

Declaration of Performance



No. 91323 015 DoP 2015-08-24 · Declaration of Performance (DoP)

1. Unique identification code of the product-type:

Single wall chimney system type TEC-EW-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):

Single wall chimney system type TEC-EW-HIGH, installation in stack¹⁾

Model 1	DN (60- 600)	T120 – P1 – W – V2 – L50060 – 000	(with EPDM gasket)
Model 2	DN (60- 600)	T120 – N1 – W – V2 – L50060 – 000	(with EPDM gasket)
Model 3	DN (60- 600)	T200 – P1 – W – V2 – L50060 – 000	(with silicone gasket)
Model 4	DN (60- 600)	T200 – N1 – W – V2 – L50060 – 000	(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 015 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 4 DN (60- 300): up to 27 m Model 1 to 4 DN (350- 450): up to 21 m Model 1 to 4 DN (500- 600): up to 15 m For further information see the installation instruction TEC-EW-HIGH	EN 1856-1:2009																								
8.2	Resistance to fire	(Resistance to fire from inside to outside) Model 1 to 2 DN (60- 600): T120 – 000 Model 3 to 4 DN (60- 600): T200 – 000 Tested without cover, with back ventilated ceiling duct	EN 1856-1:2009																								
8.3	Gas tightness/ leakage	Model 1 DN (60- 600): P1 Model 2 DN (60- 600): N1 Model 3 DN (60- 600): P1 Model 4 DN (60- 600): N1	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>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>hurrican:</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	hurrican:	0.1	EN 1856-1:2009
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8.5	Thermal resistance	Model 1 to 4 DN (60- 600): 0 m²K/W without insulation optional with insulation, values see below Model 1 to 4 DN (60- 600): >0.256 m²K/W calculated for 200°C with 25 mm insulation * *The thermal resistance is dependent on the nominal diameters of inner tubes see product information and mounting instruction	EN 1856-1:2009																								
8.6	Thermal shock resistance Sootfire resistance	Model 1 to 4 DN (60- 600): No 2) 2) Because designated O	EN 1856-1:2009																								
8.7	Thermal performance under normal operating conditions	Model 1 to 2 DN (60- 600): T120 Model 3 to 4 DN (60- 600): T200																									
8.8	Flexural tensile strength (only for means of connection for chimney sections and fittings)	Model 1 to 4 DN (60- 600): n.p.d.	EN 1856-1:2009																								
8.9	Non vertical installation	Model 1 to 4 DN (60- 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. Declared performance:



	ESSENTIAL CHARACTERISTICS	PERFORMANCE	HARMONIZED TECHNICAL SPECIFICATION
8.10	Components subject to wind load	Model 1 to 4 DN (60- 350) : Free standing height 1.5 m above last support. Model 1 to 4 DN (400- 600) : Free standing height n.p.d. above last support.	EN 1856-1:2009
8.11	Durability: Water and vapour diffusion resistance	Model 1 to 4 DN (60- 600): Yes	EN 1856-1:2009
8.12	Condensate penetration resistance	Model 1 to 4 DN (60- 600): Yes	
8.13	Against corrosion	Model 1 to 4 DN (60- 600): V2	
8.14	Freeze thaw resistance	Model 1 to 4 DN (60- 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



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Attila Kovacs CEO

Product information



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

Manufacturer's identification: **TECNOVIS GmbH**
Lessingstr. 20
DE-63110 Rodgau

Product trade name: **TEC-EW-HIGH** (Single wall chimney system, installation in stack)

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	P1	W	V2-L50060	O00	60 - 600	Single wall chimney system with EPDM gasket, moisture resistant, for installation in stacks / chimneys, which meet the requirements for fire protection. Installation with ventilated annular gap. Operation mode in positive pressure up to 200 Pa (oil, gas).
0.2	Metal chimney	EN 1856-1	T120	N1	W	V2-L50060	O00	60 - 600	Single wall chimney system with EPDM gasket, moisture resistant, for installation in stacks / chimneys, which meet the requirements for fire protection. For operation mode in negative pressure (oil, gas) a gasket isn't necessary.
0.3	Metal chimney	EN 1856-1	T200	P1	W	V2-L50060	O00	60 - 600	Single wall chimney system with silicone gasket, moisture resistant, for installation in stacks / chimneys, which meet the requirements for fire protection. Installation with ventilated annular gap. Operation mode in positive pressure up to 200 Pa (oil, gas).
0.4	Metal chimney	EN 1856-1	T200	N1	W	V2-L50060	O00	60 - 600	Single wall chimney system with silicone gasket, moisture resistant, for installation in stacks / chimneys, which meet the requirements for fire protection. For operation mode in negative pressure (oil, gas) a gasket isn't necessary.

