



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

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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 PRODUCTS

GEZE 'Boxer 2-4', 'Boxer 3-6' and 'Boxer EFS' **Concealed Overhead Door** Closers

TECHNICAL SCHEDULE

TS34 The Contribution of Controlled Door Closing Devices and Accessories to Fire Resisting Doorsets

Signed and sealed for and on behalf of CERTIFIRE

Sir Ken Knight

Chairman - Management Council

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Issued: 9th October 2002 Revised: 31st July 2012

Valid to: 15th December 2016









GEZE 'BOXER 2-4', 'BOXER 3-6' AND 'BOXER EFS' CONCEALED OVERHEAD DOOR CLOSERS

- 1. This approval relates to GEZE 'Boxer 2-4', 'Boxer 3-6' and 'Boxer EFS' which are 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.
- 2. This certification is designed to demonstrate compliance of the product or system specifically with Approved Document B (England and Wales), Section D of the Technical Standards (Scotland) and Technical Booklet E (N. Ireland). If compliance is required to other regulatory or guidance documents there may be additional considerations or conflict to be taken into account.
- 3. This approval relates to their use with the following door assemblies:-

Single and double acting, 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).

Single and double acting, latched or 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 El doors only) into hardwood timber frames and having a fire resistance of 60 minutes (Code ITT).

Single and double acting, latched or unlatched, door assemblies consisting of metallic faced and edged leaves with mineral fibre or paper honeycomb cores in metal 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 El doors only) in steel frames having a fire resistance of 60 minutes (Code ITM).

Note: only Boxer 2-4 closer is approved in double-acting configuration.

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GEZE 'BOXER 2-4', 'BOXER 3-6' AND 'BOXER EFS' CONCEALED OVERHEAD DOOR CLOSERS

- 4. The closers are approved on the basis of:
 - i) Initial type testing to EN1154, BS EN 1634-1: 2000 and BS 476: Part 22
 - ii) An appraisal against TS34
 - iii) Certification of quality management system to ISO 9001: 2008.
 - iv) Inspection and surveillance of factory production control
 - v) Ongoing audit testing in accordance with EN 1154 requirements
- 5. 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 supply and install the manufacturer's intumescent protection kit in the appropriate manner will invalidate this certificate of approval. Additional intumescent frame or door edge protection may also be needed, see notes in the individual sections.
- 6. 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

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GEZE 'BOXER 2-4', 'BOXER 3-6' AND 'BOXER EFS' CONCEALED OVERHEAD DOOR CLOSERS

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

	Approved Door Type						
Class	IMM	MM	TT	ITT	ITM	ITC	
FD20	✓	✓	×	✓	✓	✓	
FD30	✓	✓	×	✓	✓	✓	
FD60	✓	✓	×	✓	✓	✓	
FD120	✓	✓	×	*	×	*	
FD240	✓	✓	×	*	×	*	
E 20	✓	✓	×	×	×	×	
El 20	×	×	×	*	×	×	
E 30	✓	✓	×	×	×	×	
El 30	×	×	×	√ *	×	×	
E 60	✓	✓	×	×	×	×	
EI 60	×	×	×	✓	✓	×	
E 90	✓	✓	×	×	×	×	
El 90	×	×	×	×	×	×	
E 120	✓	✓	×	×	×	×	
El 120	×	×	×	×	×	×	
E 240	✓	✓	×	×	×	×	
El 240	×	×	×	×	×	×	

See CERTIFIRE Technical Schedules for designation of doorset types i.e. ITT etc.

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^{*} Applies to transom mounted units in single action doorsets only.





GEZE 'BOXER 2-4', 'BOXER 3-6' AND 'BOXER EFS' CONCEALED OVERHEAD DOOR CLOSERS

Scope of Approval:

For timber based doorsets and the door leaves of ITM type doorsets, the concealed closers shall be bedded upon 1mm-thick Interdens to all sides which shall be provided only by the manufacturer and referenced within the manufacturer's product data sheet. Additional intumescent door edge or frame protection may also be needed (see Note 1* and Note 2* below).

FD20 and FD30 timber based ITT doorsets*

Boxer 2-4 closers are approved for FD20 & FD30 single and double acting doorsets of the following specification:

• Leaf of 45 mm thick minimum mounted into a door frame of softwood timber, minimum density 500 kg/m³ and with a minimum section size 94 mm deep by 43 mm high.

FD60 and El60 timber based ITT doorsets*

Boxer 2-4 closers are approved for FD60 or El60 single and double acting doorsets and Boxer 3-6 and Boxer EFS closers are approved for FD60 or El60 single acting doorsets of the following specification:

• Leaf of 54 mm thick minimum mounted into a door frame of hardwood timber, minimum density 650 kg/m³ nominal and with a minimum section size 94 mm deep by 44 mm high. For El doors only, the leaf is to include 4.5 mm thick Masterclad of nominal density 1500 kg/m³, bonded to stiles, rails and core using a resorcinol type adhesive.

