



**CAVIUS<sup>TM</sup>**  
**THE WORLDS**  
S M A L L E S T  
A L A R M S



ALERT | ALIVE | AWAKE



Glenn Højmoser, FOUNDER CAVIUS

## WE ARE CAVIUS

Welcome to the world of CAVIUS. Since 2004 we have inspired the World of alarms, protected homes and saved lives.

In 2004, CEO and founder, Glenn Højmoser, decided to leave his design career and follow a lifelong dream. The first CAVIUS product, the travel alarm, was brought to market in 2007, featuring a motion sensor and smoke detector. The alarm went on to claim international recognition and to win the prestigious Red Dot Award.

In 2010, we introduced the world's smallest photoelectric smoke alarm, using the experience from the travel alarm. The new smoke alarm was unique because of the EN-approved micro-design and special features.

CAVIUS introduced a complete range of Safety

products, all communicating wirelessly, back in 2017. This new range brings you unrivaled system communication between wireless battery operated alarms and mains powered alarms.

CAVIUS manages to communicate across features, without compromising on design.

The unique Danish design combined with a professional UK-based R&D team, brings you the most advanced alarms.

Welcome to our world - We are CAVIUS.

# PRODUCT HISTORY

THE WORLDS  
SMALLEST  
ALARMS



reddot design award  
winner



reddot design award  
winner



TRAVEL ALARM



HEAT and SMOKE 40mm



SMOKE 40mm



FLOOD 60mm



reddot design award  
winner

WIRELESS.))  
ALARM FAMILY



SMOKE 65mm



HEAT 65mm

2007

2010

2013

2016

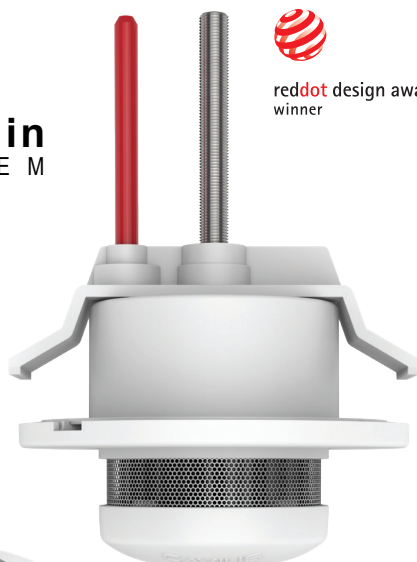


SMART REMOTE



reddot design award  
winner

Build in  
SYSTEM



BUILD-IN SYSTEM



reddot design award  
winner



SMOKE 78mm



reddot design award  
winner

WIRELESS.))  
ALARM FAMILY



SMOKE 230V

THE WORLDS  
SMALLEST  
CO ALARM



CO 40mm



HEAT 230V

2017

2018

2019

2020



# THE WORLD'S SMALLEST ALARMS

CAVIUS made the World's smallest heat and smoke alarms. 40mm in diameter.

Despite the micro design, the CAVIUS 40mm alarms is certified according to the highest standards World wide. At the same time the alarms live up to the strict CAVIUS quality demands.

CAVIUS alarms is also tested and approved for Recreational Vehicles (RV) And can be used together with the CAVIUS "Build in base"



40 mm  
SMOKE ALARM 10 YEAR BATTERY



40 mm  
HEAT ALARM 10 YEAR BATTERY



Danish Design



10 Years Battery



100% Tested



Environmentally friendly

## CO ALARM

Based on its strong experience with photoelectric smoke alarms, CAVIUS made the World's smallest CO alarm. Also designed in a 40mm micro design, it will protect you against the "silent killer".

The CAVIUS CO alarm, is made with the highest quality standards components, certified EN50291 and is featuring an ultra-long 10 year lifetime.

Like the CAVIUS Smoke alarms, the CO alarm is also approved for Recreational Vehicles (RV) And can be used together with the CAVIUS "Build in base".



