



# Clean, Safe and Hygienic

CERAMIC FLOOR TILES FOR THE FOOD  
AND BEVERAGE INDUSTRY





### Very economical

Floor tiles from Argelith can be confidently called an economic miracle. A tough cost comparison with other industrial flooring solutions will show who the winner is: After 25 years of use, the other floor types would have needed to be replaced up to six times! It is a reassuring feeling to know that your ceramic floor can last for 25 years or more without failure.



## Floors for the Beverage and Food Industry

### Always stay nice and clean!

That is the most important requirement for a floor in the food industry. The requirements and standards set by the legislative authority or a workplace safety board cannot be ignored. It is the same with the standards that we set ourselves for our tiles and that are set for us by German national and European international guidelines.

Page 4-7

## Hexagonal Success

### Advantages of Hexalith® in applications of the beverage industry

The floor plays a major role at the building construction and is the foundation of the whole production area – all machines are mounted on it.

Page 8-9

## A Strong Partner

Argelith, through worldwide partnerships with first class tiling contractors and engineers and with representatives world wide, ensures absolute technical competence. We have successfully completed projects all around the globe.



## Clean, Safe and Stylish

### Floors from Argelith in the Food and Hospitality Trade

You can find Argelith floor tiles wherever food is handled: from the production of a cookie, to the grocery store or wholesaler where it is purchased, to the café where someone enjoys it with their coffee.

Page 12-13

## Strong tiles for Heaviest Loads

There are loads placed on an Argelith ceramic tile that simply cannot be simulated. They must be experienced and withstood. A tour of some industries shows the truly shocking loads that a ceramic floor can be subjected to!

Page 14-15

## What makes Stoneware mvtec® tiles so special?

All our Stoneware tiles feature mvtec®, this technology results in a micro-compressed structure manufactured under the tightest quality controls.

Page 16-17



## CHEMICAL RESISTANCE

# Floors for the beverage industry

### Always stay clean and nice!

That is the most important requirement for a floor in the food industry. The requirements and standards set by the legislative authority or a workplace safety board cannot be ignored. It is the same with the standards that we set ourselves for our tiles and that are set for us by German national and European international guidelines.

Each country has its own prescriptions – therefore it is necessary to know someone who knows the rules. Argelith does – and in many food industry projects there are floors of Argelith tile installed that are of higher standard than required. These companies are therefore equipped for the future and the higher standards that may be required. The EC standards were for many of the new member states a new experience – Argelith helped them to meet these new requirements.

### Our tile collection for wet conditions

Argelith tiles shrug off any contact with moisture. That's why you normally find them laid where conditions are particularly wet - in bottling or packaging halls of breweries and the beverage industry. This is a result of the high density of our industrial ceramic tiles ensuring that the tile only absorbs a minimal amount of liquid. The high density and minimal water absorption also means our tiles are very hygienic.

Argelith tiles are easy to clean. Safety and hygiene technicians are always delighted to hear that our floor tiles are resistant to oils, acids and caustic solutions - yet another reason for insisting on an Argelith floor surface.

To ensure that no one slips on a wet floor, you can choose from a variety of surface finishes: with or without a profile (nopped or pyramid) - depending on the relevant local safety requirements.

No matter which tile from our collection you opt for, you will have made a sound choice. If it were any different, we would not have well-known manufacturers of brand-name goods relying on Argelith time after time, please see selected references on page 19.





ARTLAND BRAUEREI  
Master Taster

ARTLAND BRAUEREI  
ARTLAND  
ARTLAND  
BRAUEREI  
BRAUEREI

# WHICHEVER INGREDIENT YOU NEED...

## Ceramic floors – be convinced

### Advantages of Ceramic Tile Floors in the Food Industry

Reliability, easy cleaning and a trouble free service life – these are the challenges posed on a floor in the food industry. A floor from Argelith is the right decision – for decades to come.

The floor plays a critical role in the construction of a building. It is the foundation for the whole production and all the machinery stands on it. Damage can often be difficult to repair and the consequences can be serious, even resulting in loss of production to make

the necessary repairs. It is better to choose the best materials and installation right from the start of planning than be forced to spend even more down the road correcting problems that need not have happened!

