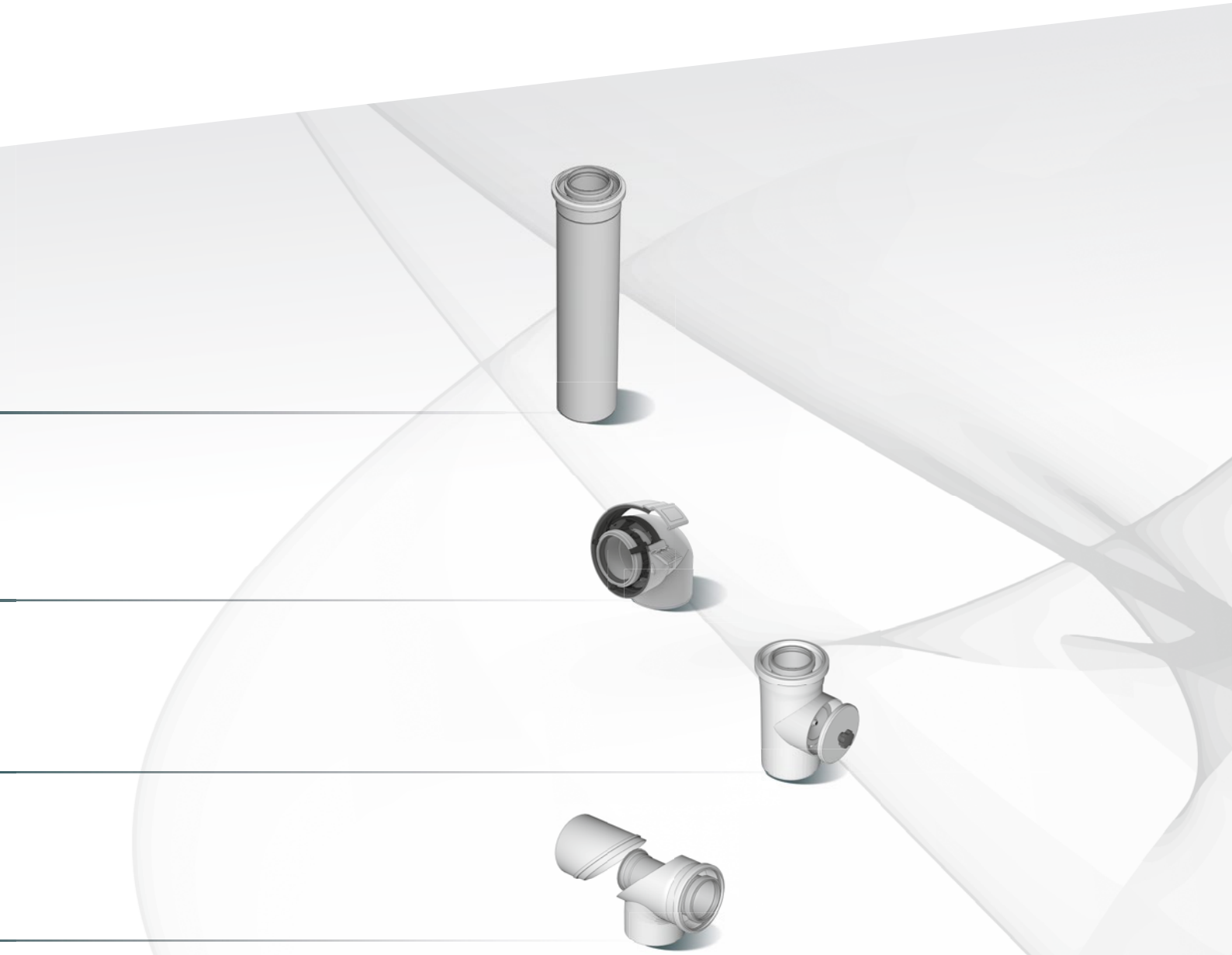
Ubbink Centrotherm group



Flues and chimney systems

Complete systems overview

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About us

The Ubbink Centrotherm Group, with over one hundred years of experience, is a leading manufacturer of gas flue systems, ventilation ductwork and building products that enhance the watertightness and airtightness, and thus sustainability, of buildings. We are strongly represented in Europe and have sales- and production facilities in North America and China warranting local association to our clients in the Americas and Asia.

Over the years, we have developed an exceptional fine portfolio and with our market knowledge and production know-how we are a reliable business partner for developing customized solutions by co-makership with our clients. We endeavor a culture of continuous improvement which is founded in a constant monitoring of standards and disciplines, 5S, waste elimination and applying our lessons learned. All is done to produce efficiently, to empower our staff and to warrant a superior product quality.

Ubbink Centrotherm group

Since 2009

The Ubbink Centrotherm Group was founded in 2009 to further target synergies and to improve the international organization between the Centrotherm and Ubbink companies. The aim is to grow the worldwide group business by developing new and existing markets and today there is an intense collaboration in the fields of sales, marketing, research and development, product management and operations.

Centrotherm

Since 1994

Seated in Brilon in Germany, Centrotherm Systemtechnik functions as the head office for the Centrotherm companies and is a leading solution provider in the heating and ventilation markets worldwide. Centrotherm has production facilities in Germany, U.S.A. and China.

ubbink

Since 1896

Seated, since its foundation, in Doesburg in The Netherlands, Ubbink is an original Dutch company with an enormous track record in the building, heating and ventilation industry. Production facilities are in The Netherlands.

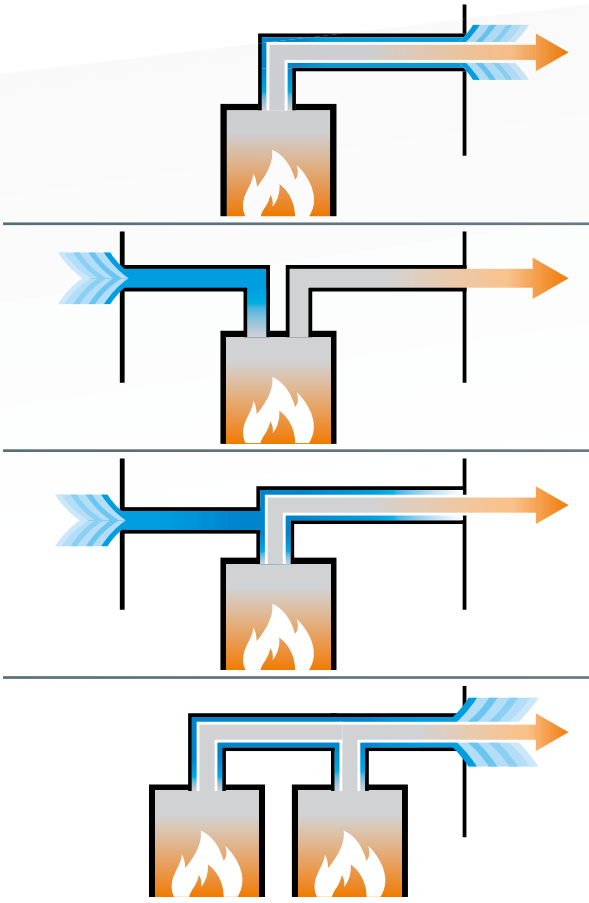
Ubbink Centrotherm group

Portfolio overview
Classification of appliances*

Configuration in boiler room (connection ducts)

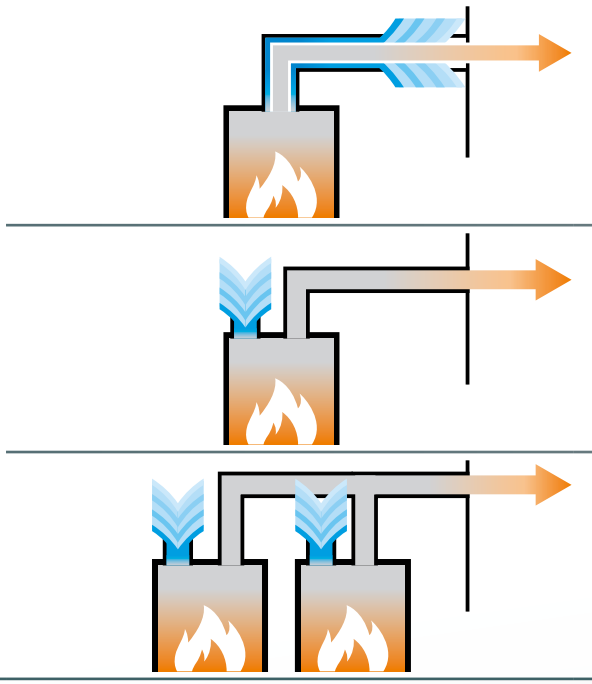
Type C room-sealed

The air supply, combustion chamber, heat exchanger and evacuation of exhaust gases (i.e. the combustion circuit) for this type of appliance is sealed with respect to the room in which the appliance is installed. The combustion air is taken from outside the installation room.

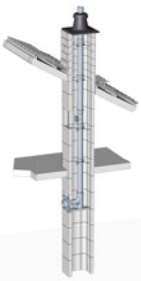


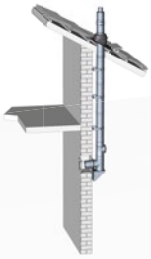
Type B non-room-sealed

Appliance is intended to be connected to a flue system that evacuates the flue gases to the outside of the room containing the appliance. The combustion air is taken from the installation room.



