

## Declaration of Performance (DOP)

No. 9174 086 DOP 2016-03-01

1. Unique identification code of the product-type:

**Multi-wall chimney system type DW-FS 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):

**Double wall “flanged sealed” chimney system type DW-FS with 32 mm heat insulation <sup>1)</sup>**

<b>Model 1</b>	<b>DN (130- 300)</b>	<b>T200 – H1 – W – V2 – L50060 – O20</b>
<b>Model 1</b>	<b>DN (350- 450)</b>	<b>T200 – H1 – W – V2 – L50060 – O30</b>
<b>Model 1</b>	<b>DN (500- 600)</b>	<b>T200 – H1 – W – V2 – L50060 – O40</b>
<b>Model 1</b>	<b>DN (650- 800)</b>	<b>T200 – H1 – W – V2 – L50060 – O80</b>
<b>Model 2</b>	<b>DN (130- 300)</b>	<b>T600 – H1 – W – V2 – L50060 – O50</b>
<b>Model 2</b>	<b>DN (350- 450)</b>	<b>T600 – H1 – W – V2 – L50060 – O75</b>
<b>Model 2</b>	<b>DN (500- 600)</b>	<b>T600 – H1 – W – V2 – L50060 – O100</b>
<b>Model 2</b>	<b>DN (650- 800)</b>	<b>T600 – H1 – W – V2 – L50060 – O200</b>
<b>Model 3</b>	<b>DN (130- 300)</b>	<b>T600 – H1 – D – Vm – L20060 – O50</b>
<b>Model 3</b>	<b>DN (350- 450)</b>	<b>T600 – H1 – D – Vm – L20060 – O75</b>
<b>Model 3</b>	<b>DN (500- 600)</b>	<b>T600 – H1 – D – Vm – L20060 – O100</b>
<b>Model 3</b>	<b>DN (650- 800)</b>	<b>T600 – H1 – D – Vm – L20060 – O200</b>

<sup>1)</sup> Manufacturer product identification DW-FS

3. Intended use or uses of the construction product, in accordance with the applicable harmonised 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  
Phone: +49 9832 68 68 0  
Fax: +49 9832 68 68 68  
Email: [info@jeremias.de](mailto:info@jeremias.de)

5. Where applicable, name and contact address of the authorised 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 086 of the factory production control.**

