

GF Building Flow Solutions

# Waste Water Systems

Get it out the best way



**+GF+**

# The full GF Building Flow Solutions Waste Water competence





## The right solution for every application.

### GF Building Flow Solutions Waste Water Systems

In construction, every detail counts. Installers and planners face more than just technical demands when designing drainage systems. Noise, fire safety, and long-term reliability are critical concerns. Buildings need more than efficient solutions; they require systems that guarantee comfort and safety for those who live and work in them.

#### Turning challenges into comfort

At GF Building Flow Solutions, we understand these challenges. For decades, we've developed waste water systems that go beyond basic functionality. Our solutions reduce noise, improve fire safety, and ensure long-lasting performance. Whether for single-family homes or multi-story buildings, we create systems that ensure peace, quiet, and security for occupants. Our solutions include:

- Acoustic House Drainage
- House Drainage
- Air Admittance Valves
- Drain Inlets

#### Anticipating with expertise and trust

Reliability is essential in waste water management. Our advanced solutions exceed industry expectations. With cutting-edge materials and over 100 years of expertise, we offer

systems that are durable, easy to install, and require minimal maintenance. From noise-reducing technology to odor-blocking valves, every feature is designed to enhance comfort and usability.

Choosing GF Building Flow Solutions means embracing a future where waste water systems are not a challenge – they are a seamless part of modern, comfortable living.

GF Building Flow Solutions, a division of GF, is a leading global provider of sustainable and innovative solutions, making water flow in buildings. The division, stemming from the 2023 acquisition of Uponor by GF, provides safe solutions for hot and cold water supply and control, noise-reducing waste water systems, as well as energy-efficient heating and cooling. Its focus is to enable its customers in the residential and commercial space to be more productive and sustainable, while ensuring comfort, health and efficiency. GF Building Flow Solutions has sales companies in 30 countries and production sites in 13 locations across Europe and the Americas.



# Leading with Water

## GF Building Flow Solutions

We make water flow in buildings, empowering customers in residential and commercial spaces to boost productivity and sustainability while enhancing comfort, health, and efficiency. Our reliable hot and cold water, waste water, and energy-efficient heating and cooling solutions are available in over 80 countries. Through GF Building Flow Solutions, we bring together two powerful global brands: GF and Uponor.

+ **1.3 bn CHF**

total revenues 2023

+ **> 4'200**

employees worldwide

+ **30**

countries

+ **13**

productions sites





## Innovation Champion in sound-proof waste water systems

The GF waste water production sites are pioneers in manufacturing soundproofed pipes. GF Building Flow Solutions continues to be the expert for robust and reliable plastic pipes for waste water application.

