

Declaration of Performance	Metaloterm® MF	EN	1/7
No. 00373	EN 1856-1:2009	MF_DoP_00373_EN_L	

1. Unique identification code of the product-type:

Twin walled stainless steel system with insulation - Metaloterm® MF 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):

Model 1 DN (ø100-250) EN 1856-1 T200 P1 W V2 L50040 010*
 Model 1 DN (ø300) EN 1856-1 T200 P1 W V2 L50050 010*
 Model 1 DN (ø350-400) EN 1856-1 T200 P1 W V2 L50050 015*
 Model 1 DN (ø450) EN 1856-1 T200 P1 W V2 L50060 015*
 Model 1 DN (ø500-600) EN 1856-1 T200 P1 W V2 L50060 020*
 Model 1 DN (ø700) EN 1856-1 T200 P1 W V2 L50060 040*
 Model 1 DN (ø800-1000) EN 1856-1 T200 P1 W V2 L50080 040*

Model 2 DN (ø100-250) EN 1856-1 T200 H1 W V2 L50040 010*
 Model 2 DN (ø300) EN 1856-1 T200 H1 W V2 L50050 010*
 Model 2 DN (ø350-400) EN 1856-1 T200 H1 W V2 L50050 015*
 Model 2 DN (ø450) EN 1856-1 T200 H1 W V2 L50060 015*
 Model 2 DN (ø500-600) EN 1856-1 T200 H1 W V2 L50060 020*
 Model 2 DN (ø700) EN 1856-1 T200 H1 W V2 L50060 040*
 Model 2 DN (ø800-1000) EN 1856-1 T200 H1 W V2 L50080 040*

Model 3 DN (ø100-250) EN 1856-1 T450 N1 W V2 L50040 040*
 Model 3 DN (ø300) EN 1856-1 T450 N1 W V2 L50050 040*
 Model 3 DN (ø350-400) EN 1856-1 T450 N1 W V2 L50050 060*
 Model 3 DN (ø450) EN 1856-1 T450 N1 W V2 L50060 060*
 Model 3 DN (ø500-600) EN 1856-1 T450 N1 W V2 L50060 080*
 Model 3 DN (ø700) EN 1856-1 T450 N1 W V2 L50060 0160*
 Model 3 DN (ø800-1000) EN 1856-1 T450 N1 W V2 L50080 0160*

Model 4 DN (ø100-250) EN 1856-1 T450 N1 D V3 L50040 G50*
 Model 4 DN (ø300) EN 1856-1 T450 N1 D V3 L50050 G50*
 Model 4 DN (ø350-400) EN 1856-1 T450 N1 D V3 L50050 G75*
 Model 4 DN (ø450) EN 1856-1 T450 N1 D V3 L50060 G75*
 Model 4 DN (ø500-600) EN 1856-1 T450 N1 D V3 L50060 G100*
 Model 4 DN (ø700) EN 1856-1 T450 N1 D V3 L50060 G200*
 Model 4 DN (ø800-1000) EN 1856-1 T450 N1 D V3 L50080 G200*

Model 5 DN (ø100-250) EN 1856-1 T600 N1 D V3 L50040 G70*
 Model 5 DN (ø300) EN 1856-1 T600 N1 D V3 L50050 G70*
 Model 5 DN (ø350-400) EN 1856-1 T600 N1 D V3 L50050 G105*
 Model 5 DN (ø450) EN 1856-1 T600 N1 D V3 L50060 G105*
 Model 5 DN (ø500-600) EN 1856-1 T600 N1 D V3 L50060 G140*
 Model 5 DN (ø700) EN 1856-1 T600 N1 D V3 L50060 G280*
 Model 5 DN (ø800-1000) EN 1856-1 T600 N1 D V3 L50080 G280*

