Declaration of Performance

No. 91323 011 DoP 2015-02-23 · Declaration of Performance (DoP)

1. Unique identification code of the product-type:
   Single wall chimney system type TEC-EW-CLASSIC 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-CLASSIC, installation in stack[1)]

Model 1	**DN (80- 300)**	**T400 – N1 – D – V2 – L50060 – G50**
Model 1	**DN (350- 450)**	**T400 – N1 – D – V2 – L50060 – G75**
Model 1	**DN (500- 600)**	**T400 – N1 – D – V2 – L50060 – G100**
Model 2	**DN (80- 300)**	**T400 – N1 – W – V2 – L50060 – O50**
Model 2	**DN (350- 450)**	**T400 – N1 – W – V2 – L50060 – O75**
Model 2	**DN (500- 600)**	**T400 – N1 – W – V2 – L50060 – O100**
Model 3	**DN (80- 300)**	**T600 – N1 – D – V2 – L50060 – G100**
Model 3	**DN (350- 450)**	**T600 – N1 – D – V2 – L50060 – G150**
Model 3	**DN (500- 600)**	**T600 – N1 – D – V2 – L50060 – G200**
Model 4	**DN (80- 300)**	**T600 – N1 – W – V2 – L50060 – O100**
Model 4	**DN (350- 450)**	**T600 – N1 – W – V2 – L50060 – O150**
Model 4	**DN (500- 600)**	**T600 – N1 – W – V2 – L50060 – O200**
Model 5	**DN (80- 300)**	**T600 – N1 – D – V3 – L50060 – G70 [2)]**
Model 5	**DN (350- 450)**	**T600 – N1 – D – V3 – L50060 – G105 [2)]**
Model 5	**DN (500- 600)**	**T600 – N1 – D – V3 – L50060 – G140 [2)]**

[1)] Manufacturer product identification, cross sections are possible in round or oval form
[2)] with 25 mm insulation

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 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 011 of the factory production control.

8. Declared performance:

<table>
<tr><th></th><th>ESSENTIAL CHARACTERISTICS</th><th>PERFORMANCE</th><th>HARMONIZED TECHNICAL SPECIFICATION</th></tr>
<tr><td>8.1</td><td>Compressive strength Chimney sections, fittings and supports</td><td><u>Sections and fittings:</u>
Model 1 to 5 DN (80- 300): up to 27 m
Model 1 to 5 DN (350- 450): up to 21 m
Model 1 to 5 DN (500- 600): up to 15 m
For further information see the installation instruction TEC-EW-CLASSIC</td><td>EN 1856-1:2009</td></tr>
<tr><td>8.2</td><td>Resistance to fire</td><td>(Resistance to fire from inside to outside)
Model 1 DN (80- 300): T400 – G50
Model 1 DN (350- 450): T400 – G75
Model 1 DN (500- 600): T400 – G100
Model 2 DN (80- 300): T400 – O50
Model 2 DN (350- 450): T400 – O75
Model 2 DN (500- 600): T400 – O100
Model 3 DN (80- 300): T600 – G100
Model 3 DN (350- 450): T600 – G150
Model 3 DN (500- 600): T600 – G200
Model 4 DN (80- 300): T600 – O100
Model 4 DN (350- 450): T600 – O150
Model 4 DN (500- 600): T600 – O200
Model 5 DN (80- 300): T600 – G70 (with 25 mm insulation)
Model 5 DN (350- 450): T600 – G105 (with 25 mm insulation)
Model 5 DN (500- 600): T600 – G140 (with 25 mm insulation)
Tested without cover, with back ventilated ceiling duct.</td><td>EN 1856-1:2009</td></tr>
<tr><td>8.3</td><td>Gas tightness/ leakage</td><td>Model 1 to 5 DN (80- 600): N1</td><td>EN 1856-1:2009</td></tr>
<tr><td>8.4</td><td>Flow resistance of chimney sections, fittings and terminals</td><td>According to EN 13384-1
<table><tr><th>component:</th><th>ζ (Zeta-value)
single resistances</th></tr><tr><td></td><td></td></tr><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></table></td><td>EN 1856-1:2009</td></tr>
<tr><td>8.5</td><td>Thermal resistance</td><td>Model 1 to 4 DN (80- 600): 0 m²K/W
(without insulation, optional with insulation, values see Model 5)
Model 5 DN (80- 600) >0.256 m²K/W calculated for 200°C
(with 25mm insulation) *
*The thermal resistance is dependent on the nominal diameters of inner tubes see product information and mounting instruction</td><td>EN 1856-1:2009</td></tr>
<tr><td>8.6</td><td>Thermal shock resistance