	Essential Characteristics	Performance	Harmonized technical specification														
8.1	Compressive strength Chimney sections, fittings and supports	<u>Sections and fittings:</u> Model 1 to 3 DN (130- 300): <b>n.p.d.</b> Model 1 to 3 DN (350- 450): <b>n.p.d.</b> Model 1 to 3 DN (500- 600): <b>n.p.d.</b> Model 1 to 3 DN (650- 800): <b>n.p.d.</b> <u>Supports:</u> n.p.d For further information see the installation instructions DW-FS	EN 1856-1:2009														
8.2	Resistance to fire	(Resistance to fire from inside to outside) Model 1 DN (130- 300): T200 – <b>O20</b> Model 1 DN (350- 450): T200 – <b>O30</b> Model 1 DN (500- 600): T200 – <b>O40</b> Model 1 DN (650- 800): T200 – <b>O80</b> Model 2 DN (130- 300): T600 – <b>O50</b> Model 2 DN (350- 450): T600 – <b>O75</b> Model 2 DN (500- 600): T600 – <b>O100</b> Model 2 DN (650- 800): T600 – <b>O200</b> Model 3 DN (130- 300): T600 – <b>O50</b> Model 3 DN (350- 450): T600 – <b>O75</b> Model 3 DN (500- 600): T600 – <b>O100</b> Model 3 DN (650- 800): T600 – <b>O200</b> Tested without cover, with back ventilated ceiling duct	EN 1856-1:2009														
8.3	Gas tightness/leakage	Model 1 to 3 DN (130- 800): <b>H1</b>	EN 1856-1:2009														
8.4	Flow resistance of chimney sections fittings and terminals	According to EN 13384-1 <table border="1" data-bbox="550 1153 1200 1424"> <thead> <tr> <th>component:</th> <th>ζ (Zeta-value) single resistances</th> </tr> </thead> <tbody> <tr> <td>pipe tee 87°:</td> <td>1,14</td> </tr> <tr> <td>pipe tee 45°:</td> <td>0,35</td> </tr> <tr> <td>pipe bend 87°:</td> <td>0,40</td> </tr> <tr> <td>pipe bend 45°:</td> <td>0,28</td> </tr> <tr> <td>pipe bend 30°:</td> <td>0,20</td> </tr> <tr> <td>pipe bend 15°:</td> <td>0,10</td> </tr> </tbody> </table>	component:	ζ (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	EN 1856-1:2009
component:	ζ (Zeta-value) single resistances																
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pipe bend 15°:	0,10																
8.5	Thermal resistance	Model 1 to 3 DN (130- 800): <b>&gt;0,501 m²K/W tested at 200°C</b>	EN 1856-1:2009														
8.6	Thermal shock resistance Sootfire resistance	Model 1 to 3 DN (130- 800): <b>No<sup>2)</sup></b> <sup>2)</sup> Because designated O	EN 1856-1:2009														
8.7	Thermal performance under normal operating conditions	Model 1 DN (130- 800): <b>T200</b> Model 2 DN (130- 800): <b>T600</b> Model 3 DN (130- 800): <b>T600</b>															
8.8	Flexural tensile strength (only for means of connection for chimney sections and fittings)	Model 1 to 3 DN (130- 800): <b>n.p.d.</b>	EN 1856-1:2009														
8.9	Non vertical installation	Model 1 to 3 DN (130- 800): Maximum offset between supports <b>n.p.d.</b> (inclined run: maximum distance between two fixations, supports at non vertical installation)	EN 1856-1:2009														

8. Declared performance

	Essential Characteristics	Performance	Harmonized technical specification
8.10	Components subject to wind load	Model 1 to 3 DN (130- 800): Free standing height <b>n.p.d.</b> above last support. Maximum spacing between lateral supports: <b>n.p.d.</b>	EN 1856-1:2009
8.11	Durability: Water and vapour diffusion resistance	Model 1 DN (130- 800): <b>Yes</b> Model 2 DN (130- 800): <b>Yes</b> Model 3 DN (130- 800): <b>No</b>	EN 1856-1:2009
8.12	Condensate penetration resistance	Model 1 DN (130- 800): <b>Yes</b> Model 2 DN (130- 800): <b>Yes</b> Model 3 DN (130- 800): <b>No</b>	
8.13	Against Corrosion	Model 1 DN (130- 800): <b>V2</b> Model 2 DN (130- 800): <b>V2</b> Model 3 DN (130- 800): <b>Vm</b>	
8.14	Freeze thaw resistance	Model 1 to 3 DN (130- 800): <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, 01<sup>st</sup> March 2016



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Stefan Engelhardt CEO

## Product information

“Chimneys - Requirements for metal chimneys – Part 1:  
System chimney products” 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: [www.jeremias.de](http://www.jeremias.de)  
 E-Mail: [info@jeremias.de](mailto:info@jeremias.de)

Product trade number:

**DW-FS** (Double wall flanged chimney system with 32 mm heat insulation)

Certification office:

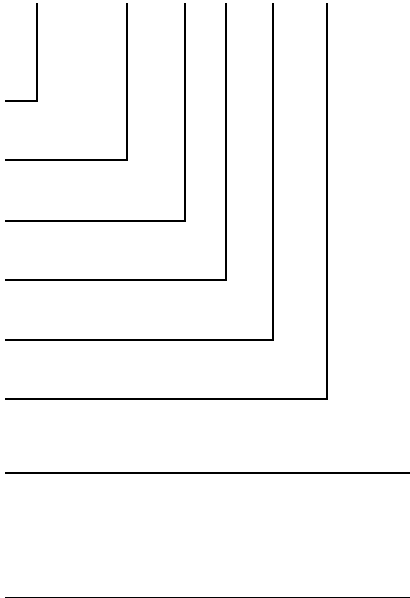
TÜV SÜD Industrie Service GmbH

Name and position of the responsible person:

