

# **Declaration of Performance (DOP)**

No. 9174 006 DOP 2014-01-27

1. Unique identification code of the product-type:

Single wall chimney system type EW-FU 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):

Single wall chimney system type EW-FU, installation in stack<sup>1)</sup>

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DN ( 80- 300) T400 - N1 - D - V2 - L50060 - G50
Model 1
Model 1
               DN (350- 450) T400 - N1 - D - V2 - L50060 - G75
Model 1
               DN (500- 600) T400 - N1 - D - V2 - L50060 - G100
              DN ( 80- 300) T400 - N1 - W - V2 - L50060 - O50
Model 2
              DN (350- 450) T400 - N1 - W - V2 - L50060 - O75
Model 2
Model 2
               DN (500- 600) T400 - N1 - W - V2 - L50060 - O100
Model 3
              DN ( 80- 300) T600 - N1 - D - V2 - L50060 - G100
Model 3
              DN (350- 450) T600 - N1 - D - V2 - L50060 - G150
Model 3
              DN (500- 600) T600 - N1 - D - V2 - L50060 - G200
Model 4
               DN ( 80- 300) T600 - N1 - W - V2 - L50060 - O100
Model 4
               DN (350- 450) T600 - N1 - W - V2 - L50060 - O150
Model 4
               DN (500- 600) T600 - N1 - W - V2 - L50060 - O200
Model 5
               DN ( 80- 300) T600 - N1 - D - V3 - L50060 - G70 <sup>2)</sup>
Model 5
               DN (350- 450) T600 - N1 - D - V3 - L50060 - G105<sup>2)</sup>
Model 5
               DN (500- 600) T600 - N1 - D - V3 - L50060 - G140<sup>2)</sup>
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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 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 11-14 DE-91717 Wassertrüdingen Tel.: +49 9832 68 68 0

Fax: +49 9832 68 68 68 Email: <u>info@jeremias.de</u>

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 the construction product as set out in CPR, Annex V:

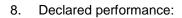
### System 2+ and System 4

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 006 of the factory production control.

Manufacturer product identification EW-FU cross sections are possible in round or oval form

<sup>2)</sup> with 25 mm insulation





	Essential Characteristics	Performance	Harmonized technical specification
8.1	Compressive strength Chimney sections, fittings and supports	Sections and fittings:  Model 1 to 5 DN ( 80- 300): up to 27 m  Model 1 to 5 DN (350- 450): up to 21 m  Model 1 to 5 DN (500- 600): up to 15 m  For further information see the installation instruction EW-FU	EN 1856-1:2009
8.2	Resistance to fire	(Resistance to fire from inside to outside)  Model 1 DN ( 80- 300): T400 – G50  Model 1 DN (350- 450): T400 – G75  Model 1 DN (500- 600): T400 – G100  Model 2 DN ( 80- 300): T400 – O50  Model 2 DN (350- 450): T400 – O75  Model 2 DN (500- 600): T400 – O100  Model 3 DN ( 80- 300): T600 – G100  Model 3 DN (350- 450): T600 – G150  Model 3 DN (500- 600): T600 – G200  Model 4 DN (80- 300): T600 – O100  Model 4 DN (80- 300): T600 – O150  Model 4 DN (500- 600): T600 – O200  Model 5 DN (80- 300): T600 – G70 (with 25 mm insulation)  Model 5 DN (350- 450): T600 – G105 (with 25 mm insulation)  Model 5 DN (500- 600): T600 – G104 (with 25 mm insulation)  Model 5 DN (500- 600): T600 – G104 (with 25 mm insulation)  Tested without cover, with back ventilated ceiling duct.	EN 1856-1:2009
8.3	Gas tightness/ leakage	Model 1 to 5 DN (80- 600): <b>N1</b>	EN 1856-1:2009
8.4	Flow resistance of chimney sections, fittings and terminals	According to EN 13384-1  component: $\zeta$ (Zeta-value) single resistances  pipe tee 87°: 1.14 pipe tee 45°: 0.35 pipe bend 87°: 0.40 pipe bend 45°: 0.28 pipe bend 30°: 0.20 pipe bend 15°: 0.10  Terminals: (only for operation in negative pressure) rain cap 1.0 fin cap type "Hubo": $\leq \varnothing$ 140 mm 0.1/ $\geq \varnothing$ 150 mm 0.2 wind deflector: $\leq \varnothing$ 140 mm 0.1/ $\geq \varnothing$ 150 mm 0.2 hurrican: 0.1	EN 1856-1:2009
8.5	Thermal resistance	Model 1 to 4 DN (80- 600): <b>0</b> m²K/W (without insulation, optional with insulation, values see Model 5)* Model 5 DN (80- 600) <b>&gt;0.26</b> m²K/W calculated for <b>200°C</b> (with 25 mm insulation)*  * The thermal resistance is dependent on the nominal diameters of inner tubes see product information and mounting instruction EW-FU	EN 1856-1:2009
	Thermal shock resistance		
8.6	Sootfire resistance	Model 1 DN (80- 600): <b>Yes</b> Model 2 DN (80- 600): <b>No</b> <sup>2)</sup> Model 3 DN (80- 600): <b>Yes</b> Model 4 DN (80- 600): <b>No</b> <sup>2)</sup> Model 5 DN (80- 600): <b>Yes</b> <sup>2)</sup> because designated O	EN 1856-1:2009