Model 6 DN (ø100-250) BS EN 1856-1 T450 N1 D V3 L50040 G60**
 Model 6 DN (ø300) BS EN 1856-1 T450 N1 D V3 L50050 G60**
 Model 6 DN (ø350-400) BS EN 1856-1 T450 N1 D V3 L50050 G90**
 Model 6 DN (ø450) BS EN 1856-1 T450 N1 D V3 L50060 G90**
 Model 6 DN (ø500-600) BS EN 1856-1 T450 N1 D V3 L50060 G120**
 Model 6 DN (ø700) BS EN 1856-1 T450 N1 D V3 L50060 G240**
 Model 6 DN (ø800-1000) BS EN 1856-1 T450 N1 D V3 L50080 G240**

* In free air

** In combustible shaft with ventilated fire stop

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

Convey the products of combustion from heating appliances to the outside atmosphere

Declaration of Performance	Metaloterm® MF	EN	2/7
No. 00373	EN 1856-1:2009	MF_DoP_00373_EN_L	

4. Name, registered trade name or registered trade mark and contact address of the manufacturer as required under Article 11(5):
 Ontop B.V.
 Postbus 135, 4330 AC Middelburg
 Oude Veerseweg 23, 4332 SH Middelburg
 The Netherlands
 T: +31 (0)118 68 99 00
 F: +31 (0)118 68 99 99
 E: info.nl@ontop.nl
5. Where applicable, name and contact address of the authorised 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. Notified factory production control certification body No. 0432 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 **0432-CPR-00373-40** of the factory production control.
8. In case of the declaration of performance concerning a construction product for which a European Technical Assessment has been issued:
 Not applicable
9. Declared performance

	Essential Characteristics	Performance	Harmonized technical specification
9.1	Compressive strength Chimney sections, fittings and supports	Sections and fittings: Model 1 to 6 DN (100- 300): up to 30 m Model 1 to 6 DN (350- 450): up to 15 m Model 1 to 6 DN (500- 600): up to 12 m Model 1 to 6 DN (700-1000): up to 9 m Supports: n.p.d. For further information see www.metaloterm.com	EN 1856-1:2009
9.2	Resistance to fire	(Resistance to fire from inside to outside) Model 1 DN (100- 300): T200 – 010 Model 1 DN (350- 450): T200 – 015 Model 1 DN (500- 600): T200 – 020 Model 1 DN (700-1000): T200 – 040 Model 2 DN (100- 300): T400 – 010 Model 2 DN (350- 450): T400 – 015 Model 2 DN (500- 600): T400 – 020 Model 2 DN (700-1000): T400 – 040 Model 3 DN (100- 300): T450 – 040 Model 3 DN (350- 450): T450 – 060 Model 3 DN (500- 600): T450 – 080 Model 3 DN (700-1000): T450 – 0160 Model 4 DN (100- 300): T450 – G50 Model 4 DN (350- 450): T450 – G75 Model 4 DN (500- 600): T450 – G100 Model 4 DN (700-1000): T450 – G200 Model 5 DN (100- 300): T600 – G70 Model 5 DN (350- 450): T600 – G105 Model 5 DN (500- 600): T600 – G140 Model 5 DN (700-1000): T600 – G280 Model 6 DN (100- 300): T450 – G60 Model 6 DN (350- 450): T450 – G90 Model 6 DN (500- 600): T450 – G120 Model 6 DN (700-1000): T450 – G240 Tested without cover, with back ventilated ceiling duct	EN 1856-1:2009

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No. 00373	EN 1856-1:2009	MF_DoP_00373_EN_L	

