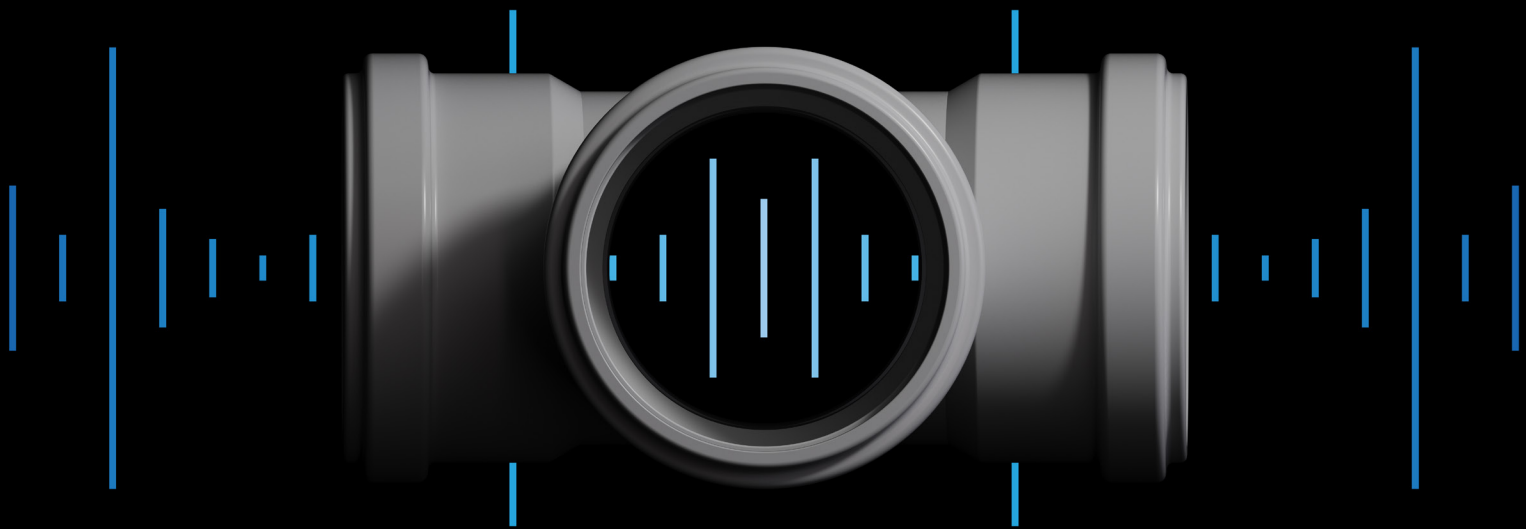


Silenta Premium

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

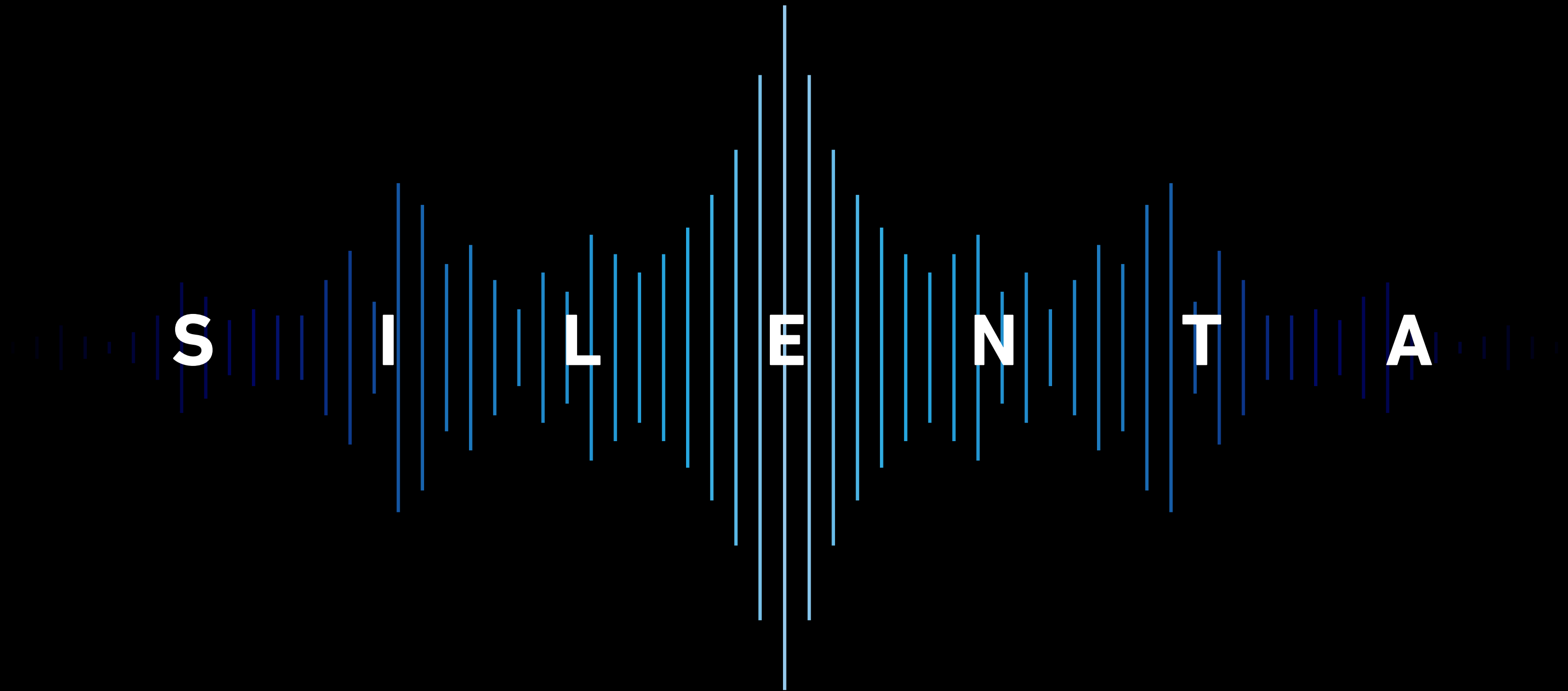
However, traditional materials come with significant drawbacks. Cast iron is heavy, requiring substantial structural support and making installation labor-intensive and time consuming. Corrosion over time leads to leaks and costly replacements. Standard PVC pipes, while lightweight and affordable, transmit 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.

