



# Butt Hinge Technical Help Sheet

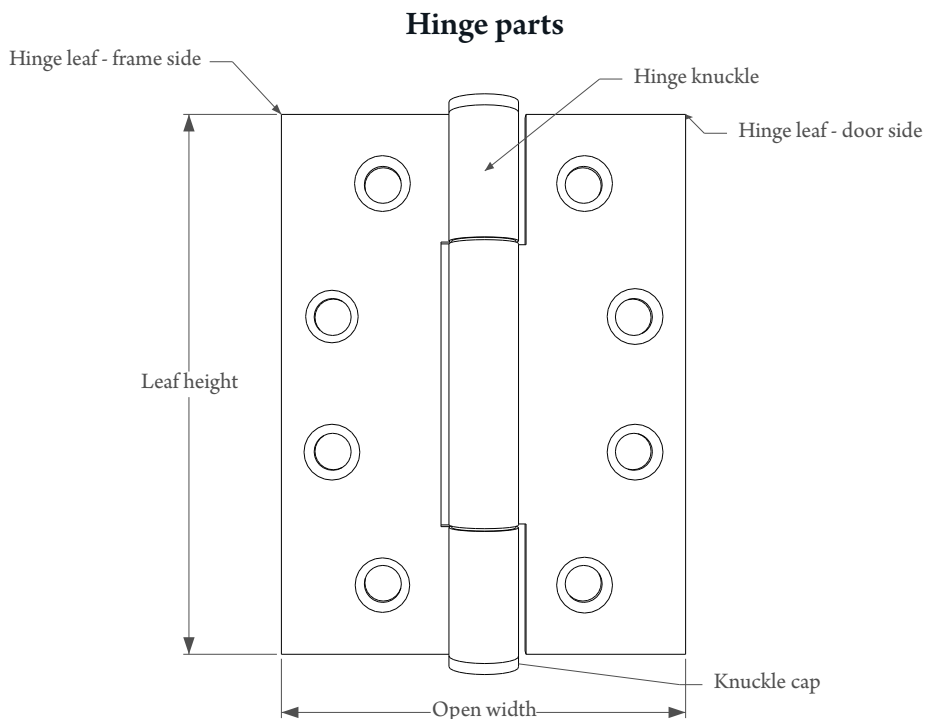
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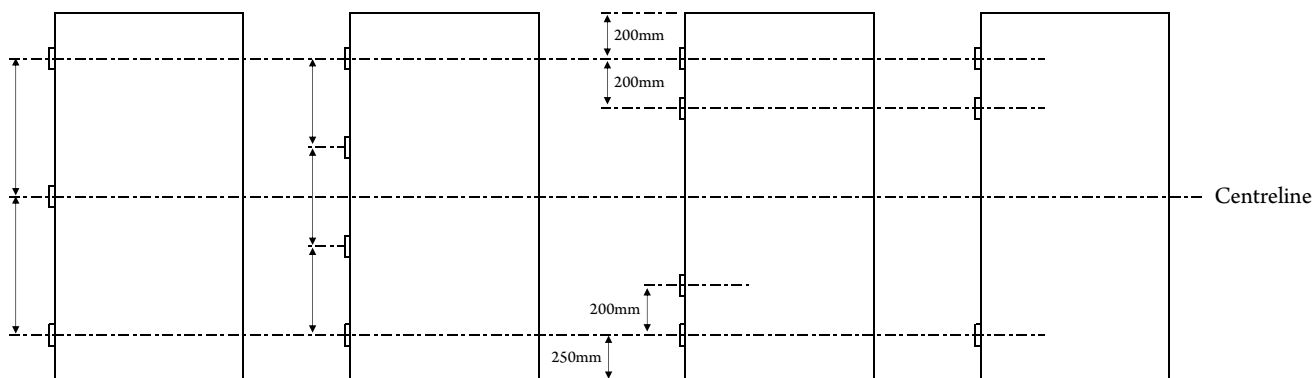
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## Butt Hinge Technical Help Sheet

Butt hinges are the most common type of hinge, in this help sheet we will outline some of the points for consideration when specifying and purchasing butt hinges.



