

Correct Specification - Conventional Hinges

Drawing The Specification Together

After establishing the criteria outlined in the previous pages it is necessary to apply this detail to the following table to determine hinge class, height & width.

Hinge Selection Guide (for Doors 2000mm x 1000mm)					
Unadjusted Door Weight / Kilos (not exceeding)	45kg	45kg	54kg	68kg	100kg
Adjusted Door Weight* / Kilos (not exceeding)	80kg	80kg	95kg	120kg	175kg
Door Thickness (minimum)	35mm	44mm	44mm	44mm	54mm
Hinge Size – mm (height/open width)	102/76	102/89	102/102	114/102	114/114
Gauge of Metal	3.3mm	3.3mm	3.3mm	3.4mm	4.6mm
Quantity of hinges per 2000mm x 1000mm Door	3	3	3	3	3
Anticipated Cycles / 24 Hours (Max.)	Class Code Polished Brass Plated Stainless Steel Satin or Bright Stainless Steel		CE Marked Hinges – BS EN 1935:2002 & EN 1634-1:2000 – E30 & E60		
<50 (low)	REL.FM**	✓			
<500 (medium)	REL.CB1960R	✓	✓	✓	✓
<5000 (high)	REL.CB1961R				✓

*Assumes doors fitted with LCN Overhead Door Closers

**FM hinges are 100mm x 76mm x 3mm gauge only

Class Code - Key

- REL.FM - Ball Bearing (Standard Weight) - Grade 13
- REL.CB1960R - Concealed Bearing (Standard Weight) - Grade 13
- REL.CB1961R* - Concealed Bearing (Heavy Weight)

*REL.CB1961R is not a CE marked hinge

Using The Table

The information contained in the table above is offered strictly as a guide to assist in the selection of hinges for normal situations. The major factors affecting hinge selection are addressed but no attempt has been made to include extraordinary factors such as abuse, impacts, hostile atmospheres or other such conditions that can, and often do, affect hinge performance.

The unadjusted/adjusted door weights listed (for CE marked hinges) are maximum figures allowable for doors expected to perform only to the criteria outlined in BS EN 1935: 2000 for Grade 13 hinges.

If your door falls within the standard criteria so far as sail area is concerned (i.e. height x width) then hinge selection becomes relatively straight-forward.

It is important to adjust the door weight where excess door width is a factor (See page 6) and to include additional hinges where excess height is a factor (See page 7).

All the standard weight hinge types shown are CE marked and can be used on fire escape doors and most fire doors - check certification requirements before final specification.

Creating the Hinge Code

Read off the class code and use the appropriate hinge size (height/open width) as a suffix to the code.



For example:

REL.CB1960R.102.89 signifies a concealed bearing standard weight hinge measuring 102mm high x 89mm open width.

Finishes

- US3 - Polished Brass Plated Stainless Steel
- US32 - Polished Stainless Steel
- US32D - Satin Stainless Steel