The advantage of a ceramic tile floor from Argelith results from its thickness and strength. The use of stoneware tiles from Argelith has become the standard in areas that require chemical resistance (for example against cleaning products and steam cleaners) or that must face the demands of a loading area where forklifts and pallet jacks are used.



## The Tile Advantage:

- ✓ Highest mechanical loads possible
- ✓ Chemical resistant
- ✓ Steam jet cleaning possible
- ✓ Temperature resistant, even above 100° C
- ✓ Ability to repair small areas invisibly
- ✓ Resistant to abrasion
- ✓ Absolute stain resistance
- ✓ Heavy machines and production facilities stand safely on Argelith floors
- ✓ Water absorption less than 0,05%
- ✓ No impregnation necessary
- ✓ Easy cleaning and low maintenance
- ✓ No glazing necessary
- ✓ Highly economical



# SERIES HEXALITH®



## Hexagonal Success

### Advantages of Hexalith® in Food and Beverage Industry Applications

The floor area plays a critical role in a production facility. It is the foundation of the entire production area – and all the machinery is mounted on it.

Damage in a production area can be difficult to repair and the consequences can be serious – the worst case scenario would be the temporary closing of the facility resulting in loss of production. It is more economical to plan with and use the best materials right from the start and avoid problems in the future!

Hexalith tiles have several advantages in use resulting from their thickness and shape. Hex tiles are ideal for use in wet areas that are heavily treated with chemicals or in areas that experience heavy traffic from forklifts or pallet jacks. When combined with installation using the vibration method (resulting in a homogeneous floor structure – the mortar bed and tile are installed as a single step – see Argelith leaflet “The Vibration Method”) many problems can be avoided entirely.

The virtually round shape of the tile allows for creation of slopes in a variety of angles without overlapping problems. Resulting in optimized drainage.

Hexalith tiles have been used successfully by companies where the highest thermal, mechanical and / or chemical loads are found. The special characteristics of Hexalith tiles makes for easy and through cleaning. This results in higher productivity and reduced costs.



