ADEXON

Fire curtains, *redefined*.

Vertical Fire Curtain Integrity (E)

Product Brochure



Snag-free fire curtains for commercial and high-rise construction

Vertical Fire Curtain - Integrity (E)

Description

Adexon's Integrity classified vertical fire curtain system is designed to meet the highest performance and aesthetic requirements in modern architecture. Built to deliver reliable compartmentation in the event of a fire, it ensures people and assets are protected.

Built for demanding environments, this system is certified for extended operation at elevated temperatures, providing fire protection for up to 180 minutes.

When installed, the system achieves complete fire containment across its full width. Its gravity fail-safe mechanism enables closure without external power, ensuring reliable operation in emergency conditions.

Applications

Adexon's Integrity classified vertical fire curtain system is ideally suited for protecting large openings and ensuring fire compartmentation in both commercial and public buildings. Its discreet design and high fire performance make it a versatile choice for:

- Open-plan layouts requiring 'invisible' fire separation.
- Discreetly integrated fire protection between zones or floors.
- Large-span curtain protection without compromising passenger flow or design.
- Compartmentation in corridors, lobbies, or waiting areas.
- Protecting atriums, stairwells, and circulation areas.
- Fire curtain solutions for large-scale openings and logistics areas.

Vertical Fire Curtain - Integrity (E)

Vertical fire curtain system certified for up to 180 minutes of fire integrity.

Table 1: Available features for integrity rating vertical fire curtains.

Main Features: Vertical Fire Curtain - Integrity	
Feature	**Description**
Fire Resistance	E60 - E180
Certification	CE marked to EN 13241:2003+A2:2016 icw EN 16034:2014
Operation	Gravity fail-safe, self-closing by fire alarm trigger
Cycle Classification	C0, C1, C2 tested per EN 12605, EN 12604
Maximum Dimensions	20,350 mm W x 12,900 mm H
Head Box Types	A, B, C, D, E, F, G, H, I
Head Box Mounting Types	Reveal Fix, Face Fix
Guide Rail Types	Type 1, Type 2, Type 3
Guide Rail Mounting Types	Face Fix, Reveal Fix
Surface Finish	Galvanised, RAL / non-standard colour options
Environmental Conditions	Indoor use (< 80% humidity and 5°C < T < 45°C)

Note: Performance characteristics and maximum dimensions are dependent on system configuration and classification. Refer to individual system documentation and certification for specific capabilities.

Vertical Fire Curtain - Integrity (E)

Vertical fire curtain certified for up to 180 minutes fire integrity.

Table 2: Integrity vertical fire curtain options and classifications.

Vertical Fire Curtains - Integrity	
Feature	**Classification Options**
Fire Resistance	E60 / E90 / E120 / E180 *
Smoke Seal Classification	NPD / Sa / Sa3 / Sa4 / S200 **
Wind Load Classification	NPD / Class 2 / Class 3 / Class 4 / Class 5
Cycle Classification	C0 / C1 / C2 ***

System Type Perfomance				
System Type	**Smoke Seal**		**Wind Load**	
	Yes	**No**	**Yes**	**No**
FC1-E		✓		✓
FC1-E/Sa	✓			✓
FC2-E-P		✓	✓	
FC2-E/Sa4	✓			✓
FC3-E		✓		✓
FC3-E/Sa3	✓			✓
FC3-E/S200	✓			✓

Note: The E integrity classification is available at 60 / 90 / 120 / 180 minutes. Sa, Sa3, Sa4, and S200 refer to the applicable smoke leakage classifications in accordance with EN 13501-2:2016.
P – Wind Load performance.
Sa – Smoke leakage classification at ambient temperature (EN 13501-2:2016).
Sa3 – Achieved in a three-sided sealed configuration (head and both jambs).
Sa4 – Achieved in a four-sided sealed configuration (head, both jambs and threshold).
S200 – Smoke leakage classification at 200°C (EN 13501-2:2016).

Adexon-FC1-E

- Without Smoke Classification
- Without Wind Load Classification

Adexon-FC1-E - Classification Summary

Adexon-FC1-E60 / E90 / E120	
Feature	**Classification**
Fire Resistance	E60 / E90 / E120 *
Smoke Seal Classification	NPD
Wind Load Classification	NPD
Cycle Classification	NPD / C0 / C1***

Adexon-FC1-E60 / E90 / E120 - Maximum Dimensions	
Fire Rating	**Maximum Available Size**
E60 - Without Cycle Classification	12,000mm W x 8,220mm H
E90 - Without Cycle Classification	12,000mm W x 8,220mm H
E120 - Without Cycle Classification	12,000mm W x 8,220mm H
Cycle Classification	**Maximum Available Size**
C0 / C1 for E60 / E90 / E120	12,000mm W x 8,220mm H

Note: Where combination of classifications are required, use the lower of the values shown in the tables to determine maximum available size.

