

DOP-SW-004

1. Unique identification code of the product-type:

Single Wall Metal System Chimney
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):

DINAK SW

1.0 Model 1.4404 / 316L	Ø 80-300	T200 P1 W V2 L50040 O30
1.0 Model 1.4404 / 316L	Ø 350-450	T200 P1 W V2 L50050 O45
1.0 Model 1.4404 / 316L	Ø 500-600	T200 P1 W V2 L50060 O60
1.1 Model 1.4404 / 316L	Ø 80-300	T250 N1 W V2 L50040 O50
1.1 Model 1.4404 / 316L	Ø 350-450	T250 N1 W V2 L50050 O75
1.1 Model 1.4404 / 316L	Ø 500-600	T250 N1 W V2 L50060 O100
2.0 Model 1.4521 / 444	Ø 80-300	T200 P1 W V2 L99040 O30
2.0 Model 1.4521 / 444	Ø 350-450	T200 P1 W V2 L99050 O45
2.0 Model 1.4521 / 444	Ø 500-600	T200 P1 W V2 L99060 O60
2.1 Model 1.4521 / 444	Ø 80-300	T250 N1 W V2 L99040 O50
2.1 Model 1.4521 / 444	Ø 350-450	T250 N1 W V2 L99050 O75
2.1 Model 1.4521 / 444	Ø 500-600	T250 N1 W V2 L99060 O100
3.0 Model 1.4162 / S32101	Ø 80-300	T200 P1 W V2 L99040 O30
3.0 Model 1.4162 / S32101	Ø 350-450	T200 P1 W V2 L99050 O45
3.0 Model 1.4162 / S32101	Ø 500-600	T200 P1 W V2 L99060 O60
3.1 Model 1.4162 / S32101	Ø 80-300	T250 N1 W V2 L99040 O50
3.1 Model 1.4162 / S32101	Ø 350-450	T250 N1 W V2 L99050 O75
3.1 Model 1.4162 / S32101	Ø 500-600	T250 N1 W V2 L99060 O100
4.0 Model 1.4301 / 304	Ø 80-300	T200 P1 W Vm L20040 O30
4.0 Model 1.4301 / 304	Ø 350-450	T200 P1 W Vm L20050 O45
4.0 Model 1.4301 / 304	Ø 500-600	T200 P1 W Vm L20060 O60
4.1 Model 1.4301 / 304	Ø 80-300	T250 N1 W Vm L20040 O50
4.1 Model 1.4301 / 304	Ø 350-450	T250 N1 W Vm L20050 O75
4.1 Model 1.4301 / 304	Ø 500-600	T250 N1 W Vm L20060 O100

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

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

DINAK S.A.
Camiño do Laranxo, 19
36216, Vigo (SPAIN)
dinak@dinak.com

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+
System 4 (for terminals)

7. Notified factory production control certification body TÜV SÜD Industrie Service GmbH, 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 of the factory production control

