

## Declaration of performance (DOP)

No. 9174 046 DOP 2013-06-17

1. Unique identification code of the product-type:

**Multi-wall metal system chimney type DW-ECO-TITAN-AL 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, positive pressure system chimney type DW-ECO-TITAN-AL with 25 mm heat insulation<sup>1)</sup>**

**Model 1            DN (80- 600) T200 – P1 – W – V2 – L99050 – O00**

**Model 2            DN (80- 600) T200 – N1 – W – V2 – L99050 – O00**

<sup>1)</sup> Manufacturer product identification DW-ECO-TITAN-AL

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 12(2):

**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 construction product as set out in CPR, Annex V:

**System 2+ and System 4**

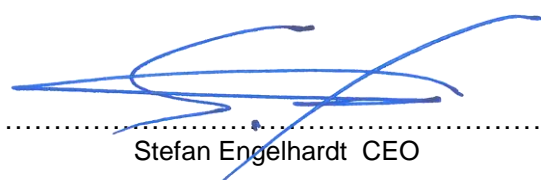
7. In case of the declaration of performance concerning a construction product for which a European Technical Assessment has been issued:

**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 046 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 2 DN ( 80- 300): <b>up to 15 m</b> Model 1 to 2 DN (350- 450): <b>up to 10 m</b> Model 1 to 2 DN (500- 600): <b>up to 10 m</b>  <u>Supports:</u> n.p.d. For further information see the installation instruction DW-ECO-TITAN-AL	EN 1856-1:2009																								
8.2	Resistance to fire	(Resistance to fire from inside to outside)  Model 1 to 2 DN (80- 600): <b>T200 – O00</b> Tested without cover, with back ventilated ceiling duct.	EN 1856-1:2009																								
8.3	Gas tightness/ leakage	Model 1 DN (80- 600): <b>P1</b> Model 2 DN (80- 600): <b>N1</b>	EN 1856-1:2009																								
8.4	Flow resistance of chimney sections fittings and terminals	According to EN 13384-1  <table border="1"> <thead> <tr> <th>component:</th> <th><math>\zeta</math> (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> <tr> <td colspan="2"><b>Terminals:</b> (only for operation in negative pressure)</td> </tr> <tr> <td>rain cap</td> <td>1,0</td> </tr> <tr> <td>fin cap type „Hubo“:</td> <td><math>\leq \varnothing 140 \text{ mm } 0,1 / \geq \varnothing 150 \text{ mm } 0,2</math></td> </tr> <tr> <td>wind deflector:</td> <td><math>\leq \varnothing 140 \text{ mm } 0,1 / \geq \varnothing 150 \text{ mm } 0,2</math></td> </tr> <tr> <td>hurricane:</td> <td>0,1</td> </tr> </tbody> </table>	component:	$\zeta$ (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	<b>Terminals:</b> (only for operation in negative pressure)		rain cap	1,0	fin cap type „Hubo“:	$\leq \varnothing 140 \text{ mm } 0,1 / \geq \varnothing 150 \text{ mm } 0,2$	wind deflector:	$\leq \varnothing 140 \text{ mm } 0,1 / \geq \varnothing 150 \text{ mm } 0,2$	hurricane:	0,1	EN 1856-1:2009
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8.5	Thermal resistance	Model 1 to 2 DN (80- 600): <b>&gt;0,26 m<sup>2</sup>K/W calculated for 200°C*</b>  * The thermal resistance is dependent on the nominal diameters of inner tubes see product information and mounting instructions.	EN 1856-1:2009																								
8.6	Thermal shock resistance  Sootfire resistance	Model 1 to 2 DN (80- 600): <b>No<sup>2)</sup></b> <sup>2)</sup> because designated O	EN 1856-1:2009																								
8.7	Thermal performance under normal operating conditions	Model 1 to 2 DN (80- 600): <b>T200</b>	EN 1856-1:2009																								
8.8	Flexural tensile strength  (only for means of connection for chimney sections and fittings)	Model 1 to 2 DN ( 80- 300): <b>up to 9 m</b> Model 1 to 2 DN (350- 450): <b>n.p.d.</b> Model 1 to 2 DN (500- 600): <b>n.p.d.</b>	EN 1856-1:2009																								
8.9	Non vertical installation	Model 1 to 2 DN (80- 600): Maximum offset between supports <b>3 m at 90°</b>  Inclined run, maximum distance between two fixations, supports at non vertical installation	EN 1856-1:2009																								

8. Declared performance:

	Essential Characteristics	Performance	Harmonized technical specification
8.10	Components subject to wind load	Free standing height above last support: Model 1 to 2 <b>DN ( 80- 300): 3 m</b> (in wall thickness 0,5 mm) Model 1 to 2 <b>DN (350- 400): 2,5 m</b> (in wall thickness 0,5 mm) Model 1 to 2 <b>DN (450- 600): 1,5 m</b> (in wall thickness 0,6 mm)  Maximum spacing between lateral supports: Model 1 to 2 DN (80- 600): <b>4 m</b>	EN 1856-1:2009
8.11	Durability: Water and vapour diffusion resistance	Model 1 to 2 DN (80- 600): <b>Yes</b>	EN 1856-1:2009
8.12	Condensate penetration resistance	Model 1 to 2 DN (80- 600): <b>Yes</b>	
8.13	Against corrosion	Model 1 to 2 DN (80- 600): <b>V2</b>	
8.14	Freeze thaw resistance	Model 1 to 2 DN (80- 600): <b>Yes</b>	
<p>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.</p> <p>Signed for and on behalf of the manufacturer by:</p> <p>Wassertrüdingen, 17<sup>th</sup> June 2013</p> <div style="text-align: right;">             .....  <b>Stefan Engelhardt CEO</b> </div>			

## 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) 9825 / 68 68-50  
 Fax: +49 (0) 9825 / 68 68-68  
 Internet: [www.jeremias.de](http://www.jeremias.de)  
 E-Mail: [info@jeremias.de](mailto:info@jeremias.de)

Product trade name:

**DW-ECO-TITAN-AL** (double wall positive pressure chimney system with 25 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	<b>Metal chimney</b>	<b>EN 1856-1</b>	<b>T200</b>	<b>P1</b>	<b>W</b>	<b>V2-L99050</b>	<b>O00</b>	<b>80 - 600</b>	Double wall chimney system, moisture resistant, with 25 mm insulation, ventilated throughout the whole length, without covering. Operation mode in positive pressure.
0.2	<b>Metal chimney</b>	<b>EN 1856-1</b>	<b>T200</b>	<b>N1</b>	<b>W</b>	<b>V2-L99050</b>	<b>O00</b>	<b>80 - 600</b>	Double wall chimney system, moisture resistant with 25 mm insulation, ventilated throughout the whole length, without covering. Operation mode in negative pressure.

Properties of a multi-wall metal chimney system

Product description

Standard no.

Temperature class

Pressure range class

Condensate resistance  
(W: wet / D: dry)

Corrosion resistance

Specification of inner tube material

Soot fire resistance  
(G: yes / O: no) and distance to combustible materials (mm)

Nominal diameter (Ø)  
(inner tube) in mm

**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 m<sup>2</sup>K/W

**Bending 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:**

≤3 m up to ≤Ø300 mm (0,5 mm wall thickness)  
 ≤2,5 m Ø350 – ≤Ø400 mm (0,5 mm wall thickness)  
 ≤1,5 m Ø450 – ≤Ø600 mm (0,6 mm wall thickness)

**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.