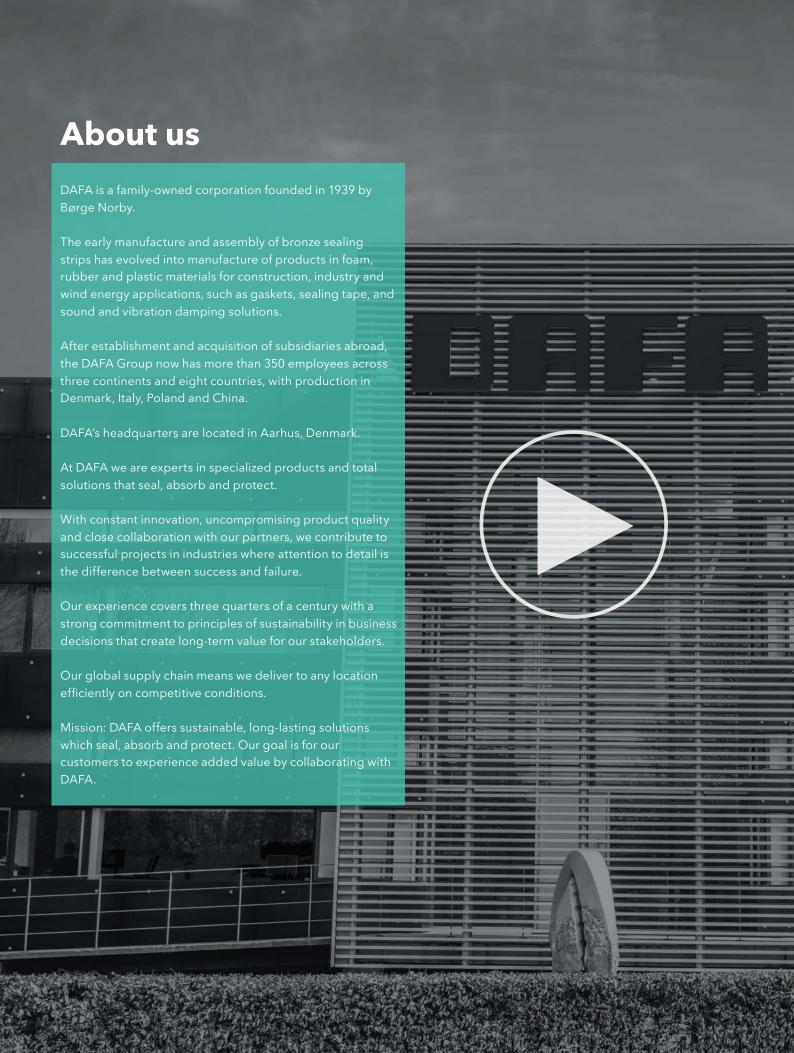


# **Building industry Norway**





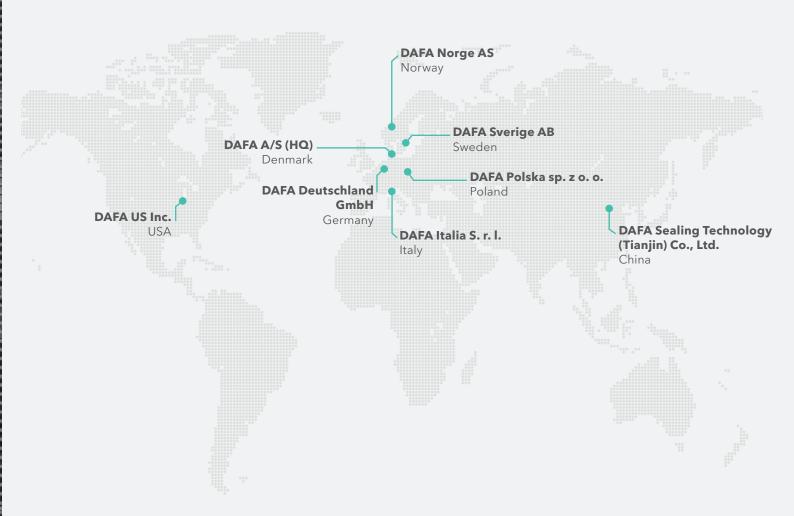


### Worldwide presence

With locations worldwide and decades of experience, DAFA is the ideal global partner - close to where our customers are.

Through constant innovation, we are able to perform a wide range of tasks. We select our materials and production methods based on careful consideration of what the task involves.

