

## Declaration of Performance (DOP)

No. 9174 013 DOP 2016-01-26

1. Unique identification code of the product-type:

**Rigid and flexible flue liner type LINE-F 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 and flexible flue liner, type LINE-F<sup>1)</sup>**

<b>Model 1</b> EW-Line Flex FU	flexible single-ply metal flue liner	<b>T400 N1 W V2-L50008 G<sup>2)</sup></b>
<b>Model 2</b> EW-Line Flex FU	flexible single-ply metal flue liner	<b>T600 N1 W V2-L50008 G<sup>2)</sup></b>
<b>Model 3</b> EW-Line Flex AL	flexible single-ply metal flue liner	<b>T120 P1 W V2-L50008 O<sup>2)4)</sup></b>
<b>Model 4</b> EW-Line Flex AL	flexible single-ply metal flue liner	<b>T200 P1 W V2-L50008 O<sup>2)4)</sup></b>
<b>Model 5</b> EW-Line Flex FU	flexible single-ply metal flue liner	<b>T200 N1 W V2-L50008 O<sup>2)</sup></b>
<b>Model 6</b> EW-Line Flex FU	flexible double-layered metal flue liner	<b>T400 N1 W V2-L50008 G<sup>3)</sup></b>
<b>Model 7</b> EW-Line Flex FU	flexible double-layered metal flue liner	<b>T600 N1 W V2-L50008 G<sup>3)</sup></b>
<b>Model 8</b> EW-Line Flex AL	flexible double-layered metal flue liner	<b>T120 P1 W V2-L50008 O<sup>3)4)</sup></b>
<b>Model 9</b> EW-Line Flex AL	flexible double-layered metal flue liner	<b>T200 P1 W V2-L50008 O<sup>3)4)</sup></b>
<b>Model 10</b> EW-Line Flex FU	flexible double-layered metal flue liner	<b>T200 N1 W V2-L50008 O<sup>3)</sup></b>
<b>Model 11</b> Line EW-FU	rigid metal flue liner	<b>T400 N1 W V2-L50060 G</b>
<b>Model 12</b> Line EW-FU	rigid metal flue liner	<b>T600 N1 W V2-L50060 G</b>
<b>Model 13</b> Line EW-ALBI	rigid metal flue liner	<b>T120 P1 W V2-L50060 O<sup>5)</sup></b>
<b>Model 14</b> Line EW-ALBI	rigid metal flue liner	<b>T200 P1 W V2-L50060 O<sup>6)</sup></b>
<b>Model 15</b> Line EW-FU	rigid metal flue liner	<b>T200 N1 W V2-L50060 O</b>

<sup>1)</sup> Manufacturer product identification LINE-F

<sup>2)</sup> flexible single-ply flue liner 0.08 mm

<sup>3)</sup> flexible double-layered flue liner 2 x 0.08 mm

<sup>4)</sup> with sealant of silicone

<sup>5)</sup> with EPDM gasket

<sup>6)</sup> with silicone gasket

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](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 013 of the factory production control.**

