

Declaration of Performance



No. 91323 005 DoP 2015-08-24 · Declaration of Performance (DoP)

1. Unique identification code of the product-type:

Multi-wall chimney system type TEC-DW-HIGH 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 TEC-DW-HIGH with 32 mm heat insulation for positive pressure¹⁾

Model 1	DN (80- 600)	T120 – N1 – W – V2 – L50060 – O00	(with EPDM gasket)
Model 2	DN (80- 600)	T120 – P1 – W – V2 – L50060 – O00	(with EPDM gasket)
Model 3	DN (80- 600)	T200 – N1 – W – V2 – L50060 – O00	(with silicone gasket)
Model 4	DN (80- 600)	T200 – P1 – W – V2 – L50060 – O00	(with silicone gasket)

¹⁾ Manufacturer product identification

3. Intended use or uses of the construction product, in accordance with the applicable harmonized 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):

**TECNOVIS GmbH
Lessingstr. 20
DE-63110 Rodgau**

5. Where applicable, name and contact address of the authorized 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 91323 005 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 4 DN (80- 300): up to 38 m Model 1 to 4 DN (350- 450): up to 32 m Model 1 to 4 DN (500- 600): up to 21 m For further information see the installing instruction TEC-DW-HIGH	EN 1856-1:2009																								
8.2	Resistance to fire	(Resistance to fire from inside to outside) Model 1 to 2 DN (80- 600): T120 – 000 Model 3 to 4 DN (80- 600): T200 – 000 Tested without fully enclosed and with ventilated floors.	EN 1856-1:2009																								
8.3	Gas tightness/ leakage	Model 1 DN (80- 600): N1 Model 2 DN (80- 600): P1 Model 3 DN (80- 600): N1 Model 4 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" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">component:</th> <th style="text-align: left;">ζ (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">Terminals: (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>≤ Ø 140 mm 0.1/ ≥ Ø 150 mm 0.2</td> </tr> <tr> <td>wind deflector:</td> <td>≤ Ø 140 mm 0.1/ ≥ Ø 150 mm 0.2</td> </tr> <tr> <td>hurricane:</td> <td>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 0.2	wind deflector:	≤ Ø 140 mm 0.1/ ≥ Ø 150 mm 0.2	hurricane:	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 0.2																										
wind deflector:	≤ Ø 140 mm 0.1/ ≥ Ø 150 mm 0.2																										
hurricane:	0.1																										
8.5	Thermal resistance	Model 1 to 4 DN (80- 600): 0.5 m²K/W tested at 200°C	EN 1856-1:2009																								
8.6	Thermal shock resistance Sootfire resistance	Model 1 to 4 DN (80- 600): No ²⁾ ²⁾ Because designated O	EN 1856-1:2009																								
8.7	Thermal performance under normal operating conditions	Model 1 to 2 DN (80- 600): T120 Model 3 to 4 DN (80- 600): T200																									
8.8	Flexural tensile strength (only for means of connection for chimney sections and fittings)	Model 1 to 4 DN (80- 600): up to 13 m	EN 1856-1:2009																								
8.9	Non vertical installation	Model 1 to 4 DN (80- 600): 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 4 DN (80- 600): Free standing height 3 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 to 4 DN (80- 600): Yes	EN 1856-1:2009
8.12	Condensate penetration resistance	Model 1 to 4 DN (80- 600): Yes	
8.13	Against corrosion	Model 1 to 4 DN (80- 600): V2	
8.14	Freeze thaw resistance	Model 1 to 4 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:

Rodgau, 24th August 2015



.....
Attila Kovacs CEO

Product information



„Chimneys – Requirements for metal chimneys – Part 1: System chimney products“ EN 1856-1:2009

Manufacturer's identification:

TECNOVIS GmbH
Lessingstr. 20
DE-63110 Rodgau

Product trade name:

TEC-DW-HIGH
(Double wall chimney system with 32 mm heat insulation for positive pressure)

Certification office:

TÜV SÜD Industrie Service GmbH

Name and position of the responsible person:

Attila Kovacs CEO

Identification of accompanying documentation

0.1	Metal chimney	EN 1856-1	T120	N1	W	V2-L50060	O00	80 - 600	Double wall chimney system with EPDM gasket, moisture resistant, with 32 mm heat insulation, ventilated throughout the whole length, without covering. Locking band necessary. For operation mode in negative pressure a gasket isn't necessary.
0.2	Metal chimney	EN 1856-1	T120	P1	W	V2-L50060	O00	80 - 600	Double wall chimney system with EPDM gasket, moisture resistant, with 32 mm heat insulation, ventilated throughout the whole length, without covering. Locking band necessary. Operation mode in positive pressure.
0.3	Metal chimney	EN 1856-1	T200	N1	W	V2-L50060	O00	80 - 600	Double wall chimney system with silicone gasket, moisture resistant, with 32 mm heat insulation, ventilated throughout the whole length, without covering. Locking band necessary. For operation mode in negative pressure a gasket isn't necessary.
0.4	Metal chimney	EN 1856-1	T200	P1	W	V2-L50060	O00	80 - 600	Double wall chimney system with silicone gasket, moisture resistant, with 32 mm heat insulation, ventilated throughout the whole length, without covering. Locking band necessary. Operation mode in positive pressure.

Product description	
Standard number	EN 1856-1
Temperature level	T120
Pressure level	N1
Condensate resistance (W: wet / D: dry)	W
Corrosion resistance	W
Flue liner material specification	V2-L50060
Sootfire resistance (G: yes / O: no) and distance to combustible material (in mm)	O00
Nominal diameter (∅) (inner tube) in mm	80 - 600

Properties of a multi-wall metal chimney system

Compressive strength:

Maximum load (see installing instructions)

Flow resistance:

Average roughness: 1.0 mm,
Zeta-values (see installing instructions)
according to EN 13384-1

Thermal resistance:

0.5 m²K/W

Flexural strength:

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

Tensile strength:

See installing instructions

Wind load: free standing end above last fixation:

≤ 3 m up to ∅600 mm (see 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.

Declaration of Performance



No. 91323 006 DoP 2015-08-24 · Declaration of Performance (DoP)

1. Unique identification code of the product-type:

Rigid, double wall metal connecting pipe type TEC-DW-HIGH 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 connecting pipe type TEC-DW-HIGH with 32 mm heat insulation for positive pressure¹⁾

Model 1 DN (80- 600) T120 – P1 – W – V2 – L50060 – O00 M³⁾ (with EPDM gasket)

Model 2 DN (80- 600) T120 – N1 – W – V2 – L50060 – O00 M³⁾ (with EPDM gasket)

Model 3 DN (80- 600) T200 – P1 – W – V2 – L50060 – O00 M³⁾ (with silicone gasket)

Model 4 DN (80- 600) T200 – N1 – W – V2 – L50060 – O00 M³⁾ (with silicone gasket)

¹⁾ Manufacturer product identification connecting pipe

²⁾ Not Measured (NM) means 3 times the Nominal Diameter with a minimum of 375 mm

³⁾ Measured (M)

3. Intended use or uses of the construction product, in accordance with the applicable harmonized technical specification, as foreseen by the manufacturer:

Convey the products of combustion from heating appliances to the chimney

4. Name, registered trade name or registered trade mark and contact address of the manufacturer as required under Article 11(5):

TECNOVIS GmbH

Lessingstr. 20

DE-63110 Rodgau

5. Where applicable, name and contact address of the authorized 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+

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 91323 006 of the factory production control.

