

# **Declaration of Performance**



Nº DOP: 0432-CPR-00095-115ST

1. Unique identification code of the product types:

# Rigid flue liners and connecting flue pipes made of stainless steel System MKKS "Standard" EN 1856-2: 2009

2. Identification of the construction product, in accordance with Article 11 § 4:

|     | System MKKS –      | "Standard"    | – flue liners |
|-----|--------------------|---------------|---------------|
| 01  | T200 – H1 – W – V2 | – L99050 – O  | DN(080- 250)  |
|     |                    | – L99060 – O  | DN(300-400)   |
|     |                    | – L99080 – O  | DN(450- 500)  |
| 01A | T120 – H1 – W – V2 | – L99050 – O  | DN(080- 100)  |
| 02  | T200 – H1 – W – Vm | .– L20050 – O | DN(060)       |
| 02A | T120 – H1 – W – Vm | .– L20050 – O | DN(060)       |
| 03  | T450 – N1 – W – V2 | – L99050 – G  | DN(080- 250)  |
|     |                    | – L99060 – G  | DN(300- 400)  |
|     |                    | – L99080 – G  | DN(450- 500)  |

# System MKKS - "Standard" - connecting flue pipes

| 01  | T200 – H1 – W – V2 | – L99050 – OXXXNM | DN(080- 250) |
|-----|--------------------|-------------------|--------------|
|     |                    | – L99060 – OXXXNM | DN(300-400)  |
|     |                    | – L99080 – OXXXNM | DN(450-500)  |
| 01A | T120 – H1 – W – V2 | – L99050 – O375NM | DN(080-100)  |
| 02  | T200 – H1 – W – Vm | L20050 - O375NM   | DN(060)      |
| 02A | T120 – H1 – W – Vm | L20050 - O375NM   | DN(060)      |
| 03  | T450 – N1 – W – V2 | - L99050 - GXXXNM | DN(080- 250) |
|     |                    | - L99060 - GXXXNM | DN(300-400)  |
|     |                    | - L99080 - GXXXNM | DN(450- 500) |

XXX – distance to combustible: 3 x nominal diameter at least 375 mm NM – not measured value

3. Use or intended use of the construction product in accordance with the relevant harmonized technical specification as provided by the manufacturer:

# Evacuation of combustion products from the furnace to the outside atmosphere (positive and negative pressure)

4. Name, company name or trademark and contact address of the manufacturer, in accordance with Article 11 § 5:

## MK Sp. z o.o.

Kadłubia, ul. Kominowa 5 PL 68-200 Żary Tel: +48684581919; Fax: +48684581914

e-mail: sekretariat@mkzary.pl

5. Name and contact address of the authorized representative whose mandate covers the tasks specified in Article 12 §2:

#### not applicable

6. The system or systems of assessment and verification of constancy of performance of construction product in accordance with Annex V:

System 2+ and System 4

#### 7. Notified body certifying the factory production control No 0432

### Materialprüfungsamt Nordrhein-Westfalen Marsbruchstraβe 186; D-44287 Dortmund

has carried the initial inspection of the factory and control of factory production and performs the continuous surveillance, assessment and approval of factory production control and has issued the compliance certificate N° 0432-CPR-00095-115 for the factory production control.

### 8. Declared performance in accordance with EN 1856-2:2009, annex ZA

| Essential characteristics   | Performance   | Comments   |  |
|---|---|--|--|
| Materials and sheet thicknesses                                     |   |  |  |
| Exhaust pipe  | 01, 03: DN (80-250) 1.4521 od 0,5 mm (minimum 0,45 mm) DN (300-400) 1.4521 od 0,6 mm (minimum 0,54 mm) DN (450-500) 1.4521 od 0,8 mm (minimum 0,72 mm) 02 DN (60) 1.4301 0,5 mm (minimum 0,45 mm)   | Version "A" type<br>DN: 60, 80, 100                        |  |
| Thermal insulation  | Not applicable  |  |  |
| Sealing   | Seals according to EN 14241-1   | For T120 - EPDM gaskets<br>For T200 - Silicone gaskets     |  |
|   | Mechanical strength   |  |  |
| Compressive strength Segments of the chimney, fittings and supports | DN (60-250): to 30 m<br>DN (300-500): to 20 m   | For more information, see the manual                       |  |
| Non-vertical installation   | 3 m at 45°  | The maximum distance between two supports                  |  |
| 13  | Working conditions  |  |  |
| Fire resistance   | 01, 02: NOT Flue liner: T200 - O Connecting pipes: T200 - OXXXNM XXX=3 x DN , at least 375 mm Version "A" type: NOT Flue liner: T120 - O Connecting pipes: T120 - O375NM  03: YES Flue liner: T450 - G Connecting pipes: T450 - GXXXNM XXX=3 x DN , at least 375 mm | NM – not measured<br>XXX – distance to combustible<br>(mm) |  |
| Tightness   | 01, 02: H1 (leakage rate for 5000Pa: less than 0,006 [l s-1 m-2] 03: N1 (leakage rate for 40Pa: less than 2,0 [l s-1 m-2]   | Working in positive pressure  Working in negative pressure |  |
| Flow resistance<br>Fittings and terminals                           | According to EN 13384-1, R = 1 mm   | Normative value: see the method of calculation             |  |
| Thermal resistance  | 0 m²K/W   | Specified at 200 °C  |  |

