

Declaration of Performance (DOP)

No. 9174 014 DOP 2016-11-18

1. Unique identification code of the product-type:

Single wall chimney system type EW-TITAN 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-TITAN, installation in stack¹⁾

Model 1	DN (80- 300) T400 – N1 – W – V2 – L99050 – G50
Model 1	DN (350- 450) T400 – N1 – W – V2 – L99050 – G75
Model 1	DN (500- 600) T400 – N1 – W – V2 – L99050 – G100
Model 2	DN (80- 300) T400 – N1 – W – V2 – L99050 – O50
Model 2	DN (350- 450) T400 – N1 – W – V2 – L99050 – O75
Model 2	DN (500- 600) T400 – N1 – W – V2 – L99050 – O100
Model 3	DN (80- 300) T600 – N1 – W – V2 – L99050 – G100
Model 3	DN (350- 450) T600 – N1 – W – V2 – L99050 – G150
Model 3	DN (500- 600) T600 – N1 – W – V2 – L99050 – G200

¹⁾ Manufacturer product identification EW-TITAN

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
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 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 014 of the factory production control.

8. Declared performance:

	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 (80- 300): up to 26 m Model 1 to 3 DN (350- 450): up to 18 m Model 1 to 3 DN (500- 600): up to 10 m <u>Supports:</u> n.p.d. For further information see the installation instruction EW-TITAN	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 Tested without cover, with back ventilated ceiling duct	EN 1856-1:2009																								
8.3	Gas tightness/ leakage	Model 1 to 3 DN (80- 600): N1	EN 1856-1:2009																								
8.4	Flow resistance of chimney sections fittings and terminals	According to EN 13384-1 <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">component:</th> <th style="text-align: center;">ζ (Zeta-value) single resistances</th> </tr> </thead> <tbody> <tr><td>pipe tee 87°:</td><td style="text-align: center;">1.14</td></tr> <tr><td>pipe tee 45°:</td><td style="text-align: center;">0.35</td></tr> <tr><td>pipe bend 87°:</td><td style="text-align: center;">0.40</td></tr> <tr><td>pipe bend 45°:</td><td style="text-align: center;">0.28</td></tr> <tr><td>pipe bend 30°:</td><td style="text-align: center;">0.20</td></tr> <tr><td>pipe bend 15°:</td><td style="text-align: center;">0.10</td></tr> <tr><td colspan="2" style="text-align: center;">Terminals: (only for operation in negative pressure)</td></tr> <tr><td>rain cap:</td><td style="text-align: center;">1.0</td></tr> <tr><td>fin cap type „Hubo“:</td><td style="text-align: center;">≤ Ø 140 mm 0.1/ ≥ Ø 150 mm 0.2</td></tr> <tr><td>wind deflector:</td><td style="text-align: center;">≤ Ø 140 mm 0.1/ ≥ Ø 150 mm 0.2</td></tr> <tr><td>hurricane:</td><td style="text-align: center;">0.1</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	Terminals: (only for operation in negative pressure)		rain cap:	1.0	fin cap type „Hubo“:	≤ Ø 140 mm 0.1/ ≥ Ø 150 mm 0.2	wind deflector:	≤ Ø 140 mm 0.1/ ≥ Ø 150 mm 0.2	hurricane:	0.1	EN 1856-1:2009
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hurricane:	0.1																										
8.5	Thermal resistance	Model 1 to 3 DN (80- 600): 0 m²K/W without insulation * Model 1 to 3 DN (80- 600): >0.26 m²K/W calculated for 200°C with 25 mm insulation * * The thermal resistance is dependent on the nominal diameters of inner tubes see product information and mounting instructions EW-TITAN	EN 1856-1:2009																								
8.6	Thermal shock resistance Sootfire resistance	Model 1 DN (80- 600): Yes Model 2 DN (80- 600): No ²⁾ Model 3 DN (80- 600): Yes ²⁾ because designated O	EN 1856-1:2009																								
8.7	Thermal performance under normal operating conditions	Model 1 DN (80- 600): T400 Model 2 DN (80- 600): T400 Model 3 DN (80- 600): T600																									
8.8	Flexural tensile strength (only for means of connection for chimney sections and fittings)	Model 1 to 3 DN (80- 600): n.p.d.	EN 1856-1:2009																								

8. Declared performance:

	Essential Characteristics	Performance	Harmonized technical specification
8.9	Non vertical installation	Model 1 to 3 DN (80- 600): Maximum offset between supports 4 m at 90° <small>(inclined run: maximum distance between two fixations, supports at non vertical installation)</small>	
8.10	Components subject to wind load	Model 1 to 3 DN (80- 350) : Free standing height 1.5 m above last support. Model 1 to 3 DN (400- 600) : Free standing height above last support n.p.d.	EN 1856-1:2009
8.11	Durability: Water and vapour diffusion resistance	Model 1 DN (80- 600): Yes Model 2 DN (80- 600): Yes Model 3 DN (80- 600): Yes	EN 1856-1:2009
8.12	Eindringen von Kondensat	Model 1 DN (80- 600): Yes Model 2 DN (80- 600): Yes Model 3 DN (80- 600): Yes	
8.13	Against corrosion	Model 1 to 3 DN (80- 600): V2	
8.14	Freeze thaw resistance	Model 1 to 3 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, 18th november 2016



