

Intumescent Protection Requirements for Hinges on Fire Doors

Item	Description	Certifire Reference	FD30 Timber Door no Intumescent liner required	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