# I PREFAB MODULAR INOFFSITE



# IMPROVE CONSTRUCTION QUALITY, EFFICIENCY AND SAFETY ON YOUR PROJECTS WITH ARDEX!

## A NEW WAY OF BUILDING

Thank you for your interest in the ARDEX PreFab system solutions! ARDEX has over 70 years of experience as a leading global system-solution and service provider of innovative building systems. This has helped us to gain experience with many different types of PreFab manufacturers worldwide over the past years.

Many industries have been and continue to be disrupted by an increasing speed of change. The construction industry, however, has historically been very reluctant to change. Now, enabled by digital technology and driven by global skill shortages as well as governmental support, PreFab is transforming the construction industry. As an alternative to conventional construction, offsite manufacturing ensures quicker, safer and more sustainable and more efficient construction.



### THE ARDEX GROUP

Recognised by installation experts, the ARDEX Group delivers industry-leading innovation and time tested consistent solutions to the most complex installations and building systems. Built on a foundation of product performance and a global focus on training, the ARDEX Group leads through local customer interaction striving for excellence in customer experience.

Our innovation focus also applies to PreFab, where innovation has been a key influencer to our continued success, with technologies introduced many years ago still unique in their respective industries today. Offering customary high quality – featuring exclusive ARDEX innovations such as MICROTEC and ARDURAPID technology – and all-round support, all ARDEX system products are easy to use and perfectly compatible for premium performance and peace of mind.



#### WHAT IS MICROTEC TECHNOLOGY?

A unique binding matrix made up of exclusive ARDEX materials, special cements and polymers combined with high performance fibres which improves adhesive strength, reduces the effect of shear strain and stress on the tiling system.



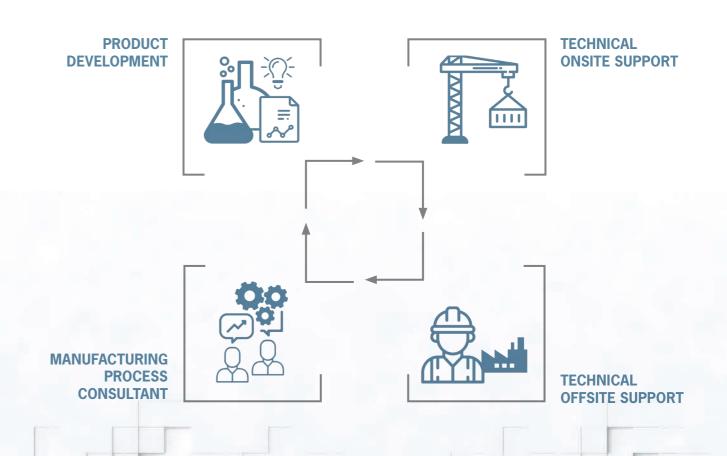
#### WHAT IS ARDURAPID?

'RAPIDRY FORMULA' Technology or ARDURAPID technology binds the water used for mixing within the cement. Therefore, the mix water is utilized chemically to build a reinforced structure. This technology ensures rapid drying and strength development, regardless of thickness, guaranteeing a shrinkage free high strength system and virtually eliminating the risk of water staining.

## YOUR PREFAB INDUSTRY PARTNER

ARDEX views the PreFab industry as a uniquely individual sector that requires specialized products to achieve the best possible efficiency. At the ARDEX Group we pride ourselves in our innovation focus. This also applies to PreFab, where we aim to develop solutions suitable to your specific needs and tailored to your manufacturing process. In addition, the ARDEX approach includes field support, technical training, education and testing. Through our dedicated technical service teams, you will have access to a wide array of expertise to support your operations.

Therefore, we are able to supply a full solution for both intelligent and trusted system solutions and services in support of making your processes as efficient as possible. As an innovation leader in our industry, we welcome the opportunity to also develop customized solutions for your particular needs – completing our service offering to be your partner for the PreFab industry.