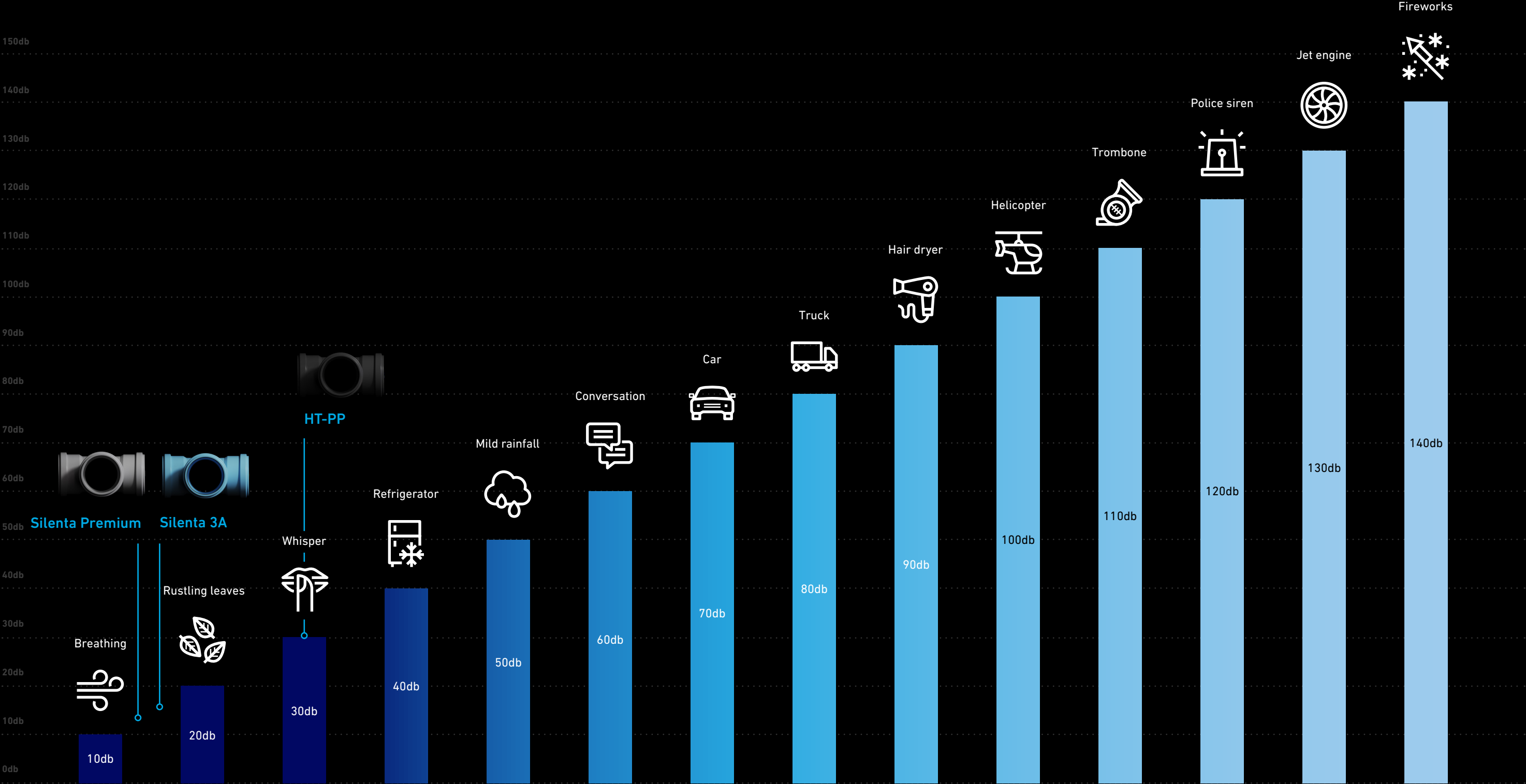
Silenta delivers the solution: sound-insulated drainage systems engineered for acoustic comfort.



> 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 Premium dimension range: DN 58-200 mm.

