



## Declaration of Performance

Nr. 001 DoP/13-02-2017 Ausf. 001

1. Unique identification code of the product type

**Flue Systems with flex or rigid innerpipe and fitting of polypropylene according to EN 14471:2013+A1:2015**

2. Type and designation allowing identification of the construction product as required pursuant to Article 11 (4):

Delivery model 1 - PolyTop „rigid“	DN 60 - 160 T120 - H1 - W2 - O20 - LI - E - U
Delivery model 2 - PolyTop „rigid“	DN 200 - 250 T120 - P1 - W2 - O20 - LI - E - U
Delivery model 3 - PolyTop „rigid“	DN 60 - 160 T120 - H1 - W2 - O00 - LI - E - U0 <sup>1)</sup>
Delivery model 4 - PolyTop „rigid“	DN 200 - 250 T120 - P1 - W2 - O00 - LI - E - U0 <sup>1)</sup>
Delivery model 5 - PolyTop „flex“	DN 60 - 110 T120 - H1 - W2 - O00 - LI - E - U0 <sup>1)</sup>
Delivery model 6 - PolyTop „flex“	DN 125 - 160 T120 - P1 - W2 - O00 - LI - E - U0 <sup>1)</sup>
Delivery model 7 - PolyStar-LAS-PP	DN 60 - 110 T120 - H1 - W2 - O00 - LE - E - U1
Delivery model 8 - PolyStar-LAS	DN 60 - 100 T120 - H1 - W2 - O00 - LE - E - U0
Delivery model 10 - PolyStar-AW-E	DN 60 - 160 T120 - H1 - W2 - O00 - LE - E - U0
Delivery model 11 - PolyStar-AW-E	DN 200 - 250 T120 - P1 - W2 - O00 - LE - E - U0

<sup>1)</sup> Delivery model from 3 to 6 assembled in fire-resistance chimney

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

**Convey products of combustion from the heating appliances to the outside atmosphere and supply air for combustion**

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

**TTC Energie- und Abgastechnik GmbH**  
**Mussinanstr. 63**  
**92318 Neumarkt**

5. Where applicable, name and contact address of the authorized representative whose mandate covers the tasks specified in Article 12 (2):

6. System or systems of assessment and verification of constancy of performance of the construction product as set out in CPR, Annex 5:

**System 2+ / System 3**

7. In case of the declaration of performance concerning a construction product covered by the harmonized standard:

The notified body for factory production control 0036, carried out initial inspection of the factory and of the factory production control and the continuous surveillance, assessment and evaluation of factory production control and issued the certificate of conformity of the factory production control.



