



CERTIFICATE OF APPROVAL

No CF 242

This is to certify that, in accordance with
TS00 General Requirements for Certification of Fire Protection Products
The undermentioned products of

GEZE UK LIMITED

Blenheim Way, Fradley Park, Lichfield, WS13 8SY
Tel: 01543 443000 Fax: 01543 443021

Have been assessed against the requirements of the Technical Schedule(s)
denoted below and are approved for use subject to the conditions
appended hereto:

CERTIFIED PRODUCT

GEZE 'Boxer' Concealed
Overhead Door Closers

TECHNICAL SCHEDULE

TS 34 - The Contribution Of
Controlled Door Closing
Devices And Accessories To
Fire Resisting Doorsets

Signed and sealed for and on behalf of Warringtonfire Testing and Certification Limited

Paul Duggan
Certification Manager



Issued: 9th October 2002
Revised: 9th March 2021
Valid to: 11th May 2022

Page 1 of 14



CERTIFICATE No CF 242 GEZE UK LIMITED

GEZE 'BOXER' CONCEALED OVERHEAD DOOR CLOSERS

1. This certification is provided to the client for its own purposes and we cannot opine on whether it will be accepted by Building Control authorities or any other third parties for any purpose.
2. This approval relates to GEZE 'Boxer' concealed overhead mounted door closing devices, with adjustable power. The closers include an external power adjustment and a slide arm channel of maximum length 457mm. The approval applies to the following configurations:

	<i>Boxer 2-4</i>	<i>Boxer 3-6</i>	<i>Boxer EFS</i>	<i>Boxer E</i>
Single-action	✓	✓	✓	✓
Double-action	✓*	✗	✗	✓*
Body door mounted in top edge	✓	✓	✓	✓
Body transom mounted	✓	✓	✓	✗

Key: ✓ - approved ✗ - Not approved

**Only the 'Boxer 2-4 and Boxer E 2-4' are approved in double-acting configuration on ITT 30 and 60 doorsets.*

3. The closer is approved on the basis of:
 - i) Initial type testing to EN1154 and BS EN 1634-1.
 - ii) An appraisal against TS34
 - iii) Inspection of quality management system
 - iv) Inspection and surveillance of factory production control
 - v) Ongoing audit testing in accordance with EN 1154 requirements
4. This approval is applicable only to the specified closers used with door assemblies of proven fire resistance (as defined in BS 476: Part 22 and EN 1634-1) and having power ratings appropriate to the leaf sizes subject to a minimum size 3 (as specified in BS EN 1154) and including the manufacturer's supplied intumescent protection kit. Failure to install the intumescent protection identified in section 11-14 will invalidate this certificate.
5. Where the closers are fitted to door leaves or frames that are manufactured from mineral composite-based materials, or low-density cellulosic-based material, the door assembly shall have previously been shown capable of accommodating the installation of closers at the head of the doorset, without detriment to the door assembly's performance.





CERTIFICATE No CF 242

GEZE UK LIMITED

GEZE 'BOXER' CONCEALED OVERHEAD DOOR CLOSERS

6. This approval relates to their use with the following door assemblies subject to the specific limitations identified in this certificate:-

Latched or unlatched, intumescent sealed door assemblies consisting of timber faced and edged leaves with timber, cellulosic or mineral cores in timber frames having a fire resistance up to 30 minutes (Code ITT).

Latched or unlatched, intumescent sealed door assemblies consisting of timber faced and edged leaves with timber, cellulosic or mineral cores (having calcium silicate sub facings where identified) into hardwood timber frames and having a fire resistance of 60 minutes (Code ITT).

Latched or unlatched, door assemblies consisting of steel faced and edged leaves with mineral fibre or paper honeycomb cores in steel frames having a fire resistance up to 240 minutes (Code MM and IMM).

Latched and unlatched, intumescent sealed door assemblies consisting of timber faced and edged leaves with timber, cellulosic or mineral cores in steel frames having a fire resistance up to 30 minutes (Code ITM).

Latched and unlatched, intumescent sealed door assemblies consisting of timber faced and edged leaves with timber, cellulosic or mineral cores and having calcium silicate sub facings (for EI doors only) in steel frames having a fire resistance of 60 minutes (Code ITM).