Natura



Arkona white



Dark grey



Beige



Creme yellow



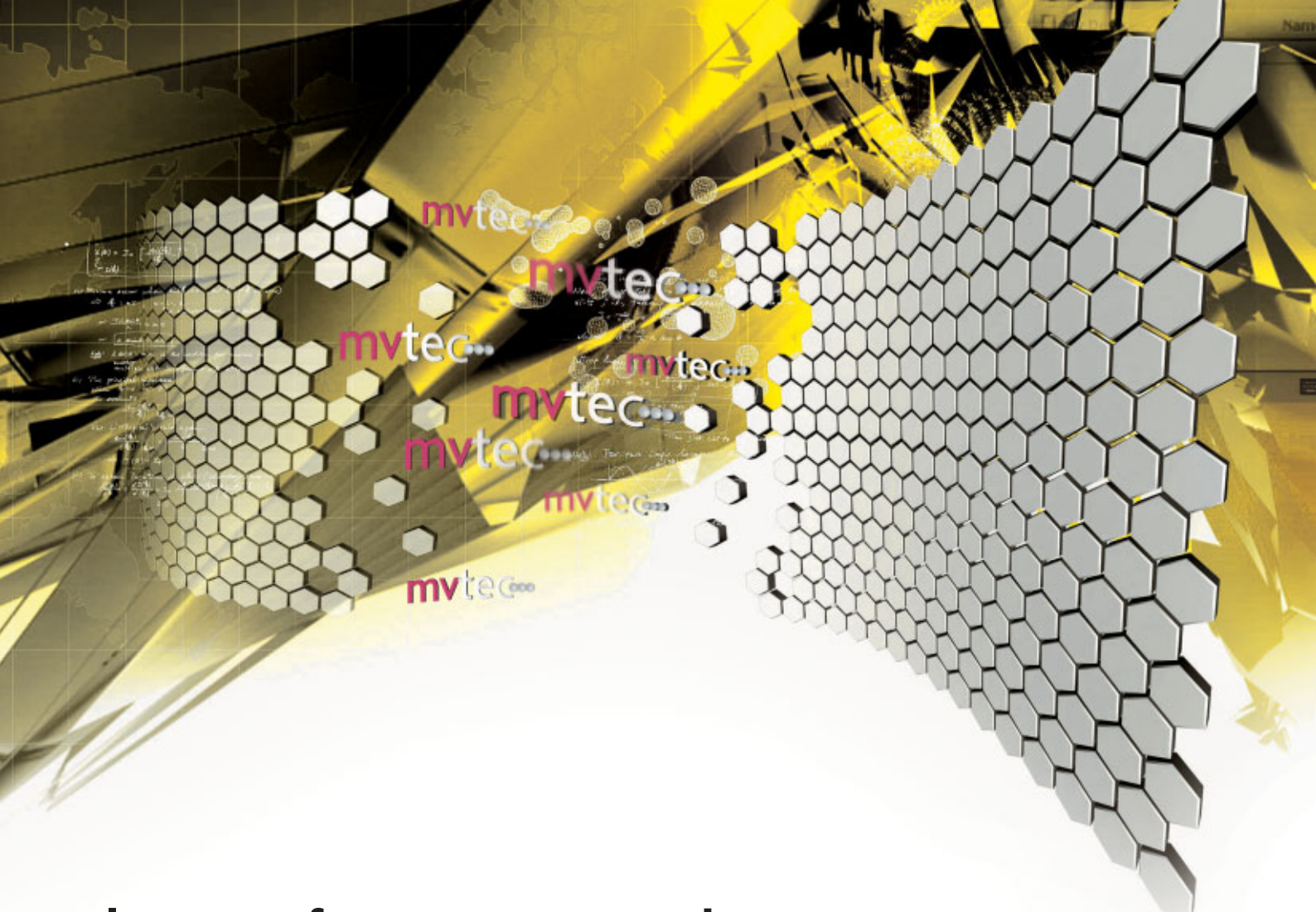
Light grey



Sand yellow



Brick red



## Clean, safe, heavy duty

### Exact and narrow joints

The joints are always critical areas in an industrial floor. With the Hexalith® Spacer we assure narrow joints, while also ensuring a perfect filling of the joint.

### Strong Partner

Argelith provides you through our own representatives and worldwide partnerships with firstclass tiling contractors and engineers absolute technical competence. Projects like one of the biggest Dairy Companies in Saudi Arabia (35.000 sqm production area) or breweries in South Africa (26.000 sqm production area) are handled problem-free and reliably. We want you to concentrate on your daily business and to rely on your strong partner...  
Argelith Bodenkeramik H. Bitter GmbH

## The most important advantages at a glance

- ✓ Higher mechanical, thermal and chemical stresses are possible
- ✓ The Hexagonal shape allows the creation of perfect slopes. The water from production disappears into the drains by the shortest route.
- ✓ The spacer of Hexalith® provides narrow joints and so a very high mutual bond
- ✓ The different surface textures of the Hexagonal tile allow applications of different tread safety requirements.
- ✓ Using the vibration method provides a flat floor, easy to maintain with highest compressive strength
- ✓ The Hexagonal shape is the ideal header for the edges. When a heavily loaded roller passes over the joints 90% cross at an acute angle.



**DON'T GET BURNED...**



# Ceramic Floors with Safety and Good Looks

In a bakery it can get very hot, and the right choice for the flooring is ceramic tiles from Argelith! Worldwide there are more than 1.000.000 m<sup>2</sup> of Argelith tiles in bakeries both small local ones and large industrial ones.

The importance of a top quality floor in a bakery becomes obvious when you consider the day to day operations. The whole process of making bread creates stresses on the floor: delivering the raw ingredients to the mixing and kneading machines right up to moving the finished product to a distribution area.

The extreme thickness and strength of Argelith tiles makes it possible for these heavy loads to be moved around without problem. The tread pattern of the tile allows safe footing for workers even under the most difficult conditions. With a vibration method installation and small joint (the tiles are laid tight) any spilled flour or dough can easily be removed and not become lodged in the joints. All of this is a great advantage for any bakery as the hygiene standards for this industry are particularly high.

