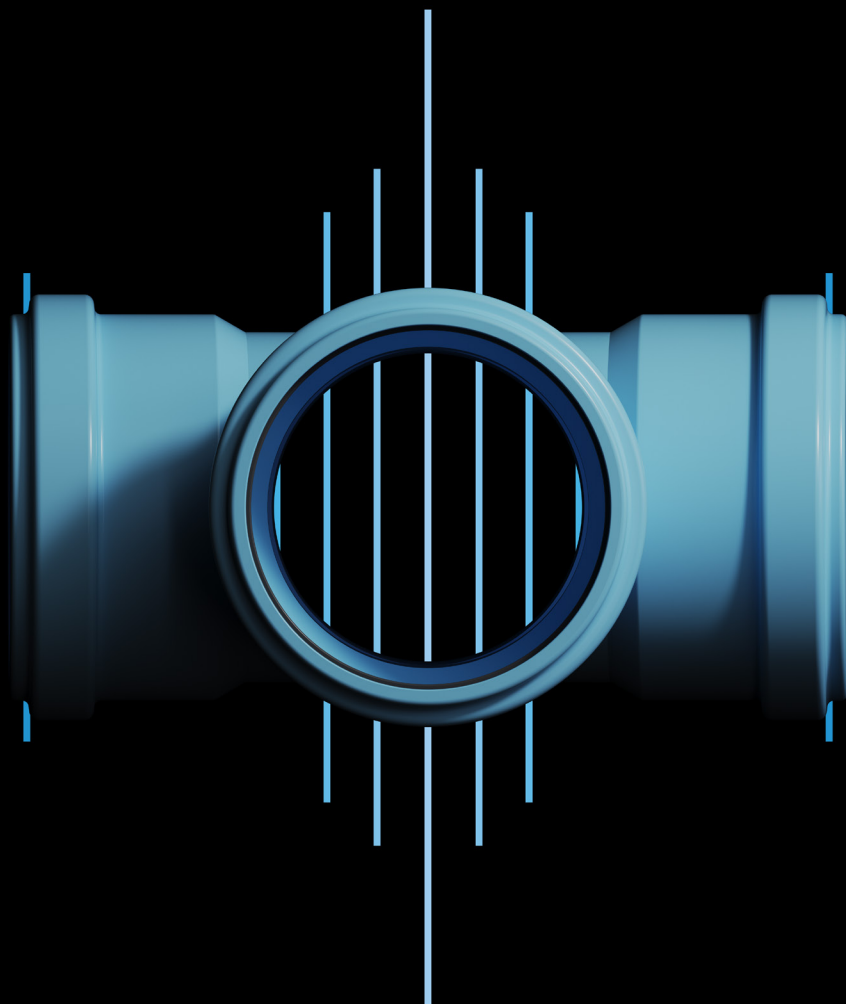


# Silenta 3A

Flush out the noise





## Acoustic waste water systems

# The sound of stillness

In modern construction, drainage systems are essential infrastructure that most occupants never think about... until they hear them.

### The cost of noise

A well-designed waste water system operates silently in the background, while a poorly chosen one creates constant disruption. The challenge lies not just in moving water efficiently, but in doing so without compromising the comfort and quality of life for building occupants. Noise from drainage systems affects people daily in residential buildings, hotels, hospitals, and offices. The sound of rushing water, rattling pipes, and vibrating connections travels through walls and floors, disturbing sleep, interrupting conversations, and reducing property values. Beyond acoustic comfort, modern drainage systems must address fire safety requirements, chemical resistance, and long-term durability. These challenges are amplified by increasing urbanization, higher building densities, and stricter building regulations demanding better acoustic performance.

Historically, cast iron and PVC pipes dominated waste water applications. Cast iron offered durability and some natural sound dampening due to its mass, making it the preferred choice for multi-story buildings. PVC became popular for its cost-effectiveness and ease of installation. Both materials established themselves as reliable standards that installers trusted and building codes accepted.

