PVC soundproof piping system

Product range: Ø 40-50-75-90-100-110-125-160

Acoustic performance: 12 dB a 2/ls

Fire classification: Euroclass B s2 d

phono line

aliaxis

Phonoline by REDI
Phonoline is a mineral reinforced Polyvinyl chloride (PVC-U) Soil & Waste system including wide range of push- fit pipes and fittings in white colour RAL 9002.

FEATURES

Material
Fittings and pipes are made of single layer PVC-U reinforced with mineral fillers to increase specific characteristics as:
- strength
- durability
- resistance to the low temperature (-15°)

Application fields
Phonoline is an acoustic soil and waste piping system that operates under gravity.
The piping system can be installed in:
- SINGLE AND COLLECTIVE DWELLINGS
- HOSPITALS
- SCHOOLS
- COMMERCIAL BUILDINGS
- INSTITUTIONAL BUILDINGS
- INDUSTRIAL BUILDINGS

Technical data
Pipe density: 1,65 g/cm^3
Fitting density: 1,4 g/cm^3
Working temperature: 70° permanent – 95° temporarily
Coefficient of thermal linear expansion; 0,05 mm/m x °C
Colour: RAL 9002 pearl white
Lip rings certified EN 681
Lifetime expectation: 50 years
Ring stiffness: SN4 EN 1401

Fire classification
Report n°216.0DC0050/16 according to the norm EN13501-1:
not flammable Euroclass B-s2 d0

Acoustic classification
Report n° P-BA 219/2006e according to the norm EN14366:
12 dB(A) Rif. 2.0 l/s
The best performance is reached using the Bismat® 1000 pipe clamps.

Joining method:
Phonoline is a push-fit system which also allows the solvent welding junction. The gaskets quality ensures a long lasting life system. Gaskets comply with law requirements and are certified by the main international certification bodies. All gaskets can be removed from the groove and consequently re-placed without affecting the hydraulic seal.
Technical features of the gaskets:
- Reference Standards: EN 681-1 and DIN 4060
- lip profile like BL type
- material: SBR (SS-P-60-00)
- hardness: 60 ± 5 IRHD
- tensile strencht at break: 14,4 N/mm^2
- elongation at break: 380%
- permanent distortion: 9,7%
- tensile strencht at break (after accelerated ageing) -0,8%
- elongamon at break (after accelerated ageing) -5,8%

Tender specifications
System made from thermoplastic mineral reinforced material. Sound performance certified by German Fraunhofer Institute according to EN14366 (12 dB at 2/ls flow rate, using special noise-insulating support Bismat® 1000) and by CSTB Institute of Grénoble, according to EN 14366 requirements (max noise of 21,7 dB at 2l/s flow rate, using standard noise-insulating supports).
- Push-fit system with elastomeric lip-rings certified EN681 and Din 4060.
- Pipes and fittings branded "Phonoline by REDI"

Handling and storage
Always store pipes on a flat surface in a dry place protected from the UV rays. Pallets must be stored at a maximum height of 3 m.
Take great care when handling pipes and fittings, excessive scratching or impact stress on the pipe may damage the external structure or affect the seal properties. Take extra care when handling the pipes and fittings during the winter: the low temperature reduces the resistance to impact stress of plastic.