Sootfire resistant</td><td>Model 1 DN (80- 600): Yes
Model 2 DN (80- 600): No [2)]
Model 3 DN (80- 600): Yes
Model 4 DN (80- 600): No [2)]
Model 5 DN (80- 600): Yes
[2)] Because designated O</td><td>EN 1856-1:2009</td></tr>
</table>

8. Declared performance:

	ESSENTIAL CHARACTERISTICS	PERFORMANCE	HARMONIZED TECHNICAL SPECIFICATION
8.7	Thermal performance under normal operating conditions	Model 1 to 2 DN (80- 600): **T400** Model 3 to 5 DN (80- 600): **T600**	
8.8	Flexural tensile strength (only for means of connection for chimney sections and fittings)	Model 1 to 5 DN (80- 600): **n.p.d.**	EN 1856-1:2009
8.9	Non vertical installation	Model 1 to 5 DN (80- 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
8.10	Components subject to wind load	Model 1 to 5 **DN (80- 350):** Free standing height **1.5 m** above last support. Model 1 to 5 **DN (400- 600):** Free standing height above last support **n.p.d.**	EN 1856-1:2009
	Durability:		EN 1856-1:2009
8.11	Water and vapour diffusion resistance	Model 1 DN (80- 600): **No** Model 2 DN (80- 600): **Yes** Model 3 DN (80- 600): **No** Model 4 DN (80- 600): **Yes** Model 5 DN (80- 600): **No**	
8.12	Condensate penetration resistance	Model 1 DN (80- 600): **No** Model 2 DN (80- 600): **Yes** Model 3 DN (80- 600): **No** Model 4 DN (80- 600): **Yes** Model 5 DN (80- 600): **No**	
8.13	Against corrosion	Model 1 DN (80- 600): **V2** Model 2 DN (80- 600): **V2** Model 3 DN (80- 600): **V2** Model 4 DN (80- 600): **V2** Model 5 DN (80- 600): **V3** (with 25 mm insulation)	
8.14	Freeze thaw resistance	Model 1 to 5 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, 23rd February 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

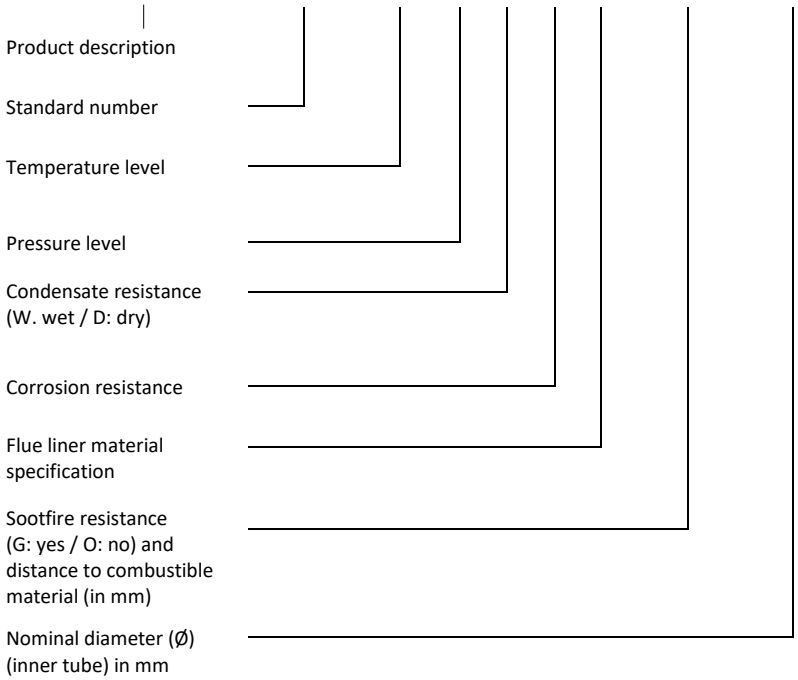
Product trade name: **TEC-EW-CLASSIC** (Single wall chimney system, installation in stack)