**Stefan Engelhardt** CEO

Identification of accompanying documentation

0.1	Metal chimney	EN 1856-1	T200	H1	W	V2-L50060	O20 O30 O40 O80	130 - 300 350 - 450 500 - 600 650 - 800	Double wall chimney system, moisture resistant, with 32 mm heat insulation, ventilated throughout the whole length, without covering. Locking band necessary. Operation mode in positive pressure / high pressure up to 5000 Pa.
0.2	Metal chimney	EN 1856-1	T600	H1	W	V2-L50060	O50 O75 O100 O200	130 - 300 350 - 450 500 - 600 650 - 800	Double wall chimney system, moisture resistant, with 32 mm heat insulation, ventilated throughout the whole length, without covering. Locking band necessary. Operation mode in positive pressure / high pressure up to 5000 Pa.
0.3	Metal chimney	EN 1856-1	T600	H1	D	Vm-L20060	O50 O75 O100 O200	130 - 300 350 - 450 500 - 600 650 - 800	Double wall chimney system, with 32 mm heat insulation, ventilated throughout the whole length, without covering. Locking band necessary. In positive pressure / high pressure up to 5000 Pa for dry operation mode.

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 materials (in mm)	
Nominal diameter (Ø) (inner tube) in mm	

Properties of a multi-wall metal chimney system

**Compressive strength:**

n.p.d.

**Flow resistance:**

Average roughness: 1.0 mm,  
Zeta-values according to EN 13384-1  
(see installing instructions)

**Thermal resistance:** 0.501 m<sup>2</sup>K/W

**Flexural strength:**

Angular assembly:  
Maximum length between two supports:  
Ø 130 - 800: n.p.d.

**Wind load: free standing end above last fixation:**

n.p.d. up to Ø300 mm  
n.p.d. Ø350 – ≤ Ø400 mm  
n.p.d. Ø450 – ≤ Ø800 mm

**Maximum distance between vertical supports:** n.p.d.

**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.

## Declaration of Performance (DOP)

No. 9174 091 DOP 2016-03-01

1. Unique identification code of the product-type:

**Double wall connecting pipe type DW-FS 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, double wall “flanged sealed” connecting pipe type DW-FS with 32 mm heat insulation <sup>1)</sup>**

**Model 1            DN (130- 800) T200 – H1 – W – V2 – L50060 – O20M <sup>3)</sup>**

**Model 2            DN (130- 800) T600 – H1 – W – V2 – L50060 – O100M <sup>3)</sup>**

**Model 3            DN (130- 800) T600 – H1 – D – Vm – L20060 – O100M <sup>3)</sup>**

<sup>1)</sup> Manufacturer product identification DW-FS connecting pipe

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

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

3. Intended use or uses of the construction product, in accordance with the applicable harmonised 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: [info@jeremias.de](mailto:info@jeremias.de)**

5. Where applicable, name and contact address of the authorised 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 CPR 9174 091 of the factory production control.**

