**United Arab Emirates** Ministry of interior Civil Defense G.H.Q Fire intentional Lab & House Of Expertise & Training Center **Approval Committee** 



دولة الامارات العربية المتحدة وزارة الداخلية القيادة العامة للدفاع المدني لجنة اعتماد المختبرات العالمية وبيوت الخبرة ومعاهد التدريب

Date: 27/11/2020

### **CERTIFICATE OF COMPLIANCE**

This certificate of compliance validates the following						
TEST REPORT NUMBER  'Assessment Reports' are not acceptable	IGV (mild steel) – 351255	IGV (stainles steel) – 404034	429967/R	CERT	IFICATE IBER	ME 5073
DATE OF ISSUE	22 <sup>nd</sup> July 2015	24 <sup>th</sup> October 2018	22 <sup>nd</sup> September 2020	DATE	OF ISSUE	29 <sup>th</sup> June 2015
DATE OF EXPIRY	n/a	n/a	n/a	DATE EXPI	_	29 <sup>th</sup> July 2025
		Manufact	urer details			
NAME OF FACTORY/ MANUFACTURER	Apreco Limit Unit 2. Bishops Fror Technology Bishops Fror Worcester. WR6 5AY. United Kingo	me Park me.	NAME OF THE BI	RAND	Apreco	
FACTORY ADDRESS / REGION (STREET / TOWN / CITY / COUNTRY)	Apreco Limited. Unit 2. Bishops Frome Technology Park. Bishops Frome. Worcester. WR6 5AY. United Kingdom.		MODEL / NO		IGV (Inert (	Gas Vent) netic Gas Vent)
WEBSITE	www.apreco	o.com	LOGO ON THE PRODUCT		<b>///</b> A	preco
TEL	+44(0)1885	485 070	EMAIL		info@apre	co.com







دولة الامارات العربية المتحدة وزارة الداخلية القيادة العامة للدفاع المدني لجنة اعتماد المختبرات العالمية وبيوت الخبرة ومعاهد التدريب

Proc	Reference Test Report page NO	
DESCRIPTION OF THE PRODUCT (TECHNICAL DETAILS FROM TEST REPORT, SUCH AS ACTUAL FIRE RATINGS/DIMENSIONS/THICKNESS/ SENSITIVITY ETC)	Inert gas vents with a fire resistance rating of up to 240 minutes (4 HoursSynthetic gas vents with a fire resistance rating of up to 180 minutes (3 Hours). The units are constructed of 1.2mm Zintec Steel. IGV gas vents may also be constructed in stainless steel.	No.351255 – Pages 1 & 2 No. 429967/R – Pages 1 & 2 No. 404034 – Pages 1 & 2
TEST STANDARD (SUCH AS ASTM/BS EN/ DN ETC)	BS EN 1634-1	No.351255 – Page 2 No.429967/R – Page2 No. 404034- Page 5
TEST DESCRIPTION	Tests to determine the fire resistance performance of two inert gas vents (IGV's) and one Synthetic gas vent (SGV) in accordance with BS EN 1634-1. The specimens were judged on their ability to comply with the performance criteria for integrity and heat radiation, as determined in BS EN 1363-1 and BS EN 1363-2.	No.351255 – Page 5 No.429967/R – Page 5 No. 404034- Page 5
SPECIFICATION OF TEST SPECIMEN	The Inert gas vents each of overall size 1140mm wide by 1152mm wide by 116mm deep; having an internal opening of nominally 1008mm wide by 1024mm high and the Synthetic gas vent with an overall size 1140mm by 1152mm wide by 137mm deep; having an internal opening of nominally 1000mm wide by 1002mm high. Each fitted into an aperture in an aerated blockwork wall 150mm thick. The vents incorporated a wall liner/flange mounting formed from 1.2mm thick powder coated Zintec steel or in stainless steel (for IGV only) IGV – Standard Flow Specimen B (mild steel) IGV – Reverse Flow Specimen A (mild steel) IGV – Standard Flow Specimen (stainless steel) SGV – Dual flow specimen	No.351255 – Page 2 No.429967/R – Page 2 No. 404034- Page 2