Our solutions appeal to many different sectors, as they are based on specific customers' needs, and we go to great lengths in the collaboration process to ensure the customer is satisfied with the final result.



Close to the markets - close to you

# Solutions for the wind turbine industry

Improving functions and applications in wind turbines.



DAFA's foam and rubber solutions offer significant benefits for the design and strength of the blades, making them last longer.



DAFA's nacelle solutions are many and varied. These solutions help structures and electronic components in the nacelle withstand stress, perform better and thus last longer.



DAFA's transportation solutions are carefully designed to help wind turbine components move safely from A to B.



#### Tower

DAFA's solutions for tower structures improve safety to avoid accidents and make maintenance easier. This benefits the operating costs and increases the durability and service life of the tower.



# Over 30 years of experience in the wind turbine industry

DAFA is a trusted partner with decades of experience in solutions for the wind turbine industry - onshore and offshore.

DAFA supplies the world's largest manufacturers of wind turbines with products for the transportation, construction and operation of wind turbines.

Our solutions absorb vibrations and noise, and protect the structure and electrical components from the ingress of

water, oil, salt, sand and dust. With materials designed to meet industry requirements and needs, the customer is always quaranteed a lasting and durable solution.

Our effective solutions help reduce down-time, accident risk, wear and maintenance costs during transportation, construction and operation for more than 100,000 active wind turbines worldwide.

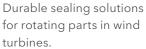


Self-adhesive sealing strips Vertical and horizontal sealing when assembling tower elements.



DAFA RotaSeal® for wind turbines

Durable sealing solutions







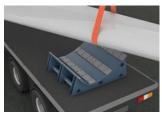
DAFA Universal Tip Protector

Visibility and protection during blade transportation and storage.



DAFA Transport Pads

Bolted high-friction pads for stabilizing towers, blades and heavy items during transportation.





# Solutions for the HVAC industry We develop, manufacture and supply solu

We develop, manufacture and supply solutions for the HVAC industry in close cooperation with our customers.

VDI 6022 requirements

DAFA is one of just a few companies in Denmark that has experts trained in the VDI 6022 requirements. These requirements set strict guidelines for materials used in HVAC systems.



# Strong commitment to the areas within the HVAC industry

As a customer of DAFA, you can expect particular expertise within the HVAC area.

This is a result of DAFA's many years of collaboration with a number of different HVAC businesses, where we have gathered experience and knowledge within following areas:

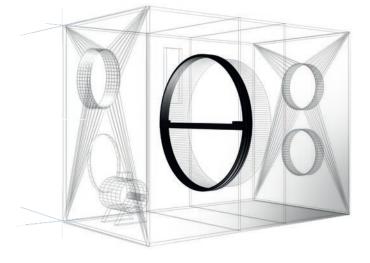
- Ventilation
- Air-conditioning
- Cooling
- Dehumidifiers
- Climate cabinets
- Heat pumps



### Optimized solutions for all units and systems

As a company within the HVAC industry, you can expect DAFA to help you optimize your systems and units in order to meet increasing requirements in many different areas, such as: efficiency, fire safety, hygiene and noise absorption. Here are some examples of different solutions which DAFA solves through sealing, absorbing and protecting.

- Cable sealing
- Gaskets
- Pipe collars
- Sealing tapes
- Thermal insulation
- Sound insulation



### DAFA RotaSeal® - A series of quality products that effectively seal rotating parts in various applications.

With DAFA RotaSeal® the efficiency of HVAC units using a rotating heat exchange system is optimized, preventing airleakage and wear. DAFA RotaSeal® is developed specifically for the HVAC applications using high abrasion resistance materials and is designed with integrated sealing lips.

#### **Advantages**

- Energy optimization
- Maximum seal
- Greater durability
- Extended product life



# Strong Research & Development

DAFA's Research & Development department is highly focused on product development and optimization in close collaboration with our customers.

We have years of know-how and experience, and we always base our solutions and advice on the latest technology and knowledge in the field.

In close cooperation with the production team, our team of engineers strives to find the best possible solution for your application, whether that means upgrading existing solutions or developing new ones.