**Waste water systems produced to the highest GF standards – for more than 50 years**

## Nastola, FI



## Çerkezköy, TR



## Świebodzice, PL

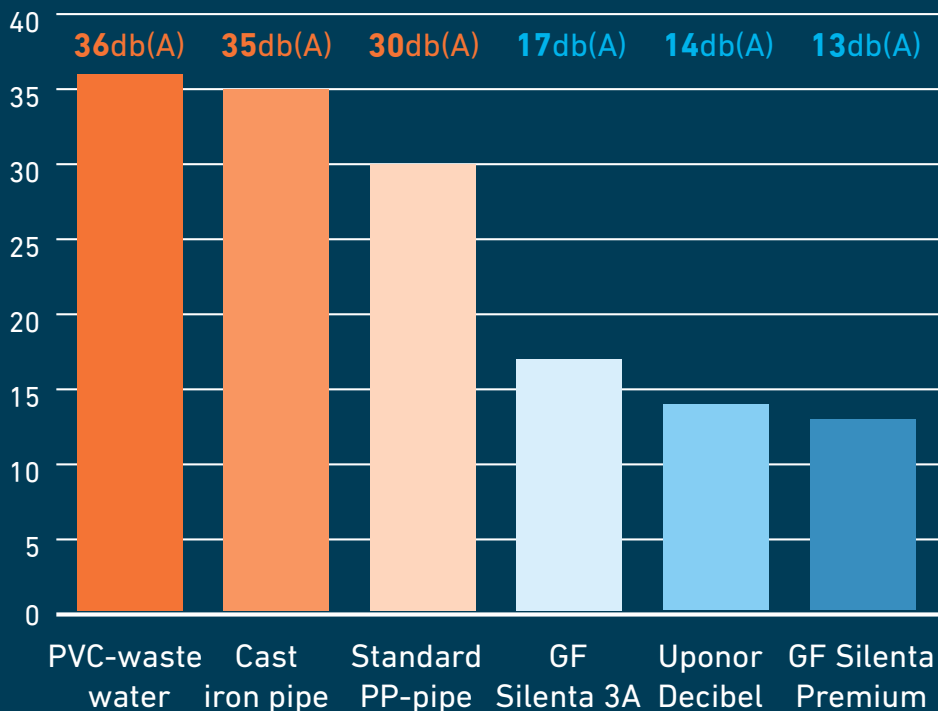


# Quiet comfort, proven performance

Waste water disposal can often result in unwanted noise, both structure-borne and air-borne. At GF Building Flow Solutions, we tackle this challenge head-on with our Acoustic In-House Drainage Pipes. Designed to reduce noise at the source, our pipes ensure a quieter, more comfortable living environment. Certified by the Fraunhofer Institute for Building Physics in Stuttgart, our systems deliver top-tier acoustic performance. The graph on this page illustrates the significant reduction in noise levels, highlighting the superior soundproofing of our solutions.

**With GF Building Flow Solutions, you choose silence, comfort, and proven quality.**

## Leader in low noise waste water systems







**> 50 %**  
**noise reduction vs.**  
**standard PP-pipes**

# GF Silenta Premium

Silenta Premium is a sound-insulated, three-layer sewage pipe system made from high-quality PP-material, specifically designed and reinforced for non-pressurized domestic drainage in accordance with the system standards DIN 4109 and DIN 4102. The acoustic performance of Silenta Premium has been accredited by the Fraunhofer Institute in Germany, ensuring exceptional noise reduction. It is ideally suited for hot, cold, and acidic waste water, offering outstanding durability and performance. The system's sturdiness is further enhanced by its impact-resistant design. Available in pipe diameters ranging from 58 mm to 200 mm, Silenta Premium also includes a variety of fittings and accessories, making it a reliable and versatile solution for modern drainage systems.

### Features

- Excellent sound insulation
- Flame-retardant
- Halogen-free and no release of toxic gases in event of fire
- Acid-resistant
- Temperature-resistant

### Benefits

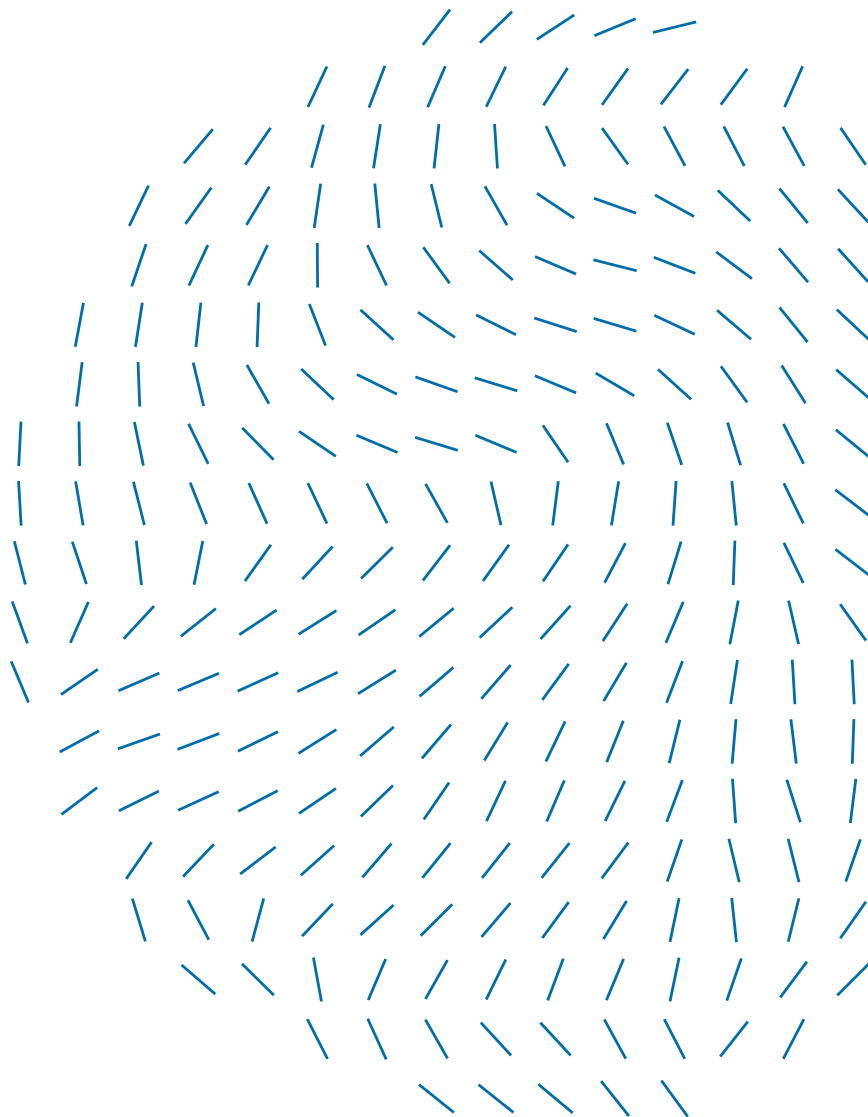
- High level of comfort
- Extending life cycle of entire system
- Securing safety and health during event of fire



### Field of application

Type	Details
Work areas	Office buildings, hospitals, conference halls, etc.
Public domains	Schools, colleges, libraries, community centers, tutoring centers, etc.
Residential buildings	Houses, residences, apartments, hotels, etc.





