

Declaration of performance

No. 9174 030 DOP 2013-06-17

1. Unique identification code of the product-type:

Double wall chimney system type DW-ECO 304/ DW-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):

**Double wall chimney system type DW-ECO 304/ DW-ECO 316
with 25 mm heat insulation¹⁾**

Model 1 DW-ECO 304 DN (80- 300) T600 – N1 – D – Vm – L20040 – G70
Model 1 DW-ECO 304 DN (350- 450) T600 – N1 – D – Vm – L20040 – G105
Model 1 DW-ECO 304 DN (600- 500) T600 – N1 – D – Vm – L20040 – G140
Model 2 DW-ECO 304 DN (80- 300) T450 – N1 – D – Vm – L20040 – G70
Model 2 DW-ECO 304 DN (350- 450) T450 – N1 – D – Vm – L20040 – G105
Model 2 DW-ECO 304 DN (500- 600) T450 – N1 – D – Vm – L20040 – G140
Model 3 DW-ECO 304 DN (80- 300) T400 – N1 – W – Vm – L20040 – O30
Model 3 DW-ECO 304 DN (350- 450) T400 – N1 – W – Vm – L20040 – O45
Model 3 DW-ECO 304 DN (500- 600) T400 – N1 – W – Vm – L20040 – O60
Model 4 DW-ECO 304 DN (80- 600) T200 – P1 – W – Vm – L20040 – O00
Model 5 DW-ECO 316 DN (80- 300) T600 – N1 – D – V3 – L50040 – G70
Model 5 DW-ECO 316 DN (350- 450) T600 – N1 – D – V3 – L50040 – G105
Model 5 DW-ECO 316 DN (500- 600) T600 – N1 – D – V3 – L50040 – G140
Model 6 DW-ECO 316 DN (80- 300) T450 – N1 – D – V3 – L50040 – G70
Model 6 DW-ECO 316 DN (350- 450) T450 – N1 – D – V3 – L50040 – G105
Model 6 DW-ECO 316 DN (500- 600) T450 – N1 – D – V3 – L50040 – G140
Model 7 DW-ECO 316 DN (80- 300) T400 – N1 – W – V2 – L50040 – O30
Model 7 DW-ECO 316 DN (350- 450) T400 – N1 – W – V2 – L50040 – O45
Model 7 DW-ECO 316 DN (500- 600) T400 – N1 – W – V2 – L50040 – O60
Model 8 DW-ECO 316 DN (80- 600) T200 – P1 – W – V2 – L50040 – O00