	Essential Characteristics	Performance	Harmonized technical specification
9.3	Gas tightness/leakage	Model 1 DN (100-1000): P1 Model 2 DN (100-1000): H1 Model 3 DN (100-1000): N1 Model 4 DN (100-1000): N1 Model 5 DN (100-1000): N1 Model 6 DN (100-1000): N1	EN 1856-1:2009
9.4	Flow resistance of chimney sections, fittings and terminals	According to EN 13384-1	EN 1856-1:2009
9.5	Thermal resistance	Model 1 to 6 DN (100-1000): 0,51 m²K/W tested at 200°C	EN 1856-1:2009
	Thermal shock resistance		
9.6	Sootfire resistance	Model 1 DN (100-1000): No* Model 2 DN (100-1000): No* Model 3 DN (100-1000): No* Model 4 DN (100-1000): Yes Model 5 DN (100-1000): Yes Model 6 DN (100-1000): Yes * because designated 0	EN 1856-1:2009
9.7	Thermal performance under normal operating conditions	Model 1 DN (100-1000): T200 Model 2 DN (100-1000): T200 Model 3 DN (100-1000): T450 Model 4 DN (100-1000): T450 Model 5 DN (100-1000): T600 Model 6 DN (100-1000): T450	EN 1856-1:2009
9.8	Flexural tensile strength (only for means of connection for chimney sections and fittings)	Model 1 to 6 DN (100- 300): up to 10 m Model 1 to 6 DN (350- 450): up to 10 m Model 1 to 6 DN (500- 600): up to 10 m Model 1 to 6 DN (700-1000): n.p.d.	EN 1856-1:2009
9.9	Non vertical installation	Model 1 to 6 DN (100-1000): Maximum offset between supports 3 m at 90° (inclined run, maximum distance between two fixations, supports at non vertical installation)	EN 1856-1:2009
9.10	Components subject to wind load	Model 1 to 6 DN (100- 600): Free standing height 3 m above last support Maximum spacing between lateral supports: 4 m Model 1 to 6 DN (700-1000): Free standing height 1,5 m above last support Maximum spacing between lateral supports: 4 m	EN 1856-1:2009
	Durability:		
9.11	Water and vapour diffusion resistance	Yes if W	EN 1856-1:2009
9.12	Condensate penetration resistance	Model 1 DN (100-1000): Yes Model 2 DN (100-1000): Yes Model 3 DN (100-1000): No Model 4 DN (100-1000): No Model 5 DN (100-1000): No Model 6 DN (100-1000): No	EN 1856-1:2009
9.13	Against corrosion	Model 1 DN (100-1000): V2 Model 2 DN (100-1000): V2 Model 3 DN (100-1000): V2 Model 4 DN (100-1000): V3 Model 5 DN (100-1000): V3 Model 6 DN (100-1000): V3	EN 1856-1:2009

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No. 00373			MF_DoP_00373_EN_L	

	Essential Characteristics	Performance	Harmonized technical specification
9.14	Freeze thaw resistance	Model 1 to 6 DN (100-1000): Yes	EN 1856-1:2009

10. The performance of the product identified in points 1 and 2 is in conformity with the declared performance in point 9. 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:

Middelburg, 2017-04-01

Marco Blaeke
Managing director

Declaration of Performance	Metaloterm® MF		EN	5/7
No. 00373	EN 1856-2:2009		MF_DoP_00373_EN_L	

1. Unique identification code of the product-type:

Twin walled stainless steel system with insulation - Metaloterm® MF 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):

Model 1 DN (ø100-250) EN 1856-2 T200 P1 W V2 L50040 O10
 Model 1 DN (ø300) EN 1856-2 T200 P1 W V2 L50050 O10
 Model 1 DN (ø350-400) EN 1856-2 T200 P1 W V2 L50050 O15
 Model 1 DN (ø450) EN 1856-2 T200 P1 W V2 L50060 O15
 Model 1 DN (ø500-600) EN 1856-2 T200 P1 W V2 L50060 O20
 Model 1 DN (ø700) EN 1856-2 T200 P1 W V2 L50060 O40
 Model 1 DN (ø800-1000) EN 1856-2 T200 P1 W V2 L50080 O40

