

# MARK BOILERS - APPENDIX C: FLUE & INLET

0660490



## **I DOP (Declaration Of Performance)**

### ***1.1 Common***

All articles (Flue and air) must be installed with the corresponding DOP's

The latest versions of these DOP's can be found on the M&G site : <https://www.mg-flues.com> -  
Download center : certifications

### ***1.2 EcoFlex***

For aluminium :

0.1 (Dn 60-250) (rigid, single) (flue) T200 PI WV1 L10/I1/I3 I50 030

For PP :

0.8 (Dn 200), (rigid, single) (flue) T120 PI W1/2 030 LI E U

### ***1.3 PowerFlex***

For aluminium :

0.1 (Dn 60-250) (rigid, single) (flue) T200 PI WV1 L10/I1/I3 I50 030

### ***1.4 MegaFlex***

For aluminium :

0.1 (Dn 60-250) (rigid, single) (flue) T200 PI WV1 L10/I1/I3 I50 030

## 1.5 Aluminium



### DECLARATION OF PERFORMANCE

N° 001-MG-ALU DoP

1. Unique identification code of the product-type:

#### M&G System Chimneys with Aluminum flue liner

EN 1856-1: 2009

##### Aluminum sections, fittings, and terminals

0.1	(Dn 60-250*)	(rigid, single)	(flue)	T200	P1	W	V1	L10/11/13 150	O30
0.2	(Dn 60-150)	(rigid, single)	(flue)	T250	P1	W	V1	L10/11/13 150	O40
0.4	(Dn 60/100-130/200)	(rigid, conc.)	(flue/air)	T200	P1	W	V1	L10/11/13 150	O00
0.4a	(Dn 60/100-100/150, IA)	(rigid, conc.)	(flue/air)	T200	P1	W	V1	L10/11/13 150	O00
0.5	(Dn 60/100-130/200)	(rigid, conc.)	(flue/air)	T250	P1	W	V1	L10/11/13 150	O00
0.6	(Dn 70-150)	(rigid, single)	(flue)	T250	P1	D	Vm	L11070	O40
0.7	(Dn 70-200; NEN 7203)	(rigid, single)	(flue)	T250	N1	D	Vm	L11045/063	O40
0.8	(Dn 250-400)	(rigid, single)	(flue)	T250	N1	D	Vm	L11045/063	O40
T.1	(Terminal Dn 60/100-100/150)	(roof, wall)	(flue/air)	T120	P1	W	V1	L13 150	O00
T.2	(Terminal Dn 80-80)	(roof)	(flue/air)	T120	P1	W	V1	L13 150	O30
A.1	(Dn 60/100-100/150)	(rigid, conc.)	(flue/air)	T200	P1	W	V1	L13 150	O00

\*Only several parts, no complete system

Plus manufacturer's batch or date code: see product marking

2. Intended use/es:

Products for the construction of single wall or concentric system chimneys to convey the products of combustion from heating appliances to the outside atmosphere. Systems 0.4, 0.4a, 0.5, T.1, T.2 and A.1 are also suitable to supply combustion air from the outside.

3. Manufacturer:

MUELINK & GROU B.V.  
P.O. Box 509  
9700 AM Groningen, the Netherlands  
E: info@mg-flues.com

Burgerhout B.V.  
P.O. Box 77  
9400 AB Assen, the Netherlands  
E: info@burgerhout.nl

4. Authorized representative:

Not applicable.

5. System/s AVCP:

System 2+.

6. Harmonized standard:

Notified factory production control certification body No 0476 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.

M&G Group Europe bv.

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CoC. 02043040 • VAT No. NL008486384B01 • IBAN NL64RABO0329436317 • BIC RABONL2U

7. Declared performance

	Essential Characteristics	Performance	Harmonized technical specification
1	<b>Compressive strength</b>		EN 1856-1:2009
	System 0.1, 0.2, 0.4, 0.5, 0.6, 0.7 and 0.8	Maximum height 24 m when using a support bend, unlimited if wall brackets are used every 2 m.	
	System 0.4a	Maximum height 10 m.	
	System T.1, T.2	Not applicable.	
	System A.1	Maximum 7 m.	
2	<b>Resistance to fire (tested fully enclosed with ventilated gap if applicable)</b>		
	System 0.1	T200 O30	
	System 0.2, 0.6, 0.7 and 0.8	T250 O40	
	System 0.4, 0.4a and A.1	T200 O00	
	System 0.5	T250 O00	
	System T.1	T120 O00	
	System T.2	T120 O30	
3	<b>Gas tightness</b>		
	System 0.1, 0.2, 0.4, 0.4a, 0.5, 0.6, T1, T.2 and A.1	P1	
	System 0.7 and 0.8	N1	
4	<b>Flow resistance</b>	Flow resistances acc. to EN 13384-1, see datasheet.	
5	<b>Thermal resistance</b>	0.00 m <sup>2</sup> K/W	
6	<b>Thermal shock resistance</b>	No	
7	<b>Flexural tensile strength</b>		
	Non-vertical installation		
	Systems 0.1, 0.2, 0.4, 0.4a, 0.5, 0.6, 0.7 en 0.8	The maximum deflection is 87°. The maximum length of the horizontal part is not limited. One wall bracket should be used per chimney section and every 2 m.	
	System T.1, T.2	For vertical (roof) terminals: not applicable, wall terminals, see instructions.	
	System A.1	Not applicable, only for vertical installation.	
	Wind load for external installation		
	System 0.4, 0.5, T1, T.2 and terminal accessories of system 0.7	Unlimited, brackets should be used per chimney section, see instructions. Free height above last bracket 2 m.	
	System 0.4a	Unlimited, brackets should be used per chimney section, see instructions. Free height above last bracket 1 m.	
	System 0.1, 0.2, 0.6, 0.7 and 0.8	Not applicable, only indoor application.	
	System A.1	Only in combination with corresponding metal outer wall. Maximum height 2 m, use guy-wires for lengths above 1 m.	
8	<b>Resistance against condensation, water vapor diffusion and condensate penetration</b>		
	System 0.1, 0.2, 0.4, 0.4a, 0.5, T.1, T.2 and A.1	Yes	
	System 0.6, 0.7 and 0.8	No	
9	<b>Durability against corrosion</b>		
	System 0.1, 0.2, 0.4, 0.4a, 0.5, T.1, T.2 and A.1	V1	
	System 0.6, 0.7 and 0.8	Vm	
10	<b>Durability against rainwater</b>		
	System 0.4, 0.5, T.1, T.2 and A.1	Yes, system 0.4 and 0.5 only with additional sealant, see instructions. System A.1 only with corresponding metal outer wall.	
	System 0.1, 0.2, 0.4a, 0.6, 0.7 and 0.8	No, only indoor application.	
11	<b>Freeze-thaw resistance</b>	Yes	
12	<b>Dangerous substances</b>	Does not contain dangerous substances.	Relevant national regulations

The performance of the product identified above is in conformity with the set of declared performance/s. This declaration of performance is issued, in accordance with Regulation (EU) No 305/2011, under the sole responsibility of the manufacturer identified above.

Signed for and on behalf of the manufacturer by:

Gezienus Hoving | Manufacturing Manager M&G Group Europe



Groningen (NL), 1 December 2018

# SYSTEM AND PRODUCT DESCRIPTION

Application Single wall system suitable for the discharge of flue gases and the supply of combustion air for type B and C appliances.

Nominal flue gas diameter	80, 100, 130 ,150	60, 70, 80, 100, 110, 130, 150, 180, 200, 250	80 ,100, 130 ,150
Heat resistance	0 m²K/W		
Pressure drops	See national regulation or see data from the boiler manufacturer with regards to maximum lengths		
Weight	Contact producer		
Material / wall thickness flue pipe	AL / 0,7 mm	AL / 1,5 mm	INOX / 0,4 mm
CE-marking	EN 1856-1	EN 1856-1	EN 1856-1
	0.6 T250 P1 D VM L11070 O(40)	0.1 T200 P1 W V1 L10/11/13/150 O(30)	0.1 T250 P1 W V2 L50040 O(50)
		0.2 T250 P1 W V1 L10/11/13/150 O(40)	
DoP nr.	001-MG-Alu DoP	001-MG-Alu DoP	001-MG-RVS DoP
Classification CE marking			
Norm.	EN 1856-1	EN 1856-1	EN 1856-1
Temperature class: T maximum in °C.	250	200, 250	250
Pressure class : maximum	P1	P1	P1
Corrosion resistance	D	W	W
Corrosion class	VM	V1	V2
Distance to combustable material: O(xx) xx in mm	40	30, 40	50
Wind strength	Not applicable, only indoor application.		
Compressive strength	Maximum height 24 m when using a support bend, unlimited if wall brackets are used every 2 m.		
Flexural strenght	2 m only if wall bracket are used per chimney section and every 2 m.		
Dangerous substances	N/A		

*Note: Additional application must be checked with the manufacturer*

## GENERAL

- Store material inside.
- Check the components for possible damages.
- Combine only with components from M&G Group members.
- Install according to national regulations.

Fill out the optional enclosed chimney label and place it near the chimney connection of the unit.