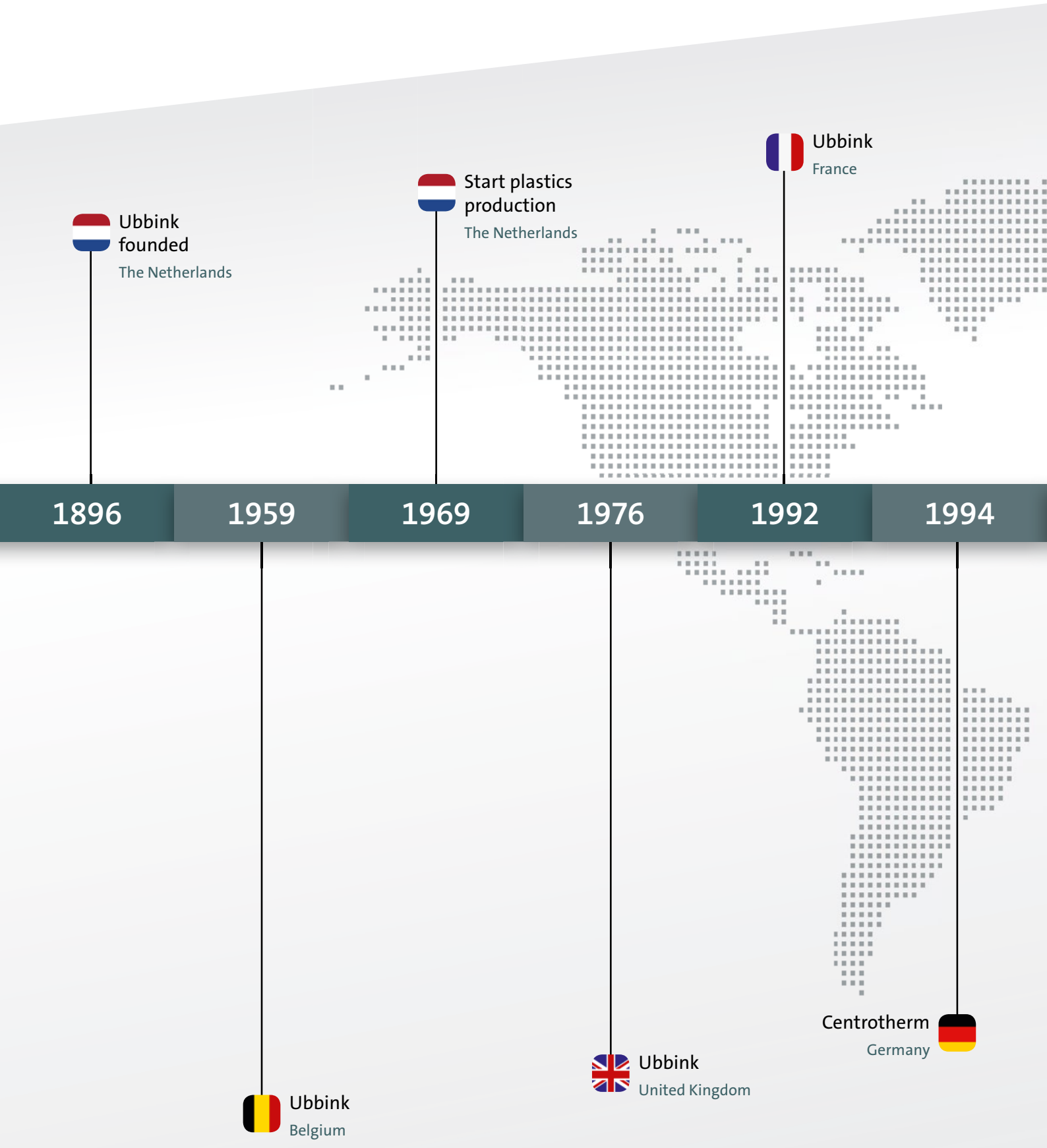
*According to new European standard for the method of evacuation of the exhaust gases; CEN/TR 1749

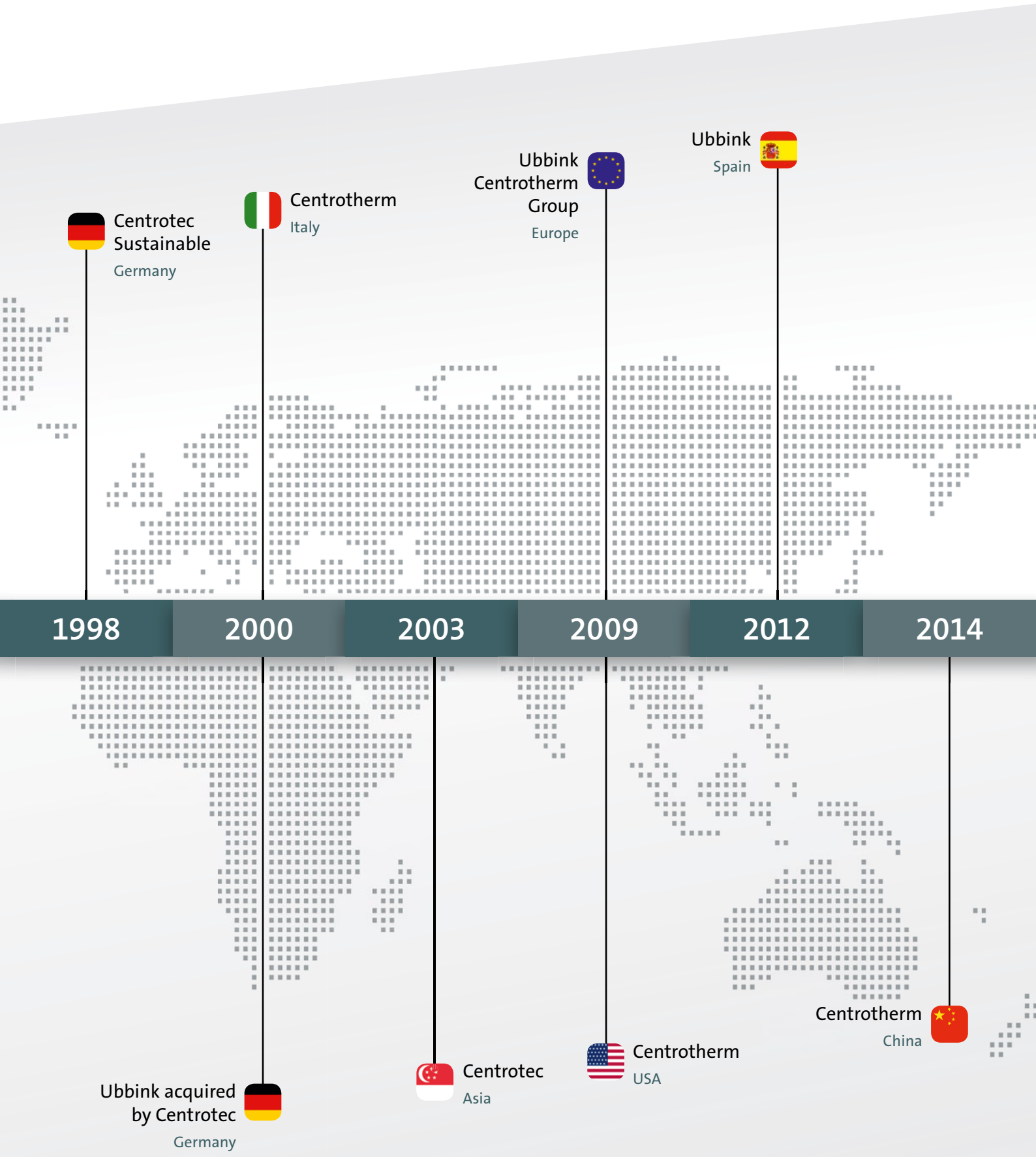
Boiler connection materials concentric	Boiler connection materials single-wall	Chimney systems rigid | single-wall	Chimney systems flexible | single-wall
			
60/100 80/125 100/150 110/160	60, 80, 110, 125, 160, 200	**Type C9** 60, 80, 110, 125, 160, 200, 250, 315	**Type C9** 60, 80, 110, 125, 160
	60, 80, 110, 125, 160, 200, 250, 315	**Type C5** 60, 80, 110, 125, 160, 200, 250, 315	**Type C5** 60, 80, 110, 125, 160
60/100, 80/125, 110/160	60, 80, 110, 125, 160, 200	**Type C5x** 60, 80, 110, 125, 160, 200, 250, 315	**Type C5x** 60, 80, 110, 125, 160
110/160		**Type C4** 60, 80, 110, 125, 160, 200, 250, 315	**Type C4** 60, 80, 110, 125, 160
60/100, 80/125, 110/160		**Type B3** 60, 80, 110, 125, 160, 200, 250, 315	**Type B3** 60, 80, 110, 125, 160
	60, 80, 110, 125, 160, 200, 250, 315	**Type B2** 60, 80, 110, 125, 160, 200, 250, 315	**Type B2** 60, 80, 110, 125, 160
	110, 125, 160, 200, 250, 315	**Type B2** 60, 80, 110, 125, 160, 200, 250, 315	**Type B2** 60, 80, 110, 125, 160

