



Ultra clean Ultra safe

CERAMIC FLOORCOVERINGS FOR FOODSTUFF
AND PHARMACEUTICAL INDUSTRIES



Always stay nice and clean!

This is the basic requirement for a floor surface in the foodstuffs industry. The foodstuffs technicians in the trade associations, and lawmakers, are uncompromising when it comes to adherence to hygiene regulations in production - but no more so than Argelith's clinker ceramic tiles.

At Argelith, we must admit that we did not invent the clinker tile. However, for many years now, we have been producing them to incomparable hardness and unimpeachable quality. The fact that quality never goes out of fashion is proved by many examples to be found in the modern foodstuffs industry, as the tried-and-tested advantages provided by remarkably strong and exceptionally hard-baked Argelith clinker tiles are still in particular demand today. This is based

on their resistance to acids, caustic solutions and oils, allied to the sure footing they provide to meet the stringent requirements of the trade associations and the fact that they are child's play to clean to the standards specified by any hygiene regulations you can name. Add to this their low-cost laying techniques and the colourful design freedom provided by the comprehensive product range.

Give your imagination free rein with the possibilities offered by Argelith clinker floor surfaces. Contact us, and we will be delighted to let you know where you can see them in use somewhere near you.



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- 1** Argelith clinker ceramic tiles play their part in ensuring that your breakfast egg arrives on the table under conditions of perfect hygiene.
- 2** Industrial bakeries produce freshly-baked goods on brick-red clinker tiles from Argelith.
- 3** Ready for transporting! In the loading area at Messrs Kronenbrot, the Argelith ceramic flooring surface with its great impact strength shows its true value.
- 4** In the area of meat processing, the requirements on hygiene and safe footing are particularly stringent. Argelith clinker ceramic tiles (here sand-coloured with a pyramid profile) in the Kauffeld meat goods factory.
- 5** No scratches and absolutely clean - Argelith unglazed clinker tiles in the Südmilch dairy in Heilbronn.

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Our tile collection for wet conditions

Argelith clinker tiles shrug off any contact with moisture. That's why you normally find them laid where conditions are particularly wet - in breweries and in the beverages industry. This is because the high density of our dry-pressed clinker ceramic tiles ensures that the tile only absorbs a minimal amount of liquid. And this also acts in the interests of hygiene. Argelith clinker 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 tile 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.





- 6** On the premises of the Rheinhessen Wine Producers' Association, the nopped profile of the brick-red Argelith clinker tiles provides the required safe footing for the wine checking process.
- 7** In the land of beer drinkers and purity laws, hygiene is of most importance - a situation in which Argelith clinker tiles provide sterling service.
- 8** The Krombach brewery is a long-term fan of the outstanding quality of our sand-coloured clinker tiles.
- 9** A common factor linking beer and the ceramic floor surface: constant monitoring and checking during production - to ensure first-class results.

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Ensuring the chemistry is right

Which category does not belong to the chemical branch - paints, lacquers, films, pharmaceutical products and many, many more. The range of products is simply infinite, and safety standards are high. However, all branches of this industry have one thing in common - almost everywhere you go, you will be walking on an Argelith clinker floor surface. And for a good reason, too - Argelith floor surfaces are of such a high quality that they provide just the right chemistry for the chemical industry.

And those who have put themselves on a safe footing with our special ceramics also transfer this experience far beyond the borders of Germany, which is why our clinker ceramic tiles can be found in such diverse places as Barcelona and Antwerp - safety knows no borders.



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- 10** Certainly the right floor surface where hygiene is the top priority - Argelith clinker tiles in the chemical industry.
- 11** Highly-sensitive measuring equipment in machines requires a floor surface which refuses to give a single milimetre even under load - Argelith has just that ability.
- 12** Boundless quality - as in this chemical plant in Antwerp, people rely on the quality of Argelith clinker tiles in many different countries.
(Photo provided by Bayer AG)

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The eternal economic miracle

Argelith clinker ceramic tiles can safely be described as an economic miracle, as a hard-headed cost comparison with other common types of industrial floor surfaces clearly shows how you can gain by using Argelith flooring: over a working life of 25 years, you will have up to six times as much area cover for your money! What's more, it was not ourselves, but a German car manufacturer who commissioned the cost comparison. What makes the comparison even more satisfying is the reassuring feeling that Argelith clinker floor surfaces bring smooth service to your operation even far in excess of 25 years.



