

Engineering progress  
Enhancing lives

## Keep your water pipes under control

RE.GUARD: smart water control with technology for maximum reliability

#expectmore





# RE.GUARD ensures you have one less thing to worry about

Solutions developed by REHAU make your life easier and smarter. RE.GUARD protects your home by using advanced technology to reduce the impact of water damage, quickly detecting and intervening before the worst happens. Staying true to our motto: #expectmore



## Unique security

Durable, sophisticated components help detect burst pipes, leaks and other issues that can lead to the uncontrolled escape of water in your home.



## Everything under control

The RE.GUARD app notifies you of any abnormalities and the water supply is automatically shut off, thereby preventing further damage.



## Quick and easy to install

Your specialist installer can fit the RE.GUARD water controller quickly and easily to the main water pipe – including in existing pipe systems. RE.GUARD water detectors can also be placed at critical points throughout the house.



## Save money

RE.GUARD helps you reduce the risk of major water damage. As a result, some insurance companies may offer a discount on premiums. RE.GUARD also helps you keep track of your water consumption, enabling you to save water. That's good news for the environment and for your wallet.



## Versatile

Whether it's a new build, a renovation or a retrofit: RE.GUARD's compact design is ideal for use in residential buildings comprising one or two dwellings\*. All components are lead-free, posing zero health risks to building inhabitants.

\*RE.GUARD is designed for residential buildings comprising one or two dwellings and is not suitable for large housing complexes containing more than two residential units.

# Water damage and its devastating impact

Water damage occurs more often than you think. A garden hose is left on, a water pipe bursts, plugholes become blocked and then the bathroom sink has turned into a swimming pool for toys. It is no wonder that water damage is one of the most frequent claims reported to insurance companies.<sup>1</sup>



- Typical water damage claims run into the thousands.<sup>1</sup>
- As well as the loss of material goods, water damage can also mean losing valuable memories in the form of photos or important documents – and no amount of money can ever replace those.
- Due to moisture penetrating the building structure, water damage can result in the formation of mould within just 24 hours, which is harmful to health and requires extensive remediation work.
- The claims settlement process is time-consuming and stressful. It is often unclear exactly what damages buildings and contents insurers will pay for. The rooms affected often cannot be used for a long time afterwards and need to be renovated – not to mention the noise of the drying equipment.

<sup>1</sup> <https://www.gdv.de/de/zahlen-und-fakten/versicherungsbereiche/wohngebaeude-24080>

**Any home can suffer water damage as it has many different causes:**



#### **Pipes**

Corrosion, limescale and frost can compromise pipes and cause water damage, particularly in the case of older existing installations.<sup>2</sup> However, disaster can strike quickly even when pipes are new – for example, if you drill into them when putting up a shelf.

#### **Drip leaks and leaky fittings**

Drip leaks are by no means harmless as they are often only discovered when a lot of damage has already been done. They are particularly harmful when they occur unnoticed around fixtures concealed in the wall. Leaky fittings and traps can also become a potential source of major damage over time.



#### **Defective connections**

Connected appliances or fittings can also be a significant cause of damage, e.g. due to a ruptured supply hose or a technical defect in a washing machine or dishwasher.

<sup>2</sup> <https://www.gdv.de/de/themen/positionen-magazin/unter-druck-39356>

# The RE.GUARD system in detail



1

## RE.GUARD water control device

- Helps to detect burst pipes and drip leaks
- Shuts off the water supply to mitigate damage
- Measures your water consumption
- Allows the water pipe to be turned on and off manually
- Is installed directly after the water meter and in front of the house water filter



2

## RE.GUARD water detector

- Detects leaking water in critical areas
- Water detectors can be placed throughout the house as required
- Reliably connects to the RE.GUARD water control device via the Z-Wave wireless standard
- Includes extension cable for places that are particularly difficult to reach