40 mm  
CO ALARM 10 YEAR BATTERY



Danish Design



10 Years Battery



100% Tested



Environmentally friendly



reddot design award  
winner

65 MM SMOKE ALARM 5YEAR BATTERY



78 MM SMOKE ALARM 10YEAR BATTERY



97 MM MAINS POWERED SMOKE ALARM



WIRELESS  
ALARM FAMILY



65 MM HEAT ALARM 5YEAR BATTERY



78 MM MAINS POWERED HEAT ALARM



ONE ALARM  
TRIGGERS ALL



140 MM SMART REMOTE



60 MM FLOOD/WATER LEAK ALARM 5YEAR BATTERY



Danish Design



5 and 10 Years Battery



100% Tested

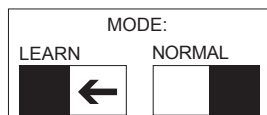


Environmentally friendly

# WIRELESS. ALARM FAMILY

CAVIUS invented the most simple way to link the Wireless Alarm Family. Slide all devices into LEARN mode and press the TEST button on any device until you hear a BEEP. All Alarms will then start flashing, to verify the communication between the alarms. Then slide back into NORMAL mode. The Alarms are now ready to be sited. This is CAVIUS simplicity.

*All devices, no matter what feature, has the exact same switch in order to avoid any misunderstandings.*



Danish Design



100% Tested



Environmentally friendly

## MAINS POWERED

WITH LAMP  
OUTLET

### MAINS POWERED SMOKE ALARM

CAVIUS Mains Powered Smoke Alarm can work as a lamp outlet or lamp hook, to avoid an extra spot on the ceiling.

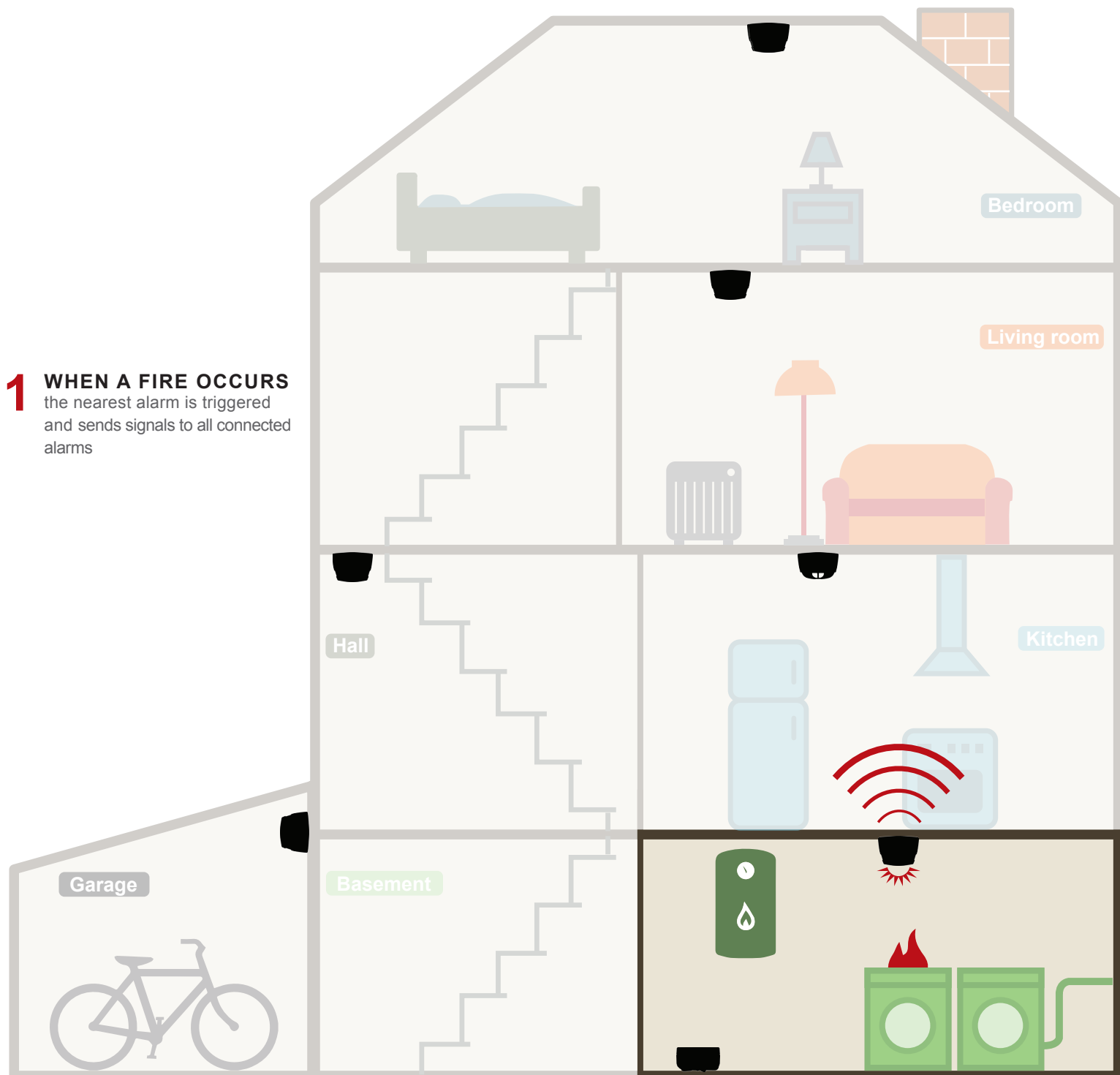
The alarm is designed with a built in slot for vacuuming and testing the smoke chamber from distance.