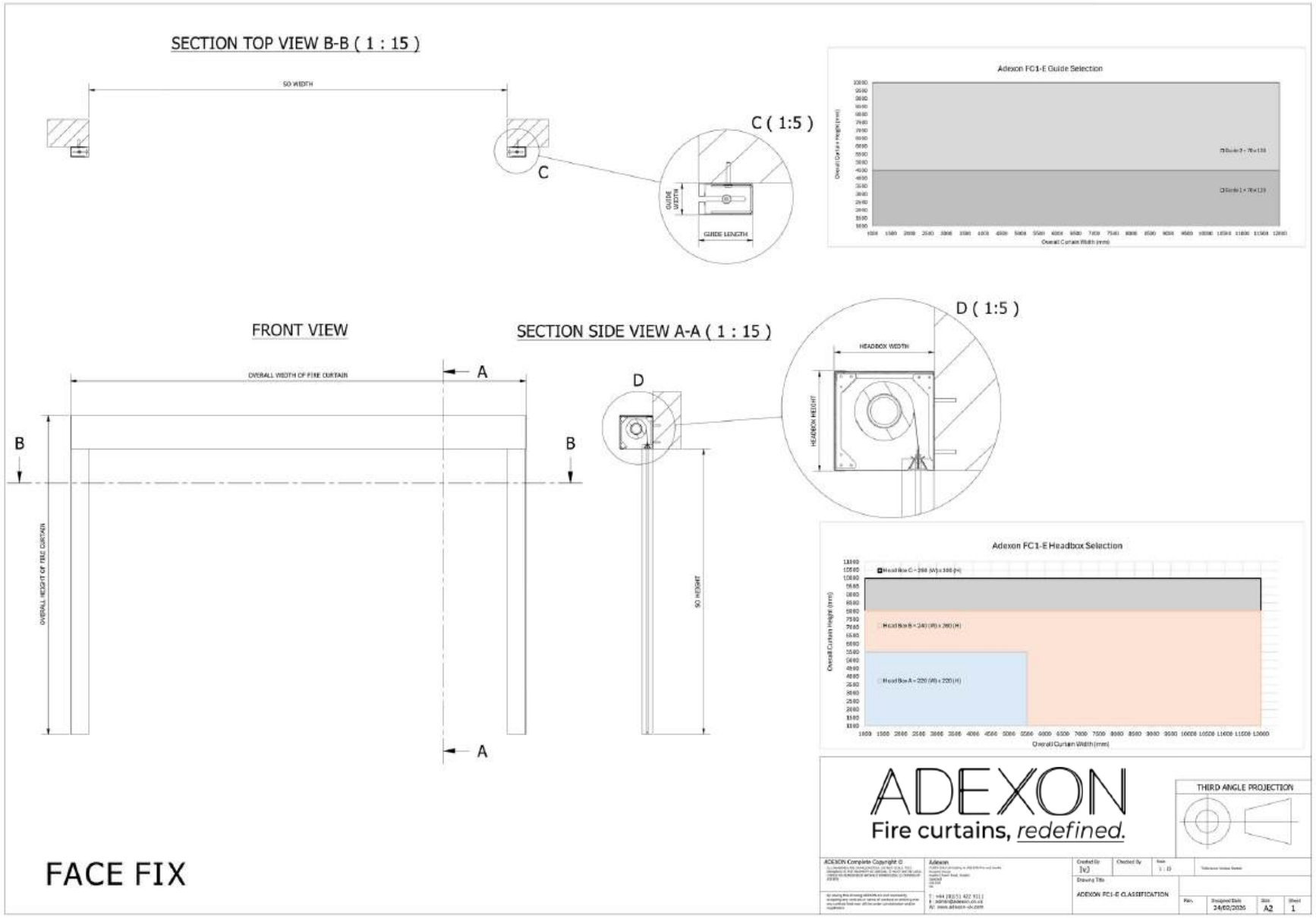
*Tested in compliance with EN 1634-1:2014+A1:2018. Classified according to EN 13501-2:2016

***Tested in compliance with EN 12605:2000 and EN 12604:2017. Durability category of use classified in accordance with EN 16034:2014.

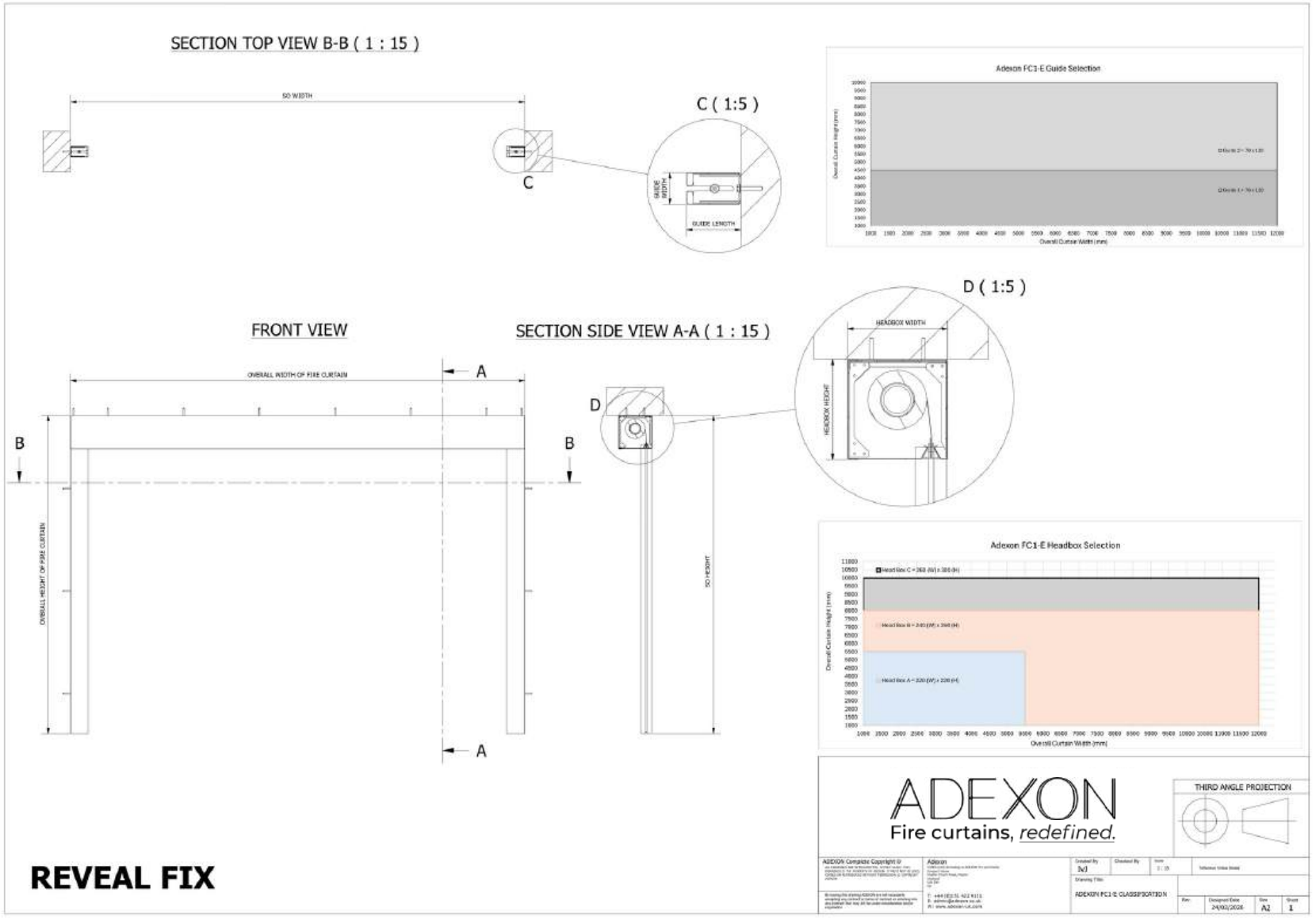
Note: During the design phase, Adexon's technical department must be consulted to ensure the latest dimensions and layout considerations are taken into account. This is relevant to headbox and guide selections and overall dimension considerations.