### Redefining expectations

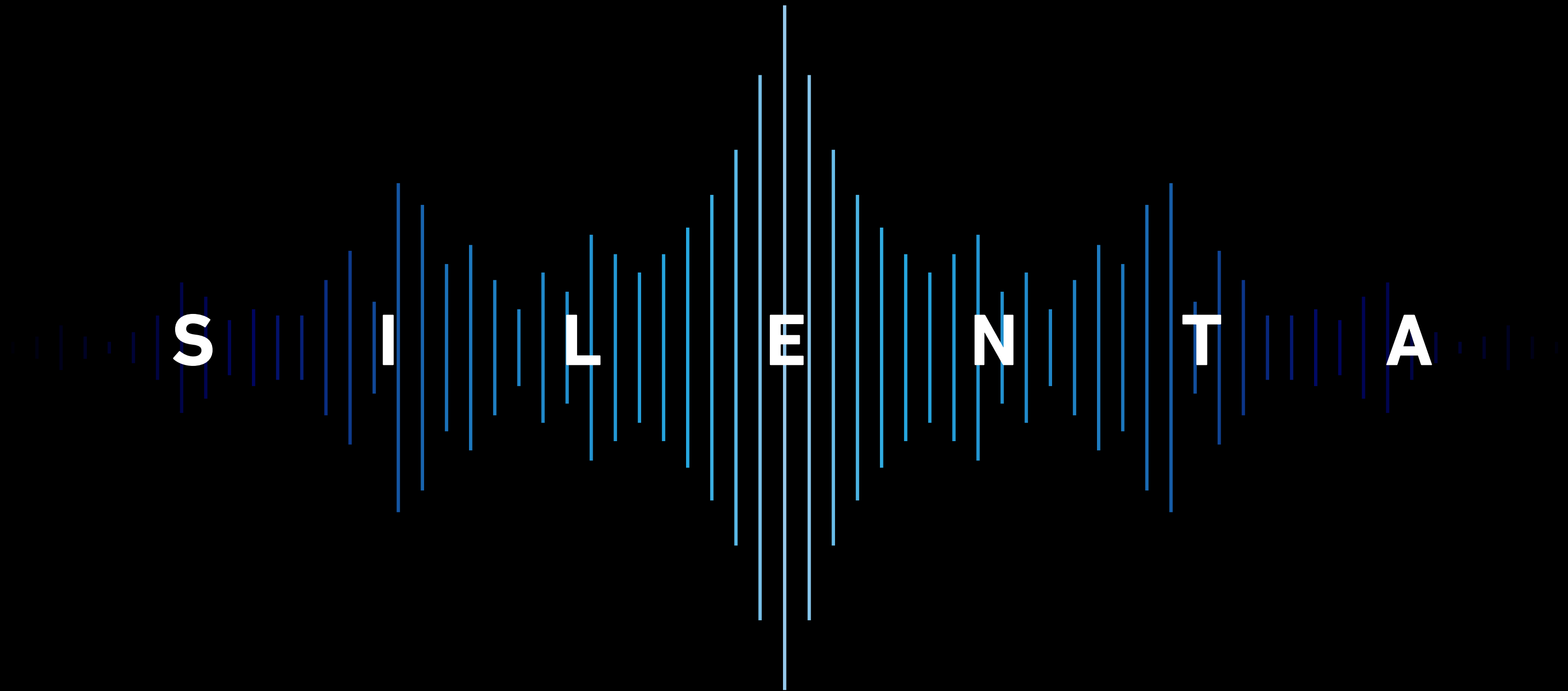
However, traditional materials come with significant drawbacks. Cast iron is heavy, requiring substantial structural support and making installation labor-intensive and time consuming. Corrosion over time leads to leaks and costly replacements. Standard PVC pipes, while lightweight and affordable, transmit noise freely: every flush becomes audible throughout the building. Neither material adequately addresses the acoustic demands of modern living spaces where comfort and quiet are not optional, but expected.

