

**CLASSIFICATION OF FIRE RESISTANCE PERFORMANCE
IN ACCORDANCE WITH EN 13501-2: 2007 + A1: 2009**

Sponsor AGC Glass Europe
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Product name A glazed partition wall made of an aluminum frame
Frame : ADS 80 FR 60 (SCHÜCO)
Glazing : Pyrobel 25 (AGC)

Classification report No EFR-15-002696

**Based on test reports/
extended application
reports Nos**

Issue number	Date of issue
EFR-15-V-000831	June the 12 th 2015
EFR-15-002695	August the 19 th 2015

1. INTRODUCTION

This classification report defines the classification assigned to a glazed partition wall, made of aluminium profiles from the series ADS 80 FR 60 (SCHÜCO) which defined openings closed by Pyrobel 25 (AGC) glazing, in accordance with the procedures given in EN 13501-2: 2007 + A1: 2009.

2. DETAILS OF CLASSIFIED PRODUCT

2.1. GENERALS

The glazed partition wall, subject of this classification report, is defined as a non load-bearing element type wall.

Its function is to resist fire concerning the fire resistance characteristics about the Article 5 of EN 13501-2: 2007 + A1: 2009.

2.2. PRODUCT DESCRIPTION

The glazed partition wall is fully described in the test report provided in support of classification listed in Clause 3.1.

The drawings for the glass partition are given in Appendix.

3. TEST REPORTS/EXTENDED APPLICATION REPORTS & TEST RESULTS IN SUPPORT OF CLASSIFICATION

3.1. TEST REPORTS/EXTENDED APPLICATION REPORTS

Name of Laboratory	Name of sponsor	Test reports/extended application report Nos.	Test method / extended application rules & date
EFFECTIS France	AGC Glass Europe	EFR-15-V-000831	EN 1363-1: 2012 EN 1364-1: 1999 prEN 1364-1: 2014
EFFECTIS France	AGC Glass Europe	EFR-15-002695	EN 15254-4: 2008 + A1: 2011

3.2. TEST RESULTS

Test method & Test number	Parameter	Results
EFR-15-V-000831 EN 1363-1: 2012 , EN 1364-1: 1999 & prEN 1364-1: 2014	Integrity - cotton pad - gap gauges - sustained flaming Insulation Radiation	73 min 72 min 73 min 73 min - -

4. CLASSIFICATION AND FIELD OF APPLICATION

4.1. REFERENCE OF CLASSIFICATION

This classification has been carried out in accordance with clause 7. of EN 13501-2: 2007 + A1: 2009.

4.2. CLASSIFICATION

The glazed partition wall is classified according to the following combinations of performance parameters and classes as appropriate.

R	E	I	W		t	-	M	C	S	G	K
	E				60						
	E	I			60						

With fire side:

Frame : Beads on fire side

Glazing : Indifferent because symmetric.

Fire resistance classification: EI 60
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4.3. FIELD OF DIRECT APPLICATION

➤ This classification is valid for the following end use applications:

- Decrease in the linear dimensions of panes ;
- Change in the aspect ratio of panes provided that the largest dimension of the pane and its area are not increased ;
- Decrease in the distance between mullions and/or transoms ;
- Decrease in distance between fixing centres ;
- Increase in the dimensions of framing members ;
- Screwed-on glazing beads, if “clip-on” beads were incorporated in the test specimen ;
- Allowance for expansion if none were incorporated in the test specimen ;
- Change in the angle of installation of up to 10° from the vertical.

The paragraphs with crossed-out characters do not apply to the element forming the object of this classification report.

Other modifications are not permitted.

➤ This classification is also valid for the following product variations:

a) Width extension

In conformity with section A.5.3 of standard EN 1364-1: 1999, the results of the fire resistance test recorded in section 4.2 of this classification report are valid for any element identical to that submitted to the test and with unlimited width.

b) Height extension

In conformity with section A.5.2 of standard EN 1364-1: 1999, no height extension is allowed above that tested, i.e. 3,360 mm maximum.