Representative system drawings are provided below to illustrate typical headbox, guide, and installation configurations. Final dimensions and fixing methodology to be confirmed by Adexon's technical department during detailed design.

FC1-E Drawings: Face Fix



FC1-E Drawings: Reveal Fix



Adexon-FC1-E/Sa

- With Smoke Classification - Sa.
- Without Wind Load Classification.

Adexon-FC1-E/Sa - Classification Summary

Adexon-FC1-E60 / E90 / E120 /Sa	
Feature	**Classification**
Fire Resistance	E60 / E90 / E120 *
Smoke Seal Classification	Sa **
Wind Load Classification	NPD
Cycle Classification	NPD / C0 / C1 ***
Adexon-FC1-E60 / E90 / E120 /Sa - Maximum Dimensions	
Fire Rating	**Maximum Available Size**
E60 - Without Cycle Classification	12,000mm W x 8,220mm H
E90 - Without Cycle Classification	12,000mm W x 8,220mm H
E120 - Without Cycle Classification	12,000mm W x 8,220mm H
Cycle Classification	**Maximum Available Size**
C0 / C1 for E60 / E90 / E120	8,000mm W x 5,000mm H

Note: Where combinations of classifications are required, use the lower of the values shown in the tables to determine maximum available size.

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**Tested in compliance with EN 1634-3:2005. Classified according to EN 13501-2:2016.

***Tested in compliance with EN 12605:2000 and EN 12604:2017. Durability category of use classified in accordance with EN 16034:2014.

Adexon-FC2-E-P

- Without Smoke Classification
- With Wind Load Classification.

Adexon-FC2-E-P - Classification Summary

Adexon-FC2-E60 / E90 / E120 / E180-P	
Feature	**Classification**
Fire Resistance	E60 / E90 / E120 / E180 *
Smoke Seal Classification	NPD
Wind Load Classification	Class 1 / Class 2 / Class 3 / Class 4 / Class 5 **
Cycle Classification	NPD / C0 / C1 / C2 ***

Adexon-FC2-E60 / E90 / E120 / E180-P - Maximum Dimensions	
Wind Load Classification	**Maximum Available Size**
Class 1	27.6 m^2
Class 2	24.0 m^2
Class 3	15.8 m^2
Class 4	12.6 m^2
Class 5	10.2 m^2

Note: Where combinations of classifications are required, use the lower of the values shown in the tables to determine maximum available size.

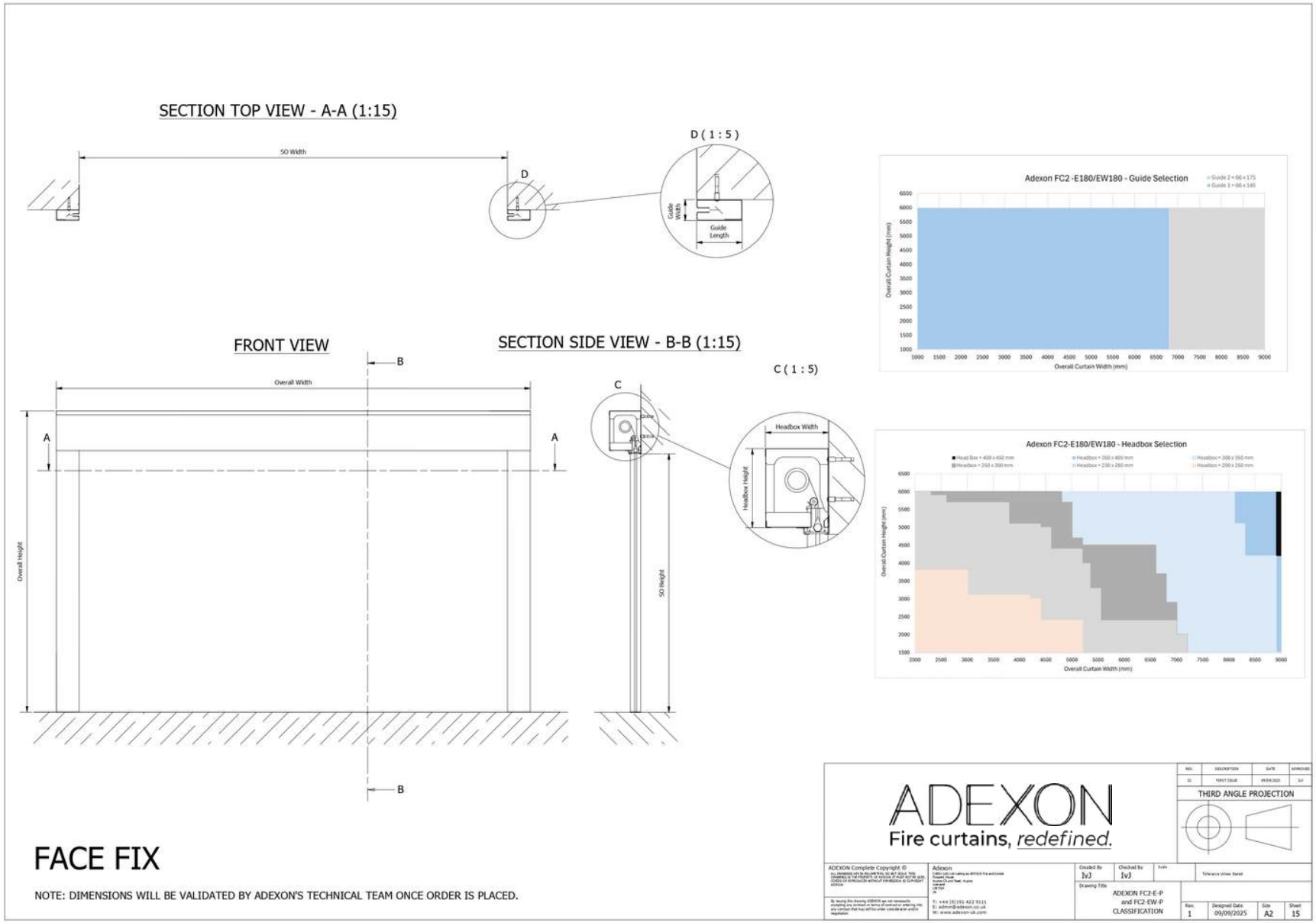
*Tested in compliance with EN 1634-1:2014+A1:2018. Classified according to EN 13501-2:2016.