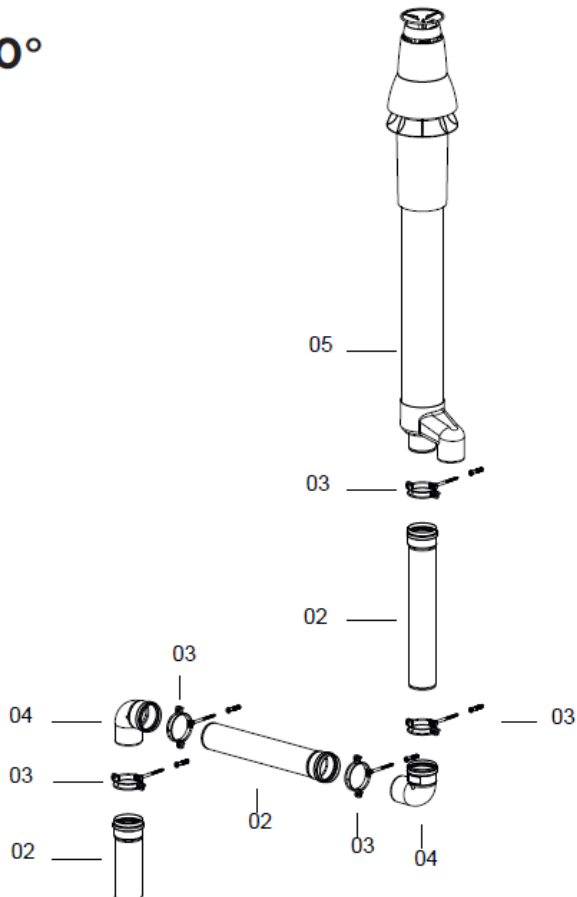
## CLEANING

Clean any dirt from the exterior using a cloth dampened with water and a small amount of detergent if necessary.

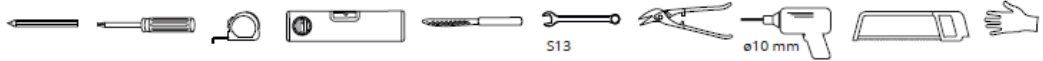
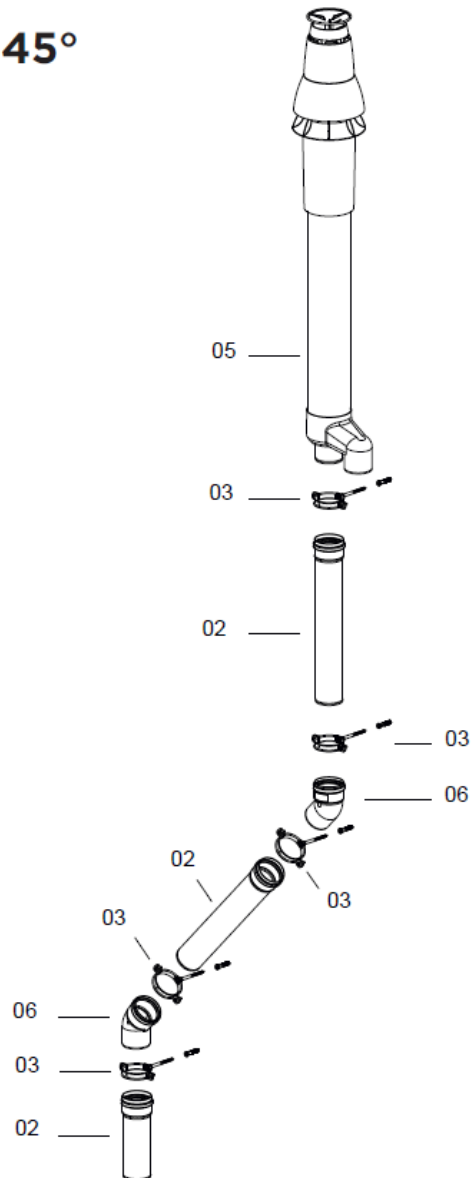
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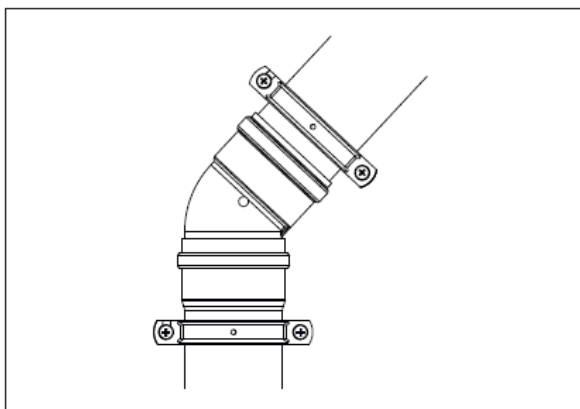
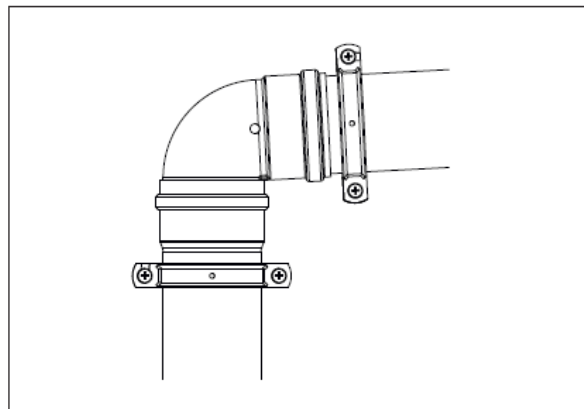
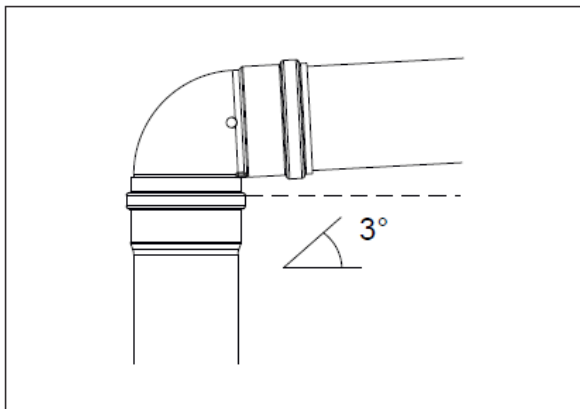
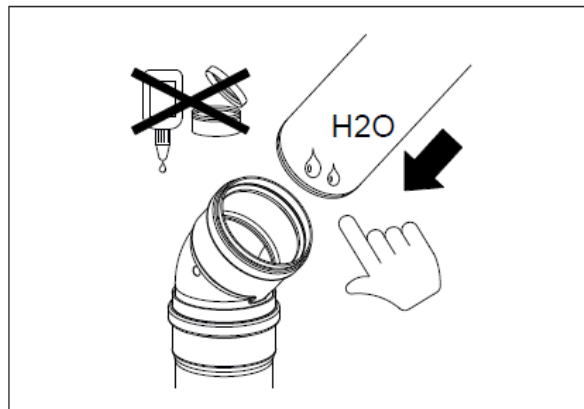
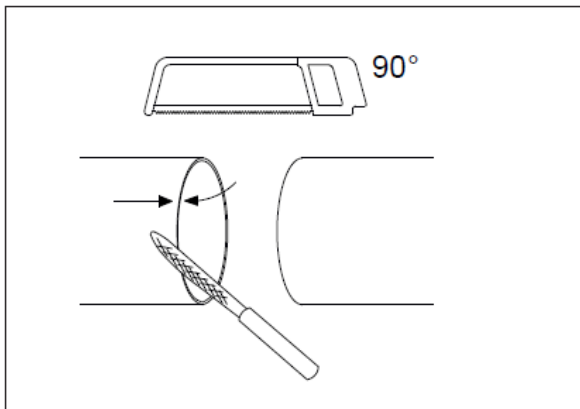
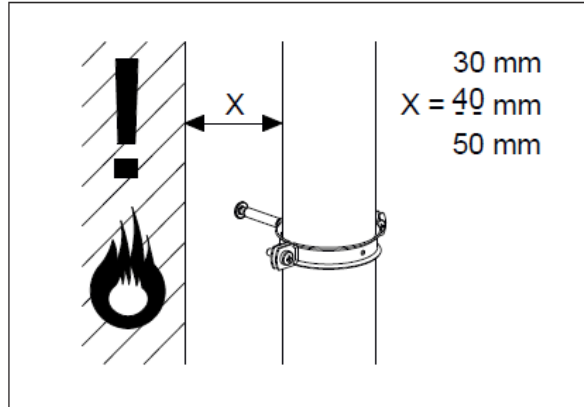
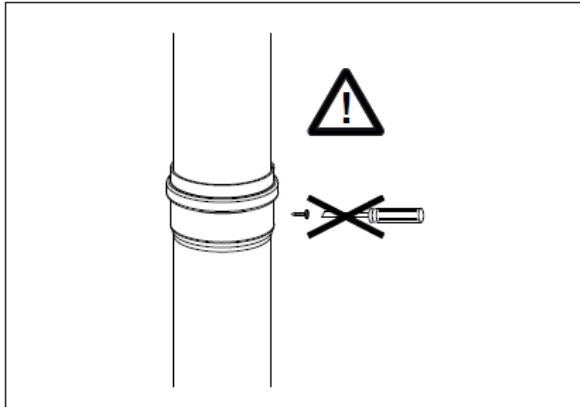
# 90° & 45°