*NOTE1: as the installation of concealed closers and top track components will usually necessitate the removal of door edge or frame seals (which are typically installed within the leaf edge or frame reveal), such seals must normally be reinstated in order for the leaf edge to be suitably protected and sealed under fire test conditions. This requirement is valid for both 30 minute and 60 minute door applications. One solution is to include additional 10mm x 4mm Palusol intumescent seals, rebated into the frame to either side of the top track component for the full length of the top track for double action configurations, and a single 10mm x 4mm Paulsol intumescent seal rebated into the frame to the non-stop side of the top track component for single action rebated frames. Other sealing solutions may be suitable and depending upon the door construction, along with the test evidence/approval available for the fire resisting doorset, other intumescent protection methods may be acceptable. The doorset manufacturer must always be consulted regarding the specification of any additional intumescent protection and to ensure the compatibility of the concealed closer with the doorset design.

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GEZE 'BOXER 2-4', 'BOXER 3-6' AND 'BOXER EFS' CONCEALED OVERHEAD DOOR CLOSERS

Scope of Approval (continued):

FD30, El30 timber based ITT doorsets - transom mounted units*

Transom mounted Boxer 2-4, 3-6 and EFS closers are approved for FD30 and EI30 single acting doorsets of the following specification:

- Leaf of 45 mm thick minimum with a hardwood lipping to the top edge minimum 8 mm thick,
 640 kgm/³ minimum density.
- Door frame of softwood timber, minimum density 500 kg/m³ nominal and with a minimum head section size 80 mm deep by 65 mm high (inclusive of rebate).
- Closer body and guide rail to be fitted with Geze intumescent Fire Pack 2 Part.
- EFS model wire ways in door frame to be sealed with suitable acrylic intumescent sealant.

FD60 and El60 timber based ITT doorsets - transom mounted units*

Transom mounted Boxer 2-4, 3-6 and Boxer EFS closers are approved for FD60 or El60 single acting doorsets of the following specification:

- Leaf of 54 mm thick minimum with a hardwood lipping to the top edge minimum 8 mm thick, 640 kgm/³ minimum density.
- Door frame of hardwood timber, minimum density 650 kg/m³ nominal and with a minimum head section size 80 mm deep by 80mm high (inclusive of rebate). For El doors only, the leaf is to include 4.5 mm thick Masterclad of nominal density 1500 kg/m³, bonded to stiles, rails and core using a resorcinol type adhesive.
- Closer body and guide rail to be fitted with Geze intumescent Fire Pack 2 Part.
- EFS model wire ways in door frame to be sealed with suitable acrylic intumescent sealant.

*The doorset manufacturer must always be consulted regarding the specification of any intumescent protection that may be required in addition to the closer manufacturer's intumescent kit, and to ensure the compatibility of the concealed closer with the doorset design.

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GEZE 'BOXER 2-4', 'BOXER 3-6' AND 'BOXER EFS' CONCEALED OVERHEAD DOOR CLOSERS

Scope of Approval (continued):

FD20 and FD30 ITM type doorsets*

Boxer 2-4 closers are approved for FD20 & FD30 single and double acting doorsets incorporating a door leaf having a minimum thickness of 45 mm.

FD60 and El60 ITM type doorsets*

Boxer 2-4 closers are approved for FD60 or El60 single and double acting doorsets and Boxer 3-6 and Boxer EFS closers are approved for FD60 or El60 single acting doorsets of the following specification:

- Leaf of 54mm minimum thickness.
- For El60 doors only, the leaf is to include 4.5 mm thick Masterclad of nominal density 1500 kg/m³, bonded to stiles, rails and core using a resorcinol type adhesive.

*NOTE2:

All installations must include the manufacturer's supplied intumescent protection kit (door leaf only), additional intumescent protection may be required. The doorset manufacturer must always be consulted regarding the specification of additional intumescent protection and to ensure the compatibility of the concealed closer with the doorset design.

As the installation of concealed closers and top track components will usually necessitate the removal of door edge or frame mounted seals (which are typically installed within the leaf edge or frame reveal), such seals must normally be reinstated in order for the leaf edge to be suitably protected and sealed under fire test conditions. This requirement is valid for both 30 minute and 60 minute door applications. One solution is to include additional 10mm x 4mm Palusol intumescent seals, mounted into the frame to either side of the top track component for the full length of the top track for double action configurations, and a single 10mm x 4mm Paulsol intumescent seal mounted into the frame to the non-stop side of the top track component for single action rebated frames. Other sealing solutions may be suitable and depending upon the door construction, along with the test evidence/approval available for the fire resisting doorset, other intumescent protection methods may be acceptable.

240 minute steel based MM/IMM doorsets

Boxer 2-4 closers are approved for single and double acting doorsets of up to 240 minutes integrity. Boxer 3-6 and Boxer EFS closers are approved for single acting doorsets of up to 240 minutes integrity.

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GEZE 'BOXER 2-4', 'BOXER 3-6' AND 'BOXER EFS' CONCEALED OVERHEAD DOOR CLOSERS

Classification codes

The above approval provides the following classifications:

Boxer 2-4 – Maximum leaf weight 130 kg (Single-acting Applications)

3 8	4 3	1	1	4
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Boxer 3-6 – Maximum leaf weight 180 kg (Single-acting Applications)

3	8	6	1	1	4
		3			

Boxer 2-4 – Maximum leaf weight 130 kg (Double-acting Applications)

3	8	3	1	1	1

Boxer EFS – Maximum leaf weight 180 kg (Single-acting Applications)

3 8 4 1 1 3		3	8	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).

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