Declaration of performance (DOP)

No. 9174 029 DOP 2013-06-17

1. Unique identification code of the product-type:

   Single wall chimney system type EW-ECO 304/ EW-ECO 316 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-ECO 304/ EW-ECO 316, installation in stack [1)]

   Model 1 EW-ECO 304 DN (80- 600) T200 – P1 – W – Vm – L20040 – O00

   Model 2 EW-ECO 304 DN (80- 300) T400 – N1 – W – Vm – L20040 – O50
   Model 2 EW-ECO 304 DN (350- 450) T400 – N1 – W – Vm – L20040 – O75
   Model 2 EW-ECO 304 DN (500- 600) T400 – N1 – W – Vm – L20040 – O100

   Model 3 EW-ECO 304 DN (80- 300) T600 – N1 – D – Vm – L20040 – G100
   Model 3 EW-ECO 304 DN (350- 450) T600 – N1 – D – Vm – L20040 – G150
   Model 3 EW-ECO 304 DN (500- 600) T600 – N1 – D – Vm – L20040 – G200

   Model 4 EW-ECO 316 DN (80- 600) T200 – P1 – W – V2 – L50040 – O00

   Model 5 EW-ECO 316 DN (80- 300) T400 – N1 – W – V2 – L50040 – O50
   Model 5 EW-ECO 316 DN (350- 450) T400 – N1 – W – V2 – L50040 – O75
   Model 5 EW-ECO 316 DN (500- 600) T400 – N1 – W – V2 – L50040 – O100

   Model 6 EW-ECO 316 DN (80- 300) T600 – N1 – D – V2 – L50040 – G100
   Model 6 EW-ECO 316 DN (350- 450) T600 – N1 – D – V2 – L50040 – G150
   Model 6 EW-ECO 316 DN (500- 600) T600 – N1 – D – V2 – L50040 – G200

   [1)] Manufacturer product identification EW-ECO 304/ EW-ECO 316

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 he 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 concering 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 029 of the factory production control.

8. Declared performance:

	Essential Characteristics	Performance	Harmonized technical specification
8.1	Compressive strength Chimney sections, fittings and supports	Sections and fittings: Model 1 to 6 DN (80- 300): **up to 23 m** Model 1 to 6 DN (350- 450): **up to 15 m** Model 1 to 6 DN (500- 600): **up to 15 m** Supports: n.p.d. For further information see the installation instruction EW-ECO 304/ EW-ECO 316	EN 1856-1:2009
8.2	Resistance to fire	(Resistance to fire from inside to outside) Model 1 DN (80- 600): T200 – **O00** 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- 600): T200 – **O00** Model 5 DN (80- 300): T400 – **O50** Model 5 DN (350- 450): T400 – **O75** Model 5 DN (500- 600): T400 – **O100** Model 6 DN (80- 300): T600 – **G100** Model 6 DN (350- 450): T600 – **G150** Model 6 DN (500- 600): T600 – **G200** Tested without cover, with back ventilated ceiling duct.	EN 1856-1:2009
8.3	Gas tightness/ leakage	Model 1 DN (80- 600): **P1** Model 2 DN (80- 600): **N1** Model 3 DN (80- 600): **N1** Model 4 DN (80- 600): **P1** Model 5 DN (80- 600): **N1** Model 6 DN (80- 600): **N1**	EN 1856-1:2009
8.4	Flow resistance of chimney sections fittings and terminals	According to EN 13384-1 **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 wind deflector: ≤ Ø 140 mm 0,1/ ≥ Ø 150 mm hurrican: 0,1	EN 1856-1:2009
8.5	Thermal resistance	Model 1 to 6 DN (80- 600): **0 m²K/W tested at 200°C** (without insulation) **0,26 m²K/W tested at 200°C** (with 25 mm insulation) **0,501 m²K/W tested at 200°C** (with 32 mm insulation)	EN 1856-1:2009