➤ Supporting constructions

In conformity with section 13.4 of standard EN 1364-1: 1999, the fire test results mentioned in section 12 of test report EFR-15-V-000831 are also applicable to any other supporting construction, or the test frame, within the same type (high density rigid, low density rigid or flexible) that has greater fire resistance.

4.4. FIELD OF EXTENDED APPLICATION

4.4.1. Specific changes to the glazing system

The maximal dimensions allowed for the Pyrobel 25 (AGC) glazing for an EI 60 classification are:

	Width (mm)	Height (mm)
Minimum	unlimited	unlimited
Maximum	3000	1680
With a maximal area of 4,23 m ² .		

Circular, triangular or 4 sided shapes can be cut from within the extended rectangular glass size as defined above. All other non-rectangular shapes can only be cut from the original sized rectangular glass in test report EFR-15-V-000831 and cannot be extended further.

A change in the aspect ratio of rectangular panes is allowed provide that the pane fits within the extended pane dimensions defined above.

It is confirmed that the additional weight due to the increased pane area can be supported by the frame system, as the weight of this glazing system is directed straight into the floor.

It is not allowed to exchange the type of material used for the glazing beads.

Clipped beads can be replaced by screw fixed or riveted beads.

Bead depth can be increased.

The bead height can be increased provided that the edge cover does not change.

4.4.2. Specific changes to the framing system

It is not allowed to exchange the type of material used to construct the frame.

The maximal dimensions allowed for the glazed partition wall for an EI 60 classification are:

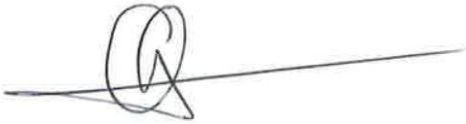
- Width : unlimited
- Height : 4, 044 m.

5. LIMITATIONS

This classification document does not represent type approval or certification of the product.

The specification and interpretation of fire methods are the subject of ongoing development and refinement. Changes in associated legislation may also occur. For these reasons, it is recommended that the relevance of test and classification reports over five years old should be considered by the user. The laboratory that issued the report will be able to offer, on behalf of the legal owner, a review of the procedures adopted for a particular test of classification to ensure that they are consistent with current practices, and if required may endorse the report.

Maizières-lès-Metz, the 29 september 2015

A handwritten signature in black ink, appearing to be "O. D'HALLUIN", with a long horizontal line extending to the right.

Olivia D'HALLUIN
Product leader of glazed elements

A handwritten signature in black ink, appearing to be "R. SCHILLINGER", with a long horizontal line extending to the left.

