

Declaration of Performance



No. 91323 017 DoP 2016-02-19 · Declaration of Performance (DoP)

1. Unique identification code of the product-type:

Rigid and flexible flue liner type TEC-FLEX 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 and flexible flue liner, type TEC-FLEX¹⁾

Model 1 TEC-FLEX TEC-EW-CLASSIC	(flexible, single-ply metal flue liner 0.08 mm)	T400 N1 W V2 L50008 G
Model 2 TEC-FLEX TEC-EW-CLASSIC	(flexible, single-ply metal flue liner 0.08 mm)	T600 N1 W V2 L50008 G
Model 3 TEC-FLEX TEC-EW-HIGH	(flexible, single-ply metal flue liner 0.08 mm)	T120 P1 W V2 L50008 O²⁾
Model 4 TEC-FLEX TEC-EW-HIGH	(flexible, single-ply metal flue liner 0.08 mm)	T200 P1 W V2 L50008 O²⁾
Model 5 TEC-FLEX TEC-EW-CLASSIC	(flexible, single-ply metal flue liner 0.08 mm)	T200 N1 W V2 L50008 O
Model 6 TEC-FLEX TEC-EW-CLASSIC	(flexible, double-layered metal flue liner 2 x 0.08 mm)	T400 N1 W V2 L50008 G
Model 7 TEC-FLEX TEC-EW-CLASSIC	(flexible, double-layered metal flue liner 2 x 0.08 mm)	T600 N1 W V2 L50008 G
Model 8 TEC-FLEX TEC-EW-HIGH	(flexible, double-layered metal flue liner 2 x 0.08 mm)	T120 P1 W V2 L50008 O²⁾
Model 9 TEC-FLEX TEC-EW-HIGH	(flexible, double-layered metal flue liner 2 x 0.08 mm)	T200 P1 W V2 L50008 O²⁾
Model 10 TEC-FLEX TEC-EW-CLASSIC	(flexible, double-layered metal flue liner 2 x 0.08 mm)	T200 N1 W V2 L50008 O
Model 11 TEC-EW-CLASSIC	(rigid metal flue liner 0.60 mm)	T400 N1 W V2 L50060 G
Model 12 TEC-EW-CLASSIC	(rigid metal flue liner 0.60 mm)	T600 N1 W V2 L50060 G
Model 13 TEC-EW-HIGH	(rigid metal flue liner 0.60 mm)	T120 P1 W V2 L50060 O³⁾
Model 14 TEC-EW-HIGH	(rigid metal flue liner 0.60 mm)	T200 P1 W V2 L50060 O⁴⁾
Model 15 TEC-EW-CLASSIC	(rigid metal flue liner 0.60 mm)	T200 N1 W V2 L50060 O

¹⁾ Manufacturer product identification

²⁾ with sealant of silicone

³⁾ with EPDM gasket

⁴⁾ with silicone gasket

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 017 of the factory production control.