DAFA's Research and Development department can be your partner in all facets of sealing, absorption and protection applications, such as:

- New product research, including determining product specifications, production costs, technologies and production time line
- New product development, from proposal to prototype to series production
- Existing product updates, including optimization of material usage
- Conducting tests, experiments and quality verifications, including documentation required by the customer, such as PPAP
- Innovation, research and analysis of products to maintain competitiveness
- Ensuring a high level of consistency throughout the supply chain









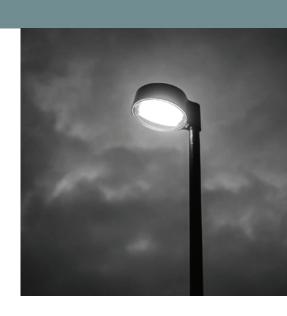
# Solutions for the lighting industry

We develop, manufacture and supply solutions for lighting products in close cooperation with our customers.

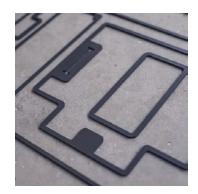
### DAFA's wide range and ability to develop new solutions makes it a good match for manufacturers of lighting products.

Our solutions meet customers' strict requirements in connection with development and the production and assembly process and the safety, durability and long lifetime of the finished products.

Many lighting products must be suitable for both indoor and outdoor use, and withstand effects from wind, heat, cold, air humidity, dust and vibrations. DAFA provides customized sealing solutions, whether they be lighting for buildings, or street lights that have to withstand extreme conditions.









#### FIPFG (Formed in place foam gaskets)

Directly applied gaskets to customers' components without adhesive. The gasket is applied directly as a liquid PUR and then expands and adheres to form the desired gasket.



#### **Advantages**

- Many different types of foam
- High IP protection levels achievable
- UL 50\*
- UL 94\*
- ISO 846 (VDI 6022)\*
- Weather resistant
- Fast curing
- Repeatability < 0.15 mm (ISO 9083)
- Individual assemblies possible

<sup>\*</sup>Upon request

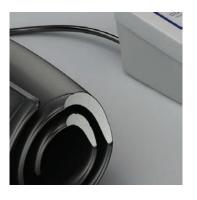
# Solutions for the health and medical industry

DAFA partners with companies that develop and manufacture products for the Health and Medical industry.

We partner with companies that develop and manufacture products to assist and provide relief for people with illnesses and other conditions, such as wound and stoma care.

We also work with companies that produce diagnostic and therapeutic equipment and devices, and materials for masks, visors and other protective equipment. Customers from this sector have strict requirements and high expectations for the final product. We offer materials that comply with the standards imposed by the final recipient.

Great flexibility and an individual approach allow us to solve technological problems the customer is facing, drawing on our extensive production equipment. DAFA offers mass market products as well as more specialized products used in the industrial health and safety segment.







#### Materials based on:

- Polyurethane (PU), including melamine
- Polyethylene (PE)

#### Products are available in the following forms:

- Tapes and rolls
- Die-cut
- Sheets and mats
- Available in a self-adhesive version single or double-sided



## Machinery

We develop and supply customer-specific solutions for companies that make industrial or production machinery and automation and process plants.

We develop and supply customer-specific solutions for companies that make industrial or production machinery and automation and process plant.

Our solutions are used by companies in the food, transport and logistics, lumber and metal industries, among others.

In close cooperation with our customers, we develop solutions using foam and rubber to seal, dampen and protect, in accordance with the customer's individual requirements.

DAFA offers a very wide range of rubber profiles, gaskets, FIPFG gaskets, sealing strips, double-sided tape and draft excluders.











## **Packaging**

DAFA develops, manufactures, and supplies standard and custom solutions providing adequate protection.

DAFA's packaging and shipment solutions protect against shock, heavy strain, momentary impacts, fire, static loads, liquids and humidity.

The protection solutions are used for a number of areas within industry, such as case inlays for the pharmaceutical industry and solutions for the transport sector, packaging industry, machine industry and wind turbine industry.

The customer-specific products are delivered in the form of strips, panels, rolls, or stamped or waterjet-cut materials. With or without adhesive.









#### Traditional packaging solutions in sustainable materials

Under our innovative approach, we customize solutions and help make it possible to choose more sustainably when searching for the correct packaging solution.

#### PaperFoam®

PaperFoam® packaging solutions are eco-friendly, biodegradable and 100% compostable.





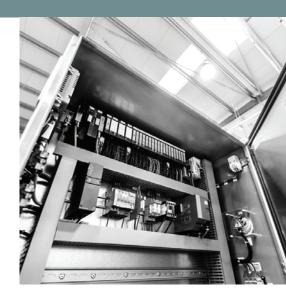
# Solutions for the electronics industry

DAFA develops, manufactures and supplies customer-specific solutions for the electronics industry.