# 8. Declared performance:



	Essential Characteristics	Performance	Harmonized technical specification
8.7	Thermal performance under normal operating conditions	Model 1 to 2 DN (80- 600): <b>T400</b> Model 3 to 5 DN (80- 600): <b>T600</b>	
8.8	Flexural tensile strength	Model 1 to 5 DN (80- 600): <b>n.p.d.</b>	
	(only for means of connection for chimney sections and fittings)		EN 1856-1:2009
8.9	Non vertical installation	Model 1 to 5 DN (80- 600):  Maximum offset between supports 4 m at 90°  (inclined run: maximum distance between two fixations, supports at non vertical installation)	EN 1856-1:2009
8.10	Components subject to wind load	Model 1 to 5 <b>DN (80- 350):</b> Free standing height <b>1.5 m</b> above last support.  Model 1 to 5 <b>DN (400- 600):</b> Free standing height <b>n.p.d.</b> above last support.	EN 1856-1:2009
	Durability:		
8.11	Water and vapour diffusion resistance	Model 1 DN (80- 600): <b>No</b> Model 2 DN (80- 600): <b>Yes</b> Model 3 DN (80- 600): <b>No</b> Model 4 DN (80- 600): <b>Yes</b> Model 5 DN (80- 600): <b>No</b>	
8.12	Condensate penetration resistance	Model 1 DN (80- 600): <b>No</b> Model 2 DN (80- 600): <b>Yes</b> Model 3 DN (80- 600): <b>No</b> Model 4 DN (80- 600): <b>Yes</b> Model 5 DN (80- 600): <b>No</b>	EN 1856-1:2009
8.13	Against corrosion	Model 1 DN (80- 600): <b>V2</b> Model 2 DN (80- 600): <b>V2</b> Model 3 DN (80- 600): <b>V2</b> Model 4 DN (80- 600): <b>V2</b> Model 5 DN (80- 600): <b>V3</b> (with 25 mm insulation)	
8.14	Freeze thaw resistance	Model 1 to 5 DN (80- 600): Yes	

9. The performance of the product identified in points 1 and 2 is in conformity with the declared performance in point 8. This declaration of performance is issued under the sole responsibility of the manufacturer identified in point 4.

Signed for and on behalf of the manufacturer by:

Wassertrüdingen, 27th Januar 2014

Stefan Engelhardt CEO



# **Product information**

"Chimneys - Requirements for metal chimneys - Part 1: System chimney products" DIN EN 1856-1:2009

Manufacturer's identification: Jeremias GmbH

Opfenrieder Str. 11-14 91717 Wassertrüdingen

Tel.: +49 (0) 9832 / 68 68-50 Fax: +49 (0) 9832 / 68 68-68 Internet: <u>www.jeremias.de</u> E-Mail: <u>info@jeremias.de</u>

Product trade name: EW-FU (Single wall chimney system, installation in stack)