8. Declared performance

Essential Characteristics	Performance	Harmonized technical specification
Compressive strength Chimney Sections, fittings and supports	Up to 72 m (See annex) See annex	EN 1856-1:2009
Resistance to fire	Models 1.0, 2.0, 3.0 and 4.0: Ø80-300: T200 – O30 Ø350-450: T200 – O45 Ø500-600: T200 – O60 Models 1.1, 2.1, 3.1 and 4.1: Ø80-300: T250 – O50 Ø350-450: T250 – O75 Ø500-600: T250 – O100	EN 1856-1:2009
Gas tightness/leakage	Models 1.0, 2.0, 3.0 and 4.0: P1 Models 1.1, 2.1, 3.1 and 4.1: N1	EN 1856-1:2009
Flow resistance of chimney sections, fittings and terminals	According to EN 13384-1	EN 1856-1:2009
Thermal resistance	0 m ² K/W	EN 1856-1:2009
Thermal shock resistance Soot fire resistance	Models 1.0, 1.1, 2.0, 2.1, 3.0, 3.1, 4.0 and 4.1: No	EN 1856-1:2009
Thermal performance under normal operating conditions	Models 1.0, 2.0, 3.0 and 4.0: T200 Models 1.1, 2.1, 3.1 and 4.1: T250	
Flexural tensile strength (only for means of connection for chimney sections and fittings)	Up to 138 m (see annex)	EN 1856-1:2009
Non vertical installation	Maximum offset between supports: 3 m at 90° (see annex)	EN 1856-1:2009
Components subject to wind load	Maximum free standing height: 3 m above last support (see annex) Maximum spacing between lateral supports: 4 m (see annex)	EN 1856-1:2009
Durability Water and vapour diffusion resistance	Models 1.0, 1.1, 2.0, 2.1, 3.0, 3.1, 4.0 and 4.1: Yes	EN 1856-1:2009
Condensate penetration resistance	Models 1.0, 1.1, 2.0, 2.1, 3.0, 3.1, 4.0 and 4.1: Yes	
Against corrosion	Models 1.0 and 1.1: V2 Models 2.0 and 2.1: V2 Models 3.0 and 3.1: V2 Models 4.0 and 4.1: Vm	
Freeze thaw resistance	Yes	EN 1856-1:2009

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

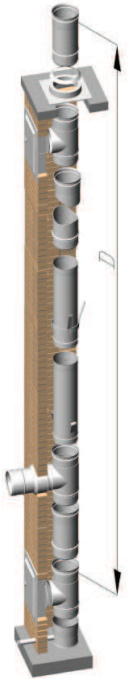
This declaration of performance is issued under the sole responsibility of the manufacturer identified in point 4.

Signed for and on behalf of the manufacturer by:

Íñigo A. Canoa (General Manager)

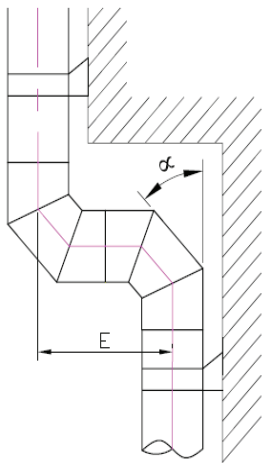
Vigo, 6th June 2013

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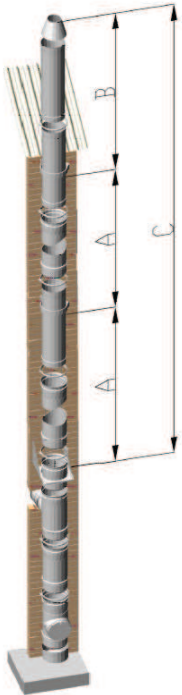


Material	COMPRESSION STRENGTH		TENSION STRENGTH	
	Height – Size D (m)		Height (m)	
	AISI 304 / 1.4401 or AISI 316L / 1.4404		AISI 304 / 1.4401 or AISI 316L / 1.4404	
80	72	138		
83	70	133		
97	60	114		
100	58	111		
110	53	101		
111	52	100		
120	48	92		
125	46	88		
130	45	85		
139	42	79		
140	41	79		
150	39	74		
153	38	72		
160	36	69		
167	35	66		
175	33	63		
180	32	61		
200	29	55		
230	25	48		
250	23	44		
280	20	39		
300	19	37		
350	17	55		
400	15	48		
450	13	43		
500	10	32		
550	9	29		
600	8	26		

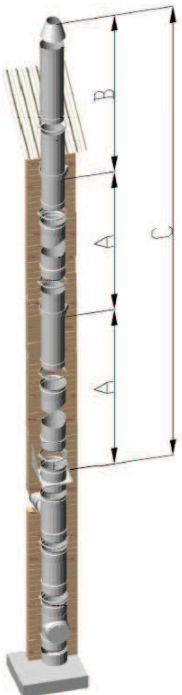
Material	NON VERTICAL INSTALLATION	
	Maximum deflection α (°)	Maximum length of the slope – Size E (m)
	AISI 304 / 1.4401 or AISI 316L / 1.4404	
80	90	3
83	90	3
97	90	3
100	90	3
110	90	3
111	90	3
120	90	3
125	90	3
130	90	3
139	90	3
140	90	3
150	90	3
153	90	3
160	90	3
167	90	3
175	90	3
180	90	3
200	90	3
230	90	3
250	90	3
280	90	3
300	90	3
350	90	3
400	90	3
450	90	3
500	90	3
550	90	3
600	90	3