## 8. Declared performance

	Essential characteristics	Performance	Harmonized technical Specification
8.1	Compressive strength  (max. headaway without intermediate support)	Duct segment and Delivery model: Delivery model 1 (DN 60 – 160) ≤ 30 m Delivery model 2 (DN 200 – 250) ≤ 30 m Delivery model 3 (DN 60 – 160) ≤ 30 m Delivery model 4 (DN 200 – 250) ≤ 30 m Delivery model 5 (DN 60 – 110) ≤ 30 m Delivery model 6 (DN 125 – 160) ≤ 30 m Delivery model 10 (DN 60 – 160) ≤ 30 m Delivery model 11 (DN 200 – 250) ≤ 30 m	EN 14471:2013 + A1:2015
8.2	Resistance to wind load (max. standing height above last support)	<b>2,0 m</b>	EN 14471:2013 + A1:2015
8.3	Resistance to wind load (Temperature class, distance from the outer surfaces to combustible materials, class of the outer pipes)	<b>3,0 m</b>	EN 14471:2013 + A1:2015
8.4	Fire prevention  (Temperature class, distance from the outer surfaces to combustible materials, class of the outer pipes)	Delivery model 1 (DN 60 – 160) <b>T120 – O20 – U</b> Delivery model 2 (DN 200 – 250) <b>T120 – O20 – U</b> Single wall without casing, tested in front of walls with full and permanent ventilation Delivery model 3 (DN 60 – 160) <b>T120 – O00 – U0<sup>1)</sup></b> Delivery model 4 (DN 200 – 250) <b>T120 – O00 – U0<sup>1)</sup></b> Delivery model 5 (DN 60 – 110) <b>T120 – O00 – U0<sup>1)</sup></b> Delivery model 6 (DN 125 – 160) <b>T120 – O00 – U0<sup>1)</sup></b> Delivery model 8 (DN 60 – 110) <b>T120 – O00 – U0<sup>2)</sup></b> Delivery model 10 (DN 60 – 110) <b>T120 – O00 – U0<sup>2)</sup></b> Delivery model 11 (DN 125 – 250) <b>T120 – O00 – U0<sup>2)</sup></b> Installed in non combustible duct 2) or metal tubes 1) with permanent ventilation Delivery model 7 (DN 60 – 110) <b>T120 – O00 – L1</b> With outer flame-resistant protection pipe with permanent ventilation <b>The distances do not apply for wall, ceiling or roof penetrations. Please consider the respective national firing regulation.</b>	EN 14471:2013 + A1:2015
8.5	Gas tightness (pressure class)	Delivery model 1, 3, 5, 7, 8, 9, and 10, (DN 60 – 160): <b>H1</b> Delivery model 2, 4, 6, und 11, (DN 125 – 250): <b>P1</b>	EN 14471:2013 + A1:2015
8.6	Temperature class (max. flue gas)	<b>T 120</b>	EN 14471:2013 + A1:2015
8.7	Dimensions	Delivery model 1 and 3 PolyTop „rigid“ (DN 60, 80, 100, 110, 125 and 160) Delivery model 2 and 4 PolyTop „rigid“ (DN 200 and 250) Delivery model 5 PolyTop „flex“ (DN 60, 80, 100 and 110) Delivery model 6 PolyTop „flex“ (DN 125 and 160) Delivery model 7 PolyTwin (DN 60, 80 and 110) Delivery model 8 PolyClassic (DN 60, 80 and 110) Delivery model 10 IronPoly (DN 60, 80, 110, 125 and 160) Delivery model 11 IronPoly (DN 200 and 250)	EN 14471:2013 + A1:2015
8.8	Thermal resistance m <sup>2</sup> K/W	<b>R 00</b>	EN 14471:2013 + A1:2015

	<b>Essential characteristics</b>	<b>Performance</b>	<b>Harmonized technical Specification</b>
8.9	Flow resistance of chimney sections (r = average roughness of inner line)	<b>rigid pipe r = 0,5</b> <b>flexible pipe r = 1,0</b>	EN 14471:2013 + A1:2015
8.10	Flow resistance of chimney fittings ( $\zeta$ = resistance coefficient)	$\zeta$ -values according to table B8 of the EN 13384.1	EN 14471:2013 + A1:2015
8.11	Flexural textile length (distance among support for not vertical assembly)	<b>≤ 1.500 mm</b>	EN 14471:2013 + A1:2015
8.12	Flexural textile length (max. inclination)	Delivery model 1 to 4 and 7 to 11 <b>- 87°</b> Delivery model 5 und 6 <b>- 0° - 45°</b>	EN 14471:2013 + A1:2015
8.13	Condensate resistance	<b>W</b>	EN 14471:2013 + A1:2015
8.14	Corrosion resistance	<b>2</b>	EN 14471:2013 + A1:2015
8.15	Resistance to UV (installation class)	Delivery model 1 to 6 <b>LI</b> Delivery model 7 to 11 <b>LE</b>	EN 14471:2013 + A1:2015
8.16	Durability against thermal load	<b>T120</b> <b>Suitable also for block heating stations and CHP plants, provided that a temperature limiter with 110° C cut-out limit is integrated into the system.</b> <b>Flue temperature in continuous operation should be max. 100 ° C .</b>	EN 14471:2013 + A1:2015
8.17	Reaction to fire	<b>E (bad reaction to fire)</b>	EN 14471:2013 + A1:2015

The performance of the product identified at point 1 and 2 is in conformity with the declared performance at point 8.

This declaration of performance is issued under the sole responsibility of the manufacturer identified in point 4.

Signed for manufacturer:

Neumarkt, 13 February 2017

Tobias Kosmehl, Legal Responsible TTC Energie- und Abgastechnik GmbH