Inner layer

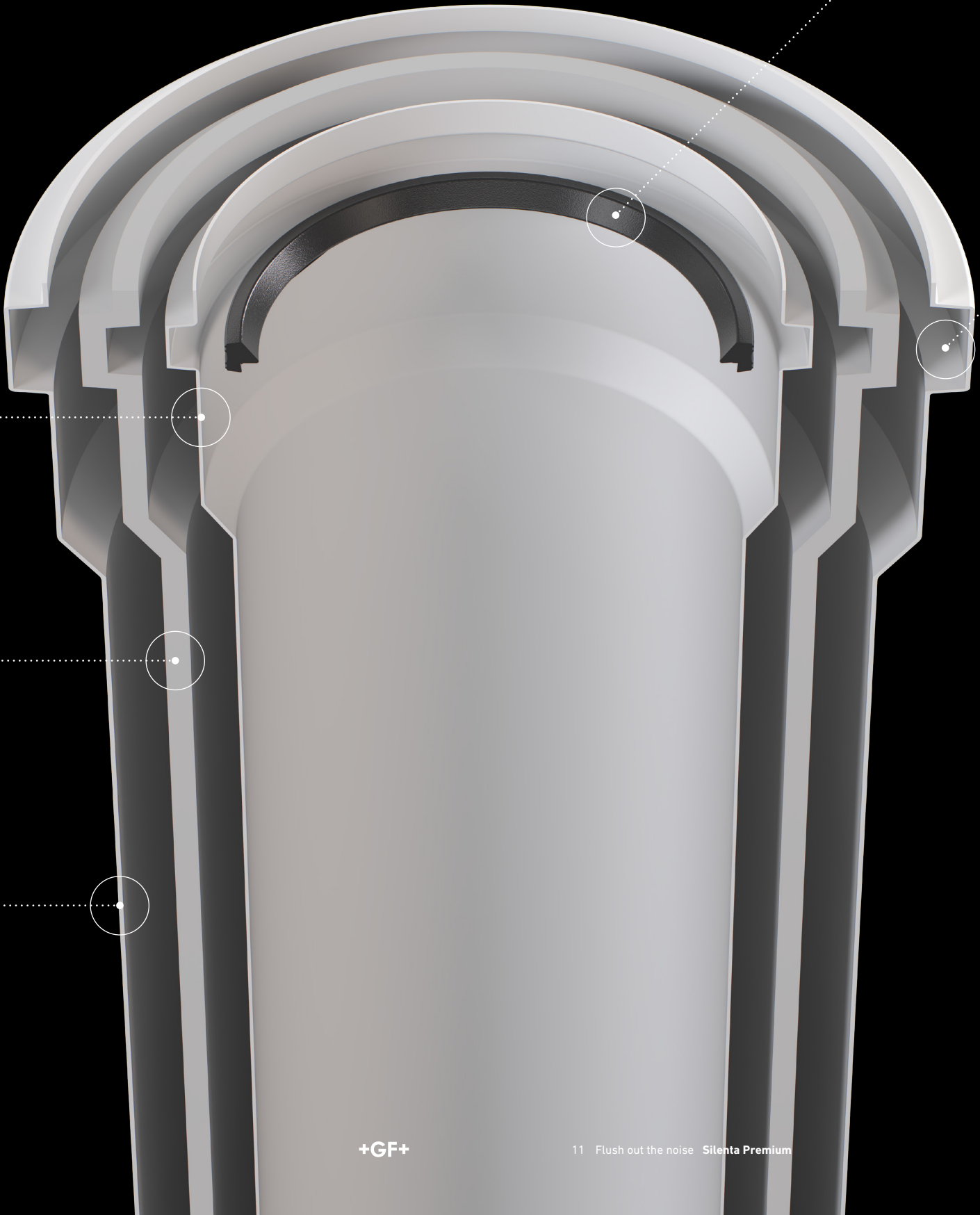
Made of PP: Resistant to domestic wastewater. The smooth and abrasion-resistant surface prevents encrustations and ensures perfect and quiet drainage behavior.

Middle layer

Made of mineral-reinforced PP: The high mass weight ensures sound absorption and reduces the propagation of sound waves.

Outer layer

Made of PP: Robust and resistant to mechanical and thermal stress during operation and during processing.



Silenta Premium incorporates three-layer technology where a specialized middle layer with high molecular structure absorbs and dampens sound waves. The Silenta Premium system takes this further with an enhanced composite formulation, delivering exceptional acoustic performance.

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.

Silenta Premium



Exceptional performance for high-end projects

Silenta Premium delivers industry-leading acoustic performance for applications where silence matters most. This three-layer system sets the benchmark for sound-insulated drainage. Premium residential developments, luxury hotels, hospitals, and office buildings demanding the highest acoustic standards benefit from its enhanced composite formulation and specialized TPE segmented gasket technology.

The system handles hot, cold, and acidic waste water while maintaining long-term durability through its impact-resistant design. Available in diameters from 58mm to 200mm with comprehensive fittings and accessories, Silenta Premium provides complete drainage solutions for projects demanding the highest standards in acoustic comfort and building quality.

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



Increased property value through superior acoustic performance

Exceptional performance for high-end projects

Silenta Premium is engineered for projects where acoustic comfort cannot be compromised. These applications demand superior environmental quality and long-term performance. With 13 dB(A) acoustic performance and specialized TPE segmented gasket technology, Silenta Premium delivers the exceptional sound insulation these projects require.