3

## RE.HUB gateway

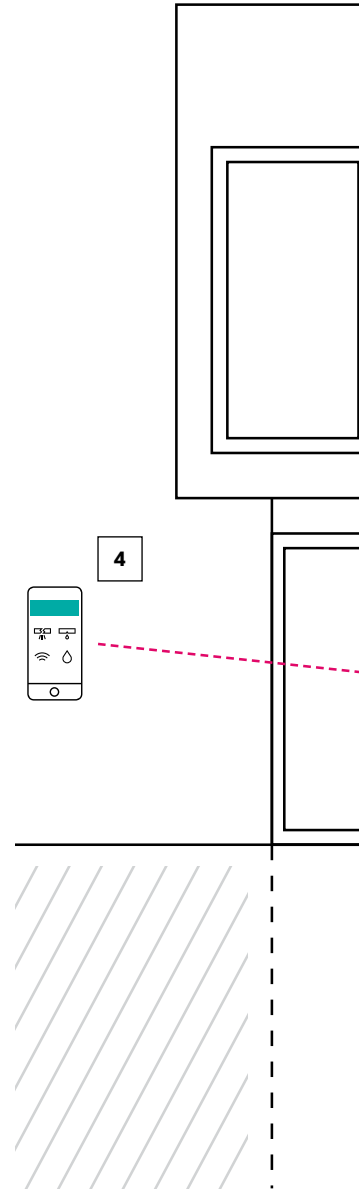
- Connects your RE.GUARD devices to the Internet
- Can be easily connected to your router