8. Declared performance:



	ESSENTIAL CHARACTERISTICS	PERFORMANCE	HARMONIZED TECHNICAL SPECIFICATION
8.1	Compressive strength of fittings and supports	Model 1 to 5 flexible single-ply DN (80- 300): not applicable Model 6 to 10 flexible double-layered DN (80- 300): not applicable Model 11 to 15 rigid flue liner DN (80- 300): min. 27 m Model 11 to 15 rigid flue liner DN (350- 450): min. 21 m Model 11 to 15 rigid flue liner DN (500- 600): min. 15 m For further information see the installation instruction TEC-FLEX	
8.2	Crushing resistance	Model 1 to 5 flexible single-ply DN (80- 300): Passed Model 6 to 10 flexible double-layered DN (80- 300): Passed Model 11 to 15 rigid flue liner DN (80- 600): not applicable	
8.3	Flexibility	Model 1 to 5 flexible single-ply DN (80- 300): Minimum bending radius 2 x NW Model 6 to 10 flexible double-layered DN (80- 300): Minimum bending radius 2 x NW Model 11 to 15 rigid flue liner DN (80- 600): Not applicable	EN 1856-2:2009
8.4	Torsion strength	Model 1 to 5 flexible single-ply DN (80- 300): Passed Model 6 to 10 flexible double-layered DN (80- 300): Passed Model 11 to 15 rigid flue liner DN (80- 600): not applicable	
8.5	Pulling force < 0,5 kN	Model 1 to 5 flexible single-ply DN (80- 300): Passed Model 6 to 10 flexible double-layered DN (80- 300): Passed Model 11 to 15 rigid flue liner DN (80- 600): not applicable	
8.6	Resistance to fire	Model 1 flexible single-ply DN (80- 300): G Model 2 flexible single-ply DN (80- 300): G Model 3 flexible single-ply DN (80- 300): O Model 4 flexible single-ply DN (80- 300): O Model 5 flexible single-ply DN (80- 300): O Model 6 flexible double-layered DN (80- 300): G Model 7 flexible double-layered DN (80- 300): G Model 8 flexible double-layered DN (80- 300): O Model 9 flexible double-layered DN (80- 300): O Model 10 flexible double-layered DN (80- 300): O Model 11 rigid flue liner DN (80- 600): G Model 12 rigid flue liner DN (80- 600): G Model 13 rigid flue liner DN (80- 600): O Model 14 rigid flue liner DN (80- 600): O Model 15 rigid flue liner DN (80- 600): O	
8.7	Gas tightness/ leakage	Model 1 flexible single-ply DN (80- 300): N1 Model 2 flexible single-ply DN (80- 300): N1 Model 3 flexible single-ply DN (80- 300): P1 Model 4 flexible single-ply DN (80- 300): P1 Model 5 flexible single-ply DN (80- 300): N1 Model 6 flexible double-layered DN (80- 300): N1 Model 7 flexible double-layered DN (80- 300): N1 Model 8 flexible double-layered DN (80- 300): P1 Model 9 flexible double-layered DN (80- 300): P1 Model 10 flexible double-layered DN (80- 300): N1 Model 11 rigid flue liner DN (80- 600): N1 Model 12 rigid flue liner DN (80- 600): N1 Model 13 rigid flue liner DN (80- 600): P1 Model 14 rigid flue liner DN (80- 600): P1 Model 15 rigid flue liner DN (80- 600): N1	EN 1856-2:2009

8. Declared performance:



	ESSENTIAL CHARACTERISTICS	PERFORMANCE	HARMONIZED TECHNICAL SPECIFICATION
8.8	Flow resistance of chimney sections, fittings and terminals	ζ (Zeta-value) single resistance Average assembly: Model 1 to 5 flexible single-ply DN (80 – 300): 1.5 mm Model 6 to 10 flexible double-layered DN (80 – 300): 1.5 mm Model 11 to 15 rigid flue liner DN (80 – 600): 1.0 mm according to EN 13384	EN 1856-2:2009
8.9	Sootfire resistance	Model 1 and 2 flexible single-ply DN (80- 300): Yes Model 3 to 5 flexible single-ply DN (80- 300): No ²⁾ Model 6 and 7 flexible double-layered DN (80- 300): Yes Model 8 to 10 flexible double-layered DN (80- 300): No ²⁾ Model 11 and 12 rigid flue liner DN (80- 600): Yes Model 13 to 15 rigid flue liner DN (80- 600): No ²⁾ ²⁾ because designated O	
8.10	Thermal performance under normal operating conditions	Model 1 flexible single-ply DN (80- 300): T400 Model 2 flexible single-ply DN (80- 300): T600 Model 3 flexible single-ply DN (80- 300): T120 Model 4 flexible single-ply DN (80- 300): T200 Model 5 flexible single-ply DN (80- 300): T200 Model 6 flexible double-layered DN (80- 300): T400 Model 7 flexible double-layered DN (80- 300): T600 Model 8 flexible double-layered DN (80- 300): T120 Model 9 flexible double-layered DN (80- 300): T200 Model 10 flexible double-layered DN (80- 300): T200 Model 11 rigid flue liner DN (80- 600): T400 Model 12 rigid flue liner DN (80- 600): T600 Model 13 rigid flue liner DN (80- 600): T120 Model 14 rigid flue liner DN (80- 600): T200 Model 15 rigid flue liner DN (80- 600): T200	EN 1856-2:2009
8.11	Durability: Water and vapour diffusion resistance	Model 1 to 5 flexible single-ply DN (80- 300): Yes Model 6 to 10 flexible double-layered DN (80- 300): Yes Model 11 to 15 rigid flue liner DN (80- 600): Yes	
8.12	Condensate penetration resistance	Model 1 to 5 flexible single-ply DN (80- 300): Yes Model 6 to 10 flexible double-layered DN (80- 300): Yes Model 11 to 15 rigid flue liner DN (80- 600): Yes	EN 1856-2:2009
8.13	Against corrosion	Model 1 to 5 flexible single-ply DN (80- 300): V2 Model 6 to 10 flexible double-layered DN (80- 300): V2 Model 11 to 15 rigid flue liner DN (80- 600): V2	
8.14	Freeze thaw resistance	Model 1 to 15 flexible single-ply, flexible double-layered and rigid flue liner: 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, 19th February 2016