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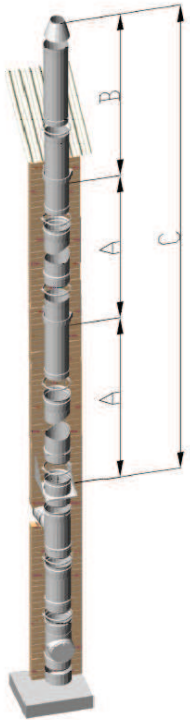


WIND LOAD RESISTANCE				
Configuration 1 (flat wall supports 086 with a self-standing support 861 at highest position)				
Max number of straight elements (020) between supports (Size A)			Max. Length from last support. (m) (Size B)	
Material	AISI 304 / 1.4401	AISI 316L / 1.4404	AISI 304 / 1.4401	AISI 316L / 1.4404
ND (mm)				
80	X			
83				
97				
100				
110				
111				
120				
125				
130				
139				
140				
150				
153				
160				
167				
175				
180				
200	4		3	2.5
230	4		3	2.5
250	4		3	2.5
280	4		3	2.5
300	4		3	2.5
350	4		3	2.5
400	4		3	2.5
450	4		3	2.5
500	4		3	2.5
550	4		3	2.5
600	4		3	2.5

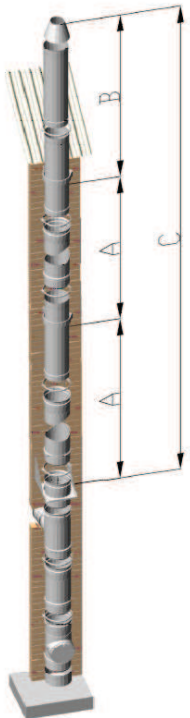


Configuration 2 (flat wall supports 086)		
Max number of straight elements (020) between supports (Size A)		Max. Length from last support. (m) (Size B)
Material	AISI 304 / 1.4401 or AISI 316L / 1.4404	
ND (mm)		
80	4	1.5
83	4	1.5
97	4	1.5
100	4	1.5
110	4	1.5
111	4	1.5
120	4	1.5
125	4	1.5
130	4	1.5
139	4	1.5
140	4	1.5
150	4	1.5
153	4	1.5
160	4	1.5
167	4	1.5
175	4	1.5
180	4	1.5
200	4	1.5
230	4	1.5
250	4	1.5
280	4	1.5
300	4	1.5
350	4	1.5
400	4	1.5
450	4	1.5
500	4	1.5
550	4	1.5
600	4	1.5

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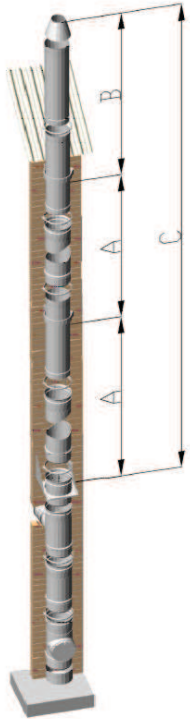


Configuration 3 (flat adjustable supports 831)		
Distance to wall: 70-120 mm		
	Max number of straight elements (020) between supports (Size A)	Max. Length from last support. (m) (Size B)
	AISI 304 / 1.4401 or AISI 316L / 1.4404	
ND (mm)	80	3
	83	3
	97	3
	100	3
	110	3
	111	3
	120	3
	125	3
	130	3
	139	3
	140	3
	150	3
	153	3
	160	3
	167	3
	175	3
	180	3
200	3	
230	3	
250	3	
280	3	
300	3	
350	3	
400-600		

