



**Engineering progress
Enhancing lives**

RAUPIANO PLUS

Efficient building drainage with tested
sound insulation and fire protection.
#expectmore



Made in Germany





How about a little something extra?

Faster, smarter, more sustainable. For ever-lower prices, with never-ending staff shortages. The sanitary, heating and air conditioning industry has it anything but easy.

So it's all the more important to be able to rely on a partner who knows their customers' needs. This is exactly why we've been successfully working to make the lives of our customers, and their customers, a little bit better every day for more than 70 years – true to our motto: "Engineering Progress. Enhancing Lives."

The result is more than just products. It's innovative solutions perfectly matched to one another which are therefore faster, easier and safer to install. On top of that, there's a comprehensive service portfolio which makes the analogue and digital aspects of your everyday sanitary, heating and air conditioning work easier.

#expectmore

Our system for installation professionals with added value:

Building drainage

Drinking water installation and radiator connection

Underfloor heating/cooling

District heating

Geothermal energy

Building ventilation

Greater reliability. No compromises.

The RAUPIANO PLUS pipe, moulded part and accessory range is your holistic solution for building drainage.

Whether it's detached houses or commercial projects, you're always perfectly equipped for every eventuality with the complete RAUPIANO PLUS system. All dimensions from DN 32 to DN 200 are compatible with a wide range of conventional HT and sewer pipe systems.

Your added value with RAUPIANO PLUS



Faster installation

Installed up to 30% faster* than SML cast iron pipes.



Noise protection

Premium sound insulation confirmed by the Fraunhofer Institute. At just 17 dB(A)**, RAUPIANO PLUS comes in considerably below the values required by the sound insulation directive.



Fire protection

At least fire resistant, with partial resistance up to 120 minutes – even with zero spacing.



Durable and reliable

Thanks to high ring stiffness, chemical resistance at pH values from 2 – 12, pressure stability up to 2 bar and impact resistance down to -10 °C, RAUPIANO PLUS is perfect for transport, storage and handling.



Structure-borne sound-dampening support bracket

Our fastening clamp ensures even less noise. It considerably minimises transmission of the structure-borne noise into the wall.

*Based on a time comparison as per the source for installation times: Innung Spengler, Sanitär- und Heizungstechnik, Munich, 2005

**Installed with REHAU structure-borne sound-dampening support bracket (P-BA 274/2016)



Fire stop collars

Available in dimensions DN 40 to 200.



It's time to rethink things

The max flow double branch enables more cost-effective design, which saves a considerable amount of money, as well as space.



A solution from a single source

The RAUPIANO PLUS system comprised of pipes, moulded parts, fasteners and fire protection.



When less is more

Noise can reduce our performance and cause illness in the long term. Even low sound levels have adverse effects: A peaceful night's sleep is perceived to be disturbed starting at 25 dB(A).* RAUPIANO PLUS can help.