A handwritten signature in blue ink, appearing to read 'Attila Kovacs', written over a horizontal dotted line. The signature is fluid and cursive.

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-FLEX** (single wall, rigid and flexible flue liner, installation in stack)
 Product subgroup: TEC-FLEX TEC-EW-CLASSIC / TEC-FLEX TEC-EW-HIGH /
 TEC-STARR TEC-EW-CLASSIC / TEC-STARR TEC-EW-HIGH

Certification office: TÜV SÜD Industrie Service GmbH

Name and position of the responsible person: Attila Kovacs CEO

Identification of accompanying documentation

0.1	TEC-FLEX TEC-EW-CLASSIC	flexible metal flue liner	EN 1856-2	T400	N1	W	V2-L50008	G	Flexible single wall flue liner, sootfire resistant, installation in stacks / chimneys, which meet the requirements for fire protection. Operation mode in negative pressure.
0.2	TEC-FLEX TEC-EW-CLASSIC	flexible metal flue liner	EN 1856-2	T600	N1	W	V2-L50008	G	Flexible single wall flue liner, sootfire resistant, installation in stacks / chimneys, which meet the requirements for fire protection. Operation mode in negative pressure.
0.3	TEC-FLEX TEC-EW-HIGH	flexible metal flue liner	EN 1856-2	T120	P1	W	V2-L50008	O	Flexible single wall flue liner with sealant of silicone , moisture resistant, installation in stacks / chimneys, which meet the requirements for fire protection. Operation mode in positive pressure.
0.4	TEC-FLEX TEC-EW-HIGH	flexible metal flue liner	EN 1856-2	T200	P1	W	V2-L50008	O	Flexible single wall flue liner with sealant of silicone , moisture resistant, installation in stacks / chimneys, which meet the requirements for fire protection. Operation mode in positive pressure.
0.5	TEC-FLEX TEC-EW-CLASSIC	flexible metal flue liner	EN 1856-2	T200	N1	W	V2-L50008	O	Flexible single wall flue liner, moisture resistant, installation in stacks / chimneys, which meet the requirements for fire protection. Operation mode in negative pressure.
0.6	TEC-FLEX TEC-EW-CLASSIC	flexible metal flue liner	EN 1856-2	T400	N1	W	V2-L50008	G	Flexible double wall (2 x 0.08 mm) flue liner, sootfire resistant, installation in stacks / chimneys, which meet the requirements for fire protection. Operation mode in negative pressure.
0.7	TEC-FLEX TEC-EW-CLASSIC	flexible metal flue liner	EN 1856-2	T600	N1	W	V2-L50008	G	Flexible double wall (2 x 0.08 mm) flue liner, sootfire resistant, installation in stacks / chimneys, which meet the requirements for fire protection. Operation mode in negative pressure.
0.8	TEC-FLEX TEC-EW-HIGH	flexible metal flue liner	EN 1856-2	T120	P1	W	V2-L50008	O	Flexible double wall (2 x 0.08 mm) flue liner with sealant of silicone , moisture resistant, installation in stacks / chimneys, which meet the requirements for fire protection. Operation mode in positive pressure.
