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**Title:**

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**Supplementary Field of Application**

Comaglio Automatic Drop Down Threshold Seals.  
For 30 and 60 minutes Fire Resistance

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**Report No.:**

BMT/CNA/F15244  
Revision A

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**Issue Date:**

4<sup>th</sup> May 2021

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**Valid Until:**

4<sup>th</sup> May 2026

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**Job Reference:**

501186

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**Prepared for:**

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*The legal validity of this report can only be claimed on presentation of the complete report*

The version/revision stated on the front of this Field of Application supersedes all previous versions/revisions and must be used to manufacture doorsets from the stated validity date on this front cover. Previous revisions of the Field of Application cannot be used once an updated Field of Application has been issued under a new revision.

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## 1 Foreword

This Supplementary Field of Application report has been commissioned by Comaglio S.R.L. and relates to the fire performance of a range of automatic drop down seals when fitted to proven 30 and 60 minute fire resisting timber doorsets.

The report is for National Application in the UK and other jurisdictions which accepts this approach, and has been written in accordance with the general principles outlined in BS EN 15725: 2010; *Extended application reports on the fire performance of construction products and building elements*.

This Supplementary Field of Application (scope) uses established empirical methods of extrapolation and experience of fire testing similar doorsets, in order to extend the scope of application by determining the limits for the designs based on the tested constructions and performances obtained. The scope is an evaluation of the potential fire resistance performance, if the variations specified herein were to be tested in accordance with BS 476: Part 22: 1987.

This Supplementary Field of Application has been written using appropriate test evidence generated at UKAS accredited laboratories, to the relevant test standard. The supporting test evidence has been deemed appropriate to support the use of the various Comaglio automatic threshold drop down seal designs and is summarised in section 3.

The scope presented in this report relates to the behaviour of the proposed door design variations under the particular conditions of the test; they are not intended to be the sole criterion for considering the potential fire hazard of the door assembly in use.

This Supplementary Field of Application has been prepared and checked by product assessors with the necessary competence, who subscribe to the principles outlined in the Passive Fire Protection Forum (PFPF) 'Guide to Undertaking Technical Assessments of the Fire Performance of Construction Products Based on Fire Test Evidence'. The aim of the PFPF guidelines is to give confidence to end-users that assessments that exist in the UK are of a satisfactory standard to be used for building control and other purposes.

## 2 Proposal

It is proposed to consider use of the Comaglio automatic drop down seals with timber based fire resisting doorsets that have been previously tested or assessed by Warringtonfire.

This supplementary Field of Application only considers specific aspects of these fire resisting doorset designs which are not otherwise covered by the relevant manufacturer's Field of Application report or supporting test evidence.

This supplementary Field of Application establishes the limits with respect to automatic drop down seal type, the required intumescent protection and door leaf type, whilst maintaining the designated level of performance in accordance with BS 476 Part 22: 1987.

Unless otherwise stated in this supplementary Field of Application report, the full construction requirements in the relevant manufacturer's Field of Application report or supporting test evidence must be referred to.

The Field of Application defined in this report is based on the fire resistance test evidence for the Comaglio automatic drop down seals, which is summarised in section 3. Analysis of specific construction details that require assessment are given within this report against the relevant element of construction, as appropriate.

### 3 Test Data

The test evidence summarised below has been generated to support the fire resistance performance of the automatic drop down seals that are the subject of this Supplementary Field of Application. The summary details are considered to be the key aspects of the automatic drop down seal design tested.

All of the test evidence used in the evaluation is over 5 years old. In accordance with industry guidance, the evidence has been reviewed to consider its suitability. Warringtonfire are satisfied that there have been no significant revisions to the relevant test standards which would render the evidence irrelevant.

The evidence has been generated to EN 1634-1. Which is known to be more onerous than the BS 476 Part 22: 1987 standard, primarily due to the use of plate thermocouples within the furnace to record the furnace temperature.

The same time temperature curve is used to control the temperature within the furnace for both test methods (the heating curve given within ISO 834-1). However, the plate thermocouple used to record the temperature within the furnace for the EN test method, requires a higher thermal inertia to read the same temperature as the probe thermocouple that is used for the BS 476 Part 22: 1987 test, particularly during the early stages of the test. Furthermore, the neutral pressure regime is positioned lower relative to the specimen height in a European fire door test, therefore resulting in greater relative positive pressure conditions than those expected in a BS 476 Part: 1987 test, which has the potential to increase hot gases and flaming on the unexposed side. These factors result in more onerous test conditions for doorsets tested to the BS EN 1634-1 test standard compared with the BS 476 Part 22: 1987 test standard, which has been demonstrated by testing the same products to both standards.

It is therefore the opinion of Warringtonfire that the evidence cited in the following section, tested to the EN standards referenced above can be utilised in this assessment which will conclude in terms of the fire resistance performance of the Comaglio automatic drop down seal designs if tested in accordance with BS 476 Part 22: 1987.

**Note:**

1. Dimensions are in mm unless otherwise stated.
2. Abbreviations: (h) = height; (w) = width; (t) = thickness; (d) = depth; (l) = length.
3. Latches fitted but disengaged for the test, are reported as 'unlatched'.

## 3.1 Primary Test Evidence

### 3.1.1 Test Report BMT/FEP/F15130 (Doorset A)

The referenced test report, the essential details of which are summarised below, is the primary data for an unlatched, single acting, single leaf doorset fitted with Comaglio I-2015 drop seal.

Date of Test:	10 <sup>th</sup> July 2015
Identification of Test Body:	BM TRADA (now trading as Warringtonfire Testing and Certification Ltd (High Wycombe). UKAS No 1762
Sponsor:	Comaglio SRL
Tested Product:	Unlatched, Single Acting, Single leaf, Doorset – ULSASD
Tested Orientation:	Opening in towards the heating condition.
Sampling Information:	None detailed
Summary of Test Specimen:	<p><u>Leaf:</u> Overall Size: 2040 (h) x 926 (w) x 54 (t). Core: Halspan particleboard, 54 thick. Lippings: Sapele, 6 thick to vertical edges only.</p> <p><u>Frame:</u> Material: Sapele. Dimensions (Head &amp; Jambs): 100 deep x 44 wide. 35 wide x 16 thick planted stop. Fire Stopping: Mineral fibre capped with intumescent mastic, 5-10 wide x frame depth. Threshold: non-combustible. Frame Fixing: 4No dia 6 x 60 long steel wood screws.</p> <p><u>Intumescent &amp; Sealing Material:</u> Head &amp; Jambs: 2No STS 1504 fire only seals. Leaf Edge (Bottom): Comaglio I-2015 drop seal. 19.7 wide x 30 high. Fitted centrally in the threshold of the leaf. Leaf Edge (Bottom): 2No STS 10x2 graphite. Fitted either side of the drop seal in the threshold of the leaf. Smoke Seal: ST1009, 10x9 fitted in the frame reveal to the upstand of the stop.</p> <p><u>Hardware:</u> Hinges: Phoenix CB7730 Lock/Latch: KCC KL1901RC Lock Status: disengaged Closer: Rutland TS3204 overhead closer. Furniture: KF5312 lever type handle.</p> <p><u>Hardware Protection:</u> Under Hinges: 1 thick STS graphite. Encasing Lock/Latch Body: 1 thick STS graphite. Under Lock/Latch Forend &amp; Keep: 1 thick STS graphite.</p> <p><u>Supporting Construction:</u> Steel stud partition with plasterboard cladding.</p>
Test Standard:	BS EN 1634-1: 2014 + A1: 2018 & BS EN 1363-1: 2012
Performance:	<p><u>Integrity:</u> 55 minutes</p> <p><u>Insulation:</u> 55 minutes</p>
Reason for Use (if test failed)	None of the failures observed prior to 60 minutes were associated with the drop down seal fitted to the door and the test evidence has therefore been deemed suitable to support the Comaglio drop down seal (I-2015) with timber based fire resisting doorsets.
Failure Mode: (if test failed)	Cotton pad ignition at the top closing corner at 55 minutes

### 3.1.2 Test Report BMT/FEP/F15130 (Doorset B)

The referenced test report, the essential details of which are summarised below, is the primary data for an unlatched, single acting, single leaf doorset fitted with Comaglio 1370NS drop seal.

Date of Test:	10 <sup>th</sup> July 2015
Identification of Test Body:	BM TRADA (now trading as Warringtonfire Testing and Certification Ltd (High Wycombe). UKAS No 1762
Sponsor:	Comaglio SRL
Tested Product:	Unlatched, Single Acting, Single leaf, Doorset with glazed aperture – ULSASD
Tested Orientation:	Opening in towards the heating condition.
Sampling Information:	None detailed
Summary of Test Specimen:	<p><u>Leaf:</u> Overall Size: 2040 (h) x 926 (w) x 54 (t). Core: Halspan particleboard, 54 thick. Lippings: Sapele, 6 thick to vertical edges only.</p> <p><u>Frame:</u> Material: Sapele. Dimensions (Head &amp; Jambs): 100 deep x 44 wide. 35 wide x 16 thick planted stop. Fire Stopping: Mineral fibre capped with intumescent mastic, 5-10 wide x frame depth. Threshold: non-combustible. Frame Fixing: 4No dia 6 x 60 long steel wood screws.</p> <p><u>Intumescent &amp; Sealing Material:</u> Head &amp; Jambs: 2No STS 1504 fire only seals. Leaf Edge (Bottom): Comaglio 1370NS drop seal. 24.5 wide x 19 high. Fitted centrally in the threshold of the leaf. Leaf Edge (Bottom): 2No STS 10x2 graphite. Fitted either side of the drop seal in the threshold of the leaf. Smoke Seal: ST1009, 10x9 fitted in the frame reveal to the upstand of the stop.</p> <p><u>Glazing (Leaf):</u> Glass: CGI Pyroguard, 11 thick. Aperture Size: 1200 high x 191 wide Bead: Sapele, 32 high x 24 wide including a 5x7 bolection return and 18 deg chamfer. Bead Fixing: dia 1.6 x 50 long pins. Fitted 40mm from corners and 150mm centres on the vertical edges. 30mm from corners and 100mm centres on the horizontal edges and 35 deg minimum angle to the face of the glass.</p> <p><u>Glazing System:</u> Glazing Perimeter: STS ST302, 30x2 fitted lining the glazing aperture. Glazing Perimeter: STS ST105GT, 9x3 fitted between glass and the beads.</p> <p><u>Hardware:</u> Hinges: Phoenix CB7730 Lock/Latch: KCC KL1901RC Lock Status: disengaged Closer: Rutland TS3204 overhead closer. Furniture: KF5312 lever type handle.</p> <p><u>Hardware Protection:</u> Under Hinges: 1 thick STS graphite. Encasing Lock/Latch Body: 1 thick STS graphite. Under Lock/Latch Forend &amp; Keep: 1 thick STS graphite.</p> <p><u>Supporting Construction:</u> Steel stud partition with plasterboard cladding.</p>
Test Standard:	BS EN 1634-1: 2014 + A1: 2018 & BS EN 1363-1: 2012
Performance:	<p><u>Integrity:</u> 50 minutes</p> <p><u>Insulation:</u></p>



	8 minutes
Reason for Use (if test failed)	None of the failures observed prior to 60 minutes were associated with the drop down seal fitted to the door and the test evidence has therefore been deemed suitable to support the Comaglio drop down seal with timber based fire resisting doorsets.
Failure Mode: (if test failed)	Continuous flaming around the glazing bead at 50 minutes.

### 3.1.3 Test Report BMT/FEP/F13292 (Doorset A)

The referenced test report, the essential details of which are summarised below, is the primary data for an unlatched, single acting, single leaf doorset fitted with Comaglio 470 drop seal.

Date of Test:	8 <sup>th</sup> April 2014
Identification of Test Body:	Chiltern International Fire Ltd (now trading as Warringtonfire Testing and Certification Ltd) UKAS No 1762
Sponsor:	AGS Systems
Tested Product:	Latched, Single Acting, Single leaf, Doorset – LSASD
Tested Orientation:	Opening in towards the heating condition.
Sampling Information:	None detailed
Summary of Test Specimen:	<p><u>Leaf:</u> Overall Size: 2040 (h) x 926 (w) x 44 (t). Core: Falcon Panel Products Ltd, Strebord particleboard, 44 thick. Lippings: Beech, 25 thick including a 13 deep x 18 wide rebate. To vertical edges and leaf head. 8 thick to bottom of leaf.</p> <p><u>Frame:</u> Material: Two part profiled Aluminium extrusion. With Oak frame insert Dimensions (Head &amp; Jambs): 80 wide x 50 deep. Including 13 wide x 15 deep integral stop. Dimensions (Oak frame insert): 26 wide x 28 deep. Fitted into frame reveal profile. Threshold: non-combustible. Frame Fixing: 2No 36 long drywall screws per frame bracket.</p> <p><u>Intumescent &amp; Sealing Material:</u> Leaf Edge (Vertical edges &amp; Leaf head): Lorient LP1504 Type 617. Fitted 5mm from exposed face. Leaf Edge (Bottom): Comaglio 470 drop seal. 28.5 high x 12.5 wide. Fitted 4mm from exposed face in the leaf threshold. Smoke Seal: Fire resistant Kerf Seal in TPE material, 10x4, fitted in the frame reveal to the upstand of the stop.</p> <p><u>Hardware:</u> Hinges: 3No Koblenz K2400. Lock/Latch: Polaris B04100 series magnetic mortice latch. Lock Status: Engaged. Closer: Rutland TS3204 overhead closer. Furniture: Aluminium lever type handle.</p> <p><u>Supporting Construction:</u> Steel stud partition with plasterboard cladding.</p>
Test Standard:	BS EN 1634-1: 2014 + A1: 2018 & BS EN 1363-1: 2012
Performance:	<p><u>Integrity:</u> 33 minutes</p> <p><u>Insulation:</u> 33 minutes</p>

### 3.1.4 Test Report BMT/FEP/F13292 (Doorset B)

The referenced test report, the essential details of which are summarised below, is the primary data for an unlatched, single acting, single leaf doorset fitted with Comaglio 422S drop seal.

Date of Test:	8 <sup>th</sup> April 2014
Identification of Test Body:	Chiltern International Fire Ltd (now trading as Warringtonfire Testing and Certification Ltd) UKAS No 1762
Sponsor:	AGS Systems
Tested Product:	Latched, Single Acting, Single leaf, Doorset – LSASD
Tested Orientation:	Opening out away from the heating condition.
Sampling Information:	None detailed
Summary of Test Specimen:	<p><u>Leaf:</u> Overall Size: 2040 (h) x 926 (w) x 44 (t). Core: Falcon Panel Products Ltd, Strebord particleboard, 44 thick. Lippings: Beech, 25 thick including a 13 deep x 18 wide rebate. To vertical edges and leaf head. 8 thick to bottom of leaf.</p> <p><u>Frame:</u> Material: Two part profiled Aluminium extrusion. With Oak frame insert Dimensions (Head &amp; Jamb): 80 wide x 50 deep. Including 13 wide x 15 deep integral stop. Dimensions (Oak frame insert): 26 wide x 28 deep. Fitted into frame reveal profile. Threshold: non-combustible. Frame Fixing: 2No 36 long drywall screws per frame bracket.</p> <p><u>Intumescent &amp; Sealing Material:</u> Leaf Edge (Vertical edges &amp; Leaf head): Lorient LP1504 Type 617. Fitted 5mm from exposed face. Leaf Edge (Bottom): Comaglio 422S drop seal. 20 high x 12.5 wide. Fitted 4mm from exposed face in the leaf threshold. Smoke Seal: Fire resistant Kerf Seal in TPE material, 10x4, fitted in the frame reveal to the upstand of the stop.</p> <p><u>Hardware:</u> Hinges: 3No Koblenz K2400. Lock/Latch: Polaris B04100 series magnetic mortice latch. Lock Status: Engaged. Closer: Rutland TS3204 overhead closer. Furniture: Aluminium lever type handle.</p> <p><u>Supporting Construction:</u> Steel stud partition with plasterboard cladding.</p>
Test Standard:	BS EN 1634-1: 2014 + A1: 2018 & BS EN 1363-1: 2012
Performance:	<p><u>Integrity:</u> 31 minutes</p> <p><u>Insulation:</u> 31 minutes</p>

## 4 General Description of Products & Materials

### 4.1 Tested Comaglio Drop Down Seals

Based on the test evidence summarised in section 3, a total of 4No Comaglio drop downs seals have been successfully tested in proprietary fire tested door leaves. Their product references and individual components/materials are summarised in the following tables.

Tested Seals for 30 Minutes Application			
Product Series	Drop Down Seal Reference	Components	Dimensions (mm)
Basic	422S	Aluminium alloy 6060 body/carrier	20 high x 12.5 wide
		EPDM gasket	
		Nylon push button (for descent)	
Basic	470	Aluminium alloy 6060 body/carrier	28.5 high x 12.5 wide
		EPDM gasket	
		Nylon push button (for descent)	
		Pre-fitted fixing screws	

These seals were tested without intumescent protection around the body of the seal.

See Appendix C1 and C2 for cross sectional diagrams of both seals and their required fitting details.

Tested Seals for 60 Minutes Application			
Product Series	Drop Down Seal Reference	Components	Dimensions (mm)
No Sound	I-2015	Aluminium alloy 6060 body/carrier	30 high x 19.7 wide
		Silicone gasket	
		Hexagonal brass push button (for descent)	
		Round brass push button (for incline)	
		Pre-fitted fixing screws	
No Sound	1370 NS	Aluminium alloy 6060 body/carrier	19 high x 24.5 wide
		Silicone gasket	
		Hexagonal brass push button (for descent)	
		Round brass push button (for incline)	
		Pre-fitted fixing screws	

These seals were tested without intumescent protection around the body of the drop down seal, but with a 10x2mm STS seal fitted on either side of the seal at the bottom edge of the door leaf.

See Appendix D1 and D2 for cross sectional diagrams of both seals and their required fitting details and intumescent specification.

### 4.2 Assessed Comaglio Drop Down Seals

Based on the successfully tested seals, the Comaglio drop down seals summarised in the following tables have been deemed acceptable based on the following reasons:

1. They are stated by the manufacturer to be made from the same components/materials as the tested seals.

2. They are of equal, smaller or slightly bigger dimensions to those tested, so that the amount of timber to be removed for their fitting is considered non-detrimental to the fire resistance performance of the door leaf as it will be either a smaller or the same amount of timber removed, as tested. Or where a slightly larger amount of timber is removed, this is only by a maximum of 5mm for the height of the seal within the door leaf, but the width of any of the seals is no greater than those tested and this is the critical dimension as it permits heat transfer across the door leaf.

The following tables summarises the assessed Comaglio drop down seals.

<b>Assessed Seals for 30 Minutes Application</b>		
Product Series	Components	Drop Down Seal Reference
Pressure	EPDM seal Hexagonal brass push button	1700 mini 1712/T017-H30 1712/T017 1700
	EPDM seal Hexagonal brass push button (pre-fitted screws)	1770 mini 1772-H30 1772 1770
Basic	EPDM seal Nylon push button	422S 420 mini 422 H30 422 420
	EDPM seal Round nylon push button (pre-fitted screws)	472S 470 mini 472 H30 472 470

See Appendix C for cross sectional diagrams of the seals and their required fitting details.

<b>Assessed Seals for 60 Minutes Application</b>			
Product Series	Components	Drop Down Seal Reference	
No Sound	Silicone seal Hexagonal brass push button	1703 ACU	1700 NS
		422GT/1774ACU	I-2015/2
		1705 ACU	1300NS
		1700 XNS	1700 XNS mini
No Sound	Silicone seal Hexagonal brass push button (pre-fitted screws)	1773 ACU	1770 NS
		1775ACU	1770 XNS mini
		1770XNS	
		472GT/1774ACU	
No Sound	Silicone seal Round nylon push button	423 ACU	420 XNS
		424 ACU	BS-2015/2
		425 ACU	220 NS
			420 XNS mini
No Sound	Silicone seal Round nylon push button (pre-fitted screws)	473 ACU	470 XNS
		474 ACU	BS-2015
		475 ACU	270 NS
			470 XNS mini
Pressure	Silicone seal Hexagonal brass push button	1712/T017-H30 1712/T017	1700 1700ACU

	Silicone seal Hexagonal brass push button (pre-fitted screws)	1772-H30 1772	1770 1770 ACU
Basic	Silicone seal Round nylon push button	422 H30 422 420	
	Silicone seal Round nylon push button (pre-fitted screws)	472 H30 472 470	
Special	Silicone seal Hexagonal brass push button (pre-fitted screws)	AE	
	Silicone seal Round nylon push button (pre-fitted screws)	AE bascul/avvolg 170/12 170/15	

See Appendix D for cross sectional diagrams of the seals and their required fitting details and intumescent protection.