Latched and unlatched, door assemblies consisting of non-metallic faced and edged leaves proprietary composite frames, of which the principal material is other than timber or metal, but may include other materials having a fire resistance up to 60 minutes (Codes ITC).

7. The closer shall only be fitted to ITT, MM or IMM doorsets which have previously been shown capable of accommodating the installation of similar concealed closers at the head of the doorset, without detriment to the doorset's performance.
8. Where the concealed closers are to be used with **ITM or ITC** doorsets, the closer shall only be fitted to doorsets incorporating the specific timber door leaf and associated steel frame or specific composite frame, which have previously been shown capable of accommodating the installation of similar concealed closers at the head of the doorset, without detriment to the doorset's performance.



CERTIFICATE No CF 242

GEZE UK LIMITED

GEZE 'BOXER' CONCEALED OVERHEAD DOOR CLOSERS

9. The closers shall be fixed with screws supplied by the closer manufacturer.
10. The approval relates to on-going production. Product and/or its immediate packaging is identified with the manufacturer's name, the product name or number, the CERTIFIRE name or name and mark, together with the CERTIFIRE certificate number and application where appropriate
11. This approval relates to the above closers used with latched or unlatched, single-leaf or double-leaf **ITT** assemblies consisting of timber faced and edged leaves with timber, cellulosic or mineral cores and in timber frames:
 - a. 'Boxer 2-4' and 'Boxer E 2-4' closers with the bodies mounted in the door leaf
Approved for FD20, E20, or EI20, FD30, E30 or EI30 single-action and double-action doorsets of the following specification (Code ITT):
 - i. Door leaves shall not less than 44 mm thick doors.
 - ii. The door frame shall consist of softwood or hardwood with a minimum density of 510 kg/m³ and with a minimum section size 73 mm wide by 34 mm thick (excluding any doorstops).
 - iii. The closer shall be fitted with intumescent protection in the form of a minimum of 1 mm thickness of Interdens mono ammonium phosphate sheet material, fully lining the mortices cut into the top edge of the door leaf and frame head member to accommodate the closer body and guide channel assembly. The intumescent protection shall be provided only by the manufacturer and referenced within the manufacturer's product data sheet
 - iv. Geze top centres and bottom straps used in double-action applications shall incorporate intumescent protection in the form of a minimum of 2 mm thickness of Interdens mono ammonium phosphate sheet material, fully lining the mortices cut into the top/bottom edge of the door leaf and frame head member.



CERTIFICATE No CF 242

GEZE UK LIMITED

GEZE 'BOXER' CONCEALED OVERHEAD DOOR CLOSERS

- b. 'Boxer 2-4' and 'Boxer E 2-4' closers with the bodies mounted in the door leaf
Approved for FD60, E60 or EI60 single-action and double-action doorsets of the following specification (Code ITT):
- i. Door leaves shall not less than 54 mm thick doors.
 - ii. The door frame shall consist of hardwood with a minimum density of 640 kg/m³ with a minimum section size 94 mm wide by 34 mm thick (excluding any doorstops).
 - iii. The closer shall be fitted with intumescent protection in the form of a minimum of 1 mm thickness of Interdens mono ammonium phosphate sheet material, fully lining the mortices cut into the top edge of the door leaf and frame head member to accommodate the closer body and guide channel assembly. The intumescent protection shall be provided only by the manufacturer and referenced within the manufacturer's product data sheet
 - iv. Geze top centres and bottom straps used in double-action applications shall incorporate intumescent protection in the form of a minimum of 2 mm thickness of Interdens mono ammonium phosphate sheet material, fully lining the mortices cut into the top/bottom edge of the door leaf and frame head member.
- c. 'Boxer 3-6', 'Boxer EFS' and 'Boxer E 3-6' closers with the bodies mounted in the door leaf
Approved for FD60, E60 or EI60 single-action doorsets of the following specification (Code ITT):
- i. Door leaves shall not less than 54 mm thick doors.
 - ii. For EI 60 doors only, the leaf is to include a minimum 4.5 mm thick Masterclad of nominal density 1500 kg/m³, bonded to stiles, rails and core using a resorcinol type adhesive.
 - iii. The door frame shall consist of hardwood with a minimum density of 640 kg/m³ with a minimum section size 94 mm wide by 44 mm thick (excluding any doorstops).
 - iv. The closer shall be fitted with intumescent protection in the form of a minimum of 1 mm thickness of mono ammonium phosphate sheet material fully lining the mortices cut into the top edge of the door leaf and frame head member to accommodate the closer body and guide channel assembly (as below). The intumescent protection shall be provided only by the manufacturer and referenced within the manufacturer's product data sheet
 - v. In addition the perimeter intumescent fire seals within the door or frame shall by-pass the closer or guide rail by a minimum of 10mm on each side.