90°

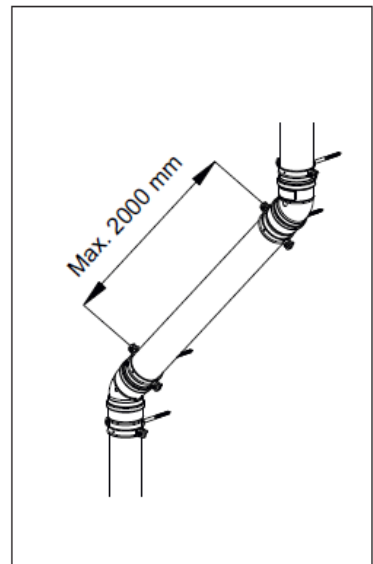
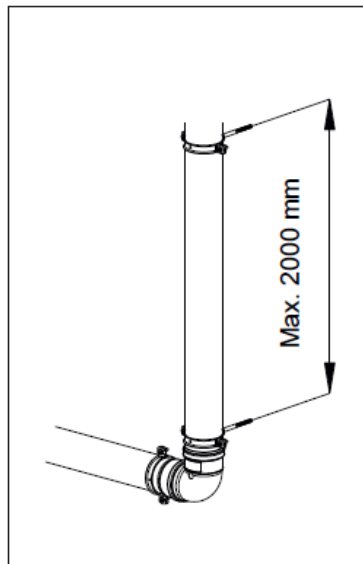
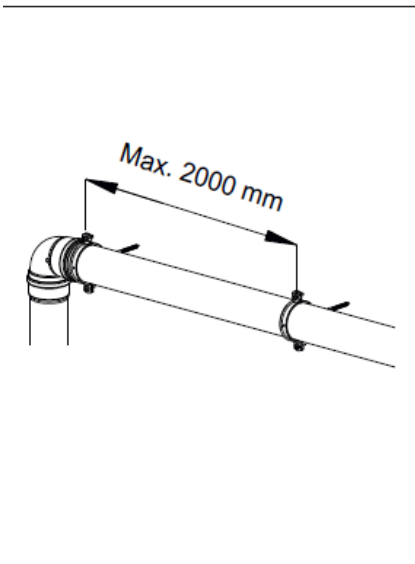
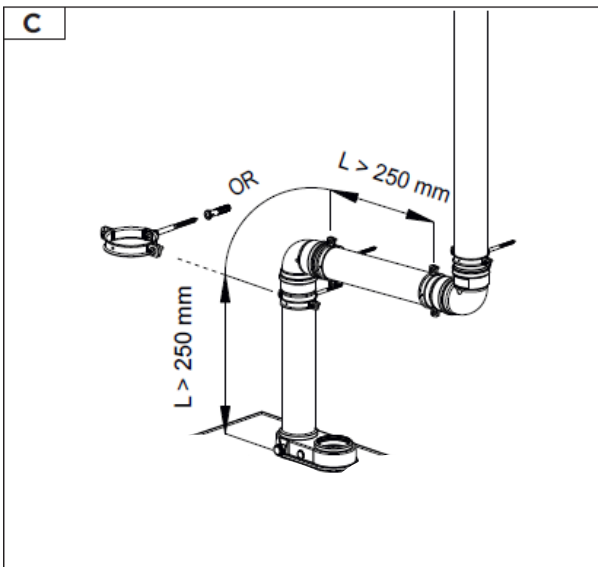
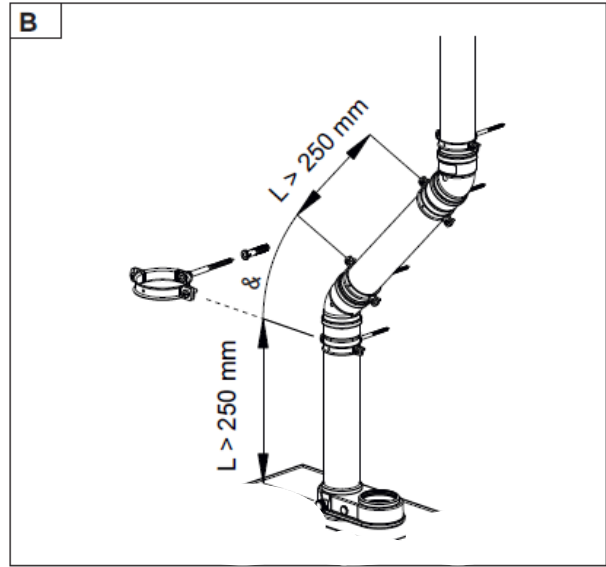
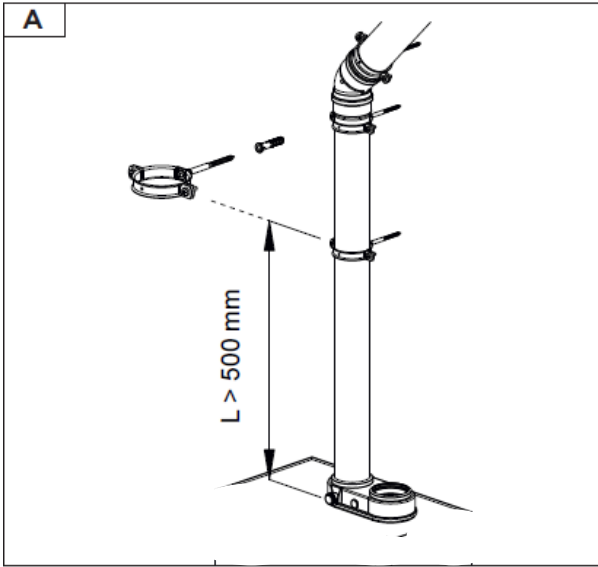


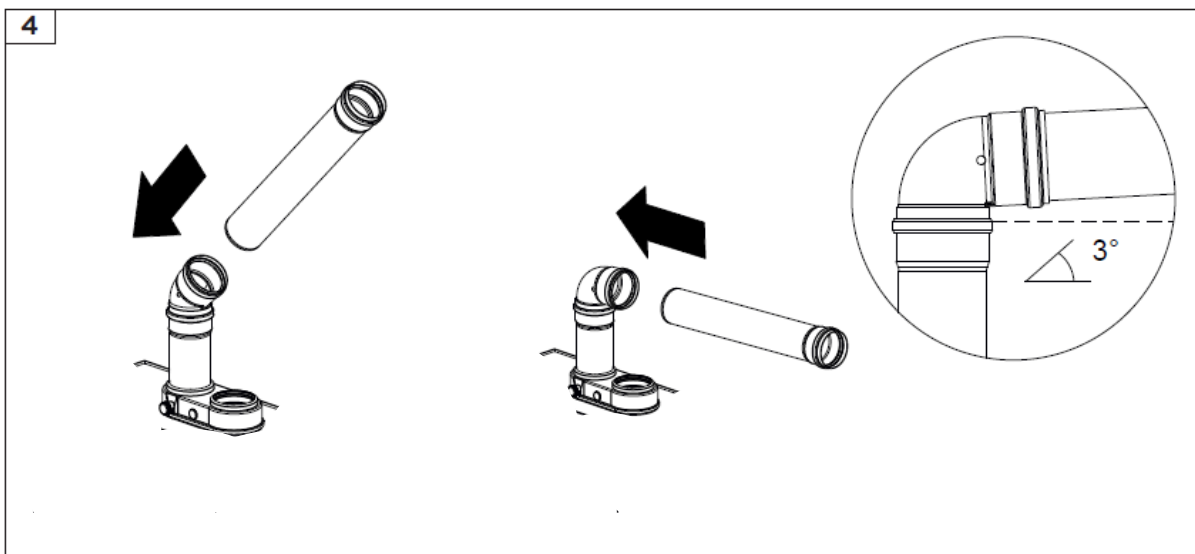
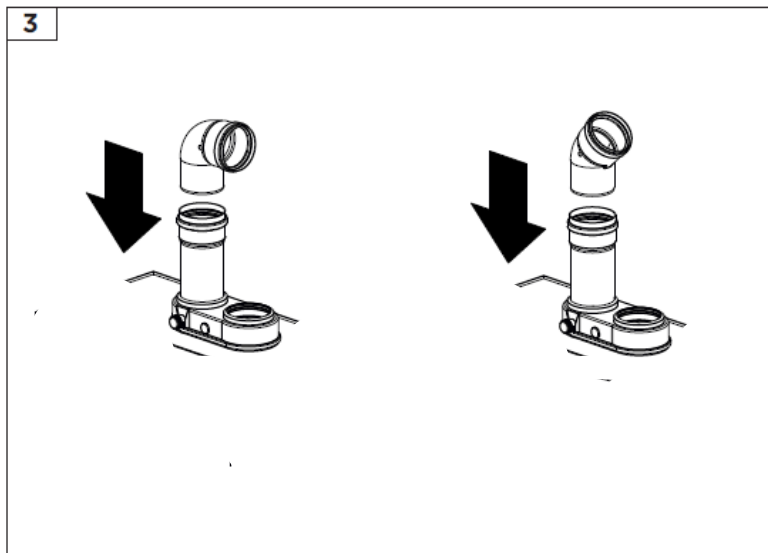
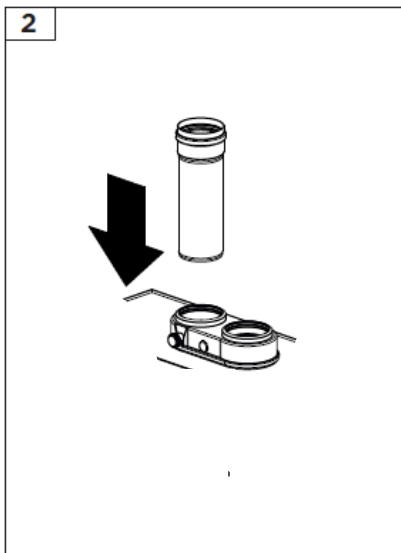
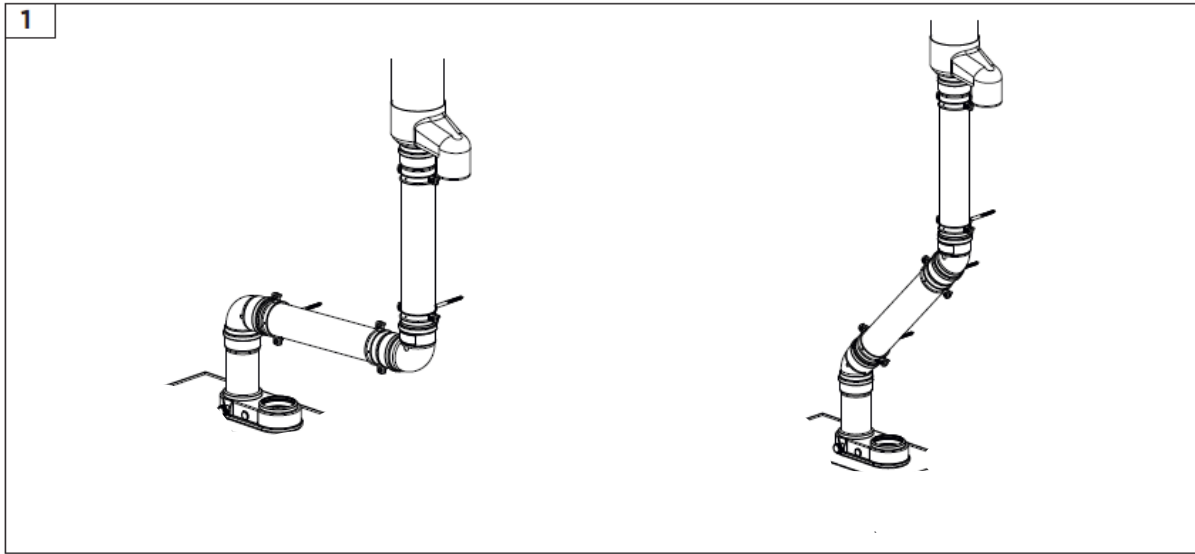
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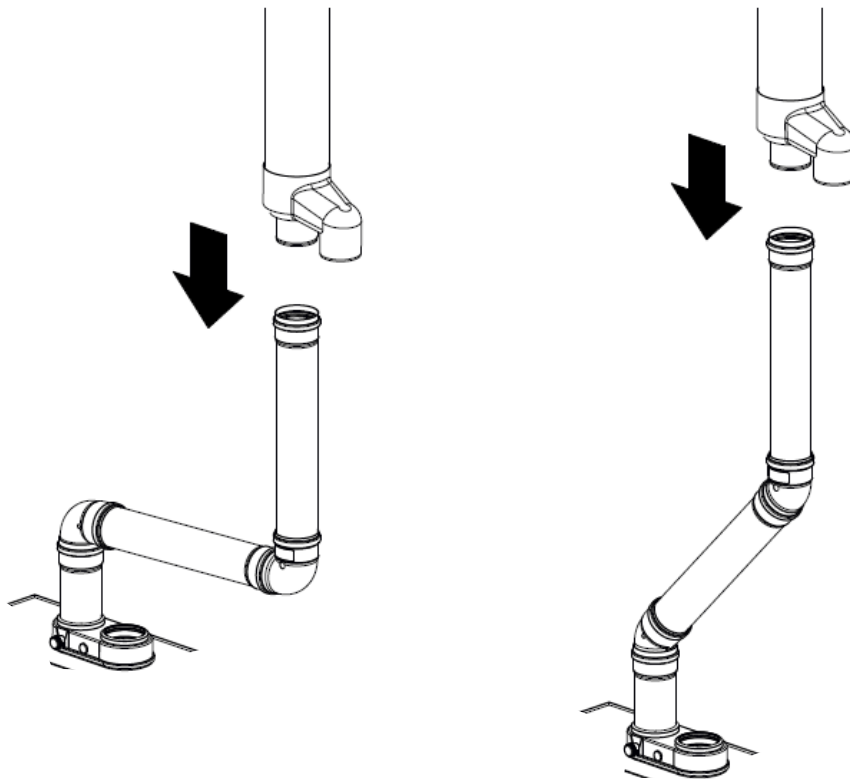