These limitations create the foundation for today's biggest challenge in waste water systems: delivering acoustic comfort while maintaining durability, installation efficiency, and environmental responsibility. Buildings are no longer judged solely on functionality. Occupant wellbeing, quality of life, and acoustic comfort have become essential criteria for successful construction projects.

# Flush out the noise

**Engineered for comfort**  
The challenges are real: noisy drainage systems disrupt daily life, reduce property values, and compromise building quality. Traditional materials cannot adequately address modern acoustic demands.

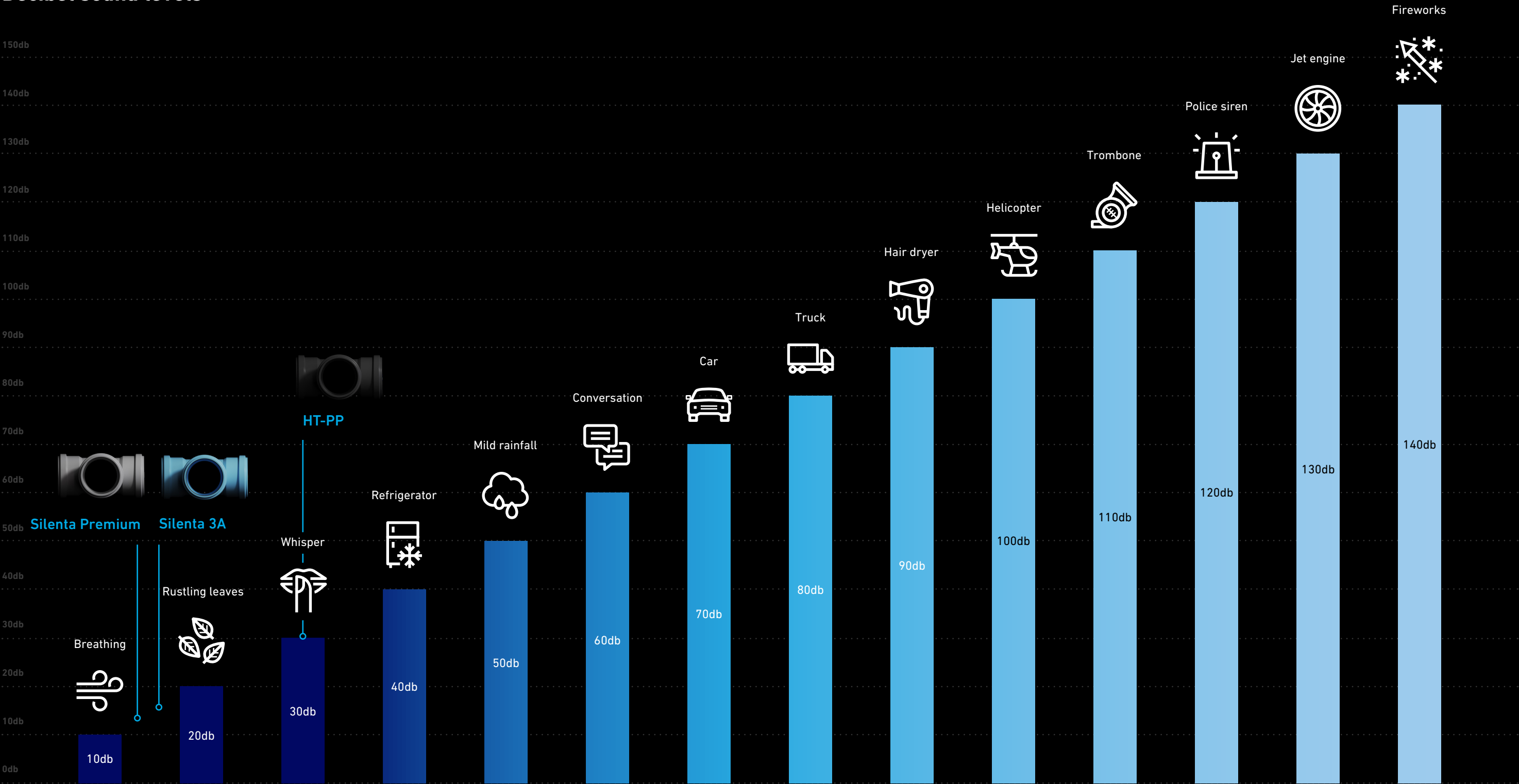
Silenta delivers the solution: sound-insulated drainage systems engineered for acoustic comfort.