Argelith lasts and lasts and ...

A durability comparison of various floor surfaces on a 25-year basis

Argelith clinker tiles

Only initial purchase and installation costs arising over 25-year period.

Hard concrete with sealant

Hard concrete **replaced twice** plus **four applications of sealant** by experts over 25-year period.

Impregnation/sealing

Complete replacement every 5 years due to wear and tear.
In all: **installation plus four replacements.**

Coating

Complete replacement every 5 years due to wear and tear.
In all: **installation plus four replacements.**

Quality pays.

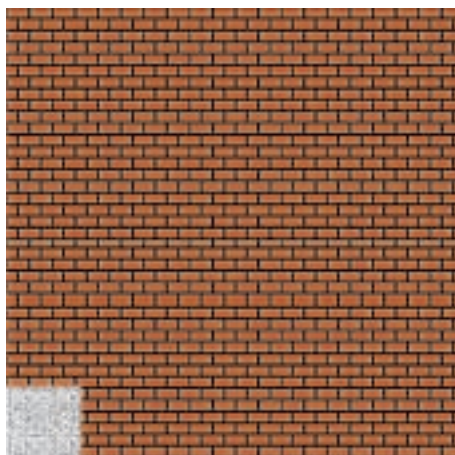
1 m² hard concrete + sealant
costs the same as 1.82 m² Argelith ceramic flooring



1 m² impregnated/sealed surface
costs the same as 1.87 m² Argelith ceramic flooring



1 m² coating, 2 mm
costs the same as 6.15 m² Argelith ceramic flooring



Economical and fast - vibration laying

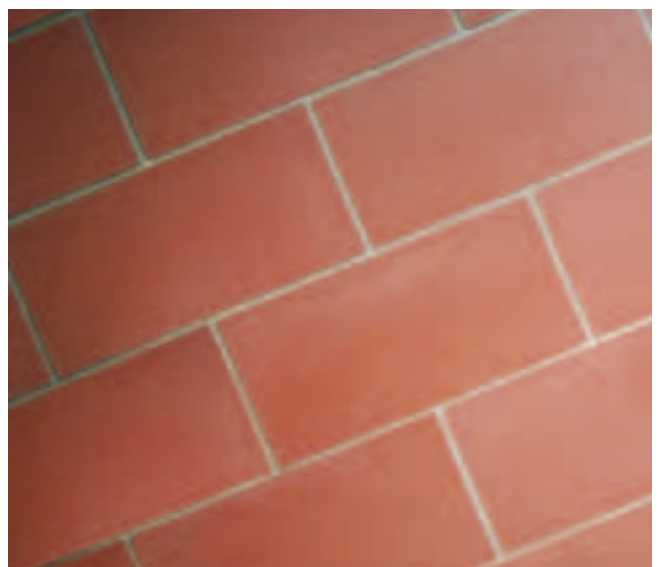
Large surface areas can be laid economically using the vibration technique to provide a long working life. Compared to conventional laying methods, this process is less expensive, cleaner and faster - and provides higher quality at the same time.

The laying and grouting materials are processed wet-in-wet, and are matched to each other so as to ensure that they both bind together and also provide a firm bond with the sub-base and the clinker tiles together and also provide a firm bond with the sub-base and the clinker tiles.



The advantages for you:

- joints represent small
- proportion of total area
- homogeneous floor surface
- short installation period
- level surfaces with extremely high load-bearing capacity
- daily laying performance of a 4-man team: approx. 80-130 m²



Use your imagination!

Planning and designing with Argelith clinker tiles is a genuine pleasure. Many operations benefit from visually pleasing structures created from the various shapes and colours provided by Argelith special ceramics. Moreover, routemarking systems created by colour contrasting can promote industrial safety in all industry sectors. Durable Argelith 100% clinker floor surfaces are always in good shape in automotive, machine construction and heavy industry sectors.