Premium residential developments



Luxury hotels and resorts



Hospitals and healthcare facilities



High-specification office buildings

Technical specifications

Design	3-layer pipe system (Special PP-Mineral reinforced composite)
Diameters [mm]	d58, d78, d90, d110, d135, d160, d200
Pipe length [mm]	150, 250, 500, 1000, 2000, 3000
Sound transmission	12 dB(A) at 4 l/s (EN 14366)
Fire class	D-s2, d2 (EN 13501-1, DIN 4102 B2)
Jointing method/Connection	Jointing with Rubber Gasket and Socket (Push-Fit)
Attachment/Clamping	With Silent Clamps (GF or third party)
Color	Light Grey (Halogen-free and Cadmium-free) (RAL 4102)
Installation	Lighter than cast-iron pipes, and Push fit system provides easier installation compared to welded or cemented plastic systems
Thermal expansion coefficient	0.04 mm/(m·K)
Tensile strength	13 N/mm ²
Chemical resistance	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.
Installation temperature	Minimum: -10°C Maximum: 60°C
Operating temperature	Minimum: -10°C Maximum: 97°C
Application class	B (Building Drainage)
Ring Stiffness	ISO / DIN 9969. The ring stiffness is at least 4.0 kN / m ² over the entire dimension range: 58 mm to 200 mm
Impact strength	Complies with TSEK 169
Density	Pipes: 1.66 g/cm ³ ; Fittings: 1.68 g/cm ³ (DIN 53479)
Maintenance	Negligible maintenance cost compared to metal-based systems
Permissible ambient temperature	Between -20°C and 60°C
Permissible wastewater temperature	For domestic wastewater between 0°C and 90°C, briefly up to 97°C

Certifications

Country	Institute
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

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

Complete system range

Silenta Premium provides comprehensive drainage solutions with pipes and fittings across the full diameter range from 58 mm to 200 mm. Every component is engineered for exceptional acoustic performance and precision installation, ensuring system consistency from connection to connection. Push-fit technology and specialized TPE segmented gasket systems throughout deliver reliable, water-tight joints that maintain acoustic integrity across the entire installation.

Silenta Premium Pipe with Socket

Dia. [mm]	Leng. [mm]	Thick. [mm]	Code	Packing Type	Pc
58	150	4,0	4401005800121	Cartonbox	30
58	250	4,0	4401005800221	Cartonbox	25
58	500	4,0	4401005800321	Cartonbox	30
58	1000	4,0	4401005800421	Bundle	8
58	2000	4,0	4401005800521	Bundle	8
58	3000	4,0	4401005800621	Bundle	8
78	150	4,5	4401007801021	Cartonbox	40
78	250	4,5	4401007801121	Cartonbox	12
78	500	4,5	4401007801221	Cartonbox	16
78	1000	4,5	4401007801321	Bundle	6
78	2000	4,5	4401007801421	Bundle	6
78	3000	4,5	4401007801521	Bundle	6
90	150	4,5	4401009002021	Cartonbox	36
90	250	4,5	4401009002121	Cartonbox	24
90	500	4,5	4401009002221	Cartonbox	12
90	1000	4,5	4401009002321	Bundle	6
90	2000	4,5	4401009002421	Bundle	6
90	3000	4,5	4401009003321	Bundle	6
110	150	5,3	4401011003021	Cartonbox	9
110	250	5,3	4401011003121	Cartonbox	12
110	500	5,3	4401011003221	Cartonbox	8
110	1000	5,3	4401011003321	Bundle	4
110	2000	5,3	4401011003421	Bundle	4
110	3000	5,3	4401011003521	Bundle	4
135	150	5,3	4401013504021	Cartonbox	12
135	250	5,3	4401013504121	Cartonbox	8
135	500	5,3	4401013504221	Cartonbox	5
135	1000	5,3	4401013504321	Bundle	4
135	2000	5,3	4401013504421	Bundle	4
135	3000	5,3	4401013504521	Bundle	4
160	150	5,3	4401016005021	Cartonbox	10
160	250	5,3	4401016005121	Cartonbox	6
160	500	5,3	4401016005221	Cartonbox	4
160	1000	5,3	4401016005321	Length	1
160	2000	5,3	4401016005421	Length	1
160	3000	5,3	4401016005521	Length	1
200	500	6,2	4401020006021	Cartonbox	5
200	1000	6,2	4401020006121	Length	1
200	2000	6,2	4401020006221	Length	1
200	3000	6,2	4401020006321	Length	1

