

LOAD CAPACITY TABLE

Hinges **IN310** for doors up to 120 Kg

The loading capacity of the hinges is a data that cannot be determined in an absolute manner, since not all the elements that constitute doors and windows can always be determined in advance.

The main variables are:

- 1) dimensions of the shutter;
- 2) weight of the shutter;
- 3) number of hinges;
- 4) position of the hinges;
- 5) type and quality of the frame material. For example: the presence of knots in wood may jeopardize the grip of the hinge or in the case of PVC frames the presence and the shape of the internal metal reinforcement may affect the loading capacity of the hinges;
- 6) accuracy, precision and experience in the assembly. For example: installing the male more than 6 mm away from the frame or a thread not completely screwed, can compromise the proper functioning of the hinges;
- 7) position and frequency of use of the window/door.

The following table has been defined taking into consideration:

1) the information provided by the European Norm UNI EN 1935:2002.

2) the tests performed on the hinges.

In particular, norm 1935:2002 suggests to load a hinge with 1/3 of the declared weight in the CE certificate or declaration of performance, thus recommends the use of three hinges per shutter, praxis OTLAV agrees with, since it makes the door/window more stable.

The regulations 1935:2002 also determines that in the case of doors or windows of remarkable width, it is necessary to apply a "coefficient of increase of the shutter mass", which determines the decrease of the loading capacity of the hinges.

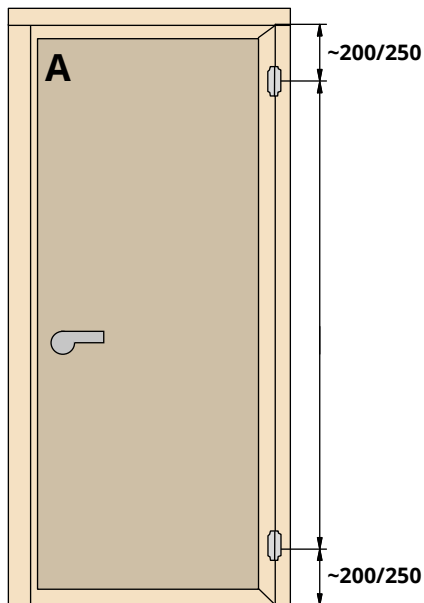
Doors up to 120 Kg - invisible hinge IN310

Door height mm.	2700	4	4	4	4	4	4	5	5
	2400	4	4	4	4	4	4	4	5
	2300	4	4	4	4	4	4	4	5
	2200	3	3	3	3	3	4	4	5
	2100	2	2	2	3	3	3	4	4
	2000	2	2	2	3	3	3	3	4
	1900	2	2	2	3	3	3	3	4
	1800	2	2	2	3	Ctd	Ctd	Ctd	Ctd
	1200	2	2	2	Ctd	Ctd	Ctd	Ctd	Ctd
	800	2	2	2	Ctd	Ctd	Ctd	Ctd	Ctd
		600	800	900	1000	1050	1100	1150	1200

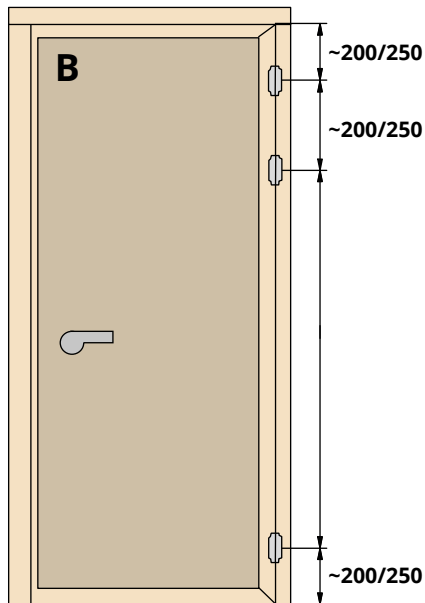
Door width mm.