**United Arab Emirates** Ministry of interior Civil Defense G.H.Q Fire intentional Lab & House Of Expertise & Training Center **Approval Committee** 



دولة الامارات العربية المتحدة وزارة الداخلية القيادة العامة للدفاع المدني لجنة اعتماد المختبرات العالمية وبيوت الخبرة ومعاهد التدريب

TEST RESULT (SUCH AS PASSED CRITERIA/ COMPLIED TO/ DURATION/OBSERVATION/ETC)	Integrity Performance for sustained flaming and gap gauge results to BS EN 1634-1 fire resistance tests, BS EN 1363-1 general requirements and BS EN 1363-1 alternative and additional procedures:  Mild Steel IGV Specimen A = 245 minutes sustained flaming / 127 minutes gap gauge.  Mild steel IGV Specimen B = 245 minutes sustained flaming / 245 minutes gap gauge.  Stainless steel IGV Specimen = 241 minutes sustained flaming / 241 minutes gap gauge  SGV Specimen = 245 minutes sustained flaming / 199 minutes gap gauge	No.351255 – Page 28 No.429967/R – Page 23 No. 404034- Page 21
PRODUCT APPLICATION GUIDELINE (END USE) (CLEARLY STATE THE END USE WITH SPECIFIC APPLICATION, SUCH AS EXACT FIRE RATING/TO BE INSTALLED IN	The inert gas vents and synthetic gas vents are designed for the use with gaseous fire suppression systems where inert/synthetic gases are used to extinguish fires. The IGV & SGV vents are designed to relief excess pressure on a system discharge. The vents should be installed in vertical partitions to maintain the fire integrity. Certificated scope given in CF5073	







دولة الامارات العربية المتحدة وزارة الداخلية القيادة العامة للدفاع المدني لجنة اعتماد المختبرات العالمية وبيوت الخبرة ومعاهد التدريب

Laboratory and Certification body details			
NAME OF CERTIFICATION BODY	Warringtonfire Testing and Certification Limited	NAME OF TEST FACILITY	Warringtonfire Testing and Certification Limited
CERTIFICATION BODY ADDRESS / REGION (STREET / TOWN / CITY / COUNTRY )	Holmesfield Road Warrington WA1 2DS United Kingdom	TEST FACILITY ADDRESS / REGION (STREET / TOWN / CITY / COUNTRY)	Holmesfield Road Warrington WA1 2DS United Kingdom
WEBSITE TEL	<u>www.warringtonfire.com</u> +44 (0) 1925 655116	WEBSITE TEL	www.warringtonfire.com +44 (0) 1925 655116
EMAIL	info@warringtonfire.com	EMAIL	info@warringtonfire.com
ACCREDITED BY (NAME OF ACCREDITATION BODY WHICH ISSUED ACCREDITATION TO THE CERTIFICATION BODY, ALONG WITH WEBSITE)	UKAS (United Kingdom Accreditation Services)	ACCREDITED BY (NAME OF ACCREDITATION BODY WHICH ISSUED ACCREDITATION TO THE LABORATORY, ALONG WITH WEBSITE)	UKAS (United Kingdom Accreditation Services)
AS PER (STANDARD TO WHICH THE CERTIFICATION BODY IS ACCREDITED TO)	BS EN ISO/IEC 17065:2012	AS PER (STANDARD TO WHICH YOUR ORGANIZATION IS ACCREDITED TO)	BS EN ISO/IEC 17065:2012
VALIDITY (EXPIRY DATE OF CERTIFICATION BODY ACCREDITATION)	Initial Accreditation Granted: 01 <sup>st</sup> August 1999 Current Certificate Issued: 24th March 2020	VALIDITY (EXPIRY DATE OF LABORATORY ACCREDITATION)	Initial Accreditation Granted: 01 <sup>st</sup> August 1999 Current Certificate Issued: 24th March 2020
REFERENCE NUMBER: (CERTIFICATION BODY ACCREDITATION REFERENCE NUMBER TO VERIFY ON THE ACCREDITOR'S WEBSITE)	UKAS Certification Body No. 0087 Notified Certification Body No. 1121	REFERENCE NUMBER: (THE LABORATORY ACCREDITATION REFERENCE NUMBER TO VERIFY ON THE ACCREDITOR'S WEBSITE)	UKAS Certification Body No. 0087 Notified Certification Body No. 1121
CERTIFICATION MARK	ewcl <sup>5</sup>	·	