Certification office: TÜV SÜD Industrie Service GmbH

Name and position of the responsible person: Stefan Engelhardt CEO

Identification of accompanying documentation

0.1	Metal chimney	EN 1856-1	T400	N1	D	V2-L50060	G50 G75 G100	80 - 300 350 - 450 500 - 600	Single wall chimney system, sootfire resistant, installation in stacks / chimneys, which meet the requirements for fire protection. Locking band optional. Operation mode in negative pressure. Cross section in round or oval form.
0.2	Metal chimney	EN 1856-1	T400	N1	w	V2-L50060	O50 O75 O100	80 - 300 350 - 450 500 - 600	Single wall chimney system, moisture resistant, installation in stacks / chimneys, which meet the requirements for fire protection. Locking band optional. Operation mode in negative pressure. Cross section in round or oval form.
0.3	Metal chimney	EN 1856-1	T600	N1	D	V2-L50060	G100 G150 G200	80 - 300 350 - 450 500 - 600	Single wall chimney system, sootfire resistant, installation in stacks / chimneys, which meet the requirements for fire protection. Locking band optional. Operation mode in negative pressure. Cross section in round or oval form.
0.4	Metal chimney	EN 1856-1	T600	N1	w	V2-L50060	O100 O150 O200	80 - 300 350 - 450 500 - 600	Single wall chimney system, moisture resistant, installation in stacks / chimneys, which meet the requirements for fire protection. Locking band optional. Operation mode in negative pressure. Cross section in round or oval form.
0.5	Metal chimney	EN 1856-1	T600	N1	D	V3-L50060	G70 G105 G140	80 - 300 350 - 450 500 - 600	Single wall chimney system, with 25mm insulation, sootfire resistant. Installation in stacks / chimneys, which meet the requirements for fire protection. Locking band optional. Operation mode in negative pressure. Cross section in round or oval form.

Product description	
Standard number	
Temperature level	
Pressure level	
Condensate resistance (W: wet / D: dry)	
Corrosion resistance	
Flue liner material specification	
Sootfire resistance (G: yes / O: no) and distance to combustible material (in mm)	
Nominal diameter (Ø) (inner tube) in mm	

Properties of a single wall metal chimney system

# Pressure resistance:

Maximum load (see installing instructions)

### Flow resistance:

Average roughness: 1.0 mm,

Zeta-values according to DIN EN 13384-1

(see installing instructions)

### Thermal resistance in stack

Without insulation 0 m<sup>2</sup>K/W With 25 mm insulation ≥0.26 m<sup>2</sup>K/W

### Flexural strength:

Angular assembly:

Maximum length between two supports: 4 m at 90°

Freeze-thaw resistance: Yes

### Cleaning:

The chimney system is only allowed to be cleaned with cleaning devices made of plastic or rust-resistant stainless steel.

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# **Declaration of Performance (DOP)**

No. 9174 026 DOP 2018-10-12

1. Unique identification code of the product-type:

### Rigid connecting pipe type 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 11(4):

# Rigid, single wall connecting pipe without heat insulation type EW-FU<sup>1)</sup>

Model 1	DN (80- 120)	T400 - N1 - D - V2 - L50060 - G375 NM <sup>2)</sup> (with radiation protection G300)
Model 1	DN (130)	<b>T400 – N1 – D – V2 – L50060 – G390 NM</b> <sup>2)</sup> (with radiation protection G300)
Model 1	DN (80- 600)	T400 - N1 - D - V2 - L50060 - G400 M <sup>3)</sup> (with radiation protection G300)
Model 2	DN (80- 120)	T400 - N1 - W - V2 - L50060 - O375 NM <sup>2)</sup> (with radiation protection O300)
Model 2	DN (130)	T400 - N1 - W - V2 - L50060 - O390 NM <sup>2)</sup> (with radiation protection O300)
Model 2	DN (80- 600)	T400 - N1 - W - V2 - L50060 - O400 M <sup>3)</sup> (with radiation protection O300)
Model 3	DN (80- 600)	T600 - N1 - D - V2 - L50060 - G400 M <sup>3)</sup> (with radiation protection G300)

<sup>1]</sup> Manufacturer product identification

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 heating appliances to the chimney

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 11-14 DE-91717 Wassertrüdingen Tel.: +49 9832 68 68 0

Fax: +49 9832 68 68 68 Email: <u>info@jeremias.de</u>

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 the construction product as set out in CPR, Annex V:

### System 2+

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 CPD 9174 026 of the factory production control.

<sup>&</sup>lt;sup>2]</sup> Not Measured (NM) means 3 times the Nominal Diameter with a minimum of 375 mm

<sup>3]</sup> Measured (M)



