## Declaration of Performance



No. 91323 035 DoP 2015-05-11 · Declaration of Performance (DoP)

1. Unique identification code of the product-type:

Multi-wall plastic chimney system with an inner wall of rigid or flexible pipes and fittings of polypropylen - plastic according to EN 14471:2013 + A1:2015 type TEC-LS-PP

2. Type, batch or serial number or any other element allowing identification of the construction product as required under Article 11(4):

Plastic chimney system type TEC-LS-PP composed of rigid or flexible inner liner and specified outer wall<sup>1)</sup>

Model 1	TEC-PPS	< DN 200	T120 - H1 - O - W2 - O00 - LI - E - U0 <sup>2)</sup>
	(inner liner)	≥ DN 200	T120 - P1 - O - W2 - O00 - LI - E - U0 <sup>2)</sup>
Model 2	TEC-PP-FLEX	DN60 - ≤ DN100	T120 - H1 - O - W2 - O00 - LI - E - U0 <sup>2)</sup>
	(inner liner)	>DN100 - DN160	T120 - P1 - O - W2 - O00 - LI - E - U0 <sup>2)</sup>

<sup>1)</sup> 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 3

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 035 of the factory production control.

 $<sup>^{2)}</sup>$  Wall thickness shaft 60mm for  $L_{\! A} 90$  resp. 50mm for  $L_{\! A} 30/$  without insulation/ annular gap min. 20mm



### 8. Declared Performance:

	ESSENTIAL CHARACTERISTICS	PERFORMANCE	HARMONIZED TECHNICAL SPECIFICATION
8.1	Compressive strength (max. installation height without intermediate support)	Conductive sections and fittings:  Model 1 to 2 TEC-PPS/TEC-PP-FLEX	EN 14471:2013 +A1:2015
8.2	Components subject to wind load (maximum spacing between lateral supports)	Model 1 to 2 TEC-PPS/TEC-PP-FLEX <b>n.p.d.</b>	EN 14471:2013 +A1:2015
8.3	Components subject to wind load (free standing height above last support)	Model 1 to 2 TEC-PPS/TEC-PP-FLEX n.p.d.	EN 14471:2013 +A1:2015
8.4	Fire prevention (temperature level, distance from outer surface to combustible materials, class of outer wall)	Model 1 to 2: T120 – O00 – E – U0  Distance from outside shaft to combustible material  0 mm  Annular gap (min. 20mm) between inner pipe and inside duct is ventilated.	EN 14471:2013 +A1:2015
8.5	Gas tightness (pressure class)	Model 1: DN (<200)	EN 14471:2013 +A1:2015
8.6	Thermal performance (temperature class)	Model 1 to 2: T 120 At communal heating/ power stations and combined heat and power-constructions max. 100°C	EN 14471:2013 +A1:2015
8.7	Dimensions in mm	Model 1 TEC-PPS 60; 80; 100; 110; 125; 160; 200; 250 Model 2 TEC-PP-FLEX 60; 80; 100; 110; 125; 160	EN 14471:2013 +A1:2015
8.8	Thermal resistance in m <sup>2</sup> K/W	Model 1 to 2: R 00	EN 14471:2013 +A1:2015
8.9	Flow resistance of chimney sections (r = average roughness of inner liner)	Model 1 TEC-PPS         r = 1,0 mm           Model 2 TEC-PP-FLEX         r = 3,0 mm	EN 13384.1
8.10	Flow resistance of chimney fittings (ζ = single resistance factor)	ζ-values according to EN 13384-1	EN 13384.1
8.11	Flow resistance of terminals (ζ = single resistance factor in the exhaust system) (ζ = single resistance factor in the air supply)	Model 1 to 2: n.p.d.	
8.12	Flexural tensile strength (real length of the lateral displacement)	Model 1 to 2: ≤ <b>1.500 mm</b>	EN 14471:2013 +A1:2015
8.13	Flexural tensile strength (max. inclination)	Model 1 TEC-PPS         87°           Model 2 TEC-PP-FLEX         0° - 45°	EN 14471:2013 +A1:2015
8.14	Resistance against chemicals (condensate resistance)	Model 1 to 2:	EN 14471:2013 +A1:2015