**Note:** All drop down seals listed above for 30 and 60 minutes application are also comprised of Aluminium alloy 6060 body/carrier as tested.

## 5 Door Specification

### 5.1 Door Type

The testing conducted on the Comaglio seals at 30 and 60 minutes has demonstrated that the seals can be fitted within timber based fire resisting doorsets without compromising the performance of the doorset.

Based on the door designs tested, the following timber based door types can be considered for use with the Comaglio automatic drop down seals:

- Graduated density chipboard and three layered particleboard door blanks.
- Softwood or hardwood laminated door constructions with tested or assessed cellulosic facings.
- Stile and rail constructions with flax, chipboard or timber based cores (see note 1 below).
- Stile and rail constructions with non-combustible sub-facings (see note 1 below).

#### Notes:

1. For stile and rail door type construction, the bottom rail must be wide enough to fully contain the drop seal with at least 15mm of uninterrupted timber remaining after fitting of the drop down seal between seal and core infill material.
2. For 30 minute applications the door leaf must be a minimum of 44mm thick.
3. For 60 minute applications the door leaf must be a minimum of 54mm thick.

### 5.2 Limitations

It is a condition of this supplementary FoA that the door design being fitted with the Comaglio automatic drop down seals must have its own test data or assessed approval for use with automatic drop down seals rebated into the bottom of the door leaf.

Door designs must also meet the following criteria:

- 1) The door design must be one of the constructions listed in section 5.1 of this report.
- 2) The door design must have demonstrated a minimum of 30 or 60 minutes fire resistance to BS 476: Part 22: 1987, as appropriate.
- 3) The door design must have been tested or have been assessed for the relevant period of fire resistance by Warringtonfire.
- 4) If the supporting test evidence or assessment for the door design specifies intumescent protection around the body of the drop down seal, it must be fitted as specified within the supporting documentation, which should take precedence over details herein.
- 5) All construction details for the doorset must comply with the relevant assessment (Field of Application) report or supporting test evidence, unless otherwise stated herein.

### 5.3 Leaf Configurations

Based on the test evidence summarised in section 3, this assessment covers the following doorset configurations when fitted with the Comaglio automatic drop down seals.

Abbreviation	Description
LSASD	Latched, Single Acting, Single Doorset
ULSASD	Unlatched, Single Acting, Single Doorset

**Note:** The approved configuration given in the supporting test evidence or assessment documentation for the doorset must be checked. If the door design is only approved for latched configurations, the supporting test/assessment evidence for the door takes precedence. i.e. unlatched configurations must be permitted in the supporting documentation, this supplemental FoA report does not take precedence in terms of permitted doorset configurations.

## 6 Conclusion

This supplementary field of application report considers the installation of the range of Comaglio drop seals detailed in section 4 when fitted into the door leaf types detailed in section 5.1.

If the Comaglio range of automatic drop down seals as referenced in this assessment, were to be tested as part of a complete doorset design compliant with the specification detailed herein and the relevant documentation for the door design, tested in accordance with BS 476 Part 22: 1987, it is our opinion that they would not adversely affect the performance and will contribute to providing a minimum of 30 or 60 minutes integrity performance, as applicable, subject to the provisos stated herein.



## 7 Declaration by the Applicant

- 1) We the undersigned confirm that we have read and comply with obligations placed on us by the Passive Fire Protection Forum (PFPF) Guide to undertaking technical assessments and engineering evaluations based on fire test evidence 2021 Industry Standard Procedure
- 2) We confirm that any changes to a component or element of structure which are the subject of this assessment have not to our knowledge been tested to the standard against which this assessment has been made.
- 3) We agree to withdraw this assessment from circulation should the component or element of structure, or any of its component parts be the subject of a failed fire resistance test to the standard against which this assessment is being made.
- 4) We understand that this assessment is based on test evidence and will be withdrawn should evidence become available that causes the conclusion to be questioned. In that case, we accept that new test evidence may be required.
- 5) We are not aware of any information that could affect the conclusions of this assessment. If we subsequently become aware of any such information, we agree to ask the assessing authority to withdraw the assessment.

(in accordance with the principles of FTSG Resolution No. 82: 2001)

Signed:

---

Name:

---

For and on behalf of: **Comaglio SRL**

## 8 Limitations

The following limitations apply to this assessment:

- 6) This field of application addresses itself solely to the elements and subjects discussed and do not cover any other criteria. All other details not specifically referred to should remain as tested or assessed.
- 7) This field of application report is issued on the basis of test data and information to hand at the time of issue. If contradictory evidence becomes available, Warringtonfire reserves the right to withdraw the report unconditionally but not retrospectively.
- 8) This field of application has been carried out in accordance with Fire Test Study Group Resolution No. 82: 2001.
- 9) Opinions and interpretation expressed herein are outside the scope of UKAS accreditation.
- 10) This field of application relates only to those aspects of design, materials and construction that influence the performance of the element(s) under fire resistance test conditions. It does not purport to be a complete specification ensuring fitness for purpose and long-term serviceability. It is the responsibility of the client to ensure that the element conforms to recognised good practice in all other respects and that, with the incorporation of the guidance given in this field of application, the element is suitable for its intended purpose.
- 11) This field of application report represents our opinion as to the performance likely to be demonstrated on a test in accordance with BS 476: Part 22: 1987, on the basis of the test evidence referred to in this report. We express no opinion as to whether that evidence, and/or this field of application would be regarded by any Building Control authority as sufficient for that or any other purpose. This field of application report 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.
- 12) This report may only be reproduced in full. Extracts or abridgements of reports shall not be published without permission of Warringtonfire. All work and services carried out by Warringtonfire Testing and Certification Limited are subject to, and conducted in accordance with, the Standard Terms and Conditions of Warringtonfire Testing and Certification Limited, which are available at <https://www.element.com/terms/terms-and-conditions> or upon request.
- 13) The version/revision stated on the front of this field of application supersedes all previous versions/revisions and must be used to manufacture doorsets from the stated validity date on this front cover. Previous revisions of the Field of Application cannot be used once an updated Field of Application has been issued under a new revision.

## 9 Validity

- 1) The assessment is initially valid for five years after which time it is recommended to be submitted to Warringtonfire for technical review and revalidation.
- 2) This assessment report is not valid unless it incorporates the declaration given in Section 7 duly signed by the applicant.

<b>Signature:</b>			
<b>Name:</b>	<b>* B Freeman</b> (Author)	<b>* A M Winning</b> (Co-author)	<b>* K D S Towler</b> (Reviewer)
<b>Title:</b>	Trainee Product Assessor	Senior Product Assessor	Senior Product Assessor

\* For and on behalf of Warringtonfire

## Appendix A Revision & Revalidation Table

Rev.	WF Job Ref.	Date	Description
A	500620	04.05.2021	Technical review and revalidation. Changes include: (1) Addition of 1700 XNS mini drop down seal. (2) Addition of 420 XNS mini drop down seal. (3) Addition of 1770 XNS mini drop down seal. (4) Addition of 470 XNS mini drop down seal. (5) Change of branding from BM TRADA to Warringtonfire. (6) Report layout update to the new Warringtonfire layout and styling

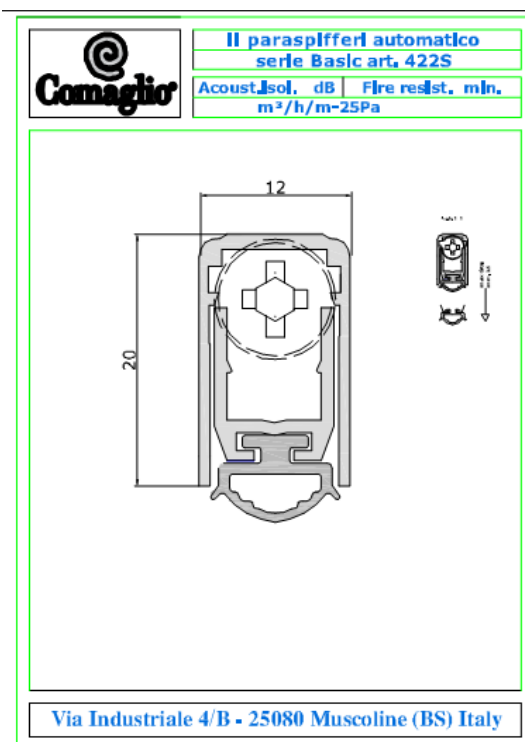
## Appendix B Performance Data

### Appendix B1 Primary Evidence

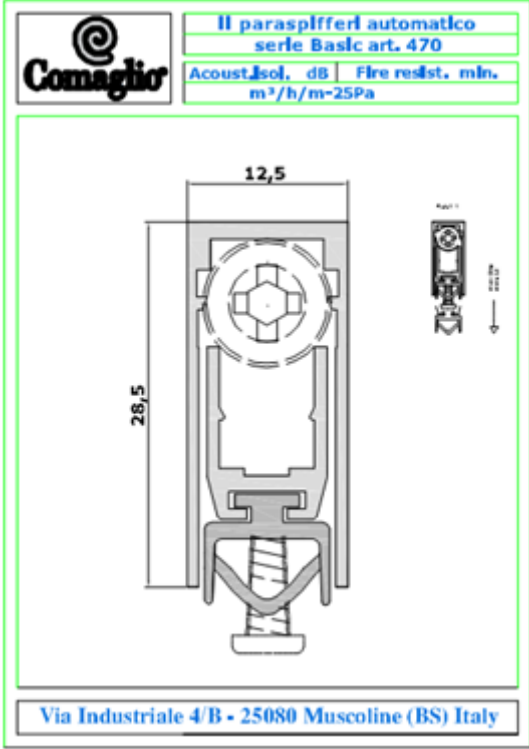
Test Reference	Configuration	Leaf Sizes (mm)	Test Standard	Performance (minutes)	
BMT/FEP/F13292 (Door A) <i>Drop seal: 470</i>	A: LSASD	2040 926 44	BS EN 1634-1	Integrity	33
				Insulation	33
BMT/FEP/F13292 (Door B) <i>Drop seal: 422S</i>	B: LSASD	2040 926 44		Integrity	31
				Insulation	31
BMT/FEP/F15130 (Door A) <i>Drop seal: I-2015</i>	ULSASD	2040 926 54	Integrity	55	
			Insulation	55	
BMT/FEP/F15130 (Door B) <i>Drop seal: 1370 NS</i>	ULSASD	2040 926 54	Integrity	50	
			Insulation	50	

## Appendix C Comaglio Drop Down Seals for Use With 30 Minutes Fire Resisting Doorsets

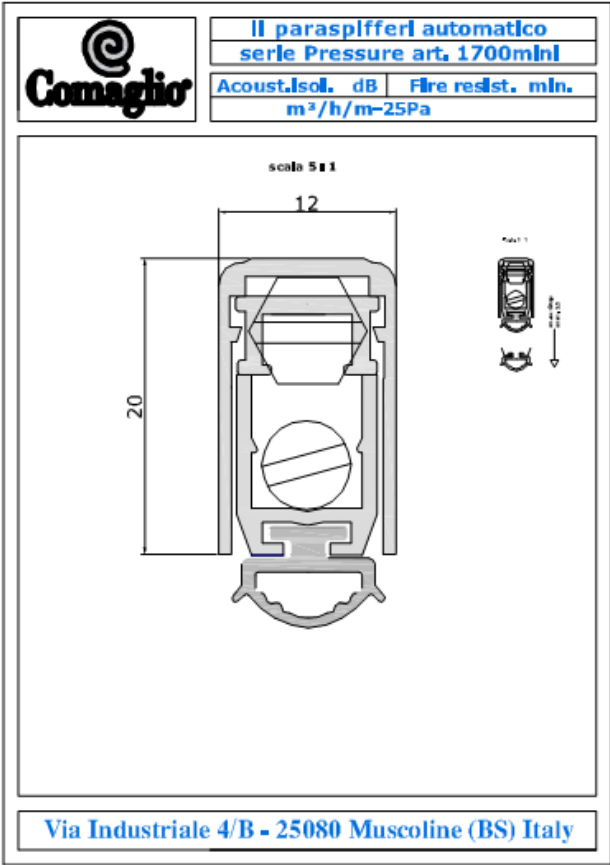
### Appendix C1 Basic Series 422S

Product reference:	422S
Series:	Basic
Description:	EPDM Seal with nylon push button
	
Scope:	Approved for use with 30 minute fire resisting timber based doorsets meeting the criteria in section 5
Minimum door leaf thickness:	44mm
Fitting requirements:	The drop down seal is to be rebated centrally in the bottom of the door leaf
Intumescent Protection:	Based on the test evidence, intumescent seal at the bottom edge of the leaf or around the seal is not required. Unless specified otherwise within the relevant test evidence or assessment documentation for the door design.
Supporting test evidence:	Seal type 422S was successfully tested in BMT/FEP/F13292

## Appendix C2 Basic Series 470

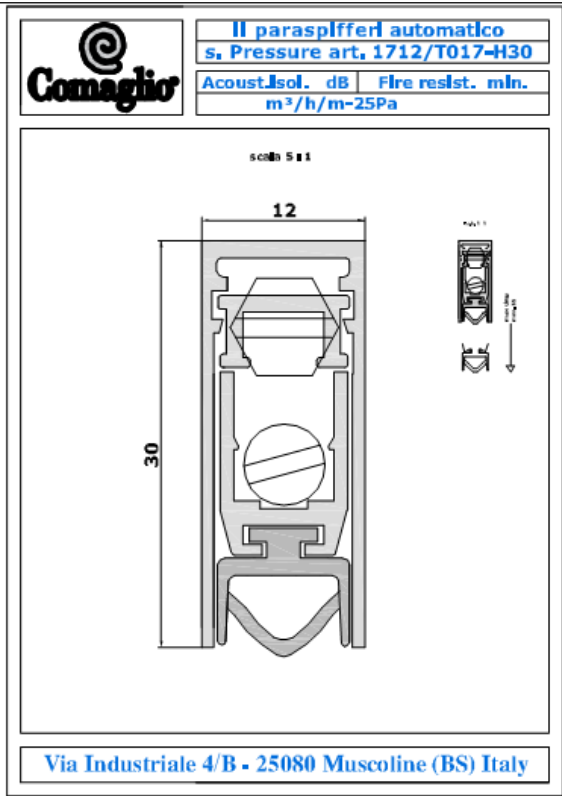
Product reference:	470
Series:	Basic
Description:	EPDM Seal with nylon push button (pre-fitted screws)
	
Scope:	Approved for use with 30 minute fire resisting timber based doorsets meeting the criteria in section 5
Minimum door leaf thickness:	44mm
Fitting requirements:	The drop down seal is to be rebated centrally in the bottom of the door leaf
Intumescent Protection:	Based on the test evidence, intumescent seal at the bottom edge of the leaf or around the seal is not required. Unless specified otherwise within the relevant test evidence or assessment documentation for the door design.
Supporting test evidence:	Seal type 470 was successfully tested in BMT/FEP/F13292

### Appendix C3 Pressure Series 1700 Mini

Product reference:	1700 Mini
Series:	Pressure
Description:	EPDM Seal with brass push button
	
Scope:	Approved for use with 30 minute fire resisting timber based doorsets meeting the criteria in section 5
Minimum door leaf thickness:	44mm
Fitting requirements:	The drop down seal is to be rebated centrally in the bottom of the door leaf
Intumescent Protection:	Based on the test evidence, intumescent seal at the bottom edge of the leaf or around the seal is not required. Unless specified otherwise within the relevant test evidence or assessment documentation for the door design.
Supporting test evidence:	Seal type 422S of the same dimensions was successfully tested in BMT/FEP/F13292

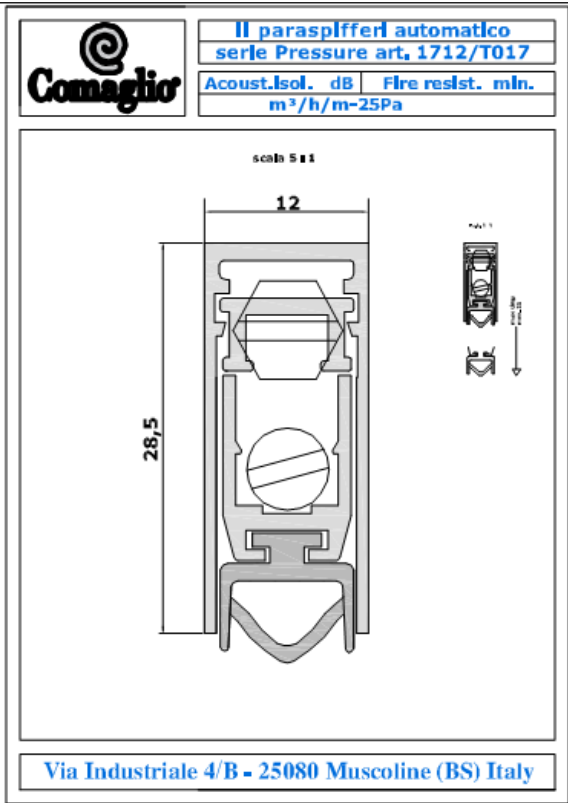


## Appendix C4 Pressure Series 1712/T017-H30

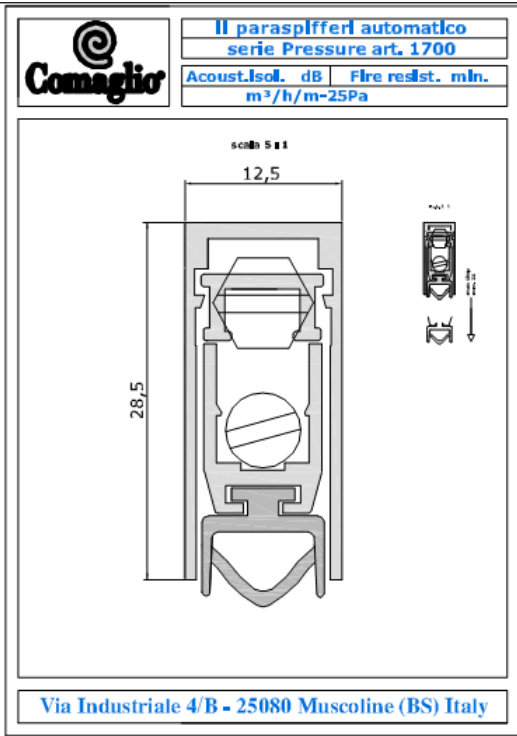
Product reference:	1712/T017-H30
Series:	Pressure
Description:	EPDM Seal with brass push button
	
Scope:	Approved for use with 30 minute fire resisting timber based doorsets meeting the criteria in section 5
Minimum door leaf thickness:	44mm
Fitting requirements:	The drop down seal is to be rebated centrally in the bottom of the door leaf
Intumescent Protection:	Based on the test evidence, intumescent seal at the bottom edge of the leaf or around the seal is not required. Unless specified otherwise within the relevant test evidence or assessment documentation for the door design.
Supporting test evidence:	Seal type 470 of dimensions 28.5mm (h) x 12.5mm (w) was successfully tested in BMT/FEP/F13292

**Note:** It is the opinion of Warringtonfire that the 1.5mm difference in height is negligible and would not adversely affect the fire resistance performance of the door leaf. And, since the width of the seal is the same as the tested seal type 470, it is acceptable, because the amount of timber that will be removed or remain along the leaf thickness should be the same as the tested seal, at minimum.