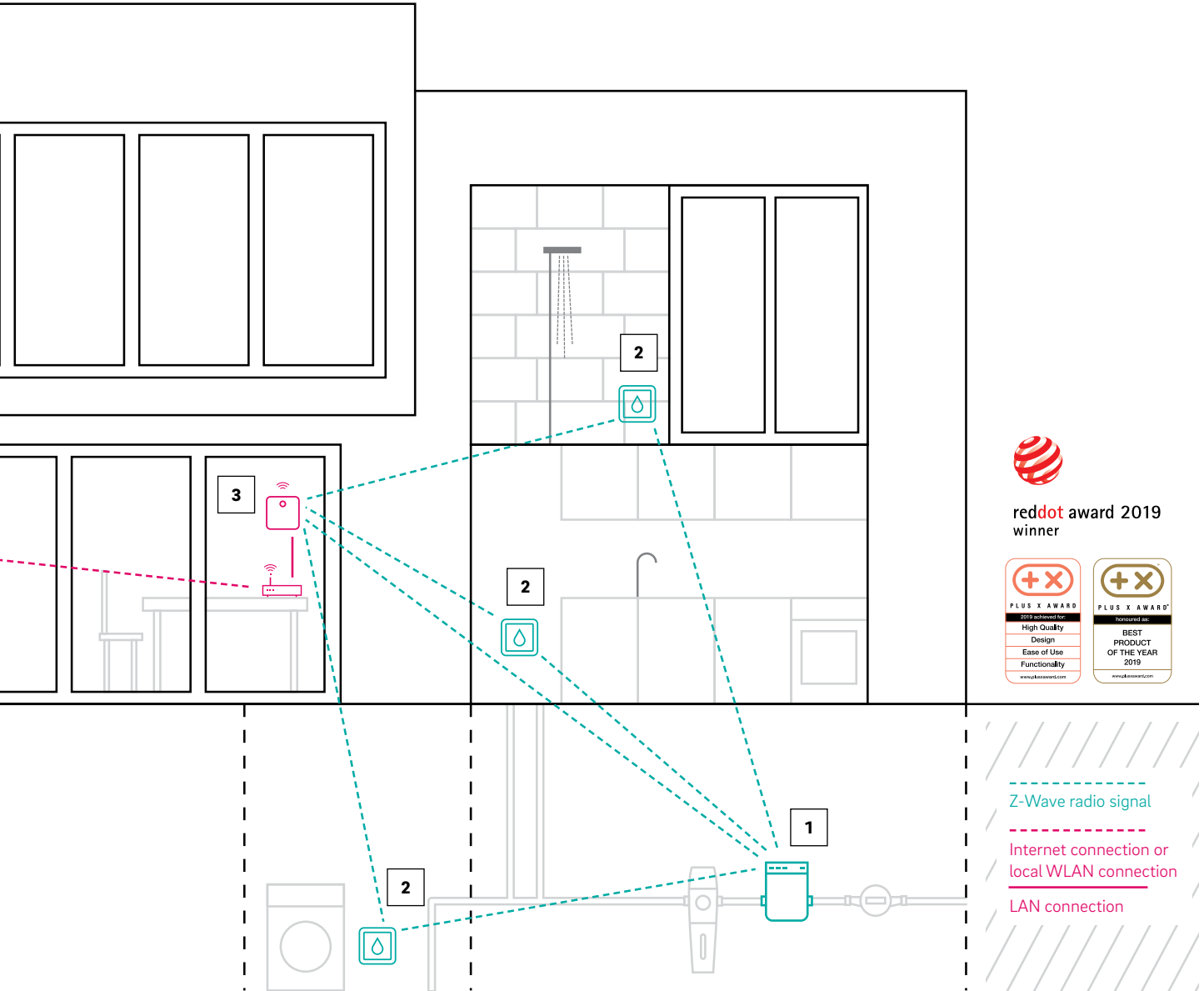


4

## RE.GUARD app

- Displays all essential information at a glance
- Helps you identify sustainable ways to save on your water consumption





  
reddot award 2019  
winner



- - - - - Z-Wave radio signal  
- - - - - Internet connection or local WLAN connection  
————— LAN connection

## Simply convincing: the RE.GUARD principle



RE.GUARD detects burst pipes and drip leaks in pipework and monitors rooms using water detectors.

If abnormalities are detected, RE.GUARD shuts off the water supply and alerts you via the app.

Costly damage, mould, non-material losses and time-consuming hassle with insurers are effectively prevented.



### Z-Wave

Z-Wave is a certified wireless communications used for smart home systems. Z-Wave devices communicate only with each other and the gateway; they are not accessible directly from the Internet. This increases security. Connection to the Internet or cloud is not required for operation. The short transmission time and low transmission power also means there is less radio pollution compared to WLAN.





# Complete protection – even when you're on the go

## Less worry, more freedom

From now on, you can enjoy peace of mind whenever you leave the house. RE.GUARD works as a fully autonomous unit. Burst pipes and drip leaks are detected completely independently by the device itself.

## Reliable protection at all times

The automatic shut-off feature works even without an active Internet connection and automatically shuts off the water flow in the event of a burst pipe. RE.GUARD even operates during a power failure thanks to its emergency batteries. And, additional protection is provided by the Z-Wave certified wireless standard, which the water control device uses to communicate with the water detectors. Z-Wave's radio signals are less prone to failure than a WLAN connection and pass more easily through solid basement ceilings and walls.

## Always the right mode

In the app, you can set different modes for when you are at home or away. This means you can specify the appropriate scenario for every situation.



RE.GUARD water control device



### Innovative measuring methods

To detect burst pipes, RE.GUARD uses innovative ultrasound technology for flow rate measurement. It has no moving parts and is therefore exceptionally durable and accurate over the long term. The section that carries the water also has no component parts. This means your water pressure remains virtually unaffected with no loss of convenience to you, such as when taking a shower.

# Do you track your fitness? Why not track your water pipes?

Train timetables, tomorrow's weather forecast, the number of steps we have taken: we use our smartphones to manage many different aspects of our lives. And with the RE.GUARD app, we can now also keep an eye on our water pipes.<sup>3</sup>

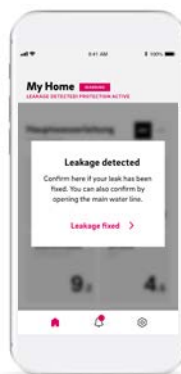
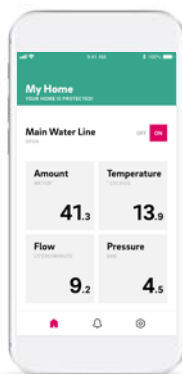
## Everything at a glance and under control

The RE.GUARD app lets you view all essential information relating to your water pipes at a glance. Not only is this useful when it comes to preventing major water damage – with the app, you also always know what shape your pipes are in. If abnormalities are detected, you are alerted via the app, while RE.GUARD automatically intervenes and shuts off the water supply. You can also use the app to conveniently shut off the water manually – for example, if you are going to be away from home for a long period of time.