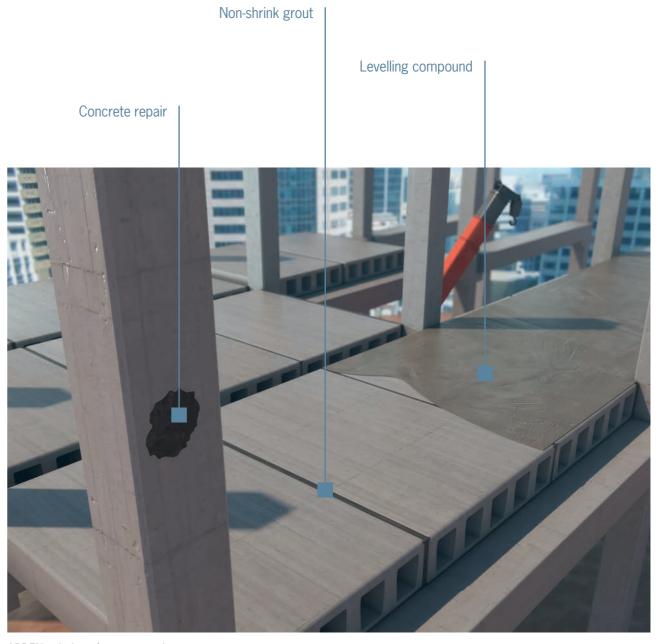




# **PRECAST**

Precast elements have become an important part of the building structure. ARDEX PreFab system solutions for the precast market offer means and methods to flatten and level precast surfaces with high quality coupled with time and labor savings.

Understanding the importance of the structural integrity of large precast elements, we provide the technology to repair concrete structures and edges. Completing our system offering for precast solutions, our product range also includes curing compounds, non-shrink grouts and bonding agents.



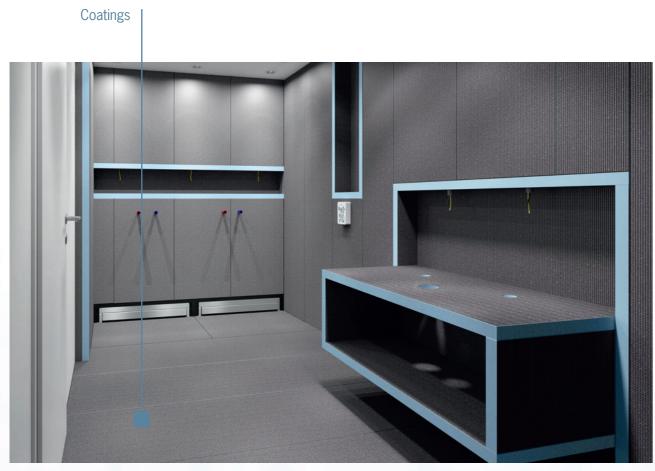
ARDEX solutions for precast elements

# **ELEMENTS**

PreFabrication "elements" can cover a variety of segments. For the three most common we have outlined our range of solutions:

#### **SURFACE CONSTRUCTION BOARDS**

When incorporating construction boards into wet areas such as bathrooms, it is critical that these boards can be worked with easily on the construction site during the finishing process. For this application, ARDEX can supply various types of coatings for different types of boards, including a range of mortars that can be applied on-site to receive tiles or other floor and wall coverings.