دولة الامارات العربية المتحدة وزارة الداخلية القيادة العامة للدفاع المدني لجنة اعتماد المختبر أت العالمية وبيوت الخبرة ومعاهد التدريب

(ENDORSEMENT) TO BE SIGNED BY MANUFACTURER			
NAME OF MANUFACTURER'S SIGNATORY	Michael Hodges	SIGNATURE	ARModg
EMAIL / TEL	info@apreco.com +44 (0)1885 485 070	FACTORY OFFICIAL SEAL	
NOTES: I Undertake that all data and information provided are genuine and accurate			

(ENDORSEMENT) TO BE SIGNED BY CERTIFICATION BODY			
NAME OF CERTIFICATION BODY SIGNATORY	Paul Duggan Certification Manager	SIGNATURE	Pal legga
EMAIL / TEL	ewcl@warringtonfire.com +44 (0) 1925 655116	CERTIFICATION BODY OFFICIAL SEAL	ewcl <sup>5</sup>
NOTES: I Undertake that all data and information provided are genuine and accurate			

#### **ATTACHMENTS:**

• COPY OF 'CERTIFICATE OF COMPLIANCE' ISSUED BY CERTIFICATION BODY (OLD OR NEW)





### **APRECO LIMITED**

Unit 2, Bishops Frome Technology Park, Bishops Frome, Worcester WR6 5AY
Tel: 01885 485070

Have been assessed against the requirements of the test standard(s) denoted below and are approved for use subject to the conditions appended hereto:

**CERTIFIED PRODUCT** 

**TEST STANDARD** 

**Pressure Relief Vent Models:** 

**ETS 001** 

IGV Inert Gas Vent SGV Synthetic Gas Vent

Signed and sealed for and on behalf of Warringtonfire Testing and Certification Limited

Paul Duggan

**Certification Manager** 



Issued: 29<sup>th</sup> June 2015 Reissued: 30<sup>th</sup> July 2020 Valid to: 29<sup>th</sup> July 2025

Page 1 of 10





#### **Approved Manufacturing Location**

Apreco Limited
Unit 2
Bishops Frome Technology Park
Bishops Frome
Worcester
WR6 5AY
United Kingdom

#### Certification Evidence - IGV Inert Gas Vent

- WF Test Report No. 351255 test generally in accordance with BS EN 1634-1: 2014
- Sampling and Factory Production Control audits conducted by Warringtonfire Testing and Certification Limited. Initial audit and specimen sampling conducted 5<sup>th</sup> May 2015.
- WF Test Report No. 429965 audit fire test on sampled specimens.

#### **Additional Information - IGV Inert Gas Vent**

BSRIA Report No. 58716/3 – BS EN 13030 and BE EN 13141-1

#### Certification Evidence - SGV Synthetic Gas Vent

- WF Test Report No. 429967 test generally in accordance with BS EN 1634-1: 2014
- Sampling and Factory Production Control audits conducted by Warringtonfire Testing and Certification Limited. Initial audit and specimen sampling conducted 25<sup>th</sup> June 2020

#### **Additional Information - SGV Inert Gas Vent**

BSRIA Report No. 58716/2 – BS EN 13030 and BE EN 13141-1

#### **Product Description**

The IGV range of inert gas pressure relief vents and the SGV range of synthetic gas pressure relief vents are designed specifically for over and under pressure venting associated with gaseous fire suppression systems used for fire protection. Powder coated Zintec steel and Stainless Steel options are available.

The pressure relief vents can also provide protection against under-pressure characteristics found with synthetic/chemical suppressant systems. The IGV vents have the unique benefit of reversible flanges allowing installers to alter the flow direction configuration on site, whilst keeping the units housed within the wall avoiding protrusions and achieving a fire performance as detailed within this certificate.