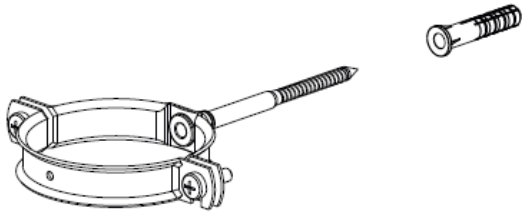




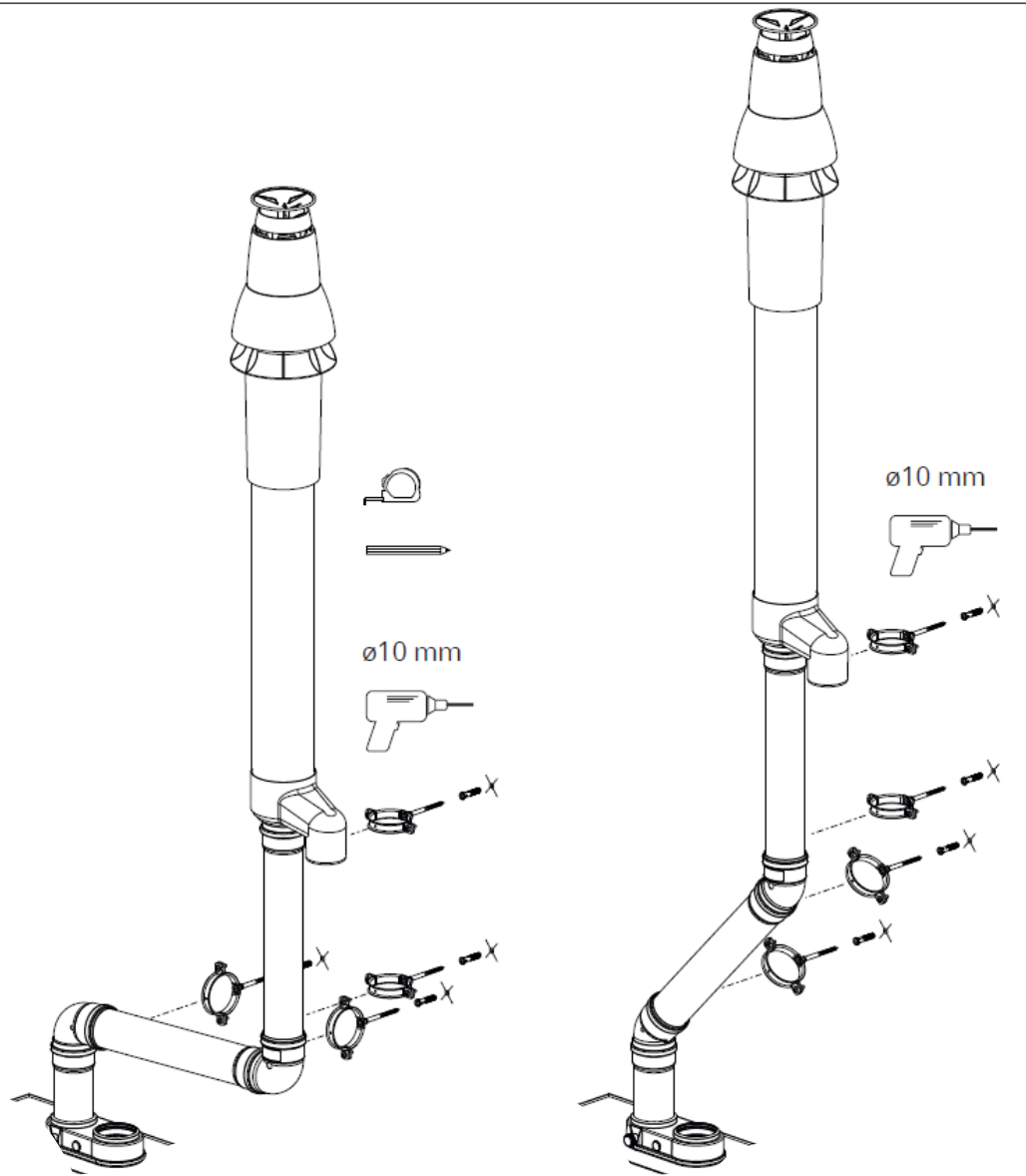
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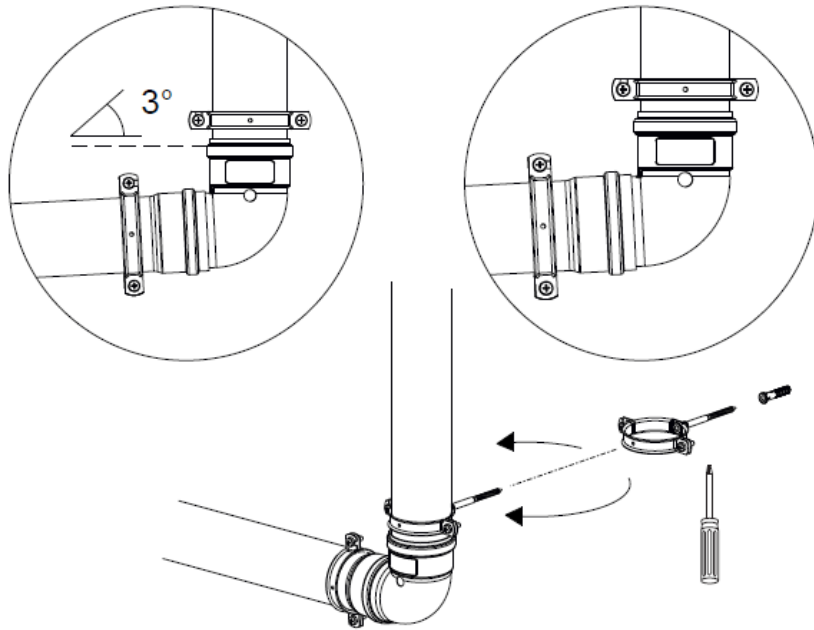
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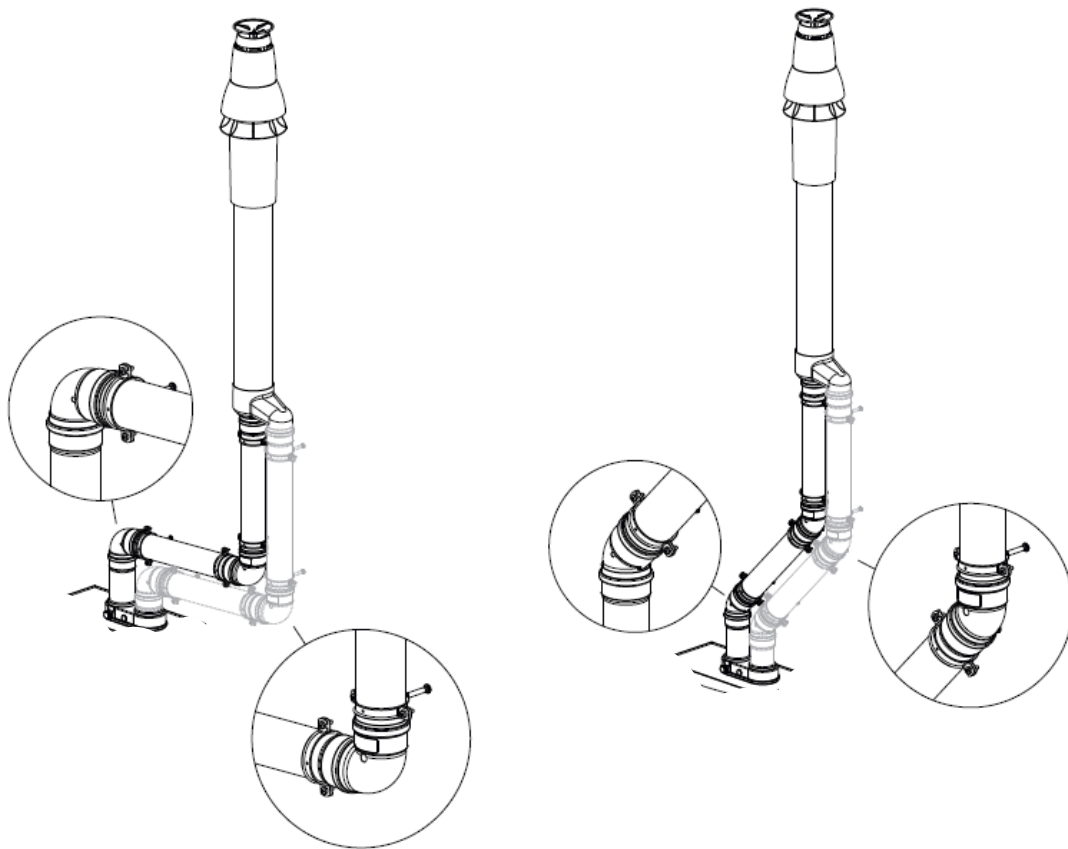
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8



