

Declaration of Performance (DOP)

No. 9174 080 DOP 2015-11-02

1. Unique identification code of the product-type:

Multi-wall chimney system type DW-KL 50 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 "conical" chimney system type DW-KL 50 with 50 mm heat insulation¹⁾

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Model 1 DN (80-1000)
                           T200 - P1 - W - V2 - L50060 - O00
                           T200 - H1 - W - V2 - L50060 - O20
Model 2 DN (80-300)
Model 2 DN (350- 450)
                           T200 - H1 - W - V2 - L50060 - O30
Model 2 DN (500- 600)
                           T200 - H1 - W - V2 - L50060 - O40
Model 2 DN (650-1000)
                           T200 - H1 - W - V2 - L50060 - O80
Model 3 DN (80-300)
                           T400 - N1 - D - V3 - L50060 - G40
Model 3 DN (350- 450)
                           T400 - N1 - D - V3 - L50060 - G60
Model 3 DN (500- 600)
                           T400 - N1 - D - V3 - L50060 - G80
                           T400 - N1 - D - V3 - L50060 - G160
Model 3 DN (650-1000)
Model 4 DN (80-300)
                           T400 - N1 - W - V2 - L50060 - O20
Model 4 DN (350- 450)
                           T400 - N1 - W - V2 - L50060 - O30
Model 4 DN (500- 600)
                           T400 - N1 - W - V2 - L50060 - O40
Model 4 DN (650-1000)
                           T400 - N1 - W - V2 - L50060 - O80
Model 5 DN (80-300)
                           T400 - P1 - W - V2 - L50060 - O20
                           T400 - P1 - W - V2 - L50060 - O30
Model 5 DN (350- 450)
Model 5 DN (500- 600)
                           T400 - P1 - W - V2 - L50060 - O40
                           T400 - P1 - W - V2 - L50060 - O80
Model 5 DN (650-1000)
Model 6 DN (80-300)
                           T450 - H1 - W - V2 - L50060 - O40
                          T450 - H1 - W - V2 - L50060 - O60
T450 - H1 - W - V2 - L50060 - O80
Model 6 DN (350- 450)
Model 6 DN (500- 600)
Model 6 DN (650-1000)
                           T450 - H1 - W - V2 - L50060 - O160
Model 7 DN (80-300)
                           T600 - N1 - D - V3 - L50060 - G40
Model 7 DN (350- 450)
                           T600 - N1 - D - V3 - L50060 - G60
                           T600 - N1 - D - V3 - L50060 - G80
Model 7 DN (500- 600)
Model 7 DN (650-1000)
                           T600 - N1 - D - V3 - L50060 - G160
Model 8 DN (80-300)
                           T600 - H1 - W - V2 - L50060 - G40
Model 8 DN (350- 450)
                           T600 - H1 - W - V2 - L50060 - G60
Model 8 DN (500- 600)
                           T600 - H1 - W - V2 - L50060 - G80
Model 8 DN (650-1000)
                           T600 - H1 - W - V2 - L50060 - G160
1) Manufacturer product identification DW-KL 50
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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):

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):

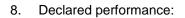
not applicable

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

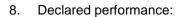
7. In case of the declaration of performance concerning a construction product for which a European Technical Assessment has been issued:

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 080 of the factory production control.





	Essential Characteristics	Performance	Harmonized technical specification
8.1	Compressive strength Chimney sections, fittings and supports	Sections and fittings: Model 1 to 8 DN (80- 300): up to 32 m Model 1 to 8 DN (350- 450): up to 21 m Model 1 to 8 DN (500- 600): up to 9 m Model 1 to 8 DN (650- 950): up to 9 m Model 1 to 8 DN (1000): n.p.d. For further information see the installation instruction DW-KL 50	EN 1856-1:2009
8.2	Resistance to fire	(Resistance to fire from inside to outside) Model 1 DN (80-1000): T200 – O00 Model 2 DN (80- 300): T200 – O20 Model 2 DN (550- 450): T200 – O40 Model 2 DN (550- 600): T200 – O40 Model 2 DN (650-1000): T200 – O80 Model 3 DN (80- 300): T400 – G40 Model 3 DN (80- 300): T400 – G60 Model 3 DN (550- 600): T400 – G80 Model 3 DN (550- 600): T400 – G80 Model 3 DN (550- 1000): T400 – O20 Model 4 DN (80- 300): T400 – O20 Model 4 DN (80- 300): T400 – O30 Model 4 DN (550- 600): T400 – O40 Model 4 DN (550- 600): T400 – O40 Model 5 DN (80- 300): T400 – O20 Model 5 DN (80- 300): T400 – O20 Model 5 DN (550- 600): T400 – O40 Model 5 DN (550- 600): T400 – O40 Model 5 DN (550- 600): T400 – O40 Model 6 DN (80- 300): T450 – O40 Model 6 DN (80- 300): T450 – O40 Model 6 DN (550- 600): T450 – O80 Model 6 DN (550- 600): T450 – O80 Model 7 DN (80- 300): T600 – G40 Model 7 DN (80- 300): T600 – G40 Model 8 DN (80- 300): T600 – G40 Model 8 DN (80- 300): T600 – G40 Model 8 DN (80- 300): T600 – G40 Model 8 DN (500- 600): T600 – G40	EN 1856-1:2009
8.3	Gas tightness/leakage	Model 1 DN (80-1000): P1 Model 2 DN (80-1000): H1 Model 3 DN (80-1000): N1 Model 4 DN (80-1000): N1 Model 5 DN (80-1000): P1 Model 6 DN (80-1000): H1 Model 7 DN (80-1000): N1 Model 8 DN (80-1000): H1	EN 1856-1:2009