**CLASSIC SERIES – Example of Use: Sand yellow**



\*color variation from original product may be caused by printing

Size mm	Surface	Thickness	Slip Resistance
198 x 98 240 x 115	non profiled	15, 18	R 10, R 11
	Security	15, 18	R 12
	Nopped	15, 18	R 12 - V 04

\*Excerpt from our Product range

**CLASSIC SERIES – EXAMPLE OF USE: SAND YELLOW**



# GROCERY / RESTAURANT / HOSPITALITY



## Clean, Safe and Stylish Floors from Argelith in the Food and Hospitality Trade

You can find Argelith floor tiles wherever food is handled: from the production of a cookie, to the grocery store or wholesaler where it is purchased, to the café where someone enjoys it with their coffee.

While design and aesthetics play a more important role in restaurants the floor covering in a grocery store has more challenging requirements. Shopping carts, pallet jacks, forklifts and of course many customers' feet put pressure on the floor day after day. Argelith stoneware mvtec® and unglazed clinker tiles live up to these challenges without tile surface changes caused by abrasion. Overall they are the obvious best choice for you floors.

### For Gourmets, Hoteliers and Kitchen personnel

Owners and guests alike both in hotels and restaurants value Argelith floors. Whether you serve nouvelle cuisine or the local pub crowd straight from the tap or if you rent a double

room with a sea-view your guests will always be happy on an Argelith floor. Even constant shifting of chairs or being danced on by stilettos will not leave a trace. Your guests will have not only a good looking but also a firm floor under their feet.

The kitchen personnel will also appreciate a firm footing and the tread safety of Argelith tiles. If, in the heat of the moment in a busy kitchen, a bottle of red wine falls and breaks or boiling oil is spilled on the floor — no problem! Our tiles are oil, alkali, acid and stain resistant. Our stoneware tiles featuring mvtec® even more so. mvtec® stands for easy cleaning and the lowest water absorption of less than 0.05%. Here nothing burns. Here nothing sticks. Argelith floor tiles are the easiest to care for!

Now then, happy shopping and enjoy your meal.



**CARRÉE SERIES –  
EXAMPLE OF USE: CREMEYELLOW & ANTHRACITE**



# EXCEPTIONALLY TOUGH UNDER PRESSURE

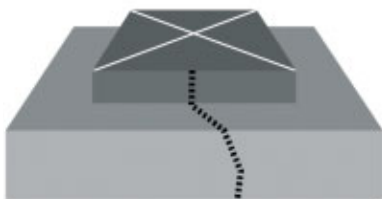


## We support the heavy weights

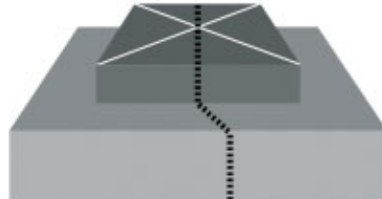
There are loads placed on an Argelith ceramic tile that simply cannot be simulated. They must be experienced and withstood. A tour of some industries shows the truly shocking loads that a ceramic floor can be subjected to!

Even when not in operation industrial production plants place several tons of weight onto just a few centimetres of floor supporting them. When the plants are running they create additional vibrations and oscillations that generate further stresses. None of these things can make an impression on Argelith ceramic tiles.

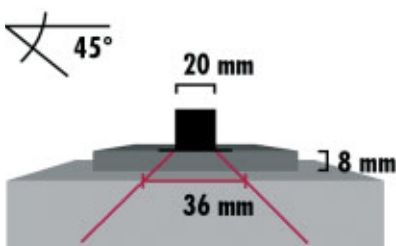
Heavy-duty vehicles with rollers are often used when several tons of weight is moved around in industrial halls. Since Argelith ceramic tiles feature an exceptionally high point-load capacity, in addition to a great compressive and bending strength, they can easily carry the weight. The chamfering on the upper four edges of Argelith tiles ensures that vibration compacted floors are additionally protected against cracking and fractures caused by heavy moving equipment. This is why the plastics, paper, automotive, aircraft and painting industries use Argelith ceramic tiles.



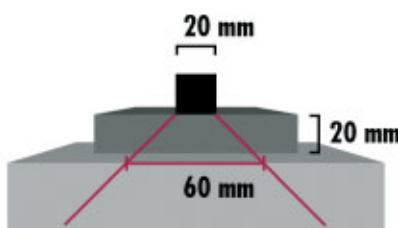
**15 mm tile on a concrete slab**  
Fracture of the slab, including tile,  
at 37 800 N (average value)



**20 mm tile on ca concrete slab**  
Fracture of the slab, including tile,  
at 45 200 N (average value)



**System with thin tile - 8 mm**



**System with thick tile - 20 mm**

The fracture patterns shown here resulted from the application of the forces listed below.

