

Intumescent Protection Requirements for Hinges on Fire Doors

Item	Description	Certifire Reference	FD30 Timber Door 0.8mm Intumescent liner required	FD60 Timber Door 0.8mm Intumescent liner required	FD120/240 Steel Door no Intumescent liner required		
H2N1446	101.6 x 152 x 3.5mm Parliament Hinge	CF339	✓	✓			
H2N1502/13	110 x 98 x 3.5mm Lift-Off Thrust Bearing Hinge	CF339		✓			
H2N1503/11	98 x 83 x 3mm Lift-Off Thrust Bearing Hinge	CF339	✓				
H3N1101/11	100 x 88 x 3mm Lift Off (Full Leaf)	CF339	✓	✓			
H3N1102/13	100 x 88 x 3mm Triple Knuckle	CF339	✓	✓	✓		
H3N1102A/13	100 x 106 x 3mm Triple Knuckle Projection	CF339		✓	✓		
H3N1103/12	100 x 88 x 2.5mm Triple knuckle	CF339	✓	✓	✓		
H3N1104/11	100 x 75 x 2.5mm Triple knuckle	CF339	✓	✓			
H3N1105/11	98 x 82 x 3mm Lift Off (Journal Support)	CF339	✓				
H3N1107/13	110 x 98 x 3.5mm Lift Off (Journal Support)	CF339		✓			
H3N1207/13	100 x 75 x 3mm Triple Knuckle (Concealed Bearing)	CF339	✓	✓	✓		
H3N1208/13	100 x 88 x 3mm Triple Knuckle (Concealed Bearing)	CF339	✓	✓	✓		
HIN13225/11	76mm x 67mm x 2.5mm ball bearing hinge	CF339	✓				
HIN14325/13	Hinge 4 x 3 x 2.5mm	CF339	✓	✓	✓		
HIN1433/13	102mm x 76mm x 3mm ball bearing hinge	CF339	✓	✓	✓		
HIN1433HT/13	102mm x 76mm x 3mm ball bearing hospital tip hinge	CF339	✓	✓	✓		
HIN1433P/13	102mm x 76mm x 3mm ball bearing hinge	CF5083	✓	✓			
HIN1433SEC/13	102mm x 76mm x 3mm ball bearing security hinge	CF339	✓	✓	✓		
HIN1443/13	102mm x 102mm x 3mm ball bearing hinge	CF339		✓	✓		
HIN1443P/13	102mm x 102mm x 3mm ball bearing hinge	CF5083		✓			
HIN1443SEC/13	102 x 102 x 3mm ball bearing security hinge	CF339		✓	✓		
LOH1000	Lift Off Hinge - 98mm x 83mm x 2.5mm	CF339	✓				
SCH14325/13	102mm x 76mm x 2.5mm Slimline Hinge	CF339	✓	✓	✓		
SCH14325SEC	102mm x 76mm x 2.5mm Slimline Security Hinge	CF339	✓	✓	✓		
HIN1433/14	102mm x 76mm x 3mm ball bearing hinge	CF339	✓	✓	✓		
HIN1443/14	102mm x 102mm x 3mm ball bearing hinge	CF339		✓	✓		
H3N1207/14	100 x 75 x 3mm Triple Knuckle (Concealed Bearing)	CF339	✓	✓	✓		
HIP14325	100 x 76 x 2.5mm Plain Bearing Hinge	N/A	*				
HIW14325	102 x 76 x 2.5mm Washered Hinge	N/A	*				
<p>* Although tested, these are not suitable for use on fire doors after 1st July 2013</p> <p>Where there are Stainless Steel and Mild Steel variants, the intumescent requirement remains the same.</p> <p>Please note that the Carlisle Brass logo hinges HDBB4 are an own brand variant of HIN1433 and the intumescent requirements are the same as the HIN1433</p> <p>✓ = Approved N/A = Not Applicable</p>			Technical Properties of Intumescent Material				
			Material	Initial Expanding Deg -C	Main Body Expanding Deg -C	Free Expansion Rate	Density
			Intercalated graphite 0.8mm sheet	>-180°C	550°C	Multi Directional X 40 Volume	1.2g/cm3