DAFA is a supplier to electronics manufacturers and their suppliers, that manufacture electronic products such as flat screens, monitors, speakers, telephones, measuring and testing equipment, IT systems, frequency converters, alarm systems, electrical cabinets and various hardware or components for electronic products.

Electronic equipment is particularly sensitive to the ingress of liquids, moisture, dirt, and other contaminating particles, placing high demands on the sealing. Our solutions for the electronics industry protect sensitive components of electronic equipment with effective gaskets and seals.

Through close, long-term customer relationships, customer-specific solutions are developed and supplied which match the market's general requirements and the customer's specific requirements for precision, documentation, fire safety and quality management.









#### Gaskets

DAFA offers a wide range of gaskets made from many types of materials. The broad product range makes it possible to quickly find a solution using the best material for the given situation.

#### FIPFG (Formed in place foam gaskets)

Directly applied gaskets to customers' components without adhesive. The gasket is applied directly as a liquid PUR and then expands and adheres to form the desired gasket.

#### **DAFA Sound**

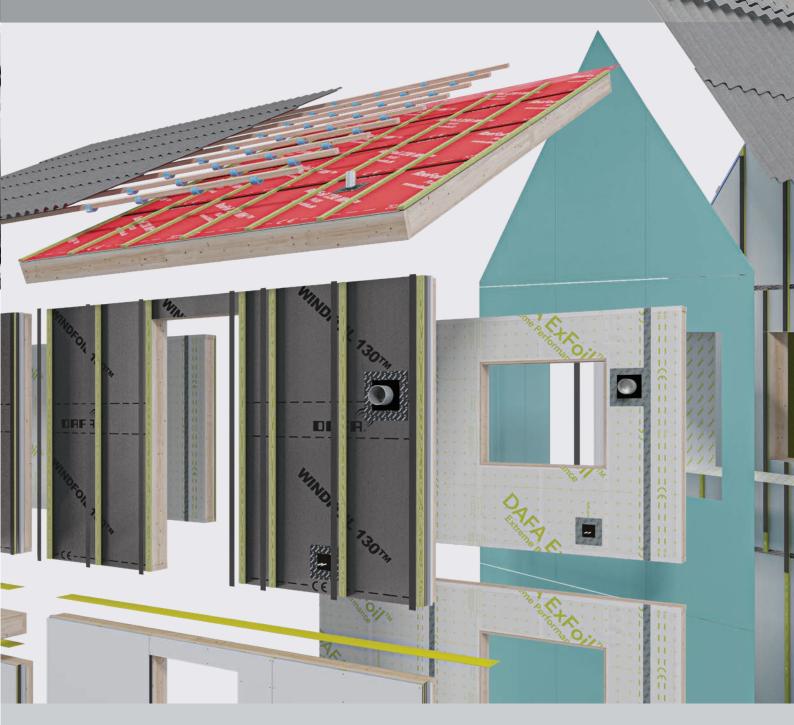
A complete system for vibration and sound dampening.

#### DAFA Cool Gap Filler™

DAFA Cool Gap Filler is a high-performance thermally conductive filler, which provides solutions for difficult thermal applications. Suitable as a gap filler for multiple components with different heights.