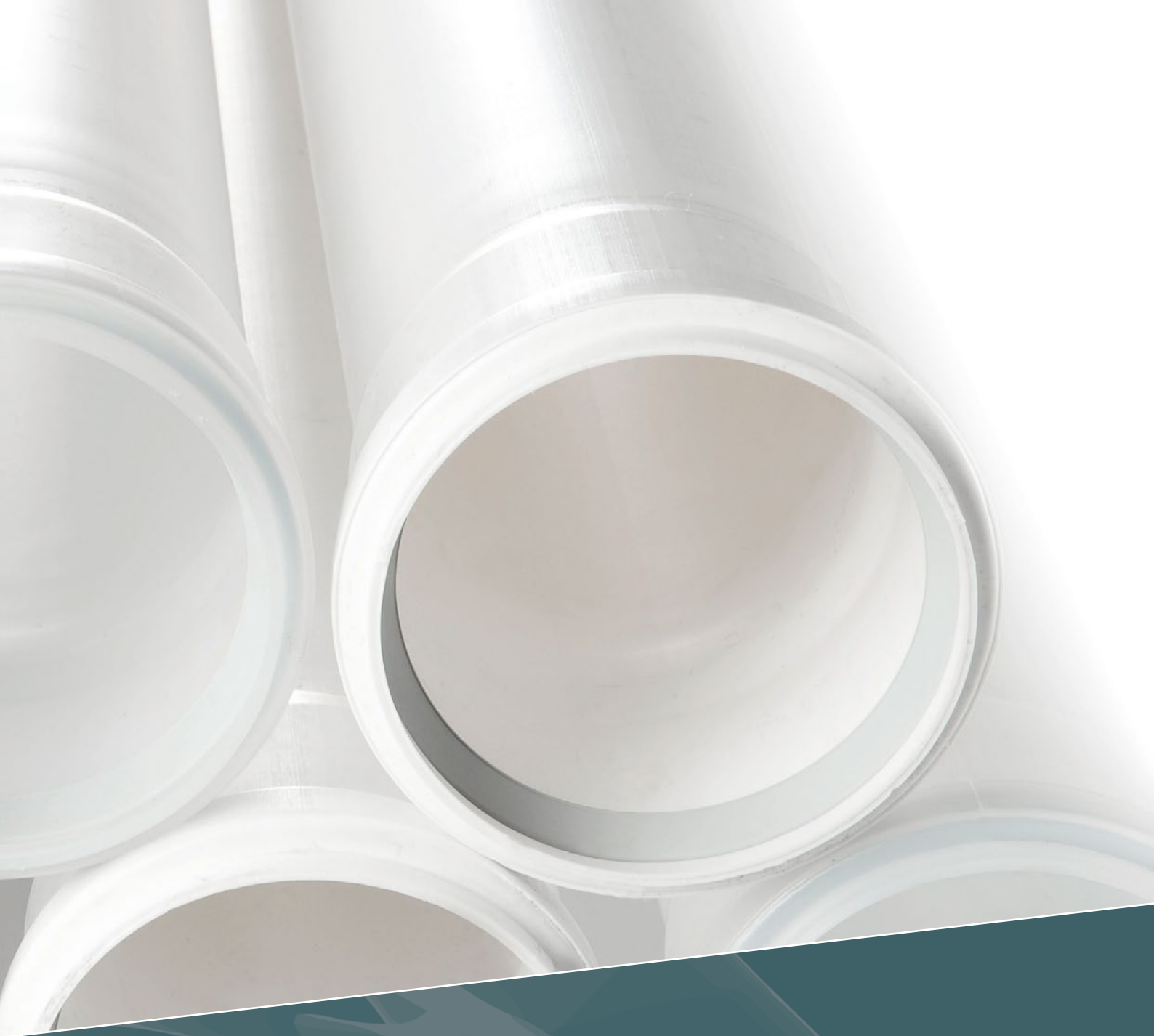
Outdoor systems rigid | concentric	Roof terminals	Wall terminals	CLV systems concentric	CLV systems single-wall
				
Type C5 or C3 60/100, 80/125, 110/160, 125/185, 160/225, 200/300, 250/350, 315/400	**Type C3** 60/100, 80/125, 100/150, 110/160	**Type C1** 60/100, 80/125, 100/150, 110/160	**Type C4** 80/130, 110/160, 125/200, 160/250, 200/300	**Type C10** 80, 110, 125, 160, 200
	Type C5 60/100, 80/125, 100/150, 110/160, 125/185, 160/225, 200/300, 250/350, 315/400			**Type C13** 80, 110, 125, 160, 200
				Type C13 80, 110, 125, 160, 200
Type C4 110/160, 125/185, 160/225, 200/300, 250/350, 315/400				
Type B3 110/160, 125/185, 160/225, 200/300, 250/350, 315/400				
Type B2 60/100, 80/125, 110/160, 125/185, 160/225, 200/300, 250/350, 315/400	**Type B2** 110/160, 125/185, 160/225, 200/300, 250/350, 315/400	**Type B2** 60/100, 80/125, 100/150, 110/160		
Type B2 110/160, 125/185, 160/225, 200/300, 250/350, 315/400	**Type B2** 110/160, 125/185, 160/225, 200/300, 250/350, 315/400	**Type B2** 80/125, 100/150, 110/160		

! All dimensions in mm.

Timeline

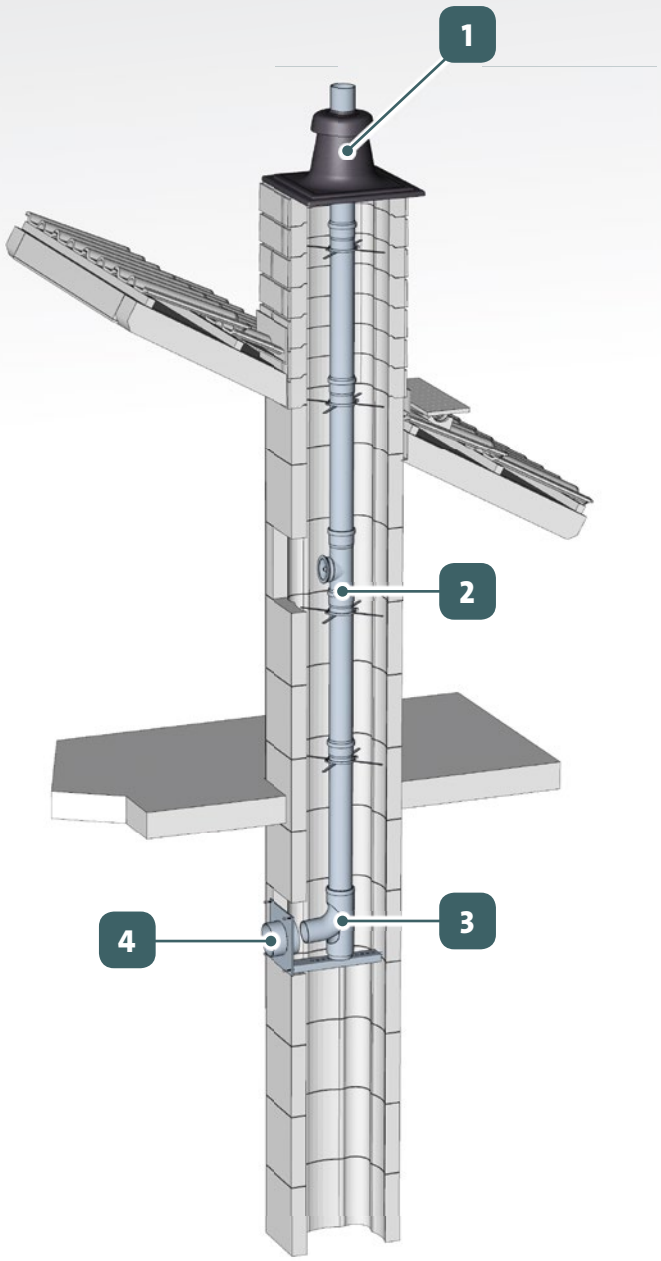

1896
Ubbink founded
The Netherlands
1959
Ubbink
Belgium
1969
Start plastics production
The Netherlands
1976
Ubbink
United Kingdom
1992
Ubbink
France
1994
Centrotherm
Germany


1998
Centrotec Sustainable
Germany
2000
Centrotherm
Italy
Ubbink acquired by Centrotec
Germany
2003
Centrotec
Asia
2009
Ubbink Centrotherm Group
Europe
Centrotherm
USA
2012
Ubbink
Spain
2014
Centrotherm
China



Gas flue systems

Chimney systems rigid | single-wall



Description

- The PP rigid ducts are suitable for condensing gas and oil boilers with a maximum flue temperature of 120°C.
- Several terminals are at hand and depending on the model available in black, terracotta or INOX.
- Plastic flue pipes expand and shrink more than metal pipes as result of temperature variations. It is important that the flue pipe can move up and downwards in the terminal.
- In general there are two ways of installation: the combustion air is taken from the chimney or it is taken from somewhere else. In that case the chimney is just ventilated.

1 Terminals
→ page 10

2 In the chimney
→ page 10

3 System support
→ page 11

4 Boiler connection materials
→ page 52 for concentric materials
→ page 54 for single-wall materials

Technical details

CE marking	EN14471 T120 H1
Temperature class	T120
Seals	Mostly in EPDM for flue pipe connections
Pressure class of the system	H1 (5.000 Pa)
Available diameters [mm]	60, 80, 110, 125, 160, 200, 250, 315
Installation types	**C9, C5, C5x, C4, B3, B2**

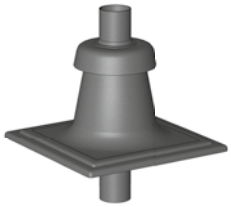
Features and benefits

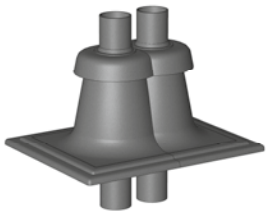
- Optimal flexibility combined with maximum robustness
- Chimney calculations possible on request
- Lightweight; easy to handle and easy to shorten
- Less risk of injuries as result of sharp edges due to plastic materials
- No specialist tools needed
- Transparent material; easy to inspect during installation or with camera after installation
- Full range of products; inspection parts, adapters, terminals, extensions, bends and more

CE

1

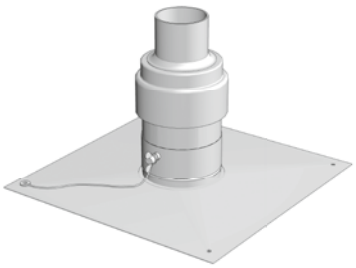
Terminals





PP terminal

- Complete chimney top
- For 60, 80 and 110
- Flue pipe can move up and downwards in the terminal due temperature variations
- For 80 and 110 available as double version
- Wind angle class A45

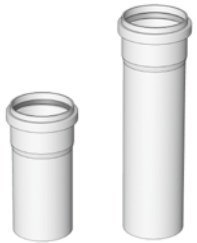


INOX terminal

- Complete chimney top
- Outer part in INOX
- Flue pipe in UV-resistant PP or INOX
- For 60, 80, 110, 125, 160, 200, 250, 315
- Wind angle class A45

2

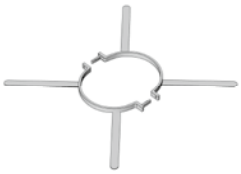
In the chimney



Chimney parts

- Flue pipes
- 15°, 30°, 45° and 87° bends
- Adaptors

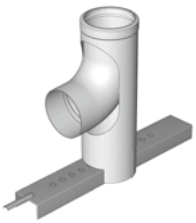
2 In the chimney



Special parts

- Inspection parts
- Spacers
  - Damage prevention during installation
  - Available for relevant diameters