## Save on insurance

Damage caused by water leaks is the biggest cost burden<sup>4</sup> for building insurers. That's why you can benefit from lower premiums from some insurers if you install a leak protection device. Just ask your insurance company.



## Everything at a glance

The overview screen lets you keep a eye on the current status of your home's water usage and activity. You can enjoy the peace of mind that comes from knowing everything is OK at home.

## Always informed

If RE.GUARD detects a potential leak, you are notified via a push message. Depending on the mode selected, you can decide whether to shut off the water or not. If a pipe bursts, RE.GUARD automatically shuts off the water in every case.

## Save water

The app provides a detailed breakdown of daily consumption. You can see, for example, how much water you are using and when. This gives you an idea of where you are using large amounts of water, so you know where you can cut back and save.

<sup>3</sup> Provided that your smartphone is connected to the Internet.

<sup>4</sup> [https://www.schadenprisma.de/wp-content/uploads/pdf/1/sp\\_1\\_2018\\_art1.pdf](https://www.schadenprisma.de/wp-content/uploads/pdf/1/sp_1_2018_art1.pdf)



# Wherever there is a need

The optional RE.GUARD water detectors identify water leaks at particularly critical points and can be conveniently placed anywhere in the house.



## Bathroom

From an overflowing bathtub to a ruptured tap connector or trap under the wash basin, things can go wrong quickly in the bathroom.



### Want more? Get more!

You can easily obtain additional RE.GUARD water detectors at any time from your specialist installer or from [reha.com/webshop](https://reha.com/webshop).



## Washing machines

Defective hoses and seals on washing machines and dishwashers can soon cause problems. A faulty aqua stop system can result in a lot of damage.



## Living areas and kitchens

Leaky drainage pipes or dripping threaded connections in the wall: in many cases, damage is only discovered when it has already affected the fabric of the building or its fixtures.

## Extension probe

Extension cable with sensor for particularly hard-to-reach places is supplied with the water detector.

# Reliable protection, quickly and easily

Whether it's a new build, a renovation project or retrofitting in an existing drinking water installation – RE.GUARD can be installed quickly and easily. And the device can be set up in just a few steps, which means you'll be ready to enjoy reliable protection in no time. Thanks to the standard external thread, RE.GUARD can be attached to any pipe system.

## RE.GUARD: installation in five easy steps



Download the RE.GUARD app and follow the step-by-step instructions.



Connect the RE.HUB gateway to the router.



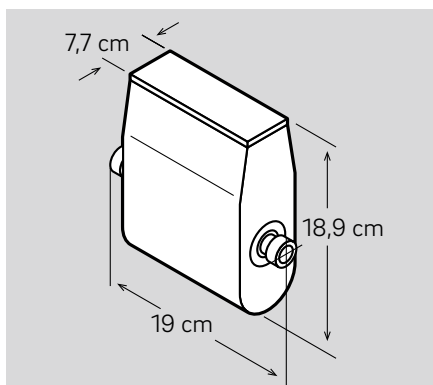
Scan the QR code on the back of the RE.HUB with the app and activate it.



Connect the components with each other at the touch of a button on the water control device and then adjust the threshold values in the app.



Have the RE.GUARD water control device installed by an expert, ensuring it is positioned after the water meter and before the house filter. Done!



### For new builds, renovations and retrofitting

No matter what your requirements are, the RE.GUARD water control device is also ideal for use in confined spaces thanks to its compact design.



# Questions? Answers!

## **What elements of the RE.GUARD system do I need to ensure optimum protection?**

In addition to the RE.GUARD water control device, you need the RE.HUB so that you can set the threshold values for your specific household, and the app for controlling the system. The RE.GUARD water detector is optional and protects areas that are particularly sensitive.