	Essential Characteristics	Performance	Harmonized technical specification
8.4	Flow resistance of	According to EN 13384-1	
	chimney sections fittings and terminals	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	EN 1856-1:2009
		pipe bend 30°: 0.20	
		pipe bend 15°: 0.10	
		Terminals: (only for operation in negative pressure)	
		rain cap:	
		fin cap type "Hubo": ≤ Ø 140 mm 0.1/ ≥ Ø 150 mm	0.2
		wind deflector: ≤ Ø 140 mm 0.1/ ≥ Ø 150 mm	
		hurrican: 0.1	
8.5	Thermal resistance	Model 1 to 8 DN (80-1000): >0.601 m ² K/W	EN 1856-1:2009
0.0	Thermal resistance	100001 1000 BIN (00 1000). 20.001 III 1000	
8.6	Thermal shock resistance Sootfire resistance Thermal performance under normal operating conditions	Model 1 DN (80-1000): No ²⁾ Model 2 DN (80-1000): No ²⁾ Model 3 DN (80-1000): Yes Model 4 DN (80-1000): No ²⁾ Model 5 DN (80-1000): No ²⁾ Model 6 DN (80-1000): No ²⁾ Model 7 DN (80-1000): Yes Model 8 DN (80-1000): Yes Model 1 DN (80-1000): T200 Model 2 DN (80-1000): T200 Model 3 DN (80-1000): T400 Model 4 DN (80-1000): T400 Model 5 DN (80-1000): T400 Model 6 DN (80-1000): T400 Model 6 DN (80-1000): T450 Model 7 DN (80-1000): T600 Model 8 DN (80-1000): T600	EN 1856-1:2009
8.8	Flexural tensile strength (only for means of connection for chimney sections and fittings)	Model 1 to 8 DN (80- 300): up to 15 m Model 1 to 8 DN (350- 450): up to 13 m Model 1 to 8 DN (500- 600): n.p.d. Model 1 to 8 DN (650-1000): n.p.d.	EN 1856-1:2009
8.9	Non vertical installation	Model 1 to 8 DN (80-1000): Maximum offset between supports 3 m at 90° (inclined run: maximum distance between two fixations, supports at non vertical ins	EN 1856-1:2009

8. Declared performance:



	Essential Characteristics	Performance	Harmonized technical specification
8.10	Components subject to wind load	Model 1 to 8 DN (80- 550): Free standing height 3 m above last support. Maximum spacing between lateral supports: 4 m. Model 1 to 8 DN (600- 950): Free standing height 1.5 m above last support. Maximum spacing between lateral supports: 4 m. Model 1 to 8 DN (1000): Free standing height n.p.d. above last support. Maximum spacing between lateral supports: n.p.d.	EN 1856-1:2009
	Durability:		
8.11	Water and vapour diffusion resistance	Model 1 DN (80-1000): Yes Model 2 DN (80-1000): Yes Model 3 DN (80-1000): No Model 4 DN (80-1000): Yes Model 5 DN (80-1000): Yes Model 6 DN (80-1000): Yes Model 7 DN (80-1000): No Model 8 DN (80-1000): Yes	
8.12	Condensate penetration resistance	Model 1 DN (80-1000): Yes Model 2 DN (80-1000): Yes Model 3 DN (80-1000): No Model 4 DN (80-1000): Yes Model 5 DN (80-1000): Yes Model 6 DN (80-1000): Yes Model 7 DN (80-1000): No Model 8 DN (80-1000): Yes	EN 1856-1:2009
8.13	Korrosionsbeständigkeit	Model 1 DN (80-1000): V2 Model 2 DN (80-1000): V2 Model 3 DN (80-1000): V3 Model 4 DN (80-1000): V2 Model 5 DN (80-1000): V2 Model 6 DN (80-1000): V2 Model 7 DN (80-1000): V3 Model 8 DN (80-1000): V2	
8.14	Freeze thaw resistance	Model 1 to 8 DN (80-1000): 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, 02th November 2015