8. Declared performance:



	ESSENTIAL CHARACTERISTICS	PERFORMANCE	HARMONIZED TECHNICAL SPECIFICATION														
8.1	Compressive strength	Model 1 to 4 DN (80- 600): up to 21 m	EN 1856-2:2009														
8.2	Tensile strength	Model 1 to 4 DN (80- 600): up to 13 m															
8.3	Non vertical installation	Model 1 to 4 DN (80- 600): Horizontal 3 m between supports* *Please pay attention to the mounting instructions, an incline, all incline has to be arranged for where applicable.															
8.4	Resistance to fire	Model 1 to 4 DN (80- 600): 000 M	EN 1856-2:2009														
8.5	Gas tightness/ leakage	Model 1 DN (80- 600): P1 Model 2 DN (80- 600): N1 Model 3 DN (80- 600): P1 Model 4 DN (80- 600): N1	EN 1856-2:2009														
8.6	Flow resistance of chimney sections and fittings	According to EN 13384-1 <table border="1"> <thead> <tr> <th>component:</th> <th>ζ (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> </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	EN 1856-2:2009
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																
8.7	Sootfire resistance	Model 1 to 4 DN (80- 600): No ²⁾ ²⁾ because designated O	EN 1856-2:2009														
8.8	Thermal performance under normal operating conditions	Model 1 to 2 DN (80- 600): T120* Model 3 to 4 DN (80- 600): T200* *(Heating strain at nominal operating temperature)															
8.9	Durability: Water and vapour diffusion resistance	Model 1 to 4 DN (80- 600): Yes	EN 1856-2:2009														
8.10	Condensate penetration resistance	Model 1 to 4 DN (80- 600): Yes															
8.11	Against corrosion	Model 1 to 4 DN (80- 600): V2															
8.12	Freeze thaw resistance	Model 1 to 4 DN (80- 600): Yes															
<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>Rodgau, 24th August 2015</p> <div style="text-align: right;">  Attila Kovacs CEO </div>																	

Product information



"Chimneys – Requirements for metal chimneys - Part 2: Metal flue liners and connecting flue pipes" EN 1856-2:2009

Manufacturer's identification:

TECNOVIS GmbH
Lessingstr. 20
DE-63110 Rodgau

Product trade name:

TEC-DW-HIGH connecting pipe
(double wall connecting pipe for positive pressure with 32 mm insulation)

Certification office:

TÜV SÜD Industrie Service GmbH

Name and position of the responsible person:

Attila Kovacs CEO

Identification of accompanying documentation

Rigid, double wall connecting pipe TEC-DW-HIGH	0.1	EN 1856-2	T120	P1	W	V2-L50060	O00 M	80 - 600	Double wall, moisture resistant connecting pipe, composed of rigid pipes and elements with EPDM gasket, ventilated along the whole length, without covering. Locking band necessary. Operation mode in positive pressure up to 200 Pa (oil, gas).
	0.2	EN 1856-2	T120	N1	W	V2-L50060	O00 M	80 - 600	Double wall, moisture resistant connecting pipe, composed of rigid pipes and elements with EPDM gasket, ventilated along the whole length, without covering. Locking band necessary. For operation mode in negative pressure (oil, gas) a gasket isn't necessary.
	0.3	EN 1856-2	T200	P1	W	V2-L50060	O00 M	80 - 600	Double wall, moisture resistant connecting pipe, composed of rigid pipes and elements with silicone gasket, ventilated along the whole length, without covering. Locking band necessary. Operation mode in positive pressure up to 200 Pa (oil, gas).
	0.4	EN 1856-2	T200	N1	W	V2-L50060	O00 M	80 - 600	Double wall, moisture resistant connecting pipe, composed of rigid pipes and elements with silicone gasket, ventilated along the whole length, without covering. Locking band necessary. For operation mode in negative pressure (oil, gas) a gasket isn't necessary.

Product description	
Standard number	EN 1856-2
Temperature level	T120
Pressure level	P1
Condensate resistance (W: wet / D: dry)	W
Corrosion resistance	W
Flue liner material specification	V2-L50060
Sootfire resistance (G: yes / O: no) and distance to combustible material (in mm)	O00 M
M = tested distance NM = calculated distance	
Nominal diameter (∅) (inner tube) in mm	80 - 600

Rigid connecting pipe of metal

Compressive strength:

>21 m over the pieces and the connections of the elements

Flow resistance:

Average roughness: 1.0 mm,
Zeta-values according to EN 13384-1

Thermal resistance:

0.5 m²K/W

Flexural strength:

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

Maximum distance between vertical supports:

≤ 4 m between two supports

Freeze-thaw resistance:

Yes

Cleaning:

The connecting pipe is only allowed to be cleaned with cleaning devices made of plastic or rust-resistant stainless steel.