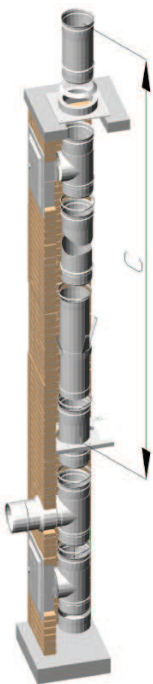


Configuration 4 (flat short cuttable supports 836)		
Distance to wall: 100-250 mm		
	Max number of straight elements (020) between supports (Size A)	Max. Length from last support. (m) (Size B)
	AISI 304 / 1.4401 or AISI 316L / 1.4404	
ND (mm)	80	3
	83	3
	97	3
	100	3
	110	3
	111	3
	120	3
	125	3
	130	3
	139	3
	140	3
	150	3
	153	3
	160	3
	167	3
	175	3
	180	3
	200	3
	230	3
	250	3
	280	3
300	3	
350	3	
400	3	
450	3	
500	3	
550	3	
600	3	

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Configuration 5 (flat long cuttable supports 846)		
Distance to wall: 250-430 mm		
	Max number of straight elements (020) between supports (Size A)	Max. Length from last support. (m) (Size B)
Material	AISI 304 / 1.4401 or AISI 316L / 1.4404	
ND (mm)		
80	2	1.5
83	2	1.5
97	2	1.5
100	2	1.5
110	2	1.5
111	2	1.5
120	2	1.5
125	2	1.5
130	2	1.5
139	2	1.5
140	2	1.5
150	2	1.5
153	2	1.5
160	2	1.5
167	2	1.5
175	2	1.5
180	2	1.5
200	2	1.5
230	2	1.5
250	2	1.5
280	2	1.5
300	2	1.5
350	2	1.5
400	2	1.5
450	2	1.5
500	2	1.5
550	2	1.5
600	2	1.5



COMPRESSIVE STRENGTH OF THE SUPPORT					
Height (m)					
Model	Adjustable base support closed 853 Size (C)	Adjustable base support extended 853 Size (C)	Adjustable floor support 856	Roof support 082	
80	377	203	197	X	
83	363	195	190		
97	311	167	162		
100	302	162	157		
110	274	147	143		
111	272	146	142		
120	251	135	131		
125	241	130	126		
130	232	125	121		
139	217	117	113		87
140	215	116	112		87
150	201	108	105		81
153	197	106	103		79
160	188	101	98	76	
167	180	97	94	73	
175	172	92	90	69	
180	167	90	87	67	
200	151	81	78	61	
230	131	70	68	53	
250	120	65	63	48	
280	107	58	56	43	
300	100	54	52	40	
350	84	58	56	X	
400	74	51	49		
450	66	45	44		
500	49	34	33		
550	45	30	30		
600	41	28	27		

DOP-SW-020

1. Unique identification code of the product-type:

Metal Flue Liner
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):

DINAK SW

1.0 Model 1.4404 / 316L	Ø80-600	T200 P1 W V2 L50040 O
1.1 Model 1.4404 / 316L	Ø80-600	T600 N1 W V2 L50040 G
2.0 Model 1.4521 / 444	Ø80-600	T200 P1 W V2 L99040 O
2.1 Model 1.4521 / 444	Ø80-600	T600 N1 W V2 L99040 G
3.0 Model 1.4162 / S32101	Ø80-600	T200 P1 W V2 L99050 O
4.0 Model 1.4301 / 304	Ø80-600	T200 P1 W Vm L20040 O
4.1 Model 1.4301 / 304	Ø80-600	T600 N1 W Vm L20040 G

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

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

DINAK S.A.
Camiño do Laranxo, 19
36216, Vigo (SPAIN)
dinak@dinak.com

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+

7. Notified factory production control certification body TÜV SÜD Industrie Service GmbH, 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 of the factory production control