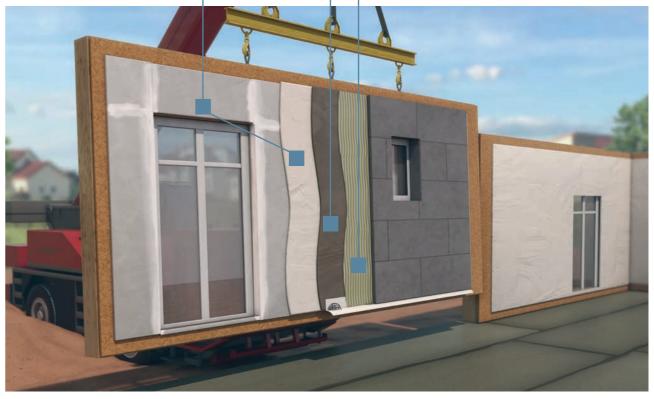


ARDEX solutions for preparing wet room construction boards

#### Waterproofing system

Filling and smoothing

Tile adhesive and grout, sealants



ARDEX solutions for floor panels or wall elements

#### PREFABRICATED FLOOR ELEMENTS

ARDEX has developed cutting-edge technology in the area of floor patches, screeds, levelers and adhesives. Both ARDEX patching and self-leveling compounds provide a smooth and level basis for the floor covering. Whether the adhesive is rolled, poured or trowel-applied, ARDEX can supply or develop the appropriate product and integrated system.

#### PREFABRICATED WALL ELEMENTS

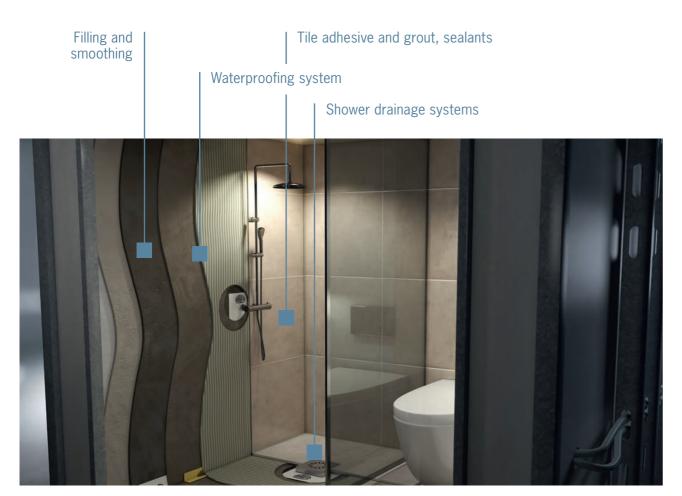
With varying degrees of finishing works done offsite - from wet room boards and renders to tiles - ARDEX can be the partner of choice for the wall finishing process. These products can be efficiently applied by roller, trowel or spray, which can save you time and labor.



# PREFABRICATED BATHROOM UNITS/PODS (PBU)

Oftentimes, the tiling process creates bottlenecks in the production of Prefabricated Bathroom Units. ARDEX tile system solutions offer improvements in the speed and quality of your installation. Overcoming drying time, transportation vibration and handling issues associated with installed tiles, are all mandatory requirements to satisfy the building end user.

The various brands of the ARDEX Group enable us to draw from a global pool of resources and respond to the needs of individual customer segments and geographical markets. With the ARDEX complete system approach, we can offer the full flooring installation system, making your manufacturing quicker, easier to apply and reliable. This system ranges from waterproofing to tile adhesives, grouts and sealants – offering a singlesource opportunity for flooring installation systems, all included in the ARDEX System guarantee. Edge profiles, electric underfloor heating and innovative shower drainage systems or building boards for floor-level showers can also be flexibly combined with a wide range of system components.



ARDEX solutions for PBU construction

#### LIGHT WEIGHT ROOM CONSTRUCTION

Technology integration, e.g., pipes for electricity or

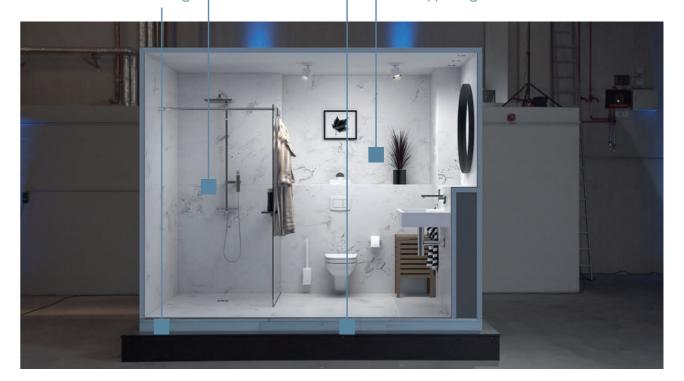
installation of shower fittings

In addition to the challenge of producing high-quality bathroom modules, it is also important to achieve weight savings per module. The ARDEX Group offers numerous solutions for wall and floor structures that make it possible to reduce the weight of a bathroom module enormously. With wedi wall modules, such a lightweight room construction can be realized. The degree of prefabrication of the wall elements can be freely selected: from factory-integrated electrical, cold and hot water lines to load-bearing reinforcements, cable ducts or empty pipes to ready-made technical components and fittings. Thanks to the high degree of prefabrication, many time-consuming and risky work steps are eliminated when creating a bathroom module.

