





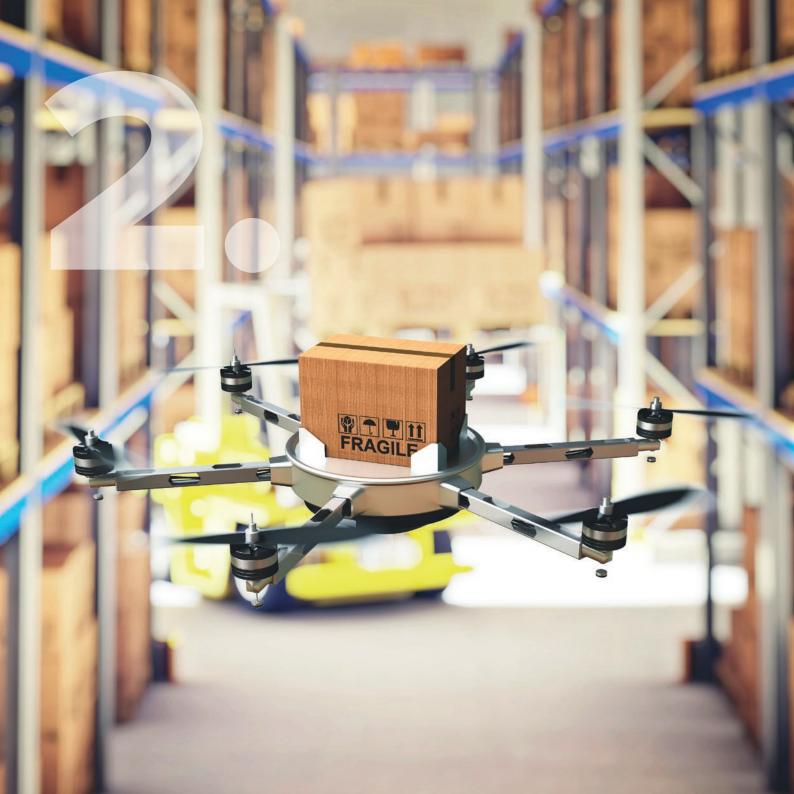
# DRAINAGE BASED ON TRIED AND TESTED PRINCIPLES.

We are Akasison. The specialists in roof drainage. Just like many others claim to be. And that is correct. Basically, we provide complete roof drainage systems based on a universal principle: Bernoulli's fluid dynamics. Just like everyone else. And yet there is a big difference. We go much further. We have introduced our own principles. Tried and tested principles. Which have brought us to where we are today. And made us what we are now: the most inspired people in the industry. With our own principles. These principles guide us forwards. Because we will not settle for status quo. Drainage can always be better. More practical for everyone. Bernoulli showed us the way, but that was merely the first step. And even though all next improvement steps are getting smaller, we will still take them. Call it the urge to improve. Call it obsessive specialism. Improving roof drainage is in our nature. To us it is a principle. A tried and tested principle.



## WE NEVER STOP IMPROVING.

Draining rainwater is hardly rocket science, yet that is how we approach it. Umpi Virtaus. UV. Closed siphonic systems. That is our business. That is our muse. That may sound somewhat theatrical, but it is what drives our people every day: perfecting a natural principle. We are UV adepts, with our own test tower for research & development, who aim for fewer components, fewer actions, fewer errors, fewer failure costs. That is how we continually develop our systems to cater a new sustainable generation. And that is how we stay a large step ahead of the competition in terms of products, knowledge and expertise. Our people continue to take a hard, critical look at our latest product generation. That is our strong suit: our undying willingness 'to kill our darlings'. Akasison is not a one-off gap filler in our portfolio. It is inherently in our genes: the best roof drainage system.



## WE DELIVER DIRECTLY.

So we kill our own darlings. On to the next generation. That is quite radical. Just as radical as our market approach. We prefer the direct approach. That way, we are in control of the entire process. We champion our own roof drainage system and take full responsibility for it. We deliver it ourselves and directly. Faster and better. After all, it is a system, not a collection of products. That takes more than clearing some shelf space. It takes craftsmanship. In roof drainage and in logistics.

### EXPERTISES.

#### **DEVELOPMENT AND INNOVATION**

As a company with more than 50 years of production experience, we pay attention to workmanship, and synthetics is in our blood. During these 50 years, we have always moved with the times. We never stop improving; it is our principle. Akasison's innovation and development department is made up of small teams with an eye for functionality, fluid dynamics and quality. All of this is guided by input from clients so that we can continue to offer the best roof drainage system.