Silenta Premium Pipe without Socket

Dia. [mm]	Leng. [mm]	Thick. [mm]	Code	Packing Type	Pc
58	3000	4,0	4401005810621	Bundle	8
58	5000	4,0	4401005810821	Bundle	8
78	3000	4,5	4401007811521	Bundle	6
78	5000	4,5	4401007811721	Bundle	6
90	1000	4,5	4401009003621	Bundle	10
90	3000	4,5	4401009002521	Bundle	6
110	3000	5,3	4401011013521	Bundle	4
110	5000	5,3	4401011013721	Bundle	4
135	3000	5,3	4401013514521	Bundle	4
135	5000	5,3	4401013514721	Bundle	4
160	3000	5,3	4401016015521	Length	1
160	5000	5,3	4401016015721	Length	1
200	500	6,2	4401020016021	Cartonbox	4
200	1000	6,2	4401020016121	Length	1
200	2000	6,2	4401020016221	Length	1
200	3000	6,2	4401020016321	Length	1

Silenta Premium Elbow 15°

Dia. [mm]	Code	Packing Type	Pc
58	4501105800321	Cartonbox	120
78	4501107800121	Cartonbox	70
90	4501109000121	Cartonbox	39
110	4501111000521	Cartonbox	20
135	4501113500821	Cartonbox	12
160	4501116001021	Cartonbox	8

Silenta Premium Elbow 30°

Dia. [mm]	Code	Packing Type	Pc
58	4501105800421	Cartonbox	120
78	4501107800221	Cartonbox	70
90	4501109000221	Cartonbox	39
110	4501111000621	Cartonbox	20
135	4501113500921	Cartonbox	12
160	4501116001121	Cartonbox	8

Silenta Premium Elbow 45°

Dia. [mm]	Code	Packing Type	Pc
58	4501105800121	Cartonbox	50
78	4501107800321	Cartonbox	60
90	4501109000321	Cartonbox	32
110	4501111000721	Cartonbox	20
135	4501113501021	Cartonbox	5
160	4501116001221	Cartonbox	8
200	4501120001421	Cartonbox	4

Silenta Premium Elbow 67,5°

Dia. [mm]	Code	Packing Type	Pc
58	4501105800521	Cartonbox	100
78	4501107800521	Cartonbox	50
90	4501109000521	Cartonbox	32
110	4501111000821	Cartonbox	16

Silenta Premium Elbow 87,5°

Dia. [mm]	Code	Packing Type	Pc
58	4501105800221	Cartonbox	40
78	4501107800421	Cartonbox	20
90	4501109000421	Cartonbox	32
110	4501111000921	Cartonbox	16
135	4501113501121	Cartonbox	12
160	4501116001321	Cartonbox	8
200	4501120001521	Cartonbox	3

Silenta Premium Long Elbow 45°

Dia. [mm]	Code	Packing Type	Pc
110	4501111001321	Cartonbox	8

Silenta Premium Siphon Elbow 87,5°

Dia. [mm]	Code	Packing Type	Pc
58-40	4501105830621	Cartonbox	140

Silenta Premium Clean Out Elbow 87,5°

Dia. [mm]	Code	Packing Type	Pc
110	4501311001121	Cartonbox	15

Silenta Premium Branch 45°

Dia. [mm]	Code	Packing Type	Pc
58-58	4501205800121	Cartonbox	20
78-58	4501207800221	Cartonbox	30
78-78	4501207800321	Cartonbox	20
90-58	4501209000121	Cartonbox	8
90-90	4501209000321	Cartonbox	14
110-58	4501211000421	Cartonbox	18
110-78	4501211000521	Cartonbox	14
110-110	4501211000621	Cartonbox	10
135-78	4501213500721	Cartonbox	10
135-110	4501213500821	Cartonbox	6
135-135	4501213500921	Cartonbox	5
160-110	4501216001021	Cartonbox	5
160-135	4501216001121	Cartonbox	4
160-160	4501216001221	Cartonbox	3
200-110	4501220001421	Cartonbox	2
200-135	4501220001521	Cartonbox	2
200-160	4501220001621	Cartonbox	1
200-200	4501220001721	Cartonbox	3