**Tested and classified according to EN 13241:2003+A2:2016:
Class 1: 0 Pa < P < 300 Pa, Class 2: 300 Pa < P < 450 Pa, Class 3: 450 Pa < P < 700 Pa, Class 4: 700 Pa < P < 1000 Pa, Class 5: P ≥ 1000 Pa.
***Tested in compliance with EN 12605:2000 and EN 12604:2017. Durability category of use classified in accordance with EN 16034:2014.

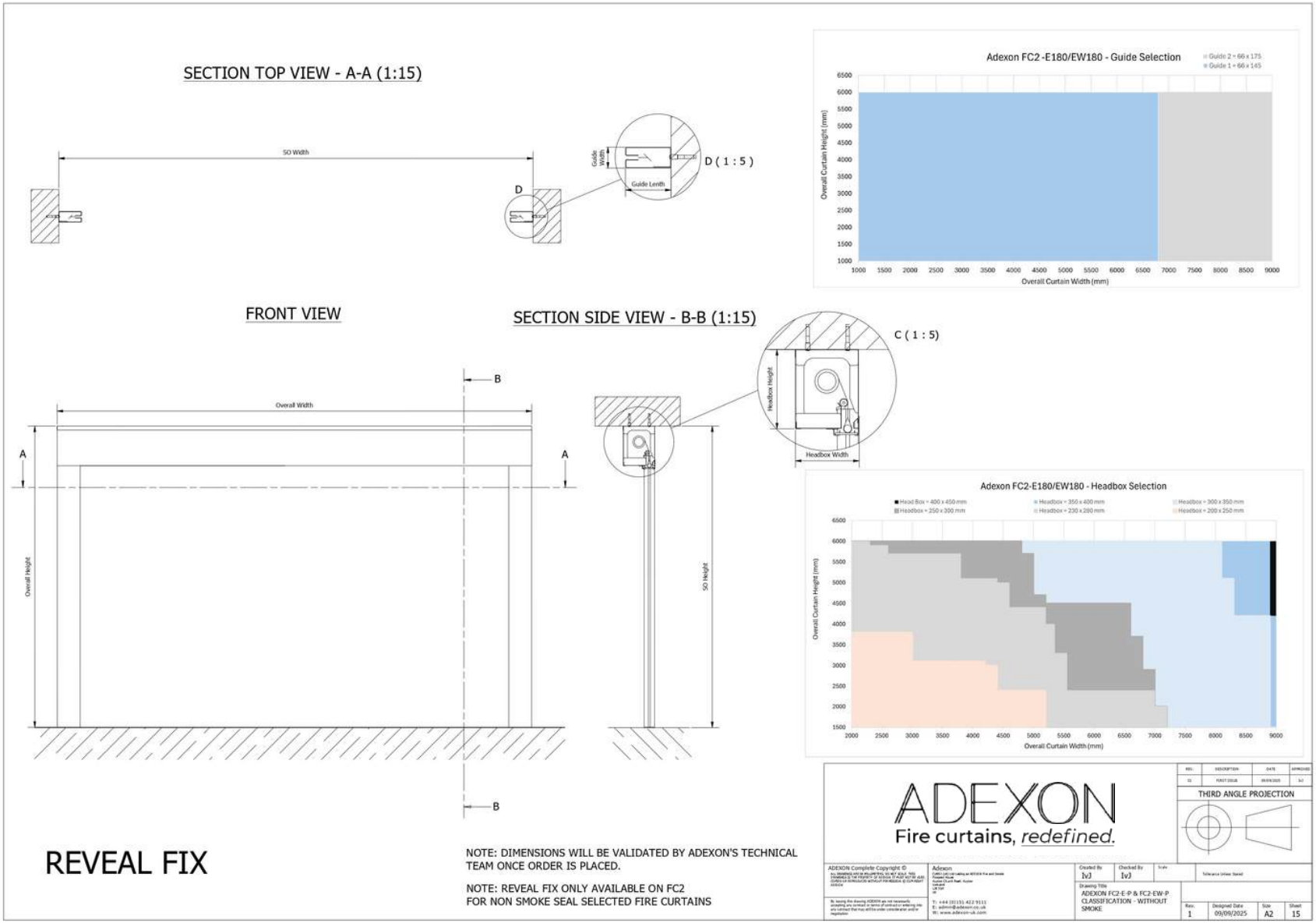
Note: During the design phase, Adexon's technical department must be consulted to ensure the latest dimensions and layout considerations are taken into account. This is relevant to headbox and guide selections and overall dimension considerations.

Representative system drawings are provided below to illustrate typical headbox, guide, and installation configurations. Final dimensions and fixing methodology to be confirmed by Adexon's technical department during detailed design.

FC2-E-P Drawings: E180 Face Fix (without smoke)



FC2-E-P Drawings: E180 Reveal Fix (without smoke)



Adexon-FC2-E/Sa4

- With Smoke Classification - Sa4
- Without Wind Load Classification.

