



SYSTEM | TWIN-GAS

Concentric flue gas system for decorative gas fires





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WE ARE THERE FOR YOU



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YOUR PARTNER JEREMIAS

The Jeremias Group, headquartered in Wassertrüdingen (Bavaria), is one of the world's leading manufacturers of flue systems and chimney systems in all areas of heat and power generation for industrial and residential applications.

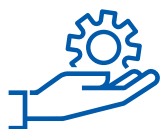
Strong, open and international – that's how we have been presenting ourselves for almost 50 years. Worldwide production sites and sales offices represent entrepreneurial success, ambitious visions and healthy growth.

With innovative products, outstanding service and highly qualified employees, we want to inspire our customers every day and achieve the goal of sustainable joint success.

Currently, our product range includes more than 100 different CE-certified systems for private and commercial applications as well as free-standing steel chimneys with a diameter of up to four meters.

This brochure provides you with a comprehensive overview of characteristics, application and installation of our concentric flue gas system TWIN-GAS for decorative gas fires.

WE ARE THERE FOR YOU



SERVICE

- Flexible production
- Special solutions tailored to customer needs
- Planning support and designing advice
- Chimney calculation
- Chimney sizing
- Country specific approvals
- Professional customer service
- Free software solutions



QUALITY

- More than 100 CE-certified systems
- CNC laser cutting and stamping technology
- Special stainless steel alloys
- Condensate/gas tight, polished welding seams
- 25-year guarantee
- ISO 9001 certified



INNOVATION

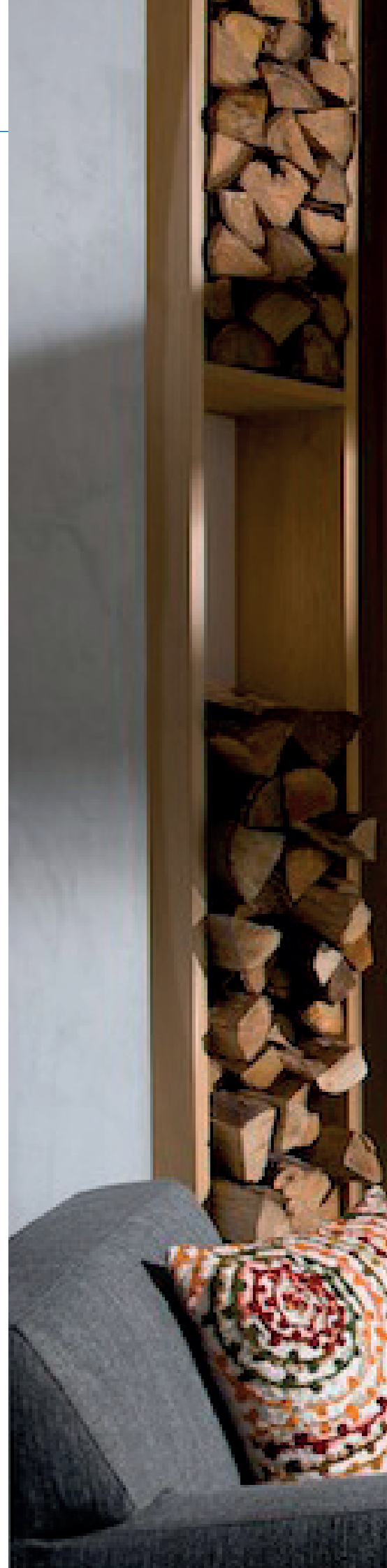
- The largest range of products in the market
- System development with boiler, CHP and stove manufacturers
- In-house development of manufacturing machines
- In-house test facility for stainless steel chimney systems and silencers
- Computer-based simulations

SYSTEM CERTIFICATION

The Jeremias TWIN - GAS balanced flue system has already been certified by many manufacturers of decorative gas fires for use with their devices and is only approved in this combination.

Currently TWIN - GAS is certified in combination with devices of: Glen Dimplex (Faber Kamine), Bellfires (former Interfocus), Element4, Ortal, STUV, Attika, Camina Schmid, Max Blank, Hoxter and Metalfire.

If the producer of your device is not yet listed here, please contact him. We are always looking for further system certifications.