Silenta Premium Branch 67,5°

Dia. [mm]	Code	Packing Type	Pc
58-58	4501207805021	Cartonbox	18
78-58	4501207805021	Cartonbox	30
78-78	4501207805521	Cartonbox	20
110-58	4501211001021	Cartonbox	18
110-78	4501211001121	Cartonbox	14
110-110	4501211000721	Cartonbox	12

Silenta Premium Branch 87,5°

Dia. [mm]	Code	Packing Type	Pc
58-58	4501205806021	Cartonbox	15
78-58	4501207806121	Cartonbox	8
78-78	4501207806221	Cartonbox	7
90-58	4501209006121	Cartonbox	18
90-78	4501209006221	Cartonbox	15
90-90	4501209006321	Cartonbox	12
110-58	4501211006321	Cartonbox	18
110-78	4501211006421	Cartonbox	15
110-90	4501211006621	Cartonbox	15
110-110	4501211006521	Cartonbox	12
135-110	4501213506621	Cartonbox	8
135-135	4501213506721	Cartonbox	6
160-110	4501216006621	Cartonbox	5
160-160	4501216006921	Cartonbox	4

Silenta Premium Radius Branch 87,5°
(Swept)

Dia. [mm]	Code	Packing Type	Pc
90-90	4501209030621	Cartonbox	16
110-90	4501211031321	Cartonbox	8
110-110	4501211031221	Cartonbox	8

Silenta Premium Double Branch 45°

Dia. [mm]	Code	Packing Type	Pc
110-110	4501211004121	Cartonbox	8
135-110	4501213504221	Cartonbox	4
160-110	4501216004321	Cartonbox	3

Silenta Premium Double Branch 87,5°

Dia. [mm]	Code	Packing Type	Pc
90-90	4501209007021	Cartonbox	8
110-110	4501211007021	Cartonbox	10

Silenta Premium



Silenta Premium Clean Out Tee

Dia. (mm)	Code	Packing	
		Type	Pc
110-110	4501311002121	Cartonbox	10
160-78	4501316001321	Cartonbox	5
160-110	4501316002321	Cartonbox	5



Silenta Premium Corner Double Branch 87,5°

Dia. (mm)	Code	Packing	
		Type	Pc
110-110	4501211007121	Cartonbox	10



Silenta Premium Corner Radius
Double Branch 87,5° (Swept)

Dia. (mm)	Code	Packing	
		Type	Pc
90-90	4501209030721	Cartonbox	12



Silenta Premium Socket Plug

Dia. (mm)	Code	Packing	
		Type	Pc
58	4501905800121	Cartonbox	25
78	4501907800221	Cartonbox	50
90	4501909000321	Cartonbox	50
110	4501911000321	Cartonbox	20
135	4501913500421	Cartonbox	40
160	4501916000521	Cartonbox	12



Silenta Premium Reducer

Dia. (mm)	Code	Packing	
		Type	Pc
58-40	4501405800221	Cartonbox	175
58-50	4501405800121	Cartonbox	60
78-50	4501407802421	Cartonbox	50
78-58	4501407800221	Cartonbox	40
78-75	4501407800321	Cartonbox	25
90-58	4501409000121	Cartonbox	80
90-78	4501409000221	Cartonbox	32
110-58	4501411000421	Cartonbox	25
110-78	4501411000521	Cartonbox	50
110-90	4501411000621	Cartonbox	40
135-110	4501413500621	Cartonbox	10
160-110	4501416000821	Cartonbox	20
160-135	4501416000921	Cartonbox	12
200-160	4501420001121	Cartonbox	10