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

# Quietly confident

## Decibel sound levels



# Your full solution partner

**Silenta 3A**

Delivers proven acoustic performance for residential and commercial buildings.



**The right fit for every project**

Every building has unique acoustic requirements and performance expectations. Silenta offers three distinct system levels, each engineered to deliver reliable drainage performance while addressing different project priorities. From essential functionality to industry-leading acoustic comfort, our range ensures installers and planners can specify the optimal solution for any application.

All three systems share the same foundation: high-quality polypropylene construction, push-fit installation, and GF reliability.

**HT-PP**

Provides reliable drainage for straightforward installations.

**Silenta Premium**

Sets the benchmark with exceptional sound insulation for premium applications.



# Sound absorbing structure

Sound reduction begins with intelligent material design. Each Silenta system uses a specific layer configuration engineered to balance acoustic performance, structural durability, and installation efficiency.



**Special gasket system**

Guarantees water tightness while the geometrical properties of the gasket groove enables fast, effortless assembly.

**Different diameter options**

Silenta 3A dimension range: DN 32-200 mm.

**Inner layer**

Perfect flow performance, superior chemical resistance that prevents corrosion and abrasion, and built to withstand high temperatures.

**Middle layer**

High molecular structure and special composite formula absorb and prevent sound waves.

**Outer layer**

Resistant to high temperatures and impacts.

Silenta 3A incorporates three-layer technology where a specialized middle layer with high molecular structure absorbs and dampens sound waves.

All three systems (Silenta Premium, Silenta 3A and HT-PP) feature a specialized gasket design that ensures water-tight connections while allowing thermal movement. The push-fit socket connection provides fast, reliable installation across the entire range.

Proven acoustic comfort

# Silenta 3A

**The trusted choice for residential and commercial buildings**

Silenta 3A combines excellent acoustic performance with proven reliability, making it the preferred solution for single-family homes, multi-family residential buildings, and commercial applications. This three-layer system uses specially formulated and reinforced PP material to deliver consistent sound insulation that transforms building comfort.

Engineered for environments where impact resistance, durability, and acoustic control are essential, Silenta 3A handle the demands of modern drainage systems. Available in diameters from 32 mm to 200 mm with SBR gasket technology.



**Features**



Excellent sound insulation



Fire performance according to EN 13501-1 (D-s2, d2)



Halogen-free with reduced harmful gas emission in case of fire



Acid-resistant for diverse applications



Temperature-resistant construction



Push-fit socket connection

**Benefits**



Highest level of acoustic comfort for occupants



Extended system life cycle



Enhanced safety and health protection during fire events



Reliable performance for mainstream projects



# The trusted choice for residential and commercial buildings

Silenta 3A is engineered for projects where reliable acoustic performance is essential. These applications require proven sound insulation that balances performance with practical installation. With 18 dB(A) acoustic performance and SBR gasket technology throughout, Silenta 3A delivers the acoustic comfort these projects demand.