# Solutions for the construction industry

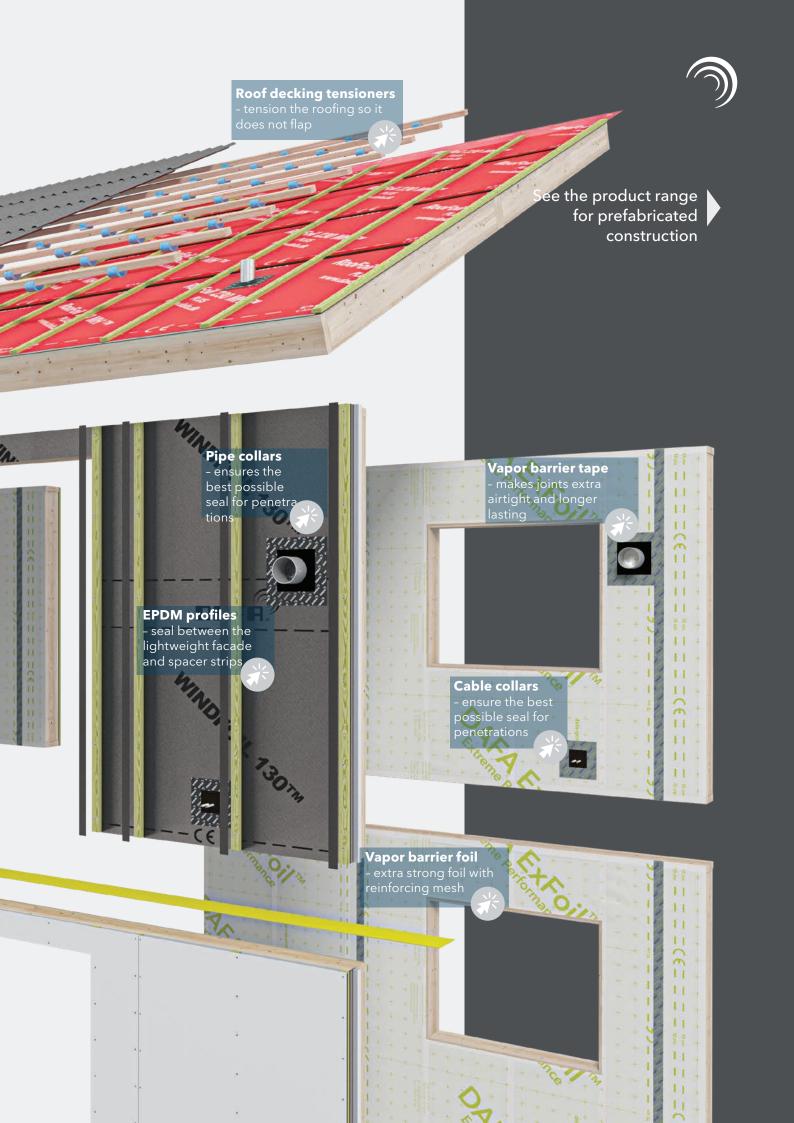
DAFA has extensive experience working with companies that produce prefabricated building elements or complete buildings and pavilions as modular construction.



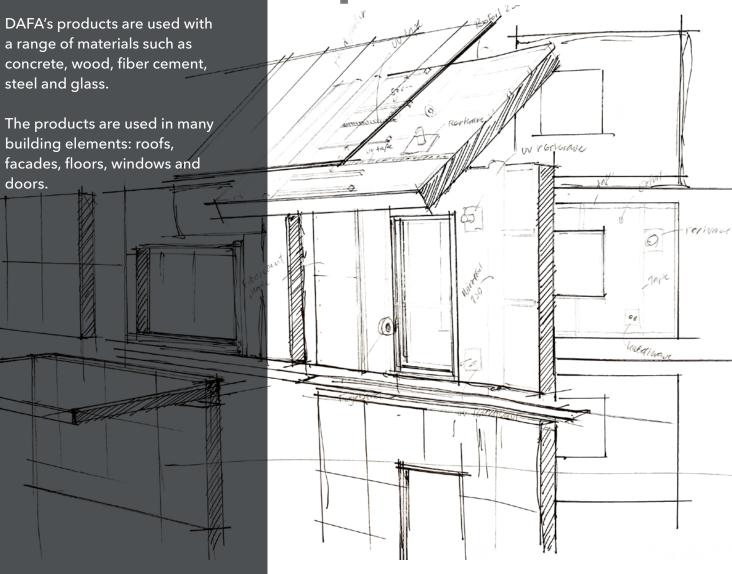
**ROOFING - FACADE - ELEMENTS** 

# Complete sealing solutions for prefabricated construction





# - a strong product prefabricated con







# t match for struction...







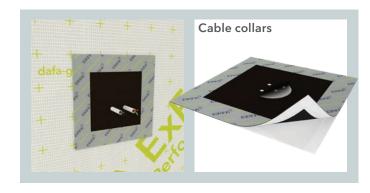


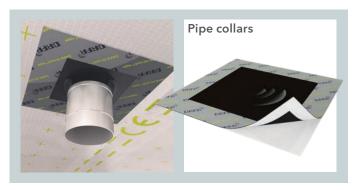










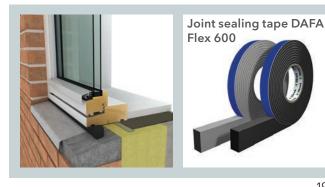












# Complete roof and facade sealing systems

Companies that provide roof and facade solutions need additional products to help make the solutions complete. These are typically sealing products, that help make the final result last for many, many years.