8. Declared performance:

	Essential Characteristics	Performance			Harmonized technical specification
8.1	Compressive strength of fittings and supports	Model 1 to 5 Model 6 to 10 Model 11 to 15 Model 11 to 15 Model 11 to 15	flexible single-ply flexible double-layered rigid flue liner rigid flue liner rigid flue liner	DN ( 80- 300): <b>not applicable</b> DN ( 80- 300): <b>not applicable</b> DN ( 80- 300): <b>min. 27 m</b> DN (350- 450): <b>min. 21 m</b> DN (500- 600): <b>min. 15 m</b>	
		For further information see the installation instruction LINE-F			
8.2	Crushing resistance	Model 1 to 5 Model 6 to 10 Model 11 to 15	flexible single-ply flexible double-layered rigid flue liner	DN (80- 300): <b>Passed</b> DN (80- 300): <b>Passed</b> DN (80- 600): <b>not applicable</b>	
8.3	Flexibility	Model 1 to 5 Model 6 to 10 Model 11 to 15	flexible single-ply <b>Minimum bending radius 2 x NW</b> flexible double-layered <b>Minimum bending radius 2 x NW</b> rigid flue liner	DN (80- 300): DN (80- 300): DN (80- 600): <b>not applicable</b>	EN 1856-2:2009
8.4	Torsion strength	Model 1 to 5 Model 6 to 10 Model 11 to 15	flexible single-ply flexible double-layered rigid flue liner	DN (80- 300): <b>Passed</b> DN (80- 300): <b>Passed</b> DN (80- 600): <b>not applicable</b>	
8.5	Pulling force < 0,5 kN	Model 1 to 5 Model 6 to 10 Model 11 to 15	flexible single-ply flexible double-layered rigid flue liner	DN (80- 300): <b>Passed</b> DN (80- 300): <b>Passed</b> DN (80- 600): <b>not applicable</b>	
8.6	Resistance to fire	Model 1 Model 2 Model 3 Model 4 Model 5 Model 6 Model 7 Model 8 Model 9 Model 10 Model 11 Model 12 Model 13 Model 14 Model 15	flexible single-ply flexible single-ply flexible single-ply flexible single-ply flexible single-ply flexible double-layered flexible double-layered flexible double-layered flexible double-layered flexible double-layered rigid flue liner rigid flue liner rigid flue liner rigid flue liner rigid flue liner	DN (80- 300): <b>G</b> DN (80- 300): <b>G</b> DN (80- 300): <b>O</b> DN (80- 300): <b>O</b> DN (80- 300): <b>O</b> DN (80- 300): <b>G</b> DN (80- 300): <b>G</b> DN (80- 300): <b>O</b> DN (80- 300): <b>O</b> DN (80- 300): <b>O</b> DN (80- 600): <b>G</b> DN (80- 600): <b>G</b> DN (80- 600): <b>O</b> DN (80- 600): <b>O</b> DN (80- 600): <b>O</b>	EN 1856-2:2009
8.7	Gas tightness/ leakage	Model 1 Model 2 Model 3 Model 4 Model 5 Model 6 Model 7 Model 8 Model 9 Model 10 Model 11 Model 12 Model 13 Model 14 Model 15	flexible single-ply flexible single-ply flexible single-ply flexible single-ply flexible single-ply flexible double-layered flexible double-layered flexible double-layered flexible double-layered flexible double-layered rigid flue liner rigid flue liner rigid flue liner rigid flue liner rigid flue liner	DN (80- 300): <b>N1</b> DN (80- 300): <b>N1</b> DN (80- 300): <b>P1</b> DN (80- 300): <b>P1</b> DN (80- 300): <b>N1</b> DN (80- 300): <b>N1</b> DN (80- 300): <b>N1</b> DN (80- 300): <b>P1</b> DN (80- 300): <b>P1</b> DN (80- 300): <b>N1</b> DN (80- 600): <b>N1</b> DN (80- 600): <b>N1</b> DN (80- 600): <b>P1</b> DN (80- 600): <b>P1</b> DN (80- 600): <b>N1</b>	EN 1856-2:2009