## **Can I use RE.GUARD water detectors separately?**

No. To guarantee effective protection, you need the RE.GUARD water control device in order to use the RE.GUARD water detectors. The RE.GUARD water control device shuts off the water supply in an emergency.

## **Am I still protected in the event of a power failure?**

The RE.GUARD water control device can be fitted with emergency batteries. These will ensure that the system is able to operate for a maximum of 24 hours in the event of a power failure.

## **Can I also open the RE.GUARD water control device manually?**

In the unlikely event that opening is not possible via the app or on the device itself, you can take off the casing of the RE.GUARD water control device and open the shut-off manually. The instructions can be found on the device.

## **Can I install the RE.GUARD water control device myself?**

Installation of the RE.GUARD water control device must be done professionally by a REHAU specialist partner. A list of specialist companies is available at [rehaubusiness.com](https://rehaubusiness.com). Threshold values are specified in the instructions and can be adjusted by the specialist installer and also by the customer. We recommend you have the initial values set by the specialist installer.

## **Can I put the RE.GUARD water detector into operation myself?**

Yes, the water detector can be put into operation intuitively in just a few steps. This means that you can add more water detectors later on. RE.GUARD water detectors can be ordered either from your specialist installer or online at [rehaubusiness.com/webshop](https://rehaubusiness.com/webshop).

### **Can the RE.GUARD water control device be built into any pipe system?**

Yes, the RE.GUARD water control device can be attached to all pipe systems thanks to the threaded connection. It is therefore equally suitable for new builds, renovations and retrofitting.

### **Is the RE.GUARD water control device suitable for inclusion in a drinking water installation? Has it been specially tested?**

A DVGW or DIN DVGW certificate (DVGW – German Technical and Scientific Association for Gas and Water) clearly indicates that a product is suitable for use in drinking water systems and for installation in the pipe system. The device is certified according to the DVGW's DIN 3553 standard. The certificate is available on request.

### **Can the RE.GUARD water control device be installed in front of the house water filter?**

Yes. The RE.GUARD ultrasound measurement process is not negatively affected by dirt particles, e.g., sand. This means the house water filter is also protected as a possible cause of damage.

### **Can the device be fitted to the hot water pipe?**

No, it is only possible to fit the device to the cold water pipe or the cold water supply to the hot water preparation system.

### **I live in an apartment building that contains multiple dwellings. Can I also have RE.GUARD installed?**

Installation is currently possible only in the individual apartment of an apartment building with a decentralised hot water supply. The RE.GUARD water control device cannot be installed in the main drinking water pipe of an apartment building, such as in the basement after the main water meter.

### **What operating systems is the RE.GUARD app available for?**

The RE.GUARD app is available for Android 7.0+ and iOS 11+.

### **Is RE.GUARD protected against cyber attacks?**

The security of the entire system is regularly tested by independent institutions. Firmware updates are provided via the app if required. Should someone manage to access your system despite all the security measures, RE.GUARD can be disconnected from the mains at any time and opened manually. In addition, Z-Wave devices are particularly secure with regard to cyber attacks because they only communicate with each other and with the gateway, and therefore are not accessible directly from the Internet.

### **Do I need the app to control RE.GUARD?**

It is possible to control RE.GUARD on the water control device itself, without the app. However, only basic functions can be controlled this

way. User-defined settings are entered exclusively via the RE.GUARD app. The protection function is provided also without use of the app.

### **Can I use the RE.GUARD app without the cloud?**

Yes, the RE.GUARD app can be used without a cloud connection solely in your own local WLAN network. However, certain functions – such as notifications of abnormalities, control and tracking of water consumption – are not possible if you are outside this network.

### **What happens to my personal data?**

All data, e.g., your login details, consumption values and threshold values, is stored on servers in the EU. This information is used solely for the purpose of ensuring the functionality of the devices. You can find more information about this in the app's data privacy policy.

### **Do you have any other questions about RE.GUARD?**

Our service team will be happy to assist you. Please email [support.de@rehau.com](mailto:support.de@rehau.com).

More information about RE.GUARD is available at: [www.rehau.uk/re-guard](http://www.rehau.uk/re-guard)



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