Single-family homes



Multi-family residential buildings



Standard hotels and hospitality



Commercial office buildings

# Technical specifications

<b>Design</b>	3-layer pipe system (Special PP-Mineral reinforced composite)
<b>Diameters [mm]</b>	d32, d40, d50, d75, d110, d125, d160, d200
<b>Pipe length [mm]</b>	150, 250, 500, 1000, 2000, 3000
<b>Sound transmission</b>	15 dB(A) at 4 l/s (EN 14366)
<b>Fire class</b>	D-s2, d2 (EN 13501-1)
<b>Joining method/Connection</b>	Joining with Rubber Gasket and Socket (Push-Fit)
<b>Attachment/Clamping</b>	With Silent Clamps (GF or third party)
<b>Color</b>	Light Blue (Halogen-free and Cadmium-free)
<b>Installation</b>	Lighter than cast-iron pipes, and Push fit system provides easier installation compared to welded or cemented plastic systems
<b>Thermal expansion coefficient</b>	0.06 mm/(m·K)
<b>Tensile strength</b>	13 N/mm <sup>2</sup>
<b>Chemical resistance</b>	Resistant to organic and inorganic chemical environments and to domestic wastewater and industrial wastewater with pH 2 – pH 12. Wherever chemically aggressive wastewater is used (e.g. for industrial applications), it is suitable for pH 2 to pH 12. An individual case assessment can be requested from GF specifying the composition of the respective wastewater and the operating conditions.
<b>Installation temperature</b>	Minimum: -10°C Maximum: 60°C
<b>Operating temperature</b>	Minimum: -10°C Maximum: 97°C
<b>Application class</b>	B (Building Drainage)
<b>Ring Stiffness</b>	ISO / DIN 9969. The ring stiffness is at least 4.0 kN / m <sup>2</sup> over the entire dimension range: 32 mm to 200 mm
<b>Impact strength</b>	Complies with TSEK 169 / EN 1451
<b>Density</b>	Pipes: 1.24 g/cm <sup>3</sup> ; Fittings: 1.34 g/cm <sup>3</sup> (DIN 53479)
<b>Maintenance</b>	Negligible maintenance cost compared to metal-based systems
<b>Permissible ambient temperature</b>	Between -20°C and 60°C
<b>Permissible wastewater temperature</b>	For domestic wastewater between 0°C and 90°C, briefly up to 97°C

## Certifications

<b>Country</b>	<b>Institute</b>
Germany	DiBt, SKZ
Austria	Austrian Standard
Netherlands	KIWA
Denmark	ETA-DANAK
Sweden	KIWA SwedCert
Norway	Sintef
Italy	IIC/KIWA IT
Poland	PZH, ITB
France	CSTB
Spain	AENOR
UK	BBA
Türkiye	TSEK, EPD

Some certifications are in progress and will be available in 2026.



# Complete system range

Silenta 3A provides comprehensive drainage solutions with pipes and fittings across the full diameter range from 32 mm to 200 mm. Every component is designed for acoustic performance and efficient installation, ensuring system consistency from connection to connection. Push-fit technology and SBR gasket systems throughout deliver reliable, water-tight joints that maintain acoustic integrity across the entire installation.



Silenta 3A Pipe with Socket

Dia. [mm]	Leng. [mm]	Thick. [mm]	Code	Packing Type	Pc
40	150	1,8	4604004000121	Cartonbox	30
40	250	1,8	4604004000221	Cartonbox	30
40	500	1,8	4604004000321	Cartonbox	35
40	1000	1,8	4604004000421	Bundle	10
40	2000	1,8	4604004000521	Bundle	10
40	3000	1,8	4604004000621	Bundle	10
50	150	2,0	4604005000121	Cartonbox	200
50	250	2,0	4604005000221	Cartonbox	150
50	500	2,0	4604005000321	Cartonbox	90
50	1000	2,0	4604005000421	Bundle	10
50	2000	2,0	4604005000521	Bundle	10
50	3000	2,0	4604005000621	Bundle	10
75	150	2,6	4604007501021	Cartonbox	40
75	250	2,6	4604007501121	Cartonbox	30
75	500	2,6	4604007501221	Cartonbox	40
75	1000	2,6	4604007501321	Bundle	10
75	2000	2,6	4604007501421	Bundle	10
75	3000	2,6	4604007501521	Bundle	10
110	150	3,4	4604011002021	Cartonbox	20
110	250	3,4	4604011002121	Cartonbox	35
110	500	3,4	4604011002221	Cartonbox	20
110	1000	3,4	4604011002321	Bundle	4
110	2000	3,4	4604011002421	Bundle	4
110	3000	3,4	4604011002521	Bundle	4
125	150	3,4	4604012503021	Cartonbox	15
125	250	3,4	4604012503121	Cartonbox	5
125	500	3,4	4604012503221	Cartonbox	6
125	1000	3,4	4604012503321	Bundle	4
125	2000	3,4	4604012503421	Bundle	4
125	3000	3,4	4604012503521	Bundle	4
160	150	4,0	4604016004021	Cartonbox	24
160	250	4,0	4604016004121	Cartonbox	6
160	500	4,0	4604016004221	Cartonbox	8
160	1000	4,0	4604016004321	Bundle	1
160	2000	4,0	4604016004421	Bundle	1
160	3000	4,0	4604016004521	Bundle	1
200	500	4,5	4604020006321	Bundle	5
200	1000	4,5	4604020006421	Length	1
200	2000	4,5	4604020006521	Length	1
200	3000	4,5	4604020006621	Length	1