¹⁾ weitere Angaben siehe Produktinformation DW-ECO 304/ DW-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 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 CPD 9174 030 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 8 DN (80- 300): up to 18 m Model 1 to 8 DN (350- 450): up to 10 m Model 1 to 8 DN (500- 600): up to 10 m <u>Supports:</u> n.p.d. For further information see the installation instruction DW-ECO 304/ DW-ECO 316	EN 1856-1:2009																								
8.2	Resistance to fire	(Resistance to fire from inside to outside) Model 1 DN (80- 300): T600 – G70 Model 1 DN (350- 450): T600 – G105 Model 1 DN (500- 600): T600 – G140 Model 2 DN (80- 300): T450 – G70 Model 2 DN (350- 450): T450 – G105 Model 2 DN (500- 600): T450 – G140 Model 3 DN (80- 300): T400 – O30 Model 3 DN (350- 450): T400 – O45 Model 3 DN (500- 600): T400 – O60 Model 4 DN (80- 600): T200 – O00 Model 5 DN (80- 300): T600 – G70 Model 5 DN (350- 450): T600 – G105 Model 5 DN (500- 600): T600 – G140 Model 6 DN (80- 300): T450 – G70 Model 6 DN (350- 450): T450 – G105 Model 6 DN (500- 600): T450 – G140 Model 7 DN (80- 300): T400 – O30 Model 7 DN (350- 450): T400 – O45 Model 7 DN (500- 600): T400 – O60 Model 8 DN (80- 600): T200 – O00 Tested without cover, with back ventilated ceiling duct	EN 1856-1:2009																								
8.3	Gas tightness/leakage	Model 1 DN (80- 600): N1 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 Model 7 DN (80- 600): N1 Model 8 DN (80- 600): P1	EN 1856-1:2009																								
8.4	Flow resistance of chimney sections fittings and terminals	According to EN 13384-1 <table border="1" data-bbox="564 1648 1174 2054"> <thead> <tr> <th data-bbox="564 1648 836 1715">component:</th> <th data-bbox="836 1648 1174 1715">ζ (Zeta-value) single resistances</th> </tr> </thead> <tbody> <tr> <td data-bbox="564 1715 836 1749">pipe tee 87°:</td> <td data-bbox="836 1715 1174 1749">1,14</td> </tr> <tr> <td data-bbox="564 1749 836 1783">pipe tee 45°:</td> <td data-bbox="836 1749 1174 1783">0,35</td> </tr> <tr> <td data-bbox="564 1783 836 1816">pipe bend 87°:</td> <td data-bbox="836 1783 1174 1816">0,40</td> </tr> <tr> <td data-bbox="564 1816 836 1850">pipe bend 45°:</td> <td data-bbox="836 1816 1174 1850">0,28</td> </tr> <tr> <td data-bbox="564 1850 836 1883">pipe bend 30°:</td> <td data-bbox="836 1850 1174 1883">0,20</td> </tr> <tr> <td data-bbox="564 1883 836 1917">pipe bend 15°:</td> <td data-bbox="836 1883 1174 1917">0,10</td> </tr> <tr> <td colspan="2" data-bbox="564 1917 1174 1939">Terminals: (only for operation in negative pressure)</td> </tr> <tr> <td data-bbox="564 1939 836 1973">rain cap</td> <td data-bbox="836 1939 1174 1973">1,0</td> </tr> <tr> <td data-bbox="564 1973 836 2007">fin cap type „Hubo“:</td> <td data-bbox="836 1973 1174 2007">≤ Ø 140 mm 0,1/ ≥ Ø 150 mm</td> </tr> <tr> <td data-bbox="564 2007 836 2040">wind deflector:</td> <td data-bbox="836 2007 1174 2040">≤ Ø 140 mm 0,1/ ≥ Ø 150 mm</td> </tr> <tr> <td data-bbox="564 2040 836 2054">hurricane:</td> <td data-bbox="836 2040 1174 2054">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	wind deflector:	≤ Ø 140 mm 0,1/ ≥ Ø 150 mm	hurricane:	0,1	EN 1856-1:2009
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8. Declared performance:

	Essential Characteristics	Performance	Harmonized technical specification
8.5	Thermal resistance	Model 1 to 8 DN (80-600): >0,26 m²K/W calculated for 200°C* * The thermal resistance is dependent on the nominal diameters of inner tubes see product information and mounting instructions DW-ECO 304_316	EN 1856-1:2009
8.6	Thermal shock resistance Sootfire resistance	Model 1 DN (80- 600): Ja Model 2 DN (80- 600): Ja Model 3 DN (80- 600): Nein²⁾ Model 4 DN (80- 600): Nein²⁾ Model 5 DN (80- 600): Ja Model 6 DN (80- 600): Ja Model 7 DN (80- 600): Nein²⁾ Model 8 DN (80- 600): Nein²⁾ ²⁾ because designated O	EN 1856-1:2009
8.7	Thermal performance under normal operating conditions	Model 1 DN (80- 600): T600 Model 2 DN (80- 600): T450 Model 3 DN (80- 600): T400 Model 4 DN (80- 600): T200 Model 5 DN (80- 600): T600 Model 6 DN (80- 600): T450 Model 7 DN (80- 600): T400 Model 8 DN (80- 600): T200	
8.8	Flexural tensile strength (only for means of connection for chimney sections and fittings)	Modell 1 bis 8 DN (80- 600): 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 installation)	EN 1856-1:2009
8.10	Components subject to wind load	Model 1 to 8 DN (80- 600): Free standing height 3 m above last support. Maximum spacing between lateral supports: 4 m.	EN 1856-1:2009
8.11	Duability: Water and vapour diffusion resistance	Model 1 DN (80-600): NO Model 2 DN (80-600): No Model 3 DN (80-600): Yes Model 4 DN (80-600): Yes Model 5 DN (80-600): No Model 6 DN (80-600): No Model 7 DN (80-600): Yes Model 8 DN (80-600): Yes	EN 1856-1:2009
8.12	Condensate penetration resistance	Model 1 DN (80-600): NO Model 2 DN (80-600): No Model 3 DN (80-600): Yes Model 4 DN (80-600): Yes Model 5 DN (80-600): No Model 6 DN (80-600): No Model 7 DN (80-600): Yes Model 8 DN (80-600): Yes	