The results of the test are clear:

**The thicker the tile, the greater the load required to cause fracture.**

**The load-distribution effect of tiles is dependent on their thickness.**

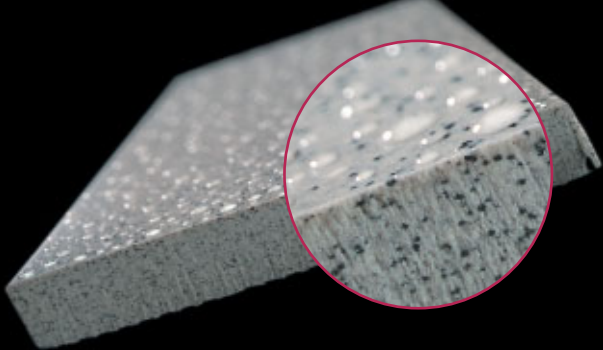
The tests were carried out with a load increase of approx. 1000N (corresponds to 100kg or 220lb) per second.

The test was ended when breakage occurred. In all cases this was accompanied by visible damage to the test pieces.

**CLASSIC SERIES – EXAMPLE OF USE: FREIA**

**12 x 1.0 L**





**DON'T CRY OVER SPILT...**



# What makes Stoneware **mvtec**® tiles so special?

All our Stoneware tiles feature mvtec®, this technology results in a micro-compressed structure manufactured under the tightest quality controls.

Stoneware tiles from Argelith are pressed under a tremendous load and go through a precisely controlled firing. As a result of this exacting process our tiles achieve the best test results. The extremely low water absorption of less than 0.05% is obtained without glazing or sealing. This means excellent stain resistance, easy cleaning and an ultra long service life.

All very good reasons to plan with Argelith!

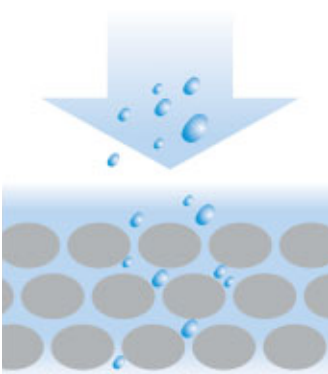
## Ideal for wet areas

- ✓ Water absorption less than 0.05%
- ✓ No sealing necessary, even after years
- ✓ Consistent density from top to bottom
- ✓ Easy cleaning and low maintenance means cost effective
- ✓ No glazing
- ✓ Highly economical

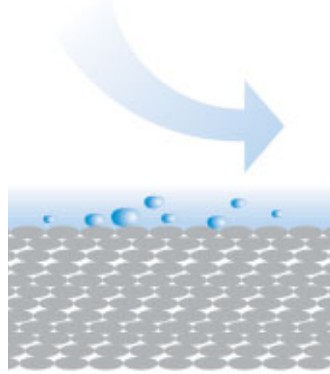


Stoneware manufactured by Argelith conforms to CE regulations.

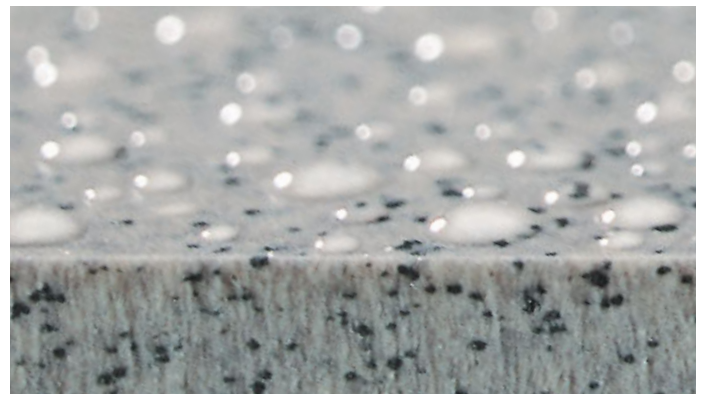
## STONEWARE **mvtec**®



**Traditional Stoneware**  
Porosity of the material allows for high rate of water absorption.



**mvtec® Porcelain**  
Extremely compressed structure hinders the absorption of water. This results in great stain resistance.