9





M&amp;G Group®



## DECLARATION OF PERFORMANCE

No. 001-MG-PP DoP

1. Unique identification code of the product-type:

## M&amp;G System Chimneys with plastic flue liner

EN 14471: 2013 + A1: 2015

## PP sections, fittings, and terminals

0.1	(Dn 60-150)	(rigid, single)	(flue)	T120	H1	W 1/2	O30	LI	E	U
0.2	(Dn 60-100)	(rigid, single)	(flue)	T120	H1	W 1/2	O30	LE	E	U
0.2a	(Dn 80; Safe PP)	(rigid, single)	(flue)	T120	H1	W 1	O30	LI	E	U
0.3	(Dn 60/100-150/220)	(rigid, conc.)	(flue/air)	T120	H1	W 1/2	O00	LI/LE	E	U0
0.3a	(Dn 80/125-100/150)	(rigid, conc.)	(flue/air)	T120	P1	W 1/2	O00	LE	E	U0
0.4	(Dn 60-130)	(flex, double)	(flue)	T120	H1	W 1/2	O30	LI	E	U
0.6	(Dn 60/100-80/125)	(flex, conc.)	(flue/air)	T120	H1	W 1/2	O00	LI	E	U1
0.8	(Dn 200)	(rigid, single)	(flue)	T120	P1	W 1/2	O30	LI	E	U
A.1	(Dn 60/100-100/150)	(rigid, conc.)	(flue/air)	T120	H1	W 1	O00	LI/LE	E	U0

Plus manufacturer's batch or date code: see product marking

2. Intended use/es:

Products for the construction of single wall, multi-wall or concentric system chimneys to convey the products of combustion from heating appliances to the outside atmosphere. Systems 0.3, 0.3a, 0.6 and A.1 are also suitable to supply combustion air from the outside.

3. Manufacturer:

MUELINK & GROU B.V.  
P.O. Box 509  
9700 AM Groningen, the Netherlands  
E: info@mg-flues.com

Burgerhout B.V.  
P.O. Box 77  
9400 AB Assen, the Netherlands  
E: info@burgerhout.nl

4. Authorized representative:

Not applicable.

5. System/s AVCP:

System 2+.

6. Harmonized standard:

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 of the factory production control.

## 7. Declared performance

	Essential Characteristics	Performance	Technical specification
1	<b>Compressive strength</b>		EN 14471: 2013 + A1: 2015
	System 0.1, 0.2, 0.2a, 0.3 and 0.3a	Max. height 50 m.	
	System 0.4	Max. height 18 m.	
	System 0.6	Max. height 15 m.	
	System 0.8	Max. height 30 m, or 50 m when bracketed every 2 m.	
	System A.1	Max. height 2m	
2	<b>Resistance to fire (tested fully enclosed with ventilated gap if applicable)</b>		
	System 0.1, 0.2, 0.2a, 0.4 and 0.8	T120 O30	
	System 0.3, 0.3a, 0.6 and A.1	T120 O00	
3	<b>Gas tightness</b>		
	System 0.1, 0.2, 0.2a, 0.3, 0.4, 0.6 and A.1	H1	
	System 0.3a and 0.8	P1	
4	<b>Flow resistance</b>	Flow resistances acc. to EN 13384-1, see datasheet.	
5	<b>Thermal resistance</b>	0.00 m <sup>2</sup> k/W	
6	<b>Thermal shock resistance</b>	No (O)	
7	<b>Flexural tensile strength</b>		
	Non-vertical installation		
	System 0.1, 0.2, 0.2a, 0.3, 0.3a and 0.8	The maximum length of the horizontal part is not limited when bracketed every section. Maximum deflection 87°.	
	System 0.4 and 0.6	Shaft application, maximum deflection 60°.	
	System A.1	Not applicable, only for vertical use.	
	Wind load for external installation		
	System 0.2	Wall brackets should be used per chimney section. The height above the last bracket 0 m, see instructions.	
	System 0.2, 0.3 and 0.3a	Wall brackets should be used per chimney section. The height above the last bracket 1,5 m.	
	System 0.1, 0.2a, 0.4, 0.6 and 0.8	Not applicable, only for inside installation.	
	System A.1	Only in combination with corresponding metal outer wall. Maximum height 2 m, use guy-wires for lengths above 1 m.	
8	<b>Resistance against condensation, water vapor diffusion and condensate penetration</b>		
	All systems	Yes (W)	
9	<b>Durability against corrosion</b>		
	System 0.1, 0.2, 0.3, 0.3a, 0.4, 0.6 and 0.8	Class 1 (with EPDM seals) or Class 2 (with Viton seals)	
	System 0.2a and A.1	Class 1 (with EPDM seals)	
10	<b>Durability against rainwater</b>		
	System 0.2, 0.3, 0.3a and A.1	Yes, system 0.3 only with extra sealant, see instructions. System A.1 only with corresponding metal outer wall.	
	System 0.1, 0.2a, 0.4, 0.6 and 0.8	No, only for inside installation.	
11	<b>Durability against UV</b>		
	System 0.2	Yes (LE)	
	System 0.3, 0.3a and A.1	Yes (LE), metal outer wall	
	System 0.1, 0.2a, 0.4, 0.6 and 0.8	No (LI), only for inside installation.	
12	<b>Freeze-thaw resistance</b>	Yes	
13	<b>Reaction to fire</b>	Class E	EN 13501-1:2007+A1:2009
14	<b>Dangerous substances</b>	Does not contain dangerous substances.	Relevant national regulations

The performance of the product identified above is in conformity with the set of declared performance/s. This declaration of performance is issued, in accordance with Regulation (EU) No 305/2011, under the sole responsibility of the manufacturer identified above.

Signed for and on behalf of the manufacturer by:

Gezienus Hoving | Manufacturing Manager M&G Group Europe



Groningen (NL), 1 July 2018

## SYSTEM AND PRODUCT DESCRIPTION

Application Single wall system suitable for the discharge of flue gases and the supply of combustion air for type B and C appliances.