## Technical facts

Type	Details
Diameter	Ø 58 mm - Ø 200 mm
Length	0.15mt - 3mt
Color	Light grey
Acoustic performance	13 dB(A) / 4lt/s acc. EN14366
Flammability class	B2 acc. to DIN 4102
Pipes	With and without socket
Standards	DIN 4109, DIN 4102-B2

# GF Silenta 3A

Silenta 3A is a sound-insulated, three-layer drainage pipe system made from high-quality PP-material, specifically designed and reinforced for non-pressurized domestic drainage in compliance with the system standards of DIN EN 1451, DIN 4109, and DIN 4102. The acoustic performance of Silenta 3A has been certified by the Fraunhofer Institute in Germany, ensuring superior noise reduction. This system excels in environments where impact resistance, durability, and sound insulation are crucial. Available in pipe diameters ranging from 40 mm to 200 mm, the range also includes a variety of fittings and accessories, making it a versatile and reliable choice for modern drainage solutions.

### Features

- Excellent sound insulation
- Flame-retardant
- Halogen-free and no release of toxic gases in event of fire
- Acid-resistant
- Temperature-resistant

### Benefits

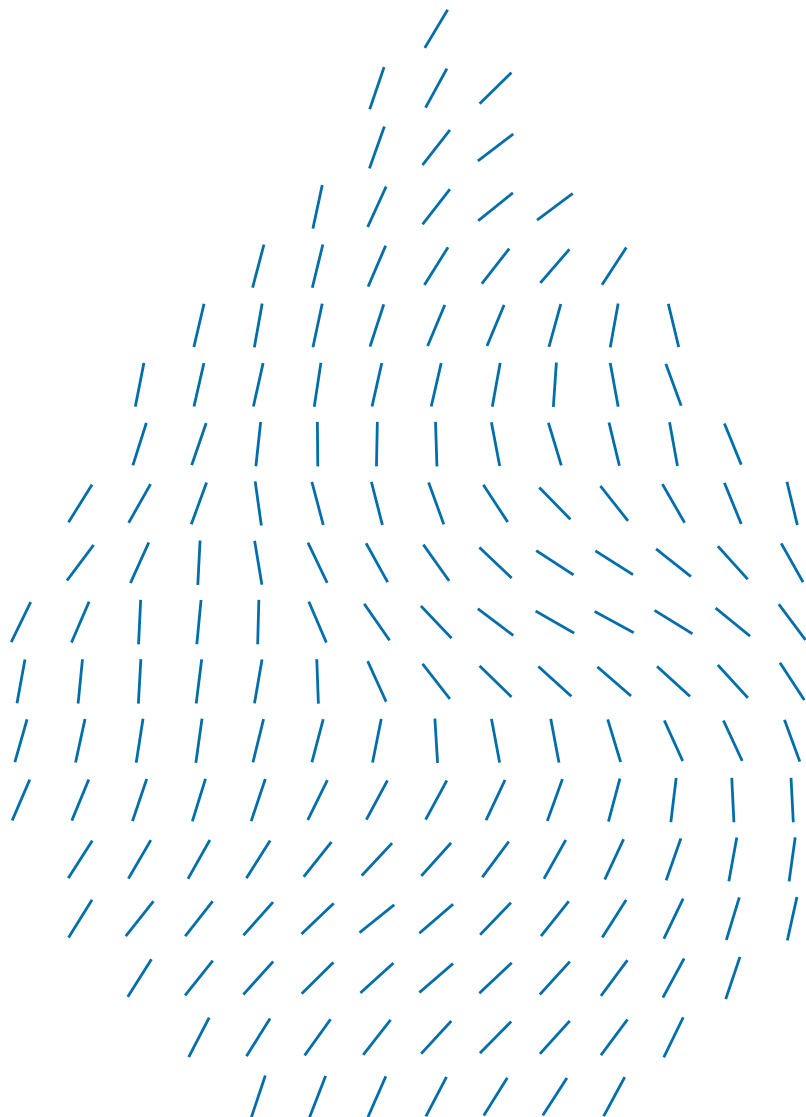
- High level of comfort
- Extending life cycle of entire system
- Securing safety and health during event of fire



### Field of application

Type	Details
Work areas	Office buildings, hospitals, conference halls, etc.
Public domains	Schools, colleges, libraries, community centers, tutoring centers, etc.
Residential buildings	Houses, residences, apartments, hotels, etc.