8. Declared performance:

	Essential Characteristics	Performance	Harmonized technical specification
	Thermal shock resistance		EN 1856-1:2009
8.6	Sootfire resistance	Model 1 DN (80- 600): **No**[2)] Model 2 DN (80- 600): **No**[2)] Model 3 DN (80- 600): **Yes** Model 4 DN (80- 600): **No**[2)] Model 5 DN (80- 600): **No**[2)] Model 6 DN (80- 600): **Yes** [2)] because designated O	
8.7	Thermal performance under normal operating conditions	Model 1 DN (80- 600): **T200** Model 2 DN (80- 600): **T400** Model 3 DN (80- 600): **T600** Model 4 DN (80- 600): **T200** Model 5 DN (80- 600): **T400** Model 6 DN (80- 600): **T600**	
8.8	Flexural tensile strength (only for means of connection for chimney sections and fittings)	Model 1 to 6 DN (80- 600): **n.p.d.**	EN 1856-1:2009
8.9	Non vertical installation	Model 1 to 6 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 6 DN (80- 600): **n.p.d.**	EN 1856-1:2009
	Durability:		EN 1856-1:2009
8.11	Water and vapour diffusion resistance	Model 1 DN (80- 600): **Yes** Model 2 DN (80- 600): **Yes** Model 3 DN (80- 600): **No** Model 4 DN (80- 600): **Yes** Model 5 DN (80- 600): **Yes** Model 6 DN (80- 600): **No**	
8.12	Condensate penetration resistance	Model 1 DN (80- 600): **Yes** Model 2 DN (80- 600): **Yes** Model 3 DN (80- 600): **No** Model 4 DN (80- 600): **Yes** Model 5 DN (80- 600): **Yes** Model 6 DN (80- 600): **No**	
8.13	Against corrosion	Model 1 DN (80- 600): **Vm** Model 2 DN (80- 600): **Vm** Model 3 DN (80- 600): **Vm** Model 4 DN (80- 600): **V2** Model 5 DN (80- 600): **V2** Model 6 DN (80- 600): **V2**	
8.14	Freeze thaw resistance	Model 1 to 6 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, 17th June 2013

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-eco 304 / ew-eco 316**

Certification office: TÜV SÜD Industrie Service GmbH

Name and position of the responsible person: **Stefan Engelhardt** CEO

Identification of accompanying documentation

0.1 ew-eco 304	**Metal chimney**	**EN 1856-1**	**T200**	**P1**	**W**	**Vm-L20040**	**O(00)**	**80 - 600**	Single wall chimney system, moisture resistant, assembly with silicone joint, installation in stack with ventilation. Operation mode in positive pressure up to max. 200 Pa.
0.2 ew-eco 304	**Metal chimney**	**EN 1856-1**	**T400**	**N1**	**W**	**Vm-L20040**	**O(50)** **O(75)** **O(100)**	**80 - 300** **350 - 450** **500 - 600**	Single wall chimney system, moisture resistant, installation in stack. Operation mode in negative pressure.
0.3 ew-eco 304	**Metal chimney**	**EN 1856-1**	**T600**	**N1**	**D**	**Vm-L20040**	**G(100)** **G(150)** **G(200)**	**80 - 300** **350 - 450** **500 - 600**	Single wall chimney system, sootfire resistant, installation in stack. Operation mode in negative pressure.
0.4 ew-eco 316	**Metal chimney**	**EN 1856-1**	**T200**	**P1**	**W**	**V2-L50040**	**O(00)**	**80 - 600**	Single wall chimney system, assembly with silicone joint, moisture resistant, installation in stack with ventilation. Operation mode in positive pressure up to max. 200 Pa.
0.5 ew-eco 316	**Metal chimney**	**EN 1856-1**	**T400**	**N1**	**W**	**V2-L50040**	**O(50)** **O(75)** **O(100)**	**80 - 300** **350 - 450** **500 - 600**	Single wall chimney system, moisture resistant, installation in stack. Operation mode in negative pressure.
0.6 ew-eco 316	**Metal chimney**	**EN 1856-1**	**T600**	**N1**	**D**	**V2-L50040**	**G(100)** **G(150)** **G(200)**	**80 - 300** **350 - 450** **500 - 600**	Single wall chimney system, sootfire resistant, installation in stack. Operation mode in negative pressure.

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

EN 1856-1

Properties of a single wall metal chimney system
Installation in stack

Compressive strength:

Maximum load (see encl. H-1 Installing instructions)
≤Ø300 mm, wall thickness 0,4 mm, height >18 m

>Ø300-Ø600 mm, wall thickness 0,6 mm height >10 m

Flow resistance:

Average roughness: 1,0 mm, Zeta values acc.UNE EN 13384-1

Flexural strength:

Angular installation: Maximum length between two supports:
4 m at 90°

Thermal resistance:

without insulation: 0 m²K/W
with 25 mm insulation: 0,26 m²K/W
with 32 mm insulation: 0,501 m²K/W

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.