Premium sound insulation that's quieter than a whisper

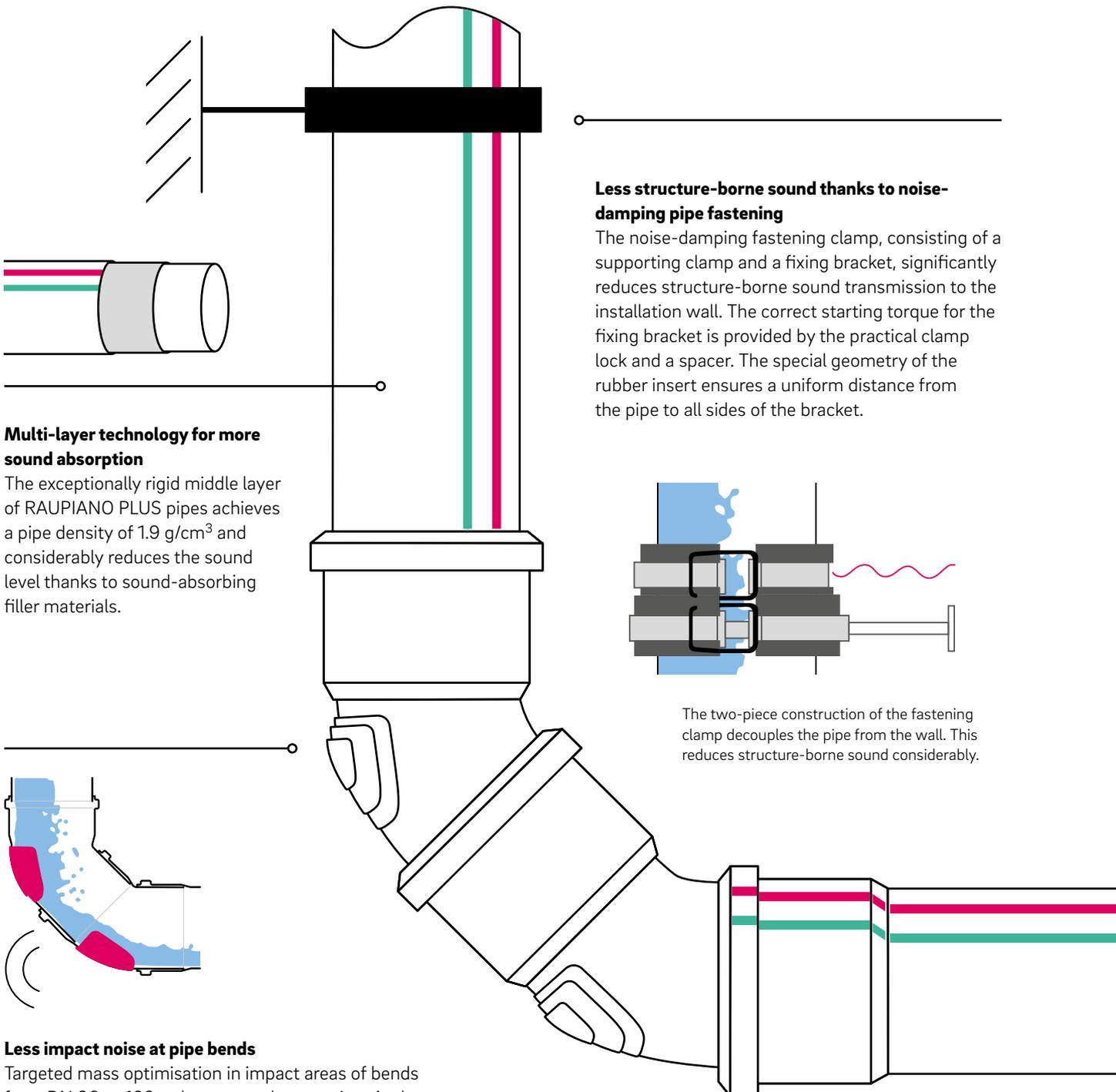
At a sound level of 17 dB(A)** – as confirmed by the Fraunhofer Institute – RAUPIANO PLUS comes in significantly below the minimum legal requirement for noise protection in sanitation installations. It easily fulfils even the stricter VDI Directive 4100. The combination of pipes, moulded parts and fastening technology is unbeatable.

* https://www.lfu.bayern.de/laerm/laerm_allgemein/wirkung_auf_menschen/index.htm

**Installed with REHAU structure-borne sound-dampening support bracket (P-BA 274/2016)

Three times more powerful against noise

RAUPIANO PLUS was developed as a holistic system from the very beginning. Its pipes, moulded parts and fastening technology are ideally matched to one another. As confirmed by the renowned Fraunhofer Institute, the combination of these elements is unbeatable.



Multi-layer technology for more sound absorption

The exceptionally rigid middle layer of RAUPIANO PLUS pipes achieves a pipe density of 1.9 g/cm^3 and considerably reduces the sound level thanks to sound-absorbing filler materials.

Less structure-borne sound thanks to noise-damping pipe fastening

The noise-damping fastening clamp, consisting of a supporting clamp and a fixing bracket, significantly reduces structure-borne sound transmission to the installation wall. The correct starting torque for the fixing bracket is provided by the practical clamp lock and a spacer. The special geometry of the rubber insert ensures a uniform distance from the pipe to all sides of the bracket.

The two-piece construction of the fastening clamp decouples the pipe from the wall. This reduces structure-borne sound considerably.

Less impact noise at pipe bends

Targeted mass optimisation in impact areas of bends from DN 90 to 160 reduces sound generation. At the same time, the hydraulically optimised inner contours of the branches minimise flow noise.

Systematic fire protection

Fire protection solutions with different design certification require elaborate planning to determine minimum spacing dimensions. This planning is completely unnecessary when RAUPIANO PLUS is used in conjunction with RAUTITAN, our universal system for drinking water and heating.



Fire stop collars: Flexible use from DN 40 to 200

For installation under the wall or on the ceiling, the REHAU compact fire stop collar impresses with its especially low installation height of just 30 mm. For installation in the ceiling or wall, the larger REHAU plus fire stop collar is used.



Angled collar: Think around the corner for DN 75 to 125

The REHAU angled fire stop collar system is the ideal choice for installation using a sleeve and for pipes exiting at any angle when installed under the ceiling.