- 1** Warning - safety area! The combination of different colours encourages care and attention in the workplace.
- 2** Separate areas are visibly demarcated by means of structured surfaces in varying colours.
- 3** A clean edge which lasts - Argelith clinker tiles ensure a smooth transition between surfaces.
- 4** Impressive design - the shapes and colours of Argelith clinker tiles provide acres of scope for design.

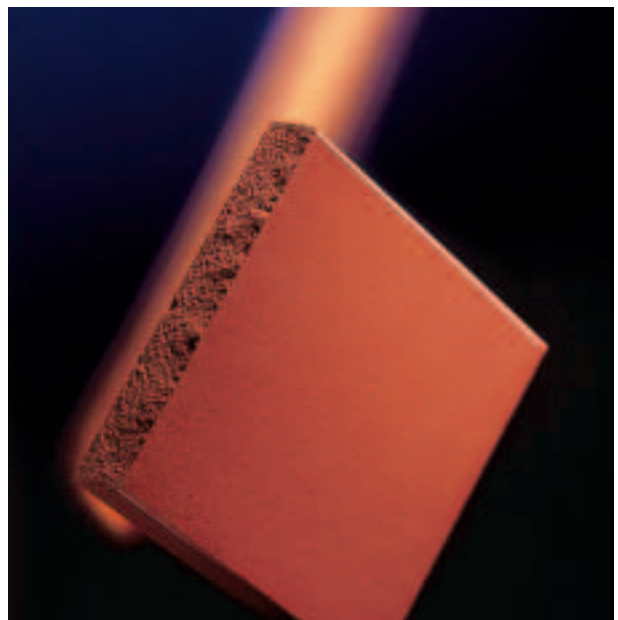




Natural beauty lasts.

A surface-deep cosmetic appearance can resemble beauty - but for how long? Argelith clinker tiles lose nothing of their natural beauty. A significant plus point is the slow maturing process applied in their production: unadulterated natural clays are baked into robust, colour-fast clinker tiles over three days in a tunnel kiln, in all thickness between 15 and 25 mm.

The section of the tile shows that the clear, full colour is more than surface-deep - it goes all the way through the tile. That's why it lasts forever, no matter what loads it is exposed to. This is how you recognize Argelith clinker tiles even years after they have been laid.



Complete reliability

It really is remarkable - despite the variety of new materials available, when it comes to floor surfacing, clinker tiles are virtually unbeatable. And the thicker they are, the greater the loads they can withstand. That's why Argelith have traditionally produced their clinker tiles in thicknesses of min. 15 mm.



Argelith offers its customers the decisive plus point of reliability. For exceptionally high loads, we manufacture 20 mm or even 25 mm-thick tiles - for complete reliability.

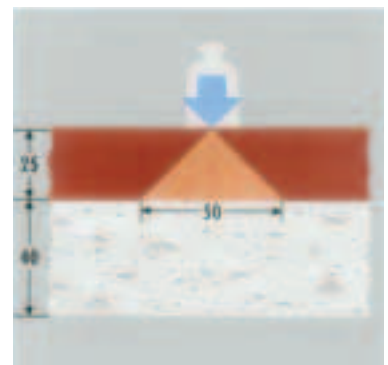
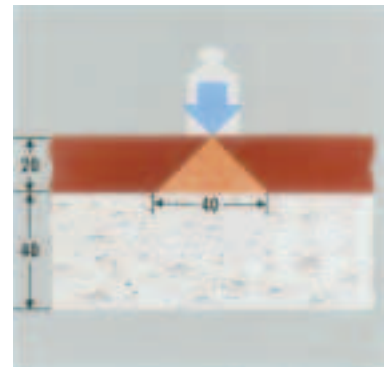
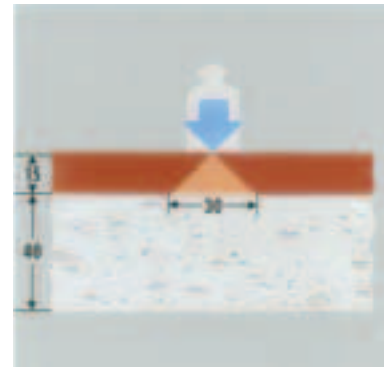




Internal reliability is decisive.

