6	4,5