

## DOP-DW-001

### 1. Unique identification code of the product-type:

Multi 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 DW

1.0 Model 1.4404 / 316L	Ø 80-300	T600 N1 D V2 L50040 G60
1.0 Model 1.4404 / 316L	Ø 350-450	T600 N1 D V2 L50050 G90
1.0 Model 1.4404 / 316L	Ø 500-600	T600 N1 D V2 L50050 G120
1.1 Model 1.4404 / 316L	Ø 80-300	T450 N1 D V2 L50040 G60
1.1 Model 1.4404 / 316L	Ø 350-450	T450 N1 D V2 L50050 G90
1.1 Model 1.4404 / 316L	Ø 500-600	T450 N1 D V2 L50050 G120
1.2 Model 1.4404 / 316L with seal	Ø 80-300	T200 P1 W V2 L50040 O00
1.2 Model 1.4404 / 316L with seal	Ø 350-600	T200 P1 W V2 L50050 O00
2.0 Model 1.4521 / 444	Ø 80-300	T600 N1 D V2 L50040 G60
2.0 Model 1.4521 / 444	Ø 350-450	T600 N1 D V2 L50050 G90
2.0 Model 1.4521 / 444	Ø 500-600	T600 N1 D V2 L50050 G120
2.1 Model 1.4521 / 444	Ø 80-300	T450 N1 D V2 L99040 G60
2.1 Model 1.4521 / 444	Ø 350-450	T450 N1 D V2 L99050 G90
2.1 Model 1.4521 / 444	Ø 500-600	T450 N1 D V2 L99050 G120
2.2 Model 1.4521 / 444 with seal	Ø 80-300	T200 P1 W V2 L99040 O00
2.2 Model 1.4521 / 444 with seal	Ø 350-600	T200 P1 W V2 L99050 O00
3.0 Model 1.4162 / S32101	Ø 80-600	T200 P1 W V2 L99050 O00
4.0 Model 1.4301 / 304	Ø 80-300	T600 N1 D Vm L20040 G60
4.0 Model 1.4301 / 304	Ø 350-450	T600 N1 D Vm L20050 G90
4.0 Model 1.4301 / 304	Ø 500-600	T600 N1 D Vm L20050 G120
4.1 Model 1.4301 / 304	Ø 80-300	T450 N1 D Vm L20040 G60
4.1 Model 1.4301 / 304	Ø 350-450	T450 N1 D Vm L20050 G90
4.1 Model 1.4301 / 304	Ø 500-600	T450 N1 D Vm L20050 G120
4.2 Model 1.4301 / 304 with seal	Ø 80-300	T200 P1 W Vm L20040 O00
4.2 Model 1.4301 / 304 with seal	Ø 350-600	T200 P1 W Vm L20050 O00