Renaud SCHILLINGER
Head of test section

PLATE 1: OVERALL VIEW

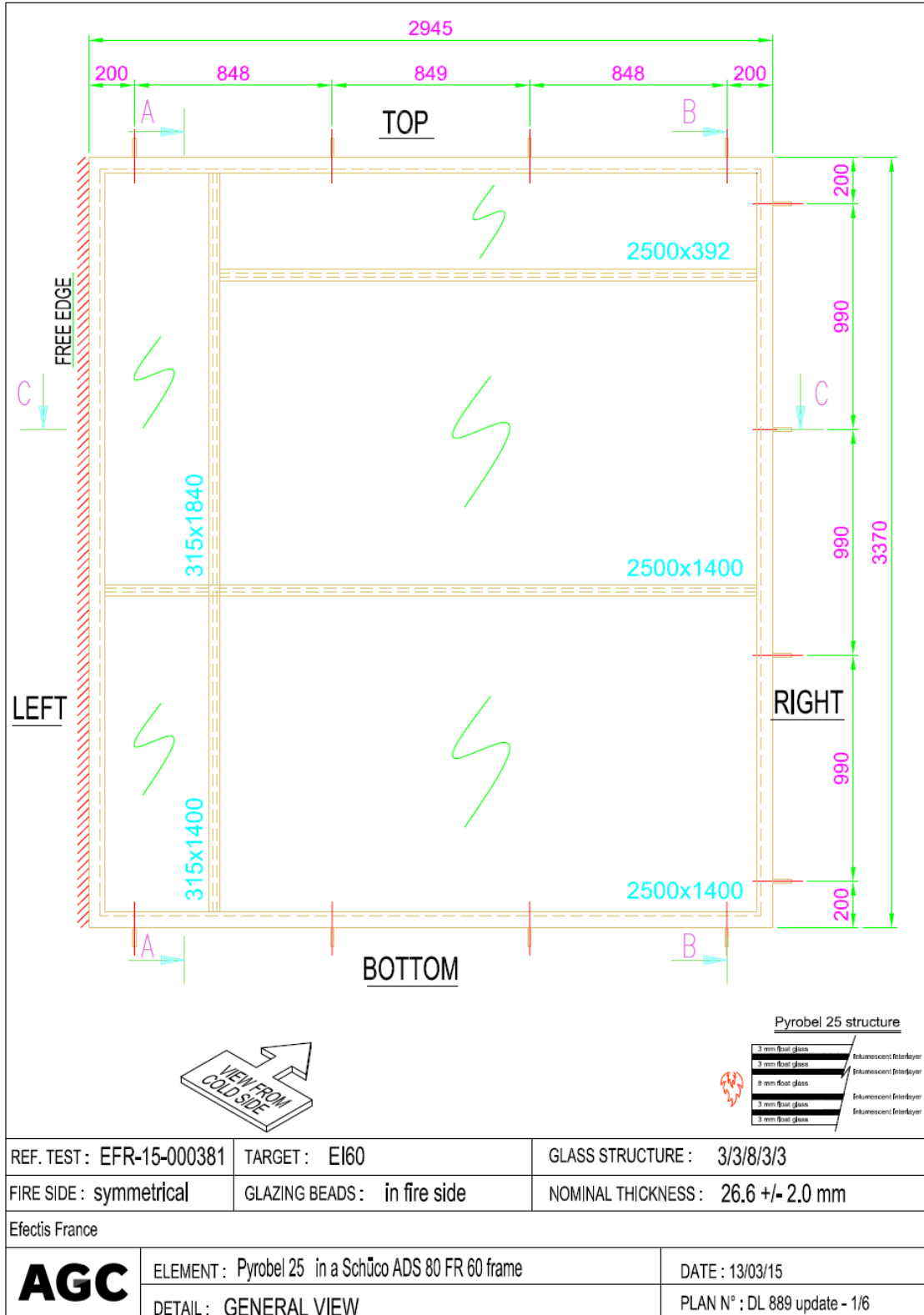