Fire stop tape: Save space for DN 32 to 110

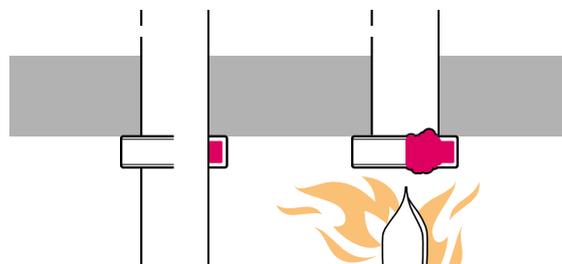
For space-saving, flush-mounted installation in the ceiling (up to DN 90 in walls as well) with smarter one-person installation: Place it around the pipe, stick it on and you're done – no drilling or dowels needed.



Planning
security
with zero
spacing

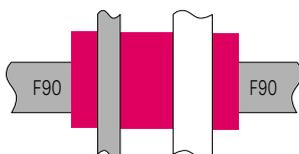
How REHAU fire protection works

In case of a fire, the special intumescent material of the fire protection solutions (fire stop collars or fire stop tape) expands up to 18 times its volume beginning at temperatures of approx. 160 °C. Upward spreading to areas up above is reliably prevented, as the ducts are completely sealed off against fire, smoke and gas.



Minimum space requirements, maximum planning security

RAUPIANO PLUS and RAUTITAN were evaluated together. The results of the expert's report: For many combinations, zero spacing is possible. This also applies to the combination of RAUPIANO PLUS with non-combustible metal pipes.



RAUTITAN RAUPIANO PLUS



Fire resistance and 100% heat protection

Our fire protection solutions are certified by the German building authorities and can withstand fire for at least 90 minutes. They can also be used with thermally insulated ceilings, such as in underground car parks.*

*As per expert report GA-2013/161-Mey from 5 June, 2018.

Not only technically superior, but economically as well

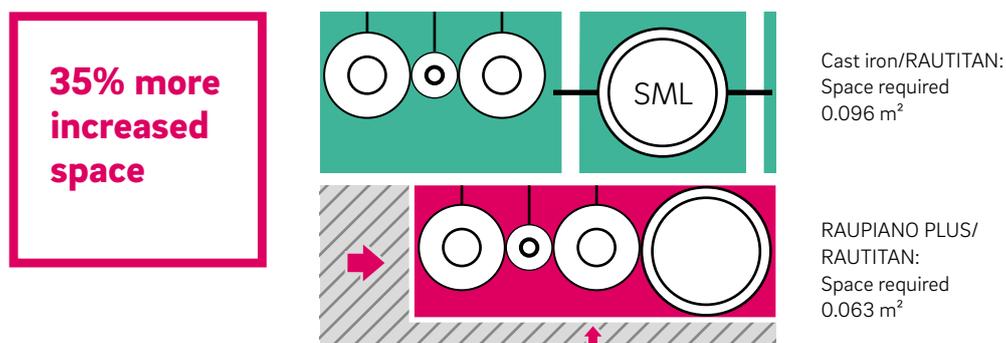
When living space is tight, fast construction and the efficient use of space are essential. RAUPIANO PLUS impresses with its clear cost-effectiveness in both detached houses and commercial projects alike.

Four reasons for greater cost-effectiveness

Using a commercial project with 313 residential units, the investor and the contractor compared the REHAU system solution with cast iron/HT based on the materials extract.

1. Greater revenue thanks to 35% more increased space

As zero spacing is possible with RAUPIANO PLUS in conjunction with RAUTITAN, a significant amount of space can be saved. In the case of the example from practice, it is possible to gain 10.3 m² of additional living area – assuming only one installation shaft per residential unit. Converted, that is €31,000 greater revenue* – a strong argument, especially in times of continually rising square metre prices.



2. 30% faster installation

Compared to SML cast iron pipes, you can reduce working time by up to 30% with our sound insulation pipes. This is made possible by eliminating sources of error during planning and installation, as well as through reduced installation expenditure.

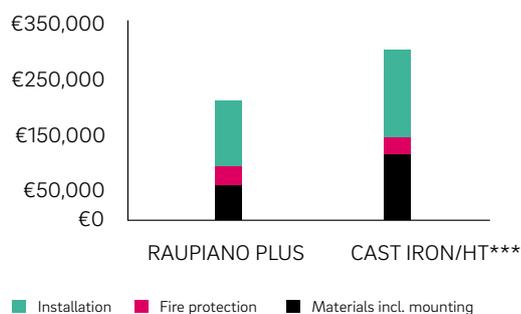
3. Nine bathrooms instead of five

While dimension DN 80 is specified for SML cast-iron pipes, RAUPIANO PLUS is installed in dimension DN 90. Thus, as many as nine instead of just five bathrooms with a toilet, shower, wash basin and bathtub can be connected to one fall pipe. This is made possible by up to 20 % higher flow rates and the flow-optimised RAUPIANO PLUS mouldings.