|  | Resistance to thermal shock  |  |  |
|--|--|--|--|
| Heat load at nominal temperature           | <b>01, 02</b> : T200<br><b>Version "A" type</b> : T120<br><b>03</b> : T450             | Test temperature 250°C Test temperature 150°C Test temperature 550°C |  |
| Sootfire resistance                        | 03: YES (designation G)  | Tested at 1000°C (30 min.)   |  |
| Southire resistance                        | 01, 02: NOT (designation O)  | Tested at nominal temperature  |  |
|  | Durability   |  |  |
| Water vapor diffusion and water resistance | YES (designation W)  |  |  |
| Condensate penetration resistance          | YES (designation W)  |  |  |
| Corrosion resistance                       | 01, 03: V2   | For gas, fuel oil and wood (according to EN 1443:2019)               |  |
|  | <b>02</b> : Vm   | For gas  |  |
| Freeze-thaw resistance                     | YES  |  |  |
| Additional information                     |  |  |  |
| Carrying away of condensate                | (D) M251 instruction of Sewage Disposal Methods<br>Association                         | Necessary neutralization of sewage                                   |  |
| Storage conditions                         | Do not store in corrosive environment  |  |  |
| Methods of cleaning                        | Do not use the tools of black steel  |  |  |
| Position of cleaning openings              | (D): According to DIN 18 160   | Observe the national regulations                                     |  |
| Identification of flue systems             | (D): According to DIN 18 160 Durable plate, mounted on installation, housing or casing | Observe the national regulations                                     |  |
| Protection against contact                 | Labeling or spacers at temperatures ≥ 70 °C  | EN 1856-1  |  |
| Direction of flow                          | Core pipe female socket upwards  |  |  |
| Installation and assembly                  | Follow the instructions  |  |  |

9. The performance of the product identified in points 1 and 2 is consistent with the declared performance in point 8.

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

On behalf of the manufacturer signed:

Kinga Pachnik - Managing Director

Ireneusz Koman - Plant Director

Żary 09-05-2022



## **Declaration of Performance**



Nº DOP: 0432-CPR-00095-115PR

1. Unique identification code of the product types:

# Rigid flue liners and connecting flue pipes made of stainless steel System MKKS "Premium" EN 1856-2: 2009

2. Identification of the construction product, in accordance with Article 11 § 4:

|     | System MKKS –             | "Premium" –   | flue liners  |
|-----|---------------------------|---------------|--------------|
| 01  | T200 – H1 – W – V2        | – L50060 – O  | DN(060- 400) |
|     |                           | – L50080 – O  | DN(450- 500) |
| 01A | T120 – H1 – W – V2        | – L50060 – O  | DN(060- 100) |
| 02  | T200 – H1 – W – V2        | .– L50050 – O | DN(060-250)  |
| 02A | T120 – H1 – W – V2        | .– L50050 – O | DN(060- 100) |
| 03  | T450 – N1 – W – V2        | – L50060 – G  | DN(060- 400) |
|     |                           | – L50080 – G  | DN(450- 500) |
| 04  | T450 – N1 – W – V2        | .– L50050 – G | DN(060- 250) |
| 05  | T450 – N1 – D <i>–</i> V3 | – L50060 – G  | DN(060-400)  |
|     |                           | – L50080 – G  | DN(450- 500) |

## System MKKS - "Premium" - connecting flue pipes

| 01  | T200 – H1 – W – V2 | - L50060 - OXXXNM  | DN(060-400)  |
|-----|--------------------|--------------------|--------------|
|     |                    | - L50080 - OXXXNM  | DN(450-500)  |
| 01A | T120 – H1 – W – V2 | – L50060 – O375NM  | DN(060-100)  |
| 02  | T200 – H1 – W – V2 | .– L50050 – OXXXNM | DN(060-250)  |
| 02A | T120 – H1 – W – V2 | L50050 - O375NM    | DN(060-100)  |
| 03  | T450 – H1 – W – V2 | – L50060 – GXXXNM  | DN(060-400)  |
|     |                    | – L50080 – GXXXNM  | DN(450-500)  |
| 04  | T450 – N1 – W – V2 | .– L50050 – GXXXNM | DN(060- 250) |
| 05  | T450 – N1 – D – V3 | – L50060 – GXXXNM  | DN(060-400)  |
|     |                    | - L50080 - GXXXNM  | DN(450-500)  |

XXX — distance to combustible: 3 x nominal diameter at least 375 mm NM — not measured value

3. Use or intended use of the construction product in accordance with the relevant harmonized technical specification as provided by the manufacturer:

# Evacuation of combustion products from the furnace to the outside atmosphere (positive and negative pressure)

4. Name, company name or trademark and contact address of the manufacturer, in accordance with Article 11 § 5:

### MK Sp. z o.o.

Kadłubia, ul. Kominowa 5 PL 68-200 Żary

Tel: +48684581919; Fax: +48684581914 e-mail: <u>sekretariat@mkzary.pl</u>

5. Name and contact address of the authorized representative whose mandate covers the tasks specified in Article 12 §2:

#### not applicable

6. The system or systems of assessment and verification of constancy of performance of construction product in accordance with Annex V:

System 2+

## 7. Notified body certifying the factory production control No 0432

### Materialprüfungsamt Nordrhein-Westfalen Marsbruchstraβe 186; D-44287 Dortmund

has carried the initial inspection of the factory and control of factory production and performs the continuous surveillance, assessment and approval of factory production control and has issued the compliance certificate  $N^\circ$  0432-CPR-00095-115 for the factory production control.