Stefan Engelhardt Geschäftsführer / 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 E-Mail: info@jeremias.de

Product trade name: DW-KL 50 (Double wall "conical" chimney system with 50 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	P1	w	V2-L50060	000	80 - 1000	Double wall chimney system, moisture resistant, with 50 mm heat insulation, ventilated through the whole length, without covering. Locking band necessary. Operation mode in positive pressure up to 200Pa.
0.2	Metal chimney	EN 1856-1	T200	H1	w	V2-L50060	O20 O30 O40 O80	80 - 300 350 - 450 500 - 600 650 - 1000	Double wall chimney system, moisture resistant, with 50 mm heat insulation, ventilated through the whole length, without covering. Locking band necessary. Operation mode in positive pressure / high pressure up to 5000Pa.
0.3	Metal chimney	EN 1856-1	T400	N1	D	V3-L50060	G40 G60 G80 G160	80 - 300 350 - 450 500 - 600 650 - 1000	Double wall chimney system, sootfire resistant, with 50 mm heat insulation, ventilated through the whole length, without covering. Locking band necessary. Operation mode in negative pressure.
0.4	Metal chimney	EN 1856-1	T400	N1	w	V2-L50060	O20 O30 O40 O80	80 - 300 350 - 450 500 - 600 650 - 1000	Double wall chimney system, moisture resistant, with 50 mm heat insulation, ventilated through the whole length, without covering. Locking band necessary. Operation mode in negative pressure.
0.5	Metal chimney	EN 1856-1	T400	P1	w	V2-L50060	O20 O30 O40 O80	80 - 300 350 - 450 500 - 600 650 - 1000	Double wall chimney system, moisture resistant, with 50 mm heat insulation, ventilated through the whole length, without covering. Locking band necessary. Operation mode in positive pressure up to 200Pa.
0.6	Metal chimney	EN 1856-1	T450	H1	w	V2-L50060	O40 O60 O80 O160	80 - 300 350 - 450 500 - 600 650 - 1000	Double wall chimney system, moisture resistant, with 50 mm heat insulation, ventilated through the whole length, without covering. Locking band necessary. Operation mode in positive pressure / high pressure up to 5000Pa.
0.7	Metal chimney	EN 1856-1	T600	N1	D	V3-L50060	G40 G60 G80 G160	80 - 300 350 - 450 500 - 600 650 - 1000	Double wall chimney system, sootfire resistant, with 50 mm heat insulation, ventilated through the whole length, without covering. Locking band necessary. Operation mode in negative pressure.
0.8	Metal chimney	EN 1856-1	T600	H1	W	V2-L50060	G40 G60 G80 G160	80 - 300 350 - 450 500 - 600 650 - 1000	Double wall chimney system, moisture resistant or sootfire resistant, with 50 mm heat insulation, ventilated through the whole length, without covering. Locking band necessary. Operation mode in positive pressure / high pressure up to 5000 Pa.

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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 (mm)	
Nominal diameter (Ø)	

(inner tube) in mm

Properties of a multi-wall metal chimney system

Compressive strength:

Maximum load (see installing instructions)

Flow resistance:

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

Thermal resistance: >0.601 m²K/W

Flexural strength:

Angular assembly: Maximum length between two supports 3 m at 90°

Tensile strength: See installing instructions

Wind load: free standing end above last fixation:

≤ 3 m, up to Ø550 mm (see installing instructions) ≤ 1.5 m, Ø600 mm – Ø950 mm (see installing instructions) n.p.d., Ø1000 mm (see installing instructions)

Maximum distance between vertical supports: 4 m

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 081 DOP 2017-06-16

1. Unique identification code of the product-type:

Rigid connecting pipe type DW-KL 50 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 "conical" metal connecting pipe type DW-KL 501)

Model 1	DN (80- 600) T200 - P1 - W - V2 - L50060 - O00 M ³⁾
Model 2	DN (80- 600) T200 - H1 - W - V2 - L50060 - O20 M ³⁾
Model 3	DN (80- 600) T450 - H1 - W - V2 - L50060 - O50 M ³⁾
Model 4	DN (80- 600) T600 – N1 – D – V3 – L50060 – G100 M $^{3)}$
Model 5	DN (80- 600) T600 - H1 - W - V2 - L50060 - G100 M $^{3)}$