SYSTEM TWIN-GAS

CONCENTRIC STAINLESS STEEL FLUE SYSTEM

DESCRIPTION

Concentric stainless steel flue system for decorative gas fires with balanced flue operation

MATERIAL

Inside: 1.4404 (316L)
Outside: 1.4301 (304)

SURFACE

Highly polished

WALL THICKNESS

Inside: 0.5 mm
Outside: 0.5 mm

DIAMETERS

100/150 mm and 130/200 mm

CONNECTION

Push fit connection secured by locking band with internally glued special seal in the outer pipe

LOCKING BAND / SEAL JOINT

Supplied with each element as standard





CHARACTERISTICS

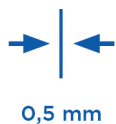
- Designed for wet operation mode
- Pressure-tight outer pipe through glued silicon seal
- This prevents combustion air from mixing with the air in the room

APPLICATION AREA

- Decorative gas fires



SYSTEM PROPERTIES



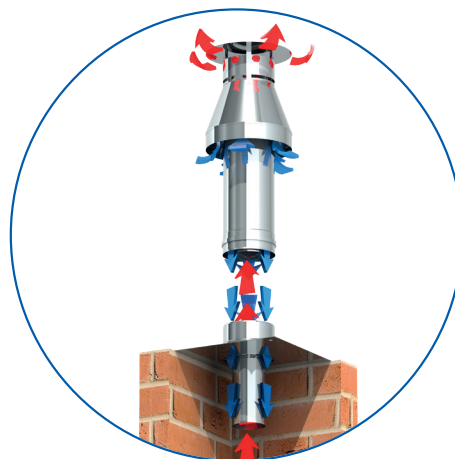
SYSTEM PROPERTIES



As a stainless steel concentric balanced flue system, TWIN-GAS uses the annular gap between the inner pipe carrying the flue gases and the outer pipe to carry the intake air. A special gasket in the outer pipe makes it pressure tight and thus prevents the combustion air from mixing with the air in the room.

FLUE SOLUTION FOR DECORATIVE FIRES

The extraction of the hot flue gases causes a vacuum in the gas fireplace, which is balanced at the collar of the flue by incoming intake air, creating a natural circulation. The intake air is extracted through the collar (wall or roof terminal), as flue gases are blown out and intake air are drawn in with the same pressure level, so that the so-called „balanced flue“ cycle works properly. To prevent the air in the room from being drawn in via the push-on connection, the TWIN-GAS has a silicon sealing ring, which is glued into the box groove of the outer pipe.

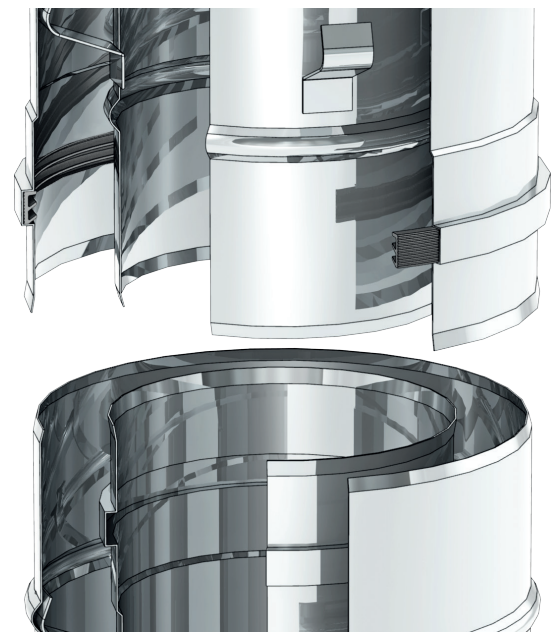


SEAL IN THE OUTER CASING

In standard operation mode the outer pipe of the system can only reach a maximum temperature of 180°C, Jeremias guarantees the correct operation mode even with smoke temperatures of 600°C. The silicone seal is factory glued into the internal socket of the outer pipe and guarantees the tightness of the system even with high smoke temperatures.