8. Declared performance

Essential Characteristics	Performance	Harmonized technical specification
Compressive strength Chimney Sections, fittings and supports	Up to 72 m (See annex) See annex	EN 1856-2:2009
Flexural tensile strength (only for means of connection for chimney sections and fittings)	Up to 138 m (see annex)	EN 1856-2:2009
Non vertical installation	Maximum offset between supports: 3 m at 90°	EN 1856-2:2009

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	(see annex)	
Resistance to fire	Models 1.0, 2.0, 3.0 and 4.0: T200 – O Models 1.1, 2.1 and 4.1 T600 – G	EN 1856-2:2009
Gas tightness/leakage	Models 1.0, 2.0, 3.0 and 4.0: N1	EN 1856-2:2009
Flow resistance of chimney sections, fittings and terminals	According to EN 13384-1	EN 1856-2:2009
Thermal shock resistance Soot fire resistance	Models 1.0, 2.0, 3.0 and 4.0: No Models 1.1, 2.1 and 4.1: Yes	EN 1856-2:2009
Thermal performance under normal operating conditions	Models 1.0, 2.0, 3.0 and 4.0: T200 Models 1.1, 2.1 and 4.1: T600	
Durability Water and vapour diffusion resistance	Models 1.0, 2.0, 3.0 and 4.0: Yes Models 1.1, 2.1, 4.1: Yes	EN 1856-2:2009
Condensate penetration resistance	Models 1.0, 2.0, 3.0 and 4.0: Yes Models 1.1, 2.1, 4.1: Yes	
Against corrosion	Model 1.0: V2 Model 2.0: V2 Model 3.0: V2 Model 4.0: Vm	
Freeze thaw resistance	Yes	EN 1856-2:2009

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

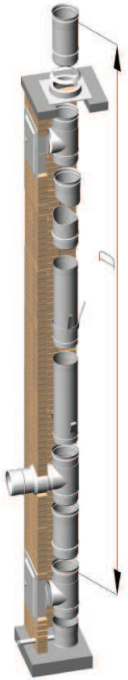
This declaration of performance is issued under the sole responsibility of the manufacturer identified in point 4.

Signed for and on behalf of the manufacturer by:

Íñigo A. Canoa (General Manager)

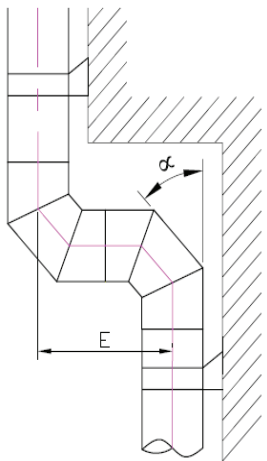
Vigo, 6th June 2013

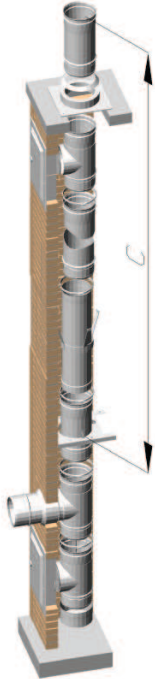
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Material	COMPRESSION STRENGTH		TENSION STRENGTH	
	Height – Size D (m)		Height (m)	
	AISI 304 / 1.4301 or AISI 316L / 1.4404		AISI 304 / 1.4301 or AISI 316L / 1.4404	
80	72	138		
83	70	133		
97	60	114		
100	58	111		
110	53	101		
111	52	100		
120	48	92		
125	46	88		
130	45	85		
139	42	79		
140	41	79		
150	39	74		
153	38	72		
160	36	69		
167	35	66		
175	33	63		
180	32	61		
200	29	55		
230	25	48		
250	23	44		
280	20	39		
300	19	37		
350	17	55		
400	15	48		
450	13	43		
500	10	32		
550	9	29		
600	8	26		