# 8. Declared performance:

	Essential Characteristics	Performance	Harmonized technical specification
8.1	Compressive strength	Model 1 to 3 DN ( 80- 300): <b>up to 27 m</b> Model 1 to 3 DN (350- 450): <b>up to 21 m</b> Model 1 to 3 DN (500- 600): <b>up to 15 m</b>	
8.2	Tensile strength	Model 1 to 3 DN (80- 600): <b>n.p.d.</b>	EN 1856-2:2009
8.3	Non vertical installation	Model 1 to 3: Horizontal <b>4 m between supports*</b> * Please pay attention to the mounting instructions, an incline, all incline has to be arranged for where applicable.	
8.4	Resistance to fire	Model 1 DN (80- 120): G375 NM Model 1 DN (130): G390 NM Model 1 DN (80- 600): G400 M  Model 2 DN (80- 120): O375 NM Model 2 DN (130): O390 NM Model 2 DN (80- 600): O400 M  Model 3 DN (80- 600): G400 M	EN 1856-2:2009
8.5	Gas tightness/ leakage	Model 1 to 3: <b>N1</b>	EN 1856-2:2009
8.6	Flow resistance of chimney sections and fittings	According to EN 13384-1	EN 1856-2:2009
8.7	Sootfire resistance	Model 1 and 3 DN (80- 600): <b>Yes</b> Model 2 DN (80- 600): <b>No</b> <sup>2)</sup> <sup>2)</sup> because designated O	EN 1856-2:2009
8.8	Thermal performance under normal operating conditions	Model 1 and 2: <b>T400*</b> Model 3: <b>T600*</b> *(Heating strain at nominal operating temperature)	
	Durability:		
8.9	Water and vapour diffusion resistance	Model 1 DN (80- 600): <b>No</b> Model 2 DN (80- 600): <b>Yes</b> Model 3 DN (80- 600): <b>No</b>	
8.10	Condensate penetration resistance	Model 1 DN (80- 600): <b>No</b> Model 2 DN (80- 600): <b>Yes</b> Model 3 DN (80- 600): <b>No</b>	EN 1856-2:2009
8.11	Against corrosion	Model 1 to 3 DN (80- 600): <b>V2</b>	
8.12	Freeze thaw resistance	Model 1 to 3 DN (80- 600): <b>Yes</b>	

9. The performance of the product identified in points 1 and 2 is in conformity with the declared performance in point 8. This declaration of performance is issued under the sole responsibility of the manufacturer identified in point 4.

Signed for and on behalf of the manufacturer by:

Wassertrüdingen, 12th October 2018

Stefan Engelhardt CEO



# **Product information**

"Chimneys - Requirements for metal chimneys - Part 2: Metal flue liners and connecting flue pipes" DIN EN 1856-2:2009

Manufacturer's identification: Jeremias GmbH

Opfenrieder Str. 11-14 91717 Wassertrüdingen

Tel.: +49 (0) 9832 / 68 68-50 Fax: +49 (0) 9832 / 68 68-68 Internet: <u>www.jeremias.de</u> E-Mail: <u>info@jeremias.de</u>

Product trade name: **EW-FU Connecting pipe** 

(rigid, single wall connecting pipe without insulation)

Certification office: TÜV SÜD Industrie Service GmbH

Name and position of the responsible person: Stefan Engelhardt CEO

Identification of accompanying documentation

Rigid connecting piece	EW-FU	0.1	EN 1856-2	T400	N1	D	V2-L50060	G375 NM <sup>1</sup> G390 NM <sup>1</sup> G400 M <sup>1</sup>	80 - 120 130 80 - 600	Single wall, sootfire resistant connecting pipe, composed of rigid pipes and elements, ventilated along the whole length, without covering. Locking band necessary. Operation mode in negative pressure (solid fuel, oil, gas).
		0.2	EN 1856-2	T400	N1	w	V2-L50060	O375 NM <sup>1</sup> O390 NM <sup>1</sup> O400 M <sup>1</sup>	80 - 120 130 80 - 600	Single wall, moisture resistant connecting pipe, composed of rigid pipes and elements, ventilated along the whole length, without covering. Locking band necessary. Operation mode in negative pressure (oil, gas).
		0.3	EN 1856-2	T600	N1	D	V2-L50060	G400 M <sup>1</sup>	80 - 600	Single wall, sootfire resistant connecting pipe, composed of rigid pipes and elements, ventilated along the whole length, without covering. Locking band necessary. Operation mode in negative pressure (solid fuel, oil, gas).

Product description Standard number Temperature level Pressure level Condensate resistance (W: wet / D: dry) Corrosion resistance Flue liner material specification Sootfire resistance (G: yes / O: no) and distance to combustible material (in mm) without radiation protection M = tested distance NM = calculated distance Nominal diameter (Ø) (inner tube) in mm

Rigid connecting pipe of metal

### Compressive strength:

> 15 m over the modules and the connections of the elements.

#### Flexural strength:

No vertical installation:

≤ 4 m between two brackets, supports or fixations.

### Flow resistance:

Average roughness: 1.0 mm,

Zeta-values according to DIN EN 13384-1.

## Thermal resistance:

0 m<sup>2</sup>K/W

## Sootfire resistance:

Yes

### Freeze-thaw resistance:

Yes

### Cleaning:

The connecting pipe is only allowed to be cleaned with cleaning devices made of plastic or rust-resistant stainless steel.

<sup>1</sup>With radiation protection the distance to combustible material can be defined at 300mm for all diameters!

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