Silenta Premium Socket with
Central Register

Dia. (mm)	Code	Packing	
		Type	Pc
58	4501505803021	Cartonbox	25
78	4501507803121	Cartonbox	15
90	4501509003121	Cartonbox	45
110	4501511003221	Cartonbox	36
135	4501513503321	Cartonbox	20
160	4501516003421	Cartonbox	6
200	4501520003521	Cartonbox	4



Silenta Premium Sliding Socket

Dia. (mm)	Code	Packing	
		Type	Pc
58	4501505804021	Cartonbox	12
78	4501507804121	Cartonbox	16
110	4501511004221	Cartonbox	15
135	4501513504521	Cartonbox	10
160	4501516004321	Cartonbox	6
200	4501520004421	Cartonbox	4



Silenta Premium Adaptor

Dia. (mm)	Code	Packing	
		Type	Pc
58-50	4501905801021	Cartonbox	150
78-75	4501907801021	Cartonbox	75
135-125	4501913501021	Cartonbox	22



Silenta Premium Repair Pipe
(Long Socket)

Dia. (mm)	Code	Packing	
		Type	Pc
110	4501911001221	Cartonbox	15



Silenta Premium Clean Out (Circular)

Dia. (mm)	Code	Packing	
		Type	Pc
58	4501305800421	Cartonbox	50
78	4501307800521	Cartonbox	28
90	4501309000121	Cartonbox	12



Silenta Premium Clean Out
(Rectangular)

Dia. (mm)	Code	Packing	
		Type	Pc
110	4501311000121	Cartonbox	10
135	4501313500221	Cartonbox	6
160	4501316000321	Cartonbox	2



* Silenta Premium S Siphon 45°

Dia. (mm)	Code	Packing	
		Type	Pc
110	4501611000121	Cartonbox	8



* Silenta Premium S Siphon 87,5°

Dia. (mm)	Code	Packing	
		Type	Pc
110	4501611000221	Cartonbox	7



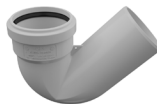
Silenta Premium Floor Trap

Dia. (mm)	Code	Packing	
		Type	Pc
110-78-58-58	4501911030322	Cartonbox	12



Silenta Premium Floor Trap - Long

Dia. (mm)	Code	Packing	
		Type	Pc
110-78-58-58	4501911030622	Cartonbox	12



Silenta Premium P - Trap

Dia. (mm)	Code	Packing	
		Type	Pc
110	4501611000521	Cartonbox	15



Silenta Premium Collector 4xd58 Out

Dia. (mm)	Code	Packing	
		Type	Pc
110	4501911031021	Cartonbox	12



Silenta Premium Double Branch 87°
(4x58 mm Outlet)

Dia. (mm)	Code	Packing	
		Type	Pc
110	4501211014121	Cartonbox	2



Silenta Premium Double Branch 87,5°
(5x58 mm Outlet)

Dia. (mm)	Code	Packing	
		Type	Pc
110	4501211013121	Cartonbox	2



Silence Clamp Metal - Vertical Set

Dia (mm)	Code	Packing	
		Type	Pc
50	1300905030412	Cartonbox	20
58	1300905830412	Cartonbox	20
75-78	1300907530412	Cartonbox	15
110	1300911030412	Cartonbox	10
135	1300913530412	Cartonbox	10
160	1300916030412	Cartonbox	7
200	1300920030412	Cartonbox	5



Silence Clamp Metal - Horizontal

Dia. (mm)	Code	Packing	
		Type	Pc
50	1300905030612	Cartonbox	50
58	1300905830612	Cartonbox	30
75-78	1300907530612	Cartonbox	30
110	1300911030612	Cartonbox	25
135	1300913530612	Cartonbox	25
160	1300916030612	Cartonbox	25
200	1300920030612	Cartonbox	20



Silenta Premium Aerator

Dia. (mm)	Code	Packing	
		Type	Pc
110-110-78	4501911000121	Cartonbox	2

* 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



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

Excellence in Flow

Visit our webpage to get in contact with your local specialist:

www.georgfischer.com/locations



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