4. Material costs cut by up to a third

RAUPIANO PLUS reduces material costs by as much as a third when compared to the conventional combination of SML cast iron and HT plastic pipes. Together with the installation time saved**, this also pays off for you as the installer.

Commercial project with 313 residential units



Time to rethink planning with our max flow moulded parts

Waste water volumes are shrinking. As a result, self-cleaning is no longer occurring due to insufficient fill levels. Demand based-planning, which has been common practice for drinking water for a long time, is now becoming increasingly important for drainage pipes. Our max flow branch connectors allow a more efficient design that not only saves space, but a significant amount of money as well.



The 110 mm double branch recently completed the max flow family.

*The basis for calculation is a price of €3,000/m², the national average in Germany.

**Installation times are from a third-party, independent study by Innung Spengler, Sanitär- und Heizungstechnik, Munich, 2005.

***The stricter requirements on construction-related fire protection for mixed installations which came into effect on 1 January, 2013 did not yet apply during the original planning of the commercial project. To meet the new specifications of the German Institute of Civil Engineering (DIBt) today, greater installation and financial expenditure are to be expected with mixed installations (cast iron/HT pipe).



No wish left unfulfilled

Want to install building drainage without any hassle?
No problem. Always be on the safe side with the
complete RAUPIANO PLUS system.

The sum of the details makes the difference.

Years of market experience and outstanding expertise in polymers make RAUPIANO PLUS what it is today: a complete system with smart features and properties you can rely on.

Self-supporting

Whether it's during transport, the building phase or operation, its ring stiffness makes RAUPIANO PLUS especially robust. This simplifies installation and prevents horizontally installed pipes sagging.

Pressure-resistant to 2 bar.

The push-fit lock prevents the socket connection from coming apart. This ensures reliability of internal stormwater pipes under pressure loads.

Sturdy and functional

The extremely smooth and abrasion-resistant inner layer of the pipe prevents deposits and scaling, while a special coating reduces friction. The UV-resistant outer layer of the pipe system boasts exceptional shock resistance and weathering resistance when stored outdoors for up to two years.

Impact and cold-resistant

The outstanding impact and cold resistance ensures optimal suitability for construction sites – even at low temperatures. Proven break resistance down to $-10\text{ }^{\circ}\text{C}$.



Easy to install

These advantages also make everyday construction site life easier:

- Planning and installation is the same as with HT
- Weighs considerably less than SML cast iron
- Transition to HT and sewer pipes without adapters
- Tried-and-tested push-fit socket connection
- Fast and easy shortening thanks to scale markings on the pipe



Achieving success together

As a well-known, owner-operated family company, partnership is more than just a word to us. We stand by your side with innovative services – locally, whenever you need us – with our decades of experience and more than 20,000 employees around the world.

Planning support and consultation

Our sales team are at your service in every way and provide assistance with both technical and commercial questions, from planning and implementation through to operation – including on-site training.

BIM

BIM is a means for modelling buildings digitally. All building data is combined and networked before the start of construction here. The result is a virtual building model with which everyone involved in a project can work. We can provide you with the BIM content of a variety of REHAU products.

www.rehau.com/bim

REHAU Academy

Further your knowledge by booking the Acoustic Pipe CPD. This CPD firstly provides an introduction to acoustics and how noise is transmitted through a soil and vent system. It then covers such topics such as acoustic pipe performance testing, relevant UK Building Regulations, key installation topics, fire protection and then finishes with a comparison of different pipe materials and jointing methods. Learn more at www.rehau.uk.

Sales support

We support you with professionally prepared advertising materials customised to fit your requirements. For you, this translates to cost savings and, above all, more time for other activities.

Live support

Should you need support especially quickly for the selection of REHAU system solutions or for their installation, call our specialists on +44 1989 762600 (Mon. – Fri. from 8 a.m. to 5:30 p.m.) or email support@rehau.com.

ePaper

Here you'll find an overview of all the relevant documentation on heating, cooling, ventilation and sanitary installation. We provide technical information, catalogues, tender documentation, calculation software and lots more on REHAU products for you at www.rehau.uk/epaper.



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