3 System support

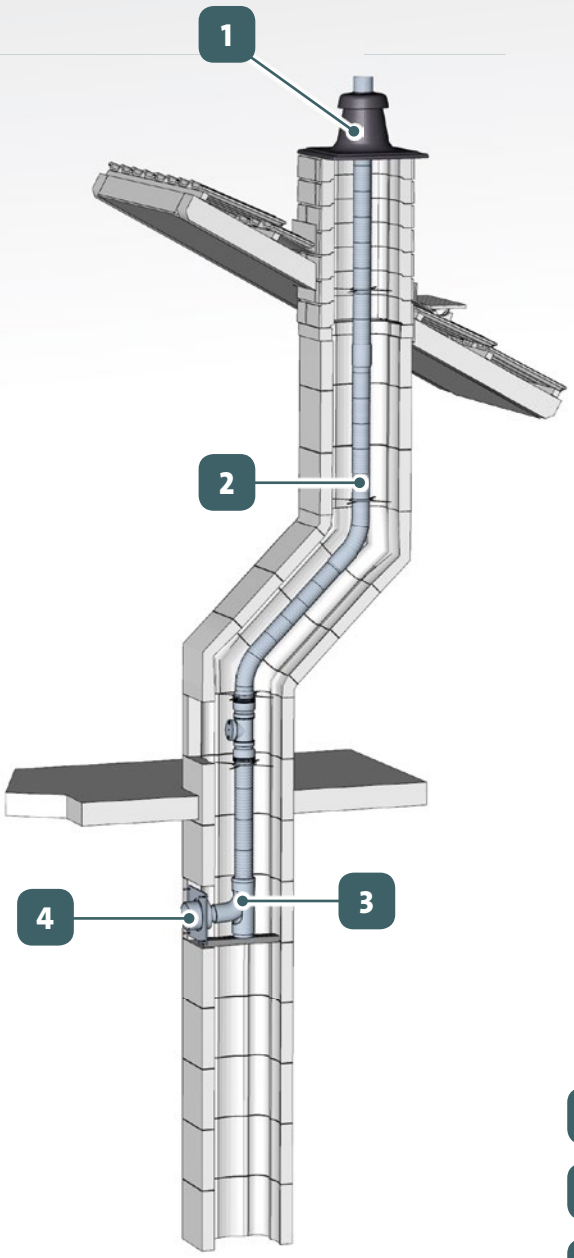


Support parts

Rigid pipes desire a firm support part at the bottom side.

- Small diameters; a metal support rail with PP bend
- Large diameters; support pipe that stands on the floor and features two gaps for a metal rail support

Chimney systems flexible | single-wall



Description

- The PP flexible ducts are suitable for condensing gas and oil boilers with a maximum flue temperature of 120°C.
- Several terminals are at hand and depending on the model available in black, terracotta or INOX.
- In general there are two ways of installation: the combustion air is taken from the chimney or it is taken from somewhere else. In that case the chimney is just ventilated.

1 Terminals
→ page 14

2 In the chimney
→ page 16

3 System support
→ page 19

4 Boiler connection materials
→ page 52 for concentric materials
→ page 54 for single-wall materials

Technical details

CE marking	EN14471 T120 H1
Temperature class	T120
Seals	EPDM for flue pipe connections
Pressure class of the system	H1 (5.000 Pa)
Available diameters [mm]	60, 80, 110, 125, 160
Installation types	**C9, C5, C5x, C4, B3, B2**

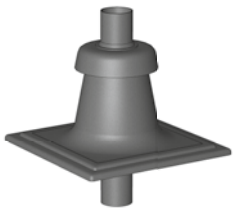
Features and benefits

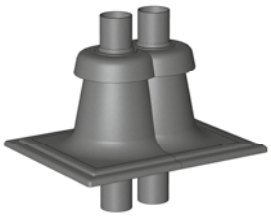
- Optimal flexibility combined with maximum robustness
- Chimney calculations possible on request
- Lightweight; easy to handle and easy to shorten
- Less risk of injuries as result of sharp edges due to plastic materials
- No specialist tools needed
- Transparent material; easy to inspect during installation or with camera after installation
- Full range of products; inspection parts, adapters, terminals, extensions and more

CE

1

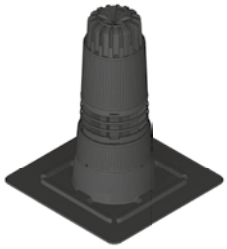
Terminals





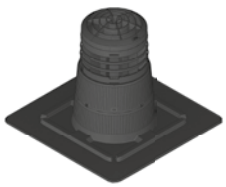
PP terminal

- Complete chimney top
- For 60, 80 and 110
- Flex pipe is fixed at the top to prevent falling down
- For 80 and 110 also available as double version
- Wind angle class A45
- Available in black and terracotta



PP terminal

- Complete chimney top
- For 60 and 80
- Flex pipe is fixed at the top to prevent falling down
- Suitable for chimneys with open top (figure A)
- Adjustable for chimney pot application (figure A)
- Wind angle class A90
- Available in black and terracotta
- For C-type installations

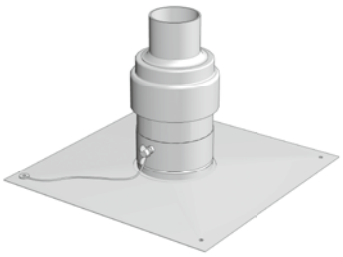


PP terminal

- Complete chimney top
- For 60 and 80
- Flex pipe is fixed at the top to prevent falling down
- Suitable for chimneys with open top (figure A)
- Adjustable for chimney pot application (figure A)
- Wind angle class A45
- Available in black and terracotta
- For B-type installations

1

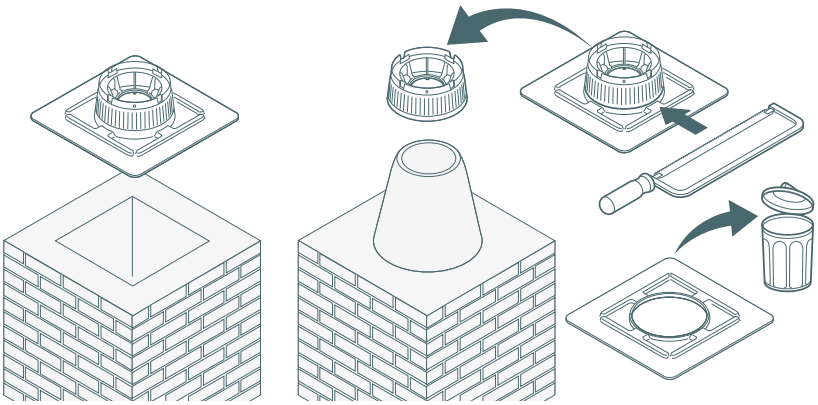
Terminals



INOX terminal

- Complete chimney top
- Outer part in INOX
- Flue pipe in UV-resistant PP or INOX
- Flex pipe is fixed at the top to prevent falling down
- For 60, 80, 110, 125, 160, 200, 250, 315
- Wind angle class A45

A



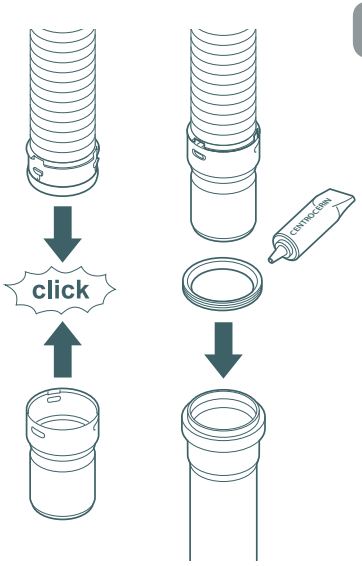
2

In the chimney

Flex 60

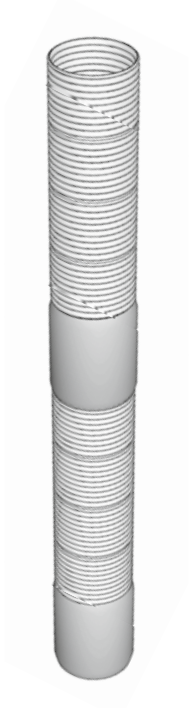
- Excellent, audible “click” connection for perfect connection (figure B)
- Easily released with a screwdriver
- Delivered on a roll

B



2

In the chimney



Flex 80 and Flex 110

- Flex pipe with spigot pieces at approx. every 50 cm
- Fixation with screw swivel
- Delivered on a roll

2

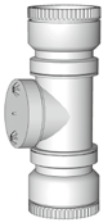
In the chimney

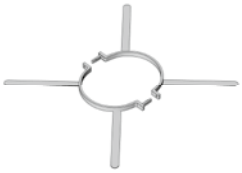
Flex 125 and Flex 160

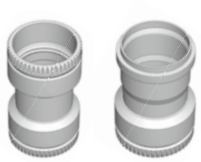
- Unique screwing mechanism (figure C)
- Delivered in pieces of around 1 m
- Can be cut to length in 7 steps

C

2 In the chimney



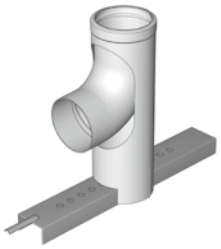




Special parts

- Inspection parts
- Spacers
  - Damage prevention during installation
  - Available for relevant diameters
- Adaptors
  - flex – flex
  - spigot – flex
  - flex – socket

3 System support

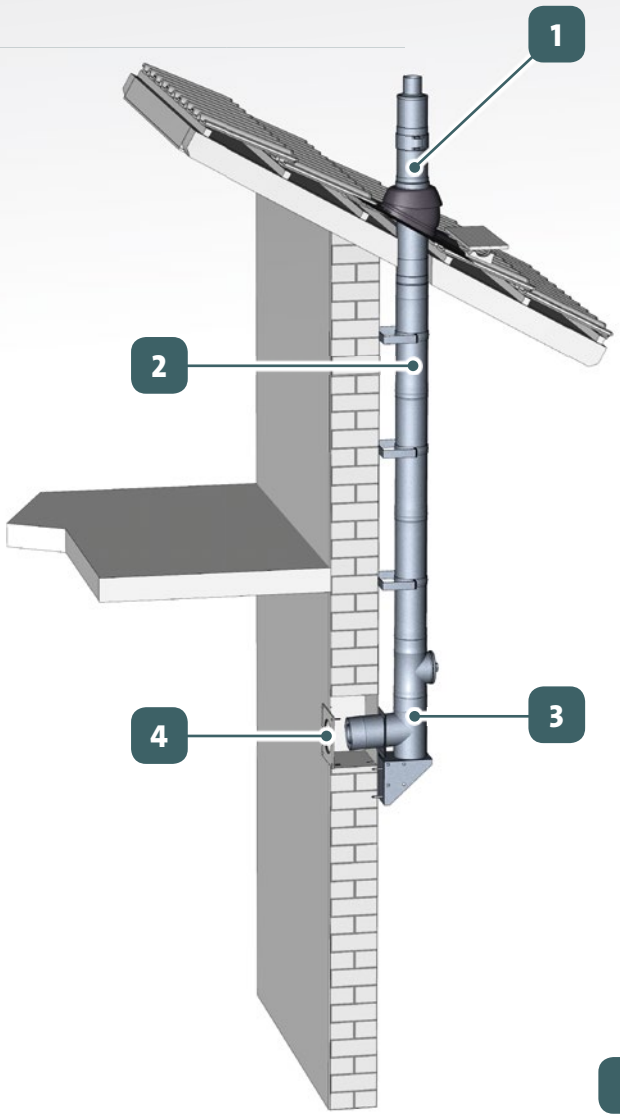


Support parts

Flex pipes must hang at the top of the chimney.
A rigid support at the bottom is also necessary.

