


## Declaration of Suitability for use on Timber Fire Doors

(Fire assessment WF 154302 issue 3 incorporating LFB2 Fire Brigade Lock)

<b>Objective:</b>	Provides a considered opinion regarding the fire resistance performance of single-acting timber based doorsets, when fitted with Eurospec brand Latch/Locksets in conjunction with various items of furniture.
<b>Summary of Conclusions:</b>	Should the recommendations be followed, it can be concluded that previously fire tested (or assessed by Warringtonfire) timber doorsets which have achieved 30 or 60 minutes integrity in accordance with BS EN 1634-1 may be fitted with Eurospec brand Latch/Locksets and associated furniture as detailed in Annex A, without detracting from the overall performance of the doorset for 30 or 60 minutes integrity (and insulation where relevant).
<b>Suitable Doorsets:</b>	<p>As the appraisal is intended to be used on a general basis and not restricted to any particular manufacturer of fire doors, the following points are given to enable the locks to be used safely:</p> <p>The timber doorset, including door frame, intumescent seals and associated ironmongery should have achieved 30 or 60 minutes integrity and, where applicable, insulation when tested by a UKAS approved laboratory (or assessed by Warringtonfire) to EN 1634-1.</p> <p>The critical aspects of the doorset construction are considered to be the material of the door frame, the leaf to frame clearance gaps and the lipping material. Attention should be paid to these details and these should not be amended from that previously fire tested. Where the information is not known, the following minimum specification will be followed:</p> <p>a) Door frame density – 500kg/m<sup>3</sup> (30 minutes). 650kg/m<sup>3</sup> (60 minutes)  b) Leaf to frame clearance gaps not to exceed 2.5mm average and 3mm maximum,  c) Lipping density – 500kg/m<sup>3</sup> (30 minutes). 650kg/m<sup>3</sup> (60 minutes)  d) Door leaf thickness – 44mm minimum (30 minutes), 54mm minimum with minimum 4mm thick non-combustible mineral board sub-facings (60 minutes)**</p> <p>Additionally, the amount of interruption to the intumescent seal specification at the door leaf to frame perimeter clearance gaps should be replicated or reduced from that originally specified for the tested doorset.</p> <p>In the location of the locksets for 30 minutes performance, where the intumescent seal has been removed, intumescent mastic material or 2mm Interdens sheet material shall be applied around the lockcase and behind the forend and strike plate, in order to reduce the level of degradation at the lock position, in a similar manner to the perimeter intumescent strips. 2mm Interdens sheet material must be utilised except where specified in Annex A.</p> <p>In the location of the locksets for 60 minutes performance, where the intumescent seal has been removed, 2mm Interdens sheet material shall be applied around the lockcase and behind the forend and strike plate, in order to reduce the level of degradation at the lock position, in a similar manner to the perimeter intumescent strips.</p>
<b>Assessment Conclusion:</b>	<p>As per Annex A, fire assessment 154302 issue 3 deemed LFB2 Fire Brigade Lock as suitable for consideration for use on 30 and 60 minute doorsets</p> <p>*Annex A lists intumescent mastic for 30 minutes, and Interdens material for 60 minutes,</p> <p>**Door leaf thickness – 54mm minimum with minimum 4mm thick non-combustible mineral board sub-facings (60 minutes)</p>
<b>Additional Supporting Information:</b>	Carlisle Brass have since carried out numerous tests on a range of our locks using 0.8mm intercalated graphite sheet for both 30 and 60 minute doors – this is representative of our locks within Certifire certificate CF611 – unfortunately, we have never added the LFB2 lock to Certifire as until recently, nobody even needed CE marking on a fire brigade lock. Every other test we carried out since the assessment report was first published, the doors used were either Halspan Optima, or Halspan Prima (dependent on 30 or 60 minutes), without the need for 4mm non-combustible subfaces.

<b>Additional Supporting Information &amp; Continued:</b>	<p>The area of the door that is subject to burn through is where the lock forend and keeper meet, and any cylinder or keyway hole. As the amount morticed out on the door edge and frame is minimal compared to a DIN sashlock, this risk is lesser for the LFB2 lock.</p> <p>Also, the LFB2 lock only requires a small hole for the key, compared to a cylinder lock that requires a large amount removed to accommodate a cylinder, this a cylinder lock creates a more onerous potential for fire spread.</p> <p>All fire evidence against door hardware is for consideration for use.</p> <p>Every lock on our Certifire certificate CF611 now states that previous thicknesses of interdens can be substituted by 0.8mm intercalated graphite for both 30 and 60 minute doors (refer to clause 6).  <a href="https://www.warringtoncertification.com">Check a Certificate   Warringtonfire (warringtoncertification.com)</a></p> <p>This includes all cylinder locks, and locks with larger forends and strike plates.</p>
<b>Intumescent Protection &amp; Conclusion:</b>	<p>As per Annex A, fire assessment 154302 issue 3 deemed LFB2 Fire Brigade Lock as suitable for consideration for use on 30 and 60 minute doorsets</p> <p>*Annex A lists intumescent mastic for 30 minutes, and Interdens material for 60 minutes,</p> <p>**Door leaf thickness – 54mm minimum with minimum 4mm thick non-combustible mineral board sub-facings (60 minutes)</p> <p>Following the inclusion of 0.8mm intercalated graphite sheet into Certifire Certificate CF611, to be used in place of all previously tested intumescent paste/materials, the use of 0.8mm intercalated sheet with the LFB2 lock can be considered.</p> <p>FS318 intercalated graphite, 0.8mm thick is the material used for all subsequent fire testing by Carlisle Brass.</p> <p>The product reference for the kit to suit LFB2 Fire Brigade lock is ES1275</p> <p>The 0.8mm sheet wrap around the lock body, and behind the lock forend and strike plate.</p>
<p>* Refer to Annex A on following page</p>	