	Safe PP	Twinline	Twinline
Nominal flue gas diameter	80	60, 80, 100, 130, 150	200
Heat resistance	0 m <sup>2</sup> /K/W		
Pressure drops	See national regulation or see data from the boiler manufacturer with regards to maximum lengths.		
Weight	Contact producer		
Material / wall thickness flue pipe	> 2 mm	> 2 mm	> 3 mm
System numbers and CE-marking	EN 14471: 2013+A1: 2015 0.2a T120 H1 W1 O30 LI E U	EN 14471: 2013+A1: 2015 0.1 T120 H1 W1/2 O30 LI E U 0.2 T120 H1 W1/2 O30 LE E U	EN 14471: 2013+A1: 2015 0.8 T120 P1 W1/2 O30 LI E U
DoP nr.	001-MG-PP DoP	001-MG-PP DoP	001-MG-PP DoP

### Explanation CE marking:

Norm.	EN 14471: 2013+A1: 2015	EN 14471: 2013+A1: 2015	EN 14471: 2013+A1: 2015
Temperature class: T maximum in °C.	120	120	120
Pressure class : maximum	H1 = over pressure max. 5000 Pa	H1 = over pressure max. 5000 Pa	P1 = over pressure max. 200 Pa
Corrosion resistance	W = wet	W = wet	W = wet
Corrosion class	1 = gas	1 = gas and 2 = oil	1 = gas and 2 = oil
Distance to combustible material: Oxx (xx in mm)	O30	O30	O30
Wind strength	1 m., from the last support		
Compressive strength	Free vertical length: 2 m. When applying brackets to each connection: length unlimited.		
Flexural strength	1 m.	1 m.	1 m.
Dangerous substances	N/A	N/A	N/A

Note: Additional application must be checked with the manufacturer

## GENERAL

- Store material inside.
- Check the components for possible damages.
- Combine only with components from M&G Group members.
- Install according to national regulations.

Complete the supplied chimney label and place it near the chimney connection of the appliance.

## CLEANING

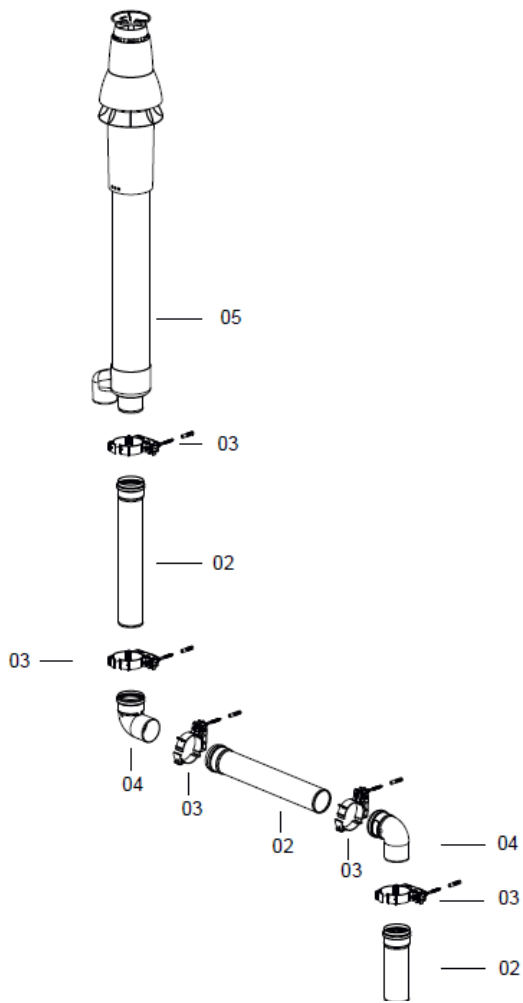
Clean any dirt from the exterior using a cloth dampened with water and a small amount of detergent if necessary.

We reserve the right to correct print errors or make technical changes. In case of doubts ask M&G Group for advice.

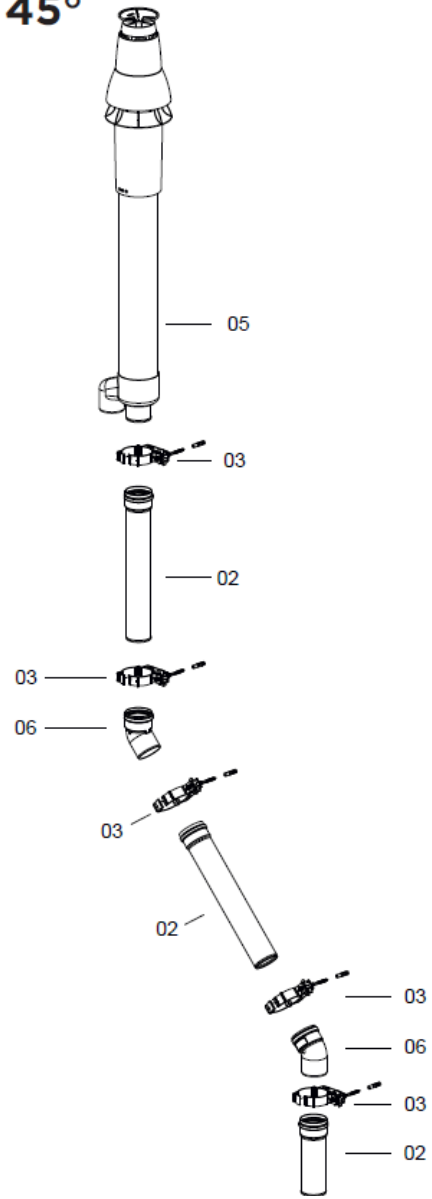


## 90° & 45°

### 90°



### 45°



TX25

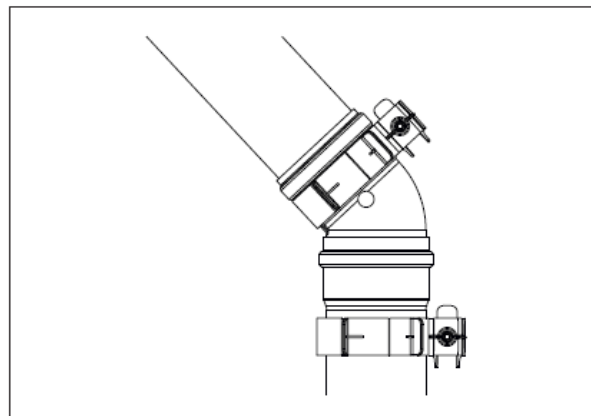
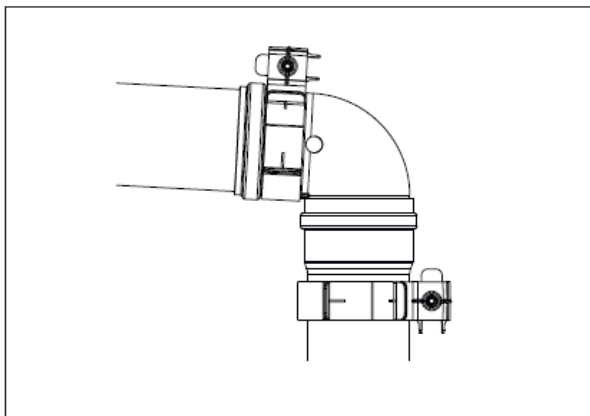
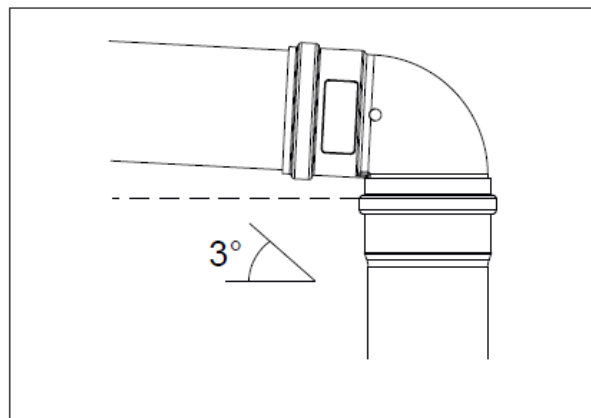
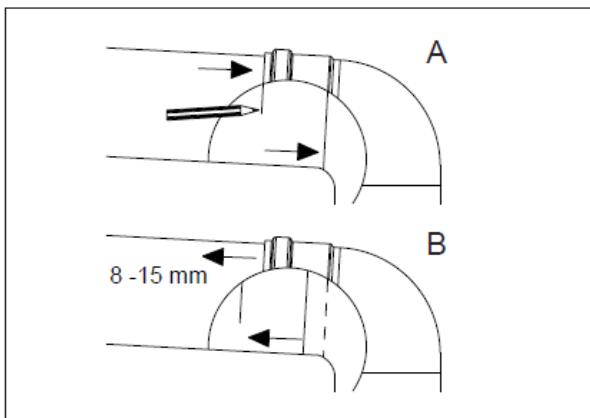
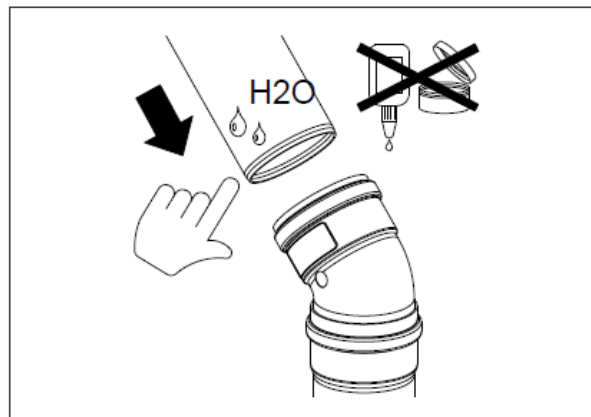
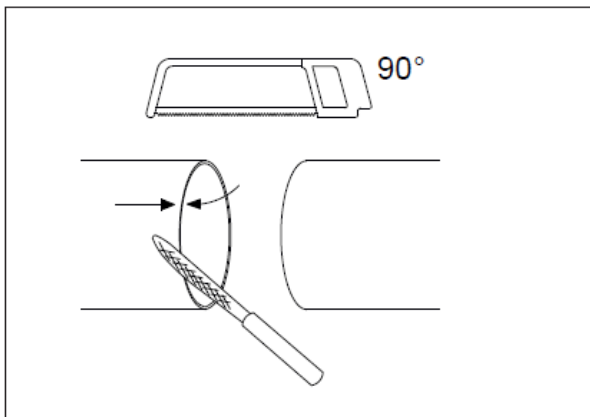
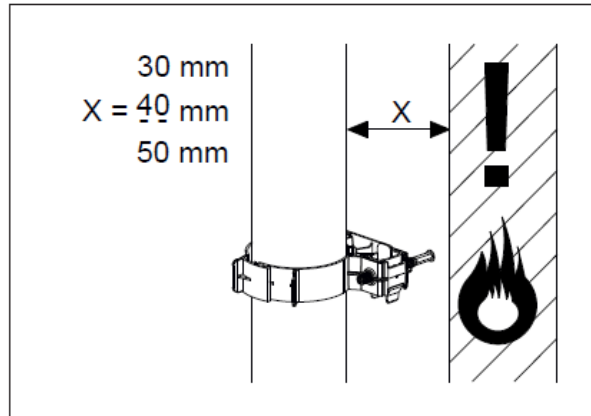
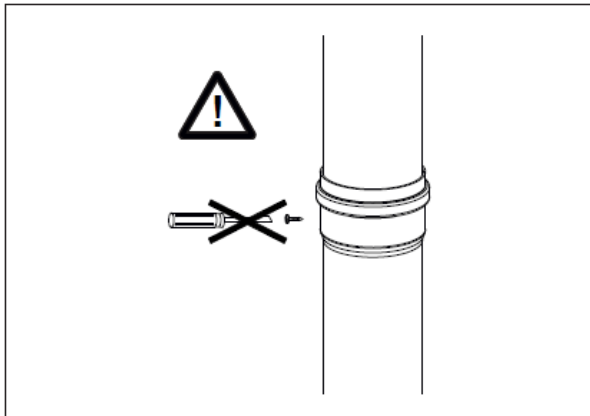