There is no point in complaining about it - the laws of physics cannot be denied. The thicker the floor surface, the better it is able to distribute impact loads over the sub-base. As the thickness of the tile increases, the load-bearing capacity of the flooring, along with its working life, increases accordingly.

The illustrations opposite provide the theoretical evidence of this. From our many references, you can see for yourself the practical benefits of our products.



In acid-resistant installations things are even harder.

Just as well Argelith produces tiles in thicknesses of 20 mm and upwards!

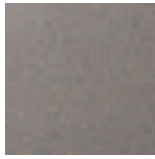
Argelith ceramic flooring: absolute hardness

STONEWARE Colours

Fine Granulation



light grey



dark grey



beige



anthracite



rosewood



porsche yellow



creme yellow

Coarse Granulation



cora



gitta



hera



verona



natura

Illustrations show fragments of each tile.

CLINKER Colours



brickred



sandy yellow



cork-flamed



bluered-flamed

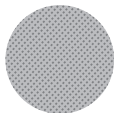


black-brown

Surfaces



non-profiled
R 9 - R 10 - R 11



security
R 12

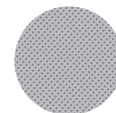


nopped profile
R 12/V 04

Surfaces



non-profiled
R 10 - R 11



security
R 12



nopped profile
R 12/V 06



pyramide profile
R 13/V 10

Technical test values to EN 176

quality tested	required by EN	Argelith is better!
flexural strength	min. 27 N/mm ²	min. 64 N/mm ²
compressive strength	not required	511 N/mm ²
water absorption	max. 3 % (average)	0,04 %
acid resistance	required	fulfilled*
caustic solution resistance	required	fulfilled*
frost resistance	required	fulfilled
surface abrasive wear	max. V _m = 205 mm ³	max. V _m = 108 mm ³
dim. accuracy, length, wight/thickness	± 0,75 % / ± 5 %**	0,65 % / ± 5 %**
coefficient of linear expansion	max. 9 x 10 x K	6,2 x 10 ⁻⁶
resistance to thermal shock	required	fulfilled

* Exception: hydrofluoric acid and its compounds
** From average value

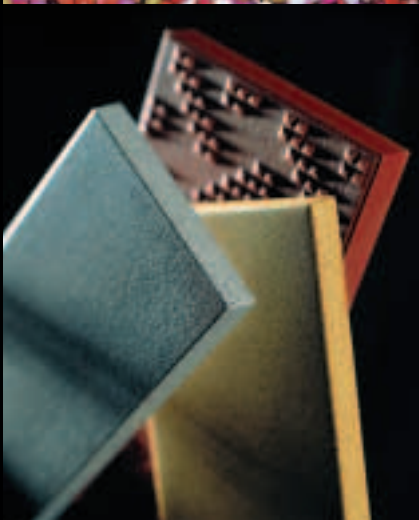
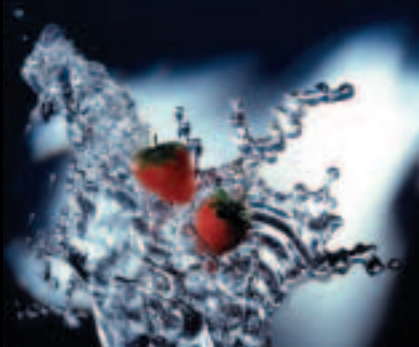
Technical test values to DIN 18158

quality tested	required by DIN
flexural strength	min. 20 N/mm ²
compressive strength	max. 3 %
water absorption	required
acid resistance	required
caustic solution resistance	required
frost resistance	max. 12 cm ³ / 50 cm ²
surface abrasive wear	cm ²
dim. accuracy, length, wight/thickness	± 1,5 %
coefficient of linear expansion	5-8 x 10 ⁻⁶ K ⁻¹
resistance to thermal shock	required

Please ask for test certificates!







For each floor covering the best ceramic solution

FULLY VITRIFIED TILES AND CERAMIC
CLINKER TILES FOR FOODSTUFF AND
PHARMACEUTICAL INDUSTRIES

Clean, safe!



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