PLATE 2: VERTICAL SECTION A-A

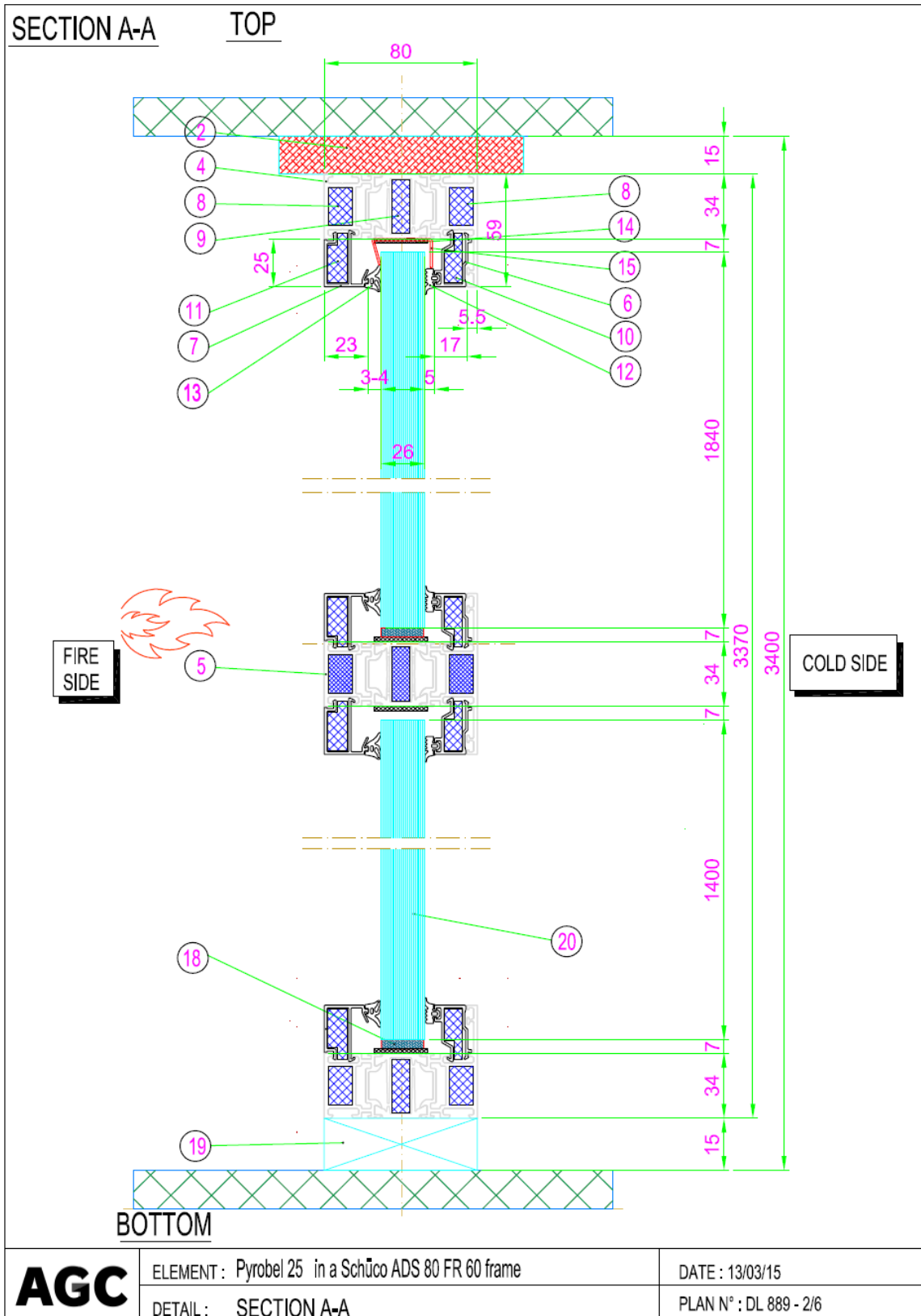