Silenta 3A Pipe without Socket

Dia. [mm]	Leng. [mm]	Thick. [mm]	Code	Packing Type	Pc
200	500	4,5	4604020005221	Cartonbox	8
200	1000	4,5	4604020005321	Length	1
200	2000	4,5	4604020005421	Length	1
200	3000	4,5	4604020005521	Length	1

Silenta 3A Clamp

Dia. [mm]	Code	Packing Type	Pc
50	4701905001022	Cartonbox	100
75	4701907501122	Cartonbox	200
110	4701911001222	Cartonbox	100
125	4701912501322	Cartonbox	100
160	4701916001422	Cartonbox	50

Silenta 3A Elbow 15°

Dia. [mm]	Code	Packing Type	Pc
50	4704105000121	Cartonbox	300
75	4704107500621	Cartonbox	150
110	4704111001121	Cartonbox	60
160	4704116001121	Cartonbox	20

Silenta 3A Elbow 30°

Dia. [mm]	Code	Packing Type	Pc
50	4704105000221	Cartonbox	350
75	4704107500721	Cartonbox	150
110	4704111001221	Cartonbox	60
160	4704116001221	Cartonbox	20

Silenta 3A Elbow 45°

Dia. [mm]	Code	Packing Type	Pc
50	4704105000321	Cartonbox	150
75	4704107500921	Cartonbox	50
110	4704111001321	Cartonbox	50
125	4704112501621	Cartonbox	15
160	4704116001821	Cartonbox	6
200	4704120002021	Cartonbox	10

Silenta 3A Elbow 67,5°

Dia. [mm]	Code	Packing Type	Pc
50	4704105000421	Cartonbox	300
75	4704107500821	Cartonbox	150
110	4704111001421	Cartonbox	50

Silenta 3A Elbow 87,5°

Dia. [mm]	Code	Packing Type	Pc
50	4704105000521	Cartonbox	150
75	4704107501021	Cartonbox	50
110	4704111001521	Cartonbox	40
125	4704112501721	Cartonbox	10
160	4704116001921	Cartonbox	6
200	4704120002121	Cartonbox	6

Silenta 3A Long Elbow 45°

Dia. [mm]	Code	Packing Type	Pc
110	4704111004521	Cartonbox	8

Silenta 3A



Silenta 3A Branch 45°

Dia. (mm)	Code	Packing	
		Type	Pc
50-50	4704205000121	Cartonbox	50
75-50	4704207500221	Cartonbox	20
75-75	4704207500321	Cartonbox	10
110-50	4704211000421	Cartonbox	40
110-75	4704211000521	Cartonbox	30
110-110	4704211000621	Cartonbox	20
125-50	4704212500721	Cartonbox	15
125-75	4704212500821	Cartonbox	10
125-110	4704212500921	Cartonbox	8
125-125	4704212501021	Cartonbox	6
160-110	4704216001121	Cartonbox	10
160-125	4704216001221	Cartonbox	10
160-160	4704216001321	Cartonbox	8
200-110	4704220001421	Cartonbox	4
200-125	4704220001521	Cartonbox	4
200-160	4704220001621	Cartonbox	4
200-200	4704220001721	Cartonbox	4