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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: www.jeremias.de
 E-Mail: info@jeremias.de

Product trade name:

EW-TITAN (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	W	V2-L99050	G50 G75 G100	80 – 300 350 – 450 500 – 600	Single wall chimney system, sootfire resistant, for installation in stacks / chimneys, which meet the requirements for fire protection. Operation mode in negative pressure.
0.2	Metal chimney	EN 1856-1	T400	N1	W	V2-L99050	O50 O75 O100	80 – 300 350 – 450 500 – 600	Single wall chimney system, moisture resistant, for installation in stacks / chimneys, which meet the requirements for fire protection. Operation mode in negative pressure.
0.3	Metal chimney	EN 1856-1	T600	N1	W	V2-L99050	G100 G150 G200	80 – 300 350 – 450 500 – 600	Single wall chimney system, sootfire resistant, for installation in stacks / chimneys, which meet the requirements for fire protection. Operation mode in negative pressure.

Product description	
Standard number	EN 1856-1
Temperature level	T400
Pressure level	N1
Condensate resistance (W: wet / D: dry)	W
Corrosion resistance	
Flue liner material specification	V2-L99050
Sootfire resistance (G: yes / O: no) and distance to combustible material (in mm)	G50 G75 G100
Nominal diameter (Ø) (inner tube) in mm	80 – 300 350 – 450 500 – 600

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 m²K/W
Optional with 25 mm insulation >0,26m²K/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.

Declaration of Performance (DOP)

No. 9174 057 DOP 2016-11-18

1. Unique identification code of the product-type:

Rigid metal connecting pipe type EW-TITAN 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 type EW-TITAN without heat insulation¹⁾

Model 1	DN (80- 120)	T450 – N1 – W – V2 – L99050 – G375 NM²⁾
Model 1	DN (130)	T450 – N1 – W – V2 – L99050 – G390 NM²⁾
Model 1	DN (80- 600)	T450 – N1 – W – V2 – L99050 – G400 M³⁾
Model 2	DN (80- 120)	T450 – N1 – W – V2 – L99050 – O375 NM²⁾
Model 2	DN (130)	T450 – N1 – W – V2 – L99050 – O390 NM²⁾
Model 2	DN (80- 600)	T450 – N1 – W – V2 – L99050 – O400 M³⁾

¹⁾ Manufacturer product identification

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

³⁾ 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**

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 057 of the factory production control.

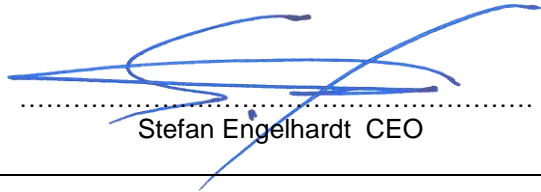
9. Declared performance:

	Essential Characteristics	Performance	Harmonized technical specification														
8.1	Compressive strength	Model 1 to 2 DN (80- 600): up to 10 m	EN 1856-2:2009														
8.2	Tensile strength	Model 1 to 2 DN (80- 600): n.p.d.															
8.3	Non vertical installation	Model 1 to 2: Horizontal 4 m between supports* * 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	EN 1856-2:2009														
8.5	Gas tightness/ leakage	Model 1 to 2: N1	EN 1856-2:2009														
8.6	Flow resistance of chimney sections and fittings	According to EN 13384-1 <table border="1" data-bbox="592 860 1198 1120"> <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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8.7	Sootfire resistance	Model 1 DN (80- 600): Yes Model 2 DN (80- 600): No ²⁾ ²⁾ because designated O	EN 1856-2:2009														
8.8	Thermal performance under normal operating conditions	Model 1 to 2: T450* *(Heating strain at nominal operating temperature)															
8.9	Durability: Water and vapour diffusion resistance	Model 1 DN (80- 600): Yes Model 2 DN (80- 600): Yes	EN 1856-2:2009														
8.10	Condensate penetration resistance	Model 1 DN (80- 600): Yes Model 2 DN (80- 600): Yes															
8.11	Against corrosion	Model 1 to 2: V2															
8.12	Freeze thaw resistance	Model 1 to 2: 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, 18th November 2016



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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: www.jeremias.de
E-Mail: info@jeremias.de

Product trade name:

EW-TITAN 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-TITAN	0.1	EN 1856-2	T450	N1	W	V2-L99050	G375 NM¹ G390 NM¹ G400 M¹	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 fuels). For temperature levels > T450 or when necessary to have shorter distances to combustible materials, the double wall connecting pieces dw-kl, dw-fu, dw-vision, dw-eco, dw-eco-titan of the following Certificate Nrs. are to be used: 0036 CPD 9174 041 / ...047/...048/...049 or ...054.
	0.2	EN 1856-2	T450	N1	W	V2-L99050	O375 NM¹ O390 NM¹ O400 M¹	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). For temperature levels > T450 or when necessary to have shorter distances to combustible materials, can be used the dw-kl, dw-fu, dw-vision, dw-eco, dw-eco-titan double wall connecting pieces with the following Certificate Nrs.: 0036 CPD 9174 041 / ...047/ ...048/ ...049/...054

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:

>10 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 m²K/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.

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