CERTIFICATE No CF 242 GEZE UK LIMITED

GEZE 'BOXER' CONCEALED OVERHEAD DOOR CLOSERS

- d. Transom mounted 'Boxer 2-4', 'Boxer 3-6' and 'Boxer EFS' closers
Approved for FD30, E30 and EI30 single acting doorsets of the following specification (Code ITT):
- i. Door leaves shall not less than 44 mm thick doors with a hardwood lipping to the top edge minimum 8 mm thick, 640 kg/m³ minimum density.
 - ii. The door frame shall consist of softwood or hardwood with a minimum density of 510 kg/m³ and with a minimum section size 80 mm wide by 65 mm thick (excluding any doorstops).
 - iii. Closer body and guide rail to be fitted intumescent protection in the form of a minimum of 2 mm thickness of mono ammonium phosphate sheet material fully lining the mortices cut into the top edge of the door leaf and frame head member to accommodate the closer body and guide channel assembly.
 - iv. EFS model wire ways in door frame to be sealed with suitable acrylic intumescent sealant.
- e. Transom mounted 'Boxer 2-4', 'Boxer 3-6' and 'Boxer EFS' closers
Approved FD60, E60 or EI60 single-acting doorsets of the following specification (Code ITT):
- i. Door leaves shall not less than 54 mm thick doors with a hardwood lipping to the top edge minimum 8 mm thick, 640 kg/m³ minimum density.
 - ii. For E60 & EI 60 doors only, the leaf is to include a minimum 4.5 mm thick Masterclad of nominal density 1500 kg/m³, bonded to stiles, rails and core using a resorcinol type adhesive.
 - iii. The door frame shall consist of softwood or hardwood with a minimum density of 640 kg/m³ and with a minimum section size 80 mm wide by 65 mm thick (excluding any doorstops).
 - iv. Closer body and guide rail to be fitted intumescent protection in the form of a minimum of 2 mm thickness of mono ammonium phosphate sheet material fully lining the mortices cut into the top edge of the door leaf and frame head member to accommodate the closer body and guide channel assembly.
 - v. In addition the perimeter intumescent fire seals within the door or frame shall by-pass the closer or guide rail by a minimum of 10mm on each side.
 - vi. EFS model wire ways in door frame to be sealed with suitable acrylic intumescent sealant.

Note: Failure to install the intumescent protection identified in the configurations above will invalidate this certificate.





CERTIFICATE No CF 242

GEZE UK LIMITED

GEZE 'BOXER' CONCEALED OVERHEAD DOOR CLOSERS

12. This approval relates to the above closers used with latched or unlatched, single-leaf or double-leaf **MM and IMM** assemblies consisting of metallic leaves in metallic frames that may or may not contain intumescent materials in the frame to leaf gap:

- a. 'Boxer 2-4', 'Boxer 3-6', 'Boxer EFS' and 'Boxer E' closers with the bodies mounted in the door leaf

Approved for FD30, FD60, FD90, FD120, FD240, E30, E60, E90 and E120 single-action doorsets of the following specification (Code MM/IMM):

- vii. Door leaves shall not less than 45 mm thick doors.
- viii. No additional intumescent protection is required

13. This approval relates to the above closers used with latched or unlatched, single-leaf or double-leaf **ITM** assemblies containing intumescent seals and consisting of non-metallic faced and edged leaves hung in metal frames:

- a. 'Boxer 2-4' and 'Boxer E 2-4' closers with the bodies mounted in the door leaf