## Technical facts

Type	Details
Diameter	Ø 40 mm - Ø 200 mm
Length	0.15mt - 3mt
Color	Light blue
Acoustic performance	17 dB(A) / 4lt acc. EN14366
Flammability class	B2 acc. to DIN 4102
Pipes	With socket
Standards	DIN EN 1451-1, DIN 4109, DIN 4102-B2

# Uponor Decibel

Uponor Decibel is a three-layer, silent drainage system engineered using the latest production technology and high-density materials. Its exceptional sturdiness is a result of its impact-resistant design, ensuring long-lasting performance. Available in pipe diameters ranging from 50 mm to 160 mm, the system offers flexibility to meet various needs. The range also includes sleeve fittings and is fully compatible with HTP products, providing a versatile and reliable solution for modern drainage systems.



### Features

- Excellent sound insulation
- Halogen-free
- Made for challenging Nordic requirements
- For new buildings and renovation

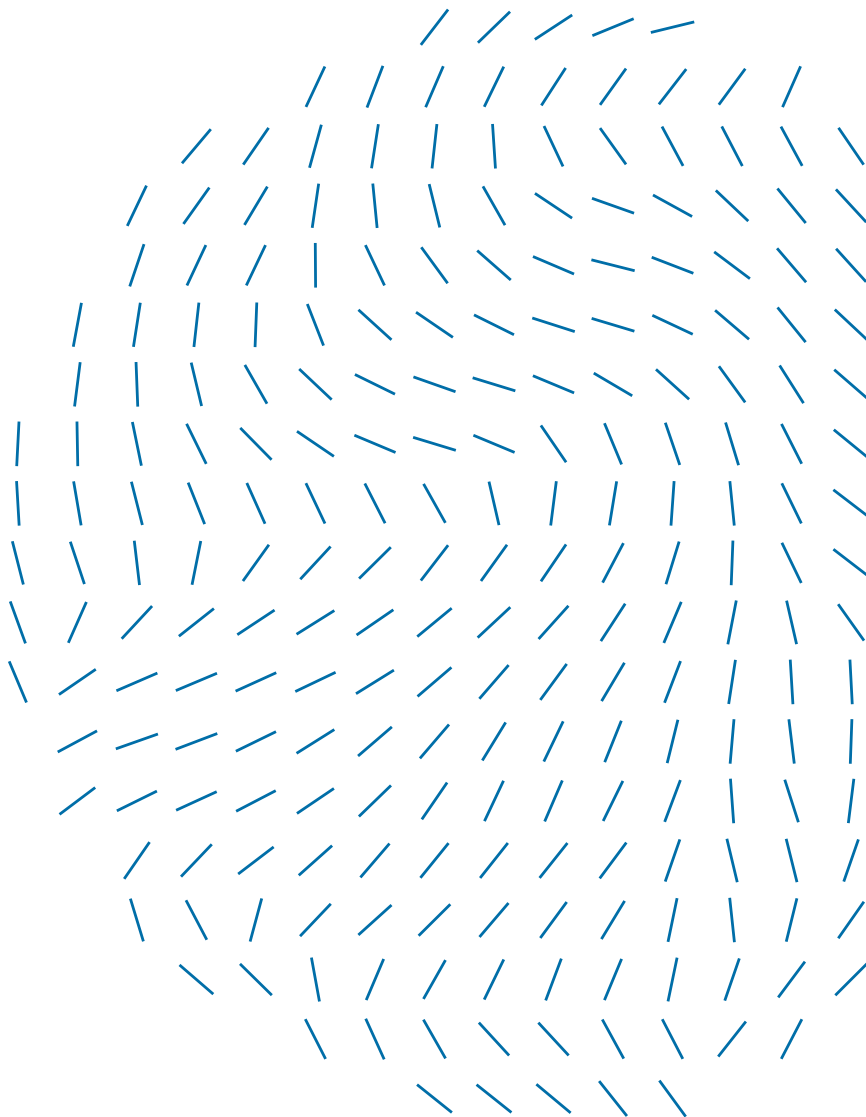
### Benefits

- Low sound values
- High-quality/S16/SN4 and S8
- Competitive pricing

### Field of application

Type	Details
Work areas	Office buildings, hospitals, conference halls, etc.
Public domains	Schools, colleges, libraries, community centers, tutoring centers, etc.
Residential buildings	Houses, residences, apartments, hotels, etc.