8. Declared performance:

	Essential Characteristics	Performance	Harmonized technical specification
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): Vm Model 5 DN (80- 600): V3 Model 6 DN (80- 600): V3 Model 7 DN (80- 600): V2 Model 8 DN (80- 600): V2	
8.14	Freeze thaw resistance	Model 1 to 8 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



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Stefan Engelhardt, Geschäftsführer / 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:

dw-eco 304 / dw-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 dw-eco 304	Metal chimney	EN 1856-1	T600	N1	D	Vm-L20040	G(70) G(105) G(140)	80 - 300 350 - 450 500 - 600	Double wall chimney system, sootfire resistant, with 25mm heat insulation, ventilated throughout the whole length, without covering. Operation mode in negative pressure.
0.2 dw-eco 304	Metal chimney	EN 1856-1	T450	N1	D	Vm-L20040	G(70) G(105) G(140)	80 - 300 350 - 450 500 - 600	Double wall chimney system, sootfire resistant, with 25mm heat insulation, ventilated throughout the whole length, without covering. Operation mode in negative pressure.
0.3 dw-eco 304	Metal chimney	EN 1856-1	T400	N1	W	Vm-L20040	O(30) O(45) O(60)	80 - 300 350 - 450 500 - 600	Double wall chimney system, moisture resistant, with 25mm heat insulation, ventilated throughout the whole length, without covering. Operation mode in negative pressure.
0.4 dw-eco 304	Metal chimney	EN 1856-1	T200	P1	W	Vm-L20040	O(00)	80 - 600	Double wall chimney system, moisture resistant, with 25mm heat insulation, with silicone joint, ventilated throughout the whole length, without covering. Operation mode in positive pressure up to max. 200Pa.
0.5 dw-eco 316	Metal chimney	EN 1856-1	T600	N1	D	V3-L50040	G(70) G(105) G(140)	80 - 300 350 - 450 500 - 600	Double wall chimney system, sootfire resistant, with 25mm heat insulation, ventilated throughout the whole length, without covering. Operation mode in negative pressure.
0.6 dw-eco 316	Metal chimney	EN 1856-1	T450	N1	D	V3-L50040	G(70) G(105) G(140)	80 - 300 350 - 450 500 - 600	Double wall chimney system, sootfire resistant, with 25mm heat insulation, ventilated throughout the whole length, without covering. Operation mode in negative pressure.
0.7 dw-eco 316	Metal chimney	EN 1856-1	T400	N1	W	V2-L50040	O(30) O(45) O(60)	80 - 300 350 - 450 500 - 600	Double wall chimney system, moisture resistant, with 25mm heat insulation, ventilated throughout the whole length, without covering. Operation mode in negative pressure.
0.8 dw-eco 316	Metal chimney	EN 1856-1	T200	P1	W	V2-L50040	O(00)	80 - 600	Double wall chimney system, moisture resistant, with 25mm de heat insulation, with silicone joint, ventilated throughout the whole length, without covering. Operation mode in positive pressure up to max. 200Pa.

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 double wall metal chimney system

Compressive strength:

Maximum load (see encl. H-1 Installing instructions)

Flow resistance:

Average roughness: 1,0 mm, Zeta-values according to DIN EN 13384-1 (see encl. H-1 Installing instructions)

Thermal resistance:

≥ 0,26 m²K/W

Flexural strength:

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

Tensile strength:

See encl. H-1 Installing instructions

Wind load: free standing end above last fixation:

≤ 1,5 m, 0,4 mm - wall thickness for Ø80 - Ø300 mm
 ≤ 3 m, 0,5 mm - wall thickness for Ø80 - Ø300 mm
 ≤ 2,5 m, 0,5 mm - wall thickness for ≤ Ø350 - ≤ Ø400 mm,
 ≤ 1,5 m, 0,6 mm - wall thickness for ≥ Ø450 - Ø600 mm,

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.