Silenta 3A Branch 67,5°

Dia. (mm)	Code	Packing	
		Type	Pc
110-110	4704211000721	Cartonbox	25



Silenta 3A Branch 87,5°

Dia. (mm)	Code	Packing	
		Type	Pc
50-50	4704205001821	Cartonbox	30
75-50	4704207501921	Cartonbox	10
75-75	4704207502021	Cartonbox	15
110-50	4704211002121	Cartonbox	50
110-75	4704211002221	Cartonbox	15
110-110	4704211002321	Cartonbox	10
125-110	4704212503822	Cartonbox	20
125-125	4704212503921	Cartonbox	4
160-125	4704216004022	Cartonbox	10



Silenta 3A Double Branch 45°

Dia. (mm)	Code	Packing	
		Type	Pc
50-50	4704205003021	Cartonbox	15
75-50	4704207503121	Cartonbox	15
110-50	4704211003221	Cartonbox	7
110-110	4704211003421	Cartonbox	6
160-110	4704216003621	Cartonbox	8



Silenta 3A Reducer

Dia. (mm)	Code	Packing	
		Type	Pc
40-32	4704404000521	Cartonbox	750
50-32	4704405000021	Cartonbox	500
50-40	4704405000121	Cartonbox	500
75-50	4704407500121	Cartonbox	100
110-50	4704411000221	Cartonbox	50
110-75	4704411000321	Cartonbox	40
125-110	4704412500421	Cartonbox	25
160-110	4704416000521	Cartonbox	20
160-125	4704416000721	Cartonbox	20
200-160	4704420000621	Cartonbox	10



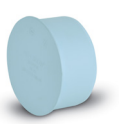
Silenta 3A Socket with Central Register

Dia. (mm)	Code	Packing	
		Type	Pc
50	4704505000121	Cartonbox	50
75	4704507500221	Cartonbox	20
110	4704511000321	Cartonbox	10
160	4704516000421	Cartonbox	6
200	4704520000521	Cartonbox	12



Silenta 3A Sliding Socket

Dia. (mm)	Code	Packing	
		Type	Pc
50	4704505000221	Cartonbox	50
75	4704507500321	Cartonbox	35
110	4704511000421	Cartonbox	8
160	4704516000621	Cartonbox	6
200	4704520000721	Cartonbox	4



Silenta 3A Pipe Socket Plug

Dia. (mm)	Code	Packing	
		Type	Pc
50	4704905000421	Cartonbox	125
75	4704907500121	Cartonbox	50
110	4704911000221	Cartonbox	25
160	4704916000321	Cartonbox	12



\* Silenta 3A S Siphon 45°

Dia. (mm)	Code	Packing	
		Type	Pc
75	4704607500121	Cartonbox	20
110	4704611000121	Cartonbox	6



Silenta 3A Corner Double Branch 87,5°

Dia. (mm)	Code	Packing	
		Type	Pc
110-110	4704211003021	Cartonbox	20



\* Silenta 3A S Siphon 87,5°

Dia. (mm)	Code	Packing	
		Type	Pc
75	4704607500221	Cartonbox	50
110	4704611000221	Cartonbox	5



Silenta 3A Repair Pipe (Long Socket)

Dia. (mm)	Code	Packing	
		Type	Pc
110	4704911002221	Cartonbox	15



Silenta 3A Floor Trap

Dia. (mm)	Code	Packing	
		Type	Pc
110-75-50-50	4704911002022	Cartonbox	12



Silenta 3A P-Trap

Dia. (mm)	Code	Packing	
		Type	Pc
110	4704611000521	Cartonbox	25



Silence Clamp Metal - Vertical Set

Dia. (mm)	Code	Packing	
		Type	Pc
50	1300905030412	Cartonbox	20
75	1300907530412	Cartonbox	15
110	1300911030412	Cartonbox	10
125	1300912530412	Cartonbox	10
160	1300916030412	Cartonbox	7
200	1300920030412	Cartonbox	5