Product description	
Standard number	EN 1856-1
Temperature level	T120
Pressure level	P1
Condensate resistance (W: wet / D: dry)	W
Corrosion resistance	V2-L50060
Flue liner material specification	
Sootfire resistance (G: yes / O: no) and distance to combustible material (in mm)	
Nominal diameter (∅) (inner tube) in mm	60 - 600

Properties of a single wall metal chimney system

Pressure resistance:

Maximum load (see installation instructions)

Flow resistance:

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

Thermal resistance in stack:

Without insulation 0 m²K/W
 Optional with 25 mm insulation >0.256m²K/W

Flexural strength:

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

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 016 DoP 2015-08-24 · Declaration of Performance (DoP)

1. Unique identification code of the product-type:

Rigid metal connecting pipe type TEC-EW-HIGH according to EN 1856-2:2009

2. Type, batch or serial number or any other element allowing identification of the construction product:

Single wall connecting pipe type TEC-EW-HIGH with gasket for positive pressure¹⁾

Model 1	DN (60- 600)	T120 – P1 – W – V2 – L50060 – O50 M³⁾	(with EPDM gasket)
Model 2	DN (60- 600)	T120 – N1 – W – V2 – L50060 – O50 M³⁾	(with EPDM gasket)
Model 3	DN (60- 600)	T200 – P1 – W – V2 – L50060 – O50 M³⁾	(with silicone gasket)
Model 4	DN (60- 600)	T200 – N1 – W – V2 – L50060 – O50 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 016 of the factory production control.

8. Declared performance:



	ESSENTIAL CHARACTERISTICS	PERFORMANCE	HARMONIZED TECHNICAL SPECIFICATION														
8.1	Compressive strength	Model 1 to 4 DN (60- 600): up to 15 m	EN 1856-2:2009														
8.2	Tensile strength	Model 1 to 4 DN (60- 600): n.p.d.															
8.3	Non vertical installation	Model 1 to 4 DN (60- 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 (60- 600): O50 M	EN 1856-2:2009														
8.5	Gas tightness/ leakage	Model 1 DN (60- 600): P1 Model 2 DN (60- 600): N1 Model 3 DN (60- 600): P1 Model 4 DN (60- 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
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8.7	Sootfire resistance	Model 1 to 4 DN (60- 600): No ²⁾ ²⁾ because designated O	EN 1856-2:2009														
8.8	Thermal performance under normal operating conditions	Model 1 to 2 DN (60- 600): T120* Model 3 to 4 DN (60- 600): T200* *(Heating strain at nominal operating temperature)															
8.9	Durability: Water and vapour diffusion resistance	Model 1 to 4 DN (60- 600): Yes	EN 1856-2:2009														
8.10	Condensate penetration resistance	Model 1 to 4 DN (60- 600): Yes															
8.11	Against corrosion	Model 1 to 4 DN (60- 600): V2															
8.12	Freeze thaw resistance	Model 1 to 4 DN (60- 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

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Attila Kovacs CEO

Product information



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

Manufacturer's identification: **TECNOVIS GmbH**
Lessingstr. 20
DE-63110 Rodgau

Product trade name: **TEC-EW-HIGH Connecting pipe**
(single wall connecting pipe for positive pressure with joint seals)

Certification office: TÜV SÜD Industrie Service GmbH

Name and position of the responsible person: Attila Kovacs CEO

Identification of accompanying documentation

Rigid single wall Connecting pipe TEC-EW-HIGH	0.1	EN 1856-2	T120	P1	W	V2-L50060	O50 M	60 - 600	Single wall moisture resistant connecting pipe, composed of rigid pipes and elements with EPDM gasket, ventilated along the whole length, without covering. Operation mode in positive pressure up to 200Pa (oil, gas).
	0.2	EN 1856-2	T120	N1	W	V2-L50060	O50 M	60 - 600	Single wall moisture resistant connecting pipe, composed of rigid pipes and elements with EPDM gasket, ventilated along the whole length, without covering. For operation mode in negative pressure (oil, gas) a gasket isn't necessary.
	0.3	EN 1856-2	T200	P1	W	V2-L50060	O50 M	60 - 600	Single wall moisture resistant connecting pipe, composed of rigid pipes and elements with silicone gasket, ventilated along the whole length, without covering. Operation mode in positive pressure up to 200Pa (oil, gas).
	0.4	EN 1856-2	T200	N1	W	V2-L50060	O50 M	60 - 600	Single wall moisture resistant connecting pipe, composed of rigid pipes and elements with silicone gasket, ventilated along the whole length, without covering. For operation mode in negative pressure (oil, gas) a gasket isn't necessary.

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) M = tested distance NM = calculated distance	
Nominal diameter (Ø) inner tube in mm	

Rigid connecting pipe of metal

Compressive strength:
>10 m over the modules and the connections of the elements

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

Thermal resistance:
0 m²K/W without insulation

Flexural strength:
No vertical installation:
≤ 3 m between two brackets, supports or fixations

Tensile strength:
n.p.d.

Maximal distance between vertical supports:
≤ 4 m

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