

Declaration of performance (DOP)

No. 9174 002 DOP 2013-06-17

1. Unique identification code of the product-type:

Multi-wall chimney system type DW-KL 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 with 32 mm heat insulation¹⁾

| | |
|-----------------------|------------------------------------|
| Model 1 DN (80-1000) | T200 – P1 – W – V2 – L50060 – O00 |
| Model 2 DN (80- 300) | T200 – H1 – W – V2 – L50060 – O20 |
| 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 – G50 |
| Model 3 DN (350- 450) | T400 – N1 – D – V3 – L50060 – G75 |
| Model 3 DN (500- 600) | T400 – N1 – D – V3 – L50060 – G100 |
| Model 3 DN (650-1000) | T400 – N1 – D – V3 – L50060 – G200 |
| 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 |
| Model 5 DN (350- 450) | T400 – P1 – W – V2 – L50060 – O30 |
| Model 5 DN (500- 600) | T400 – P1 – W – V2 – L50060 – O40 |
| Model 5 DN (650-1000) | T400 – P1 – W – V2 – L50060 – O80 |
| Model 6 DN (80- 300) | T450 – H1 – W – V2 – L50060 – O50 |
| Model 6 DN (350- 450) | T450 – H1 – W – V2 – L50060 – O75 |
| Model 6 DN (500- 600) | T450 – H1 – W – V2 – L50060 – O100 |
| Model 6 DN (650-1000) | T450 – H1 – W – V2 – L50060 – O200 |
| Model 7 DN (80- 300) | T600 – N1 – D – V3 – L50060 – G50 |
| Model 7 DN (350- 450) | T600 – N1 – D – V3 – L50060 – G75 |
| Model 7 DN (500- 600) | T600 – N1 – D – V3 – L50060 – G100 |
| Model 7 DN (650-1000) | T600 – N1 – D – V3 – L50060 – G200 |
| Model 8 DN (80- 300) | T600 – H1 – W – V2 – L50060 – G50 |
| Model 8 DN (350- 450) | T600 – H1 – W – V2 – L50060 – G75 |
| Model 8 DN (500- 600) | T600 – H1 – W – V2 – L50060 – G100 |
| Model 8 DN (650-1000) | T600 – H1 – W – V2 – L50060 – G200 |

¹⁾ Manufacturer product identification

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 002 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 38 m Model 1 to 8 DN (350- 450): up to 32 m Model 1 to 8 DN (500- 600): up to 21 m Model 1 to 8 DN (650-1000): up to 9 m <u>Supports:</u> n.p.d. For further information see the installation instruction DW-KL | 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 (350- 450): T200 – O30 Model 2 DN (500- 600): T200 – O40 Model 2 DN (650-1000): T200 – O80 Model 3 DN (80- 300): T400 – G50 Model 3 DN (350- 450): T400 – G75 Model 3 DN (500- 600): T400 – G100 Model 3 DN (650-1000): T400 – G200 Model 4 DN (80- 300): T400 – O20 Model 4 DN (350- 450): T400 – O30 Model 4 DN (500- 600): T400 – O40 Model 4 DN (650-1000): T400 – O80 Model 5 DN (80- 300): T400 – O20 Model 5 DN (350- 450): T400 – O30 Model 5 DN (500- 600): T400 – O40 Model 5 DN (650-1000): T400 – O80 Model 6 DN (80- 300): T450 – O50 Model 6 DN (350- 450): T450 – O75 Model 6 DN (500- 600): T450 – O100 Model 6 DN (650-1000): T450 – O200 Model 7 DN (80- 300): T600 – G50 Model 7 DN (350- 450): T600 – G75 Model 7 DN (500- 600): T600 – G100 Model 7 DN (650-1000): T600 – G200 Model 8 DN (80- 300): T600 – G50 Model 8 DN (350- 450): T600 – G75 Model 8 DN (500- 600): T600 – G100 Model 8 DN (650-1000): T600 – G200 Tested without cover, with back ventilated ceiling duct | 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 |