Silenta 3A Clean Out (Circular)

Dia. (mm)	Code	Packing	
		Type	Pc
75	4704311000421	Cartonbox	80



Silenta 3A Clean Out (Rectangular)

Dia. (mm)	Code	Packing	
		Type	Pc
110	4704311000121	Cartonbox	30
160	4704316000221	Cartonbox	8



Silenta 3A Floor Trap - Long

Dia. (mm)	Code	Packing	
		Type	Pc
110-75-50-50	4704911002122	Cartonbox	12



Silence Clamp Metal - Horizontal

Dia. (mm)	Code	Packing	
		Type	Pc
50	1300905030612	Cartonbox	50
75	1300907530612	Cartonbox	30
110	1300911030612	Cartonbox	25
125	1300912530612	Cartonbox	25
160	1300916030612	Cartonbox	25
200	1300920030612	Cartonbox	20

\* To be used only under the WC stone



## Positive health impact

# Protecting your peace

### Health and wellbeing through acoustic comfort

Noise pollution in buildings affects more than comfort. Studies confirm that persistent exposure to unwanted sound disrupts sleep patterns, increases stress levels, and reduces overall quality of life. Drainage systems that operate multiple times daily create repetitive disturbances that accumulate over time, affecting residents, patients, hotel guests, and office workers.

Acoustic comfort has become a measurable indicator of building quality. Property values reflect this reality, with quieter buildings commanding premium prices and higher tenant satisfaction. Protecting occupants from drainage noise is no longer optional: it is essential infrastructure planning that directly impacts human well-being.

## Understanding drainage noise

Waste water systems generate sound through multiple mechanisms. Water rushing through pipes creates turbulence. Direction changes at fittings produce vibrations. High flow velocities amplify noise levels. These sounds travel through pipe walls into building structures, radiating into living and working spaces.

Common noise sources include:

- Toilet flushing
- Direction changes at elbows and junctions
- High water flow velocities
- Pipe joints and connections
- Discharge events
- Inadequate system planning
- Improper installation practices

Silenta addresses these challenges through specialized three-layer construction that absorbs vibrations at the source. The mineral-reinforced middle layer dampens sound waves before they can transfer to building structures. Critical connection points receive particular attention to minimize noise transmission where flow velocities and direction changes create the greatest acoustic impact.

## The case for sound protection

Building occupants deserve environments free from disruptive noise. Sound protection measures aim to create spaces where drainage systems operate without intruding on daily life. This means addressing both airborne sound that travels through air and structure-borne sound that transmits through walls, floors, and ceilings.

Drainage noise falls into both categories. Water flow creates airborne sound within pipes. Vibrations transfer to building materials, becoming structure-borne noise that radiates throughout the structure. Traditional single-layer pipes can't adequately control these transmission paths.

Silenta's three-layer technology provides comprehensive sound protection. The specialized middle layer absorbs acoustic energy, preventing it from reaching building structures. This dual approach of controlling both airborne and structure-borne sound ensures occupants experience the peace and quiet they expect from modern buildings.





## Explore Silenta

# Next steps

### Proven solutions

Acoustic comfort in waste water drainage is no longer a compromise between performance and installation efficiency. Silenta's three-tier approach ensures every project, from cost-conscious installations to premium developments, benefits from engineered sound reduction, durable construction, and reliable push-fit technology.

Buildings deserve drainage systems that operate silently in the background. Occupants deserve environments free from disruptive noise. Silenta makes both possible.

### Enjoy the silence

You've now explored how Silenta delivers acoustic comfort through intelligent material design and how each system addresses specific project requirements while maintaining the reliability and quality that defines GF.

Ready to specify the right system for your next project? The Silenta page provides detailed information for each system level, helping you make informed decisions across all building types.



Learn more at  
[georgfischer.com/silenta](https://georgfischer.com/silenta)



Watch on YouTube  
[@UponorEurope](https://www.youtube.com/@UponorEurope)



# Excellence in Flow

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