ADVANTAGES:

- Prevents the air intake from mixing with the air in the room
- Hermetically sealed system
- The glued silicon seal minimises the risk of leaks due to slippage or damage to the seal during installation
- Blower door test capability

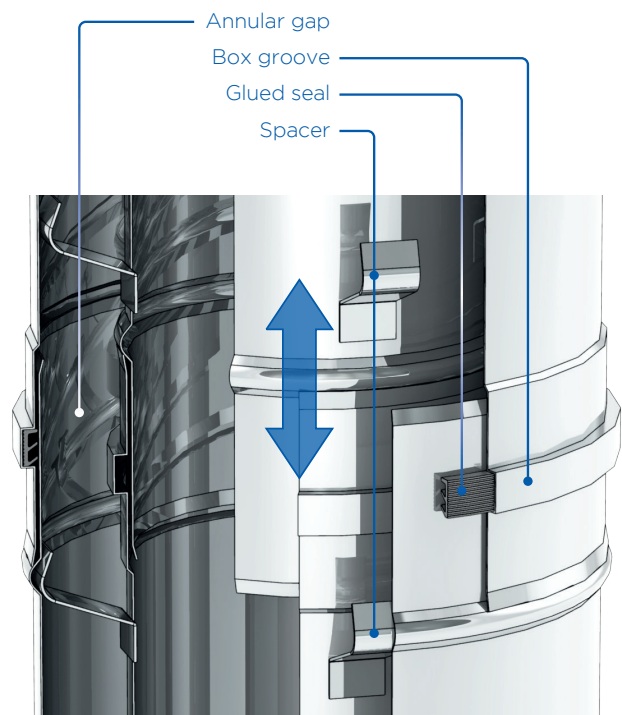


BLOWER-DOOR-TEST

Blower door tests are becoming increasingly common in new builds and refurbishment projects in order to detect any weaknesses in a building's air-tight seal. This first involves creating a vacuum in the building and then checking to see at which points air enters the building. The glued seal enables the TWIN-GAS system to prevent the intake air from escaping and the air from the room from entering the annular gap if overpressure is generated in the living room in phase 2 of the blower door test.

FREE MOVABLE INNER PIPE

Special spacers are used to centre the inner pipe in the outer cladding and, at the same time, to allow the longitudinal expansion of the internal pipe at high temperatures as there is no fixed connection between the internal and external pipes.



CLASSIFICATIONS

WITH EXCLUSIVE USE OF TWIN-GAS

The declaration of performance provides information about the classification of the flue gas system. It lists product properties and specific installation requirements and thus offers evidence of the suitability of the relevant flue gas system.

The classification of the TWIN-GAS system comprises of following:

		1	2	3	4	5	6	7
Model 1	TWIN-GAS	DN (80-200)	T600	N1	W	V2	L50040	050
Model 2	TWIN-GAS	DN (80-200)	T400	N1	W	V2	L50040	050

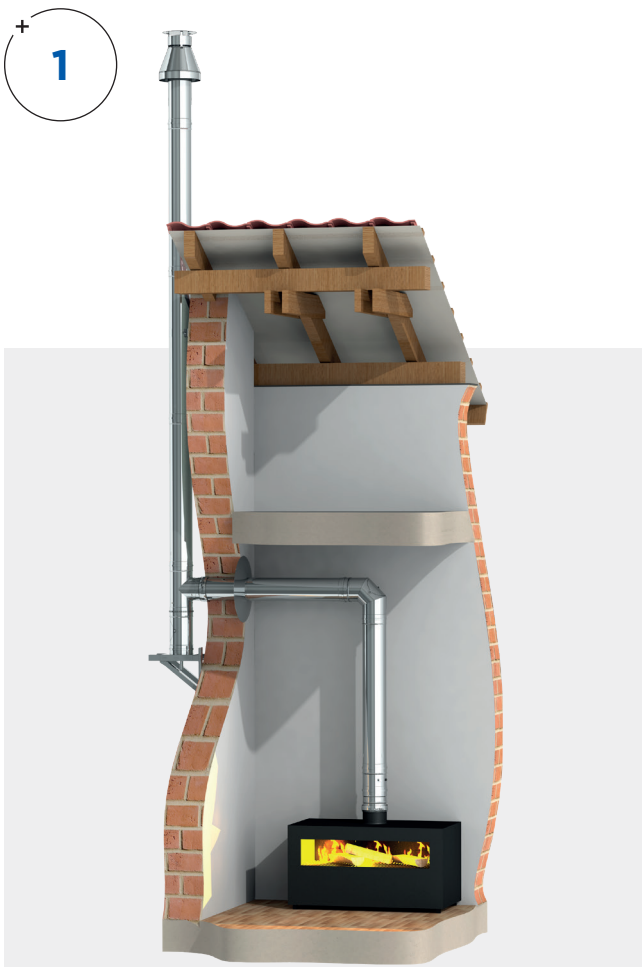
- 1 Inner diameters in mm
- 2 Temperature class
T600: Operation up to 600°C gas temperature
- 3 Pressure class
N1: Low pressure
- 4 Condensate class
W: Wet or dry operation
- 5 Corrosion resistance class for the flue liner Material
V2: Oil, Gas, solid fuel for wet or dry operation
- 6 Material specification for the inner pipe
L50: Material quality of the inner pipe (1.4404)
O40: Wall thickness of the internal pipe min. 0.4 mm
- 7 Soot fire resistance
O50: not resistant to soot fires Minimum ventilated distance from flammable building materials 50 mm