### mvtec® porcelain tiles

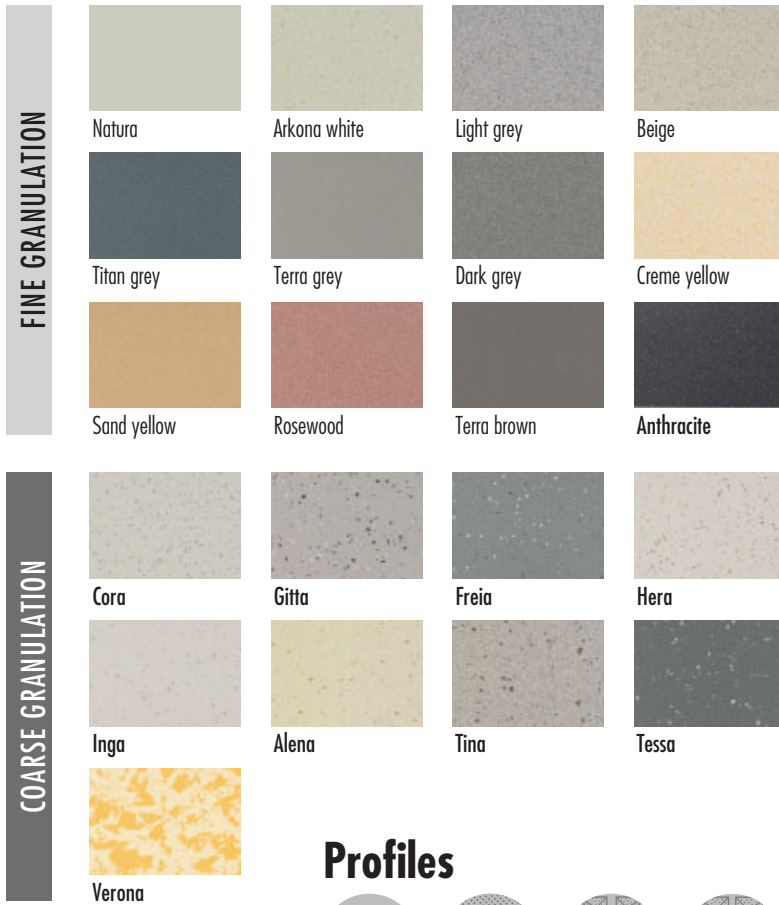
This picture shows the cross section of an Argelith tile, prepared with a high-quality water-jet-cutter. The cut demonstrates the overall micro-density of the Argelith fully vitrified tile. **Nearly impervious!**

**HEXALITH® SERIES – EXAMPLE OF USE: LIGHT GREY**

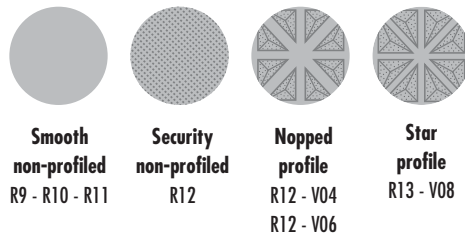


# OVERVIEW

## STONEWARE Colours with **mytec** seal

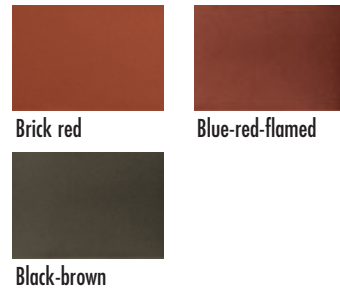


### Profiles

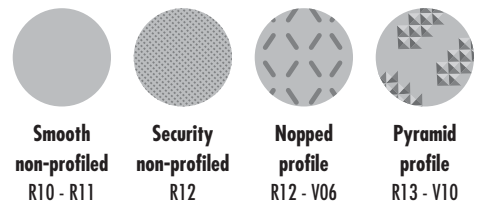


Illustrations show fragments of each tile.