## Technical facts

Type	Details
Diameter	Ø 50 mm - Ø 160 mm
Weight	290 g/m - 400 g/m
Color	White
Density	1.6 kg/dm <sup>3</sup>
Tencile strength	> 16 Mpa
Modules of elasticity	Pipes 2100 ja fittings 1700 Mpa
Operational temperatures	+85°C (continous); +100°C (momentary)

# Uponor RDS

Uponor RDS is a comprehensive roof drainage system designed for optimal performance. With all components sourced from a single manufacturer, the system ensures perfect product compatibility and seamless integration. It offers a remarkable instantaneous pressure tolerance of 2.5 bar, providing reliability even under demanding conditions. Made in Finland, Uponor RDS is a proven solution known for its durability and high-quality craftsmanship. Additionally, the system incorporates the acoustic benefits of the Uponor Decibel line, minimizing noise and ensuring a quieter environment.



### Features

- 2,5 bar pressure tolerance
- Excellent sound insulation
- Based on Uponor Decibel
- Halogen-free
- Made for challenging Nordic requirements
- For new buildings and renovation
- For internal roof drainage, where high pressure tolerance is important

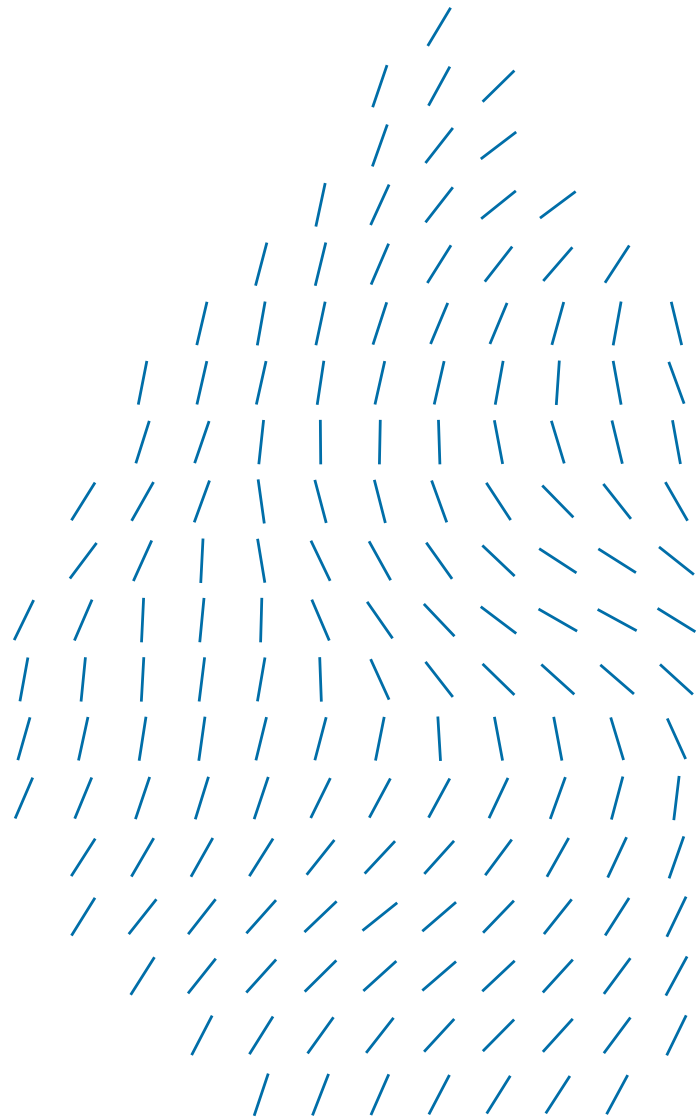
### Benefits

- Low sound valves
- High-quality/S16/SN4 and S8
- Pressure tolerance 2.5 bar

### Field of application

Type	Details
Work areas	Office buildings, hospitals, conference halls, etc.
Public domains	Schools, colleges, libraries, community centers, tutoring centers, etc.
Residential buildings	Houses, residences, apartments, hotels, etc.





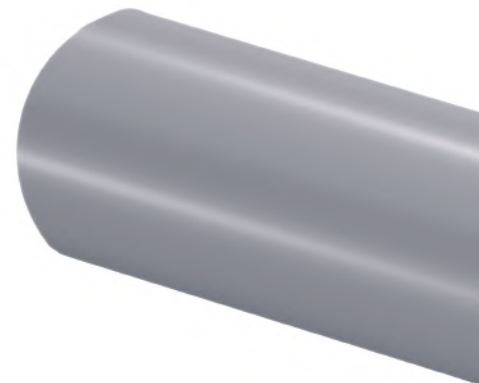
### Technical facts

Type	Details
Diameter	Ø 110
Weight	1230 – 2000 g/m
Color	Beige
Material	Mineral reinforced polypropylene
Tensile strength	> 16 Mpa
Operational temperatures	+85°C (continuous); +100°C (momentary)

## House Drainage

# Uponor HTP

Uponor HTP is a one-layer PP non-pressure sewage system, produced using the latest manufacturing technology. The system's durability is ensured through its impact-resistant design. Available in pipe diameters ranging from 32 mm to 160 mm, Uponor HTP provides flexibility for a variety of installations. The range also includes socket fittings and is fully compatible with Decibel products, offering a seamless solution for efficient and reliable drainage.