PLATE 3: VERTICAL SECTION B-B

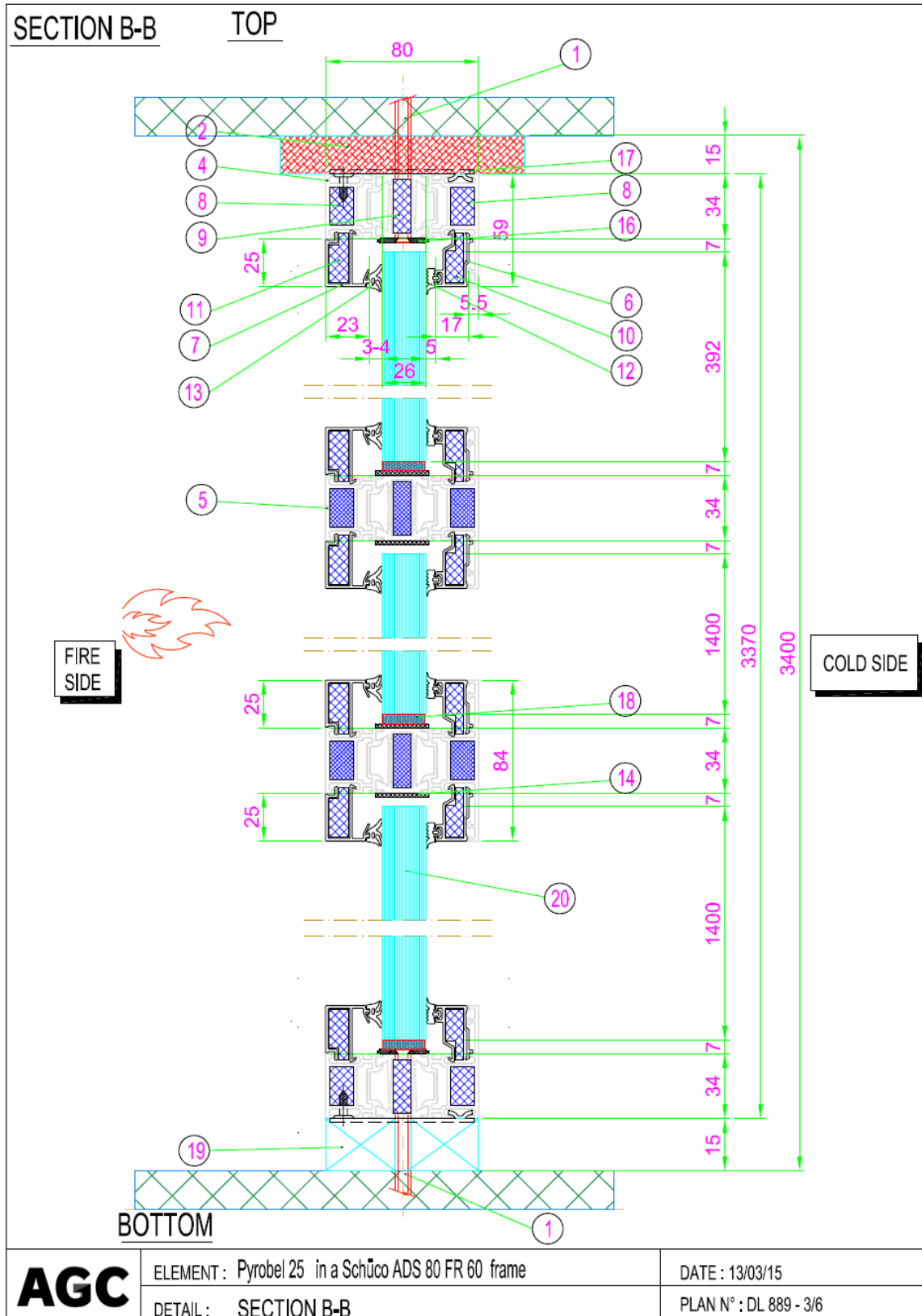


PLATE 4: HORIZONTAL SECTION C-C