X	Suggested number of hinges
X	Switch to a hinge of higher class, use X hinges IN311 model .
Ctd	Please contact the technical department

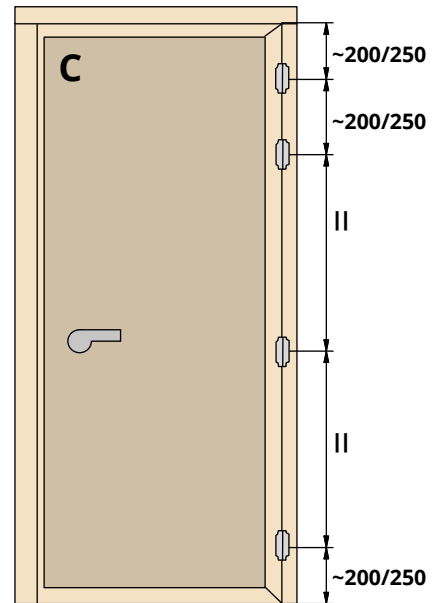
Positioning of the hinges



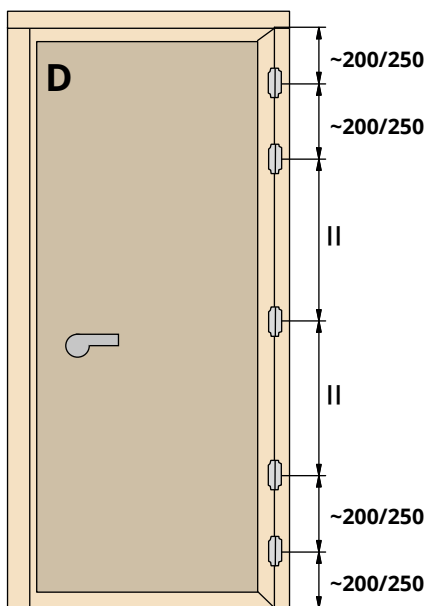
2 hinges



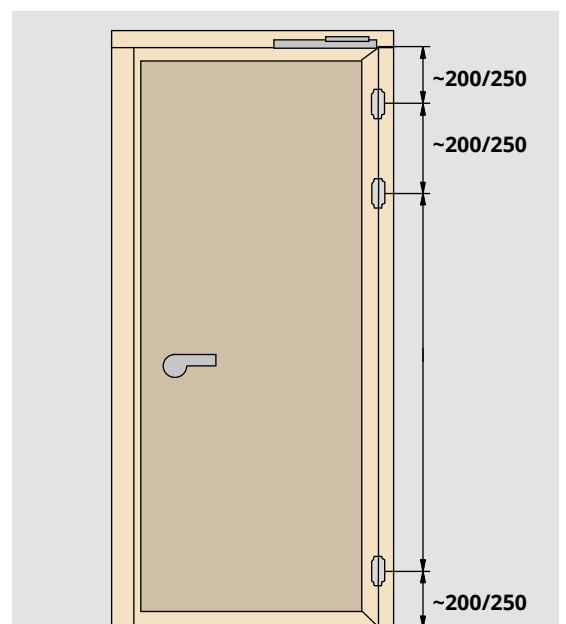
3 hinges



4 hinges



5 hinges



Door-closer

Can be used in combination with the hinges model IN230, IN300, IN303, IN310 and IN311.

Referring to the load capacity table, add a hinge and decrease of 20% the maximum loading capacity of the hinge*.

*Please contact the Technical Department for more information on tests carried out in Otlav.

List of Otlav invisible hinges classified by maximum load capacity

Capacity	Model
30 Kg	IN232
40 Kg	IN235, IN301, IN305
60 Kg	IN230, IN300, IN570
80 Kg	IN303
120 Kg	IN310
140 kg	IN311

The product is guaranteed only if used according to the instructions given by the manufacturer.