### 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  
tlf: +34 986 452 526

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

Not applicable

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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
<b>Compressive strength</b> Chimney Sections, fittings and supports	Up to 21 m (See annex) See annex	EN 1856-1:2009
<b>Resistance to fire</b>	Models 1.0, 2.0 and 4.0: Ø80-300: T600 – G60 Ø350-450: T600 – G90 Ø500-600: T600 – G120  Models 1.1, 2.1 and 4.1: Ø80-300: T450 – G60 Ø350-450: T450 – G90 Ø500-600: T450 – G120  Models 1.2, 2.2, 3.0 and 4.2: T200 – O00	EN 1856-1:2009
<b>Gas tightness/leakage</b>	Models 1.0, 1.1, 2.0, 2.1, 4.0, 4.1: N1 Models 1.2, 2.2, 3.0, 4.2: P1	EN 1856-1:2009
<b>Flow resistance of chimney sections, fittings and terminals</b>	According to EN 13384-1	EN 1856-1:2009
<b>Thermal resistance</b>	Ø80-300: 0.286 - 0.351 m <sup>2</sup> K/W tested at 200°C Ø350-600: 0.442 - 0.459 m <sup>2</sup> K/W tested at 200°C	EN 1856-1:2009
<b>Thermal shock resistance</b> Soot fire resistance	Models 1.0, 1.1, 2.0, 2.1, 4.0, 4.1: Yes Models 1.2, 2.2, 3.0, 4.2: No	EN 1856-1:2009
Thermal performance under normal operating conditions	Models 1.0, 2.0, 4.0: T600 Models 1.1, 2.1, 4.1: T450 Models 1.2, 2.2, 3.0, 4.2: T200	
<b>Flexural tensile strength (only for means of connection for chimney sections and fittings)</b>	Up to 68 m ( see annex)	EN 1856-1:2009
<b>Non vertical installation</b>	Maximum offset between supports: 3 m at 90° (see annex)	EN 1856-1:2009
<b>Components subject to wind load</b>	Maximum free standing height: 2.5 m above last support (see annex) Maximum spacing between lateral supports: 4 m (see annex)	EN 1856-1:2009
<b>Durability</b> Water and vapour diffusion resistance	Models 1.0, 1.1, 2.0, 2.1, 4.0, 4.1: Yes Models 1.2, 2.2, 3.0, 4.2: Yes	EN 1856-1:2009
Condensate penetration resistance	Models 1.0, 1.1, 2.0, 2.1, 4.0, 4.1: No Models 1.2, 2.2, 3.0, 4.2: Yes	

Against corrosion	Models 1.0, 1.1, 1.2: V2 Models 2.0, 2.1, 2.2; V2 Model 3.0: V2 Models 4.0, 4.1, 4.2: Vm	
<b>Freeze thaw resistance</b>	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.**

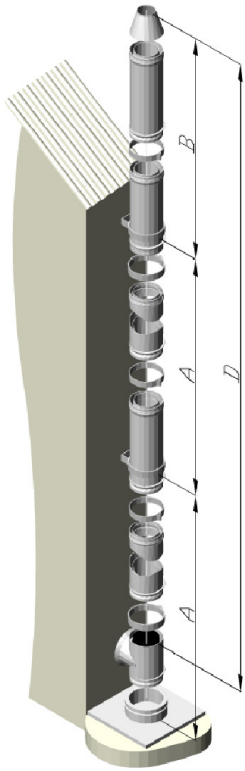
**This declaration of performance is issued under the sole responsibility of the manufacturer identified in point 4.**

**Signed for and on behalf of the manufacturer by:**

Íñigo A. Canoa (General Manager)

Vigo, 6<sup>th</sup> June 2013

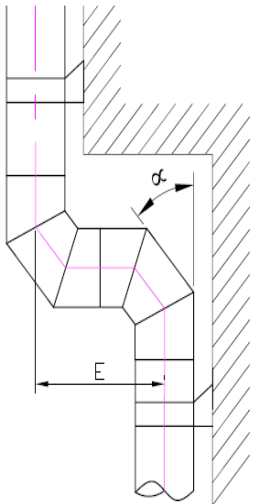
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		DINAK DW					
		COMPRESSIVE STRENGTH*			TENSILE STRENGTH		
		Height – Size D (m)			Height (m)		
Outer material	1.4301 / 304 1.4404 / 316L 1.4521 / 444 1.4509 / 441 1.4075 / 430	Galvanized steel	Copper	1.4301 / 304 1.4404 / 316L 1.4521 / 444 1.4509 / 441 1.4075 / 430	Galvanized steel	Copper	
ND (mm)	80	21	21	15	68	68	NPD**
	100	18	18	13	58	58	NPD
	130	15	15	11	48	48	NPD
	150	13	13	9	43	43	NPD
	160	13	13	9	41	41	NPD
	180	11	11	8	37	37	NPD
	200	10	10	7	34	34	NPD
	250	9	9	6	28	28	NPD
	300	7	7	5	24	24	NPD
	350	6	6	5	16	16	NPD
	400	6	6	5	14	14	NPD
	450	5	5	5	13	13	NPD
	500	4	4	4	11	11	NPD
	550	4	4	4	10	10	NPD
	600	4	4	4	10	10	NPD