Material	NON VERTICAL INSTALLATION	
	Maximum deflection α (°)	Maximum length of the slope – Size E (m)
	AISI 304 / 1.4301 or AISI 316L / 1.4404	
80	90	3
83	90	3
97	90	3
100	90	3
110	90	3
111	90	3
120	90	3
125	90	3
130	90	3
139	90	3
140	90	3
150	90	3
153	90	3
160	90	3
167	90	3
175	90	3
180	90	3
200	90	3
230	90	3
250	90	3
280	90	3
300	90	3
350	90	3
400	90	3
450	90	3
500	90	3
550	90	3
600	90	3





COMPRESSIVE STRENGTH OF THE SUPPORT				
Height (m)				
Model	Adjustable base support closed 853 Size (C)	Adjustable base support extended 853 Size (C)	Adjustable floor support 856	Roof support 082
80	377	203	197	X
83	363	195	190	
97	311	167	162	
100	302	162	157	
110	274	147	143	
111	272	146	142	
120	251	135	131	
125	241	130	126	
130	232	125	121	
139	217	117	113	
140	215	116	112	
150	201	108	105	
153	197	106	103	
160	188	101	98	
167	180	97	94	
175	172	92	90	
180	167	90	87	
200	151	81	78	
230	131	70	68	
250	120	65	63	
280	107	58	56	
300	100	54	52	
350	84	58	56	X
400	74	51	49	
450	66	45	44	
500	49	34	33	
550	45	30	30	
600	41	28	27	

ND (mm)

DOP-SW-038

1. Unique identification code of the product-type:

Connecting flue pipes
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):

DINAK SW

1.0 Model 1.4404 / 316L	Ø80-300	T200 P1 W V2 L50040 O NM
1.1 Model 1.4404 / 316L	Ø80-300	T600 N1 D V2 L50040 G NM
2.0 Model 1.4521 / 444	Ø80-300	T200 P1 W V2 L99040 O NM
2.1 Model 1.4521 / 444	Ø80-300	T600 N1 D V2 L99040 G NM
3.0 Model 1.4301 / 304	Ø80-300	T200 P1 W Vm L20040 O NM
3.1 Model 1.4301 / 304	Ø80-300	T600 N1 D Vm L20040 G NM

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):

DINAK S.A.
Camiño do Laranxo, 19
36216, Vigo (SPAIN)
dinak@dinak.com

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+

7. Notified factory production control certification body TÜV SÜD Industrie Service GmbH, 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 of the factory production control

8. Declared performance

Essential Characteristics	Performance	Harmonized technical specification
Compressive strength Chimney Sections, fittings and supports	Up to 72 m (See annex) See annex	EN 1856-2:2009
Flexural tensile strength (only for means of connection for chimney sections and fittings)	Up to 138 m (see annex)	EN 1856-2:2009
Non vertical installation	Maximum offset between supports: 3 m at 90° (see annex)	EN 1856-2:2009
Resistance to fire	Models 1.0, 2.0 and 3.0:	EN 1856-2:2009

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	T200 – O Models 1.1, 2.1 and 3.1 T600 – GXXX NM (See Annex)	
Gas tightness/leakage	Models 1.0, 2.0 and 3.0: P1 Models 1.1, 2.1 and 3.1: N1	EN 1856-2:2009
Flow resistance of chimney sections, fittings and terminals	According to EN 13384-1	EN 1856-2:2009
Thermal shock resistance Soot fire resistance	Models 1.0, 2.0 and 3.0: No Models 1.1, 2.1 and 3.1: Yes	EN 1856-2:2009
Thermal performance under normal operating conditions	Models 1.0, 2.0 and 3.0: T200 Models 1.1, 2.1 and 3.1: T600	
Durability Water and vapour diffusion resistance	Models 1.0, 2.0 and 3.0: Yes Models 1.1, 2.1 and 3.1: Yes	EN 1856-2:2009
Condensate penetration resistance	Models 1.0, 2.0 and 3.0: Yes Models 1.1, 2.1 and 3.1: No	
Against corrosion	Models 1.0, 1.1, 2.0 and 2.1: V2 Models 3.0 and 3.1: Vm	
Freeze thaw resistance	Yes	EN 1856-2:2009

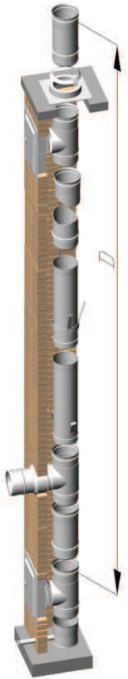
9. The performance of the product identified in points 1 and 2 is in conformity with the declared performance in point 8.