0.9	TEC-FLEX TEC-EW-HIGH	flexible metal flue liner	EN 1856-2	T200	P1	W	V2-L50008	O	Flexible double wall (2 x 0.08 mm) flue liner with sealant of silicone , moisture resistant, installation in stacks / chimneys, which meet the requirements for fire protection. Operation mode in positive pressure.
0.10	TEC-FLEX TEC-EW-CLASSIC	flexible metal flue liner	EN 1856-2	T200	N1	W	V2-L50008	O	Flexible double wall (2 x 0.08 mm) flue liner, moisture resistant, installation in stacks / chimneys, which meet the requirements for fire protection. Operation mode in negative pressure.
0.11	TEC-STARR TEC-EW-CLASSIC	rigid metal flue liner	EN 1856-2	T400	N1	W	V2-L50060	G	Rigid single wall flue liner, sootfire resistant, installation in stacks / chimneys, which meet the requirements for fire protection. Operation mode in negative pressure.
0.12	TEC-STARR TEC-EW-CLASSIC	rigid metal flue liner	EN 1856-2	T600	N1	W	V2-L50060	G	Rigid single wall flue liner, sootfire resistant, installation in stacks / chimneys, which meet the requirements for fire protection. Operation mode in negative pressure.
0.13	TEC-STARR TEC-EW-HIGH	rigid metal flue liner	EN 1856-2	T120	P1	W	V2-L50060	O	Rigid single wall flue liner with EPDM gasket , moisture resistant, installation in stacks / chimneys, which meet the requirements for fire protection. Operation mode in positive pressure.
0.14	TEC-STARR TEC-EW-HIGH	rigid metal flue liner	EN 1856-2	T200	P1	W	V2-L50060	O	Rigid single wall flue liner with silicone gasket , moisture resistant, installation in stacks / chimneys, which meet the requirements for fire protection. Operation mode in positive pressure.
0.15	TEC-STARR TEC-EW-CLASSIC	rigid metal flue liner	EN 1856-2	T200	N1	W	V2-L50060	O	Rigid single wall flue liner, moisture resistant, installation in stacks / chimneys, which meet the requirements for fire protection. Operation mode in negative pressure.

Product description	
Standard number	
Temperature level	
Pressure range level	
Condensate resistance (W: wet / D: dry)	
Corrosion resistance	
Flue liner material specification	
Sootfire resistance (G: yes / O: no)	

EN 1856-2 / EN 1856-1
 Properties of a flex, single wall, flex, multi-wall metal chimney system with rigid flue liner, for installation in stack

Compressive strength:
Flex. single wall & flex. double wall: without / *Rigid flue liner:* >15 m

Flow resistance (average roughness):
Flex. single-ply: 1.5 mm / *Flex. double-layered:* 1.5 mm / *Rigid flue liner:* 1.0 mm
 Zeta-values acc. 13384-1

Thermal resistance: 0 m²K/W

Flexural fatigue strength:
Flex. single-ply: min. bending radius 2 x NW /
Flex. double-layered: min. bending radius 2 x NW / *Rigid flue liner:* no

Flexural strength: Angular assembly:
Rigid flue liner: max. length between two supports: 4 m (Elbows max. 90°)

Facture strength: given

Torsional stiffness: given

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

Remarks: It will be explicitly referenced the use of appropriate fittings to ensure enough gas tightness, heat resistance and moisture resistance.