## 8. Declared performance in accordance with EN 1856-2:2009, annex ZA

| Essential characteristics   | Performance   | Comments   |  |
|---|---|--|--|
| Materials and sheet thicknesses                                     |   |  |  |
| Exhaust pipe  | 01, 03, 05: DN (60-400) 1.4404; 1.4571 od 0,6 mm (minimum 0,54 mm) DN (450 – 500) 1.4404; 1.4571 od 0,8 mm (minimum 0,72 mm) 02, 04: DN (60-250) 1.4404; 1.4571 0,5 mm (minimum 0,45 mm)  | Version "A" type<br>DN: 60, 80, 100                        |  |
| Thermal insulation  | <b>05:</b> 30 mm pipe section insulation [density: 105 (-0/+30%) kg/m³]   |  |  |
| Sealing   | Seals according to EN 14241-1   | For T120 - EPDM gaskets<br>For T200 - Silicone gaskets     |  |
|   | Mechanical strength   |  |  |
| Compressive strength Segments of the chimney, fittings and supports | DN (60-250): to 30 m<br>DN (300-500): to 20 m   | For more information, see the manual                       |  |
| Non-vertical installation   | 3 m at 45°  | The maximum distance between two supports                  |  |
|   | Working conditions  |  |  |
| Fire resistance   | 01, 02: NOT Flue liner: T200 - O Connecting pipes: T200 - OXXXNM XXX=3 x DN , at least 375 mm Version "A" type: NOT Flue liner: T120 - O Connecting pipes: T120 - O375NM  03, 04, 05: YES Flue liner: T450 - G Connecting pipes: T450 - GXXXNM XXX=3 x DN , at least 375 mm | NM – not measured<br>XXX – distance to combustible         |  |
| Tightness   | <b>01, 02:</b> H1 (leakage rate for 5000Pa: less than 0,006 [l s <sup>-1</sup> m <sup>-2</sup> ] <b>03, 04, 05:</b> N1 (leakage rate for 40Pa: less than 2,0 [l s <sup>-1</sup> m <sup>-2</sup> ]   | Working in positive pressure  Working in negative pressure |  |
| Flow resistance<br>Fittings and terminals                           | According to EN 13384-1, R = 1 mm   | Normative value: see the method of calculation             |  |
| Thermal resistance  | <b>05:</b> 0,56 m²K/W   | Specified at 200 °C  |  |

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| Resistance to thermal shock                |   |  |  |
|--|---|--|--|
| Heat load at nominal temperature           | 01, 02: T200<br>Version "A" type: T120<br>03, 04, 05: T450                              | Test temperature 250°C Test temperature 150°C Test temperature 550°C |  |
| Sootfire resistance                        | 03, 04, 05: YES (designation G)   | Tested at 1000°C (30 min.)   |  |
|  | 01, 02: NOT (designation O)   | Tested at nominal temperature  |  |
|  | Durability  |  |  |
| Water vapor diffusion and water resistance | <b>01, 02, 03, 04:</b> YES (designation W) <b>05:</b> NOT (designation D)               |  |  |
| Condensate penetration resistance          | <b>01, 02, 03, 04:</b> YES (designation W) <b>05:</b> NOT (designation D)               |  |  |
| Corrosion resistance                       | <b>05</b> : V3  | For gas, fuel oil and solid fuels (dry running)                      |  |
|  | 01, 02, 03, 04: V2  | For gas, fuel oil and wood (according to EN 1443:2019)               |  |
| Freeze-thaw resistance                     | YES   |  |  |
| Additional information                     |   |  |  |
| Carrying away of condensate                | (D) M251 instruction of Sewage Disposal Methods<br>Association                          | Necessary neutralization of sewage                                   |  |
| Storage conditions                         | Do not store in corrosive environment   |  |  |
| Methods of cleaning                        | Do not use the tools of black steel   |  |  |
| Position of cleaning openings              | (D): According to DIN 18 160  | Observe the national regulations                                     |  |
| Identification of flue systems             | (D): According to DIN 18 160  Durable plate, mounted on installation, housing or casing | Observe the national regulations                                     |  |
| Protection against contact                 | Labeling or spacers at temperatures ≥ 70 °C   | EN 1856-1  |  |
| Direction of flow                          | Core pipe female socket upwards   |  |  |
| Installation and assembly                  | Follow the instructions   |  |  |

9. The performance of the product identified in points 1 and 2 is consistent with the declared performance in point 8.

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

On behalf of the manufacturer signed:

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