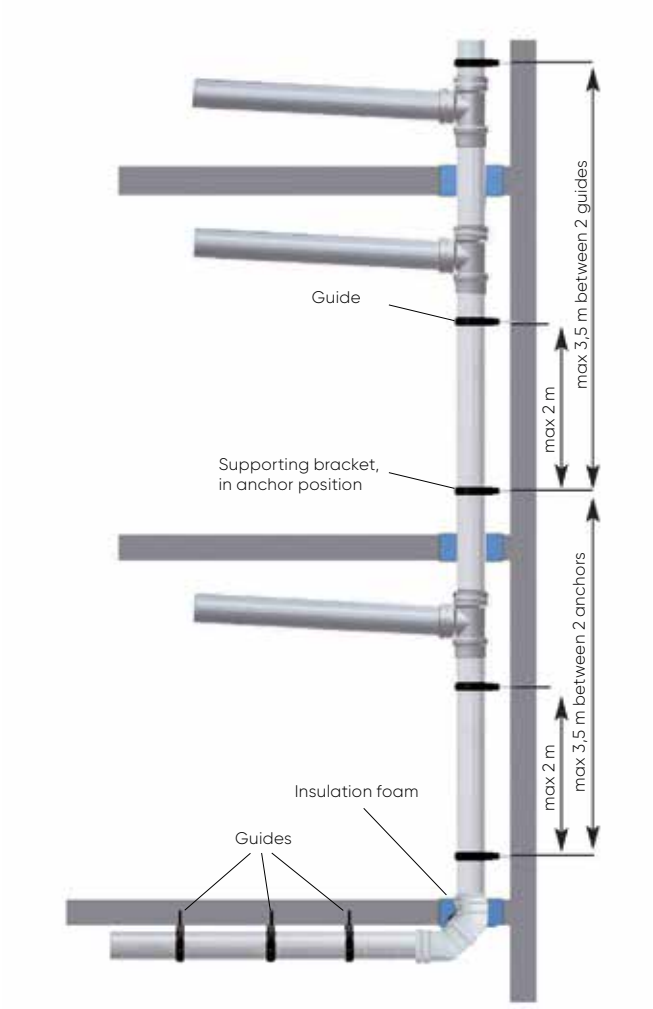
Distance between Phonoklip brackets

For vertical pipes 2 brackets must be used at each floor level:

- 1 anchor
- 1 guide.

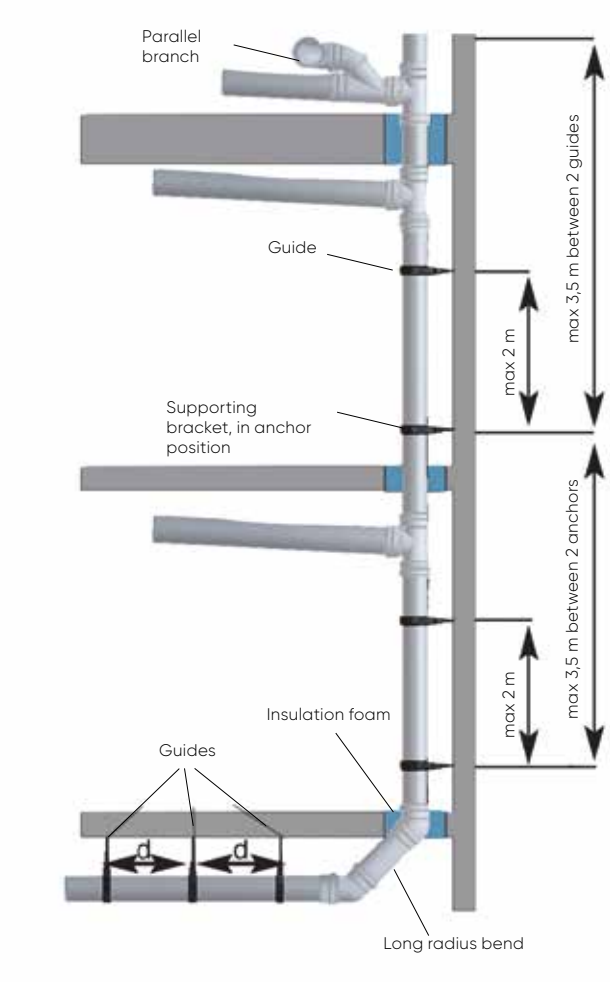
For horizontal pipes, the distance are:

- DN 50 = 0,50 m
- DN 75 - DN 125 = 0,80 m
- DN 160 = 1,00 m



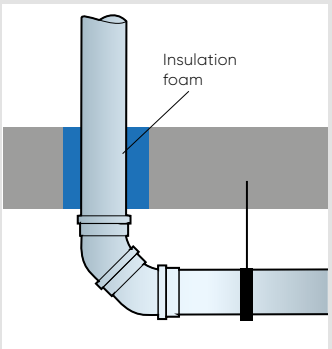
Alternative configuration

for pipes drops above 10 m

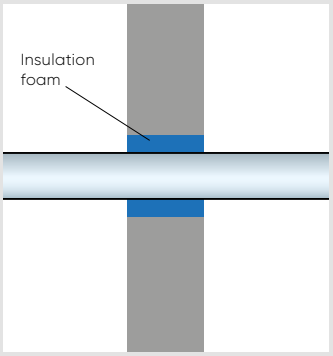


Acoustic insulation of pipes passing through floors, partitions and walls

In order to limit the trasmission of structural noise, pipes must be disconnected by floors, parttions and walls each time they pass through, by use of foam or insulating material (minimun thikness 4 mm).



Passage through the floor. (Up to10 m pipe drop).



Passage through the wall or partition.