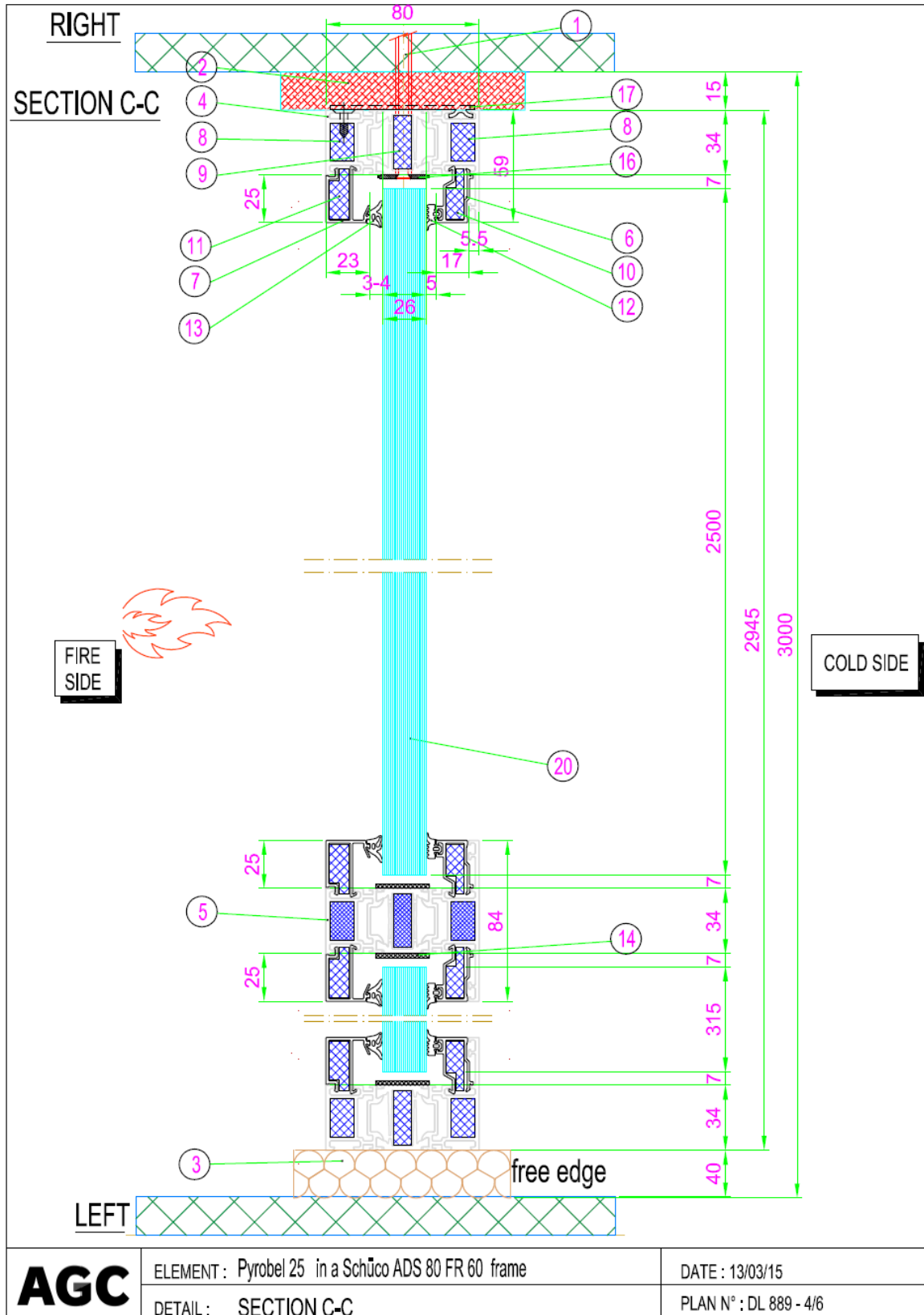
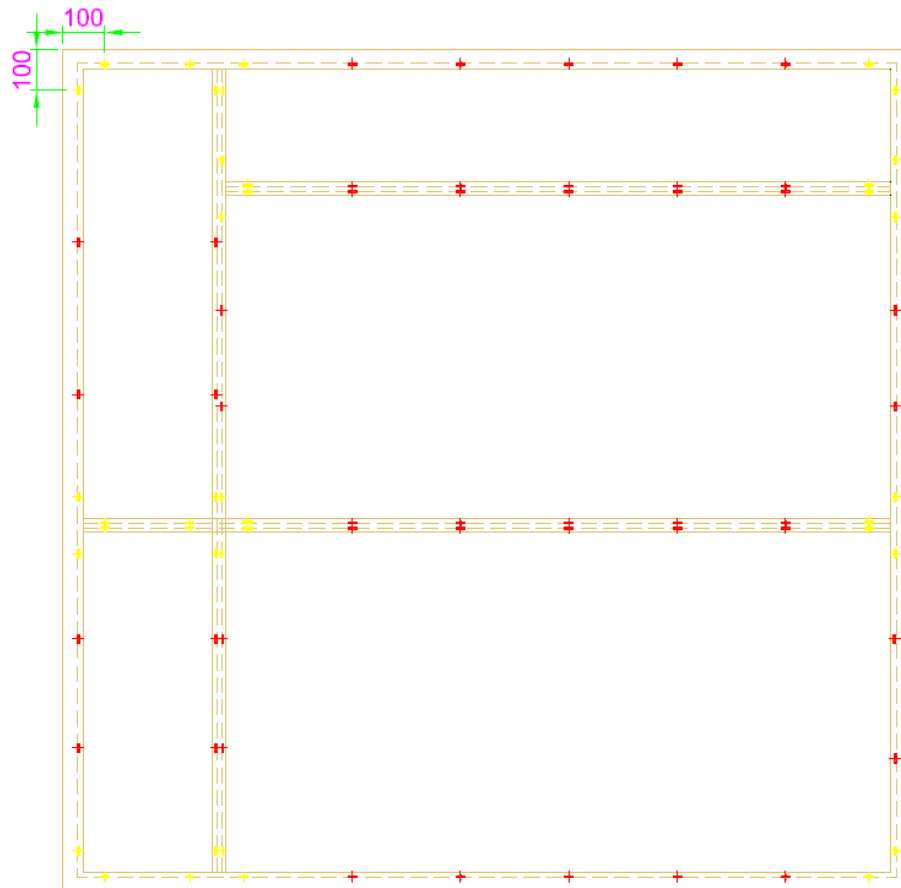