Approved for FD20, E20, or EI20, FD30, E30 or EI30 single-action and double-action doorsets of the following specification (Code ITM):

- i. Door leaves shall not less than 44 mm thick doors.
- ii. The door frame shall be of profiled steel.
- iii. The closer shall be fitted with intumescent protection the form of a minimum of 1 mm thickness of Interdens mono ammonium phosphate sheet material, fully lining the mortices cut into the top edge of the door leaf to accommodate the closer body. The intumescent protection shall be provided only by the manufacturer and referenced within the manufacturer's product data sheet.
- iv. Intumescent protection to the guide rail within the frame shall be identical in type, thickness and location to that tested as part of the original concealed door closers testing undertaken by the doorset manufacturer. Where no additional intumescent protection was included, there is no requirement to include it here.
- i. Geze top centres and bottom straps used in double-action applications shall incorporate intumescent protection in the form of a minimum of 2 mm thickness of Interdens mono ammonium phosphate sheet material, fully lining the mortices cut into the top/bottom edge of the door leaf.



CERTIFICATE No CF 242

GEZE UK LIMITED

GEZE 'BOXER' CONCEALED OVERHEAD DOOR CLOSERS

- b. 'Boxer 2-4' and 'Boxer E 2-4' closers with the bodies mounted in the door leaf
Approved for FD60, E60 or EI60 single-action and double-action doorsets of the following specification (Code ITM):
- i. Door leaves shall not less than 54 mm thick doors.
 - ii. The door frame shall be of profiled steel.
 - iii. The closer shall be fitted with intumescent protection in the form of a minimum of 1 mm thickness of Interdens mono ammonium phosphate sheet material, fully lining the mortices cut into the top edge of the door leaf to accommodate the closer body. The intumescent protection shall be provided only by the manufacturer and referenced within the manufacturer's product data sheet
 - iv. Intumescent protection to the guide rail within the frame shall be identical in type, thickness and location to that tested as part of the original concealed door closers testing undertaken by the doorset manufacturer. Where no additional intumescent protection was included, there is no requirement to include it here.
 - ii. Geze top centres and bottom straps used in double-action applications shall incorporate intumescent protection in the form of a minimum of 2 mm thickness of Interdens mono ammonium phosphate sheet material, fully lining the mortices cut into the top/bottom edge of the door leaf.
- c. 'Boxer 3-6', 'Boxer EFS' and 'Boxer E 3-6' closers with the bodies mounted in the door leaf
Approved for FD60 or EI60 single-action doorsets of the following specification (Code ITM):
- i. Door leaves shall not less than 54 mm thick doors.
 - ii. For EI 60 doors only, the leaf is to include a minimum 4.5 mm thick Masterclad of nominal density 1500 kg/m³, bonded to stiles, rails and core using a resorcinol type adhesive.
 - iii. The door frame shall be of profiled steel.
 - iv. The closer shall be fitted with intumescent protection in the form of a minimum of 1 mm thickness of mono ammonium phosphate sheet material fully lining the mortices cut into the top edge of the door leaf to accommodate the closer body. The intumescent protection shall be provided only by the manufacturer and referenced within the manufacturer's product data sheet.
 - v. In addition the perimeter intumescent seals within the door or frame shall by-pass the closer or guide rail by a minimum of 10mm on each side.
 - vi. Intumescent protection to the guide rail within the frame shall be identical in type, thickness and location to that tested as part of the original concealed door closers testing undertaken by the doorset manufacturer. Where no additional intumescent protection was included, there is no requirement to include it here.

CERTIFICATE No CF 242 GEZE UK LIMITED

14. This approval relates to the above closers used with latched or unlatched, single-leaf or double-leaf **ITC** assemblies containing intumescent seals and consisting of non-metallic faced and edged leaves hung in in proprietary composite frames, of which the principal material is other than timber or metal but which may include any other materials:

- a. 'Boxer 2-4' and 'Boxer E 2-4' closers with the bodies mounted in the door leaf
Approved for FD20, E20, or EI20, FD30, E30 or EI30 single-action doorsets of the following specification (Code ITC):
 - i. Door leaves shall not less than 44 mm thick doors.
 - ii. The door frame shall be a previously proven composite frame.
 - iii. The closer shall be fitted with intumescent protection in the form of a minimum of 1 mm thickness of Interdens mono ammonium phosphate sheet material, fully lining the mortices cut into the top edge of the door leaf to accommodate the closer body. The intumescent protection shall be provided only by the manufacturer and referenced within the manufacturer's product data sheet
 - iv. Intumescent protection to the guide rail within the frame shall be identical in type, thickness and location to that tested as part of the original concealed door closers testing undertaken by the doorset manufacturer. Where no additional intumescent protection was included, there is no requirement to include it here.