Adexon-FC2-E/Sa4 - Classification Summary

Adexon-FC2-E60 / E90 / E120 / E180/Sa4	
Feature	**Classification**
Fire Resistance	E60 / E90 / E120 / E180 *
Smoke Seal Classification	Sa4 **
Wind Load Classification	NPD
Cycle Classification	NPD / C0 / C1 / C2 ***
Maximum Dimension	20,350mm W x 12,900mm H

Note: Where combinations of classifications are required, use the lower of the values shown in the tables to determine maximum available size.

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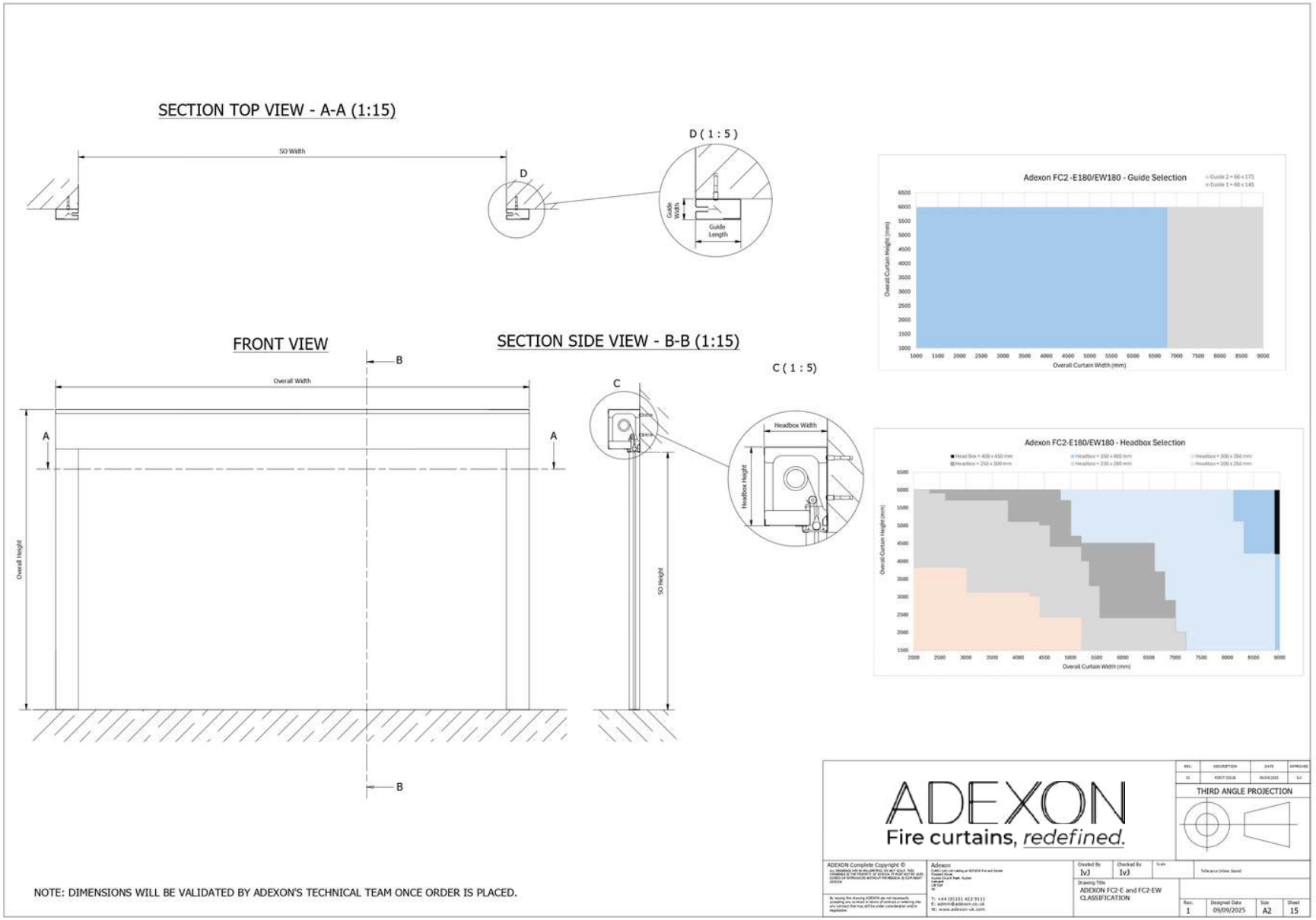
**Tested in compliance with EN 1634-3:2005. Classified according to EN 13501-2:2016

***Tested in compliance with EN 12605:2000 and EN 12604:2017. Durability category of use classified in accordance with EN 16034:2014.