DAFA has valuable experience from supplying products to both small and large suppliers of roof and facade materials. In many cases, through close collaboration with several departments in the company - from development and production to purchasing and sales. DAFA is used to working in a multidisciplinary environment when the customer so requires.

### Self-adhesive foam tape

between roof panels

## **UV tape for facades**- highly adhesive UV tape for facades, etc.

#### **EPDM** profiles

- seal between the lightweight facade and spacer strips



#### Rib Top foam infill strips

- prevents driving rain and snow, dirt and wind from entering the structure.

See the product range for roofs and facades

#### **Roof decking** tensioners

tension the roofing so it does not flap

#### **Pre-impregnated** corrugated foam infill

- prevent driving rain and snow, dirt and wind from entering the structure.

Joint sealing tape
- seals the window structure and leaves it vapor-permeable

#### Lining foil

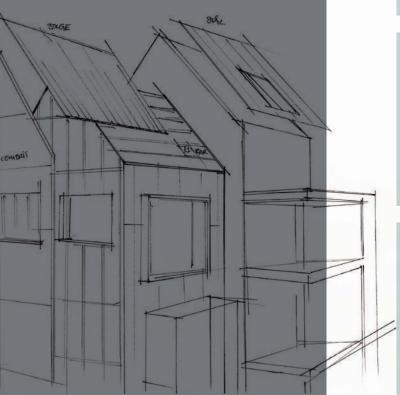
- seals between window frames and the interior structure.

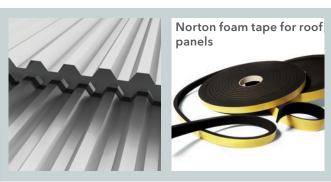
#### **Bearing rubber** seals the joints

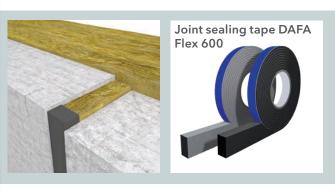
between balcony decks and handrails

# a strong production roof and facade a

DAFA's products are used with other building materials such as steel, concrete, wood, fiber cement and glass, and possess various properties which make them well-suited to achieving long-lasting roof and facade structures.























# t match for pplications...























DAFA Flex 600<sup>TM</sup> Joint Sealing Tape

Much more than just sealing tape.



DAFA's sealant tapes are all BG1-approved, and the DAFA sealant tapes regularly undergo external unannounced quality checks for waterproofing.

All the sealant tapes have been subject to constant testing and monitoring by the manufacturer throughout the last 20 years. This takes place both within and outside of modern testing laboratories.

The products are exposed to stresses which accelerate the ageing process. This includes the products being exposed to UV light and moisture, and severe temperature fluctuations.



- Review products
- Coordinate tasks
- Make agreements on deliveries and logistics
- Provide guidance on any specific structural engineering issues





EMICODE is a certification for building materials with low emissions and which are solventfree. EMICODE EC 1 PLUS (very low emissions) is the most stringent EMICODE classification.

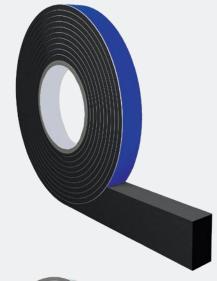




DAFA Flex 600 are the only sealing tape on the market to undergo regular external unannounced quality checks for waterproofing carried out by the MPA Hannover Institute (Materialprüfanstalt für das Bauwesen Hannover).

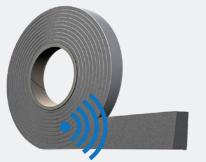


### Solid advantages to DAFA Flex 600



#### Approved and tested quality

DAFA Flex 600 sealing tape has been tested by the RAL Institute and Technical Inspection Association (TÜV) in Germany, and meets the requirements of the DIN 18542 standard and the DIN 4102 standard on ignitability. Our quality is demonstrated by over 40 years in the market and quality approval in accordance with AB92. This equates to maximum safety for a long-lasting sealant material that fully meets the requirements set for use in construction.



# Q:

# \*\*

#### Effective sound absorption

DAFA's sealing tape consists of open, air-filled insulating cells. DAFA Flex 600 provides effective sound absorption up to 51 dB in a 1-step sealant. This means that no sound bridge is formed through the joints when they have been filled with sealing tape.