- metal support rail with PP bend

Outdoor systems rigid | concentric



Description

- The outdoor systems are designed for installation along the outer side of a building. The PP rigid, flue ducts are suitable for condensing gas and oil boilers with a maximum flue temperature of 120°C. The INOX outer ducts have a polished finish.
- The combustion air is taken at the bottom of the system. Installing an optional air inlet part gives the possibility to take the air from a different location.
- Rain ingress is avoided due to clever design. The terminals contain a UV-resistant flue PP pipe which can freely move up and downwards to compensate elongation due to temperature variations.

1 Terminals
→ page 22

2 System components
→ page 22

3 System connection
→ page 23

4 Boiler connection materials
→ page 52 for concentric materials
→ page 54 for single-wall materials

Technical details

CE marking	EN14471 T120 H1
Temperature class	T120
Seals	EPDM for flue pipe connections, silicon for air inlet
Pressure class of the system	H1 (5.000 Pa)
Available diameters [mm]	60/100, 80/125, 110/160, 125/185, 160/225, 200/300, 250/350, 315/400
Installation types	**C5, C3, C4, B3, B2**

Features and benefits

- Complete range of products for all installations
- Rain water tight
- Aesthetically fits to each and every wall structure and color
- Roof tiles available

CE

1 Terminals

INOX Terminal

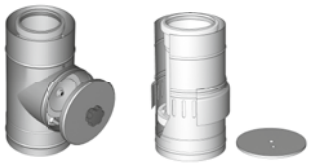
- Outer part of INOX
- Flue pipe of UV-resistant PP
- Flue pipe is moving freely
- Terminal consists of 3-parts
  - concentric outlet part with UV-resistant PP flue pipe
  - concentric basic terminal part that will be connected to the flue system
  - a clamp to connect these 2 component to a complete terminal

2 System components

INOX System

- Extension pipes
  - 500 and 1000 mm extension pipes
- Bends
  - Available in 30°, 45° and 87°
- Installation bracket
  - For a firm façade installation

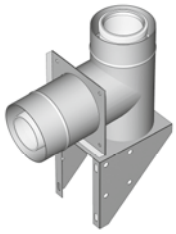
2 System components



INOX Special parts

- Inspection part
- Optional air-inlet part
  - Includes a round plate to close the opening in the wall support. Part can be placed between top and bottom of the system

3 System connection



INOX Wall support

- Air inlet for combustion
- The inlet can be closed when the optional air inlet is used

Wall throughput pipe

Roof terminals

Boiler connection materials
→ page 52 for concentric materials
→ page 54 for single-wall materials

Description

- The PP inner ducts are suitable for condensing gas and oil boilers with a maximum flue temperature of 120°C.
- The terminals are designed in a way that there is no icicle forming and a minimum of recirculation and wind influence.

Models with cap

- Several configurations possible
- Several models available

Models with open outlet

- The inner pipe can move up and down to compensate elongation due to temperature variations
- Several models avaiable

Technical details

CE marking	EN14471 T120 H1
Temperature class	T120
Seals	EPDM for flue pipe connections, silicon for air inlet side
Pressure class of the system	H1 (5.000 Pa)
Diameters | with cap [mm]	60/100, 80/125, 100/150
Diameters | open outlet [mm]	60/100, 80/125, 110/160
Installation types	**C3, C5, C4, B2**

Features and benefits

- Complete range of products for all installations
- Rain water tight
- Aesthetically fits to each and every wall structure and color
- Roof tiles available
- Many accessories available for complete and hassle-free installation kits

CE

1

Models with cap

Model 1 – with cap

- Designed for type C installations
- Innovative internal water discharge spiral
- Pressure loss brought to minimum level according to standards
- Tool-free cap removal/terminal inspection
- Low circulation due to specially designed surface
- Very suitable for both gas and oil fueled boilers (T120)
- Better boiler performance; less maintenance
- Wind angle class A45
- Available in black and terracotta
- Diameter
  - 80/125 (80-80 with branch piece)
- Material outer pipe below roof: plastic or metal
- Flue pipe available in PP, ALU or INOX

Model 2 – with cap

- Designed for type B and type C installations
- Pressure loss brought to minimum level according to standards
- Better overall boiler performance; less maintenance
- Available in black and terracotta (except 100/150)
- Diameters
  - 60/100
  - 80/125 (80-80 with branch piece)
  - 100/150 (100-100 with branch piece)
- Material outer pipe below roof: plastic or metal
- Flue pipe available in PP, ALU or INOX

1

Models with cap

Model 3 – with cap

- Pressure loss brought to minimum level according to standards
- Better overall boiler performance; less maintenance
- Available in black
- Diameters
  - 60/100 (80-80 with branch piece)
- Material outer pipe below roof: plastic or metal
- Flue pipe available in PP, ALU or INOX

Special edition

- Featuring a flexible rain collar.
- Installation from the inner side of the building possible

2

Models with open outlet

Model 1 – open outlet

- Superb performance
- Designed for type B and type C installations
- Open outlet, minimum pressure loss and recirculation
- Available in black and terracotta
- Material outer pipe below roof: plastic or metal

2

Models with open outlet

Model 2 – open outlet (INOX)

- Modular system
  - End piece, clamp, basic connection part
- Designed for type B and type C installations
- Open outlet, minimum pressure loss and recirculation
- Better overall boiler performance
- Material outer pipe: INOX
- Flue pipe available in UV-resistant PP
- Fixation to the vertical terminal with clamp

Wall terminals

Description

- The PP inner ducts are suitable for condensing gas and oil boilers with a maximum flue temperature of 120°C.
- The terminals are designed in a way that there is no icicle forming and a minimum of recirculation and wind influence.
- The terminals can be finished with either a plastic or INOX cap.
- There are special telescopic models available as well as a plume management kit.

Boiler connection materials
→ page 52 for concentric materials
→ page 54 for single-wall materials

Technical details

CE marking	EN14471 T120 H1/P1
Temperature class	T120
Seals	EPDM for flue pipe connections, silicon for air inlet side
Pressure class of the system	H1 (5.000 Pa)/P1 (200 Pa)
Diameters | plastic cap [mm]	60/100, 80/125, 100/150
Diameters | INOX cap [mm]	60/100, 80/125, 110/160, 125/185, 160/225, 200/300, 250/350, 315/400
Installation types	**C1, B2**

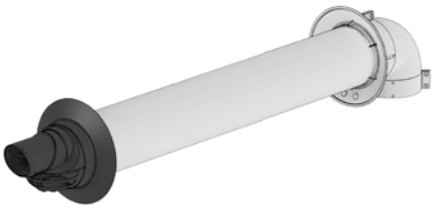
Features and benefits

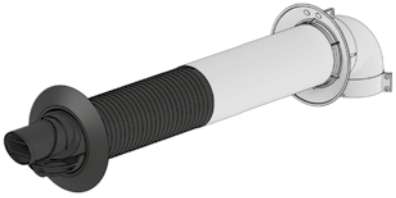
- Complete range of products for all configurations/installations
- Many accessories available for complete and hassle-free installation kits
- Plume management kit available

CE

1

Models with plastic cap





- Eccentric cap to ensure flow back of condensate to the boiler
- Rain stopper to prevent rain water entering the terminal
- Inner and outer wall plates
- Designed for type C installations
- Open outlet, minimum pressure loss and less recirculation for better boiler performance
- Available as telescopic version
- Diameter:
  - 60/100
- Plume management kit available

1

Models with plastic cap

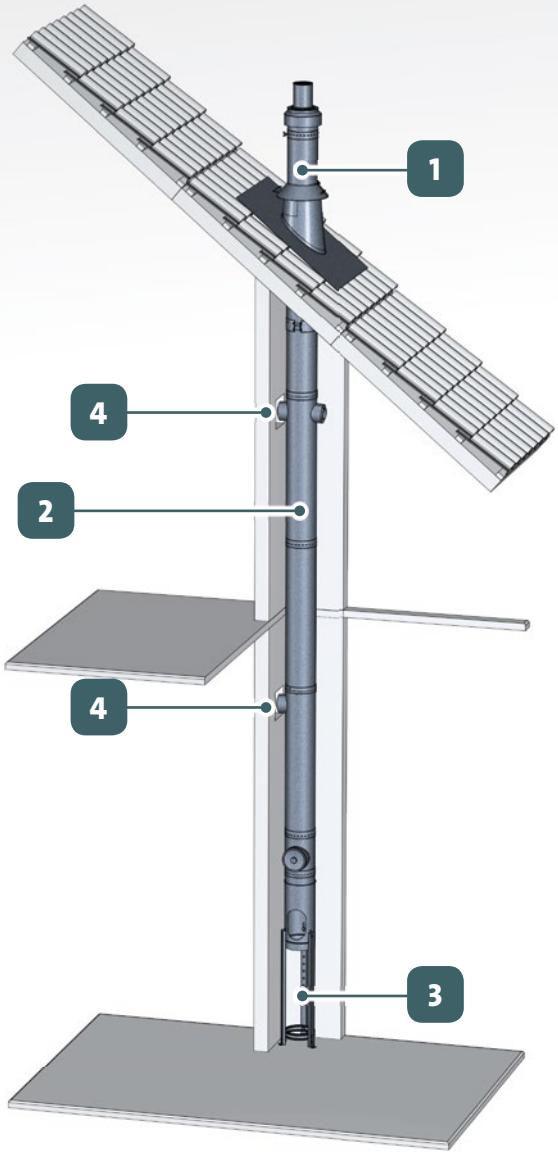
- Eccentric cap to ensure flow back of condensate to the boiler
- Rain stopper to prevent rain water entering the terminal
- Inner and outer wall plates
- Designed for type C installations
- Open outlet, minimum pressure loss and less recirculation for better boiler performance
- Material outer pipe: plastic or metal
- Available in black and white
- For 60/100, 80/125, 100/150
- Various models and configurations available and possible