### Features

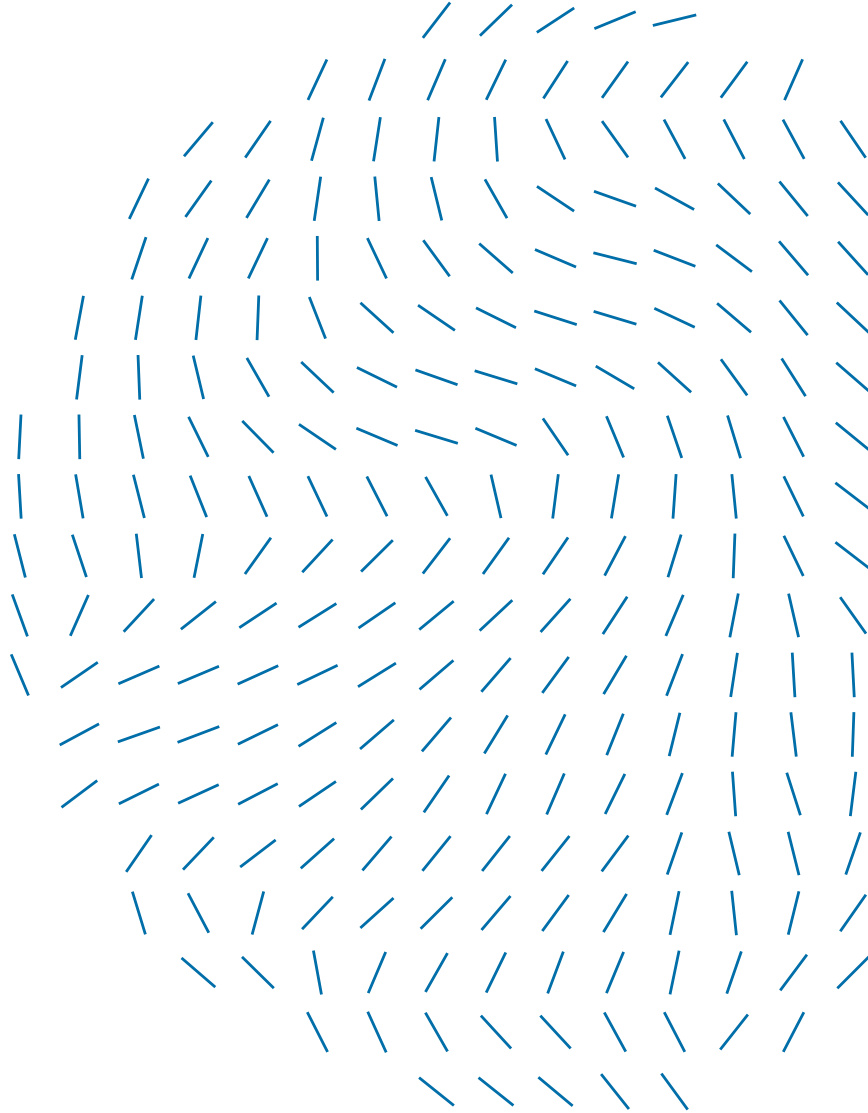
- Halogen-free
- Made for challenging Nordic requirements
- Cost-efficient

### Benefits

- Full system
- Top quality/S16/SN4 and SN8
- Competitive price
- Resistant to heat and chemicals
- High compadibility

### Field of application

Type	Details
Work areas	Office buildings, hospitals, conference halls, etc.
Public domains	Schools, colleges libraries, community centers, tutoring centers, etc.
Residential buildings	Houses, residences, apartments, hotels, etc.
Sustainable/green architecture	



### Technical facts

Type	Details
Diameter	Ø 32 mm - Ø 110 mm
Operational temperatures	+85°C (continuous); +100°C (momentary)
Standards	EN 1451; EN 681-1
Socket	With socket and spigot
Range of parts	Angles, branches, reducers, double sleeves, plug connections



# GF HT-PP

HT-PP pipes and fittings are made from high-quality polypropylene, ensuring lightweight construction and exceptional resistance to chemical agents and abrasion. These properties make them ideal for building waste and drainage systems, as well as other underground applications, in compliance with EN1451-1. Additionally, they feature a B2 flammability class for fire resistance, as per DIN 4102, providing enhanced safety and reliability in a variety of installations.