Declaration of Performance (DOP)
No. 9174 078 DOP 2020-09-15

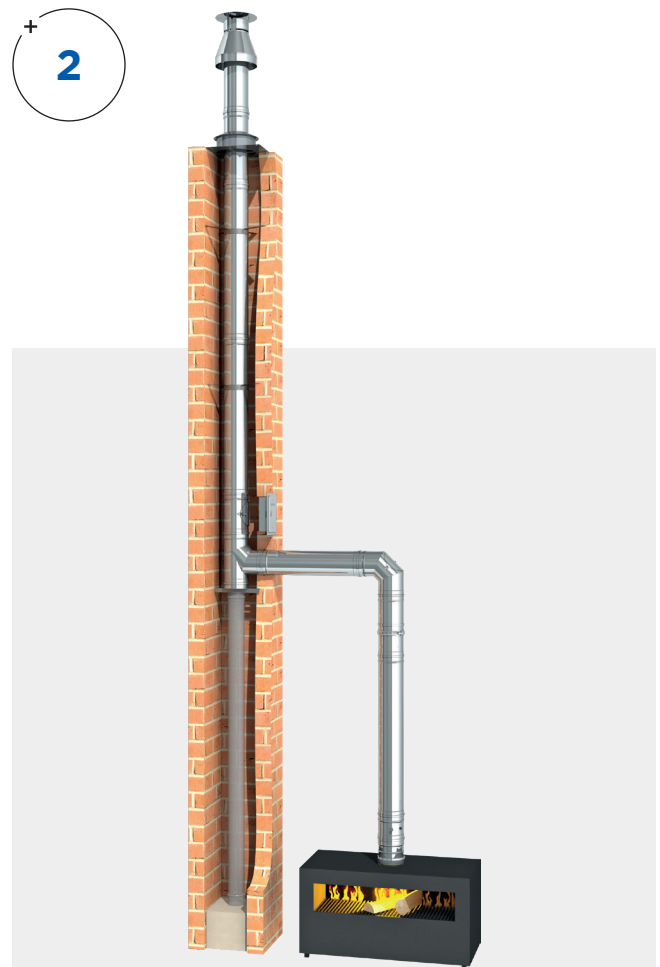
1. Unique identification code of the product-type:
Multi-wall chimney system type TWIN-GAS according to EN 1856-1:2009
2. Type, batch or serial number or any other element allowing identification of the construction product as required under Article 11(4):
Multi-wall chimney system type TWIN-G with ventilated annular gap and stainless steel outer tube incl. gasket¹⁾
Model 1 TWIN-G DN (80- 200) T600 - N1 - W - V2 - L50040 - O50
¹⁾TWIN-G is a concrete chimney system with an annular gap for combustion air supply
Multi-wall chimney system type Fumo-LUX TWG with ventilated annular clearance in a mineral shaft²⁾
Model 2 FUMO-LUX-TWG DN (80- 200) T600 - N1 - W - V2 - L50040 - O50
²⁾FUMO-LUX-TWG is a concrete chimney system with annular gap for combustion air supply in a mineral shaft type FUMOLUX
3. Intended use or uses of the construction product, in accordance with the applicable harmonized technical specification, as foreseen by the manufacturer:
Convey the products of combustion from decorative gas heating appliances to the outside atmosphere
4. Name, registered trade name or registered trade mark and contact address of the manufacturer as required under Article 11(5):
Jeremias GmbH
Opfenrieder Straße 12
DE-91717 Wassertrüdingen
Tel.: +49 9832 68 68 0
Fax: +49 9832 68 68 68
Email: info@jeremias.de
5. Where applicable, name and contact address of the authorized representative whose mandate covers the tasks specified in Article 12(2):
not applicable
6. System or systems of assessment and verification of constancy of performance of construction product as set out in CPR, Annex V:
System 2+ and System 4
7. In case of the declaration of performance concerning a construction product for which a European Technical Assessment has been issued:
Notified factory production control (certification body no. 0036 performed the initial inspection of the manufacturing plant and of factory production control and the continuous surveillance, assessment and evaluation of factory production control and issued the certificate of conformity 0036 CPR 9174 078 of the factory production control.