# CAVIUS CREATED AN AFFORDABLE ALARM FAMILY OUT OF THE ORDINARY

CAVIUS has created an integrated Wireless Alarm Family range with a common protocol.

All alarms will alert you whether there is a flood/water leak in the basement, a fire in the attic or smoke in the hallway.  
The detector causing the alarm, will be easy to identify due to the clear visible indication.

**WIRELESS**   
ALARM FAMILY



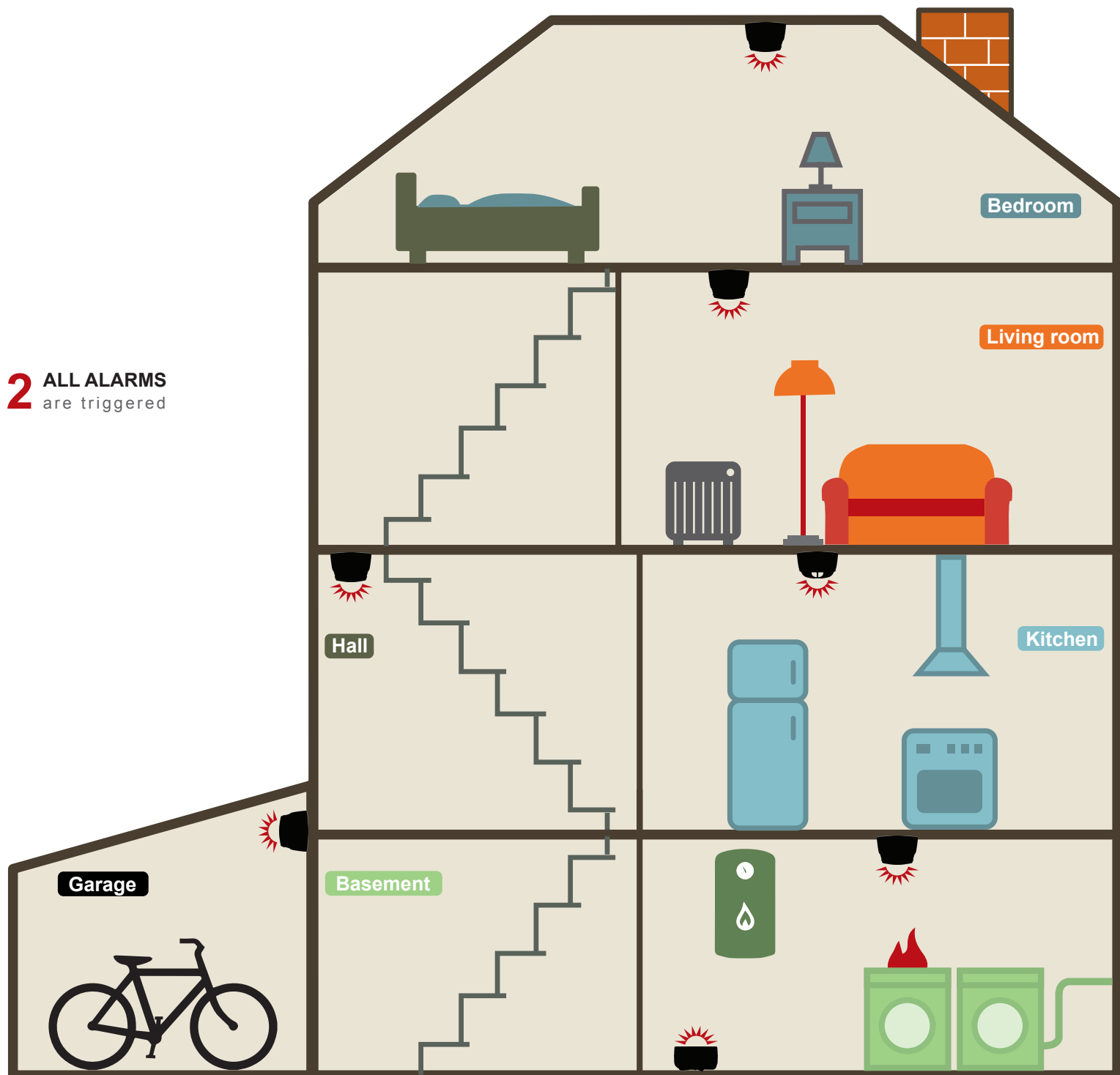


# ONE ALARM TRIGGERS ALL

So far communication between wireless battery operated alarms and mains powered alarms, has not appeared in the market.

The CAVIUS Mains Powered smoke alarm can communicate with any other CAVIUS wireless battery operated alarm. Alongside this new way of thinking, CAVIUS has also created the Smart Remote for the range. The communication between the alarm devices and the remote is unique. If an alarm occurs, the CAVIUS Smart Remote will activate and help you escape. The remote can be used either to test or silence the alarms.

CAVIUS has created an affordable alarm family to the modern home.





40 mm  
HEAT ALARM



40 mm  
SMOKE ALARM



40 mm  
CO ALARM

## BUILD IN SOLUTION

The new top button on the 40 mm product line, allows you to build in the CAVIUS “stand alone” models. And will make your CAVIUS alarm even more unnoticed. Designed with standard CAVIUS snap features, it will substitute original mounting base and allow you to hide much of your alarm into the ceiling.

*The World's smallest, just got smaller.*





65 mm  
SMOKE ALARM



65 mm  
HEAT ALARM



78 mm  
SMOKE ALARM

## BUILD IN SOLUTION

The CAVIUS “Build in” base also went through certification for the Wireless Alarm Family. It is now possible to hide away most of your alarm without compromising on safety.

The first “build in” base, to pass the Fireroom test.



reddot design award  
winner



65 mm  
SMOKE ALARM

# TYPES OF ALARMS

Smoke, heat, flood or CO – with the CAVIUS alarm family you are able to protect your entire home from fire. Alarms installed in the home saves lives. More than half of house fire deaths occur in homes with no working smoke alarms.