### Features

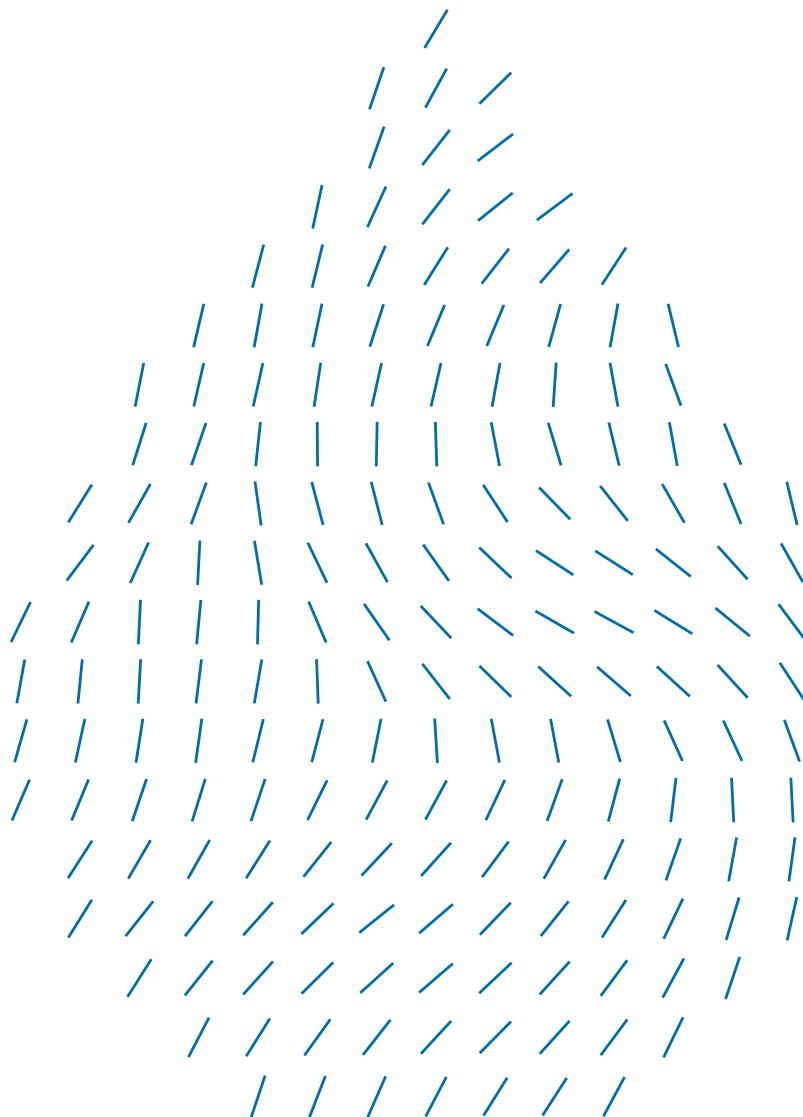
- High impact resistance
- Low weight
- Easy and cost-efficient jointing technology

### Benefits

- No product loss during logistics and assembly
- Simplifies logistics and installation process
- High time- and effort-efficiency

### Field of application

Type	Details
Work areas	Office buildings, hospitals, conference halls, etc.
Public domains	Schools, colleges, libraries, community centers, tutoring centers, etc.
Residential buildings	Houses, residences, apartments, hotels, etc.
Sustainable/green architecture	



## Technical facts

Type	Details
Diameter	Ø 32 mm - Ø 160 mm
Length	0.15mt - 3mt
Color	Dark grey
Flammability class	B2 acc. to DIN 4102
Socket	Single and double socket
Standard	EN 1451-1

# Uponor Aqua Ambient

Uponor Aqua Ambient features a modern, sleek design with gently rounded edges and a stainless steel finish. Its smooth, flat surface with no thresholds ensures both safety and a seamless, harmonious aesthetic. The durable waterproofing layer, along with an additional sealing flange, provides long-lasting protection. Available in various sizes (600 to 1000 mm) and finishes (black or silver), with both high and low siphon options, Uponor Aqua Ambient is versatile and adaptable to different needs. Easy to install and maintain, it is the perfect choice for spas, homes, and sports facilities, combining style with functionality.