### Effective at keeping heavy rain out

The standard test for installed 1-step sealant in accordance with DIN 18542 is 600 Pa. A Danish hurricane is equivalent to 700 Pa. DAFA's sealing tape keeps out heavy rain every time.

#### Better insulating properties

Test results from Danish Technological Institute show DAFA's sealing tape has insulating properties that are up to 60% better than those of traditional sealants. This guarantees well-sealed and energy-friendly buildings with a good indoor climate.







#### Prevents thermal bridges

DAFA Flex 600 can withstand temperatures ranging from -30°C to +100°C. The sealing tape ensures minimal heat loss through joints, preventing dark spots/mould inside. DAFA Flex 600 improves the indoor climate, stopping draughts coming through the joints.

### Reliable filling/smoothing of joints

With DAFA Flex 600 sealing tape there is no risk of leaks, as the sealant tape attaches itself firmly to the frame, filling out the joint completely, to a maximum width of 40 mm. This ensures a fully sealed solution.

### Highly resistant to mould

DAFA Flex 600 sealing tape is made of inorganic material and will not decompose due to mildew, mould or microorganisms and is therefore long-lasting and able to withstand damp environments without risk of the sealant breaking down.

# DAFA's competences strengthen the collaboration

DAFA offers reliable, easy and evolving collaboration, targeting suppliers and manufacturers of building materials and prefabricated elements or modular buildings.

This offers a wide range of benefits, as you can draw on DAFA's competences and experience with sealing products. This allows you to buy your sealing products in the best and most advantageous manner.



**Quality products** with great breadth



Technical support ensures a good result



Efficient logistics ensure fast delivery



Regular contacts make it easy

The personal and professional relations between you and us form the basis of close and productive collaboration. DAFA's experience working with producing companies is broad and deep. This means that, as a customer, you can benefit from the insight and knowledge which DAFA's employees have gained over many years.

#### Ready to hear more?

DAFA is always ready to discuss your needs Contact:

#### DAFA Norge AS

Borgeskogen 30 3160 Stokke T +47 48 20 99 00 E dafa@dafa.no W dafa-group.com







# **Eco-friendly products for sustainable construction**

DAFA has a constant focus on developing products that support sustainability. Our building products ensure airtight solutions that support sustainable construction and reduce energy consumption, to the benefit of the environment.

It is therefore only natural that many of DAFA's products are included in the Nordic Ecolabelling database of construction products that can be used in buildings carrying the Nordic Swan Ecolabel.



## Products are tested, documented, and guaranteed



DAFA offers a highly attractive 15-year functional warranty and 30-year product warranty on all products. The product warranty covers the durability of the product, while the functional warranty ensures that the products fulfil the standards and norms they have been approved under.



### In-house test center advances the development of DAFA's products

To underscore and continue its progressive development, DAFA is able to conduct tests in its own climate chamber. The test center allows us to perform aging tests - subjecting products to harsh climate impacts from heat, cold, UV light and moisture. This allows DAFA to simulate the most commonly used and recognized national and international testing standards.





# DAFA is the construction industry's partner in sealing, absorbing and protection with products for sustainable solutions

Our extensive expertise springs from close cooperation with the construction industry. This is why we can offer system solutions developed based on more than 80 years of in-depth knowledge of the challenges and needs of building applications.

With DAFA, it's easy to build airtight, efficiently and correctly. Our systems are designed to reduce energy emissions in all structures and optimize air quality for inhabitants by reducing the ingress of harmful substances - to the benefit of health, the economy and the environment.

#### The next steps



### Specification and requirements

Any collaboration starts with constructive dialogue about your current projects and needs. This also includes the preparation of specifications and requirements for approvals.



### Prototypes and testing

If you need special products with your own brand, DAFA will develop a prototype which is delivered for your approval to test its functional and visual properties.



### Agreement and implementation

A final agreement regarding quality, functionality, scope, delivery times, prices and terms of payment will be concluded and form the basis of excellent and valuable

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<sup>\*</sup> Applies to: DAFA A/S, DAFA Sverige AB, DAFA Deutschland GmbH, DAFA Sealing Technology (Tianjin) Co., Ltd., DAFA US Inc., DAFA Polska sp. z o.o.

<sup>\*\*</sup> Applies to: DAFA A/S, DAFA Sverige AB, DAFA Deutschland GmbH, DAFA Sealing Technology (Tianjin) Co., Ltd., DAFA US Inc.