SELECTED INSTALLATION VARIANTS



INSTALLATION ON AN OUTER WALL

The TWIN-GAS connecting pipe is routed from the gas fire through the wall to the building's exterior. The riser begins with a base plate (with condensate outlet, cleaning and T-piece) and ends with a vertical terminal.



INSTALLATION IN AN EXISTING BRICK CHIMNEY

The set-up is largely the same as for variant 1, however in this case the flue gases are channelled upwards by means of elements of the TWIN-GAS system in the shaft. Here too, elements of the EW-FU system can be used to support the weight on the shaft base instead of the bearing rail.

* This variant is only permissible in Germany and other countries after prior consultation with the responsible authorized district chimney sweeper.

SELECTED INSTALLATION VARIANTS



INSTALLATION WITH A HORIZONTAL WALL TERMINAL*

Exhaust gas and intake air are channelled by means of the concentric TWIN-GAS system and a horizontally installed wall terminal with eccentric internal pipe. This ensures that the flue gases are released from the top, while the intake air is mostly drawn in from down below. This minimizes the recirculation of flue gases back into the system.

* This variant is only permissible in Germany and other countries after prior consultation with the responsible authorized district chimney sweeper.



INSTALLATION WITH CEILING AND ROOF*

The TWIN-GAS system is directly installed vertically above the gas fire. An L_A-90 lightweight shaft is used to clad the flue gas system on the upper floor. The flue gas is released and the intake air is drawn in by means of the roof terminal.

* This variant is only permissible in Germany and other countries after prior consultation with the responsible authorized district chimney sweeper.




CLASSIFICATION

WHEN USING TWIN-GAS IN THE SHAFT

The declaration of performance provides information about the classification of the flue gas system. It lists product properties and specific installation requirements and thus offers evidence of the suitability of the relevant flue gas system. The classification of the TWIN-GAS system in combination with supply air through the shaft for system EW-FU and EW-LINE FLEX FU:

		1	2	3	4	5	6
Model 1	LINE-FLEX TWIN-GAS, single-ply	T600	N1	W	V2-L50008	0	
Model 2	LINE-FLEX TWIN-GAS, single-ply	T400	N1	W	V2-L50008	0	
Model 3	LINE-FLEX TWIN-GAS, double-ply	T600	N1	W	V2-L50008	0	
Model 4	LINE-FLEX TWIN-GAS, double-ply	T400	N1	W	V2-L50008	0	
Model 5	EW-FU TWIN-GAS	T600	N1	W	V2-L50050	0	
Model 6	EW-FU TWIN-GAS	T400	N1	W	V2-L50050	0	

- 1 Temperature class
T400: Operation up to 400°C gas temperature
T600: Operation up to 600°C gas temperature
- 2 Pressure class
N1: Low pressure
- 3 Condensate class
W: Suitable for both wet or dry operation
- 4 Corrosion resistance class for the flue liner material
V2: Oil, Gas, solid fuel for wet or dry operation
- 5 Material specification for the inner pipe
L50: Material quality of the inner pipe (1.4404)
008: Wall thickness of the internal pipe min. 0,08 mm per layer
050: Wall thickness of the internal pipe min. 0,5 mm
- 6 Soot fire resistance
O: not resistant to soot fires Minimum ventilated distance from flammable building materials 50 mm