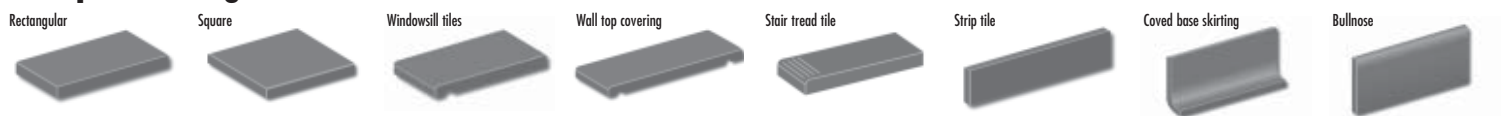
## A classic for decades: CLINKER TILES Colours



### Profiles



## Complete range: Accessories stoneware and clinker tiles. Planning reliability for floors, stairs and walls!



## Security: Stoneware and clinker tiles meet the key requirements in the high load areas of industry and commercial. And they always exceed the required standards!

Slip resistant  
Argelith meets the requirements  
for all areas of application.  
(R10-R13 and V04-V10)



Frost resistant  
Argelith tiles do not crack,  
even in low temperatures  
and at thermal shocks



Ecologically sound  
Only natural materials with no  
chemical additives are used



Chemical resistant  
Argelith tiles are unglazed and  
oil, acid and alkali resistant



Maximum load bearing  
Argelith products are inher-  
ently elastic and can withstand  
high pressure



# REFERENCES

## DAIRIES

2.800 sqm	Arla Foods	Videboek, Denmark
12.000 sqm	Luxlait	Bissen, Luxemburg
2.400 sqm	Chesse Dairy	Gilz Rijen, Netherland
12.000 sqm	Dairy Grajewo	Grajewo, Poland
6.000 sqm	Danone	Tychy, Poland
3.500 sqm	Lacpol - milk factory	Piotrkow Kujawski, Poland
2.000 sqm	CJSC «GALICHYNA»	Radekhiv, Ukraine
39.000 sqm	Almarai	Riyadh, Saudi Arabia
3.850 sqm	Daisy Brand Dairy	Casa Grande, AZ, USA
3.900 sqm	Daisy Brand Dairy	Garland, TX, USA

## FOOD INDUSTRIES

3.700 sqm	Eden Vail Creamery	Edinburgh, Great Britain
3.400 sqm	Park Cakes Bakery Ltd.	Oldham, Great Britain
4.500 sqm	Dr. Oetker	Janossomorja, Hungary
2.600 sqm	Vikonda Concerнас	Vilnius, Lithuania
5.500 sqm	PZM Stoislav Farine Factory	Poland
6.000 sqm	Meat factory	Poland
7.500 sqm	Dr. Oetker Pizza	Lebcz, Poland
3.400 sqm	Marmalade factory Schwartz	Plock, Poland
4.000 sqm	Prodimeх, sugar factory	Rostov, Russia
3.800 sqm	Sant Dalmai	Girona, Spain
6.230 sqm	Akova A.S.	Adana, Turkey
5.500 sqm	Aytac dis Ticaret chicken farm	Cerkes, Turkey
1.250 sqm	Unilever	Accra, Ghana
3.000 sqm	Cadbury Sweeties Factory	Lagos, Nigeria
820 sqm	Chips & Mixers	Sydney, Australia
5.000 sqm	Edita Food Industries	6th of October City, Egypt
4.000 sqm	Siniora Foods	Amman, Jordan
3.050 sqm	Saudi Modern Foods Factory	Jeddah, Saudi Arabia
3.600 sqm	Ken's Foods	Las Vegas, NV, USA

## BREWERIES

1.100 sqm	Inbev	Leuven, Belgium
4.500 sqm	AK-Nar Brewery	Almaty, Kazakstan
2.000 sqm	Brewery Bofferding	Bascharage, Luxemburg
2.500 sqm	Heineken Brewery	Den Bosch, Netherlands
4.800 sqm	Heineken Brewery	Zoeterwoude, Netherlands
3.500 sqm	Brewery Leszajsk	Leszajsk, Poland

8.000 sqm	Kompania Piwowarska "Lech"	Poznan, Poland
12.000 sqm	Kompania Piwowarska "Tyskie"	Tychy, Poland
3.650 sqm	Brewery Warka	Warka, Poland
2.000 sqm	Brewery Zywiec	Zywiec, Poland
1.500 sqm	Rosar	Omsk, Russia
1.190 sqm	Topvar Brewery	Velky Saris, Slovakia
2.350 sqm	Carlsberg Brewery	Izmir, Turkey