## Fire Safety Tips:

If a fire occurs in your home:

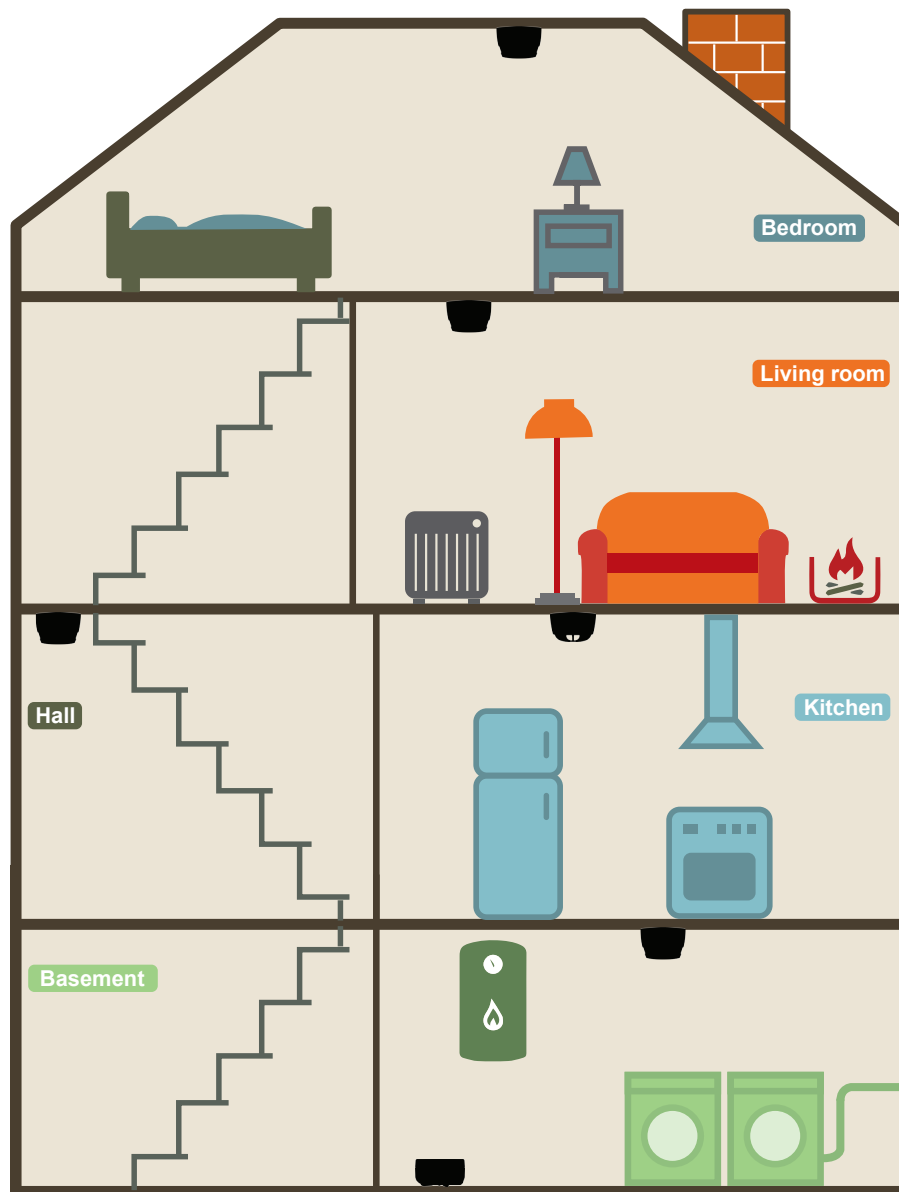
GET OUT, STAY OUT and CALL for help.

Install alarms on every level of your home.

The alarm should be vacuum cleaned and tested once per month.

Talk with all household members about a fire escape plan and practice the plan twice a year.

Each CAVIUS product goes individually through a 100% final test. CAVIUS always strive to have the smallest design without compromising on quality or aesthetics. Danish design & development.



It is recommended to place at least one smoke alarm on every floor of the home - especially in hallways and bedrooms. Do not place a smoke alarm too close to a kitchen appliance or fireplace, as this may result in false alarm.



Heat alarms are designed to avoid false alarms. It is used in areas where smoke can be accepted, such as kitchens, garages, fireplaces and workshops. This device is activated when it senses a rapid increase in room temperature.



CO alarms are placed in rooms with burners and near sleeping areas - in the level where you breathe - and on each floor. Can be placed on walls or ceilings, but not right next to or over a fireplace or flame-producing appliance. CO - carbon monoxide - is known as the "silent killer" because it is odorless, tasteless and colorless.