<p>Signed for and on behalf of Carlisle Brass Ltd by:</p> 	<p>Mr Paul Campbell Technical Manager</p> <p>Date of re-issue: 21<sup>st</sup> December 2021</p>
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## Annex A

Lock Reference	Description
EDB5025/CT/PVD*	Euro Profile BS8621 Cylinder/Turn Deadlock (Complete)
EDB5025/CT/SSS*	Euro Profile BS8621 Cylinder/Turn Deadlock (Complete)
EDB5025PVD*	Euro Profile BS3621 Double Cylinder Deadlock (Complete)
EDB5025SSS*	Euro Profile BS3621 Double Cylinder Deadlock (Complete)
EDB5030/CT/PVD*	Euro Profile BS8621 Cylinder/Turn Deadlock (Complete)
EDB5030/CT/SSS*	Euro Profile BS8621 Cylinder/Turn Deadlock (Complete)
EDB5030PVD*	Euro Profile BS3621 Double Cylinder Deadlock (Complete)
EDB5030SSS*	Euro Profile BS3621 Double Cylinder Deadlock (Complete)
ESB5025/CT/PVD	Euro Profile BS8621 Cylinder/Turn Sashlock (Complete)
ESB5025/CT/SSS	Euro Profile BS8621 Cylinder/Turn Sashlock (Complete)
ESB5025PVD	Euro Profile BS3621 Double Cylinder Sashlock (Complete)
ESB5025SSS	Euro Profile BS3621 Double Cylinder Sashlock (Complete)
ESB5030/CT/PVD	Euro Profile BS8621 Cylinder/Turn Sashlock (Complete)
ESB5030/CT/SSS	Euro Profile BS8621 Cylinder/Turn Sashlock (Complete)
ESB5030PVD	Euro Profile BS3621 Double Cylinder Sashlock (Complete)
ESB5030SSS	Euro Profile BS3621 Double Cylinder Sashlock (Complete)
LDB5525PVD*	5 Lever Deadlock BS 2.5"
LDB5525SSS*	5 Lever Deadlock BS 2.5"
LDB5530PVD*	5 Lever Deadlock BS 3"
LDB5530SSS*	5 Lever Deadlock BS 3"
LSB5525PVD	5 Lever Deadlock BS 2.5"
LSB5525SSS	5 Lever Deadlock BS 2.5"
LSB5530PVD	5 Lever Deadlock BS 3"
LSB5530SSS	5 Lever Deadlock BS 2.5"
LFB2SSS*	Fire Brigade Lock
DLE0055EPPVD	DIN Euro Deadlock 55 mm - Contract
DLE0055EPPVD/R	DIN Euro Deadlock 55 mm - Contract - RADIUS
DLE0055EPSSS	DIN Euro Deadlock 55 mm - Contract
DLE0055EPSSS/R	DIN Euro Deadlock 55 mm - Contract - RADIUS
DLE0055LPVD	DIN Latch 55 mm - Contract
DLE0055LPVD/R	DIN Latch 55 mm - Contract - RADIUS
DLE0055LSSS	DIN Latch 55 mm - Contract
DLE0055LSSS/R	DIN Latch 55 mm - Contract - RADIUS
DLE7255EPPVD	DIN Euro Sashlock 55 mm - Contract
DLE7255EPPVD/R	DIN Euro Sashlock 55 mm - Contract - RADIUS
DLE7255EPSSS	DIN Euro Sashlock 55 mm - Contract
DLE7255EPSSS/R	DIN Euro Sashlock 55 mm - Contract - RADIUS
DLE7255NLPVD	DIN Euro Nightlatch 55 mm - Contract
DLE7255NLPVD/R	DIN Euro Nightlatch 55 mm - Contract - RADIUS
DLE7255NLSSS	DIN Euro Nightlatch 55 mm - Contract
DLE7255NLSSS/R	DIN Euro Nightlatch 55 mm - Contract - RADIUS
DLE7855WCPVD	DIN Bathroom Lock 55 mm - Contract
DLE7855WCPVD/R	DIN Bathroom Lock 55 mm - Contract - RADIUS
DLE7855WCSSS	DIN Bathroom Lock 55 mm - Contract
DLE7855WCSSS/R	DIN Bathroom Lock 55 mm - Contract - RADIUS
DLS0060EPSSS	DIN Euro Deadlock 60 mm - Security
DLS0060LSSS	DIN Latch 60 mm - Security
DLS7260EPSSS	DIN Euro Sashlock 60 mm - Security
DLS7260NLSSS	DIN Euro Nightlatch 55 mm - Security
DLS7260NLA	DIN Euro Nightlatch 60 mm

\* Bedded upon intumescent mastic only for FD30