2

Models with INOX cap

- Eccentric cap to ensure flow back of condensate to the boiler
- Inner and outer wall plates
- Designed for type C installations
- Open outlet, minimum pressure loss and less recirculation for better boiler performance
- Material outer pipe: INOX
- For 60/100, 80/125, 110/160, 125/185, 160/225, 200/300, 250/350, 315/400
- Various models and configurations available and possible

CLV systems concentric



Description

- The concentric CLV system is a collective chimney system especially for apartment buildings. It brings combustion air to the boilers on each floor and evacuates the individual flue through one common flue duct.
- The PP rigid inner ducts are suitable for condensing gas and oil boilers with a maximum flue temperature of 120°C. The outer ducts are made of galvanized steel. The system has a H1 tightness class which enables operation with positive pressure. This reduces the required diameters compared to a negative pressure system.
- T-pieces with 1 or 2 boiler connections (90° or 180°) are available. Each T-piece contains a compensator to absorb the elongation and shrinking of the PP flue pipes due to temperature variations.
- A special ring in the T-piece ensures that condensate flows back to each individual boiler. This limits drying-out of boiler siphons which are out of operation.
- A telescopic pipe makes it easier to adjust the length to the height of the room.
- An optional inspection opening at the bottom guarantees an easy access.

1 Terminals/outlet parts
→ page 36

2 In the chimney
→ page 36

3 System support
→ page 37

4 Boiler connection materials
→ page 52 for concentric materials
→ page 54 for single-wall materials

Technical details

CE marking	EN14471 T120 H1
Temperature class	T120
Seals	EPDM for flue pipe connections, silicon for air inlet side
Pressure class of the system	H1 (5.000 Pa)
Diameters | with cap [mm]	80/130, 110/160, 125/200, 160/250, 200/300
Installation types	**C4**

Features and benefits

- For multiple boiler installation (positive-pressure)
- Room sealed (type C) operation
- Maximum number of boilers depending on national regulations
- Number of boilers per floor depending on installation of the various T-pieces
- Reduced diameter for the flue pipes
- Telescopic pipes for easy adjustment to room height
- Special ring in T-piece limits drying-out of boiler siphons

CE

1

Terminals/outlet parts

CLV Terminal

- In INOX or coated steel
- Coating colors; black or terracotta
- Flue pipe in UV-resistant PP

Roof parts

- Roof tile for pitched roofs; in INOX
- Rain collar for pitched roofs; in INOX
- Fixing plate for chimneys

2

In the chimney

Extension pieces

- 500 mm
- 1000 mm
- Telescopic extension pieces
  - Easy adjustment to room height
  - Fixation with security clamp

2

In the chimney

Floor connection pieces (T-pieces)

- 1 connection
- 2 connections; 90°
- 2 connections; 180°

Special parts

- Inspection piece
- Bottom part; for siphon placement

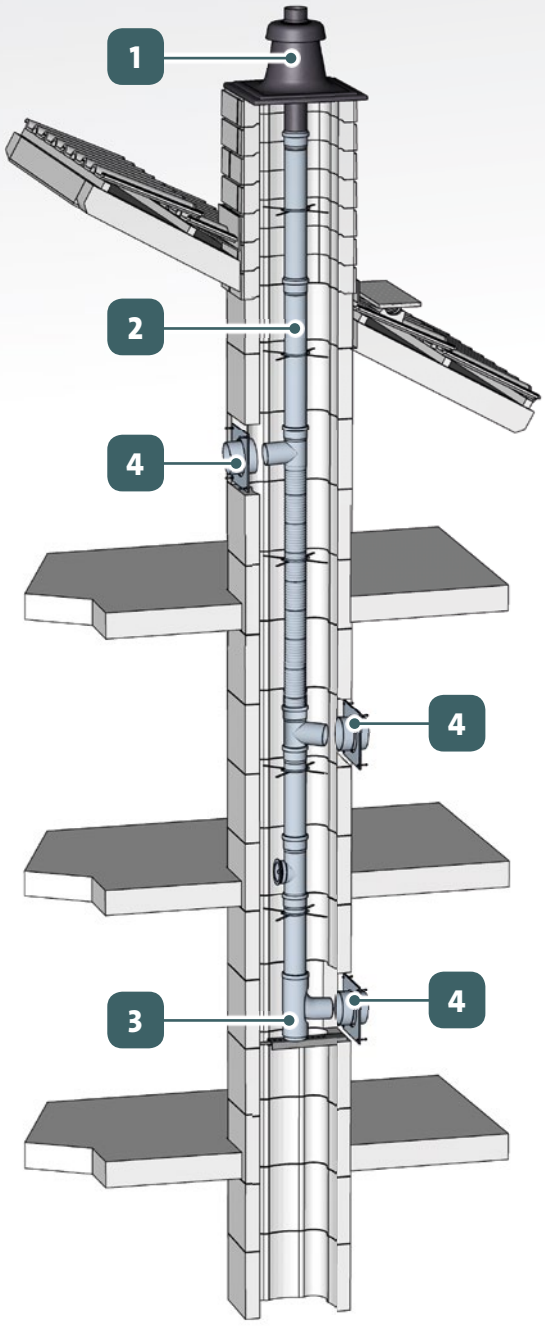
3

System support

System support

- Adjustable, 3 feet tripod
- Can be fixed to the floor

CLV systems single-wall



Description

- The single wall CLV system is a collective chimney system especially for apartment and residential buildings. It evacuates the individual flue through one common duct. The combustion air comes either from the chimney or from a separate air intake terminal. The flue pipe is made from PP.
- The system has a H1 tightness class which enables operation with positive pressure. This reduces the required diameters compared to a negative pressure system.
- T-pieces with 1 boiler connection are available. Each T-piece contains a compensator to absorb the elongation and shrinking of the PP flue pipes as result of temperature variations.
- A special ring in the T-piece ensures that condensate water flows back to each individual boiler. This limits drying-out of boiler siphons which are out of operation.

1 Terminal
→ page 40

2 In the chimney
→ page 40

3 System support
→ page 41

4 Boiler connection materials
→ page 52 for concentric materials
→ page 54 for single-wall materials

Technical details

CE marking	EN14471 T120 H1
Temperature class	T120
Seals	EPDM for flue pipe connections
Pressure class of the system	H1 (5.000 Pa)
Available diameters [mm]	110, 125, 160, 200
Installation types	**C4, C8, C8x**

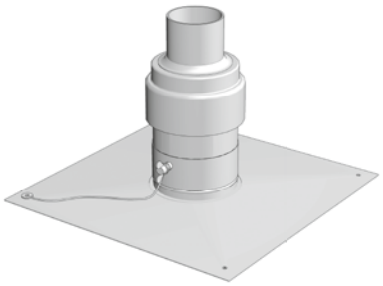
Features and benefits

- For multiple boiler installation
- For positive-pressure and negative-pressure installations
- Maximum number of boilers depending on national regulations
- Number of boilers per floor depending on installation of the various T-pieces
- Room sealed (type C) operation
- Reduced diameter of the flue
- Special ring in T-piece limits drying-out of boiler siphons
- PP pipes can be easily cut to adjust the length to the height of the room

CE

1

Terminal

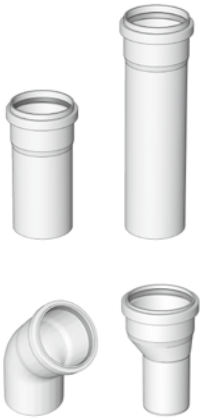


Chimney top terminal

- With outer part of INOX and exhaust pipe of PP or INOX

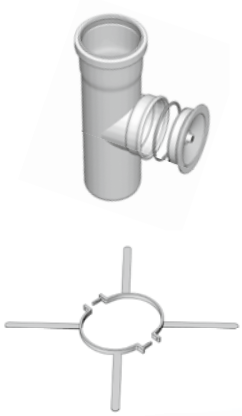
2

In the chimney



Chimney parts

- Flue pipes
- 15°, 30°, 45° and 87° bends
- Adaptors



Special parts

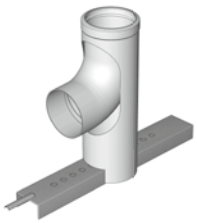
- Inspection parts
- Spacers
  - Damage prevention during installation
  - Available for relevant diameters

2 In the chimney

T-pieces with 1 connection

- A special ring in the T-piece ensures that condensate flows back to each individual boiler
- Each T-piece contains a compensator to absorb the elongation and shrinking of the PP pipes as result of the temperature variations