PLATE 5: REPARTITION OF THE GLAZING CLIPS



at 100 mm from each corner of each glass
and

divide the remaining value to have equal distance
to obtain the number of clips mentioned on the drawing

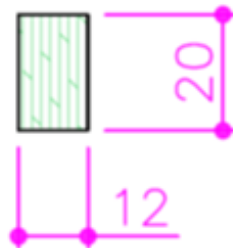


AGC	ELEMENT : Pyrobel 25 in a Schüco ADS 80 FR 60 frame	DATE : 13/03/15
	DETAIL : Glazing clips position	PLAN N° : DL 889 - 5/6

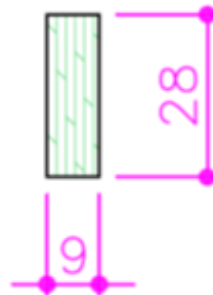
PLATE 6: INSULATING PARTS OF THE PROFILES

Isolant Densité 1,6 kg/m³

266 600
12 x 20



266 601
9 x 28



SCHÜCO
vetrotech

Schüco ADS 80 FR 60
ISOLANTS

Classement
EI 60

PLATE 7: PART LIST

REPERE	COMPOSANTS
1	Fixation: Hilti 100 HT - Ø10x112 mm
2	Thermal Insulation Promat Promaglaf HTK 1100 - 96 kg/m3
3	Thermal Insulation Flumroc FPI700 - 120 kg/m3
4	Schüco Profile reference 150 330
5	Schüco Profile reference 150 380
6	Schüco clipped beads reference 173 820 (outside)
7	Schüco clipped beads reference 173 810 (inside)
8	Schüco Fireboard reference 266 600
9	Schüco Fireboard reference 266 601
10	Schüco Fireboard reference 266 602
11	Schüco Fireboard reference 267 967
12	Schüco EPDM glazing gasket reference 224 267 (outside)
13	Schüco EPDM glazing gasket reference 284 304 (inside)
14	Schüco intumescent strip reference 266 784 (28 mm x 2.4 mm)
15	Schüco glazing clip reference 266 500 (see drawing DL 889 update - 5/6 for position)
16	Schüco fixing plate reference 242 033
17	Schüco anchor steel plate reference 242 035
18	Setting Block : (L) 70 mm x (W) 25 mm x (H) 5mm
19	Setting Block : (L) 100 mm x (W) 80 mm x (H) 15mm
20	Pyrobel 25

AGC

ELEMENT : Pyrobel 25 in a Schüco ADS 80 FR 60 frame

DATE : 13/03/15

DETAIL : NOMENCLATURE DES COMPOSANTS

PLAN N° : DL 889 - 6/6