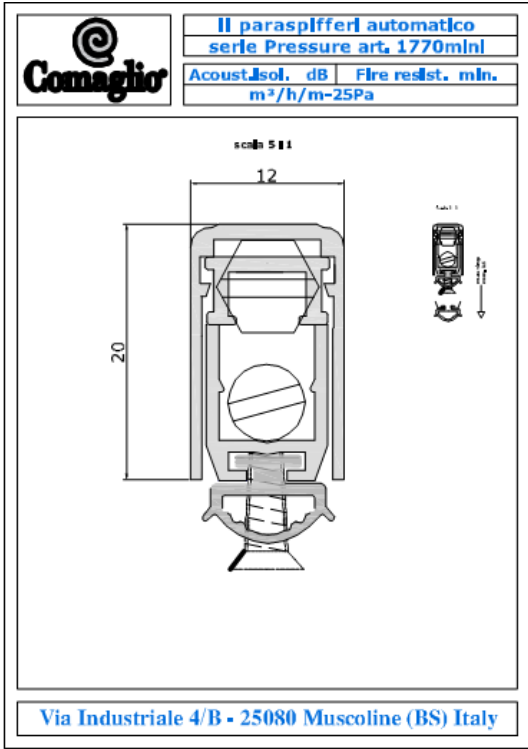
## Appendix C5 Pressure Series 1712/T017

Product reference:	1712/T017
Series:	Pressure
Description:	EPDM Seal with brass push button
	
Scope:	Approved for use with 30 minute fire resisting timber based doorsets meeting the criteria in section 5
Minimum door leaf thickness:	44mm
Fitting requirements:	The drop down seal is to be rebated centrally in the bottom of the door leaf
Intumescent Protection:	Based on the test evidence, intumescent seal at the bottom edge of the leaf or around the seal is not required. Unless specified otherwise within the relevant test evidence or assessment documentation for the door design.
Supporting test evidence:	Seal type 470 of the same dimensions was successfully tested in BMT/FEP/F13292

## Appendix C6 Pressure Series 1700

Product reference:	1700
Series:	Pressure
Description:	EPDM Seal with brass push button
	
Scope:	Approved for use with 30 minute fire resisting timber based doorsets meeting the criteria in section 5
Minimum door leaf thickness:	44mm
Fitting requirements:	The drop down seal is to be rebated centrally in the bottom of the door leaf
Intumescent Protection:	Based on the test evidence, intumescent seal at the bottom edge of the leaf or around the seal is not required. Unless specified otherwise within the relevant test evidence or assessment documentation for the door design.
Supporting test evidence:	Seal type 470 of the same dimensions was successfully tested in BMT/FEP/F13292

## Appendix C7 Pressure Series 1770 Mini

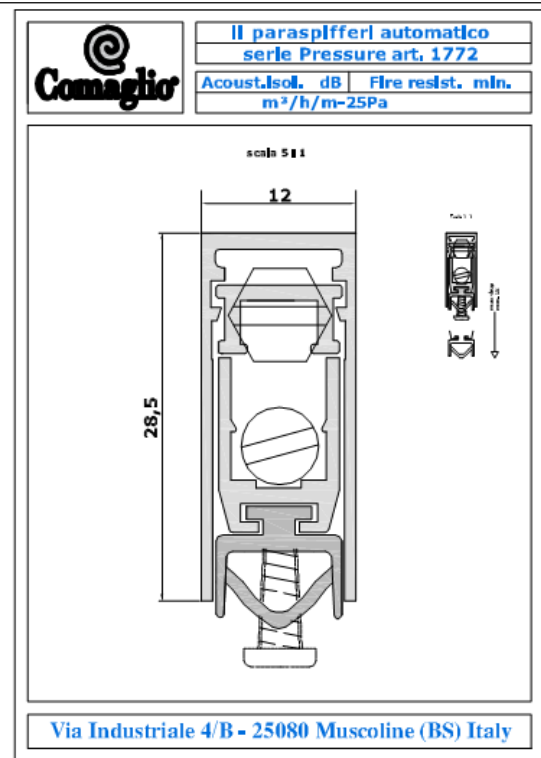
Product reference:	1770 Mini
Series:	Pressure
Description:	EPDM Seal with brass push button (pre-fitted screws)
	
Scope:	Approved for use with 30 minute fire resisting timber based doorsets meeting the criteria in section 5
Minimum door leaf thickness:	44mm
Fitting requirements:	The drop down seal is to be rebated centrally in the bottom of the door leaf
Intumescent Protection:	Based on the test evidence, intumescent seal at the bottom edge of the leaf or around the seal is not required. Unless specified otherwise within the relevant test evidence or assessment documentation for the door design.
Supporting test evidence:	Seal type 422S of the same dimensions was successfully tested in BMT/FEP/F13292

## Appendix C8 Pressure Series 1772-H30

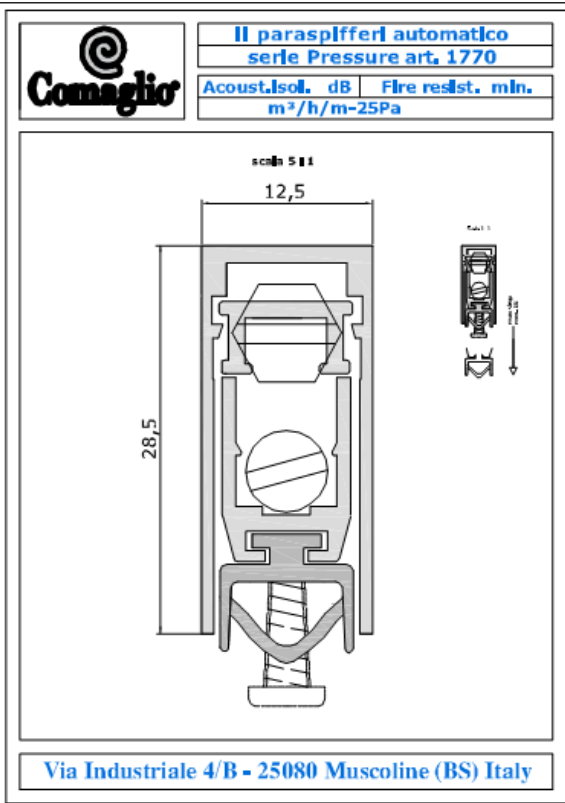
Product reference:	1772-H30
Series:	Pressure
Description:	EPDM Seal with brass push button (pre-fitted screws)
Scope:	Approved for use with 30 minute fire resisting timber based doorsets meeting the criteria in section 5
Minimum door leaf thickness:	44mm
Fitting requirements:	The drop down seal is to be rebated centrally in the bottom of the door leaf
Intumescent Protection:	Based on the test evidence, intumescent seal at the bottom edge of the leaf or around the seal is not required. Unless specified otherwise within the relevant test evidence or assessment documentation for the door design.
Supporting test evidence:	Seal type 470 of dimensions 28.5mm (h) x 12.5mm (w) was successfully tested in BMT/FEP/F13292

**Note:** It is the opinion of Warringtonfire that the 1.5mm difference in height is negligible and would not adversely affect the fire resistance performance of the door leaf. And, since the width of the seal is the same as the tested seal type 470, it is acceptable, because the amount of timber that will be removed or remain along the leaf thickness should be the same as the tested seal type, at minimum.

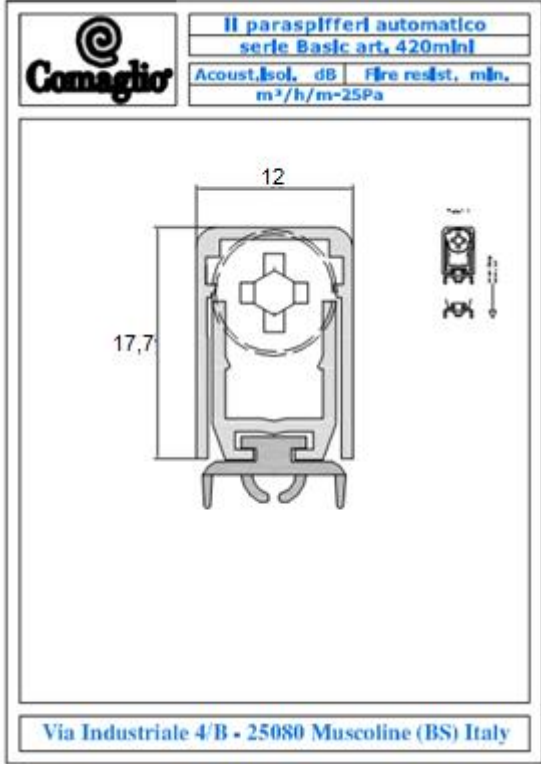
## Appendix C9 Pressure Series 1772

Product reference:	1772
Series:	Pressure
Description:	EPDM Seal with brass push button (pre-fitted screws)
	
Scope:	Approved for use with 30 minute fire resisting timber based doorsets meeting the criteria in section 5
Minimum door leaf thickness:	44mm
Fitting requirements:	The drop down seal is to be rebated centrally in the bottom of the door leaf
Intumescent Protection:	Based on the test evidence, intumescent seal at the bottom edge of the leaf or around the seal is not required. Unless specified otherwise within the relevant test evidence or assessment documentation for the door design.
Supporting test evidence:	Seal type 470 of the same dimensions was successfully tested in BMT/FEP/F13292

## Appendix C10 Pressure Series 1770

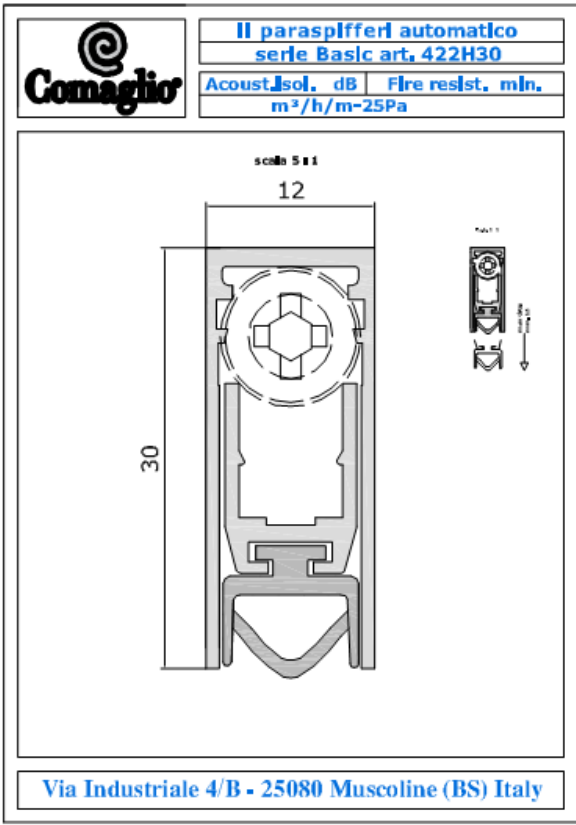
Product reference:	1770
Series:	Pressure
Description:	EPDM Seal with brass push button (pre-fitted screws)
	
Scope:	Approved for use with 30 minute fire resisting timber based doorsets meeting the criteria in section 5
Minimum door leaf thickness:	44mm
Fitting requirements:	The drop down seal is to be rebated centrally in the bottom of the door leaf
Intumescent Protection:	Based on the test evidence, intumescent seal at the bottom edge of the leaf or around the seal is not required. Unless specified otherwise within the relevant test evidence or assessment documentation for the door design.
Supporting test evidence:	Seal type 470 of the same dimensions was successfully tested in BMT/FEP/F13292

## Appendix C11 Basic Series 420 Mini

Product reference:	420 Mini
Series:	Basic
Description:	EPDM Seal with nylon push button
 <p>The image is a technical drawing of the Comaglio 420 Mini automatic drop-down seal. It features a central cross-section showing the internal mechanism, including a nylon push button and an EPDM seal. Dimensions are provided: a width of 12mm and a height of 17.7mm. The drawing is enclosed in a rectangular frame with a header containing the Comaglio logo and a table of performance metrics. The table lists 'Acoust. Isol. dB' and 'Fire resist. min. m²/h/m-25Pa'. Below the drawing, the address 'Via Industriale 4/B - 25080 Muscoline (BS) Italy' is printed.</p>	
Scope:	Approved for use with 30 minute fire resisting timber based doorsets meeting the criteria in section 5
Minimum door leaf thickness:	44mm
Fitting requirements:	The drop down seal is to be rebated centrally in the bottom of the door leaf
Intumescent Protection:	Based on the test evidence, intumescent seal at the bottom edge of the leaf or around the seal is not required. Unless specified otherwise within the relevant test evidence or assessment documentation for the door design.
Supporting evidence:	test Seal type 422S and 470 of the larger dimensions were successfully tested in BMT/FEP/F13292

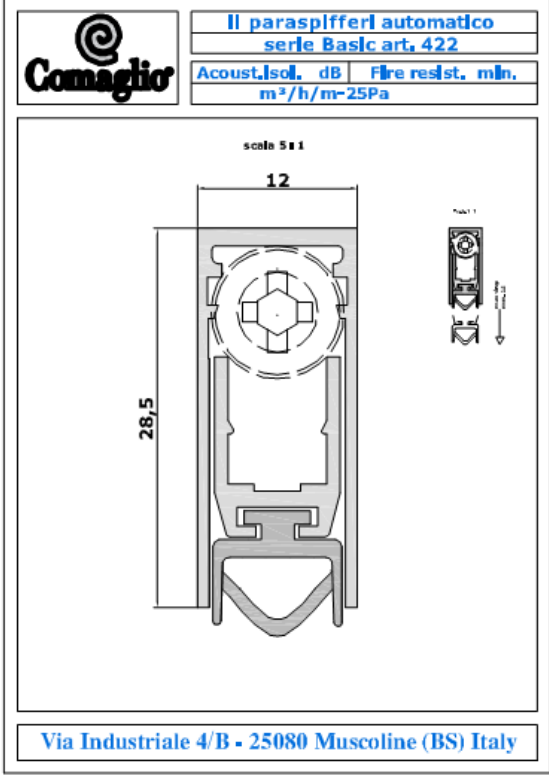


## Appendix C12 Basic Series 422 H30

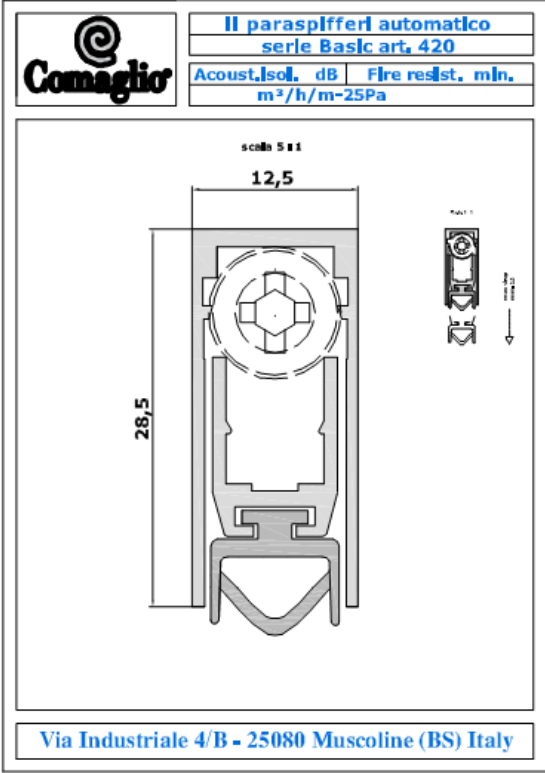
Product reference:	422 H30
Series:	Basic
Description:	EPDM Seal with nylon push button
	
Scope:	Approved for use with 30 minute fire resisting timber based doorsets meeting the criteria in section 5
Minimum door leaf thickness:	44mm
Fitting requirements:	The drop down seal is to be rebated centrally in the bottom of the door leaf
Intumescent Protection:	Based on the test evidence, intumescent seal at the bottom edge of the leaf or around the seal is not required. Unless specified otherwise within the relevant test evidence or assessment documentation for the door design.
Supporting test evidence:	Seal type 470 of dimensions 28.5mm (h) x 12.5mm (w) was successfully tested in BMT/FEP/F13292

**Note:** It is the opinion of Warringtonfire that the 1.5mm difference in height is negligible and would not adversely affect the fire resistance performance of the door leaf. And, since the width of the seal is the same as the tested seal type 470, it is acceptable, because the amount of timber that will be removed or remain along the leaf thickness should be the same as the tested seal, at minimum.

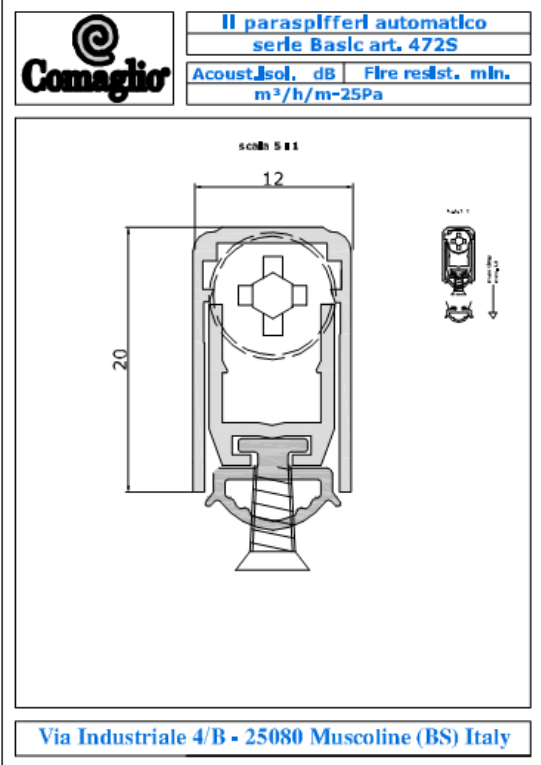
## Appendix C13 Basic Series 422

Product reference:	422
Series:	Basic
Description:	EPDM Seal with nylon push button
	
Scope:	Approved for use with 30 minute fire resisting timber based doorsets meeting the criteria in section 5
Minimum door leaf thickness:	44mm
Fitting requirements:	The drop down seal is to be rebated centrally in the bottom of the door leaf
Intumescent Protection:	Based on the test evidence, intumescent seal at the bottom edge of the leaf or around the seal is not required. Unless specified otherwise within the relevant test evidence or assessment documentation for the door design.
Supporting evidence:	test Seal type 470 of the same dimensions was successfully tested in BMT/FEP/F13292

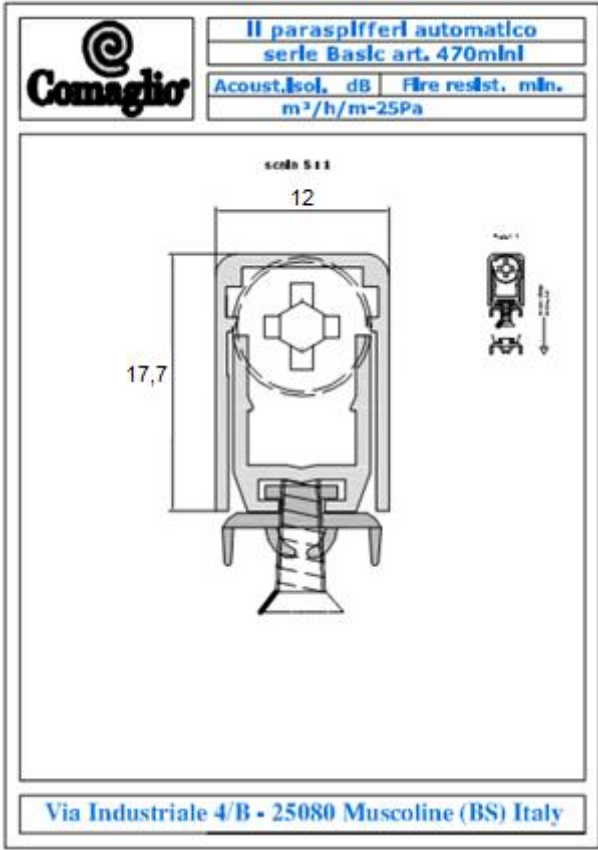
## Appendix C14 Basic Series 420

Product reference:	420
Series:	Basic
Description:	EPDM Seal with nylon push button
	
Scope:	Approved for use with 30 minute fire resisting timber based doorsets meeting the criteria in section 5
Minimum door leaf thickness:	44mm
Fitting requirements:	The drop down seal is to be rebated centrally in the bottom of the door leaf
Intumescent Protection:	Based on the test evidence, intumescent seal at the bottom edge of the leaf or around the seal is not required. Unless specified otherwise within the relevant test evidence or assessment documentation for the door design.
Supporting evidence:	test Seal type 470 of the same dimensions was successfully tested in BMT/FEP/F13292

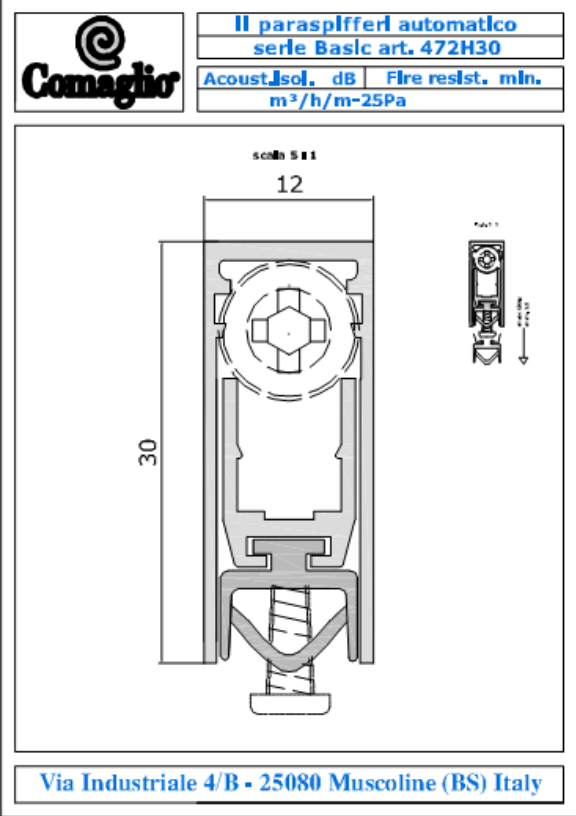
## Appendix C15 Basic Series 472S

Product reference:	472S
Series:	Basic
Description:	EPDM Seal with nylon push button (pre-fitted screws)
	