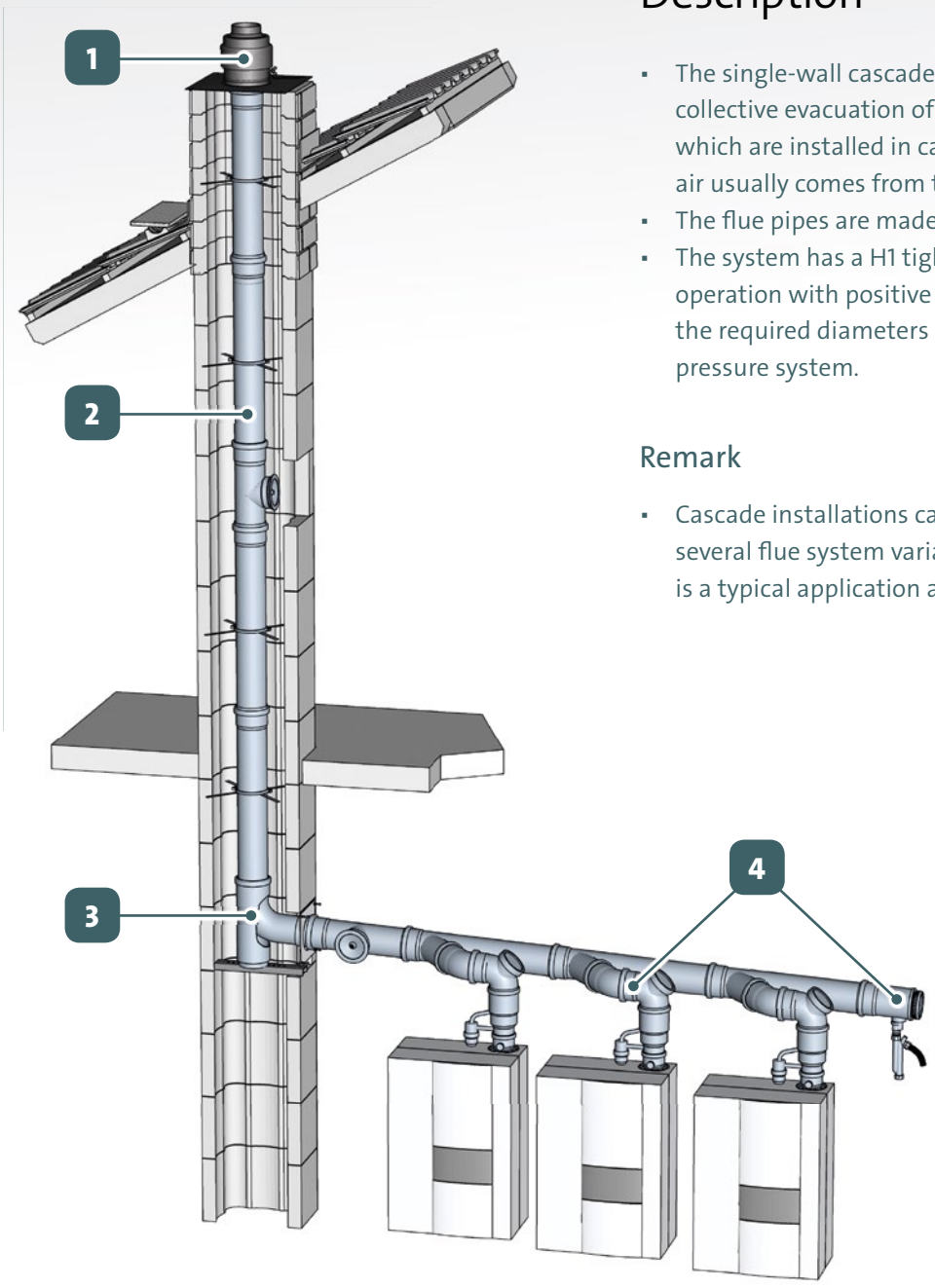
3 System support



Support parts

- It is extremely important to have a good support at the bottom of the chimney
- The smaller diameters consist of a horizontal rail with a bend

Exceptional installations in cascade | single-wall



Description

- The single-wall cascade system is meant for collective evacuation of flue for several boilers which are installed in cascade. The combustion air usually comes from the boiler room.
- The flue pipes are made in PP.
- The system has a H1 tightness class which enables operation with positive pressure. This reduces the required diameters compared to a negative pressure system.

Remark

- Cascade installations can be combined with several flue system variations. The system image is a typical application and is meant as example.

1 Terminal
→ page 44

2 In the chimney
→ page 44

3 System support
→ page 44

4 Cascade connection materials
→ page 45

Technical details

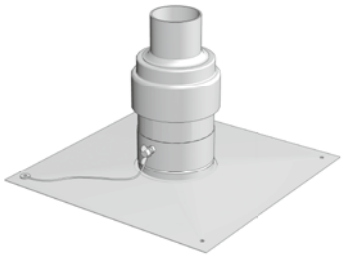
CE marking	EN14471 T120 H1
Temperature class	T120
Seals	EPDM for flue pipe connections
Pressure class of the system	H1 (5.000 Pa)
Available diameters [mm]	110, 125, 160, 200, 250, 315
Installation types	**B2**

Features and benefits

- The PP pipes can be easily cut to adjust the length
- Optimal flexibility combined with maximum robustness
- Chimney calculations possible on request
- Lightweight; easy to handle and easy to shorten
- Plastic materials; less risk of injuries as result of sharp edges
- Transparent material; easy to inspect during installation
- Non-return valves available

CE

1 Terminal



INOX terminal

- Complete chimney top
- Outer part in INOX
- Flue pipe in UV-resistant PP or INOX
- For 125, 160, 200, 250 and 315
- Wind angle class A45

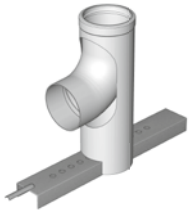
2 In the chimney

Extension materials

Flue pipes with lengths of 250, 500, 2000 and 2000 mm

- 15°, 30°, 45° and 87° bends
- In translucent PP
- Some parts available in black or white
- 315 variant in PPs, in grey

3 System support

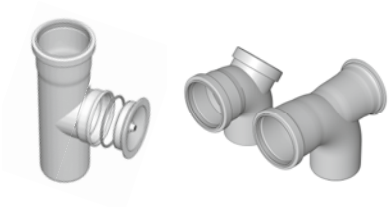


Support parts

- Small diameters; a metal support rail with PP bend
- Large diameters; support pipe that stands on the floor and features two gaps for a metal rail support

4

Cascade connection materials



Inspection parts

- T-pieces
- Several bends with inspection caps

Adaptors

- For the right boiler connection
- Available for any configuration

Cascade collector

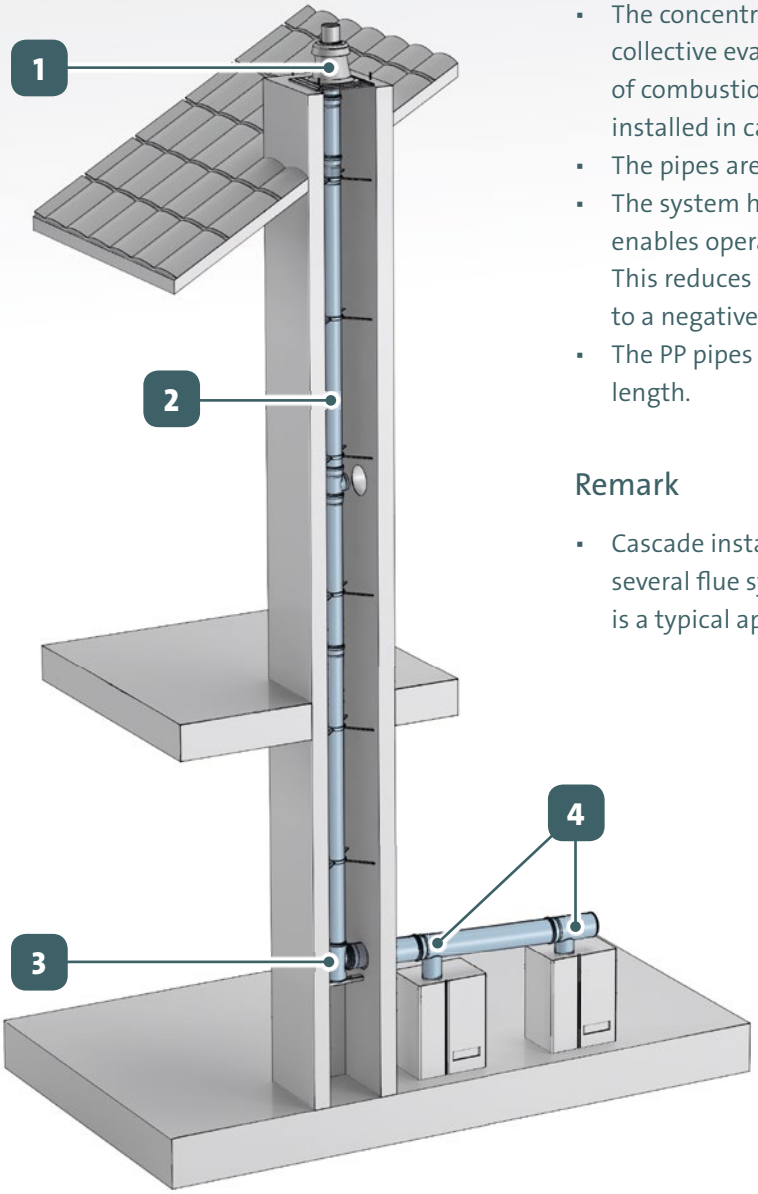
- For connecting boilers in cascade installation
- Easy to cut to length for multiple usage
- Easily connect multiple connectors up the required number of boiler connections

Cascade end-piece

- With inspection end-part
- With siphon connection

Exceptional installations in cascade | concentric

Description



- The concentric cascade system is meant for the collective evacuation of exhaust gases and supply of combustion air of several boilers which are installed in cascade.
- The pipes are made of PP.
- The system has a H1 tightness class which enables operation with positive pressure. This reduces the required diameters compared to a negative pressure system.
- The PP pipes can be easily cut to adjust the length.

Remark

- Cascade installations can be combined with several flue system variations. The system image is a typical application and is meant as example.