Model 2 DN (ø100-250) EN 1856-2 T200 H1 W V2 L50040 O10
 Model 2 DN (ø300) EN 1856-2 T200 H1 W V2 L50050 O10
 Model 2 DN (ø350-400) EN 1856-2 T200 H1 W V2 L50050 O15
 Model 2 DN (ø450) EN 1856-2 T200 H1 W V2 L50060 O15
 Model 2 DN (ø500-600) EN 1856-2 T200 H1 W V2 L50060 O20
 Model 2 DN (ø700) EN 1856-2 T200 H1 W V2 L50060 O40
 Model 2 DN (ø800-1000) EN 1856-2 T200 H1 W V2 L50080 O40

Model 3 DN (ø100-250) EN 1856-2 T450 N1 W V2 L50040 O40
 Model 3 DN (ø300) EN 1856-2 T450 N1 W V2 L50050 O40
 Model 3 DN (ø350-400) EN 1856-2 T450 N1 W V2 L50050 O60
 Model 3 DN (ø450) EN 1856-2 T450 N1 W V2 L50060 O60
 Model 3 DN (ø500-600) EN 1856-2 T450 N1 W V2 L50060 O80
 Model 3 DN (ø700) EN 1856-2 T450 N1 W V2 L50060 O160
 Model 3 DN (ø800-1000) EN 1856-2 T450 N1 W V2 L50080 O160

Model 4 DN (ø100-250) EN 1856-2 T450 N1 D V3 L50040 G70
 Model 4 DN (ø300) EN 1856-2 T450 N1 D V3 L50050 G70
 Model 4 DN (ø350-400) EN 1856-2 T450 N1 D V3 L50050 G105
 Model 4 DN (ø450) EN 1856-2 T450 N1 D V3 L50060 G105
 Model 4 DN (ø500-600) EN 1856-2 T450 N1 D V3 L50060 G140
 Model 4 DN (ø700) EN 1856-2 T450 N1 D V3 L50060 G280
 Model 4 DN (ø800-1000) EN 1856-2 T450 N1 D V3 L50080 G280

Model 5 DN (ø100-250) EN 1856-2 T600 N1 D V3 L50040 G100
 Model 5 DN (ø300) EN 1856-2 T600 N1 D V3 L50050 G100
 Model 5 DN (ø350-400) EN 1856-2 T600 N1 D V3 L50050 G150
 Model 5 DN (ø450) EN 1856-2 T600 N1 D V3 L50060 G150
 Model 5 DN (ø500-600) EN 1856-2 T600 N1 D V3 L50060 G200
 Model 5 DN (ø700) EN 1856-2 T600 N1 D V3 L50060 G400
 Model 5 DN (ø800-1000) EN 1856-2 T600 N1 D V3 L50080 G400

3. Intended use or uses of the construction product, in accordance with the applicable harmonised 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):

Ontop B.V.
 Postbus 135, 4330 AC Middelburg
 Oude Veerseweg 23, 4332 SH Middelburg
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 E: info.nl@ontop.nl

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5. Where applicable, name and contact address of the authorised 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. Notified factory production control certification body No. 0432 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 **0432-CPR-00373-41** of the factory production control.
8. In case of the declaration of performance concerning a construction product for which a European Technical Assessment has been issued:
Not applicable

