

# FIRE SAFETY CERTIFICATION

## PRODUCT APPROVAL

No. **APF-1817**

**LGAI TECHNOLOGICAL CENTER S.A. (APPLUS)**, according to the requirements of the SPC-102 Ed. 5, certifies the performances stated in the technical annex following the reference standard for:

<b>Product range</b>	<b>FIRE CURTAIN FM1 &amp; FIRE CURTAIN FMB</b> "FIRE CURTAIN E" <small>(*) EN 13241:2003+A2:2016 INDUSTRIAL COMMERCIAL, GARAGE DOORS AND GATES. PRODUCT STANDARD, PERFORMANCE CHARACTERISTICS</small>
<b>Company</b>	<b>COLT INTERNATIONAL LICESING Ltd.</b> UNIT 12, THE BRIARS, WATERBERRY DRIVE, WATERLOOVILE HAMPSHIRE PO7 7YH, UNITED KINGDOM
<b>Manufactured</b>	<b>COLT INTERNATIONAL GmbH.</b> BRIENER STRASSE 186 47533 KLEVE, GERMANY
<b>Standard Reference</b>	EN 16034:2014 "Pedestrian doorsets, industrial, commercial, garage doors and openable windows. Product standard, performance characteristics. Fire resisting and/or smoke control characteristics".
<b>Product Details and Test Report</b>	Please check at the technical annex file and the range report nº 20/21957-485 and 20/22032-1221-1



(\*) This standard is not the subject of this certification; it is used only for clarification of the type of product to which the fire performances according to the standards specified in the clause Classification and testing standards are certified

**Renovation** of the initial certificate issued on 4<sup>th</sup> December 2020

**Valid until 31<sup>st</sup> May 2024**

Bellaterra, 21<sup>st</sup> April 2023

 LGAI Technological Center, S.A. <b>Xavier Ruiz Peña</b> Product Conformity B. U., Managing Director	
You can check the validity of this certificate on our website: <a href="http://www.appluslaboratories.com/certified_products">www.appluslaboratories.com/certified_products</a>	

This document is not valid without its technical annex, whose number coincides with the number of certificate.



## APF-1817

Annex according to **EN 16034:2014**

**PEDESTRIAN DOORSETS, INDUSTRIAL, COMMERCIAL, GARAGE DOORS AND OPENABLE WINDOWS.**  
 PRODUCT STANDARD, PERFORMANCE CHARACTERISTICS. FIRE RESISTING AND/OR SMOKE CONTROL  
 CHARACTERISTICS

### CERTIFIED PERFORMANCES

EN 16034:2014		
ESSENTIAL CHARACTERISTICS	CLAUSES IN THIS EUROPEAN STANDARD	MANDATED LEVEL(S) OR CLASS(ES)
Resistance to fire (for fire compartmentation uses)	4.1	E60 E 180 EW 20
Smoke control (only for applications where limitation of smoke spread is required)	4.2	NA
Ability to release	4.3	RELEASED
Self-closing (only for self-closing fire resistant and/or smoke control doorsets and /or openable windows)	4.4	C
Durability of ability to release	4.5.1	NA
Durability of self-closing (only for self- closing fire resistant and/or smoke control doorsets and/or openable windows) - against degradation (cycling testing) - against ageing (corrosion)	4.5.2.1	1 0
	4.5.2.2	NA

PASS; NPD = No Performance Determined; NA = Not Applicable

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### PRODUCT

#### Maximum free pass dimensions system

- Class E60 (Cloth 3200-2-SP):
  - Width (free pass):
    - Single barrel: up to 4m.
    - Double barrel: from 4m up to 14m with only 1 overlap.
  - Height (free pass): Up to 6.5m, in single and double barrel.
- Class EW20 / E90 (Cloth 4415-2-SP):
  - Width (free pass):
    - Single barrel: up to 4m.
    - Double barrel: from 4m up to 14m with only 1 overlap.
  - Height (free pass): Up to 6.5m, in single and double barrel.
- Class EW20 / E180 (Cloth 4415-2-SP):
  - Width (free pass):
    - Single barrel: up to 3m.
    - Double barrel: from 3m up to 14m with only 1 overlap.
  - Height (free pass): Up to 6.5m, in single and double barrel.

#### Steel head box housing:

- Single barrel system:
  - Option 1: reference "SI-N" supplied by COLT International GmbH; Dimensions (w x h) 155 mm x 150 mm; Fixation to supporting construction by means of two M8 anchor bolts fitting position.
  - Option 2: reference "SI-L" supplied by COLT International GmbH; Dimensions (w x h) 180 mm x 185 mm; Fixation to the supporting construction: by means of two M8 anchor bolts fitting position.
- Double barrel system:
  - Option vertical: reference "DV-L" supplied by COLT International GmbH; Dimensions (w x h) 180 mm x 300 mm; Fixation to supporting construction by means of two M8 anchor bolts per fitting position.
  - Option horizontal: reference "DH-L" supplied by COLT International GmbH; Dimensions (w x h) 300 mm x 185 mm; Fixation to supporting construction by means of two M8 anchor bolts per fitting position

In both cases, the steel head box housing shall include an intermediate bracket to stiffen and separate both curtains.

#### Barrels and technical fabric

- The barrels, where the technical fabric curtain is rolled, are made of galvanized steel sheets 2 mm thick rolled in order to create an Ø70 mm cylinder.
- The technical fabric used in the system could be:
  - Option 1:
    - Technical fabric with reference "4415-2-SP" supplied by Valmira.
    - **Classification: EW 20 / E180-C1**
  - Option 2:
    - Technical fabric with reference "3200-2-SP" supplied by Valmira.
    - **Classification: E 60**

For two curtain systems, a minimum overlapping of 480 mm.

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### Side guides

- The side guides consists in of
  - Base profile made of galvanized steel sheet 2,0 mm thick and
  - Two front profiles made of galvanized steel sheet 1,0 mm thick.
  - Fixed together with M5 bolts in order to generate the guiding profile.
- The system shall incorporate one of the following options as a side guides:
  - Option 1: Reference "FR"; This system fixes the technical fabric of the curtain with rollers inside the side guide, allowing the system to slide freely in the allowed direction and prevent it to slip out of the guides.
  - Option 2: Reference "FS"; This system fixes the technical fabric of the curtain by means of a sleeve placed around an galvanised steel rod inside the guide, allowing the system to slide freely in the allowed direction and prevent it to slip out of the guides.

The maximum height of the side guides will be restricted to the maximum height of the curtain.

### Bottom bar:

- The bottom bar configurations are all made of galvanized steel sheet 1,0 mm
- When the system incorporates FR side guide the following bottom bar configuration will be allowed:
  - "U" consists of steel profiles that were bolted together on either side of the fabric curtain. At the lower part of the fabric curtain a steel container was applied to hold the weight.
  - "UK" bottom bar; bolted together on either side of the fabric curtain. At the lower part of the fabric curtain a steel container was applied to hold the weight. Sliding the aluminium profile 50 mm x 5 mm on to the spring clips to close the gab underneath the steel head box (housing). SU-25 glider in continuously contact with the side guide profile.
- When the system incorporates FS side guide the following bottom bar configurations will be allowed:
  - ID bottom bar: Consists of a bent profile made of galvanized steel sheet, attached to the lower end of the technical fabric by means of rivets. The bottom bar has a fabric loop made of 3200-2-SP cloth in order to provide a seal between itself and the floor. This loop needs to be fitted within:
    - Option 1: Lying down configuration – 45 mm from the floor.
    - Option 2: Hanging configuration – 65 mm from the floor.