8. Declared performance

	Essential Characteristics	Performance	Harmonized technical specification														
8.1	Compressive strength	Model 1 to 3 DN (130- 800): <b>n.p.d.</b>	EN 1856-2:2009														
8.2	Tensile strength	Model 1 to 3 DN (130- 800): <b>n.p.d.</b>															
8.3	Non vertical installation	Model 1 to 3 DN (130- 800): Horizontal <b>n.p.d. 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 (130- 800): <b>O20 M</b> Model 2 DN (130- 800): <b>O100 M</b> Model 3 DN (130- 800): <b>O100 M</b>	EN 1856-2:2009														
8.5	Gas tightness/ leakage	Model 1 to 3 DN (130- 800): <b>H1</b>	EN 1856-2:2009														
8.6	Flow resistance of chimney sections and fittings	According to EN 13384-1 <table border="1" data-bbox="592 779 1201 1039"> <thead> <tr> <th>component:</th> <th>ζ (Zeta-value) single resistances</th> </tr> </thead> <tbody> <tr> <td>pipe tee 87°:</td> <td>1.14</td> </tr> <tr> <td>pipe tee 45°:</td> <td>0.35</td> </tr> <tr> <td>pipe bend 87°:</td> <td>0.40</td> </tr> <tr> <td>pipe bend 45°:</td> <td>0.28</td> </tr> <tr> <td>pipe bend 30°:</td> <td>0.20</td> </tr> <tr> <td>pipe bend 15°:</td> <td>0.10</td> </tr> </tbody> </table>	component:	ζ (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	EN 1856-2:2009
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pipe bend 15°:	0.10																
8.7	Sootfire resistance	Model 1 DN (130- 800): <b>No</b> <sup>2)</sup> Model 2 DN (130- 800): <b>No</b> <sup>2)</sup> Model 3 DN (130- 800): <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 DN (130- 800): <b>T200*</b> Model 2 DN (130- 800): <b>T600*</b> Model 3 DN (130- 800): <b>T600*</b> *(Heating strain at nominal operating temperature)															
8.9	Durability: Water and vapour diffusion resistance	Model 1 DN (130- 800): <b>Yes</b> Model 2 DN (130- 800): <b>Yes</b> Model 3 DN (130- 800): <b>No</b>	EN 1856-2:2009														
8.10	Condensate penetration resistance	Model 1 DN (130- 800): <b>Yes</b> Model 2 DN (130- 800): <b>Yes</b> Model 3 DN (130- 800): <b>No</b>															
8.11	Against corrosion	Model 1 DN (130- 800): <b>V2</b> Model 2 DN (130- 800): <b>V2</b> Model 3 DN (130- 800): <b>Vm</b>															
8.12	Freeze thaw resistance	Model 1 to 3 DN (130- 800): <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, 01<sup>st</sup> March 2016



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Stefan Engelhardt CEO

# Product information

“Chimneys - Requirements for metal chimneys - Part 2:  
Metal flue liners and connecting flue pipes” 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: [www.jeremias.de](http://www.jeremias.de)  
E-Mail: [info@jeremias.de](mailto:info@jeremias.de)

Product trade name:

**DW-FS Connecting pipe**  
(rigid “flanged sealed” connecting pipe, double wall with 32 mm insulation)

Certification office:

TÜV SÜD Industrie Service GmbH

Name and position of the responsible person:

**Stefan Engelhardt** CEO

Identification of accompanying documentation

Rigid double wall connecting pipe DW-FS	0.1	EN 1856-2	T200	H1	W	V2-L50060	O20 M	130 - 800	Double wall, moisture resistant connecting pipe, composed of rigid pipes and elements, ventilated along the whole length, without covering. Locking band necessary. Operation mode in positive pressure/ high pressure (oil, gas).
	0.2	EN 1856-2	T600	H1	W	V2-L50060	O100 M	130 - 800	Double wall, moisture resistant connecting pipe, composed of rigid pipes and elements, ventilated along the whole length, without covering. Locking band necessary. Operation mode in positive pressure/ high pressure (oil, gas).
	0.3	EN 1856-2	T600	H1	D	Vm-L20060	O100 M	130 - 800	Double wall connecting pipe, composed of rigid pipes and elements, ventilated along the whole length, without covering. Locking band necessary. In positive pressure/ high pressure for dry operation mode (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 materials (in mm)	
M = tested distance NM = calculated distance	
Nominal diameter (Ø) inner tube in mm	

Rigid connecting pipe of metal

**Compressive strength:**

n.p.d.

**Flexural strength:**

No vertical installation:  
n.p.d. between two fixations or supports.

**Maximal distance between vertical supports:**

≤ 4 m between two fixations

**Coefficient for flow resistance:**

Average roughness: 1.0 mm,  
Zeta-values according to EN 13384-1

**Thermal resistance:**

0.501 m²K/W

**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.