We usually recommend using three hinges for a standard door. Doors taller than 2100mm should mostly be fitted with four hinges. There are other considerations and general recommendations for other possible configurations which are outlined below:



Three hinges can be equally spaced, this is best for doors that may be prone to warping e.g. glazed doors or in areas of high humidity. This is also the best option if a jamb mounted door closer is fitted in the middle of the door, the closer should be installed as close as possible to the centre hinge.

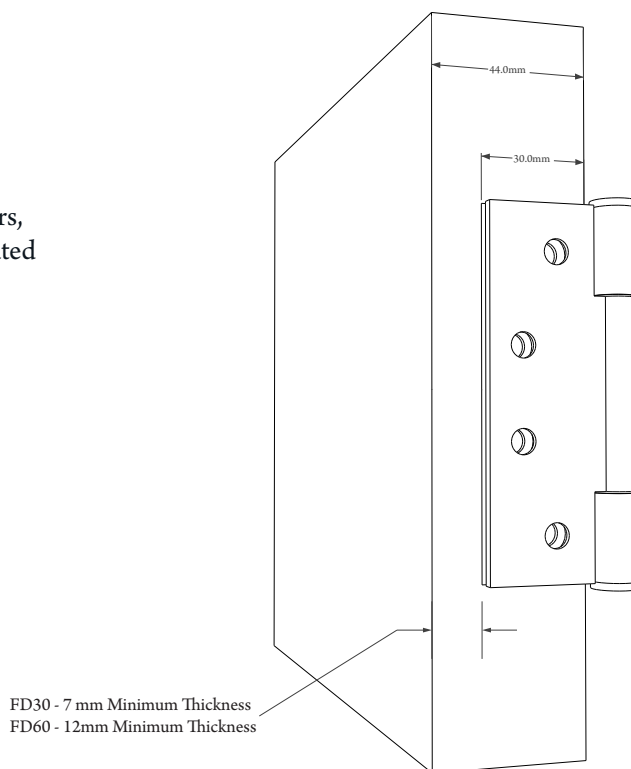
Four hinges can be equally spaced, this is best for tall doors that may be prone to warping e.g. glazed doors or in areas of high humidity. This is also the best option if a jamb mounted door closer is fitted in the middle of the door.

Four hinges can be equally spaced like this on tall doors as it gives the door the most effective load bearing capabilities in the required positions. It is also the best positioning if an overhead door closer is being fitted.

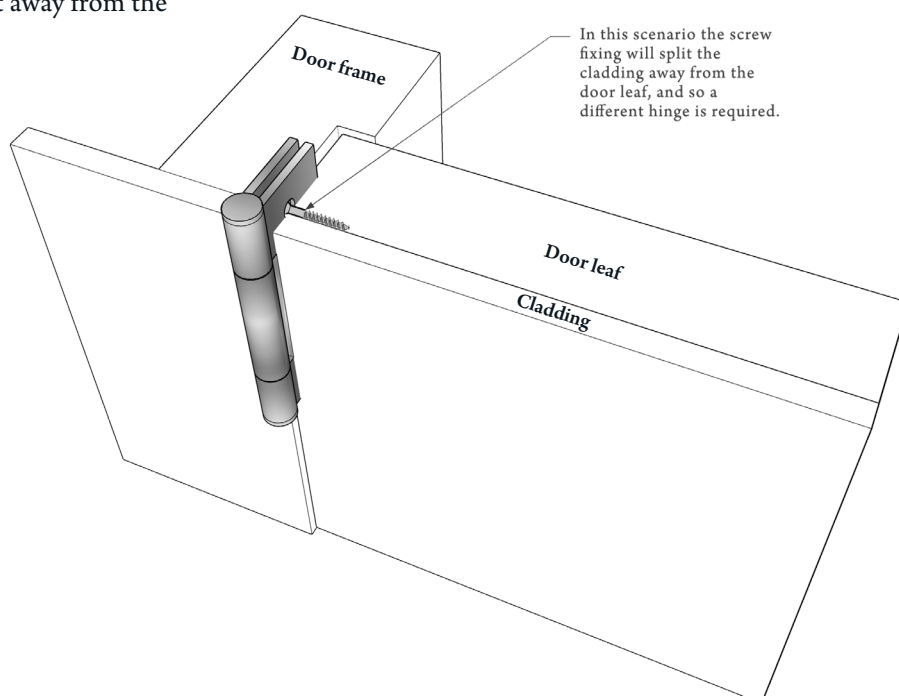
The standard positioning for when fitting three hinges as it gives the door the most effective load bearing capabilities it also has the best positioning if an overhead door closer is being fitted.

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For both aesthetic and fire safety reasons hinges should be rebated to leave a minimum of 7mm on 30 minute fire doors, and 12mm on 60 minute fire doors between the hinge rebated edge and the opposite face of the door.



Care must be taken when choosing the correct hinge for doors with cladding the critical point being the position of the screw fixings on the hinge leaf. As you will see from the illustration, the screws could cause the cladding to split away from the door leaf.



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Intumescent material is fitted behind each of the hinge leaves on timber doors, as this is an area most likely to suffer integrity failure in the event of a fire. When activated, they expand rapidly providing additional protection and insulate the heat transfer from the hinge to the door and frame.

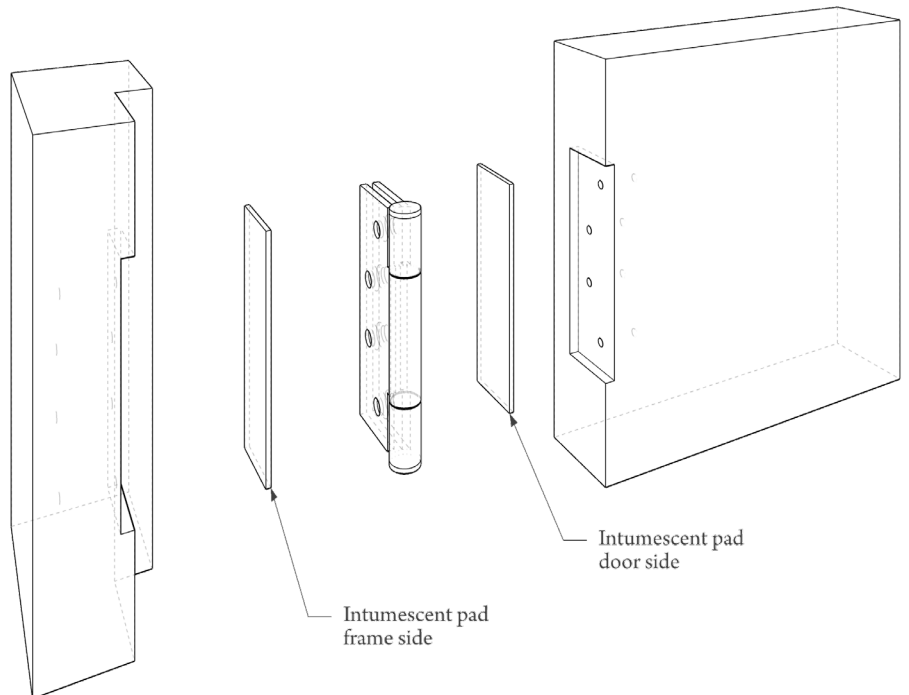
Butt hinge with intumescent pad



Butt hinge following activation of the intumescent pad

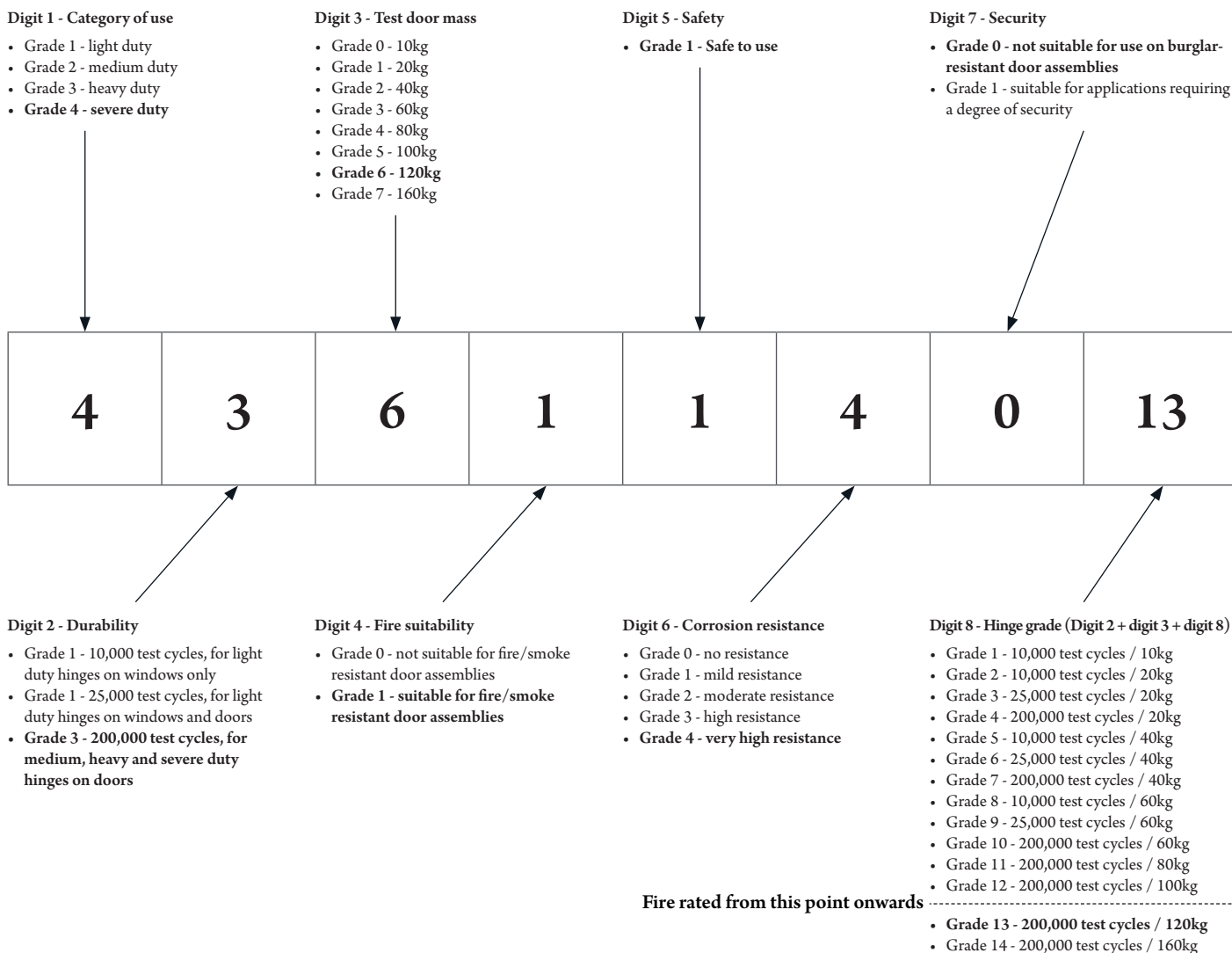


This detail shows where the intumescent pads must be installed



# Butt Hinge Technical Help Sheet

Butt hinges fall under the BS EN 1935:2002 standard for single axis hinges. They have a unique reference which is identified using the coding convention shown below:



If you require any assistance with selecting suitable hinges for your project, please contact our team who are on hand to assist you.