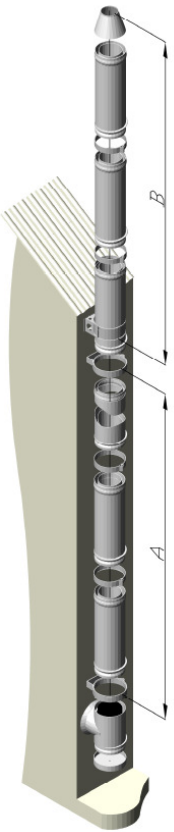
\* In case a higher resistance is required, check with Dinak the possibility of installing a reinforced Tee

\*\* NPD: No performance determined

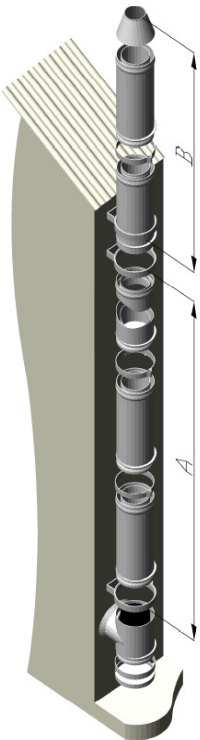


		NON VERTICAL INSTALLATION					
		MAX. DEFLECTION $\alpha$ (°)			MAX. LENGTH OF THE SLOPE – Size E (m)		
Outer material	1.4301 / 304 1.4404 / 316L 1.4521 / 444 1.4509 / 441	Galvanized steel 1.4075 / 430	Copper	1.4301 / 304 1.4404 / 316L 1.4521 / 444 1.4509 / 441	Galvanized steel 1.4075 / 430	Copper	
ND (mm)	80	90	90	3	3	1	
	100	90	90	3	3	1	
	130	90	90	3	3	1	
	150	90	90	3	3	1	
	160	90	90	3	3	1	
	180	90	90	3	3	1	
	200	90	90	3	3	1	
	250	90	90	3	3	1	
	300	90	90	3	3	1	
	350	90	90	3	3	1	
	400	90	90	3	3	1	
	450	90	90	3	3	1	
	500	90	90	3	3	1	
	550	90	90	3	3	1	
	600	90	90	3	3	1	

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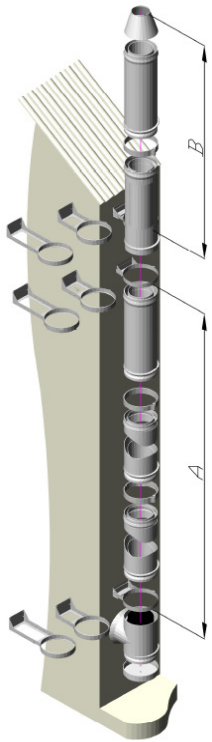


DINAK DW								
WIND LOAD RESISTANCE								
CONFIGURATION 1: WALL SUPPORTS 080 / SELF-STANDING SUPPORT 861								
Outer material	Max number of straight elements (020) between supports (Size A)			Max. Length from last support. (m) (Size B)				
	1.4301 / 304 1.4404 / 316L 1.4521 / 444 1.4509 / 441	Galvanized steel 1.4075 / 430	Copper	1.4301 / 304 1.4404 / 316L 1.4521 / 444 1.4509 / 441	Galvanized steel 1.4075 / 430	Copper		
ND (mm)	80	X	X	X	X	X		
	100							
	130						4	2,5
	150						4	2,5
	160						4	2,5
	180						4	2,5
	200						4	2,5
	250						4	2,5
	300						4	2,5
	350						4	2,5
	400						4	2,5
	450						4	2,5
	500						4	2,5
	550						4	2,5
	600						4	2,5