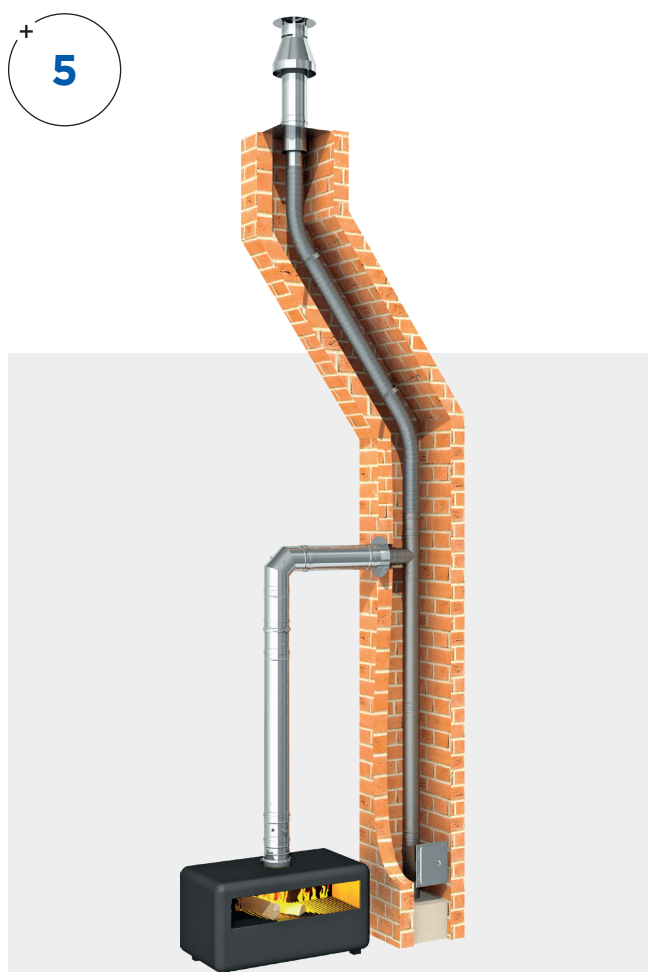
Declaration of Performance (DOP)
No. 9174 083 DOP 2020-09-15

1. Unique identification code of the product-type:
Rigid and flexible flue liner type TWIN-GAS-FLEX/ EW-FU according to EN 1856-2:2009
2. Type, batch or serial number or any other element allowing identification of the construction product as required under Article 1(4):
Rigid and flexible flue liner type TWIN-GAS-FLEX/ EW-FU¹⁾

Model 1 LINE-F TWG	flexible, single-ply metal flue liner	T600 N1 W V2-L50008 O²⁾
Model 2 LINE-F TWG	flexible, double-ply metal flue liner	T600 N1 W V2-L50008 O²⁾
Model 3 EW-FU TWG	rigid metal flue liner	T600 N1 W V2-L50050 O

¹⁾ Manufacturer product identification TWIN-GAS-FLEX/ EW-FU
²⁾ Flexible, single-ply, flue liner 2 x 0,08 mm
³⁾ Flexible, double-ply, flue liner 2 x 0,08 mm
3. Intended use or uses of the construction product, in accordance with the applicable harmonized technical specification, as foreseen by the manufacturer:
Convey the products of combustion from decorative gas heating appliances to the outside atmosphere
4. Name, registered trade name or registered trade mark and contact address of the manufacturer as required under Article 1(10):
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Opferstraße 12
DE-91717 Wassertrüdingen
Tel: +49 9832 68 68 0
Fax: +49 9832 68 68 68
Email: info@jeremias.de
5. Where applicable, name and contact address of the authorized representative whose mandate covers the tasks specified in Article 1(2)(3):
not applicable
6. System or systems of assessment and verification of constancy of performance of construction product as set out in CPR, Annex V:
System 2+ and System 4
7. In case of the declaration of performance concerning a construction product for which a European Technical Assessment has been issued:
Notified factory production control certification body no. 0036 performed the initial inspection of the manufacturing plant and of factory production control and the continuous surveillance, assessment and evaluation of factory production control and issued the certificate of conformity 0036 CPR 9174 083 of the factory production control.

SELECTED INSTALLATION VARIANTS



INSTALLATION IN AN EXISTING BRICK CHIMNEY

A TWIN-GAS connecting pipe leads from the gas fire to the shaft. Starting from a base plate, the flue gas is extracted using elements of the EW-FU and/or EW-LINE FLEX systems, while the intake air is supplied from the shaft. The termination is through a shaft cover plate with transition from EW-FU or EW-LINE FLEX to a concentric pipe in order to connect with the TWIN-GAS roof terminal.