Shower element with integrated drain technology

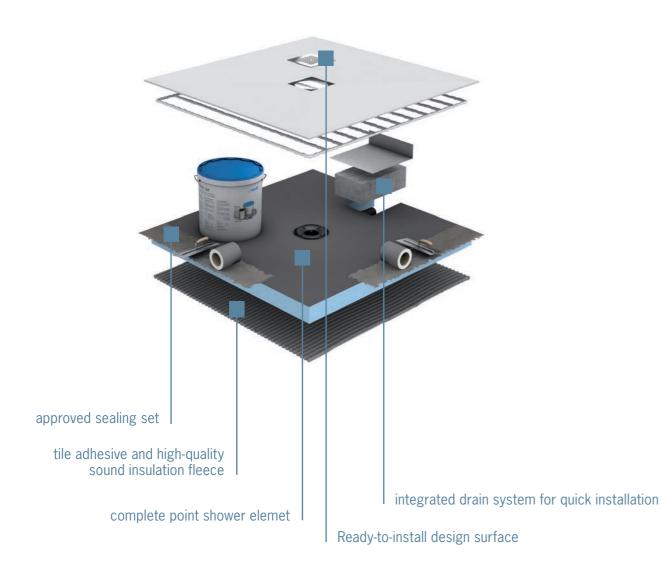
Floor construction with prepared underfloor heating

Self-supporting wall elements

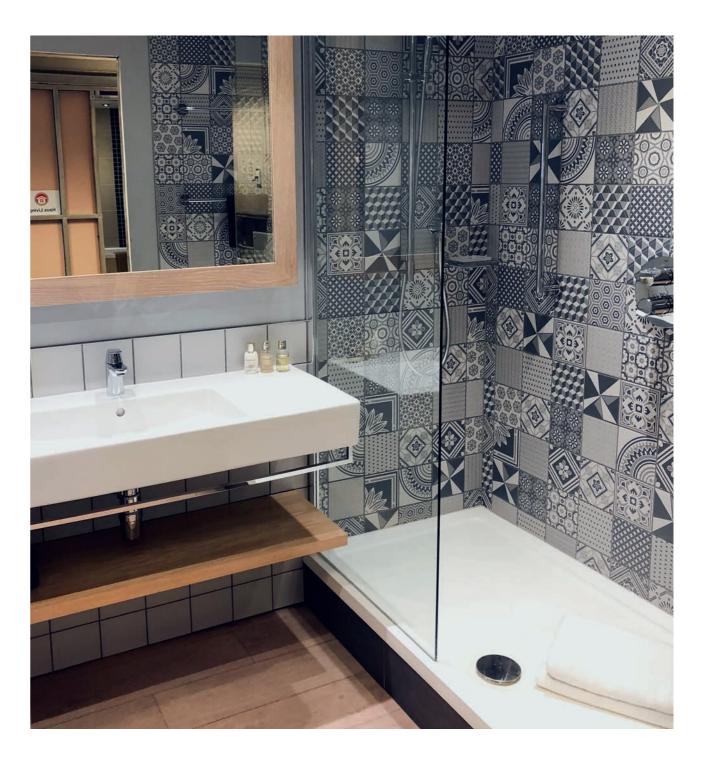


#### LIGHT WEIGHT FLOOR SOLUTIONS

Together with you, our customers, we don't just develop self-supporting wall elements but also individual floor elements with low weight. The floor element is the basis for every PBU and usually determines the further construction of the bathroom module. Long drying times, high weight, sound insulation requirements have to be aligned. Whether shower systems with point or linear drainage, whether with a classic shower element or a complete system including integrated drainage technology: thanks to the diverse product systems of the ARDEX Group, we can offer suitable solutions for any desired system structure. The range of services extends from integrated drainage technology, preparation for underfloor heating systems and individual slope situations to finished surfaces for wet areas.