### 8. Declared Performance:

	ESSENTIAL CHARACTERISTICS	PERFORMANCE	HARMONIZED TECHNICAL SPECIFICATION
8.15	Resistance against chemicals (corrosion resistance)	Model 1 to 2: 2	EN 14471:2013 +A1:2015
8.16	UV-resistance (installation class)	Model 1 to 2:	EN 14471:2013 +A1:2015
8.17	Thermal resistance	Model 1 to 2: T120 At communal heating/ power stations and combined heat and power-constructions max. 100°C	EN 14471:2013 +A1:2015
8.18	Fire behaviour	Model 1 to 2:	EN 14471:2013 +A1:2015
8.19	Freeze-thaw resistance	Model 1 to 2: Yes	EN 14471:2013 +A1:2015
8.20	Dangerous substances	No release of dangerous substances in planned operation	

Characteristics for the wind direction of terminals	Model 1 to 2:	n.p.d.	EN 14471:2013 +A1:2015
Resistance of terminals to rainwater penetration	Model 1 to 2:	n.p.d.	EN 14471:2013 +A1:2015
Resistance of terminals to icing	Model 1 to 2:	n.p.d.	EN 14471:2013 +A1:2015

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, 11<sup>th</sup> May 2015

Attila Kovacs CEO

# **Product information**



"Chimneys – System chimneys with plastic flue liners -Requirements and test methods EN 14471"

Manufacturer's identification: TECNOVIS GmbH

Lessingstr. 20 DE-63110 Rodgau

Product trade name: TEC-LS-PP (plastic chimney system with specified outer wall)

Certification office: TÜV SÜD Industrie Service GmbH

Name and position of the responsible person: Attila Kovacs CEO

Identification of accompanying documentation

0.1	Plastic chimney system TEC-PPS	EN 14471	T120 T120	H1 P1	w w	2 2	O00 O00	LI	E E	UO UO	<dn 200<br="">≥DN 200</dn>	Chimney system with moisture resistant inner plastic flue liners and 60mm ( $L_{\rm A}90$ ) resp. 50mm ( $L_{\rm A}30$ ) light construction duct made of Calciumsilicat as outer lining. Operation mode in positive pressure/ high pressure up to 5000Pa, ventilated throughout the whole length. Annular gap of min. 20mm between inner pipe and inside duct.
0.2	Plastic chimney system TEC-PP-FLEX	EN 14471	T120 T120	H1 P1	w w	2	O00 O00	LI	E	UO UO	DN60-≤DN100 >DN100-DN160	Chimney system with moisture resistant inner plastic flue liners and 60mm (L <sub>A</sub> 90) resp. 50mm (L <sub>A</sub> 30) light construction duct made of Calciumsilicat as outer lining. Operation mode in positive pressure/ high pressure up to 5000Pa, ventilated throughout the whole length. Annular gap of min. 20mm between inner pipe and inside duct.

Pr	oduct description						
St	andard number						
Te	emperature level						
Pr	essure level						
	ondensate resistand V: wet / D: dry)	ce —		]			
Co	orrosion resistance						
Tł	nermal resistance						
(G	ootfire resistance i: yes / O: no) and stance to combusti aterial (mm)	ble					
(L	ounting location: I: inside building :: inside & outside b g)	ouild-					
Re	eaction to fire						
_							

#### EN 14471

Thickness of outer wall: 50mm (L<sub>A</sub>30)/ 60mm (L<sub>A</sub>90)

Compressive strength TEC-PPS/ TEC-PP-FLEX: up to 30m

Compressive strength duct: up to 25m

Wind load resistance TEC-PPS/ TEC-PP-FLEX: n.p.d.

Wind load resistance duct: above last fixation 1.5 m

Fire resistance: U0

Fire resistance class duct:  $60mm (L_A 90)/50mm (L_A 30)$ 

**Gas tightness:** TEC-PPS: H1 < DN200

TEC-PP-FLEX:

P1 ≥DN200

TEC-PP-FLEX: H1 DN60-≤DN100

P1 >DN100-DN160

Heating trial: T120

**Dimensions:** TEC-PPS: 60; 80; 100; 110;

125; 160; 200; 250 60; 80; 100; 110;

125; 160

Thermal resistance: >0,5 m²K/W (shaft)

Flow resistance: acc. EN 13384-1

Mechanical resistance:

Not vertical installation between two supports:

pp-s: n.p.d.

*pp-flex:* n.p.d.

Condensate exposure resistance:givenThermal load resistance:T120Reaction to fire acc. EN 13501-1:E

Material: TEC-PPS = Polypropylen-rigid TEC-PP-FLEX = Polypropylen-flexible

Recycling:



**EN ISO 14021** 

Outer wall