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**	**T400**	**N1**	**D**	**V2-L50060**	**G50** **G75** **G100**	**80 - 300** **350 - 450** **500 - 600**	Single wall chimney system, sootfire resistant, installation in stacks / chimneys, which meet the requirements for fire protection. Operation mode in negative pressure. Cross section in round or oval form.
0.2	**Metal chimney**	**EN 1856-1**	**T400**	**N1**	**W**	**V2-L50060**	**O50** **O75** **O100**	**80 - 300** **350 - 450** **500 - 600**	Single wall chimney system, moisture resistant, installation in stacks / chimneys, which meet the requirements for fire protection. Operation mode in negative pressure. Cross section in round or oval form.
0.3	**Metal chimney**	**EN 1856-1**	**T600**	**N1**	**D**	**V2-L50060**	**G100** **G150** **G200**	**80 - 300** **350 - 450** **500 - 600**	Single wall chimney system, sootfire resistant, installation in stacks / chimneys, which meet the requirements for fire protection. Operation mode in negative pressure. Cross section in round or oval form.
0.4	**Metal chimney**	**EN 1856-1**	**T600**	**N1**	**W**	**V2-L50060**	**O100** **O150** **O200**	**80 - 300** **350 - 450** **500 - 600**	Single wall chimney system, moisture resistant, installation in stacks / chimneys, which meet the requirements for fire protection. Operation mode in negative pressure. Cross section in round or oval form.
0.5	**Metal chimney**	**EN 1856-1**	**T600**	**N1**	**D**	**V3-L50060**	**G70** **G105** **G140**	**80 - 300** **350 - 450** **500 - 600**	Single wall chimney system, with 25mm insulation, sootfire resistant. Installation in stacks / chimneys, which meet the requirements for fire protection. Operation mode in negative pressure. Cross section in round or oval form.



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 m^2K/W
With 25 mm insulation >0.256 m^2K/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 012 DoP 2018-10-31 · Declaration of Performance (DoP)

1. Unique identification code of the product-type:
   Rigid connecting pipe type TEC-EW-CLASSIC 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, single wall connecting pipe without heat insulation type TEC-EW-CLASSIC[1)]

Model 1	**DN (80- 120)**	**T400 – N1 – D – V2 – L50060 – G375 NM [2)]**	**(with radiation protection G300)**
Model 1	**DN (130)**	**T400 – N1 – D – V2 – L50060 – G390 NM [2)]**	**(with radiation protection G300)**
Model 1	**DN (80- 600)**	**T400 – N1 – D – V2 – L50060 – G400 M [3)]**	**(with radiation protection G300)**
Model 2	**DN (80- 120)**	**T400 – N1 – W – V2 – L50060 – O375 NM [2)]**	**(with radiation protection O300)**
Model 2	**DN (130)**	**T400 – N1 – W – V2 – L50060 – O390 NM [2)]**	**(with radiation protection O300)**
Model 2	**DN (80- 600)**	**T400 – N1 – W – V2 – L50060 – O400 M [3)]**	**(with radiation protection O300)**
Model 3	**DN (80- 600)**	**T600 – N1 – D – V2 – L50060 – G400 M [3)]**	**(with radiation protection G300)**

[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 012 of the factory production control.