8. Declared performance:

| | Essential Characteristics | Performance | Harmonized technical specification | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|--|------------------------------------|--|---------------|------|---------------|------|----------------|------|----------------|------|----------------|------|----------------|------|---|--|----------|-----|----------------------|----------------------------|-----------------|----------------------------|-----------|-----|----------------|
| 8.4 | Flow resistance of chimney sections fittings and terminals | According to EN 13384-1 <table border="1" data-bbox="566 376 1177 786"> <thead> <tr> <th data-bbox="566 376 901 443">component:</th> <th data-bbox="901 376 1177 443">ζ (Zeta-value) single resistances</th> </tr> </thead> <tbody> <tr> <td data-bbox="566 443 901 477">pipe tee 87°:</td> <td data-bbox="901 443 1177 477">1,14</td> </tr> <tr> <td data-bbox="566 477 901 510">pipe tee 45°:</td> <td data-bbox="901 477 1177 510">0,35</td> </tr> <tr> <td data-bbox="566 510 901 544">pipe bend 87°:</td> <td data-bbox="901 510 1177 544">0,40</td> </tr> <tr> <td data-bbox="566 544 901 577">pipe bend 45°:</td> <td data-bbox="901 544 1177 577">0,28</td> </tr> <tr> <td data-bbox="566 577 901 611">pipe bend 30°:</td> <td data-bbox="901 577 1177 611">0,20</td> </tr> <tr> <td data-bbox="566 611 901 645">pipe bend 15°:</td> <td data-bbox="901 611 1177 645">0,10</td> </tr> <tr> <td colspan="2" data-bbox="566 645 1177 678">Terminals: (only for operation in negative pressure)</td> </tr> <tr> <td data-bbox="566 678 901 712">rain cap</td> <td data-bbox="901 678 1177 712">1,0</td> </tr> <tr> <td data-bbox="566 712 901 745">fin cap type „Hubo“:</td> <td data-bbox="901 712 1177 745">≤ Ø 140 mm 0,1/ ≥ Ø 150 mm</td> </tr> <tr> <td data-bbox="566 745 901 779">wind deflector:</td> <td data-bbox="901 745 1177 779">≤ Ø 140 mm 0,1/ ≥ Ø 150 mm</td> </tr> <tr> <td data-bbox="566 779 901 786">hurrican:</td> <td data-bbox="901 779 1177 786">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 | hurrican: | 0,1 | EN 1856-1:2009 |
| 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 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8.5 | Thermal resistance | Model 1 to 8 DN (80-1000): 0,501 m²K/W tested at 200°C | EN 1856-1:2009 | | | | | | | | | | | | | | | | | | | | | | | | |
| 8.6 | Thermal shock resistance Sootfire resistance | 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 ²⁾ because designated O | EN 1856-1:2009 | | | | | | | | | | | | | | | | | | | | | | | | |
| 8.7 | Thermal performance under normal operating conditions | 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): T450 Model 7 DN (80-1000): T600 Model 8 DN (80-1000): T600 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8.8 | Flexural tensile strength (only for means of connection for chimney sections and fittings) | Model 1 to 8 DN (80- 300): up to 16 m Model 1 to 8 DN (350- 450): up to 13 m Model 1 to 8 DN (500- 600): up to 13 m 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 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. Model 1 to 8 DN (650-1000) : Free standing height 1,5 m above last support. Maximum spacing between lateral supports: 4 m. | EN 1856-1:2009 | | | | | | | | | | | | | | | | | | | | | | | | |

8. Declared performance:

| | Essential Characteristics | Performance | Harmonized technical specification |
|------|--|--|------------------------------------|
| 8.11 | Durability: 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 | EN 1856-1:2009 |
| 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 | |
| 8.13 | Against corrosion | 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, 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-KL (Double wall “conical” chimney system with 32mm 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 | O00 | 80 - 1000 | Double wall chimney system, moisture resistant, with 32 mm heat insulation, ventilated through the whole length, without covering. Operation mode in positive pressure. |
| 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 32 mm heat insulation, ventilated through the whole length, without covering. Operation mode in high pressure up to 5000 Pa. |
| 0.3 | Metal chimney | EN 1856-1 | T400 | N1 | D | V3-L50060 | G50 G75 G100 G200 | 80 - 300 350 - 450 500 - 600 650 - 1000 | Double wall chimney system, sootfire resistant, with 32 mm heat insulation, ventilated through the whole length, without covering. 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 32 mm heat insulation, ventilated through the whole length, without covering. 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 32 mm heat insulation, ventilated through the whole length, without covering. Operation mode in positive pressure. |
| 0.6 | Metal chimney | EN 1856-1 | T450 | H1 | W | V2-L50060 | O50 O75 O100 O200 | 80 - 300 350 - 450 500 - 600 650 - 1000 | Double wall chimney system, moisture resistant, with 32 mm heat insulation, ventilated through the whole length, without covering. Operation mode in positive pressure / high pressure up to 5000 Pa. |
| 0.7 | Metal chimney | EN 1856-1 | T600 | N1 | D | V3-L50060 | G50 G75 G100 G200 | 80 - 300 350 - 450 500 - 600 650 - 1000 | Double wall chimney system, sootfire resistant, with 32 mm heat insulation, ventilated through the whole length, without covering. Operation mode in negative pressure. |
| 0.8 | Metal chimney | EN 1856-1 | T600 | H1 | W | V2-L50060 | G50 G75 G100 G200 | 80 - 300 350 - 450 500 - 600 650 - 1000 | Double wall chimney system, moisture resistant or sootfire resistant, with 32 mm heat insulation, ventilated through the whole length, without covering. Operation mode in positive pressure / high pressure up to 5000 Pa. |

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

Properties of a multi-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: 0,501 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:

≤ 3 m up to Ø600 mm (see encl. H-1 Installing instructions)
 ≤ 1,5 m Ø650 – Ø1000mm (see encl. H-1 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.