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:

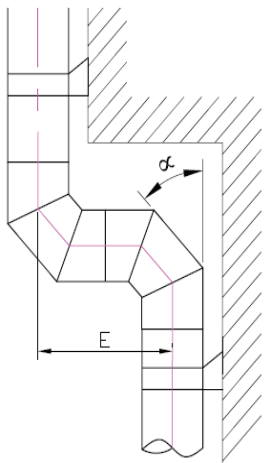
Íñigo A. Canoa (General Manager)

Vigo, 6th June 2013

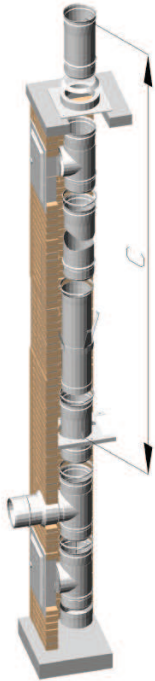


	COMPRESSION STRENGTH*		TENSILE STRENGTH	
	Material	Height – Size D (m)	Material	Height (m)
ND (mm)		1.4301 / 304; 1.4404 / 316L; 1.4521 / 444; 1.4162 / S32101		
	80	72		138
	83	70		133
	97	60		114
	100	58		111
	110	53		101
	111	52		100
	120	48		92
	125	46		88
	130	45		85
	139	42		79
	140	41		79
	150	39		74
	153	38		72
	160	36		69
	167	35		66
	175	33		63
	180	32		61
	200	29		55
	230	25		48
250	23		44	
280	20		39	
300	19		37	

* In case a higher resistance is required, check with Dinak the possibility of installing a reinforced Tee



	NON VERTICAL INSTALLATION	
	Material	Maximum length of the slope – Size E (m)
ND (mm)		1.4301 / 304; 1.4404 / 316L; 1.4521 / 444; 1.4162 / S32101
	80	3
	83	3
	97	3
	100	3
	110	3
	111	3
	120	3
	125	3
	130	3
	139	3
	140	3
	150	3
	153	3
	160	3
	167	3
	175	3
	180	3
	200	3
	230	3
250	3	
280	3	
300	3	



COMPRESSIVE STRENGTH OF THE SUPPORT					
Height (m)					
Model	Adjustable base support closed 853 Size (C)	Adjustable base support extended 853 Size (C)	Adjustable floor support 856*	Roof Support 082	
80	377	203	197	X	
83	363	195	190		
97	311	167	162		
100	302	162	157		
110	274	147	143		
111	272	146	142		
120	251	135	131		
125	241	130	126		
130	232	125	121		
139	217	117	113		87
140	215	116	112		87
150	201	108	105		81
153	197	106	103		79
160	188	101	98	76	
167	180	97	94	73	
175	172	92	90	69	
180	167	90	87	67	
200	151	81	78	61	
230	131	70	68	53	
250	120	65	63	48	
280	107	58	56	43	
300	100	54	52	40	

*Please check maximum load in the compressive strength table, in case of installing a Tee section on top of our floor support

SOOT FIRE RESISTANCE		
ND	Distance to combustible material (O)	Distance to combustible material (G)
80-125	375 NM	375 NM
130	390 NM	390 NM
139	417 NM	417 NM
140	420 NM	420 NM
150	450 NM	450 NM
153	459 NM	459 NM
160	480 NM	480 NM
167	501 NM	501 NM
175	525 NM	525 NM
180	540 NM	540 NM
200	600 NM	600 NM
230	690 NM	690 NM
250	750 NM	750 NM
280	840 NM	840 NM
300	900 NM	900 NM