^{1]} 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):



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 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:

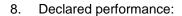
System 2+

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 CPR 9174 081 of the factory production control

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

^{3]} Measured (M)





	Essential Characteristics	Performance	Harmonized technical specification
8.1	Compressive strength	Model 1 to 5 DN (80- 300): up to 32 m Model 1 to 5 DN (350- 450): up to 21 m Model 1 to 5 DN (500- 600): up to 9 m	
8.2	Tensile strength	Model 1 to 5 DN (80- 450): up to 13 m	EN 1856-2:2009
8.3	Non vertical installation	Model 1 to 5: Horizontal 3 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	(Resistance to fire from inside to outside) Model 1 DN (80- 600): O00 M Model 2 DN (80- 600): O20 M Model 3 DN (80- 600): O50 M Model 4 DN (80- 600): G100 M Model 5 DN (80- 600): G100 M	EN 1856-2:2009
8.5	Gas tightness/ leakage	Model 1 DN (80- 600): P1 Model 2 DN (80- 600): H1 Model 3 DN (80- 600): H1 Model 4 DN (80- 600): N1 Model 5 DN (80- 600): H1	EN 1856-2:2009
8.6	Flow resistance of chimney sections and fittings	According to EN 13384-1 component:	
		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
8.7	Sootfire resistance	Model 1 DN (80- 600): No ²⁾ Model 2 DN (80- 600): No ²⁾ Model 3 DN (80- 600): No ²⁾ Model 4 DN (80- 600): Yes Model 5 DN (80- 600): Yes ²⁾ because designated O	EN 1856-2:2009
8.8	Thermal performance under normal operating conditions	Model 1 DN (80- 600): T200* Model 2 DN (80- 600): T200* Model 3 DN (80- 600): T450* Model 4 DN (80- 600): T600* Model 5 DN (80- 600): T600* *(Heating strain at nominal operating temperature)	

8. Declared performance:



	Essential Characteristics	Performance	Harmonized technical specification
	Durability:		
8.9	Water and vapour diffusion resistance	Model 1 DN (80- 600): Yes Model 2 DN (80- 600): Yes Model 3 DN (80- 600): Yes Model 4 DN (80- 600): No Model 5 DN (80- 600): Yes	
8.10	Condensate penetration resistance	Model 1 DN (80- 600): Yes Model 2 DN (80- 600): Yes Model 3 DN (80- 600): Yes Model 4 DN (80- 600): No Model 5 DN (80- 600): Yes	EN 1856-2:2009
8.11	Against corrosion	Model 1 DN (80- 600): V2 Model 2 DN (80- 600): V2 Model 3 DN (80- 600): V2 Model 4 DN (80- 600): V3 Model 5 DN (80- 600): V2	
8.12	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, 16th June 2017

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: <u>www.jeremias.de</u> E-Mail: <u>info@jeremias.de</u>

Product trade name: DW-KL 50 connecting pipe

(rigid double wall "conical sealed" connecting pipe with 50 mm insulation)

Certification office: TÜV SÜD Industrie Service GmbH

Name and position of the responsible person: Stefan Engelhardt CEO

Identification of accompanying documentation

	0.1	EN 1856-2	T200	P1	W	V2-L50060	O00 M	80 - 600	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 up to 200Pa. (oil, gas).
connecting pipe L 50	0.2	EN 1856-2	T200	H1	w	V2-L50060	O20 M	80 - 600	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 high pressure up to 5000Pa. (oil, gas).
_	0.3	EN 1856-2	T450	H1	w	V2-L50060	O50 M	80 - 600	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 high pressure up to 5000Pa. (oil, gas).
Double wall rigid DW-k	0.4	EN 1856-2	T600	N1	D	V3-L50060	G100 M	80 - 600	Double 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).
Doc	0.5	EN 1856-2	T600	H1	w	V2-L50060	G100 M	80 - 600	Double wall, sootfire resistant or moisture resistant connecting pipe, composed of rigid pipes and elements, ventilated along the whole length, without covering. Locking band necessary. Operation mode in high pressure up to 5000Pa. (oil, gas or solid fuels).

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:

>13 m above the connections of the elements

Flexural strength:

No vertical installation:

≤ 3 m between two fixations or supports

Maximum distance between vertical supports:

≤ 4 m between two supports

Flow resistance:

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

Thermal resistance:

 $>0.601 \text{ m}^2\text{K/W}$

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.

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