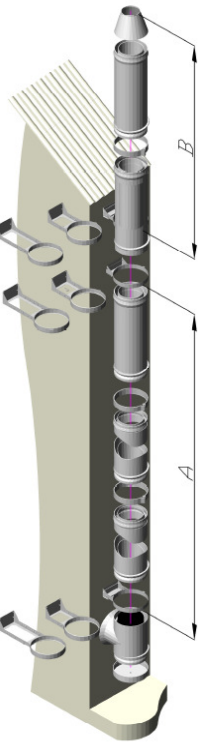


CONFIGURATION 2: WALL SUPPORTS 080 / FLAT WALL SUPPORT 086										
Outer material	Max number of straight elements (020) between supports (Size A)			Max. Length from last support. (m) (Size B)						
	1.4301 / 304 1.4404 / 316L 1.4521 / 444 1.4509 / 441	Galvanized steel 1.4075 / 430	Copper	1.4301 / 304 1.4404 / 316L 1.4521 / 444 1.4509 / 441	Galvanized steel 1.4075 / 430	Copper				
ND (mm)	80	X	X	X	X	X				
	100						4	3	2,4	1,5
	130						4	3	2,4	1,5
	150						4	3	2,4	1,5
	160						4	3	2,4	1,5
	180						4	3	2,4	1,5
	200						4	3	2,4	1,5
	250						4	3	2,4	1,5
	300						4	3	2,4	1,5
	350						4	3	1,5	1,5
	400						4	3	1,5	1,5
	450						4	3	1,5	1,5
	500						4	3	1,5	1,5
	550						4	3	1,5	1,5
	600						4	3	1,5	1,5

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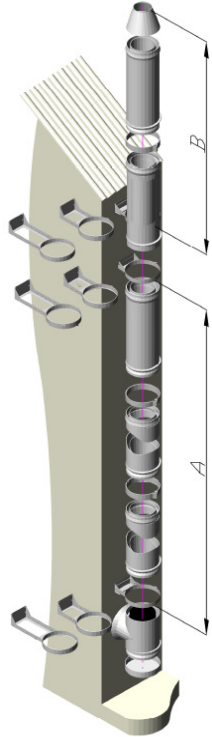


CONFIGURATION 3: ADJUSTABLE WALL SUPPORTS 083 / FLAT ADJ. WALL SUPPORTS 831						
Distance to wall (083/831) : 70-120 mm						
Outer material	Max number of straight elements (020) between supports (Size A)			Max. Length from last support. (m) (Size B)		
	1.4301 /304 1.4404 / 316L 1.4521 / 444 1.4509 / 441	Galvanized steel 1.4075 / 430	Copper	1.4301 /304 1.4404 / 316L 1.4521 / 444 1.4509 / 441	Galvanized steel 1.4075 / 430	Copper
80	3	X	2	1,5	X	1,5
100	3		2	1,5		1,5
130	3		2	1,5		1,5
150	3		2	1,5		1,5
160	3		2	1,5		1,5
180	3		2	1,5		1,5
200	3		2	1,5		1,5
250	X	X	X	X	X	X
300						
350						
400						
450						
500						
550						
600	X	X	X	X	X	X