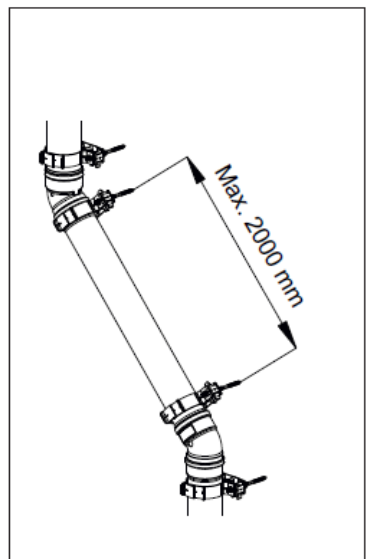
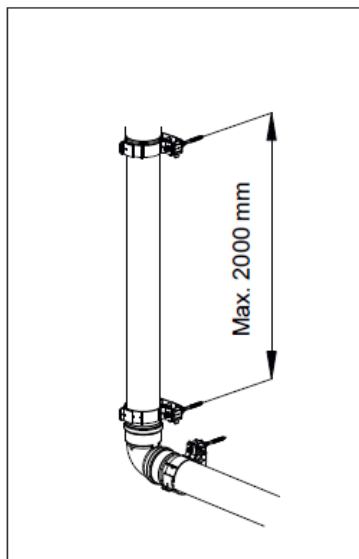
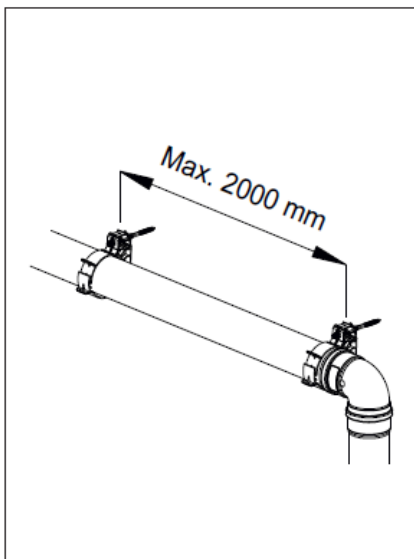
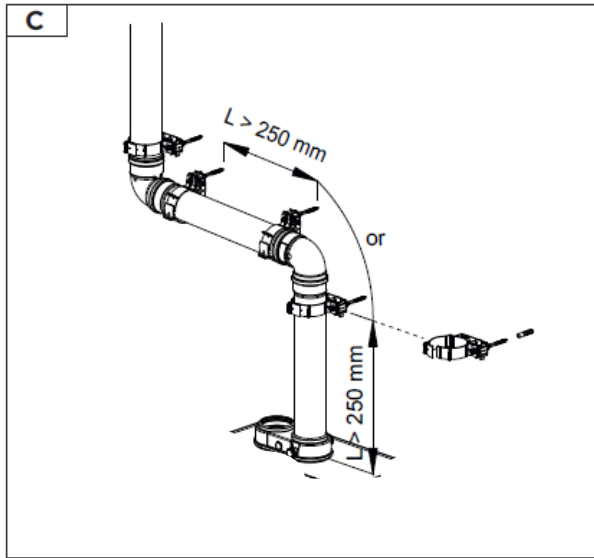
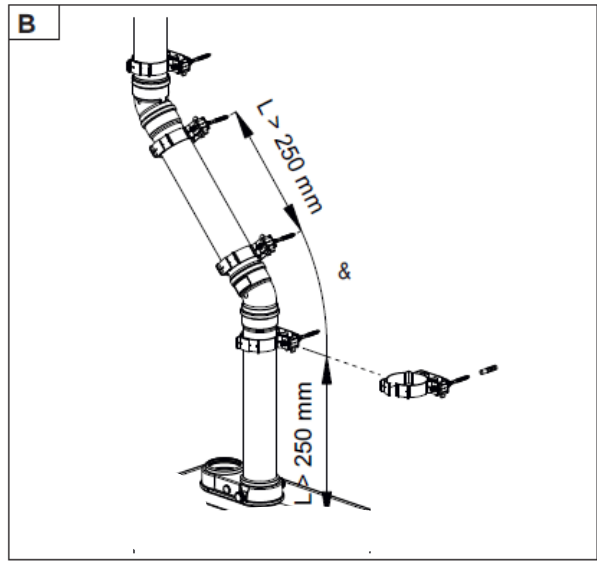
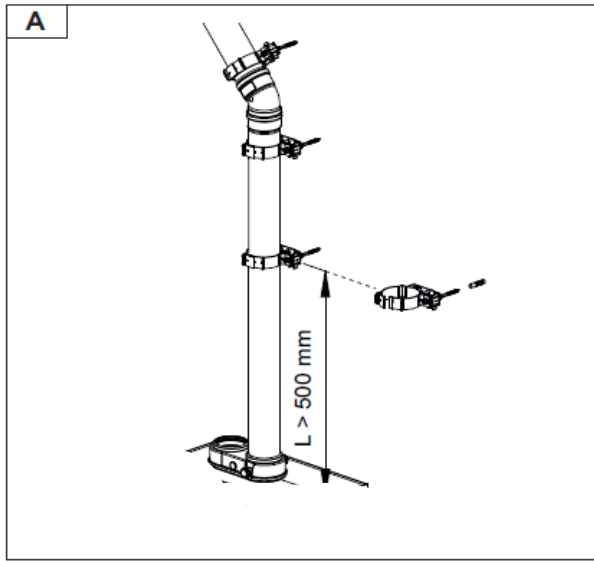
S13