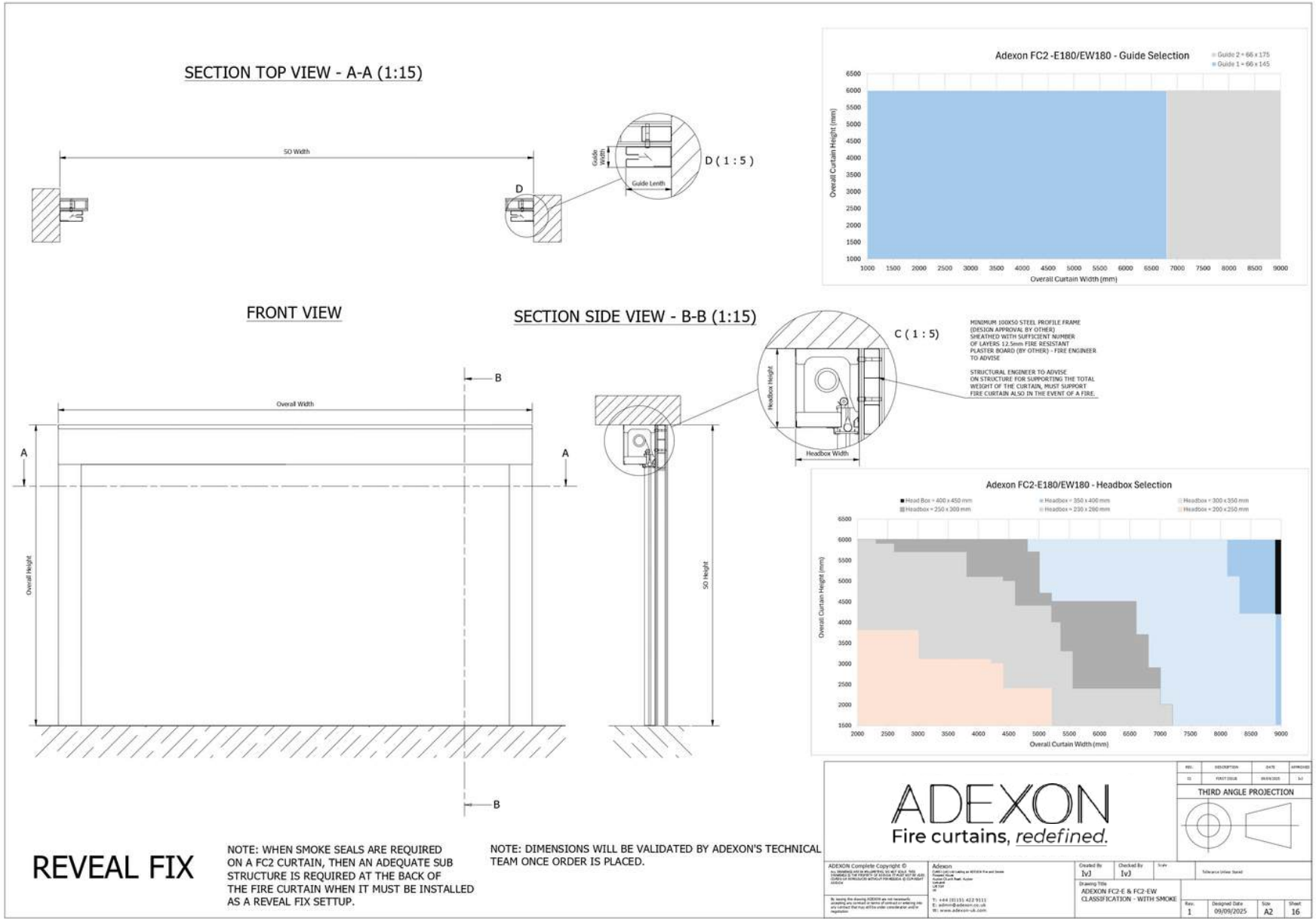
Note: During the design phase, Adexon's technical department must be consulted to ensure the latest dimensions and layout considerations are taken into account. This is relevant to headbox and guide selections and overall dimension considerations.

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FC2-E Drawings: E180 Face Fix



FC2-E Drawings: E180 Reveal Fix



Adexon-FC3-E

- Without Smoke Classification.
- Without Wind Load Classification.

Adexon-FC3-E - Classification Summary

Adexon-FC3-E60 / E90 / E120	
Feature	**Classification**
Fire Resistance	E60 / E90 / E120 *
Smoke Seal Classification	NPD
Wind Load Classification	NPD
Cycle Classification	NPD / C0 / C1 / C2 ***
Adexon-FC3-E60 / E90 / E120 - Maximum Dimensions	
Fire Rating	**Maximum Available Size**
E60 - Without Cycle Classification	11,000mm W x 8,000mm H
E90 - Without Cycle Classification	11,000mm W x 8,000mm H
E120 - Without Cycle Classification	10,000mm W x 8,000mm H
Cycle Classification	**Maximum Available Size**
C0 / C1 / C2 for E60 / E90 / E120	11,000mm W x 9,800mm H

Note: Where combinations of Classifications are required, use the lower of the values shown in the tables to determine maximum available size.

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***Tested in compliance with EN 12605:2000 and EN 12604:2017. Durability category of use classified in accordance with EN 16034:2014.

Adexon-FC3-E/Sa3

- With Smoke Classification - Sa3.
- Without Wind Load Classification.

Adexon-FC3-E/Sa3 - Classification Summary

Adexon FC3-E60 / E90 / E120/Sa3	
Feature	**Classification**
Fire Resistance	E60 / E90 / E120 *
Smoke Seal Classification	Sa3 **
Wind Load Classification	NPD
Cycle Classification	NPD / C0 / C1 / C2 ***

Adexon FC3-E60 / E90 / E120/Sa3 - Maximum Dimensions	
Fire Rating	**Maximum Available Size (W x H) mm**
E60 - Without Cycle Classification	8,792mm W x 5,000mm H
E90 - Without Cycle Classification	8,792mm W x 5,000mm H
E120 - Without Cycle Classification	8,792mm W x 5,000mm H
Cycle Classification	**Maximum Available Size (W x H) mm**
C0 / C1 / C2 for E60 / E90 / E120	7,500mm W x 5,000mm H

Note: Where combinations of classifications are required, use the lower of the values shown in the tables to determine maximum available size.

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**Tested in compliance with EN 1634-3:2005. Classified according to EN 13501-2:2016

***Tested in compliance with EN 12605:2000 and EN 12604:2017. Durability category of use classified in accordance with EN 16034:2014.

Adexon-FC3-E/S200

- With Smoke Classification - S200.
- Without Wind Load Classification.

Adexon-FC3-E/S200 - Classification Summary

Adexon-FC3-E60 / E90 / E120/S200	
Feature	**Classification**
Fire Resistance	E60 / E90 / E120 *
Smoke Seal Classification	S200 **
Wind Load Classification	NPD
Cycle Classification	NPD / C0 / C1 / C2***

Adexon-FC3-E60 / E90 / E120/S200 - Maximum Dimensions	
Fire integrity classification	**Maximum tested surface area**
E60 - C0 / C1 / C2	25.2 m^2
E90 - C0 / C1 / C2	25.2 m^2
E120 - C0 / C1 / C2	25.2 m^2

Note: Where combinations of classifications are required, use the lower of the values shown in the tables to determine maximum available size.