1 Terminal
→ page 48

2 In the chimney
→ page 48

3 System support
→ page 48

4 Cascade connection materials
→ page 49

Technical details

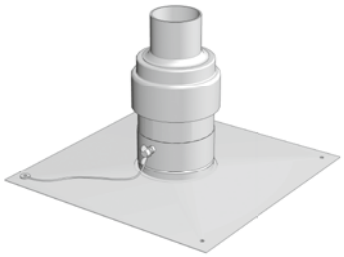
CE marking	EN14471 T120 H1
Temperature class	T120
Seals	EPDM for flue pipe connections
Pressure class of the system	H1 (5.000 Pa)
Available diameters [mm]	110/160
Installation types	**C4**

Features and benefits

- Optimal flexibility combined with maximum robustness
- Chimney calculations possible on request
- Lightweight; easy to handle and easy to shorten
- Plastic materials; less risk of injuries as result of sharp edges
- Non-return valves available

CE

1 Terminal



INOX terminal

- Complete chimney top
- Outer part in INOX
- Flue pipe in UV-resistant PP or INOX
- For 125, 160, 200, 250 and 315
- Wind angle class A45

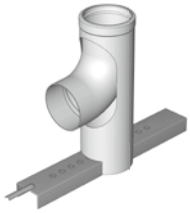
2 In the chimney

Extension materials

Flue pipes with lengths of 250, 500, 2000 and 2000 mm

- 15°, 30°, 45° and 87° bends
- In translucent PP
- Some parts available in black or white
- 315 variant in PPs, in grey

3 System support



Support parts

- Small diameters; a metal support rail with PP bend
- Large diameters; support pipe that stands on the floor and features two gaps for a metal rail support

4

Cascade connection materials

Inspection parts

- T-pieces
- Several bends with inspection caps

Adaptors

- For the right boiler connection
- Available for any configuration

Cascade collector

- For connecting boilers in cascade installation
- Easy to cut to length for multiple usage
- Easily connect multiple connectors up the required number of boiler connections

Cascade end-piece

- With inspection end-part

Mounting brackets

- For a firm façade installation

Parts

Concentric materials for boiler connections

Description

- The concentric materials are especially designed for condensing boilers for oil and gas. The inner exhaust pipe comes standard in PP and is suitable for a maximum flue temperature of 120°C (T120).
- The outer casing can come in plastic or in powder coated metal. The colors are optimized on customer need.
- Straight extension pipes come in 250, 500, 1000 and 2000 mm.
- Bends come in variations of 15°, 30°, 45° and 87°.
- Straight extension pieces and 87° bends available with inspection opening.
- Boiler connection adapters, with or without testing points available in various types.

Technical details

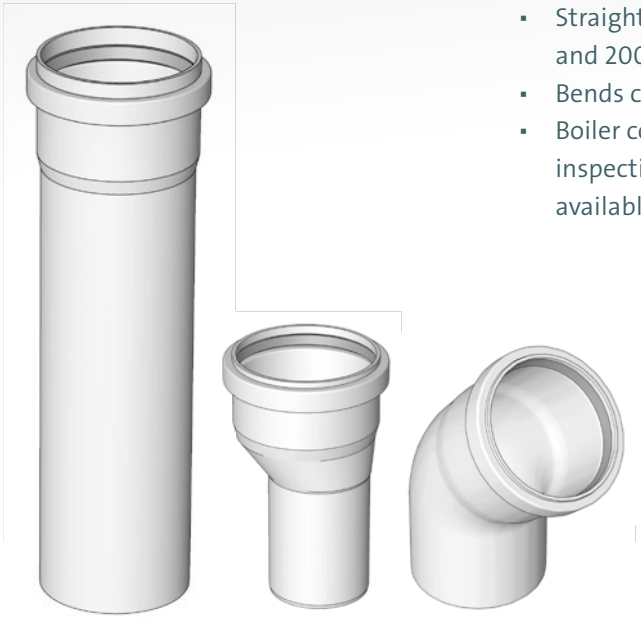
CE marking	EN14471 T120 H1
Temperature class	T120
Seals	EPDM for flue pipe connections
Pressure class of the system	H1 (5.000 Pa)
Available diameters [mm]	60/100, 80/125, 100/150, 110/160

Features and benefits

- Many possible variations; in dimensions, materials and connection type
- Full range of products; various bends, inspection parts, adapters and much more

CE

Single-wall materials for boiler connections



Description

- The single-wall boiler connection materials are designed for condensing oil- or gas boilers.
- The flue pipe comes standard in PP and is suitable for a maximum flue temperature of 120°C (T120).
- Straight extension pipes come in 250, 500, 1000 and 2000 mm.
- Bends come in variations of 15°, 30°, 45° and 87°.
- Boiler connection adapters, condensate traps, inspection parts and many other accessories are available in various types.

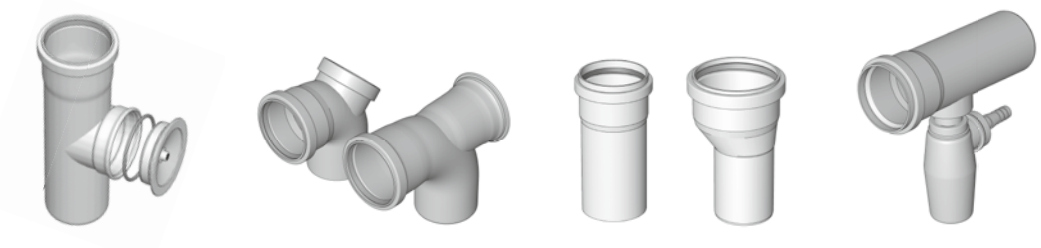
Technical details

CE marking	EN14471 T120 H1
Temperature class	T120
Seals	EPDM for flue pipe connections
Pressure class of the system	H1 (5.000 Pa)
Available diameters [mm]	60, 80, 100, 110, 125, 160, 200, 250, 315

Features and benefits

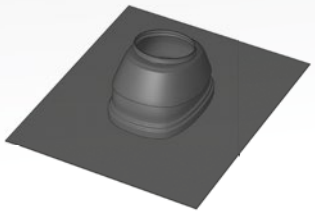
- Full range of products; various bends, inspection parts, adapters, adapters with test points, condensate traps, etc.

CE



Accessories

Accessories

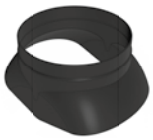


Universal roof tiles, with lead-free flashing

- Made of reinforced aluminum mesh (grid) with a mixture of modified bitumen. The material provides an all-weatherproof junction.
- Several tiles available; for the various roof angles and diameters
- Available in black and terracotta

Universal, “all-angles”, lead-free, roof tile

- For all pitched roofs in range 15°–55°
- With lead-free flashing
- Available in black



Rain collars

- Available for all diameters
- Available in black or terracotta

Flat roof flange plates

- Made from aluminum
- Versions with integrated EPDM, PVC or bitumen foils

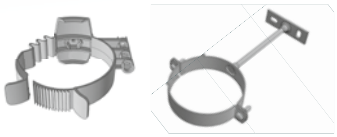
Wall plates

- For wall connections
- For ceiling connections
- Available for concentric and single-wall configurations

Accessories

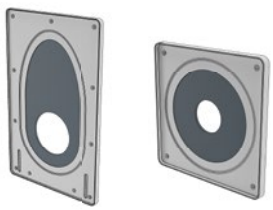
Wall plates

- Round versions
- Rubber material
- Split-versions for application afterwards



Mounting brackets

- In metal, for various diameters
- In plastic, for 80 mm



Interior finishing plates

- For a tidy installation
- Improving overall energy efficiency by taking away leakage
- For new and renovation applications

Siphons

- For condensate discharge
- Several models available

Air intake grills

- For B-type boiler installations
- Made from PP

Grills

- Air inlet grid for boiler room
- For B-type (combustion air taken from the boiler room)
- Made from INOX

Non-return valves

Description

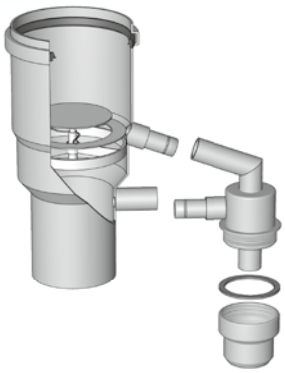
Non return valves are necessary to prevent back flow of flue gases through boiler which is out of operation in case of over pressure systems. This means the pressure in the system is higher than the atmospheric pressure. The use of non-return valves is only allowed after a release of the boiler manufacturer.

Non-return valves

Valve type 80

- One valve
- Internal syphon
- Trap flushes condensate when boiler is switched off

Non-return valves



Valve type 110

- Unique twin valve mechanism
- Small valve opens at ΔP = 25 Pa, at higher pressure differences the big valve opens
- Trap flushes condensate when boiler is switched off
- Many thousands in operation during several years

Valve type 160

- Unique twin valve mechanism
- Small valve opens at ΔP = 25 Pa, at higher pressure differences the big valve opens
- Internal syphon
- Trap flushes condensate when boiler is switched off

Notes

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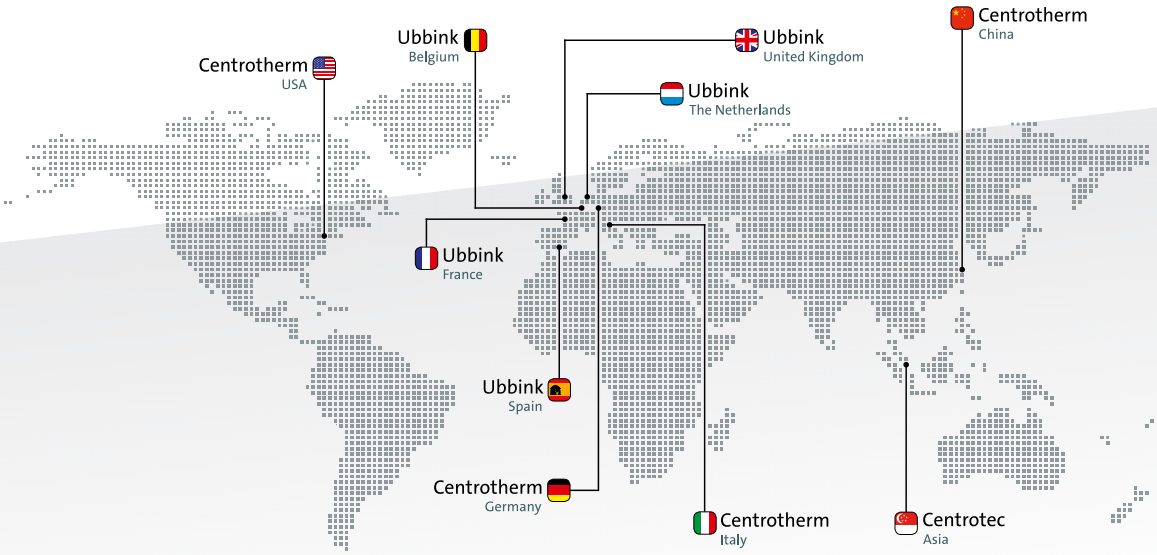
Ubbink
Centrotherm
group



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