9. Declared performance

	Essential Characteristics	Performance	Harmonized technical specification
9.1	Compressive strength Chimney sections, fittings and supports	Sections and fittings: Model 1 to 5 DN (100- 300): up to 30 m Model 1 to 5 DN (350- 450): up to 15 m Model 1 to 5 DN (500- 600): up to 12 m Model 1 to 5 DN (700-1000): up to 9 m Supports: n.p.d. For further information see www.metaloterm.com	EN 1856-2:2009
9.2	Resistance to fire	(Resistance to fire from inside to outside) Model 1 DN (100- 300): T200 – 010 Model 1 DN (350- 450): T200 – 015 Model 1 DN (500- 600): T200 – 020 Model 1 DN (700-1000): T200 – 040 Model 2 DN (100- 300): T400 – 010 Model 2 DN (350- 450): T400 – 015 Model 2 DN (500- 600): T400 – 020 Model 2 DN (700-1000): T400 – 040 Model 3 DN (100- 300): T450 – 040 Model 3 DN (350- 450): T450 – 060 Model 3 DN (500- 600): T450 – 080 Model 3 DN (700-1000): T450 – 0160 Model 4 DN (100- 300): T450 – G70 Model 4 DN (350- 450): T450 – G105 Model 4 DN (500- 600): T450 – G140 Model 4 DN (700-1000): T450 – G280 Model 5 DN (100- 300): T600 – G100 Model 5 DN (350- 450): T600 – G150 Model 5 DN (500- 600): T600 – G200 Model 5 DN (700-1000): T600 – G400 Tested without cover	EN 1856-2:2009
9.3	Gas tightness/leakage	Model 1 DN (100-1000): P1 Model 2 DN (100-1000): H1 Model 3 DN (100-1000): N1 Model 4 DN (100-1000): N1 Model 5 DN (100-1000): N1	EN 1856-2:2009
9.4	Flow resistance of chimney sections fittings and terminals	According to EN 13384-1	EN 1856-2:2009

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	Essential Characteristics	Performance	Harmonized technical specification
9.5	Thermal resistance	Model 1 to 5 DN (100-1000): 0,51 m ² K/W tested at 200°C	EN 1856-2:2009
	Thermal shock resistance		
9.6	Sootfire resistance	Model 1 DN (100-1000): No* Model 2 DN (100-1000): No* Model 3 DN (100-1000): No* Model 4 DN (100-1000): Yes Model 5 DN (100-1000): Yes * because designated 0	EN 1856-2:2009
9.7	Thermal performance under normal operating conditions	Model 1 DN (100-1000): T200 Model 2 DN (100-1000): T200 Model 3 DN (100-1000): T450 Model 4 DN (100-1000): T450 Model 5 DN (100-1000): T600	EN 1856-2:2009
9.8	Flexural tensile strength (only for means of connection for chimney sections and fittings)	Model 1 to 5 DN (100- 300): up to 10 m Model 1 to 5 DN (350- 450): up to 10 m Model 1 to 5 DN (500- 600): up to 10 m Model 1 to 5 DN (700-1000): n.p.d.	EN 1856-2:2009
9.9	Non vertical installation	Model 1 to 5 DN (100-1000): Maximum offset between supports 3 m at 90° (inclined run, maximum distance between two fixations, supports at non vertical installation)	EN 1856-2:2009
9.10	Components subject to wind load	Model 1 to 5 DN (100- 600): Free standing height 3 m above last support Maximum spacing between lateral supports: 4 m Model 1 to 5 DN (700-1000): Free standing height 1,5 m above last support Maximum spacing between lateral supports: 4 m	EN 1856-2:2009
	Durability:		
9.11	Water and vapour diffusion resistance	Yes if W	EN 1856-2:2009
9.12	Condensate penetration resistance	Model 1 DN (100-1000): Yes Model 2 DN (100-1000): Yes Model 3 DN (100-1000): No Model 4 DN (100-1000): No Model 5 DN (100-1000): No	EN 1856-2:2009
9.13	Against corrosion	Model 1 DN (100-1000): V2 Model 2 DN (100-1000): V2 Model 3 DN (100-1000): V2 Model 4 DN (100-1000): V3 Model 5 DN (100-1000): V3	EN 1856-2:2009
9.14	Freeze thaw resistance	Model 1 to 5 DN (100-1000): Yes	EN 1856-2:2009

10. The performance of the product identified in points 1 and 2 is in conformity with the declared performance in point 9. 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:

Middelburg, 2017-04-01



Marco Blaëke
Managing director