8. Declared performance:

	ESSENTIAL CHARACTERISTICS	PERFORMANCE	HARMONIZED TECHNICAL SPECIFICATION
8.1	Compressive strength	Model 1 to 3 DN (80- 300): **up to 27 m** Model 1 to 3 DN (350- 450): **up to 21 m** Model 1 to 3 DN (500- 600): **up to 15 m**	EN 1856-2:2009
8.2	Tensile strength	Model 1 to 3 DN (80- 600): **n.p.d.**	
8.3	Non vertical installation	Model 1 to 3: Horizontal **4 m between supports*** *Please pay attention to the mounting instructions, an incline has to be arranged for where applicable	
8.4	Resistance to fire	Model 1 DN (80- 120): **G375 NM** Model 1 DN (130): **G390 NM** Model 1 DN (80- 600): **G400 M** Model 2 DN (80- 120): **O375 NM** Model 2 DN (130): **O390 NM** Model 2 DN (80- 600): **O400 M** Model 3 DN (80- 600): **G400 M**	EN 1856-2:2009
8.5	Gas tightness/ leakage	Model 1 to 3: **N1**	EN 1856-2:2009
8.6	Flow resistance of chimney sections and fittings	According to EN 13384-1	EN 1856-2:2009
8.7	Sootfire resistance	Model 1 and 3 DN (80- 600): **Yes** Model 2 DN (80- 600): **No** [2)] [2)] because designated O	EN 1856-2:2009
8.8	Thermal performance under normal operating conditions	Model 1 and 2: **T400*** Model 3: **T600*** *(Heating strain at nominal operating temperature)	
	Durability:		EN 1856-2:2009
8.9	Water and vapour diffusion resistance	Model 1 DN (80- 600): **No** Model 2 DN (80- 600): **Yes** Model 3 DN (80- 600): **No**	
8.10	Condensate penetration resistance	Model 1 DN (80- 600): **No** Model 2 DN (80- 600): **Yes**	
8.11	Against corrosion	Model 3 DN (80- 600): **No**	
8.12	Freeze thaw resistance	Model 1 to 3 DN (80- 600): **V2** Model 1 to 3 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, 31st October 2018

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-CLASSIC Connecting pipe**
(rigid, single wall connecting pipe without insulation)

Certification office: TÜV SÜD Industrie Service GmbH

Name and position of the responsible person: Attila Kovacs CEO

Identification of accompanying documentation

Rigid connecing pipe TEC-EW-CLASSIC	**0.1**	**EN 1856-2**	**T400**	**N1**	**D**	**V2-L50060**	**G375 NM¹** **G390 NM¹** **G400 M¹**	**80 - 120** **130** **80 - 600**	Single wall sootfire resistant connecting pipe, composed of rigid pipes and elements, ventilated along the whole length, without covering. Operation mode in negative pressure (solid fuel, oil, gas).
	0.2	**EN 1856-2**	**T400**	**N1**	**W**	**V2-L50060**	**O375 NM¹** **O390 NM¹** **O400 M¹**	**80 - 120** **130** **80 - 600**	Single wall moisture resistant connecting pipe, composed of rigid pipes and elements, ventilated along the whole length, without covering. Operation mode in negative pressure (oil, gas).
	0.3	**EN 1856-2**	**T600**	**N1**	**D**	**V2-L50060**	**G400 M¹**	**80 - 600**	Single wall sootfire resistant connecting pipe, composed of rigid pipes and elements, ventilated along the whole length, without covering. Operation mode in negative pressure (solid fuel, oil, gas).

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) **without radiation protection**
M = tested distance
NM = calculated distance

Nominal diameter (Ø)
(inner tube) in mm

Rigid connecting pipe of metal

Compressive strength:
>15 m over the modules and the connections of the elements

Flexural strength:
No vertical installation:
≤ 4 m between two brackets, supports or fixations

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

Thermal resistance:
0 m²K/W

Sootfire resistance:
Yes

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.

[1]With radiation protection the distance to combustible material can be defined at 300mm for all diameters!