### Features

- High and low siphon options for versatile installation
- Durable waterproofing layer and additional sealing flange for long-lasting protection
- Available in various sizes and finishes
- Modern, sleek design

### Benefits

- Easy to install and maintain

### Technical facts

Type	Details
Sizes	600 – 1000 mm
Color	Black and silver



# Uponor HypAir

Uponor HypAir effectively eliminates suction in sewage pipes, offering flexible installation options to meet various requirements. It operates reliably across a wide temperature range from  $-20^{\circ}\text{C}$  to  $+60^{\circ}\text{C}$ , making it suitable for diverse environments. The system can be installed below the flood level of connected sanitary facilities, providing additional flexibility. Certified for European markets (Class A1 EN 12380, TÜV certified), Uponor HypAir ensures top-quality performance. Its patented silicone membrane guarantees airtightness, even at high air flow rates of 6.1 l/sec and 23.2 l/sec, ensuring optimal efficiency and reliability.



### Features

- Eliminates suction in sewage pipes
- Wide temperature range from  $-20^{\circ}\text{C}$  to  $+60^{\circ}\text{C}$
- Below the flood level of connected sanitary facilities
- Certified for European markets
- Patented silicone membrane

### Benefits

- Flexible installation options to suit various setups
- Reliable operation in extreme temperatures
- High level of safety and quality
- Optimal system efficiency at high air flow rates

### Technical facts

Type	Details
Operational temperatures	$-20^{\circ}\text{C}$ - $+60^{\circ}\text{C}$
Standard	Class A1 EN 12380, TÜV certified
Air flow rates	6.1 l/sec and 23.2 l/sec

# References

## Shopping mall in UAE

### Products

Silenta Premium +  
Silenta 3A Pipes & Fittings



## Governmental building in Türkiye

### Products

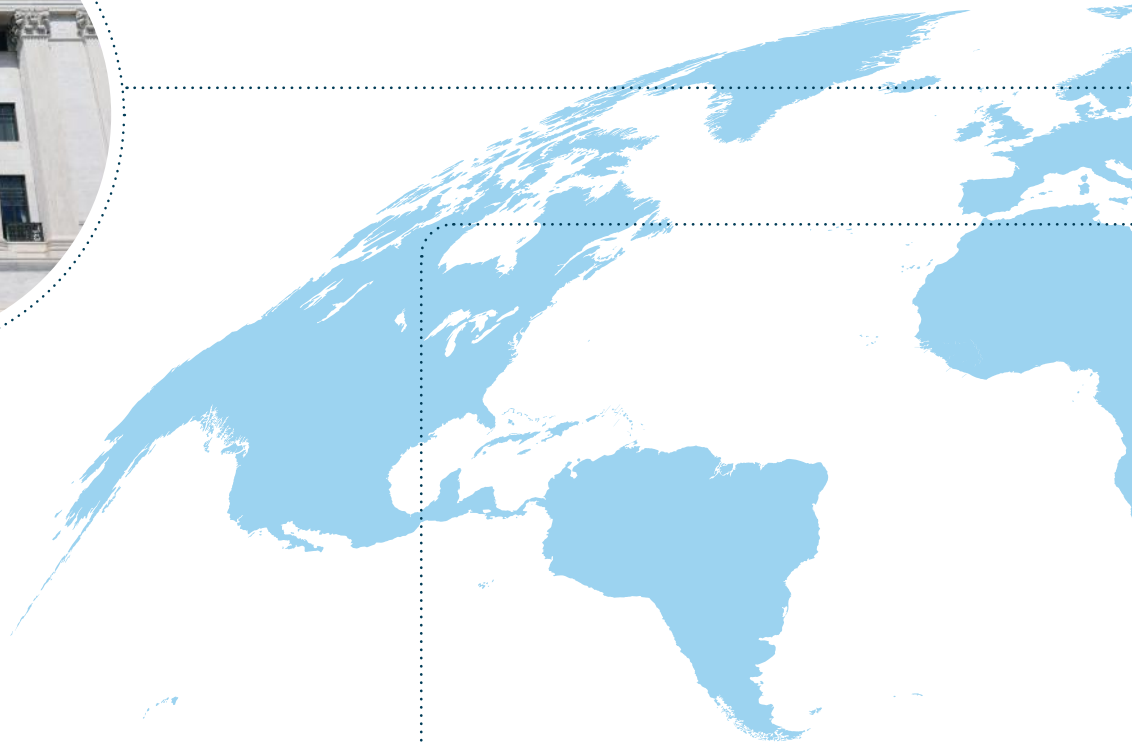
Silenta Premium + Silenta  
3A Pipes & Fittings



## High rise hotel in Azerbaijan

### Products

Silenta Premium Pipes & Fittings





## High rise residential building in India

### Products

Silenta Premium Pipes & Fittings



## Airport in Saudi Arabia

### Products

Silenta Premium Pipes & Fittings



## Luxury residential housing in Malaysia

### Products

Silenta 3A Fittings



# Leading with Water

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