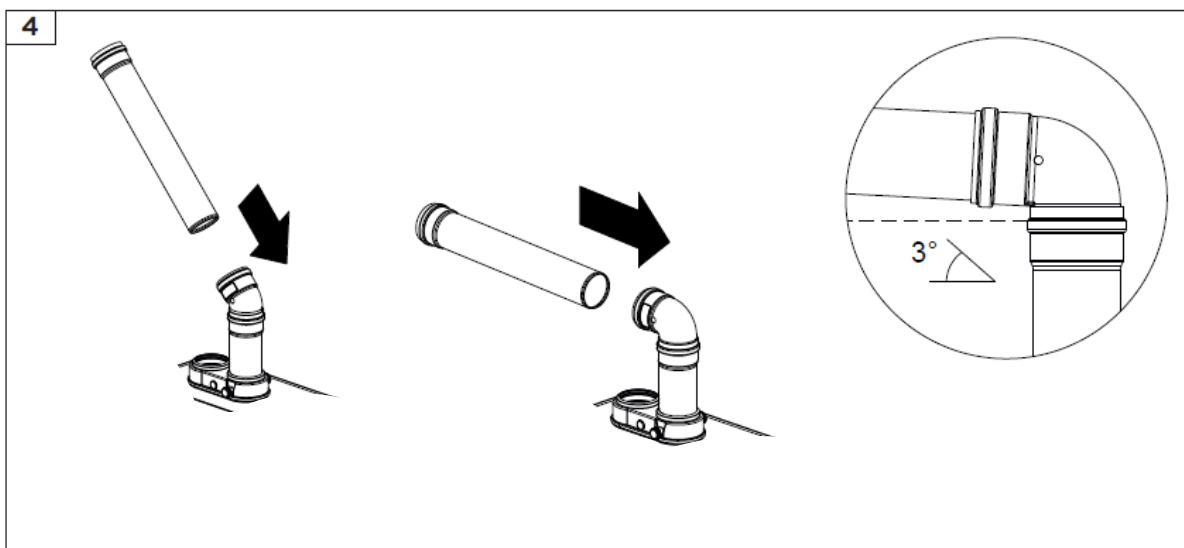
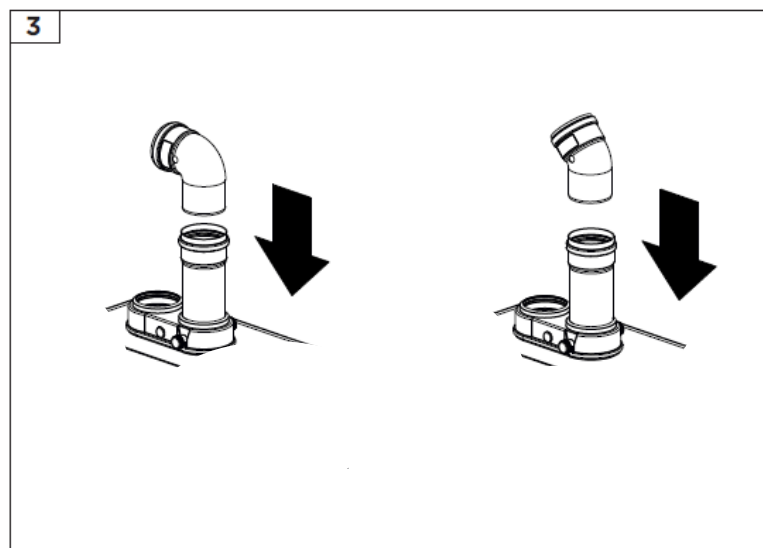
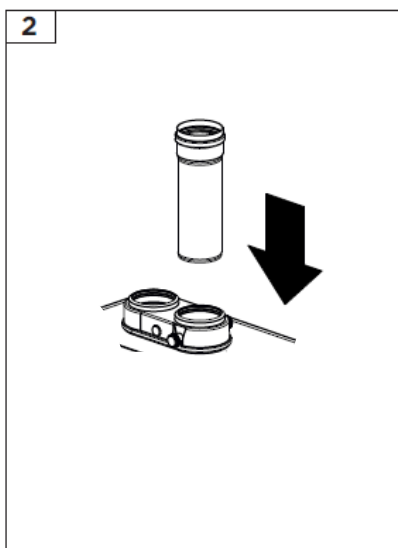
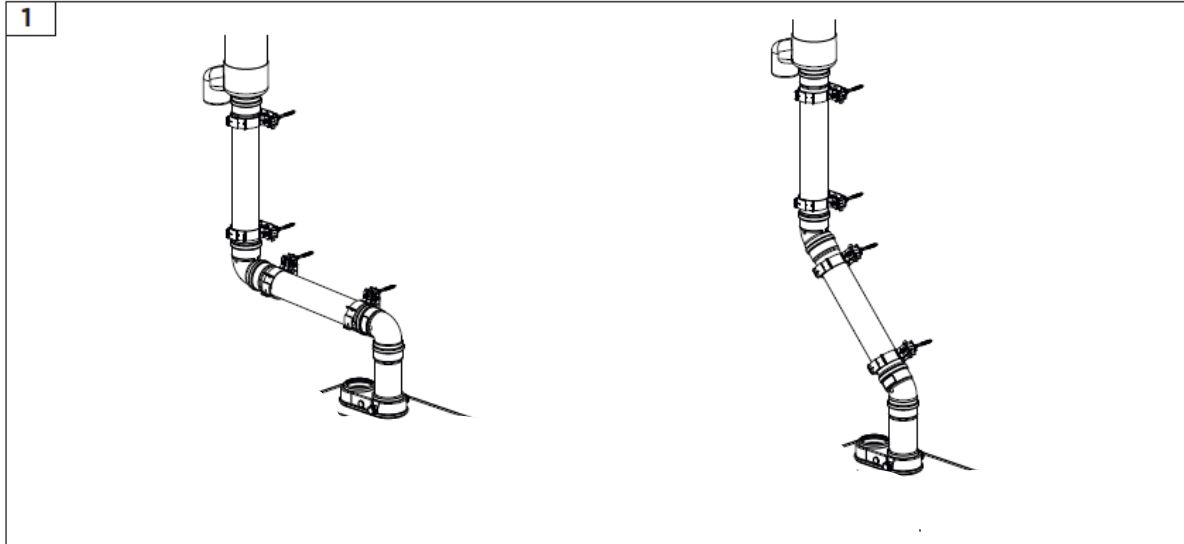


ø10 mm

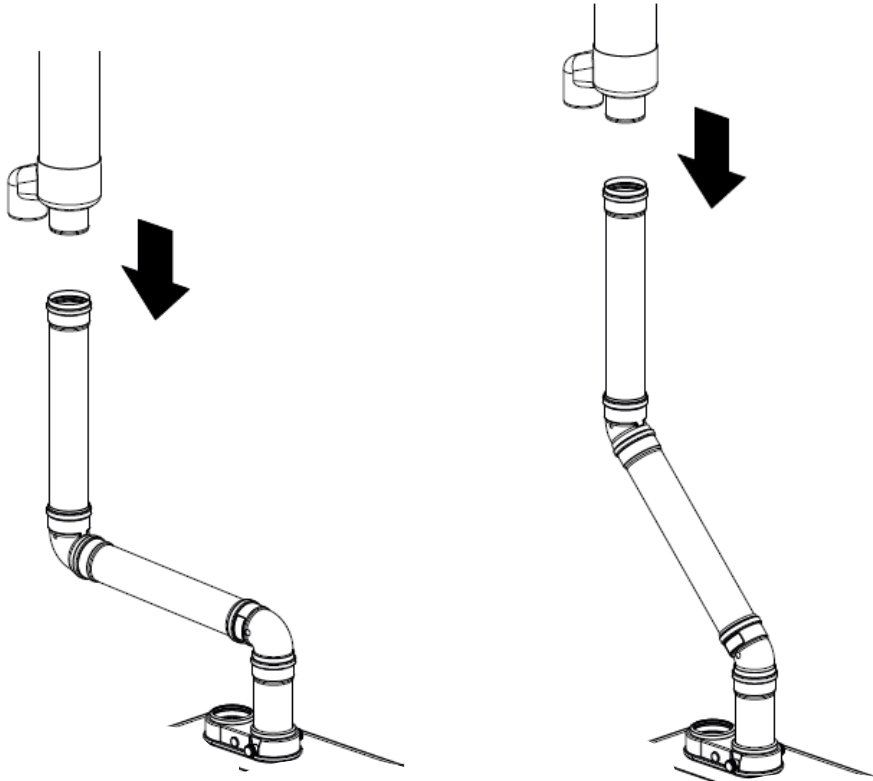




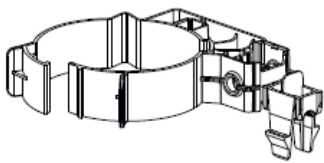




5



6



ø 80, 100 mm



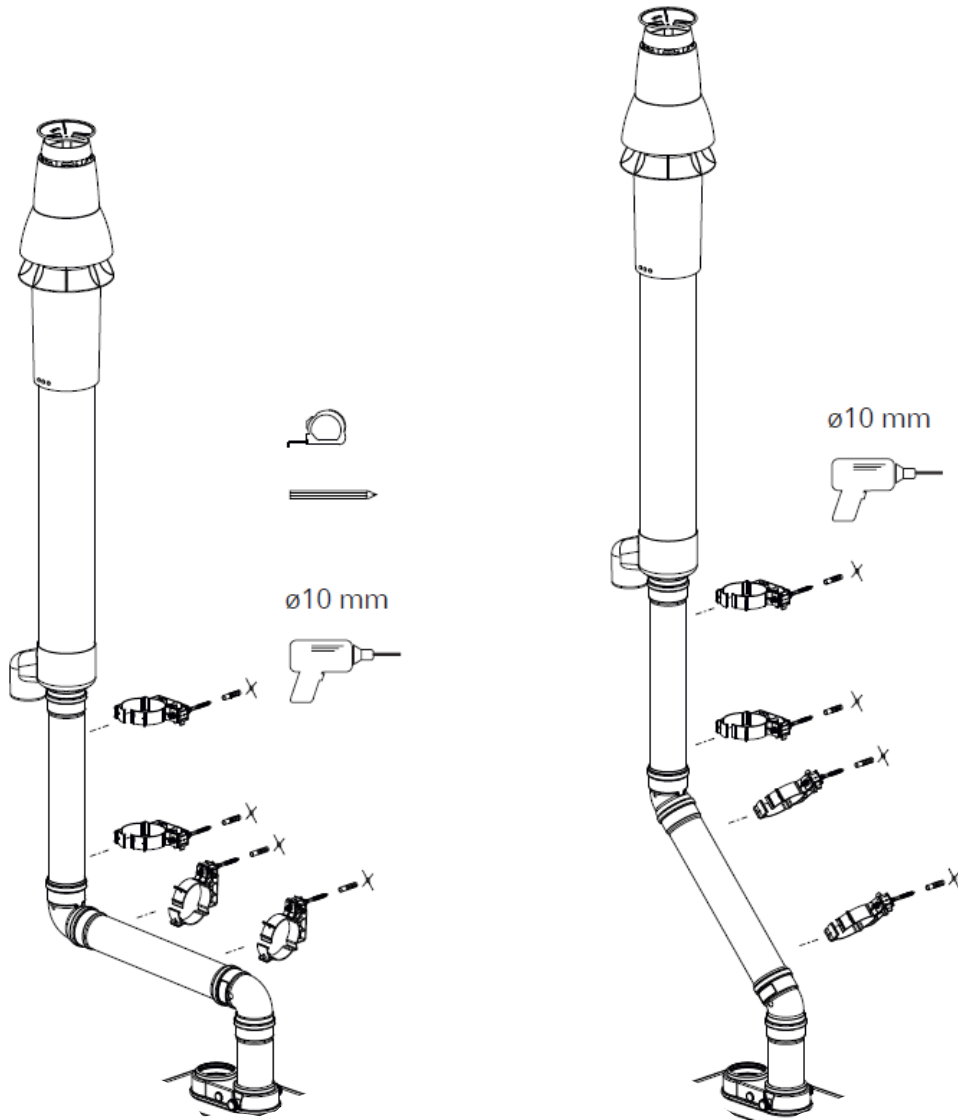
ø 60, 100 mm



ø 60, 80, 100,  
130, 150, 200 mm



7





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