## PROJECT DESIGN AND ENGINEERING

Your project is in safe hands with our project engineers. The Akasison engineers are a young team who have already built up a wealth of experience in our field of expertise: siphonic roof drainage. Your immediate point of contact will provide you with a tailor-made design for the pipe layout in your project. After your approval, the design is converted into a quote that includes a list of materials, the hydraulic design, isometric drawings and an overview of all the relevant requirements. Our quote is drawn up by one contact person, and that is unique. It is possible because we have set up accordingly. It is possible because we have set up accordingly. This is what makes Akasison easy for you.

#### PROJECT SUPERVISION

As soon as the decision is taken to use Akasison for your project, we offer intensive project supervision. We are on the roof with you during every project. From the beginning, throughout the project until final completion. Our many years of experience enable us to expertly assess and supervise the unique characteristics of every project. Because we have one point of contact, you can rest assured that the details of your project are known to us and that every question will be handled effectively.





## ORDER AND DELIVERY SUPERVISION

Our market approach has short lines. We deliver as directly as possible and take full responsibility in this process. Our Akasison Customer Service is structured so that it has a project-oriented approach and delivers our system as such. On Tuesday you have a progress meeting for the following week, on Wednesday you order the materials and on Monday we deliver the goods to the building site. Packed and delivered to specifically serve your project, in the order that your project is taking place. In-house development, our own production and stock, rounded off with direct delivery. That is our craftsmanship.



## TRAINING AND SUPPORT

A great deal of knowledge is involved in every step of our development and project engineering process, right through to completion. Knowledge of fluid dynamics, legislation and regulations, the application of standards and our own procedures. But especially about how things work in practice. We offer training courses and support so that we can continue to lead the way in the market with our Akasison system. Everything has to be in good order on the roof.





# WE HAVE ONE POINT OF CONTACT FOR THE CUSTOMER.

So we do business directly. That keeps the communication lines short. Another fundamental principles of Akasison: the shortest lines in the industry. The combination of enthusiasm and process optimisation. Our customers only have one point of contact. For commercial matters and for engineering. For sales and engineering. That is unique. Because our people are unique. And because we have setup our system accordingly. There are no counters at Akasison. No-one is sent from pillar to post. That is how process is setup. That is how our people are trained. That is how our system has been designed. This is what makes Akasison easy for you. It requires a big effort from our people and organisation. But it works: it is a tried and tested principle.



## WE ARE COMPLETE.

You might understand by now: we like to keep control. Of our entire process and our entire system. Which is why keep short contact lines. It requires a lot from our organisation, but especially from our portfolio. We cannot afford not to be complete. So we have the most comprehensive portfolio. In short, development, manufacturing, stock and logistics: all in our full ownership. The work on the roof cannot cease. The roof has to be closed before the next construction phase, without delay. That is the principle behind our portfolio: just one stop before the top.

### PROJECTS.

## 100.000 M<sup>2</sup>

New building logistics distribution center Michael Kors

Installation time: 14 weeks

The new logistics centre of international fashion label Michael Kors is filled with innovation, so it includes Akasison. The primary system is designed principle that we understand our business. To be exact, it can drain 2250 litres of water drainage per second. Effortless.





#### 9.014 M<sup>2</sup>

#### **New store Uni Hobby**

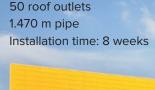
27 roof outlets 462 m pipe

Installation time: 3 weeks



#### New building Ikea Pisa

Akasison can take a punch. Ikea Pisa seems to have thought so too. The Akasison system is integrated in an earthquake resistant building.









#### 8.200 M<sup>2</sup>

#### **New building Amazon**

234 roof outlets 550 m pipe Installation time : 4 weeks

Let's talk about the leading e-commerce company worldwide: Amazon.com. Evermore expanding their business, in this case with their new building in Costa Rica. The rainwater is drained using Akasison L, they have chosen the best!

### 128.500 M<sup>2</sup>

New logistices center for BMW 372 roof outlets 7550 m pipe Installation time: 14 weeks

Impressive is an understatement for the new BMW logistics centre. In fact, this building is as large as 18 soccer fields.

Akasison XL is installed as the primary and the emergency, and partly equipped with Akasison fire protection. Just like the automotive industry, build for the future.



# WE UNDERSTAND OUR BUSINESS.

Fluid dynamics is a kind of rocket science for us after all. We take our business seriously and stick to our principles. An Akasison system is more than a collection of products. There is a disproportionate amount of brainwork in our system, and in our projects, from first deliveries to its completion. Design and engineering are at least as relevant in the best roof drainage system. You need to know all about fluid dynamics, laws and regulations. And about processes and systems. But especially, and most importantly, about the daily practice in siphonic roof drainage. We have short contact lines to stay in touch with daily practice. We are present on the roof. Where it has to be exactly right.