8. Declared performance:

	Essential Characteristics	Performance			Harmonized technical specification
8.8	Flow resistance of chimney sections, fittings and terminals	$\zeta$ (Zeta-value) single resistance Average assembly: Model 1 to 5 flexible single-ply DN (80 – 300): <b>1.5 mm</b> Model 6 to 10 flexible double-layered DN (80 – 300): <b>1.5 mm</b> Model 11 to 15 rigid flue liner DN (80 – 600): <b>1.0 mm according to EN 13384</b>			EN 1856-2:2009
8.9	Sootfire resistance	Model 1 and 2 flexible single-ply DN (80- 300): <b>Yes</b> Model 3 to 5 flexible single-ply DN (80- 300): <b>No</b> <sup>2)</sup> Model 6 and 7 flexible double-layered DN (80- 300): <b>Yes</b> Model 8 to 10 flexible double-layered DN (80- 300): <b>No</b> <sup>2)</sup> Model 11 and 12 rigid flue liner DN (80- 600): <b>Yes</b> Model 13 to 15 rigid flue liner DN (80- 600): <b>No</b> <sup>2)</sup> <sup>2)</sup> because designated O			EN 1856-2:2009
8.10	Thermal performance under normal operating conditions	Model 1 flexible single-ply DN (80- 300): <b>T400</b> Model 2 flexible single-ply DN (80- 300): <b>T600</b> Model 3 flexible single-ply DN (80- 300): <b>T120</b> Model 4 flexible single-ply DN (80- 300): <b>T200</b> Model 5 flexible single-ply DN (80- 300): <b>T200</b> Model 6 flexible double-layered DN (80- 300): <b>T400</b> Model 7 flexible double-layered DN (80- 300): <b>T600</b> Model 8 flexible double-layered DN (80- 300): <b>T120</b> Model 9 flexible double-layered DN (80- 300): <b>T200</b> Model 10 flexible double-layered DN (80- 300): <b>T200</b> Model 11 rigid flue liner DN (80- 600): <b>T400</b> Model 12 rigid flue liner DN (80- 600): <b>T600</b> Model 13 rigid flue liner DN (80- 600): <b>T120</b> Model 14 rigid flue liner DN (80- 600): <b>T200</b> Model 15 rigid flue liner DN (80- 600): <b>T200</b>			
8.11	Durability: Water and vapour diffusion resistance	Model 1 to 5 flexible single-ply DN (80- 300): <b>Yes</b> Model 6 to 10 flexible double-layered DN (80- 300): <b>Yes</b> Model 11 to 15 rigid flue liner DN (80- 600): <b>Yes</b>			EN 1856-2:2009
8.12	Condensate penetration resistance	Model 1 to 5 flexible single-ply DN (80- 300): <b>Yes</b> Model 6 to 10 flexible double-layered DN (80- 300): <b>Yes</b> Model 11 to 15 rigid flue liner DN (80- 600): <b>Yes</b>			
8.13	Against corrosion	Model 1 to 5 flexible single-ply DN (80- 300): <b>V2</b> Model 6 to 10 flexible double-layered DN (80- 300): <b>V2</b> Model 11 to 15 rigid flue liner DN (80- 600): <b>V2</b>			
8.14	Freeze thaw resistance	Model 1 to 15 flexible single-ply, flexible double-layered and rigid flue liner: <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, 26<sup>th</sup> January 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](http://www.jeremias.de)  
 E-Mail: [info@jeremias.de](mailto:info@jeremias.de)

Product trade name:

**LINE-F** (single wall, rigid and flexible flue liner, installation in stack)  
 Product subgroup: EW-Line Flex FU / EW-Line Flex AL / Line EW-FU / Line EW-ALBI

Certification office:

TÜV SÜD Industrie Service GmbH

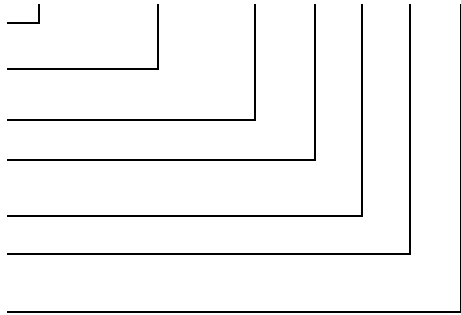
Name and position of the responsible person:

**Stefan Engelhardt** CEO



Identification of accompanying documentation

0.1 EW-Line Flex FU	flexible metal flue liner	EN 1856-2	T400	N1	W	V2-L50008	G	Flexible <b>single wall</b> flue liner, sootfire resistant, installation in stacks / chimneys, which meet the requirements for fire protection. Operation mode in negative pressure.
0.2 EW-Line Flex FU	flexible metal flue liner	EN 1856-2	T600	N1	W	V2-L50008	G	Flexible <b>single wall</b> flue liner, sootfire resistant, installation in stacks / chimneys, which meet the requirements for fire protection. Operation mode in negative pressure.
0.3 EW-Line Flex AL	flexible metal flue liner	EN 1856-2	T120	P1	W	V2-L50008	O	Flexible <b>single wall</b> flue liner <b>with sealant of silicone</b> , moisture resistant, installation in stacks / chimneys, which meet the requirements for fire protection. Operation mode in positive pressure.
0.4 EW-Line Flex AL	flexible metal flue liner	EN 1856-2	T200	P1	W	V2-L50008	O	Flexible <b>single wall</b> flue liner <b>with sealant of silicone</b> , moisture resistant, installation in stacks / chimneys, which meet the requirements for fire protection. Operation mode in positive pressure.
0.5 EW-Line Flex FU	flexible metal flue liner	EN 1856-2	T200	N1	W	V2-L50008	O	Flexible <b>single wall</b> flue liner, moisture resistant, installation in stacks / chimneys, which meet the requirements for fire protection. Operation mode in negative pressure.
0.6 EW-Line Flex FU	flexible metal flue liner	EN 1856-2	T400	N1	W	V2-L50008	G	Flexible <b>double wall</b> (2 x 0.08 mm) flue liner, sootfire resistant, installation in stacks / chimneys, which meet the requirements for fire protection. Operation mode in negative pressure.
0.7 EW-Line Flex FU	flexible metal flue liner	EN 1856-2	T600	N1	W	V2-L50008	G	Flexible <b>double wall</b> (2 x 0.08 mm) flue liner, sootfire resistant, installation in stacks / chimneys, which meet the requirements for fire protection. Operation mode in negative pressure.
0.8 EW-Line Flex AL	flexible metal flue liner	EN 1856-2	T120	P1	W	V2-L50008	O	Flexible <b>double wall</b> (2 x 0.08 mm) flue liner <b>with sealant of silicone</b> , moisture resistant, installation in stacks / chimneys, which meet the requirements for fire protection. Operation mode in positive pressure.
0.9 EW-Line Flex AL	flexible metal flue liner	EN 1856-2	T200	P1	W	V2-L50008	O	Flexible <b>double wall</b> (2 x 0.08 mm) flue liner <b>with sealant of silicone</b> , moisture resistant, installation in stacks / chimneys, which meet the requirements for fire protection. Operation mode in positive pressure.
0.10 EW-Line Flex FU	flexible metal flue liner	EN 1856-2	T200	N1	W	V2-L50008	O	Flexible <b>double wall</b> (2 x 0.08 mm) flue liner, moisture resistant, installation in stacks / chimneys, which meet the requirements for fire protection. Operation mode in negative pressure.
0.11 Line EW-FU	rigid metal flue liner	EN 1856-2	T400	N1	W	V2-L50060	G	<b>Rigid</b> single wall flue liner, sootfire resistant, installation in stacks / chimneys, which meet the requirements for fire protection. Operation mode in negative pressure.
0.12 Line EW-FU	rigid metal flue liner	EN 1856-2	T600	N1	W	V2-L50060	G	<b>Rigid</b> single wall flue liner, sootfire resistant, installation in stacks / chimneys, which meet the requirements for fire protection. Operation mode in negative pressure.
0.13 Line EW-ALBI	rigid metal flue liner	EN 1856-2	T120	P1	W	V2-L50060	O	<b>Rigid</b> single wall flue liner <b>with EPDM gasket</b> , moisture resistant, installation in stacks / chimneys, which meet the requirements for fire protection. Operation mode in positive pressure.
0.14 Line EW-ALBI	rigid metal flue liner	EN 1856-2	T200	P1	W	V2-L50060	O	<b>Rigid</b> single wall flue liner <b>with silicone gasket</b> , moisture resistant, installation in stacks / chimneys, which meet the requirements for fire protection. Operation mode in positive pressure.
0.15 Line EW-FU	rigid metal flue liner	EN 1856-2	T200	N1	W	V2-L50060	O	<b>Rigid</b> single wall flue liner, moisture resistant, installation in stacks / chimneys, which meet the requirements for fire protection. Operation mode in negative pressure.

Product description	
Standard number	EN 1856-2 / EN 1856-1
Temperature level	T400, T600, T120, T200
Pressure range level	N1, P1
Condensate resistance (W: wet / D: dry)	W, D
Corrosion resistance	W, D
Flue liner material specification	flexible metal flue liner, rigid metal flue liner
Sootfire resistance (G: yes / O: no)	G, O

**EN 1856-2 / EN 1856-1**  
 Properties of a flex. single wall, flex. multi-wall metal chimney system with rigid flue liner, for installation in stack

**Compressive strength: flex. single wall & flex. double wall** without, **rigid flue liner** >15 m

**Flow resistance** average roughness:  
**flex. single wall:** 1.5 mm; **flex. double wall:** 1.5 mm; **rigid flue liner:** 1.0 mm  
 Zeta-values acc. 13384-1

**Thermal resistance:** 0 m²K/W

**Flexural fatigue strength: flex. single wall:** min. bending radius 2 x NW  
**flex doppellagig:** min. bending radius 2 x NW; **starre Innenrohre:** no

**Flexural strength: Angular assembly: rigid flue liner**  
 Max. length between two supports: 4 m (Elbows max. 90°)

**Fracture strength:** given

**Torsional stiffness:** given

**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.

**Remarks:** It will be explicitly referenced the use of appropriate fittings to ensure enough gas tightness, heat resistance and moisture resistance.