Flood alarms are designed to detect a leak of water from washing machines, dish washing machines, broken pipes or humid areas.

Can also detect flooding of basements etc. Place it on the floor in inaccessible places where leaks are difficult to discover.

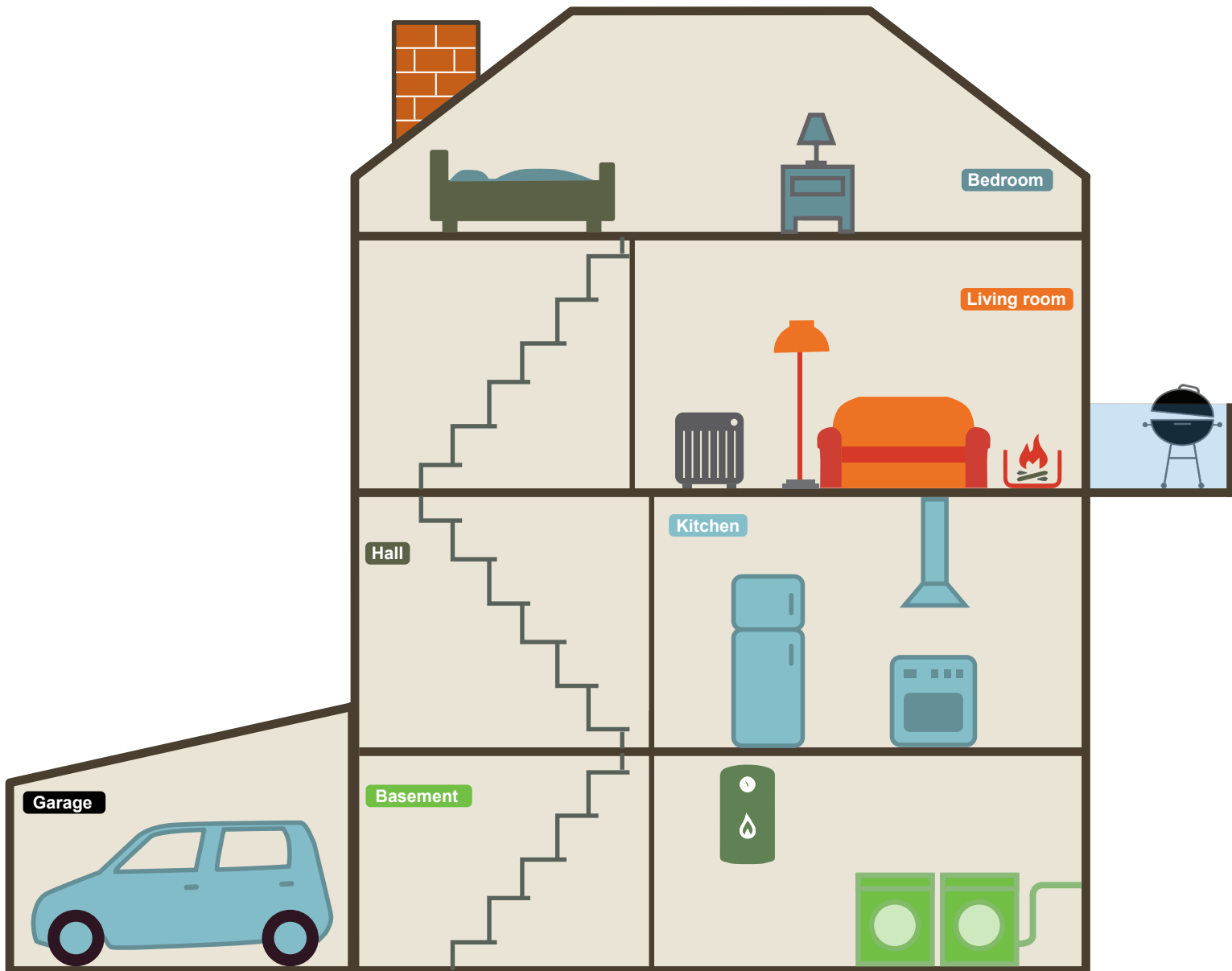


# POSSIBLE CO SOURCES

Carbon monoxide (CO) is a poisonous, colorless, odorless and tasteless gas. Although it has no detectable odor, CO is often mixed with other gases that do have an odor.