5.600 sqm	Nigerian Breweries (Heineken)	Lagos, Nigeria
26.000 sqm	Heineken Brewery	Gauteng, South Africa

900 sqm	San Miguel	Foshan, China
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1.600 sqm	Belize Brewing	Belize City, Belize
2.000 sqm	New Belgium Brewing Company	Fort Collins, CO, USA
4.200 sqm	Anheuser Busch	St. Louis, MI, USA
4.500 sqm	Anheuser Busch	Columbus, OH, USA

## BEVERAGE INDUSTRY

3.800 sqm	Coca-Cola	Minsk, Belarus
1.450 sqm	Coca-Cola	Prague, Czech Republic
1.500 sqm	Vin-Kon, wine production	Konin, Poland
4.000 sqm	Coca-Cola	Niepolomice, Poland
2.500 sqm	Rauch Fruit Juices	Serbia
8.000 sqm	Rauch Fruit Juices	Widnau, Switzerland
6.400 sqm	Coca-Cola	Kiev, Ukraine

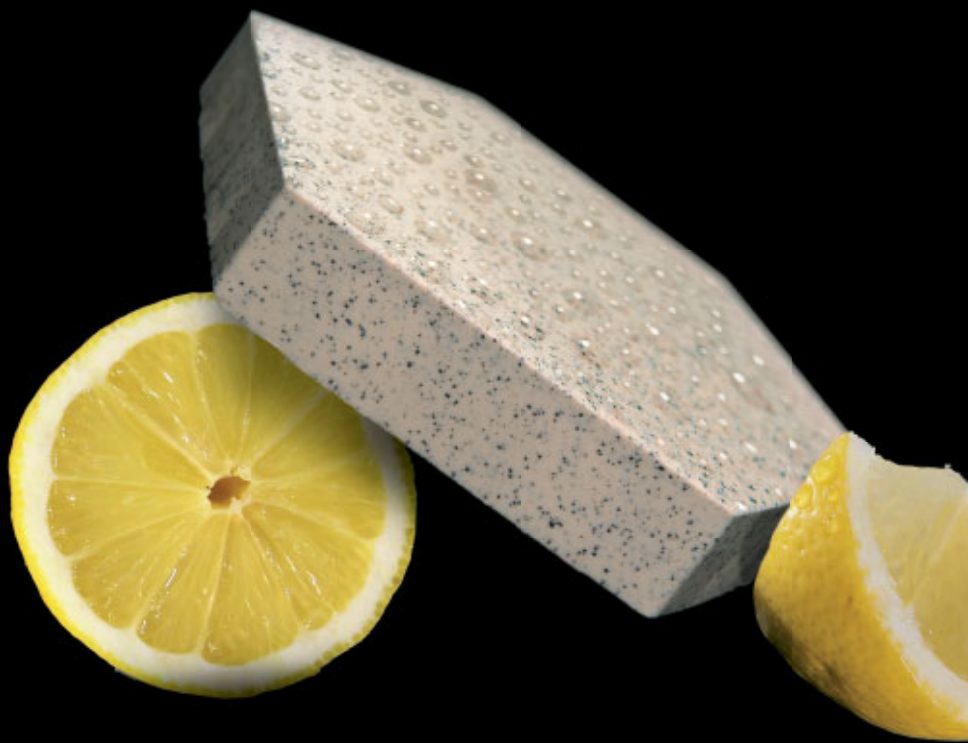
16.000 sqm	Juhayna Fruit Juices	6th of October City, Egypt
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2.500 sqm	Pepsi Cola	Shenzen, China
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## SUPERMARKETS

4.000 sqm	Hofer markets	Austria
1.400 sqm	Aldi Market	Biggleswade, England
1.500 sqm	Aldi Market	Gardony, Hungaria
1.200 sqm	ALDI store	Dublin, Ireland
4.500 sqm	Match Supermarket	Sandweiler, Luxemburg
1.000 sqm	Biedronka	Karlino, Poland
1.150 sqm	ALDI store	Glenrothes, Scotland

11.500 sqm	Supermarket	Keelung, Taiwan
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