- b. 'Boxer 2-4' and 'Boxer E 2-4' closers with the bodies mounted in the door leaf
Approved for FD60, E60 or EI60 single-action doorsets of the following specification (Code ITC):
 - i. Door leaves shall not less than 54 mm thick doors.
 - ii. The door frame shall be a previously proven composite frame.
 - iii. The closer shall be fitted with intumescent protection in the form of a minimum of 1 mm thickness of Interdens mono ammonium phosphate sheet material, fully lining the mortices cut into the top edge of the door leaf to accommodate the closer body. The intumescent protection shall be provided only by the manufacturer and referenced within the manufacturer's product data sheet
 - iv. Intumescent protection to the guide rail within the frame shall be identical in type, thickness and location to that tested as part of the original concealed door closers testing undertaken by the doorset manufacturer. Where no additional intumescent protection was included, there is no requirement to include it here.





CERTIFICATE No CF 242

GEZE UK LIMITED

GEZE 'BOXER' CONCEALED OVERHEAD DOOR CLOSERS

- c. 'Boxer 3-6', 'Boxer EFS' and 'Boxer E 3-6' closers with the bodies mounted in the door leaf

Approved for FD60 or EI60 single-action doorsets of the following specification (Code ITC):

- i. Door leaves shall not less than 54 mm thick doors.
- ii. For EI 60 doors only, the leaf is to include a minimum 4.5 mm thick Masterclad of nominal density 1500 kg/m^3 , bonded to stiles, rails and core using a resorcinol type adhesive.
- iii. The door frame shall be a previously proven composite frame.
- iv. The closer shall be fitted with intumescent protection in the form of a minimum of 1 mm thickness of mono ammonium phosphate sheet material fully lining the mortices cut into the top edge of the door leaf to accommodate the closer body. The intumescent protection shall be provided only by the manufacturer and referenced within the manufacturer's product data sheet
- v. In addition the perimeter intumescent fire seals within the door or frame shall by-pass the closer or guide rail by a minimum of 10mm on each side.
- v. Intumescent protection to the guide rail within the frame shall be identical in type, thickness and location to that tested as part of the original concealed door closers testing undertaken by the doorset manufacturer. Where no additional intumescent protection was included, there is no requirement to include it here.

CERTIFICATE No CF 242 GEZE UK LIMITED

GEZE 'BOXER' CONCEALED OVERHEAD DOOR CLOSERS

15. The following table shows acceptable doorset types and fire resistance periods:

Class	Approved Door Type				
	IMM	MM	ITT	ITM	ITC
FD20	✓	✓	✓	✓	✓
FD30	✓	✓	✓	✓	✓
FD60	✓	✓	✓	✓	✓
FD120	✓	✓	x	x	x
FD240	✓	✓	x	x	x
E 20	✓	✓	x	x	x
EI 20	x	x	x	x	x
E 30	✓	✓	x	x	x
EI 30	x	x	✓	x	x
E 60	✓	✓	x	x	x
EI 60	x	x	✓	✓	x
E 90	✓	✓	x	x	x
EI 90	x	x	x	x	x
E 120	✓	✓	x	x	x
EI 120	x	x	x	x	x
E 240	✓	✓	x	x	x
EI 240	x	x	x	x	x

Key:

- ✓ - approved
- x - Not approved

Please Note, not all closers are available in all approved doorsets types listed above. Please refer to section 11-14 above for the specific approval of each closer type, application and doorset type.