So, you can inhale carbon monoxide right along with gases that you can smell and not even know that CO is present.

Open fireplace and clogged chimney  
Incorrectly serviced gas stove  
Defect or incorrectly ventilated gas boiler  
Running vehicle engine in the garage



Cavius CO-alarm alerts you according to the following levels (PPM=parts per million):



Safe.



Cavius CO alarm starts after 60-90 minutes.



Cavius CO alarm starts after 10-40 minutes.



Cavius CO alarm starts in 3 minutes or less.

# CAVIUS SMOKE ALARM - ADVANTAGES

*The following explanation shows why the CAVIUS smoke alarms are superior to other more standard designs:*

## **Core technology:**

The core technology of the CAVIUS 40mm smoke alarms was designed by a team experienced in developing high quality system smoke detectors to EN54-7. There are often many hundred detectors on a system, and single false alarm can cause evacuation of hotels, hospitals, shopping centres etc. They also have to be highly reliable in detecting fires. There is also direct involvement with forming and revising EN system and smoke alarm standards.

## **Design:**

The alarm design with the stacking of all the components: Battery, electronics, chamber and sounder in order to make the overall design as small as possible were a first on the market and revolutionized the smoke alarm industry.

CAVIUS alarms are using the highest quality components to ensure quality, reliability in performances, stability and to ensure products will be 100% operational during their lifetime of 10Y.

## **Chamber size:**

The effective size of the smoke sensing chamber is much smaller than previous 'standard' designs. To maintain a good quality performance this requires additional cost in the optical components, amplifiers for the photodiode and a good quality micro controller to carry out signal processing.

## **Performance:**

The performance of a smoke sensor is dependent on a good smoke entry in all orientations around the alarm. It also must have a very good resistance to false alarms due to point sources of contamination, insects, and humidity. This is not the case with most other larger smoke alarm sensor designs.

Due to these characteristics, CAVIUS smoke alarms are certified for recreational vehicles where the exposure to different humidity and change in temperature is high.

## **Software:**

The software in the CAVIUS smoke alarms includes a fire detection algorithm with features similar to that found in expensive analogue detection systems. This includes correction for drift due to the build-up of contamination, rejection of spurious signals, temperature compensation and averaging of the signal levels. These features give a superior performance to the simple alarm thresholds used in standard smoke alarm ICs.

The software also includes a calibration routine, which stores a gain factor in flash memory. This is more accurate than the variable resistor set by hand on most other alarms, and much more reliable long term. The software also includes features for self-test, hush mode after alarm, and battery test.

## **Manufacturing:**

CAVIUS alarms are testing 100% of the production in a smoke tunnel to ensure the right calibration, and every single piece is checked in an anechoic room for sound output test.

Samples from each production week are sent to an accredited lab, and we are always having an inspection before shipment by an external audit company.

Factory is audited several times per year (NF, VdS, ISO, Customers...)



**100%**  
TESTED



**ENVIRONMENTALLY**  
FRIENDLY



# DANISH DESIGN AND STATE OF THE ART PRODUCTION

Making security products, requires high quality as well as a reliable and rigorous QC (Quality Control) process.

CAVIUS products goes through a 100% outgoing test schedule, as well as being tested by notified certification bodies and testing laboratories. The products complies with the highest safety standards in Europe, US and Australia.

Our state of the art production facilities helps us ensure the desired CAVIUS quality. We use the best equipment, the best engineers and the best materials.

All products are developed in corporation with \*AW Technology.

At CAVIUS, we never compromise, and we never fail to meet and exceed your expectations.





# CAVIUS

ALERT | ALIVE | AWAKE