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Adexon-FC3-E: Minimum Wall Thickness

Table 6: FC3-E: Minimum Structural Requirements by Fire Integrity Classification

Minimum Wall Thickness and Fixing Requirements (Adexon-FC3-E)			
Classification	**Minimum Wall Thickness Required**	**Headbox Type**	**Side Guide Type**
E30	140mm	A, B, C*	1, 2**
E60	140mm	A, B, C*	1, 2**
E90	200mm	A, B, C*	1, 2**
E120	200mm	A, B, C*	1, 2**

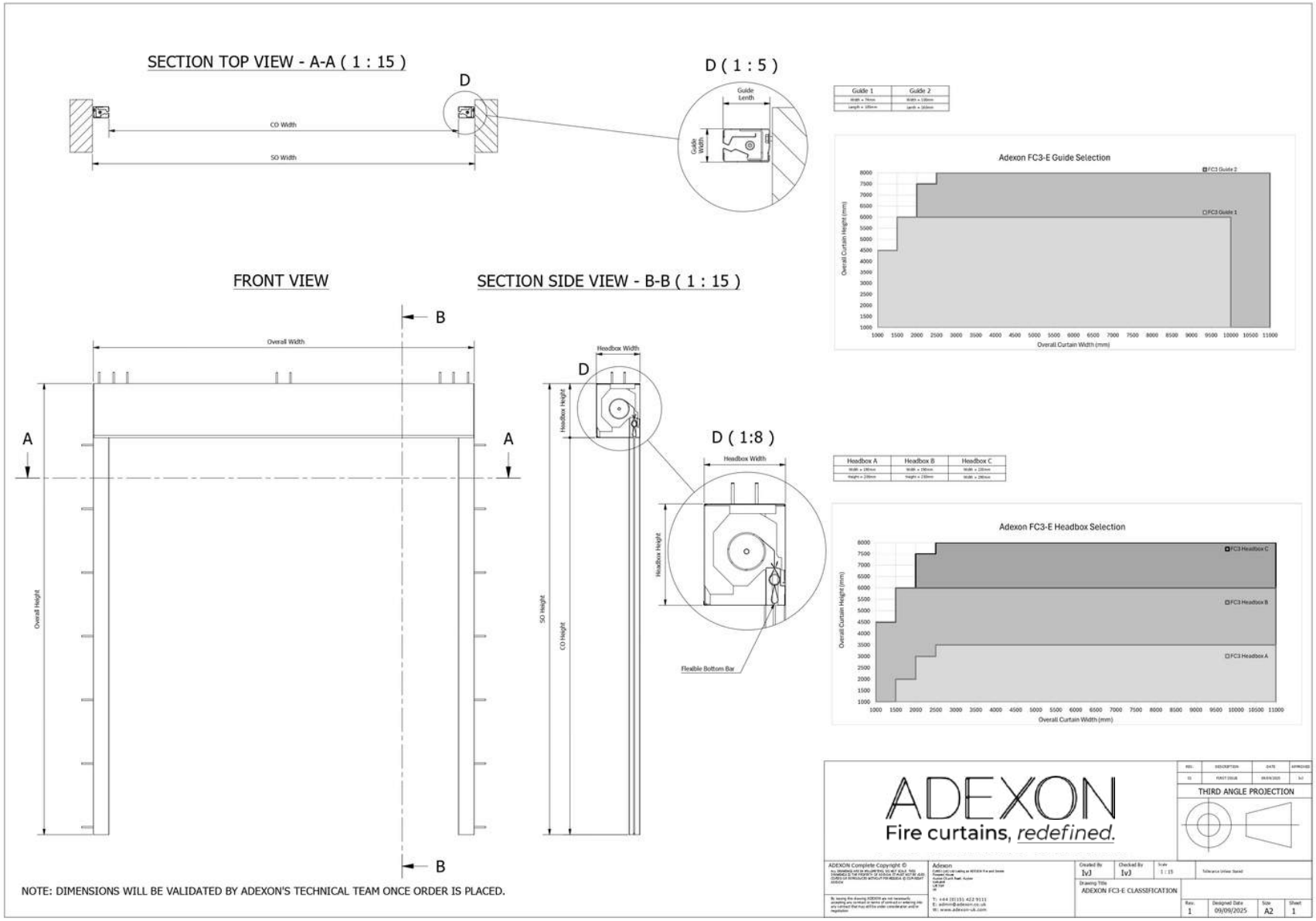
*Type A: H = 190 mm, W = 200 mm
Type B: H = 190 mm, W = 150 mm
Type C: H = 235 mm, W = 295 mm