CERTIFICATE No CF 242 GEZE UK LIMITED

GEZE 'BOXER' CONCEALED OVERHEAD DOOR CLOSERS

16. Doors are classified as the following types:

Code ITT - 20 minute to 120 minute doorsets containing intumescent seals and consisting of timber faced and edged leaves with timber, cellulosic or mineral cores, hung in timber-based frames.

Code ITM - 20 minute to 120 minute doorsets containing intumescent seals and consisting of timber faced and edged leaves with timber, cellulosic or mineral cores, hung in steel frames.

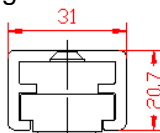
Code ITC - 20 minute to 120 minute doorsets containing intumescent seals and consisting of timber faced and edged leaves with timber, cellulosic or mineral cores, hung in proprietary composite frames, of which the principal material is other than timber or metal but which may include any other materials.

Code MM - 20 to 240 minute doorsets consisting of uninsulated or insulated predominantly steel leaves, hung in steel frames without intumescent seals.

Code IMM - 20 to 240 minute doorsets consisting of uninsulated or insulated predominantly steel leaves, hung in steel frames with intumescent seals.

Scope of Approval:

- The closers may not be fitted to timber doorsets without leaf/frame edge intumescent protection.
- Concealed overhead closers and their guide channel shall only be fitted in conjunction with the intumescent protection detailed previously in this certificate.
- Concealed overhead closers shall only be fitted to doorsets which have previously been shown capable of accommodating the installation of similar concealed items at the head of the doorset, without detriment to the doorset's performance.
- The following specific guide channels are approved for use with the Boxer closers:
 - Non-hold open single-action guiderail for Boxer with lever arm 31 x 21 mm
 - Non-hold open double-action guide rail for Boxer with lever arm 31 x 21 mm

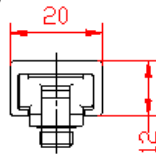


CERTIFICATE No CF 242 GEZE UK LIMITED

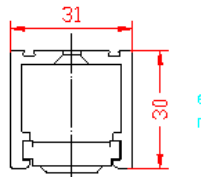
GEZE 'BOXER' CONCEALED OVERHEAD DOOR CLOSERS

Scope of Approval - continued:

- Non-hold open single-action guiderail for Boxer with lever arm 20 x 12mm
- Non-hold open double-action guiderail for Boxer with lever arm 20 x 12mm



- 'E' electrical hold-open, single-action and double-action guide rail for Boxer 'E' with lever arm 31 x 30 mm



- Double action doors shall be mounted on the Geze Type B 06371 or Type C 06666 Upper Pivots, Type C 07432 Bottom Strap and '109621 TS137a' floor pivot.
- In ITT double-action applications the Geze top centres and bottom straps shall incorporate intumescent protection in the form of a minimum of 2 mm thickness of Interdens mono ammonium phosphate sheet material, fully lining the mortices cut into the top/bottom edge of the door leaf and the frame head.
- In ITM double-action applications the Geze top centres and bottom straps shall incorporate intumescent protection in the form of a minimum of 2 mm thickness of Interdens mono ammonium phosphate sheet material, fully lining the mortices cut into the top/bottom edge of the door leaf.

Classification codes

The above approval provides the following classifications:

'Boxer 2-4' and 'Boxer E 2-4' – Maximum leaf weight 130 kg (Single-acting Applications):

3	8	4 3	1	1	4
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CERTIFICATE No CF 242 GEZE UK LIMITED

GEZE 'BOXER' CONCEALED OVERHEAD DOOR CLOSERS

Classification codes Cont'd:

'Boxer 3-6' and 'Boxer E 3-6' – Maximum leaf weight 180 kg (Single-acting Applications):

3	8	6 3	1	1	4
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'Boxer 2-4' and 'Boxer E 2-4' – Maximum leaf weight 130 kg (Double-acting Applications):

3	8	3	1	1	1
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'Boxer EFS' – Maximum leaf weight 180 kg (Single-acting Applications):

3	8	6 4	1	1	3
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Further Information

Further information regarding the details contained in this data sheet may be obtained from GEZE UK (Tel: 01543 443000).

Further information regarding the CERTIFIRE certification and other approved products can be obtained from CERTIFIRE (Tel: 01925 646777).