Our systems are suitable for timber-/wood-, steel- and GRP-framed modules as well as concrete. The focus remains on the implementation of customized solutions to achieve low superstructure heights with low weight. With the support and expertise of ARDEX technical field personnel, we can support your tile system installations either during the production process or later on-site. With an international network of ARDEX companies around the globe, we can also assist with the on-site installation of the modules regardless of where they are installed.



# PREFABRICATED PREFINISHED VOLUMETRIC CONSTRUCTION (PPVC)

PPVC construction can be very complex depending on the design variation and the customer's preference. Over the years, the ARDEX Group has developed expertise for practically all flooring and wall installation systems ranging from subfloor preparation material to adhesives. These full system solutions ensures both premium quality and products with a long-standing track record of global performance.

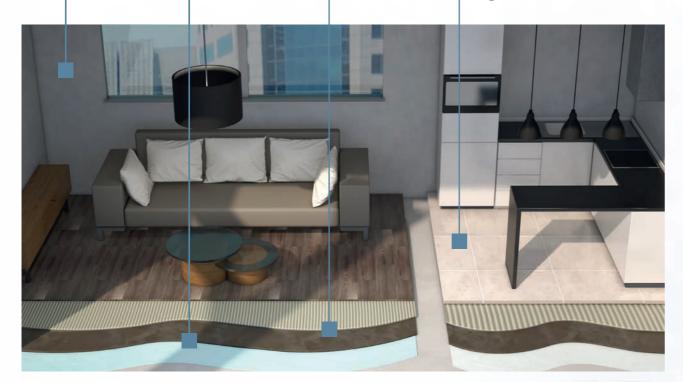
Similar to PBUs, through its network of international subsidiaries and our global footprint, ARDEX can offer to support both the onsite installation and the production processes. Depending on your particular production process, ARDEX can collaborate with you to develop a finished product to fulfill the requirements of your customer for years to come.

| Filling and smoothing

Wall filling and smoothing

Flooring or tile adhesive

Tile grout and sealants



ARDEX solutions for PPVC construction



#### **SENJA POLYCLINIC**

Singapore

- PPVC steel structure moduls for Senja Care Home (SJCH), which is expected to open by the end of 2020, will offer 350 beds. The home will also be co-located with a polyclinic in a 12-storey Integrated Healthcare Facility.
- 2000 m<sup>2</sup>

#### **USED PRODUCTS:**

■ Filling and smoothing



# OUR COMMITMENT TO SUSTAINABILITY



Sustainability is a central component of ARDEX' corporate philosophy. For many years now, we have been thinking and acting responsibly and with an eye to the future - and thus taking responsibility; for example, for the economical use of raw materials or for fair and respectful cooperation.

We understand sustainability as part of a strong, dependable partnership within the company and beyond. It's one of

the cornerstones of our corporate philosophy. As a family company, we see our employees as the foundation of our business, and seek collaboration with our market partners for a lasting, mutual benefit.

# ARDEX SUSTAINABILITY VALUES



**Source raw materials, packaging and products responsibly** and work with our suppliers to deliver materials within our sustainability platform objectives.



Consider the life-cycle of products from innovation to disposal, and apply product declarations to support their use in the marketplace.



**Promote the use of our products in repair and restoration** to prevent the generation of waste from substrate/core structure replacement.



Use energy efficiently throughout our business processes. Measure and commit to reducing energy consumption and source its supply in line with the sustainability vision.



**Eliminate waste and reuse, recycle or recover energy** from waste that cannot be otherwise prevented. Waste will only be land-filled as a last resort.



**Develop sustainable workplace environments**, foster employee awareness to act in accordance with these values and promote social responsibility.