**Type 1: W = 105 mm, D = 74 mm
Type 2: W = 160 mm, D = 100 mm

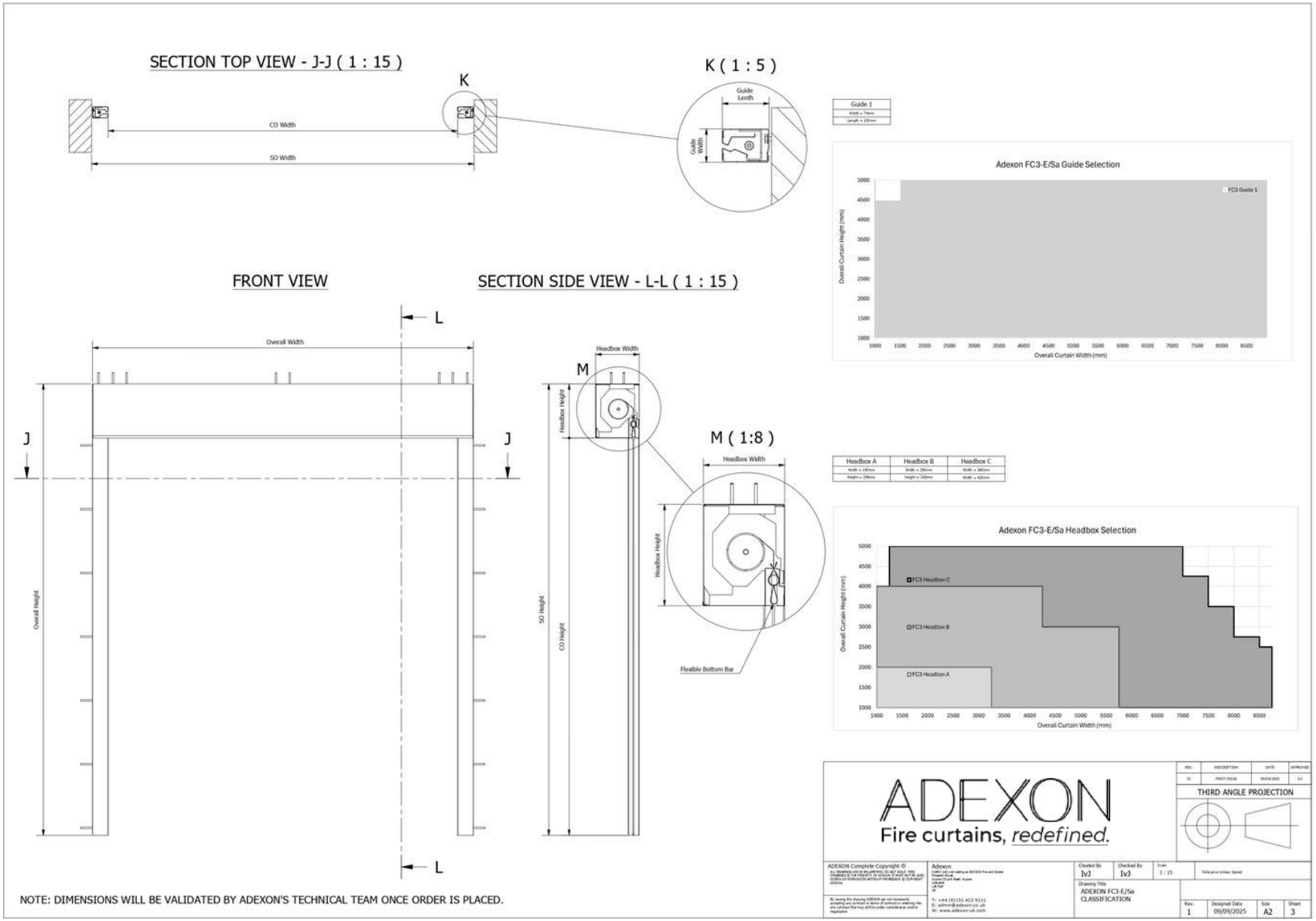
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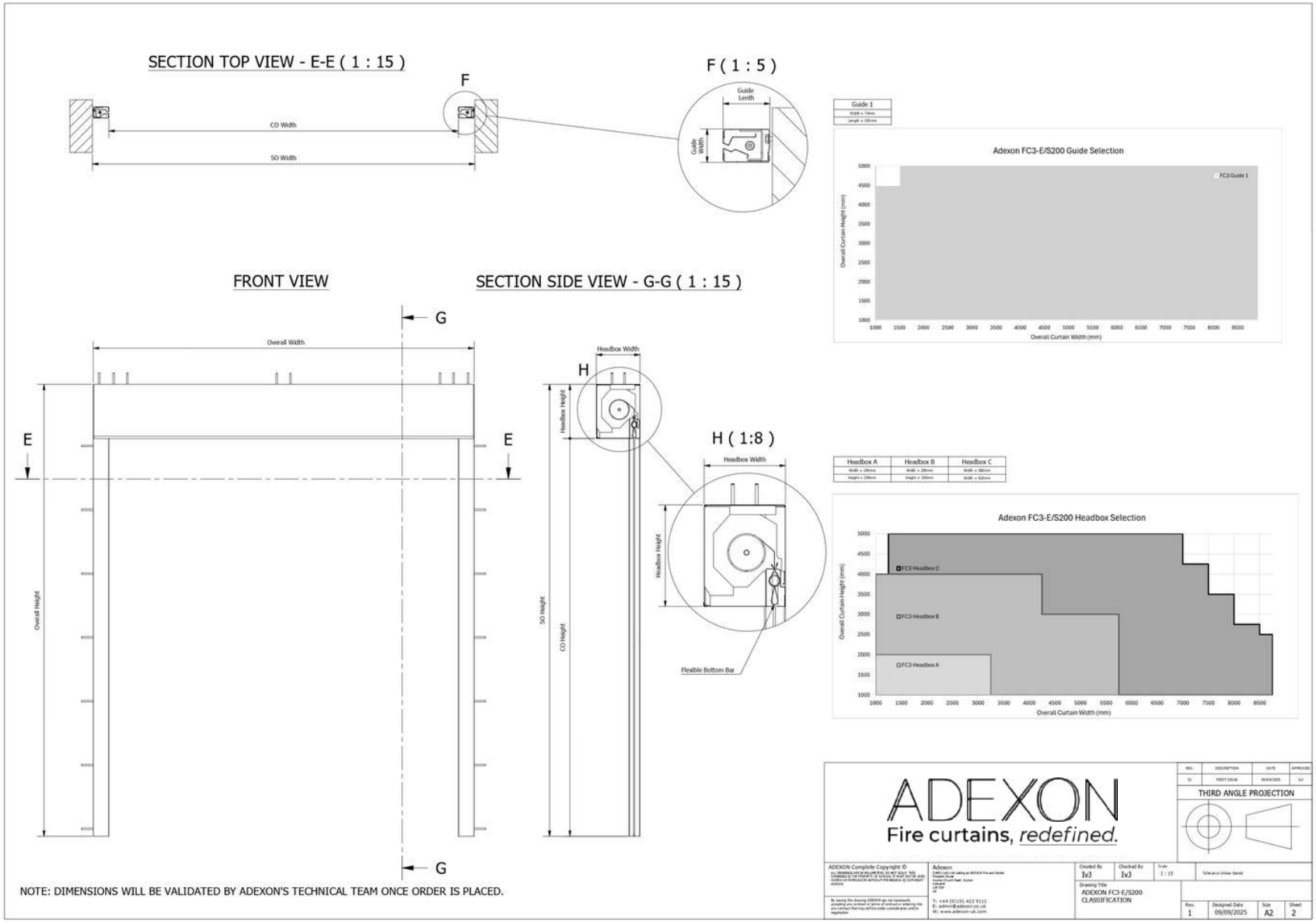
FC3-E Drawings: E120 Reveal Fix (without smoke)



FC3-E Drawings: E/Sa3 Reveal Fix



FC3-E Drawings: E/S200 Reveal Fix



ADEXON

Fire curtains, *redefined.*



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40 x traditional pressure performance.
10-year warranty.
'World-class' NPS

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