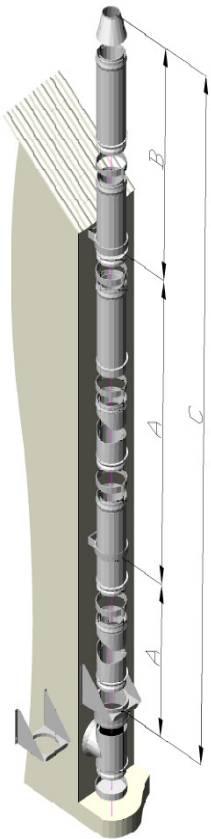
CONFIGURATION 4: SHORT CUTTABLE WALL SUPPORTS 835 / FLAT SHORT CUTTABLE WALL SUPPORTS 836						
Distance to wall (835/836) : 100-250 mm						
Outer material	Max number of straight elements (020) between supports (Size A)			Max. Length from last support. (m) (Size B)		
	1.4301 /304 1.4404 / 316L 1.4521 / 444 1.4509 / 441	Galvanized steel 1.4075 / 430	Copper	1.4301 /304 1.4404 / 316L 1.4521 / 444 1.4509 / 441	Galvanized steel 1.4075 / 430	Copper
80	3	X	X	1,5	X	X
100	3			1,5		
130	3			1,5		
150	3			1,5		
160	3			1,5		
180	3			1,5		
200	3			1,5		
250	3			1,5		
300	3			1,5		
350	3			1,5		
400	3			1,5		
450	3			1,5		
500	3			1,5		
550	3			1,5		
600	3			1,5		

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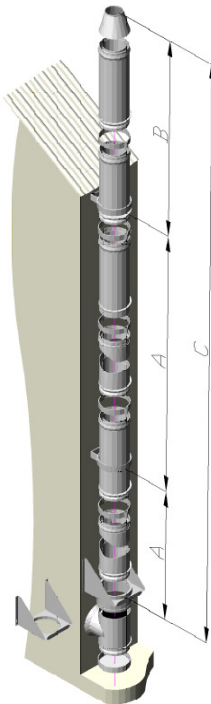
CONFIGURATION 5: LONG CUTTABLE WALL SUPPORTS 845 / FLAT LONG CUTTABLE WALL SUPPORTS 846							
Distance to wall (845/846) : 250-430 mm							
Max number of straight elements (020) between supports (Size A)				Max. Length from last support. (m) (Size B)			
Outer material	1.4301 / 304 1.4404 / 316L 1.4521 / 444 1.4509 / 441	Galvanized steel 1.4075 / 430	Copper	1.4301 / 304 1.4404 / 316L 1.4521 / 444 1.4509 / 441	Galvanized steel 1.4075 / 430	Copper	
ND (mm)	80	2	X	1,5	X	X	
	100	2		1,5			
	130	2		1,5			
	150	2		1,5			
	160	2		1,5			
	180	2		1,5			
	200	2		1,5			
	250	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					

## DOP-DW-001



DINAK DW						
COMPRESSIVE STRENGTH OF THE SUPPORT						
MAX. LOAD (m)						
Outer material	1.4301 / 304 ; 1.4404 / 316L 1.4521 / 444; 1.4509 / 441 1.4075 / 430; Galvanized steel					
Model	Adjustable base support closed 085/853 Size (C)	Adjustable base support extended 085/853 Size (C)	Adjustable floor support 856*	Roof support 082	Roof support 082 Galvanized	Joist floor support 903
80	85	46	44	35	25	42
100	73	39	38	30	21	36
130	60	32	31	24	18	29
150	53	29	28	22	16	26
160	51	27	26	21	15	25
180	46	25	24	19	13	22
200	42	22	22	17	12	21
250	35	19	18	14	10	17
300	30	16	15	12	8	14
350	25	17	16	X	X	X
400	22	15	15			
450	20	13	13			
500	18	12	12			
550	16	11	11			
600	15	10	10			

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



MAX. LOAD (m)			
Outer material	Copper		
Model	Adjustable base support closed 085/853 Size (C)	Adjustable base support extended 085/853 Size (C)	Adjustable floor support 856*
80	74	40	38
100	63	34	33
130	52	28	27
150	47	25	24
160	44	24	23
180	40	21	21
200	37	20	19
250	31	16	16
300	26	14	13
350	24	16	16
400	21	14	14
450	19	13	12
500	17	12	11
550	16	11	10
600	14	10	9

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