Scope:	Approved for use with 30 minute fire resisting timber based doorsets meeting the criteria in section 5
Minimum door leaf thickness:	44mm
Fitting requirements:	The drop down seal is to be rebated centrally in the bottom of the door leaf
Intumescent Protection:	Based on the test evidence, intumescent seal at the bottom edge of the leaf or around the seal is not required. Unless specified otherwise within the relevant test evidence or assessment documentation for the door design.
Supporting evidence:	test Seal type 422S of the same dimensions was successfully tested in BMT/FEP/F13292

## Appendix C16 Basic Series 470 Mini

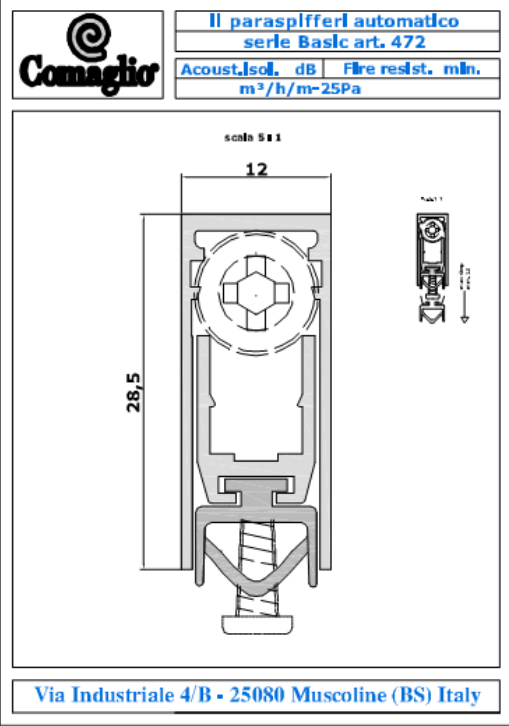
Product reference:	470 Mini
Series:	Basic
Description:	EPDM Seal with nylon push button (pre-fitted screws)
	
Scope:	Approved for use with 30 minute fire resisting timber based doorsets meeting the criteria in section
Minimum door leaf thickness:	44mm
Fitting requirements:	The drop down seal is to be rebated centrally in the bottom of the door leaf
Intumescent Protection:	Based on the test evidence, intumescent seal at the bottom edge of the leaf or around the seal is not required. Unless specified otherwise within the relevant test evidence or assessment documentation for the door design.
Supporting test evidence:	Seal type 422S and 470 of larger dimensions were successfully tested in BMT/FEP/F13292

## Appendix C17 Basic Series 472 H30

Product reference:	472 H30
Series:	Basic
Description:	EPDM Seal with nylon push button (pre-fitted screws)
	
Scope:	Approved for use with 30 minute fire resisting timber based doorsets meeting the criteria in section 5
Minimum door leaf thickness:	44mm
Fitting requirements:	The drop down seal is to be rebated centrally in the bottom of the door leaf
Intumescent Protection:	Based on the test evidence, intumescent seal at the bottom edge of the leaf or around the seal is not required. Unless specified otherwise within the relevant test evidence or assessment documentation for the door design.
Supporting test evidence:	Seal type 470 of dimensions 28.5mm (h) x 12.5mm (w) was successfully tested in BMT/FEP/F13292

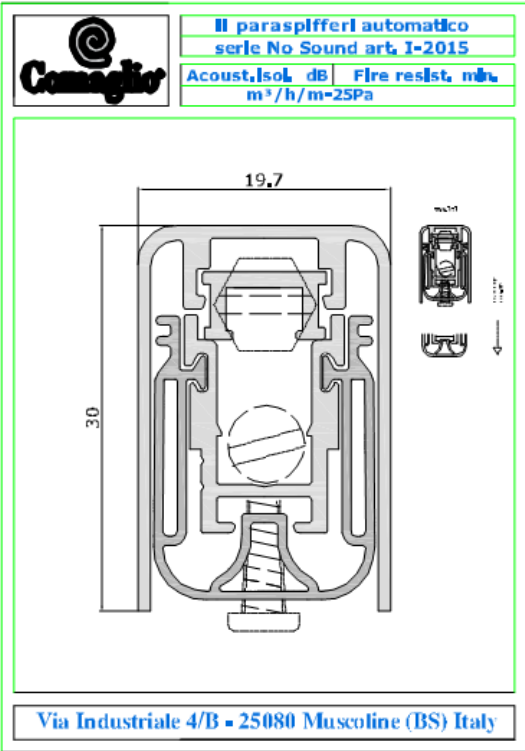
**Note:** It is the opinion of Warringtonfire that the 1.5mm difference in height is negligible and would not adversely affect the fire resistance performance of the door leaf. And, since the width of the seal is the same as the tested seal type 470, it is acceptable, because the amount of timber that will be removed or remain along the leaf thickness should be the same as the tested seal type, at minimum.

## Appendix C18 Basic Series 472

Product reference:	472
Series:	Basic
Description:	EPDM Seal with nylon push button (pre-fitted screws)
	
Scope:	Approved for use with 30 minute fire resisting timber based doorsets meeting the criteria in section 5
Minimum door leaf thickness:	44mm
Fitting requirements:	The drop down seal is to be rebated centrally in the bottom of the door leaf
Intumescent Protection:	Based on the test evidence, intumescent seal at the bottom edge of the leaf or around the seal is not required. Unless specified otherwise within the relevant test evidence or assessment documentation for the door design.
Supporting test evidence:	Seal type 470 of the same dimensions was successfully tested in BMT/FEP/F13292

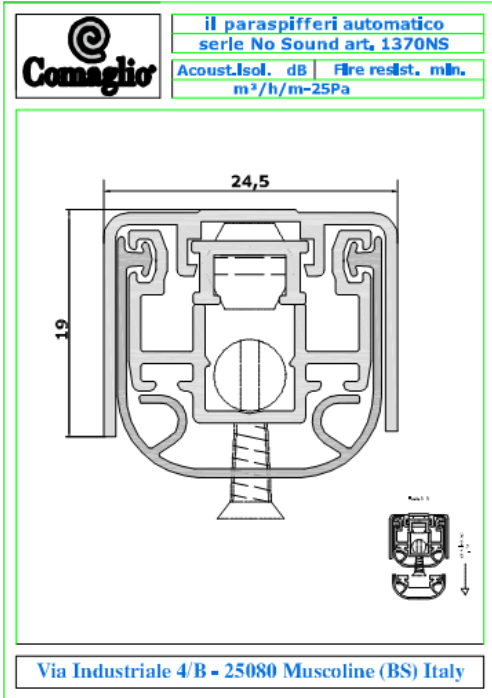
## Appendix D Comaglio Drop Down Seals for Use With 60 Minutes Fire Resisting Doorsets

### Appendix D1 No Sound Series I-2015

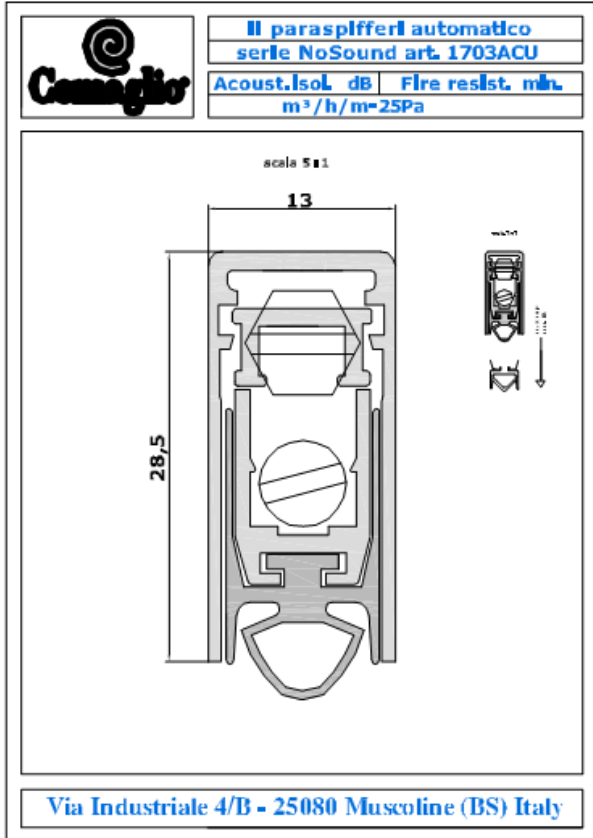
Product reference:	I-2015
Series:	No Sound
Description:	Silicone seal with brass push button (pre-fitted screws)
	
Scope:	Approved for use with 60 minute fire resisting timber based doorsets meeting the criteria in section 5
Minimum door leaf thickness:	54mm
Fitting requirements:	The drop down seal is to be rebated centrally in the bottom of the door leaf
Intumescent Protection:	10 x 2mm uncased STS graphite seals must be fitted either side of the drop down seal in the bottom of the door leaf. The perimeter intumescent specification for the door design must be fitted in the frame reveal and not the leaf edge i.e. it is not permitted for the drop seal to interrupt the perimeter intumescent seals around the leaf
Supporting evidence:	test Seal type I-2015 was successfully tested in BMT/FEP/F15130



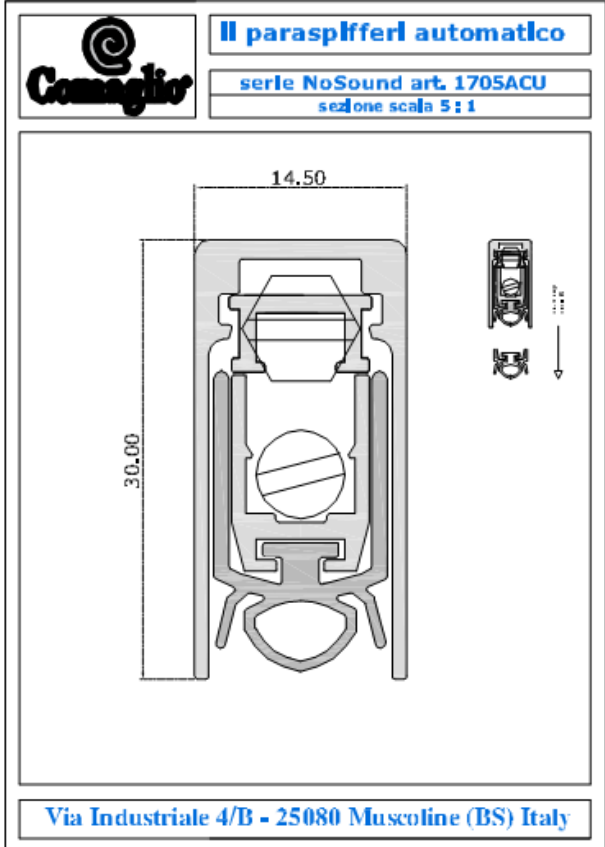
## Appendix D2 No Sound Series 1370 NS

Product reference:	1370 NS
Series:	No Sound
Description:	Silicone seal with brass push button (pre-fitted screws)
	
Scope:	Approved for use with 60 minute fire resisting timber based doorsets meeting the criteria in section 5
Minimum door leaf thickness:	54mm
Fitting requirements:	The drop down seal is to be rebated centrally in the bottom of the door leaf
Intumescent Protection:	10 x 2mm uncased STS graphite seals must be fitted either side of the drop down seal in the bottom of the door leaf. The perimeter intumescent specification for the door design must be fitted in the frame reveal and not the leaf edge i.e. it is not permitted for the drop seal to interrupt the perimeter intumescent seals around the leaf
Supporting evidence:	test Seal type 1370NS was successfully tested in BMT/FEP/F15130

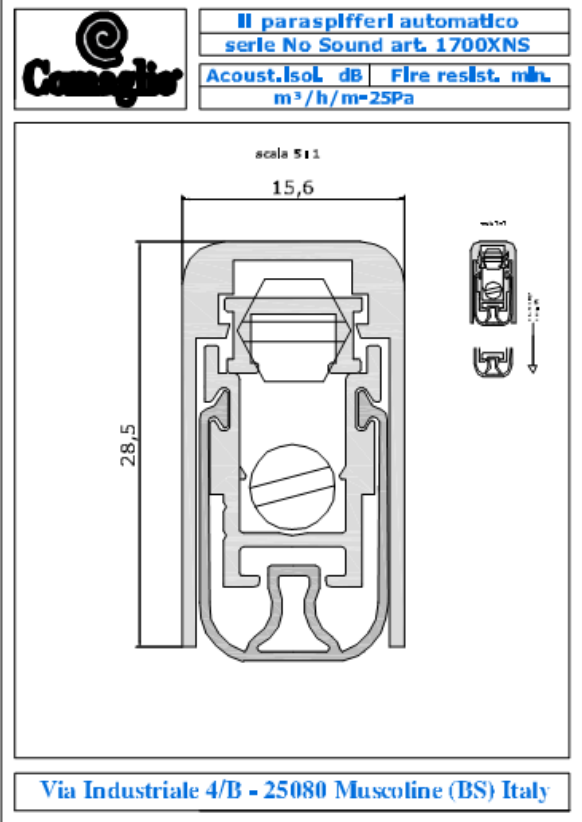
## Appendix D3 No Sound Series 1703 ACU

Product reference:	1703 ACU
Series:	No Sound
Description:	Silicone seal with brass push button
	
Scope:	Approved for use with 60 minute fire resisting timber based doorsets meeting the criteria in section 5
Minimum door leaf thickness:	54mm
Fitting requirements:	The drop down seal is to be rebated centrally in the bottom of the door leaf
Intumescent Protection:	10 x 2mm uncased STS graphite seals must be fitted either side of the drop down seal in the bottom of the door leaf. The perimeter intumescent specification for the door design must be fitted in the frame reveal and not the leaf edge, i.e. it is not permitted for the drop seal to interrupt the perimeter intumescent seals around the leaf
Supporting evidence:	test Seal type I-2015 of larger dimensions was successfully tested in BMT/FEP/F15130

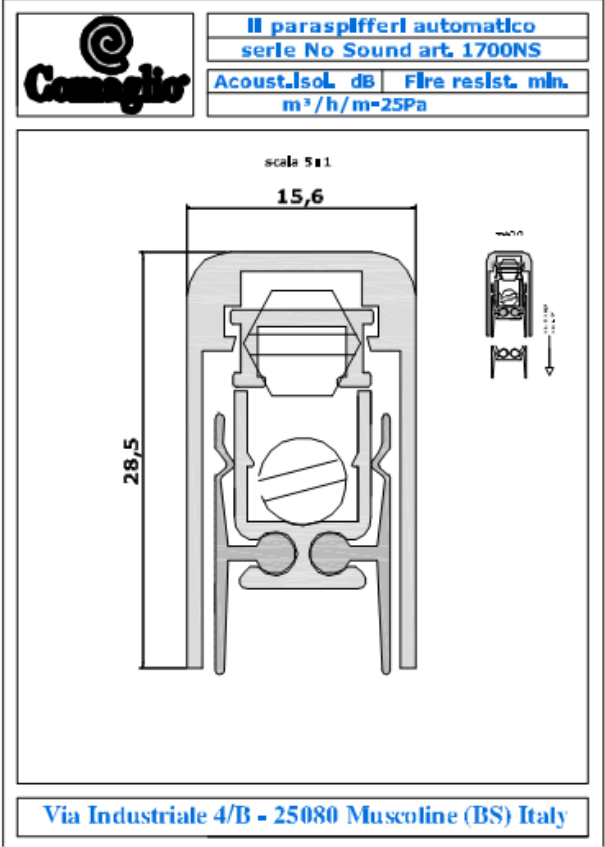
## Appendix D4 No Sound Series 1705 ACU

Product reference:	1705 ACU
Series:	No Sound
Description:	Silicone seal with brass push button
	
Scope:	Approved for use with 60 minute fire resisting timber based doorsets meeting the criteria in section 5
Minimum door leaf thickness:	54mm
Fitting requirements:	The drop down seal is to be rebated centrally in the bottom of the door leaf
Intumescent Protection:	10 x 2mm uncased STS graphite seals must be fitted either side of the drop down seal in the bottom of the door leaf. The perimeter intumescent specification for the door design must be fitted in the frame reveal and not the leaf edge i.e. it is not permitted for the drop seal to interrupt the perimeter intumescent seals around the leaf
Supporting test evidence:	Seal type I-2015 of larger dimensions was successfully tested in BMT/FEP/F15130

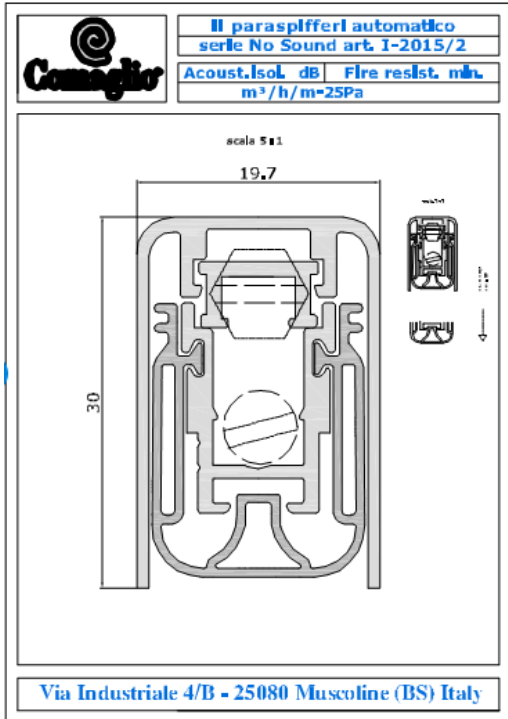
## Appendix D5 No Sound Series 1700 XNS

Product reference:	1700 XNS
Series:	No Sound
Description:	Silicone seal with brass push button
	
Scope:	Approved for use with 60 minute fire resisting timber based doorsets meeting the criteria in section 5
Minimum door leaf thickness:	54mm
Fitting requirements:	The drop down seal is to be rebated centrally in the bottom of the door leaf
Intumescent Protection:	10 x 2mm uncased STS graphite seals must be fitted either side of the drop down seal in the bottom of the door leaf. The perimeter intumescent specification for the door design must be fitted in the frame reveal and not the leaf edge i.e. it is not permitted for the drop seal to interrupt the perimeter intumescent seals around the leaf
Supporting evidence:	test Seal type I-2015 of larger dimensions was successfully tested in BMT/FEP/F15130

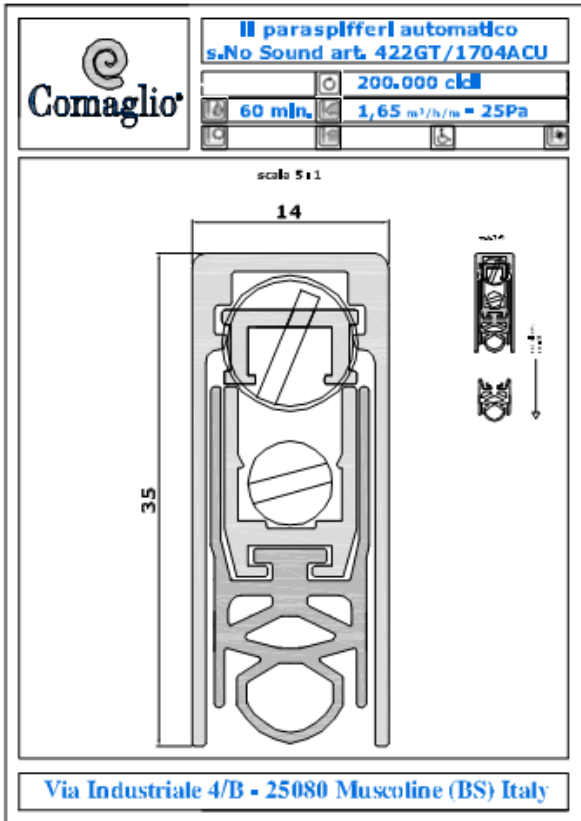
## Appendix D6 No Sound Series 1700 NS

Product reference:	1700 NS
Series:	No Sound
Description:	Silicone seal with brass push button
	
Scope:	Approved for use with 60 minute fire resisting timber based doorsets meeting the criteria in section 5
Minimum door leaf thickness:	54mm
Fitting requirements:	The drop down seal is to be rebated centrally in the bottom of the door leaf
Intumescent Protection:	10 x 2mm uncased STS graphite seals must be fitted either side of the drop down seal in the bottom of the door leaf. The perimeter intumescent specification for the door design must be fitted in the frame reveal and not the leaf edge i.e. it is not permitted for the drop seal to interrupt the perimeter intumescent seals around the leaf
Supporting evidence:	test Seal type I-2015 of larger dimensions was successfully tested in BMT/FEP/F15130

## Appendix D7 No Sound Series I-2015/2

Product reference:	I-2015/2
Series:	No Sound
Description:	Silicone seal with brass push button
	
Scope:	Approved for use with 60 minute fire resisting timber based doorsets meeting the criteria in section 5
Minimum door leaf thickness:	54mm
Fitting requirements:	The drop down seal is to be rebated centrally in the bottom of the door leaf
Intumescent Protection:	10 x 2mm uncased STS graphite seals must be fitted either side of the drop down seal in the bottom of the door leaf. The perimeter intumescent specification for the door design must be fitted in the frame reveal and not the leaf edge i.e. it is not permitted for the drop seal to interrupt the perimeter intumescent seals around the leaf
Supporting test evidence:	Seal type I-2015 was successfully tested in BMT/FEP/F15130

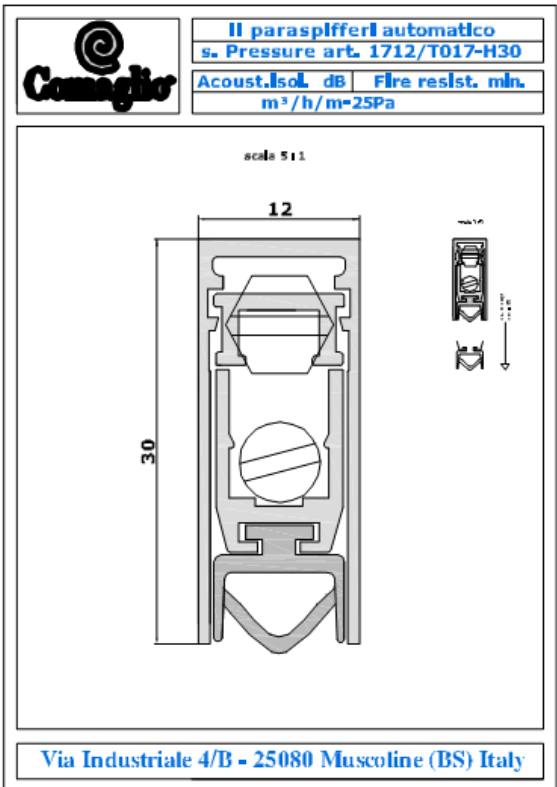
## Appendix D8 No Sound Series 422GT / 1704ACU

Product reference:	422GT/1704ACU
Series:	No Sound
Description:	Silicone seal with brass push button
	
Scope:	Approved for use with 60 minute fire resisting timber based doorsets meeting the criteria in section 5
Minimum door leaf thickness:	54mm
Fitting requirements:	The drop down seal is to be rebated centrally in the bottom of the door leaf
Intumescent Protection:	10 x 2mm uncased STS graphite seals must be fitted either side of the drop down seal in the bottom of the door leaf. The perimeter intumescent specification for the door design must be fitted in the frame reveal and not the leaf edge i.e. it is not permitted for the drop seal to interrupt the perimeter intumescent seals around the leaf
Supporting evidence:	test Seal type I-2015 of dimensions 30mm (h) x 19.7mm (w) was successfully tested in BMT/FEP/F15130

**Note:** It is the opinion of Warringtonfire that the 5mm difference in height would not adversely affect the fire resistance performance of the door leaf, since the width of the seal is smaller than that of the tested seal type. The additional 5mm depth is acceptable because it will not increase heat transfer across the door thickness, and

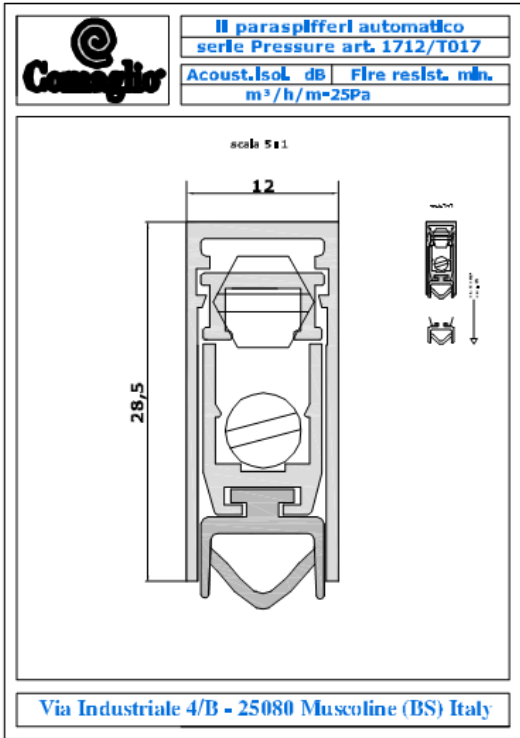
the amount of timber removed in the thickness direction is less compared to that of the tested seal type.

### Appendix D9 Pressure Series 1712 / T017-H30

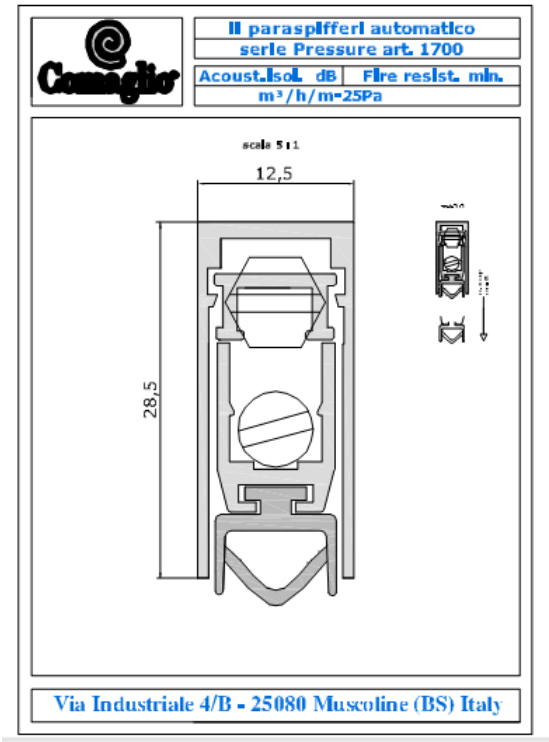
Product reference:	1712/T017-H30
Series:	Pressure
Description:	Silicone seal with brass push button
	
Scope:	Approved for use with 60 minute fire resisting timber based doorsets meeting the criteria in section 5
Minimum door leaf thickness:	54mm
Fitting requirements:	The drop down seal is to be rebated centrally in the bottom of the door leaf
Intumescent Protection:	10 x 2mm uncased STS graphite seals must be fitted either side of the drop down seal in the bottom of the door leaf. The perimeter intumescent specification for the door design must be fitted in the frame reveal and not the leaf edge i.e. it is not permitted for the drop seal to interrupt the perimeter intumescent seals around the leaf
Supporting evidence:	test Seal type I-2015 of a larger dimension was successfully tested in BMT/FEP/F15130



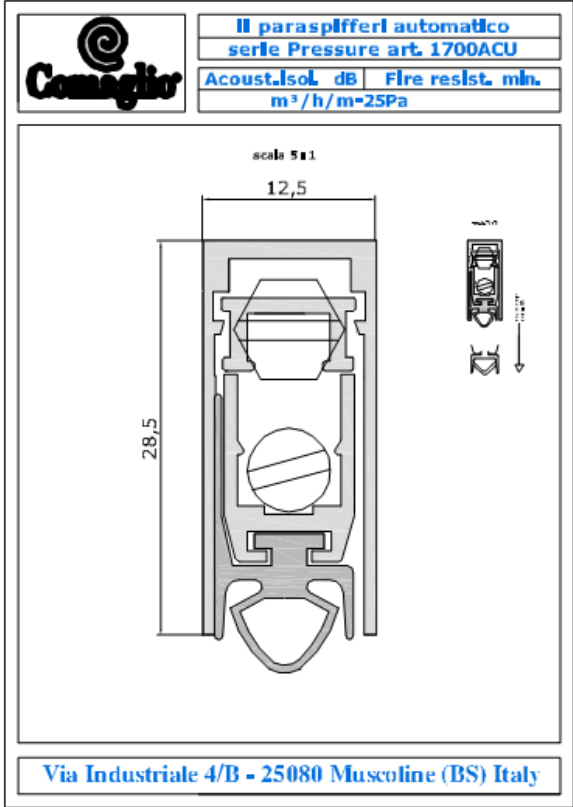
## Appendix D10 Pressure Series 1712/T017

Product reference:	1712/T017
Series:	Pressure
Description:	Silicone seal with brass push button
	
Scope:	Approved for use with 60 minute fire resisting timber based doorsets meeting the criteria in section 5 of
Minimum door leaf thickness:	54mm
Fitting requirements:	The drop down seal is to be rebated centrally in the bottom of the door leaf
Intumescent Protection:	10 x 2mm uncased STS graphite seals must be fitted either side of the drop down seal in the bottom of the door leaf. The perimeter intumescent specification for the door design must be fitted in the frame reveal and not the leaf edge i.e. it is not permitted for the drop seal to interrupt the perimeter intumescent seals around the leaf
Supporting evidence:	test Seal type I-2015 of larger dimensions was successfully tested in BMT/FEP/F15130

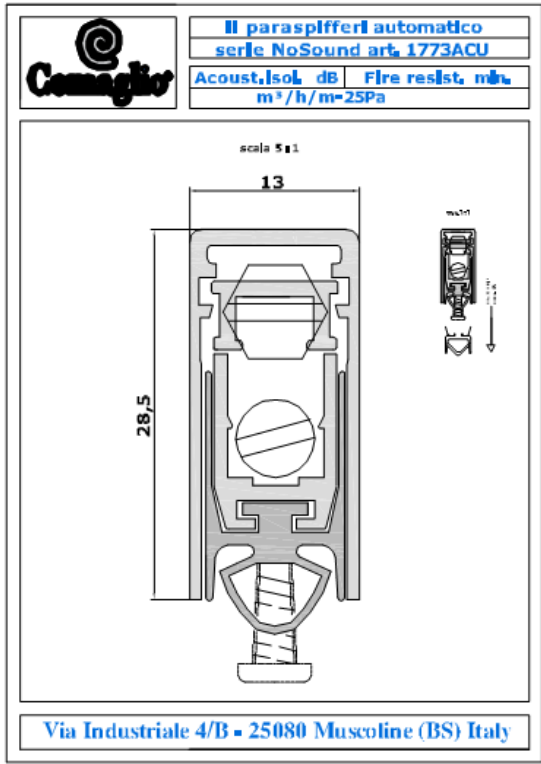
## Appendix D11 Pressure Series 1700

Product reference:	1700
Series:	Pressure
Description:	Silicone seal with brass push button
	
Scope:	Approved for use with 60 minute fire resisting timber based doorsets meeting the criteria in section 5
Minimum door leaf thickness:	54mm
Fitting requirements:	The drop down seal is to be rebated centrally in the bottom of the door leaf
Intumescent Protection:	10 x 2mm uncased STS graphite seals must be fitted either side of the drop down seal in the bottom of the door leaf. The perimeter intumescent specification for the door design must be fitted in the frame reveal and not the leaf edge i.e. it is not permitted for the drop seal to interrupt the perimeter intumescent seals around the leaf
Supporting evidence:	test Seal type I-2015 of larger dimensions was successfully tested in BMT/FEP/F15130

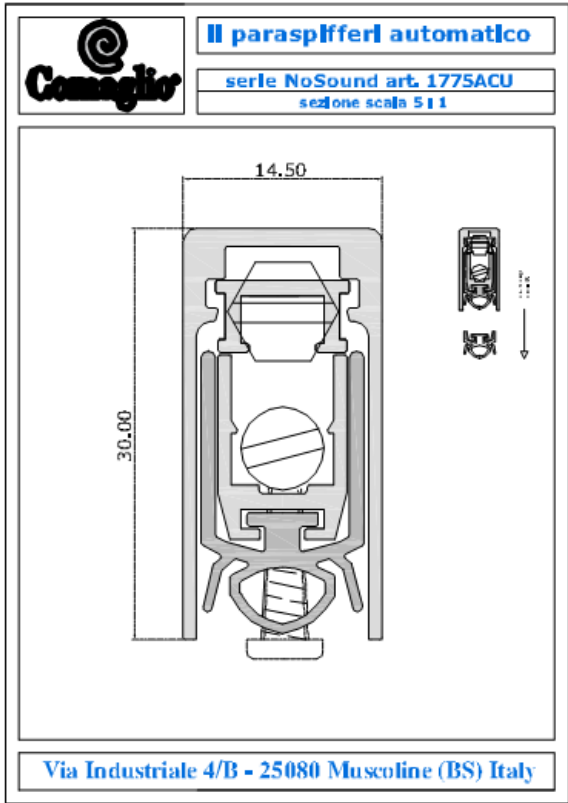
## Appendix D12 Pressure Series 1700 ACU

Product reference:	1700 ACU
Series:	Pressure
Description:	Silicone seal with brass push button
	
Scope:	Approved for use with 60 minute fire resisting timber based doorsets meeting the criteria in section 5
Minimum door leaf thickness:	54mm
Fitting requirements:	The drop down seal is to be rebated centrally in the bottom of the door leaf
Intumescent Protection:	10 x 2mm uncased STS graphite seals must be fitted either side of the drop down seal in the bottom of the door leaf. The perimeter intumescent specification for the door design must be fitted in the frame reveal and not the leaf edge i.e. it is not permitted for the drop seal to interrupt the perimeter intumescent seals around the leaf
Supporting evidence:	test Seal type I-2015 of larger dimensions was successfully tested in BMT/FEP/F15130

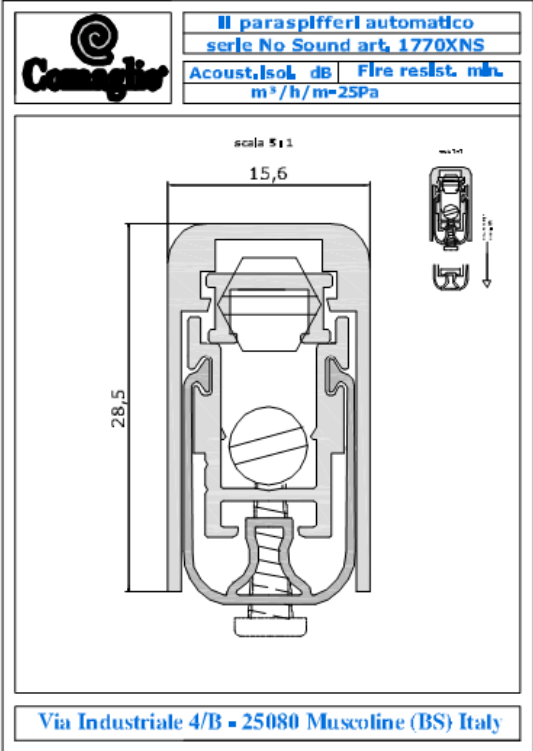
## Appendix D13 No Sound Series 1773 ACU

Product reference:	1773 ACU
Series:	No Sound
Description:	Silicone seal with brass push button (pre-fitted screws)
	
Scope:	Approved for use with 60 minute fire resisting timber based doorsets meeting the criteria in section 5
Minimum door leaf thickness:	54mm
Fitting requirements:	The drop down seal is to be rebated centrally in the bottom of the door leaf
Intumescent Protection:	10 x 2mm uncased STS graphite seals must be fitted either side of the drop down seal in the bottom of the door leaf. The perimeter intumescent specification for the door design must be fitted in the frame reveal and not the leaf edge i.e. it is not permitted for the drop seal to interrupt the perimeter intumescent seals around the leaf
Supporting evidence:	test Seal type I-2015 of larger dimensions was successfully tested in BMT/FEP/F15130

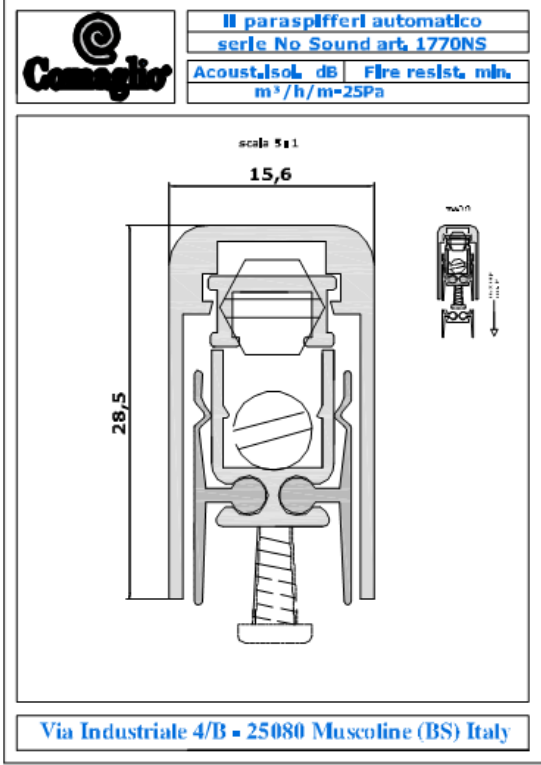
## Appendix D14 No Sound Series 1775 ACU

Product reference:	1775 ACU
Series:	No Sound
Description:	Silicone seal with brass push button (pre-fitted screws)
	
Scope:	Approved for use with 60 minute fire resisting timber based doorsets meeting the criteria in section 5
Minimum door leaf thickness:	54mm
Fitting requirements:	The drop down seal is to be rebated centrally in the bottom of the door leaf
Intumescent Protection:	10 x 2mm uncased STS graphite seals must be fitted either side of the drop down seal in the bottom of the door leaf. The perimeter intumescent specification for the door design must be fitted in the frame reveal and not the leaf edge i.e. it is not permitted for the drop seal to interrupt the perimeter intumescent seals around the leaf
Supporting evidence:	test Seal type I-2015 of a larger dimension was successfully tested in BMT/FEP/F15130

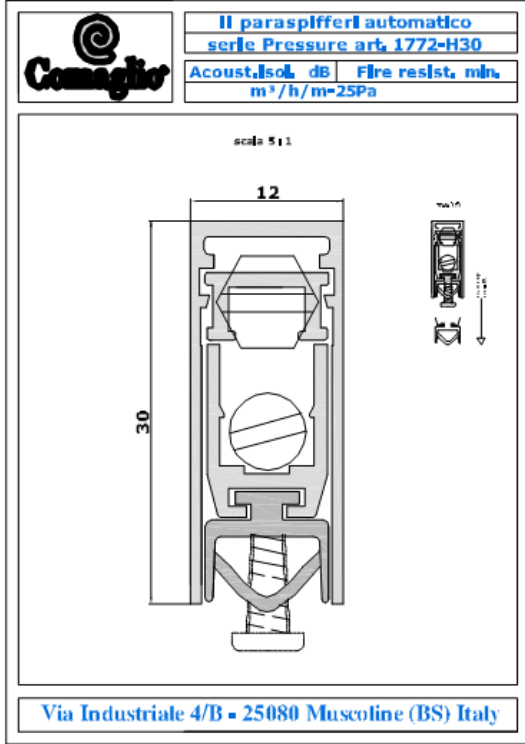
## Appendix D15 No Sound Series 1770 XNS

Product reference:	1770 XNS
Series:	No Sound
Description:	Silicone seal with brass push button (pre-fitted screws)
	
Scope:	Approved for use with 60 minute fire resisting timber based doorsets meeting the criteria in section 5
Minimum door leaf thickness:	54mm
Fitting requirements:	The drop down seal is to be rebated centrally in the bottom of the door leaf
Intumescent Protection:	10 x 2mm uncased STS graphite seals must be fitted either side of the drop down seal in the bottom of the door leaf. The perimeter intumescent specification for the door design must be fitted in the frame reveal and not the leaf edge i.e. it is not permitted for the drop seal to interrupt the perimeter intumescent seals around the leaf
Supporting test evidence:	Seal type I-2015 of larger dimensions was successfully tested in BMT/FEP/F15130

## Appendix D16 No Sound Series 1770 NS

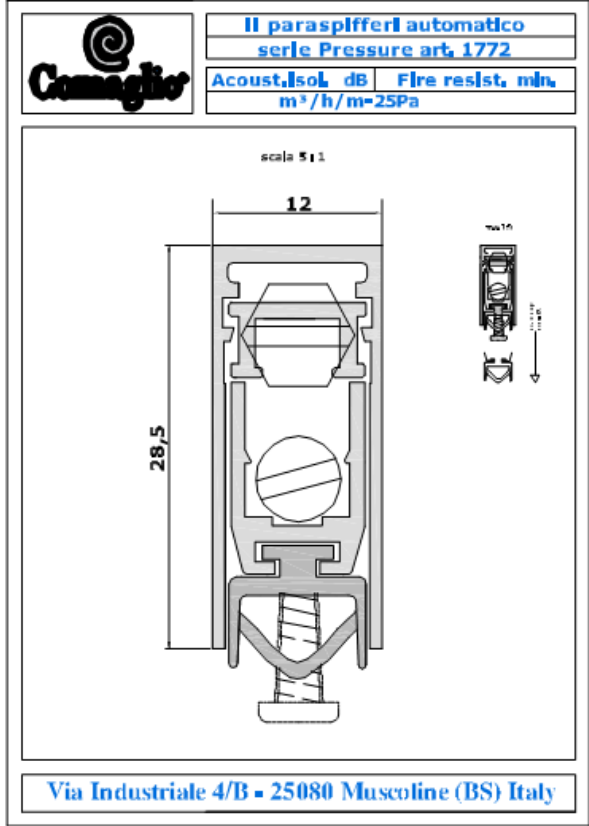
Product reference:	1770 NS
Series:	No Sound
Description:	Silicone seal with brass push button (pre-fitted screws)
	
Scope:	Approved for use with 60 minute fire resisting timber based doorsets meeting the criteria in section 5
Minimum door leaf thickness:	54mm
Fitting requirements:	The drop down seal is to be rebated centrally in the bottom of the door leaf
Intumescent Protection:	10 x 2mm uncased STS graphite seals must be fitted either side of the drop down seal in the bottom of the door leaf. The perimeter intumescent specification for the door design must be fitted in the frame reveal and not the leaf edge i.e. it is not permitted for the drop seal to interrupt the perimeter intumescent seals around the leaf
Supporting evidence:	test Seal type I-2015 of larger dimensions was successfully tested in BMT/FEP/F15130

## Appendix D17 Pressure Series 1772-H30

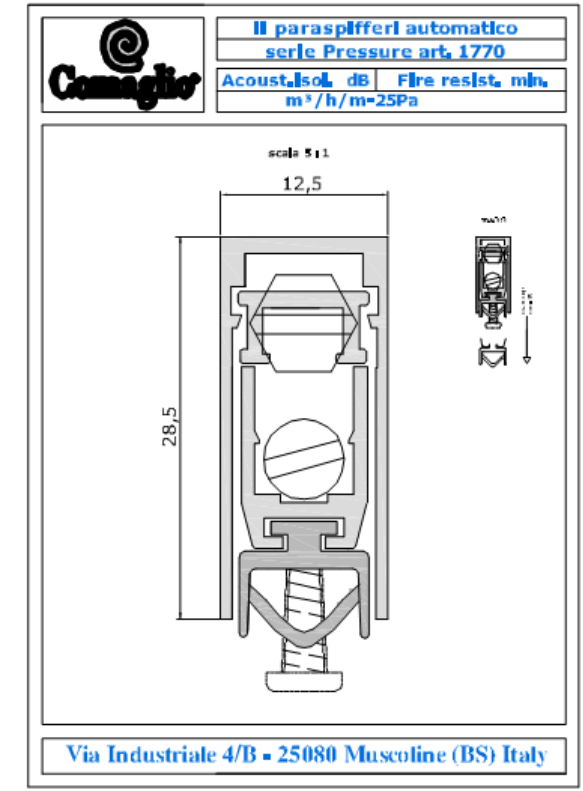
Product reference:	1772-H30
Series:	Pressure
Description:	Silicone seal with brass push button (pre-fitted screws)
	
Scope:	Approved for use with 60 minute fire resisting timber based doorsets meeting the criteria in section 5
Minimum door leaf thickness:	54mm
Fitting requirements:	The drop down seal is to be rebated centrally in the bottom of the door leaf
Intumescent Protection:	10 x 2mm uncased STS graphite seals must be fitted either side of the drop down seal in the bottom of the door leaf. The perimeter intumescent specification for the door design must be fitted in the frame reveal and not the leaf edge i.e. it is not permitted for the drop seal to interrupt the perimeter intumescent seals around the leaf
Supporting evidence:	test Seal type I-2015 of a larger dimension was successfully tested in BMT/FEP/F15130



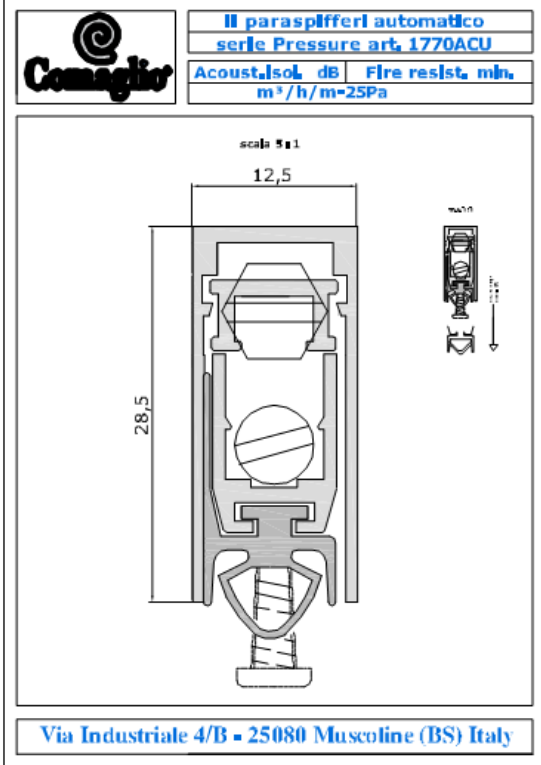
## Appendix D18 Pressure Series 1772

Product reference:	1772
Series:	Pressure
Description:	Silicone seal with brass push button (pre-fitted screws)
	
Scope:	Approved for use with 60 minute fire resisting timber based doorsets meeting the criteria in section 5
Minimum door leaf thickness:	54mm
Fitting requirements:	The drop down seal is to be rebated centrally in the bottom of the door leaf
Intumescent Protection:	10 x 2mm uncased STS graphite seals must be fitted either side of the drop down seal in the bottom of the door leaf. The perimeter intumescent specification for the door design must be fitted in the frame reveal and not the leaf edge i.e. it is not permitted for the drop seal to interrupt the perimeter intumescent seals around the leaf
Supporting evidence:	test Seal type I-2015 of larger dimensions was successfully tested in BMT/FEP/F15130

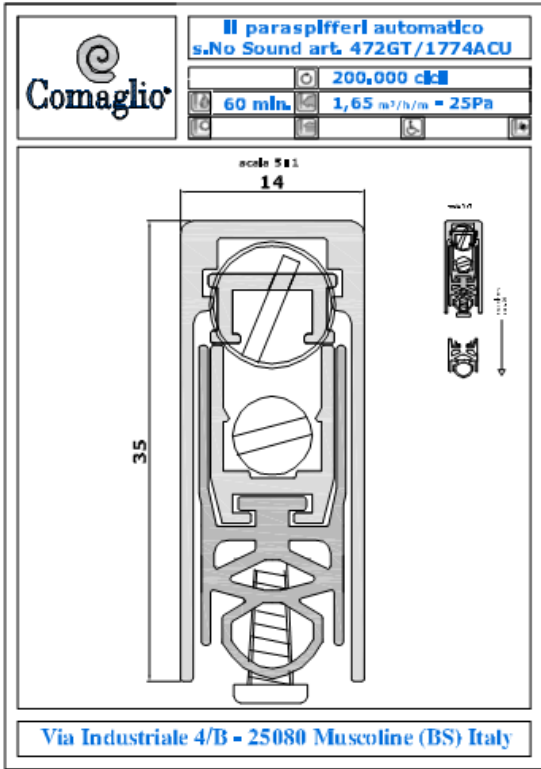
## Appendix D19 Pressure Series 1770

Product reference:	1770
Series:	Pressure
Description:	Silicone seal with brass push button (pre-fitted screws)
	
Scope:	Approved for use with 60 minute fire resisting timber based doorsets meeting the criteria in section 5
Minimum door leaf thickness:	54mm
Fitting requirements:	The drop down seal is to be rebated centrally in the bottom of the door leaf
Intumescent Protection:	10 x 2mm uncased STS graphite seals must be fitted either side of the drop down seal in the bottom of the door leaf. The perimeter intumescent specification for the door design must be fitted in the frame reveal and not the leaf edge i.e. it is not permitted for the drop seal to interrupt the perimeter intumescent seals around the leaf
Supporting evidence:	test Seal type I-2015 of larger dimensions was successfully tested in BMT/FEP/F15130

## Appendix D20 Pressure Series 1770 ACU

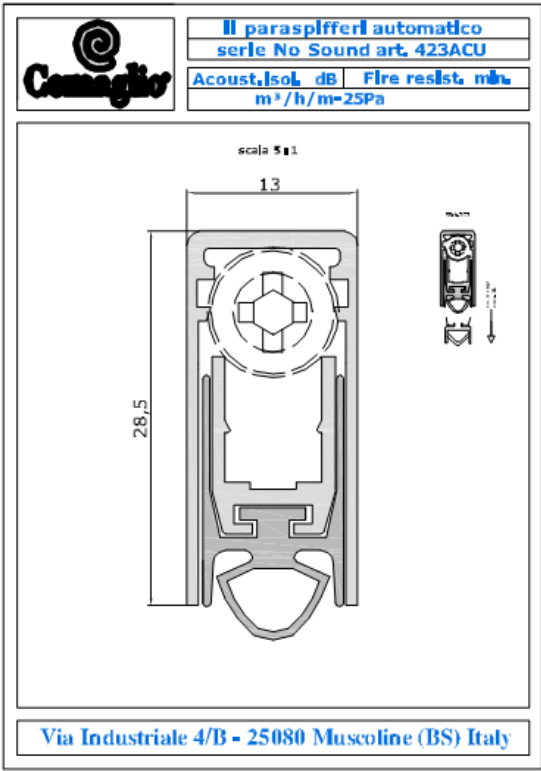
Product reference:	1770-ACU
Series:	Pressure
Description:	Silicone seal with brass push button (pre-fitted screws)
	
Scope:	Approved for use with 60 minute fire resisting timber based doorsets meeting the criteria in section 5
Minimum door leaf thickness:	54mm
Fitting requirements:	The drop down seal is to be rebated centrally in the bottom of the door leaf
Intumescent Protection:	10 x 2mm uncased STS graphite seals must be fitted either side of the drop down seal in the bottom of the door leaf. The perimeter intumescent specification for the door design must be fitted in the frame reveal and not the leaf edge i.e. it is not permitted for the drop seal to interrupt the perimeter intumescent seals around the leaf
Supporting evidence:	test Seal type I-2015 of larger dimensions was successfully tested in BMT/FEP/F15130

## Appendix D21 No Sound Series 472GT / 1774ACU

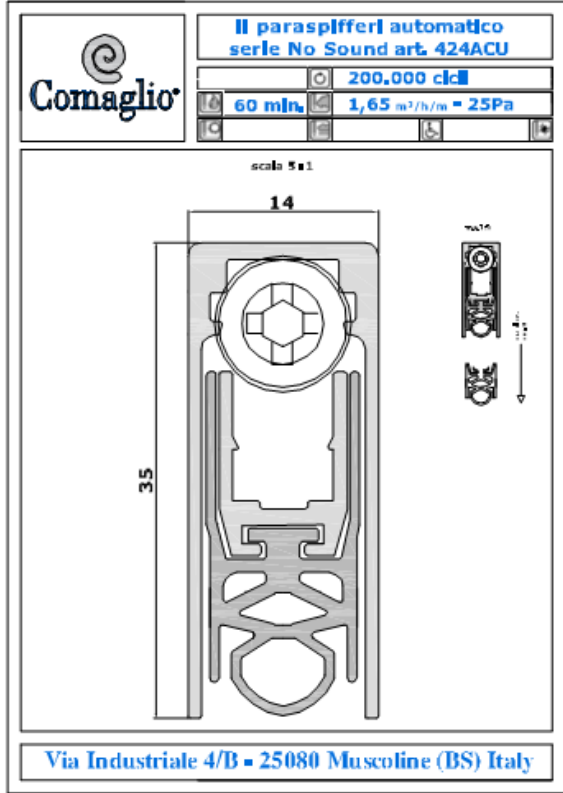
Product reference:	472GT / 1774ACU
Series:	No Sound
Description:	Silicone seal with brass push button (pre-fitted screws)
	
Scope:	Approved for use with 60 minute fire resisting timber based doorsets meeting the criteria in section 5
Minimum door leaf thickness:	54mm
Fitting requirements:	The drop down seal is to be rebated centrally in the bottom of the door leaf
Intumescent Protection:	10 x 2mm uncased STS graphite seals must be fitted either side of the drop down seal in the bottom of the door leaf. The perimeter intumescent specification for the door design must be fitted in the frame reveal and not the leaf edge i.e. it is not permitted for the drop seal to interrupt the perimeter intumescent seals around the leaf
Supporting test evidence:	Seal type I-2015 of dimensions 30mm (h) x 19.7mm (w) was successfully tested in BMT/FEP/F15130

**Note:** It is the opinion of Warringtonfire that the 5mm difference in height would not adversely affect the fire resistance performance of the door leaf, since the width of the seal is smaller than that of the tested seal type. The additional 5mm depth is acceptable because it will not increase heat transfer across the door thickness, and the amount of timber removed in the thickness direction is less compared to that of the tested seal type.

## Appendix D22 No Sound Series 423 ACU

Product reference:	423 ACU
Series:	No Sound
Description:	Silicone seal with nylon push button
 <p>Il parasplifferi automatico serie No Sound art. 423ACU Acoust. isol. dB   Fire resist. min. m<sup>3</sup>/h/m<sup>2</sup> 25Pa</p> <p>scale 5:1</p> <p>13</p> <p>28,5</p> <p>Via Industriale 4/B - 25080 Muscoline (BS) Italy</p>	
Scope:	Approved for use with 60 minute fire resisting timber based doorsets meeting the criteria in section 5
Minimum door leaf thickness:	54mm
Fitting requirements:	The drop down seal is to be rebated centrally in the bottom of the door leaf
Intumescent Protection:	10 x 2mm uncased STS graphite seals must be fitted either side of the drop down seal in the bottom of the door leaf. The perimeter intumescent specification for the door design must be fitted in the frame reveal and not the leaf edge i.e. it is not permitted for the drop seal to interrupt the perimeter intumescent seals around the leaf
Supporting evidence:	test Seal type I-2015 of larger dimensions was successfully tested in BMT/FEP/F15130

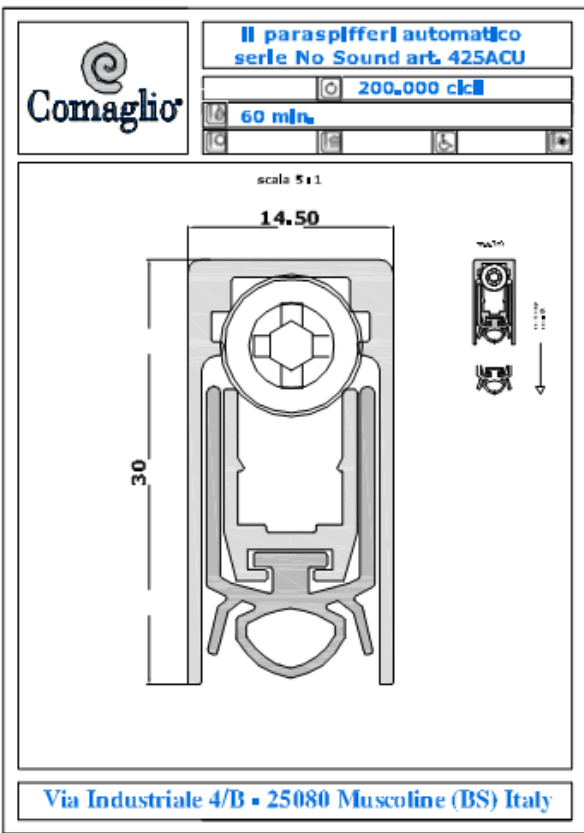
## Appendix D23 No Sound Series 424 ACU

Product reference:	424 ACU
Series:	No Sound
Description:	Silicone seal with nylon push button
	
Scope:	Approved for use with 60 minute fire resisting timber based doorsets meeting the criteria in section 5
Minimum door leaf thickness:	54mm
Fitting requirements:	The drop down seal is to be rebated centrally in the bottom of the door leaf
Intumescent Protection:	10 x 2mm uncased STS graphite seals must be fitted either side of the drop down seal in the bottom of the door leaf. The perimeter intumescent specification for the door design must be fitted in the frame reveal and not the leaf edge i.e. it is not permitted for the drop seal to interrupt the perimeter intumescent seals around the leaf
Supporting test evidence:	Seal type I-2015 of dimensions 30mm (h) x 19.7mm (w) was successfully tested in BMT/FEP/F15130

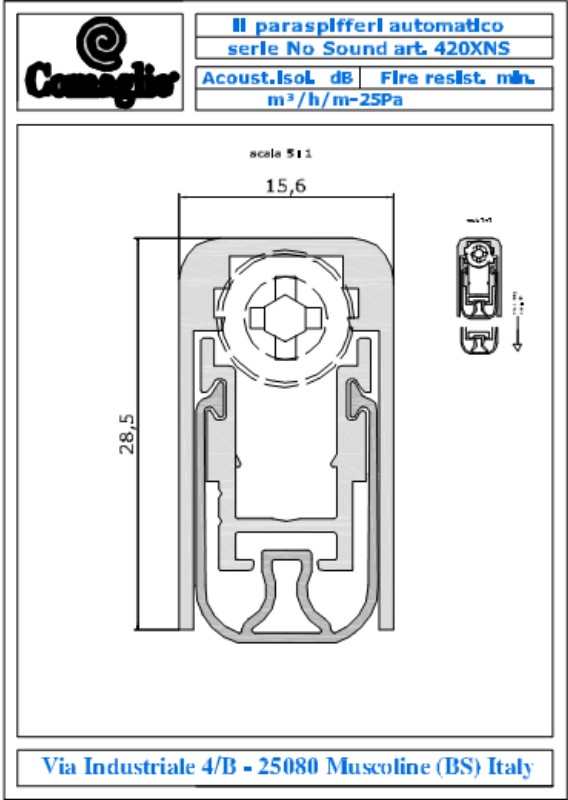
**Note:** It is the opinion of Warringtonfire that the 5mm difference in height would not adversely affect the fire resistance performance of the door leaf, since the width of the seal is smaller than that of the tested seal type. The additional 5mm depth is acceptable because it will not increase heat transfer across the door thickness, and

the amount of timber removed in the thickness direction is less compared to that of the tested seal type.

### Appendix D24 No Sound Series 425 ACU

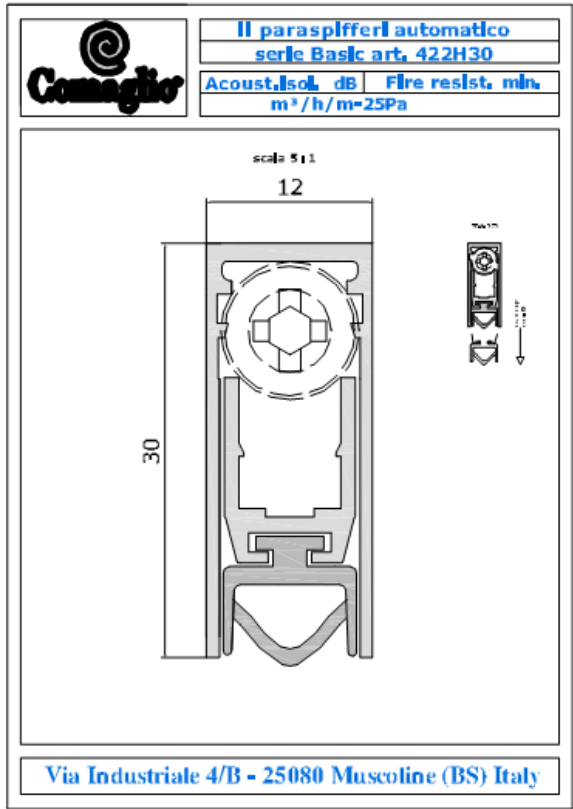
Product reference:	425 ACU
Series:	No Sound
Description:	Silicone seal with nylon push button
	
Scope:	Approved for use with 60 minute fire resisting timber based doorsets meeting the criteria in section 5
Minimum door leaf thickness:	54mm
Fitting requirements:	The drop down seal is to be rebated centrally in the bottom of the door leaf
Intumescent Protection:	10 x 2mm uncased STS graphite seals must be fitted either side of the drop down seal in the bottom of the door leaf. The perimeter intumescent specification for the door design must be fitted in the frame reveal and not the leaf edge i.e. it is not permitted for the drop seal to interrupt the perimeter intumescent seals around the leaf
Supporting evidence:	test Seal type I-2015 of a larger dimension was successfully tested in BMT/FEP/F15130

## Appendix D25 No Sound Series 420 XNS

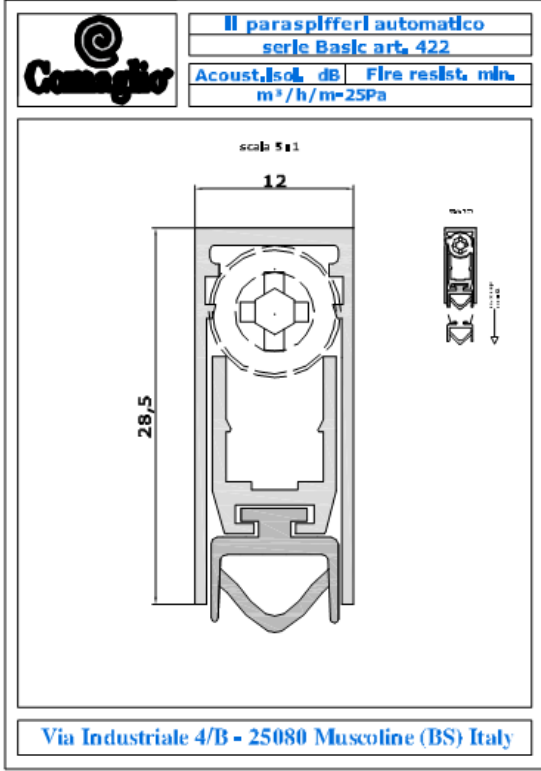
Product reference:	420 XNS
Series:	No Sound
Description:	Silicone seal with nylon push button
	
Scope:	Approved for use with 60 minute fire resisting timber based doorsets meeting the criteria in section 5
Minimum door leaf thickness:	54mm
Fitting requirements:	The drop down seal is to be rebated centrally in the bottom of the door leaf
Intumescent Protection:	10 x 2mm uncased STS graphite seals must be fitted either side of the drop down seal in the bottom of the door leaf. The perimeter intumescent specification for the door design must be fitted in the frame reveal and not the leaf edge i.e. it is not permitted for the drop seal to interrupt the perimeter intumescent seals around the leaf
Supporting evidence:	test Seal type I-2015 of larger dimensions was successfully tested in BMT/FEP/F15130



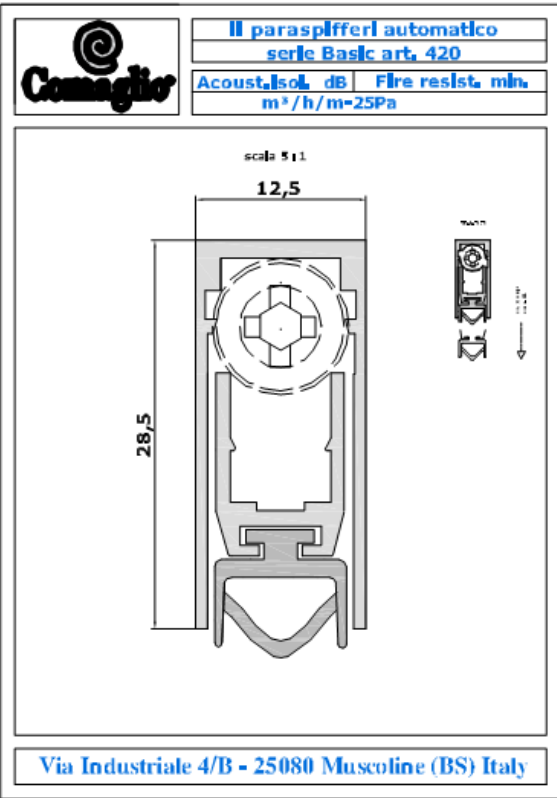
## Appendix D26 Basic Series 422 H30

Product reference:	422 H30
Series:	Basic
Description:	Silicone seal with nylon push button
	
Scope:	Approved for use with 60 minute fire resisting timber based doorsets meeting the criteria in section 5
Minimum door leaf thickness:	54mm
Fitting requirements:	The drop down seal is to be rebated centrally in the bottom of the door leaf
Intumescent Protection:	10 x 2mm uncased STS graphite seals must be fitted either side of the drop down seal in the bottom of the door leaf. The perimeter intumescent specification for the door design must be fitted in the frame reveal and not the leaf edge i.e. it is not permitted for the drop seal to interrupt the perimeter intumescent seals around the leaf
Supporting evidence:	test Seal type I-2015 of a larger dimension was successfully tested in BMT/FEP/F15130

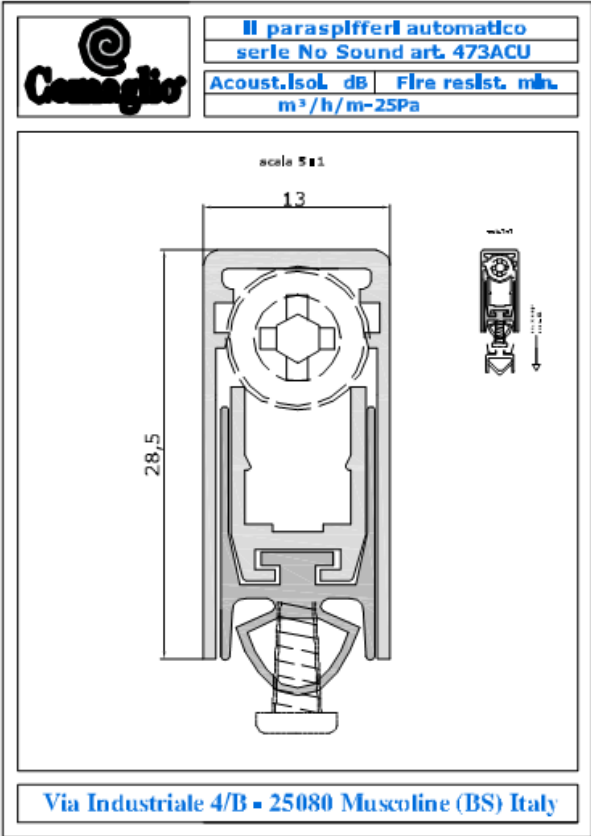
## Appendix D27 Basic Series 422

Product reference:	422
Series:	Basic
Description:	Silicone seal with nylon push button
	
Scope:	Approved for use with 60 minute fire resisting timber based doorsets meeting the criteria in section 5
Minimum door leaf thickness:	54mm
Fitting requirements:	The drop down seal is to be rebated centrally in the bottom of the door leaf
Intumescent Protection:	10 x 2mm uncased STS graphite seals must be fitted either side of the drop down seal in the bottom of the door leaf. The perimeter intumescent specification for the door design must be fitted in the frame reveal and not the leaf edge i.e. it is not permitted for the drop seal to interrupt the perimeter intumescent seals around the leaf
Supporting evidence:	test Seal type I-2015 of larger dimensions was successfully tested in BMT/FEP/F15130

## Appendix D28 Basic Series 420

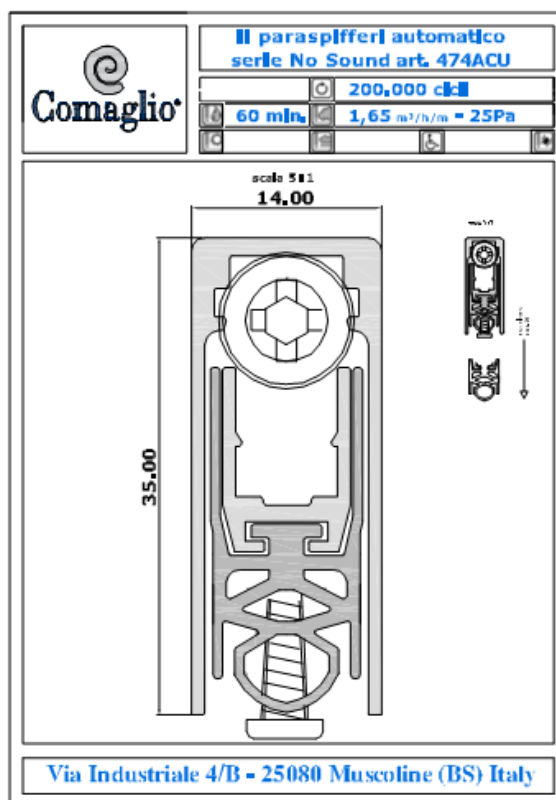
Product reference:	420
Series:	Basic
Description:	Silicone seal with nylon push button
	
Scope:	Approved for use with 60 minute fire resisting timber based doorsets meeting the criteria in section 5
Minimum door leaf thickness:	54mm
Fitting requirements:	The drop down seal is to be rebated centrally in the bottom of the door leaf
Intumescent Protection:	10 x 2mm uncased STS graphite seals must be fitted either side of the drop down seal in the bottom of the door leaf. The perimeter intumescent specification for the door design must be fitted in the frame reveal and not the leaf edge i.e. it is not permitted for the drop seal to interrupt the perimeter intumescent seals around the leaf
Supporting evidence:	test Seal type I-2015 of larger dimensions was successfully tested in BMT/FEP/F15130

## Appendix D29 No Sound Series 473 ACU

Product reference:	473 ACU
Series:	No Sound
Description:	Silicone seal with nylon push button (pre-fitted screws)
	
Scope:	Approved for use with 60 minute fire resisting timber based doorsets meeting the criteria in section 5
Minimum door leaf thickness:	54mm
Fitting requirements:	The drop down seal is to be rebated centrally in the bottom of the door leaf
Intumescent Protection:	10 x 2mm uncased STS graphite seals must be fitted either side of the drop down seal in the bottom of the door leaf. The perimeter intumescent specification for the door design must be fitted in the frame reveal and not the leaf edge i.e. it is not permitted for the drop seal to interrupt the perimeter intumescent seals around the leaf
Supporting evidence:	test Seal type I-2015 of larger dimensions was successfully tested in BMT/FEP/F15130

## Appendix D30 No Sound Series 474 ACU

Product reference:	474 ACU
Series:	No Sound
Description:	Silicone seal with nylon push button (pre-fitted screws)



Scope:	Approved for use with 60 minute fire resisting timber based doorsets meeting the criteria in section 5
Minimum door leaf thickness:	54mm
Fitting requirements:	The drop down seal is to be rebated centrally in the bottom of the door leaf
Intumescent Protection:	10 x 2mm uncased STS graphite seals must be fitted either side of the drop down seal in the bottom of the door leaf. The perimeter intumescent specification for the door design must be fitted in the frame reveal and not the leaf edge i.e. it is not permitted for the drop seal to interrupt the perimeter intumescent seals around the leaf
Supporting evidence:	test Seal type I-2015 of dimensions 30mm (h) x 19.7mm (w) was successfully tested in BMT/FEP/F15130

**Note:** It is the opinion of Warringtonfire that the 5mm difference in height would not adversely affect the fire resistance performance of the door leaf, since the width of the seal is smaller than that of the tested seal type. The additional 5mm depth is acceptable because it will not increase heat transfer across the door thickness, and

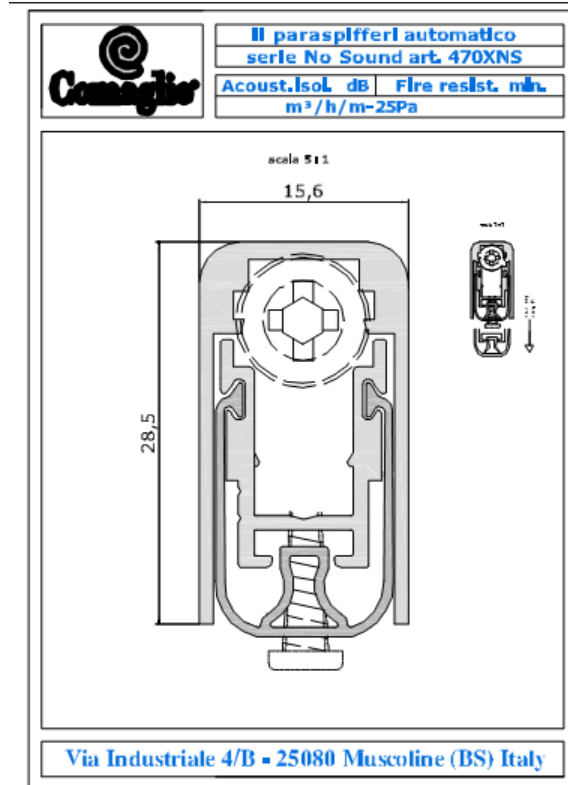
the amount of timber removed in the thickness direction is less compared to that of the tested seal type.

### Appendix D31 No Sound Series 475 ACU

Product reference:	475 ACU
Series:	No Sound
Description:	Silicone seal with nylon push button (pre-fitted screws)
Scope:	Approved for use with 60 minute fire resisting timber based doorsets meeting the criteria in section 5
Minimum door leaf thickness:	54mm
Fitting requirements:	The drop down seal is to be rebated centrally in the bottom of the door leaf
Intumescent Protection:	10 x 2mm uncased STS graphite seals must be fitted either side of the drop down seal in the bottom of the door leaf. The perimeter intumescent specification for the door design must be fitted in the frame reveal and not the leaf edge i.e. it is not permitted for the drop seal to interrupt the perimeter intumescent seals around the leaf
Supporting evidence:	test Seal type I-2015 of a larger dimension was successfully tested in BMT/FEP/F15130

## Appendix D32 No Sound Series 470 XNS

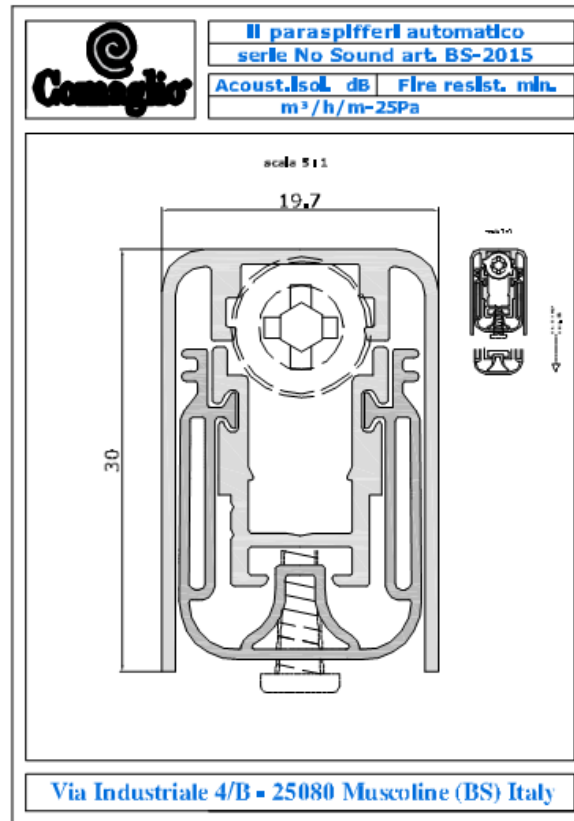
Product reference:	470 XNS
Series:	No Sound
Description:	Silicone seal with nylon push button (pre-fitted screws)



Scope:	Approved for use with 60 minute fire resisting timber based doorsets meeting the criteria in section 5 of assessment referenced: BMT/CNA/F15244
Minimum door leaf thickness:	54mm
Fitting requirements:	The drop down seal is to be rebated centrally in the bottom of the door leaf
Intumescent Protection:	10 x 2mm uncased STS graphite seals must be fitted either side of the drop down seal in the bottom of the door leaf. The perimeter intumescent specification for the door design must be fitted in the frame reveal and not the leaf edge i.e. it is not permitted for the drop seal to interrupt the perimeter intumescent seals around the leaf
Supporting evidence:	test Seal type I-2015 of larger dimensions was successfully tested in BMT/FEP/F15130

## Appendix D33 No Sound Series BS-2015

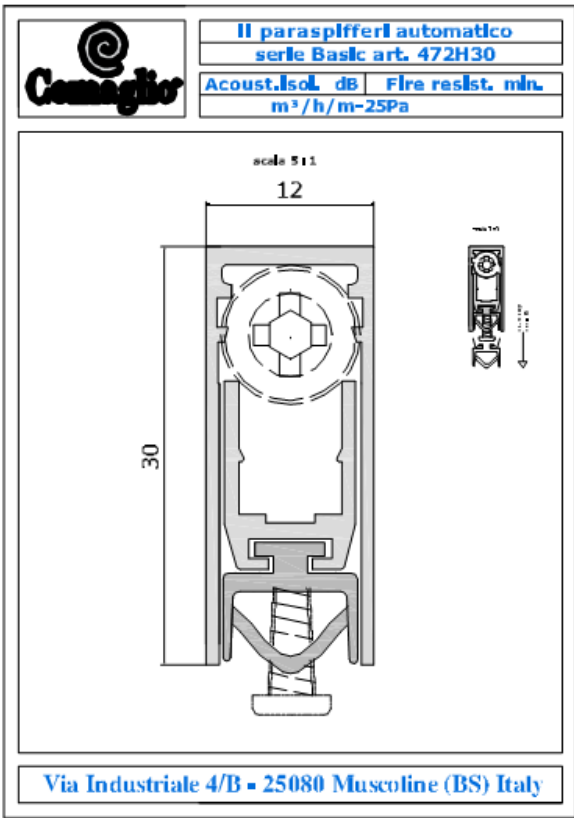
Product reference:	BS-2015
Series:	No Sound
Description:	Silicone seal with nylon push button (pre-fitted screws)



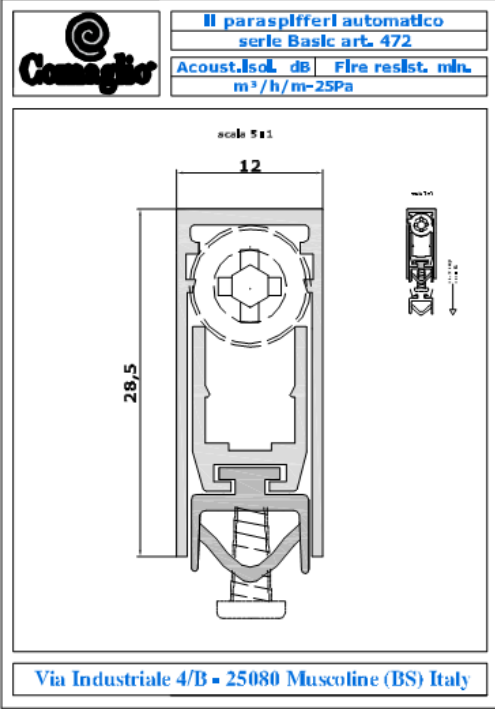
Scope:	Approved for use with 60 minute fire resisting timber based doorsets meeting the criteria in section 5
Minimum door leaf thickness:	54mm
Fitting requirements:	The drop down seal is to be rebated centrally in the bottom of the door leaf
Intumescent Protection:	10 x 2mm uncased STS graphite seals must be fitted either side of the drop down seal in the bottom of the door leaf. The perimeter intumescent specification for the door design must be fitted in the frame reveal and not the leaf edge i.e. it is not permitted for the drop seal to interrupt the perimeter intumescent seals around the leaf
Supporting evidence:	test Seal type I-2015 of the same dimensions was successfully tested in BMT/FEP/F15130



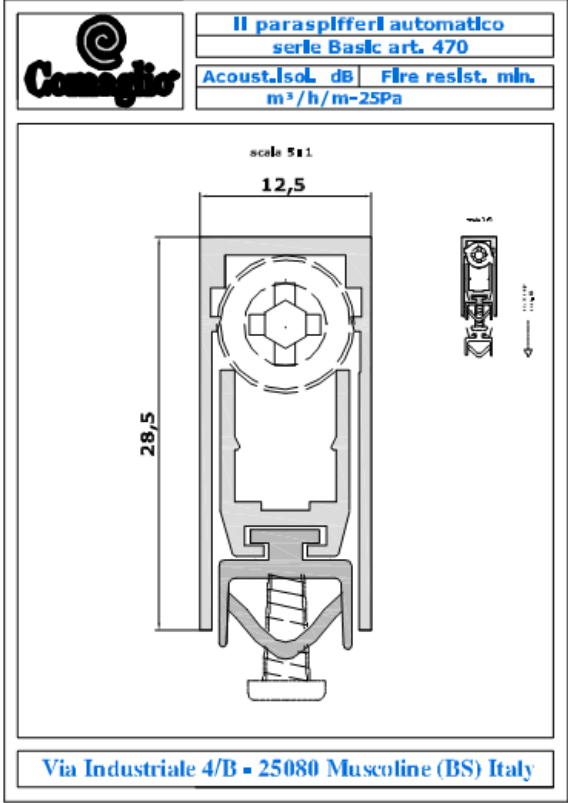
## Appendix D34 Basic Series 472-H30

Product reference:	472-H30
Series:	Basic
Description:	Silicone seal with nylon push button (pre-fitted screws)
	
Scope:	Approved for use with 60 minute fire resisting timber based doorsets meeting the criteria in section 5
Minimum door leaf thickness:	54mm
Fitting requirements:	The drop down seal is to be rebated centrally in the bottom of the door leaf
Intumescent Protection:	10 x 2mm uncased STS graphite seals must be fitted either side of the drop down seal in the bottom of the door leaf. The perimeter intumescent specification for the door design must be fitted in the frame reveal and not the leaf edge i.e. it is not permitted for the drop seal to interrupt the perimeter intumescent seals around the leaf
Supporting evidence:	test Seal type I-2015 of a larger dimension was successfully tested in BMT/FEP/F15130

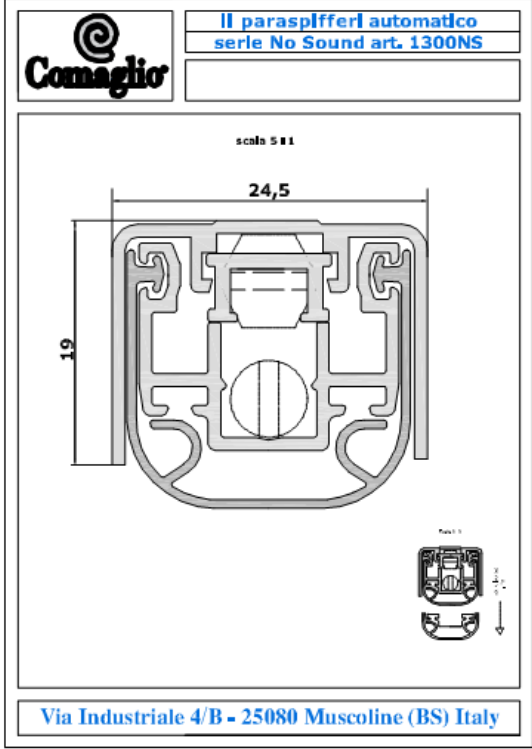
## Appendix D35 Basic Series 472

Product reference:	472
Series:	Basic
Description:	Silicone seal with nylon push button (pre-fitted screws)
	
Scope:	Approved for use with 60 minute fire resisting timber based doorsets meeting the criteria in section 5
Minimum door leaf thickness:	54mm
Fitting requirements:	The drop down seal is to be rebated centrally in the bottom of the door leaf
Intumescent Protection:	10 x 2mm uncased STS graphite seals must be fitted either side of the drop down seal in the bottom of the door leaf. The perimeter intumescent specification for the door design must be fitted in the frame reveal and not the leaf edge i.e. it is not permitted for the drop seal to interrupt the perimeter intumescent seals around the leaf
Supporting evidence:	test Seal type I-2015 of larger dimensions was successfully tested in BMT/FEP/F15130

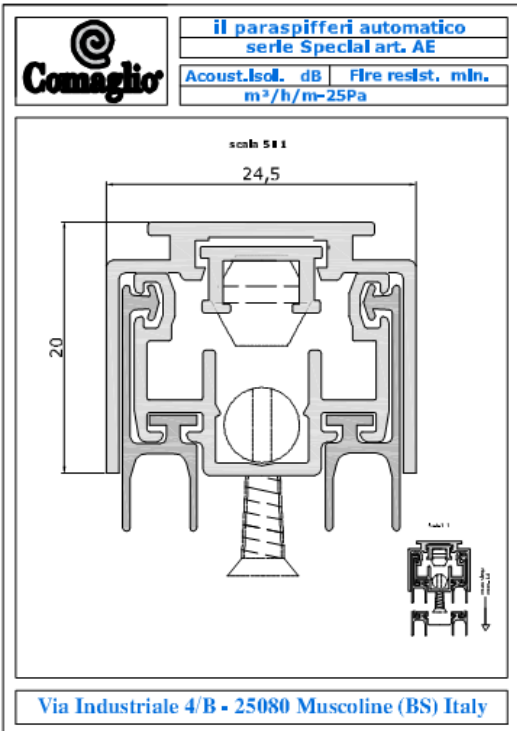
## Appendix D36 Basic Series 470

Product reference:	470
Series:	Basic
Description:	Silicone seal with nylon push button (pre-fitted screws)
	
Scope:	Approved for use with 60 minute fire resisting timber based doorsets meeting the criteria in section 5
Minimum door leaf thickness:	54mm
Fitting requirements:	The drop down seal is to be rebated centrally in the bottom of the door leaf
Intumescent Protection:	10 x 2mm uncased STS graphite seals must be fitted either side of the drop down seal in the bottom of the door leaf. The perimeter intumescent specification for the door design must be fitted in the frame reveal and not the leaf edge i.e. it is not permitted for the drop seal to interrupt the perimeter intumescent seals around the leaf
Supporting evidence:	test Seal type I-2015 of larger dimensions was successfully tested in BMT/FEP/F15130

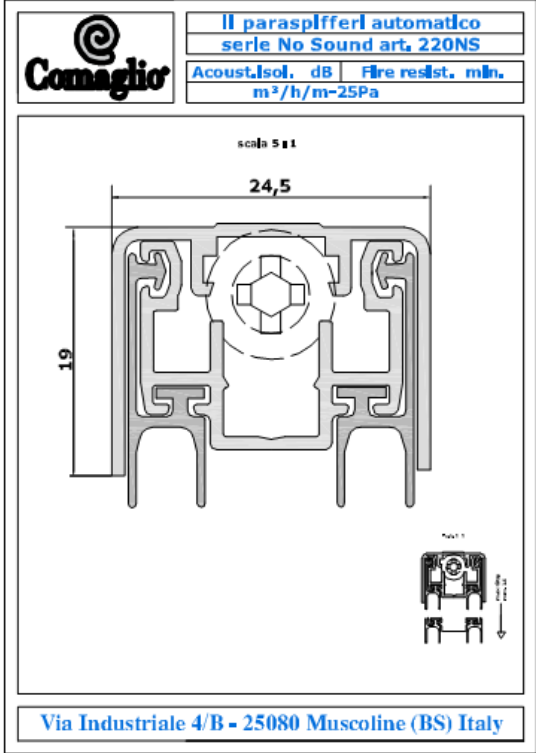
## Appendix D37 No Sound Series 1300 NS

Product reference:	1300 NS
Series:	No Sound
Description:	Silicone seal with brass push button
	
Scope:	Approved for use with 60 minute fire resisting timber based doorsets meeting the criteria in section
Minimum door leaf thickness:	54mm
Fitting requirements:	The drop down seal is to be rebated centrally in the bottom of the door leaf
Intumescent Protection:	10 x 2mm uncased STS graphite seals must be fitted either side of the drop down seal in the bottom of the door leaf. The perimeter intumescent specification for the door design must be fitted in the frame reveal and not the leaf edge i.e. it is not permitted for the drop seal to interrupt the perimeter intumescent seals around the leaf
Supporting evidence:	test Seal type 1370NS of the same dimensions was successfully tested in BMT/FEP/F15130

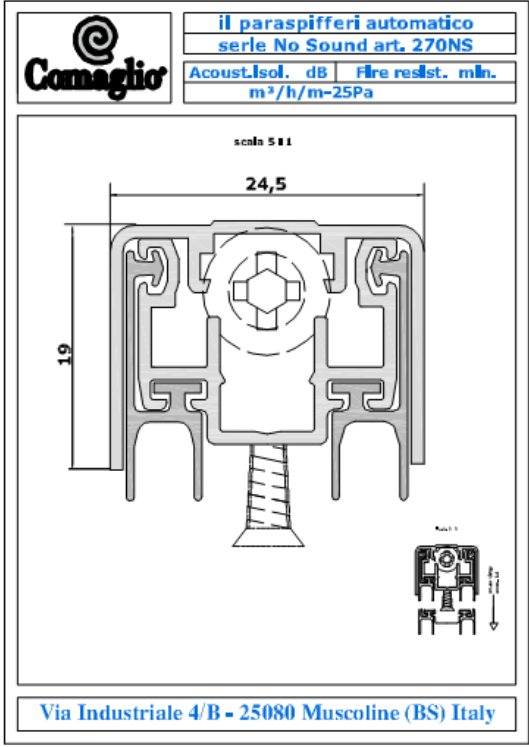
## Appendix D38 Special Series AE

Product reference:	AE
Series:	Special
Description:	Silicone seal with brass push button (pre-fitted screws)
	
Scope:	Approved for use with 60 minute fire resisting timber based doorsets meeting the criteria in section 5
Minimum door leaf thickness:	54mm
Fitting requirements:	The drop down seal is to be rebated centrally in the bottom of the door leaf
Intumescent Protection:	10 x 2mm uncased STS graphite seals must be fitted either side of the drop down seal in the bottom of the door leaf. The perimeter intumescent specification for the door design must be fitted in the frame reveal and not the leaf edge i.e. it is not permitted for the drop seal to interrupt the perimeter intumescent seals around the leaf
Supporting evidence:	test Seal type 1370NS with dimensions 24.5mm (w) x 19mm (h) was successfully tested in BMT/FEP/F15130

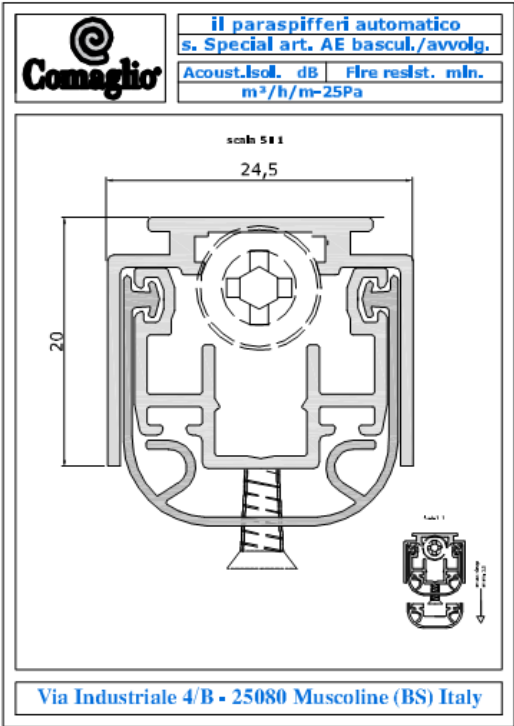
## Appendix D39 No Sound Series 220 NS

Product reference:	220 NS
Series:	No Sound
Description:	Silicone seal with nylon push button
	
Scope:	Approved for use with 60 minute fire resisting timber based doorsets meeting the criteria in section 5
Minimum door leaf thickness:	54mm
Fitting requirements:	The drop down seal is to be rebated centrally in the bottom of the door leaf
Intumescent Protection:	10 x 2mm uncased STS graphite seals must be fitted either side of the drop down seal in the bottom of the door leaf. The perimeter intumescent specification for the door design must be fitted in the frame reveal and not the leaf edge i.e. it is not permitted for the drop seal to interrupt the perimeter intumescent seals around the leaf
Supporting test evidence:	Seal type 1370NS of the same dimensions was successfully tested in BMT/FEP/F15130

## Appendix D40 No Sound Series 270 NS

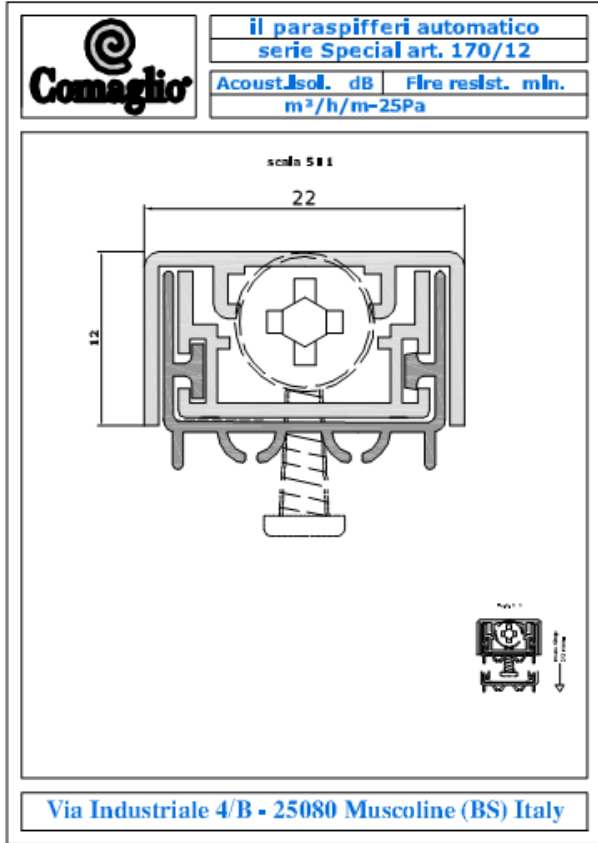
Product reference:	270 NS
Series:	No Sound
Description:	Silicone seal with nylon push button (pre-fitted screws)
	
Scope:	Approved for use with 60 minute fire resisting timber based doorsets meeting the criteria in section 5
Minimum door leaf thickness:	54mm
Fitting requirements:	The drop down seal is to be rebated centrally in the bottom of the door leaf
Intumescent Protection:	10 x 2mm uncased STS graphite seals must be fitted either side of the drop down seal in the bottom of the door leaf. The perimeter intumescent specification for the door design must be fitted in the frame reveal and not the leaf edge i.e. it is not permitted for the drop seal to interrupt the perimeter intumescent seals around the leaf
Supporting evidence:	test Seal type 1370NS of the same dimensions was successfully tested in BMT/FEP/F15130

## Appendix D41 Special Series AE bascul / avvlog

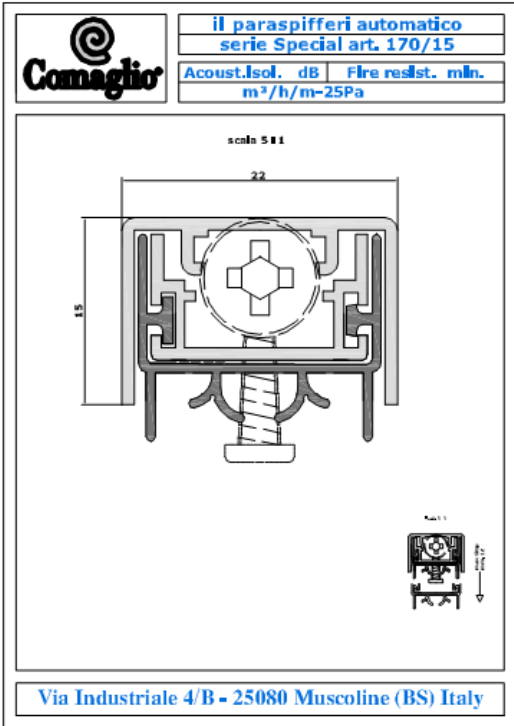
Product reference:	AE bascul/avvlog				
Series:	Special				
Description:	Silicone seal with brass push button (pre-fitted screws)				
 <p>Comaglio</p> <p>il paraspifferi automatico s. Special art. AE bascul./avvlog.</p> <table border="1"> <tr> <td>Acoust. Isol. dB</td> <td>Fire resist. min.</td> </tr> <tr> <td>m<sup>2</sup>/h/m-25Pa</td> <td></td> </tr> </table> <p>scala 5:1</p> <p>24,5</p> <p>20</p> <p>Via Industriale 4/B - 25080 Muscoline (BS) Italy</p>		Acoust. Isol. dB	Fire resist. min.	m <sup>2</sup> /h/m-25Pa	
Acoust. Isol. dB	Fire resist. min.				
m <sup>2</sup> /h/m-25Pa					
Scope:	Approved for use with 60 minute fire resisting timber based doorsets meeting the criteria in section 5				
Minimum door leaf thickness:	54mm				
Fitting requirements:	The drop down seal is to be rebated centrally in the bottom of the door leaf				
Intumescent Protection:	10 x 2mm uncased STS graphite seals must be fitted either side of the drop down seal in the bottom of the door leaf. The perimeter intumescent specification for the door design must be fitted in the frame reveal and not the leaf edge i.e. it is not permitted for the drop seal to interrupt the perimeter intumescent seals around the leaf				
Supporting evidence:	test Seal type 1370NS with dimensions 24.5mm (w) x 19mm (h) was successfully tested in BMT/FEP/F15130				



## Appendix D42 Special Series 170/12

Product reference:	170/12
Series:	Special
Description:	Silicone seal with brass push button (pre-fitted screws)
	
Scope:	Approved for use with 60 minute fire resisting timber based doorsets meeting the criteria in section 5
Minimum door leaf thickness:	54mm
Fitting requirements:	The drop down seal is to be rebated centrally in the bottom of the door leaf
Intumescent Protection:	10 x 2mm uncased STS graphite seals must be fitted either side of the drop down seal in the bottom of the door leaf. The perimeter intumescent specification for the door design must be fitted in the frame reveal and not the leaf edge i.e. it is not permitted for the drop seal to interrupt the perimeter intumescent seals around the leaf
Supporting evidence:	test Seal type 1370NS of larger dimensions was successfully tested in BMT/FEP/F15130

## Appendix D43 Special Series 170/15

Product reference:	170/15
Series:	Special
Description:	Silicone seal with brass push button (pre-fitted screws)
	
Scope:	Approved for use with 60 minute fire resisting timber based doorsets meeting the criteria in section 5
Minimum door leaf thickness:	54mm
Fitting requirements:	The drop down seal is to be rebated centrally in the bottom of the door leaf
Intumescent Protection:	10 x 2mm uncased STS graphite seals must be fitted either side of the drop down seal in the bottom of the door leaf. The perimeter intumescent specification for the door design must be fitted in the frame reveal and not the leaf edge i.e. it is not permitted for the drop seal to interrupt the perimeter intumescent seals around the leaf
Supporting evidence:	test Seal type 1370NS of larger dimensions was successfully tested in BMT/FEP/F15130

## Appendix D44 No Sound Series 1700 XNS Mini

Product reference:	1700 XNS mini
Series:	No Sound
Description:	Silicone seal with brass push button
Scope:	Approved for use with 60 minute fire resisting timber based doorsets meeting the criteria in section 5
Minimum door leaf thickness:	54mm
Fitting requirements:	The drop down seal is to be rebated centrally in the bottom of the door leaf
Intumescent Protection:	10 x 2mm uncased STS graphite seals must be fitted either side of the drop down seal in the bottom of the door leaf. The perimeter intumescent specification for the door design must be fitted in the frame reveal and not the leaf edge i.e. it is not permitted for the drop seal to interrupt the perimeter intumescent seals around the leaf
Supporting evidence:	test Seal type I-2015 of larger dimensions was successfully tested in BMT/FEP/F15130

## Appendix D45 No Sound Series 420 XNS Mini

Product reference:	420 XNS mini
Series:	No Sound
Description:	Silicone seal with brass push button
Scope:	Approved for use with 60 minute fire resisting timber based doorsets meeting the criteria in section 5
Minimum door leaf thickness:	54mm
Fitting requirements:	The drop down seal is to be rebated centrally in the bottom of the door leaf
Intumescent Protection:	10 x 2mm ditto uncased STS graphite seals must be fitted either side of the drop down seal in the bottom of the door leaf. The perimeter intumescent specification for the door design must be fitted in the frame reveal and not the leaf edge i.e. it is not permitted for the drop seal to interrupt the perimeter intumescent seals around the leaf
Supporting evidence:	test Seal type I-2015 of larger dimensions was successfully tested in BMT/FEP/F15130

## Appendix D46 No Sound Series 1770 XNS Mini

Product reference:	1770 XNS mini
Series:	No Sound
Description:	Silicone seal with brass push button (pre-fitted screws)
Scope:	Approved for use with 60 minute fire resisting timber based doorsets meeting the criteria in section 5
Minimum door leaf thickness:	54mm
Fitting requirements:	The drop down seal is to be rebated centrally in the bottom of the door leaf
Intumescent Protection:	10 x 2mm ditto uncased STS graphite seals must be fitted either side of the drop down seal in the bottom of the door leaf. The perimeter intumescent specification for the door design must be fitted in the frame reveal and not the leaf edge i.e. it is not permitted for the drop seal to interrupt the perimeter intumescent seals around the leaf
Supporting evidence:	test Seal type I-2015 of larger dimensions was successfully tested in BMT/FEP/F15130

## Appendix D47 No Sound Series 470 XNS Mini

Product reference:	470 XNS mini
Series:	No Sound
Description:	Silicone seal with brass push button (pre-fitted screws)
Scope:	Approved for use with 60 minute fire resisting timber based doorsets meeting the criteria in section 5
Minimum door leaf thickness:	54mm
Fitting requirements:	The drop down seal is to be rebated centrally in the bottom of the door leaf
Intumescent Protection:	10 x 2mm ditto uncased STS graphite seals must be fitted either side of the drop down seal in the bottom of the door leaf. The perimeter intumescent specification for the door design must be fitted in the frame reveal and not the leaf edge i.e. it is not permitted for the drop seal to interrupt the perimeter intumescent seals around the leaf
Supporting evidence:	test Seal type I-2015 of larger dimensions was successfully tested in BMT/FEP/F15130

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