Page 2 of 10 Signed E/371



Apreco IGV and SGV vents are of the 'counter-weighted' design to prevent the risks of over and under pressurisation resulting from the use of gaseous fire suppression systems. Details of their free venting performance are also reported within this certificate.

Maximum room pressure is controlled by the pressure relief vents opening to release excess pressure generated during gas discharge. They are designed to close during the discharge once the initial peak pressures have been relieved to retain the levels of suppressant within the protected area to prevent re-ignition.

The IGV – Inert Gas Vents are supplied in standard sizes as follows:

- IGV 0301 (nominal size of 300mm x 100mm)
- IGV 0303 (nominal size of 300mm x 300mm)
- IGV 0501 (nominal size of 500mm x 100mm)
- IGV 0505 (nominal size of 500mm x 500mm)
- IGV 0707 (nominal size of 700mm x 700mm)
- IGV 1010 (nominal size of 1000mm x 1000mm)

Alternative vent sizes are available in 100mm increments from nominal 100mm to 1000mm.

The SGV – Synthetic Gas Vents are supplied in standard sizes as follows:

- SGV 0301 (nominal size of 300mm x 100mm)
- SGV 0501 (nominal size of 500mm x 100mm)
- SGV 0303 (nominal size of 300mm x 300mm)
- SGV 0505 (nominal size of 500mm x 500mm)
- SGV 0705 (nominal size of 700mm x 700mm)
- SGV 1010 (nominal size of 1000mm x 1000mm)

Alternative vent sizes are available in 100mm increments from nominal 100mm to 1000mm.

This certification is provided to the client for their own purposes and we cannot opine on whether it will be accepted by Building Control authorities or any other third parties for any purpose.

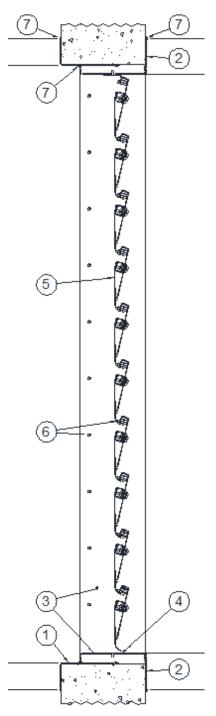
Page 3 of 10 Signed E/371

Pol Agg-





The IGV Inert Gas Vent products are described below:



Page 4 of 10 Signed E/371

fol agg-





#### **Powder Coated Zintec Steel Option:**

<u>Item</u> <u>Description</u>

1. Wall Liner

Manufacturer : Apreco Ltd

Material : Powder coated (white) Zintec steel

2. Front Flange

Manufacturer : Apreco Ltd

Material : Powder coated (white) Zintec steel

3. Frame

Manufacturer : Apreco Ltd

Material : Powder coated (white) Zintec steel

4. Gap Closures

Manufacturer : Apreco Ltd

Material : Powder coated (white) Zintec steel

5. Blade Assembly

Manufacturer : Apreco Ltd

Reference : IGV 1000 Blade Assembly

6. Blade Stop Post

Material : Stainless steel rod

7. Perimeter Sealant

Manufacturer : Astroflame

Reference : Intumescent acoustic acrylic mastic

Fixings to blockwork

i. manufacturer : Spit

ii. reference : The Original Tapcon Concrete Anchors

iii. material : Steel

iv. overall size : 50 mm long x 5 mm diameter

v. quantity : 4 off per side, nominally 50 mm from each corner and at

450 mm centres

Page 5 of 10 Signed E/371





#### **Stainless Steel Option:**

<u>Item</u> <u>Description</u>

1. Wall Liner

Manufacturer : Apreco Ltd Material : Stainless Steel

2. Front Flange

Manufacturer : Apreco Ltd Material : Stainless Steel

3. Frame

Manufacturer : Apreco Ltd Material : Stainless Steel

4. Gap Closures

Manufacturer : Apreco Ltd Material : Stainless Steel

5. Blade Assembly

Manufacturer : Apreco Ltd

Reference : IGV 1000 Blade Assembly

6. Blade Stop Post

Material : Stainless steel rod

7. Perimeter Sealant

Manufacturer : Astroflame

Reference : Intumescent acoustic acrylic mastic

Fixings to blockwork

i. manufacturer : Spit

ii. reference : The Original Tapcon Concrete Anchors

iii. material : Stee

iv. overall size : 50 mm long x 5 mm diameter

v. quantity : 4 off per side, nominally 80 mm from each corner and at

350 mm centres

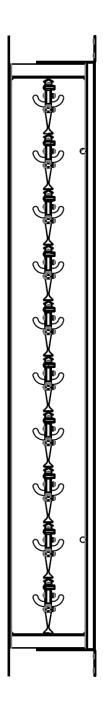
Page 6 of 10 Signed E/371

Pel Ragg-





The SGV Synthetic Gas Vent products are described below:



Page 7 of 10 Signed E/371

Pol Ryg-





<u>Item</u> **Description** 

1. Wall Liner

Manufacturer Apreco Ltd

Material Powder coated (white) Zintec steel angle

2. Front Flange

Manufacturer Apreco Ltd

Material Powder coated (white) Zintec steel angle

3. Frame

Manufacturer Apreco Ltd

Material Powder coated (white) Zintec steel channel

4. Gap Closures

Manufacturer Apreco Ltd

Material Powder coated (white) Zintec steel angle

5. Blade Assembly

Manufacturer Apreco Ltd

Reference SGV 1000 Blade Assembly

6. Brace Rod

Manufacturer Apreco Ltd

Material Zinc plated mild steel bar

7. Fusible Link

Manufacturer Globe Technologies Corp.

Reference Fusible Link Assembly - Model A 74°C

8. Perimeter Sealant

Manufacturer Astroflame

Reference Intumescent acoustic acrylic mastic

Fixings to blockwork

manufacturer Rawlplug R-KGS-0632 ii. reference

iii. material

32 mm long x 6 mm diameter iv. overall size

4 off per side, nominally 50 mm from each v. quantity

corner and at 450 mm centres

Page 8 of 10 Signed

E/371





#### Certificated Product Performance - IGV Inert Gas Vent

The IGV Inert Gas Pressure Relief Vents certificated provide the following performance when tested generally in accordance with BS EN 1634-1: 2014:

Standard Flow Orientation	240 minutes integrity
Reverse Flow Orientation	120 minutes Integrity

#### Product Performance\* - IGV Inert Gas Vent

From recorded pressure drops across an IGV 0505 at a range of airflows following the test methods defined in BS EN 13030, the equivalent are is calculated, in accordance with EN 13141-1, to be as follows:

Equivalent Area	0.25m <sup>2</sup>
	(for IGV 0505 variant)

#### <u>Certificated Product Performance – SGV Synthetic Gas Vent</u>

The SGV Synthetic Gas Pressure Relief Vents certificated provide the following performance when tested generally in accordance with BS EN 1634-1: 2014:

<b>Dual Flow Orientation</b>	180 minutes integrity

#### Product Performance\* - SGV Inert Gas Vent

From recorded pressure drops across an SGV 0505 at a range of airflows following the test methods defined in BS EN 13030, the equivalent are is calculated, in accordance with EN 13141-1, to be as follows:

<b>Equivalent Area</b>	0.22m <sup>2</sup>
	(for SGV 0505 variant)

<sup>\*</sup>see note 4 overpage

Page 9 of 10 Signed E/371

Pol Agg-





#### Information

- 1. It is the responsibility of the user of the information contained within this document to establish appropriate safety and health practices and determine the applicability of regulatory requirements prior to use of the product
- 2. The performance stated herein relates only to the specimens of the product in the form in which they were tested within rigid masonry walls.
- 3. This certification relates to on-going production. The product and/or its immediate packaging shall be identified with the certification mark including the certification number, and the manufacturer's name and the product name or code reference.
- 4. Product performance relating to equivalent area has been supplied by BSRIA (Building Services Research and Information Association) UK, taken from dynamic tests carried out in accordance with test protocols and calculation methods in BS EN 13030 and EN 13141-1, These results are presented for product information only rather than being certificated performance indicators.

Page 10 of 10 Signed E/371

fol agg-