## WE WORK TOGETHER.

We are very principled but not rigid. Because we are present on the roof, we are fully aware that a building is not designed to fit the roof drainage system, but the other way around. Rainwater drainage is only part of a larger context in which our system has to function. Which is why we like to work together. We respect the principles of others. Aesthetic principles. Safety principles. Practical principles. We share ideas and think along with installers, construction companies, architects, engineers, investors and building owners. We do not pedantically enforce our system, instead we apply our principles within our partners vision. We see roof drainage as an integrated process and work to fluently pass each phase. That requires short lines of communication. But especially a heart for the business, clear instructions, great people and a well-thought out process. Also known as: principled craftsmanship.

### **OUR SYSTEMS.**

#### **AKASISON XL**

The Akasison XL system is ideal for siphonic roof drainage in buildings with the largest or most complicated roofs. Akasison XL includes a pipe system made from HDPE (High Density Polyethylene). This material combines flexibility during installation with robustness and reliability up to the biggest diameters.



#### **ROOF OUTLET XL75**

The XL75 roof outlets for PVC roofing membranes are made from high-quality plastics that are UV and corrosion resistant. The connection to the roof is made using a large PVC roof outlet to which nearly all PVC roofing membranes can be directly connected. The connection with the HDPE pipe system is n

The connection with the HDPE pipe system is made using a 360 mm long PE connector. The long connector enables an electrofusion connection to the pipe system underneath the roof regardless of the thickness of the insulation. Akasison roof outlets are TÜV certified, which means that our high product quality is independently guaranteed for you.

#### **AKASISON XL FIXING SYSTEM**

The Akasison XL fixing system is a unique design with few components. This allows a quick and secure installation. The system uses a rail to absorb the expansion forces of the pipe system and to secure it to the permanent building structure.







#### **AKASISON L**

The Akasison L system is ideal for siphonic roof drainage in small to medium-sized buildings in which the pipe system can move freely. Akasison L consists of pipe diameters of up to 200 mm and is made from HPTP (High Performance Thermoplastic).

#### **FLEXIBLE ROOF OUTLET CONNECTION**

Flexible roof outlet connection absorb the expansion from the free moving pipe system and prevent that any force is transferred to the roof outlets. The roof outlet connections are flexible while still having a high degree of rigidity for use in roof drainage systems with negative pressure. The connections to the roof outlet and the pipe system can be glued without any mechanical couplings. The flexible connectors are available in all common diameters and can be made to size on site.

#### TRANSPARENT INSPECTION T-BRANCH

Its high speed and siphonic pipelines ensure that the Akasison L system is self-cleaning. Inspection T-branches are installed at the bottom of the down pipes where the transition from the siphonic to the underground sewer system takes place.

Akasison L inspection T-branches are made from transparent HPTP to make a visual inspection possible very clear.





### WE TAKE RESPONSIBILITY.

Our people are often torn between two concepts. On the one hand, there is the "I-always-want to-improve-things" notion. And, on the other, there is the "I-want to-avoid-making-mistakes" notion. Both involve taking responsibility. Which is an important principle to Akasison. Our roof drainage system is only a small part in the whole construction process. That has to deal with natural forces. That even saves lives. We take this responsibility. With the longest guarantee in the market: fifteen years. And needless to say, our system is also fully insured against personal injury. But those are legal and financial constructs: the principled side of the business is what concerns us. We stand for quality. Based on tried and tested principles.



# WE CARRY OUR NAME PROUDLY.

We are Akasison, the specialists in roof drainage. A special name, and one we carry with pride. It stands for a group of specialists that always want better. That approach the market in their own way. Faster, smarter, safer. That might make us obsessive specialists. To us it is always about the best system and the right know-how. It is about drainage based on tried and tested systems, and to never just follow the common herd. To us, it is about craftsmanship, taking responsibility and providing top-quality products and projects. Searching for innovation based on many years of experience. Improving systems and avoiding mistakes. The most valuable combination that a customer could wish for. We don't leave anything to chance. Very practical for all parties involved. That is our most important principle.

# ALL ADVANTAGES OF SYPHONIC SYSTEMS

The Akasison siphonic roof drainage system offers many advantages for buildings with large or complex roofs. The fully filled pipe system has small diameters which installed horizontally and close to the roof for maximum space saving and full freedom of design. Fewer roof outlets and fewer down pipes leads to less ground work and contribute to lower cost of building. Akasison offers complete security during heavy rainfall with a low water level on the roof.



## <u>akatherm</u>