INSTALLATION IN AN EXISTING BRICK CHIMNEY*

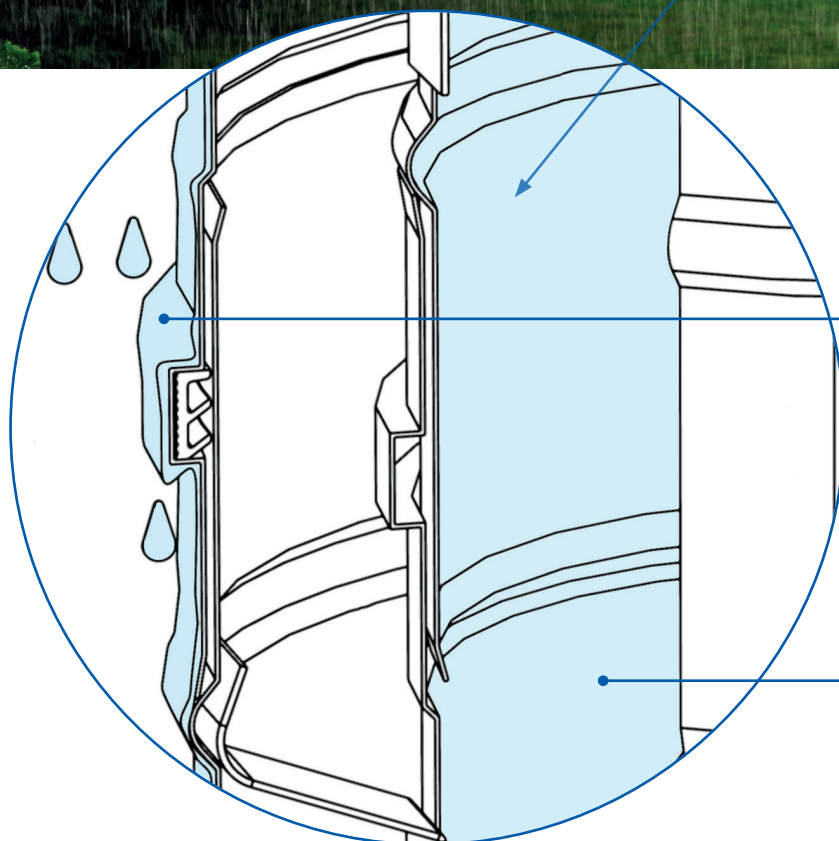
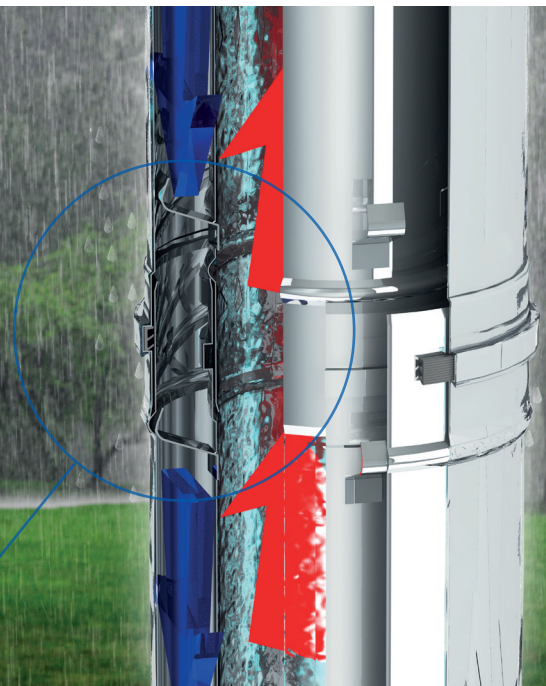
The set-up is largely the same as for variant 1, however, instead of the base plate, a 90° bend with supporting foot is used which is secured by means of a bearing rail in the flue. Alternatively, the weight can also be supported by means of elements of the EW-FU system.

* This variant is only permissible in Germany and other countries after prior consultation with the responsible authorized district chimney sweeper.



INSTALLATION DIRECTIONS

All components are to be fitted in a way that the sleeve of the internal pipe always points in the direction of the flow of the flue gas. This prevents condensate from escaping into the annular gap. On the other hand, the sleeve of the outer pipe faces in the opposite direction to the flow to prevent rainwater from penetrating the annular gap from outside.



Rain-proof

Condensate-resistant

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www.jeremias.fi

UNITED KINGDOM

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The expert in your area: