



BASALT AND CONCRETE FOR LIVING



INTRODUCING OURSELVES



Over 120 years of expertise: The FCN company

It is always fascinating to observe how something entirely new comes into existence from individual parts: when paving stones become a new street, tiles create a new garden path, or walls a whole new house. Because things are certainly more than the mere sum of their parts — their character originates from the interplay of these.

That's also true for our company. Franz Carl Nüdling comprises three organisations, numerous subdivisions and even more people. Each one of them gives their all every day and are significantly involved in FCN's success. Clients, partners and suppliers also contribute to the nature of our company and inspire us daily with their ideas and challenges.

Franz Carl Nüdling Basaltwerke — that is also the story of our company, which dates back to 1893. Since its founding, FCN has developed into an established, medium-sized family company, providing 400 people with secure employment and constantly adapting itself to changing times. The range of products is characterized by a combination of tried-and-tested classics and high-performance innovations.

Key products are building materials from natural stone and concrete for the residential, industrial, roads, paths and concrete construction, as well as garden and landscape design. In this brochure, we have compiled interesting information about FCN, its products and its services. Take a look inside.

We hope you enjoy finding out more about us.

Peter Nüdling

Executive Partner

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Bernhard Pilz
Executive Partner

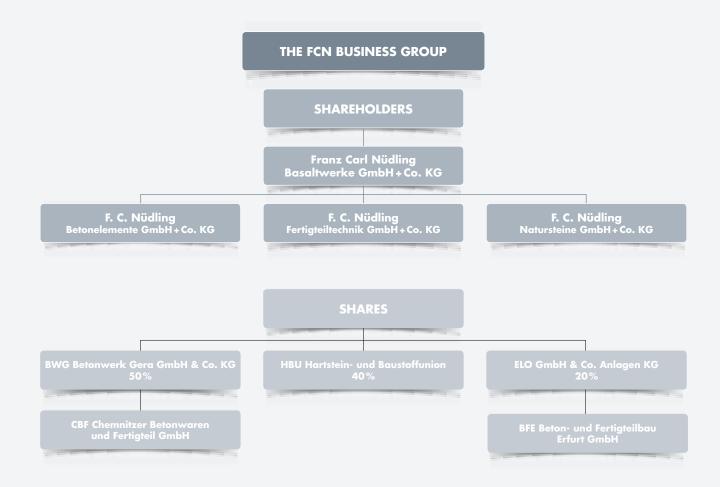
OUR AREAS OF BUSINESS

D eveloping, producing, marketing — all of this only succeeds with a high-performance business structure and a clear specialisation. This is why we decided to divide our company into three clearly separate areas of business as early as 1994. These were turned into legally independent joint operating companies in 1999.

Under the umbrella of Franz Carl Nüdling Basaltwerke GmbH + Co. KG - that as a holding takes care of central services such as purchasing, accounting and marketing and is a stand-alone business - are the following three subsidiary companies:

- The F. C. Nüdling Betonelemente GmbH & Co. KG produces concrete items for garden and landscape design, as well as road construction.
- The F. C. Nüdling Natursteine GmbH + Co. KG manufactures natural stone products such as crushed stones and gravel from its own quarries.
- The F. C. Nüdling Fertigteiltechnik GmbH + Co. KG is a specialist in pre-fabricated frame systems (Systemrohbau) and a manufacturer of prefabs and sound protection elements for concrete constructions.

Construction companies, industrial firms, public clients and partners in the building materials trade, as well as property developers from all over Germany and Europe, are among the clients of our three companies.



OUR EMPLOYEES

Our employees form the core of our company and essentially ensure its success. This is why we prioritize a comfortable work environment, high-class training and further education, as well as diverse career opportunities within the entire firm

Since the year dot, we have been training our own junior staff and enabling young people to have a qualified start to their career — the majority with very good possibilities of a permanent position — and are particularly proud of the quality of our technical training. Among our graduates are IHK (Chamber of Industry and Commerce) regional and even national award-winners. This means we officially count as one of the best training companies in Germany.







Social engagement likewise has a firm place in our company policy. We believe that giving something back is the responsibility of every established and successful company. Particularly close to our hearts is the engagement for the people in our home region, which is why FCN has been a shareholder at Perspektiva (the local support association for young people in work) for more than ten years. The goal of the association is to support young people with learning difficulties, prepare them for their professional lives, and permanently integrate them into the working world.



ENVIRONMENT, RESEARCH AND INNOVATION

Sustainability and environmental protection play a big role at FCN. So that we can ensure the protection of the climate and the environment, we produce in sustainable ways and manufacture products that have a positive effect on the environment themselves.

In production we focus on strategy and synergy that provide meaningful contributions at all stages of the work chain. For example, we use aggregates that we produce in our own quarries. This is how we keep our transport routes short, thereby reducing the strains on the environment related to this. We also select vehicles and machines in the same way so that energy use is at an optimum level and emissions are as low as possible. Our own concrete recycling plant enables us to reuse sand from splinters or gained from scrap in our products — an ideal circular economy.

FCN develops and distribute special products that actively contribute to climate protection. These include wall and brick systems featuring insulation made from environmentally-friendly minerals or polystyrene. Furthermore, our employees in Rupsroth manufacture crushed stone from clinkstone, which is perfect for mineral wool production. Homeowners can reduce their heat energy loss and thus conserve the environment with the assistance of this insulation system. In addition, lightweight concrete and foamed concrete are the objects of our research work aimed at creating new environmentally-friendly products on account of their easy recyclability.



Our AirClean® paving stones present a particular range of goods. Alongside titan dioxide, these contain a harmless material that breaks down harmful gases such as nitrogen oxide when exposed to the sun. In 2006, FCN was the first manufacturer in Germany to bring these so-called photocatalytic paving stones onto the market. Photocatalysis is a part of our future too; it's a central theme of our research and development. This is why we are also working towards the use of this photocatalytic effect in asphalt road surfaces, in order to effectively combat the nitrogen oxide dilemma in inner city areas.





We work in harmony with nature in stone extraction too: we break down basalt and clinkstone in the company's own quarries in Germany as cautiously and ecologically as possible, giving flora and fauna their habitat back by recultivating and renaturing the quarrying areas with great care. This creates natural ecosystems in which rare plants and animals such as orchids, little ringed plovers or natterjack toads make their home. Sometimes even more species live in these restored areas than before they were quarried.



The latest development is AirClean® granulate , photocatalytically active, artificial rock granules, which can be integrated as chippings in the fresh asphalt surfacing of roads.



RAW MATERIALS — FROM OUR OWN QUARRIES F. C. NÜDLING NATURSTEINE GMBH + CO. KG

CN Natursteine is historically the oldest part of our company — yet extraordinarily modern and sustainably organised today. The organisation runs three quarry operations for the break down and processing of the volcanic basalt and clinkstone.

The value of both stones was particularly highlighted with the award "Stone of the Year" from the Berufsverband Deutscher Geowissenschaftler (German Professional Association of Geoscientists) and the Deutsche Gesellschaft für Geowissenschaften (German Society of Geosciences). The basalt received this honour in 2009, and the clinkstone in 2014.

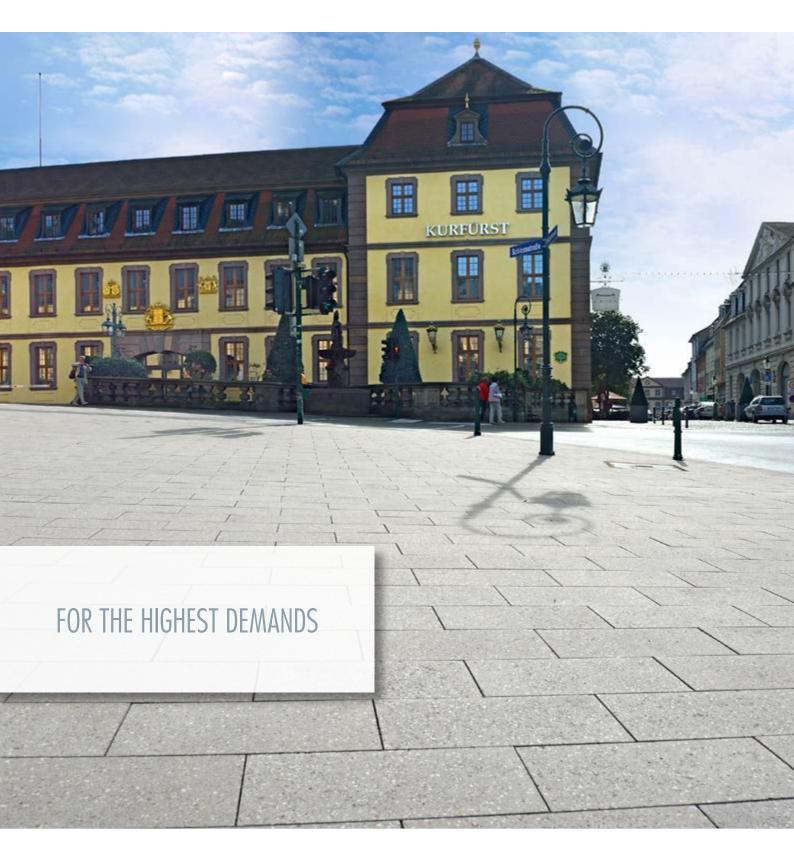
The clinkstone and concrete factory in Rupsroth has been extracting the clinkstone since 1893, in order to prepare it for crushed and double-crushed stone for FCN's own products. Modern sand processing for the production of silicate sand for the glass and insulation industry has completed the range since 2012.

The Billstein basalt factory began operating in 1923. Since then, basalt has been quarried and processed here into gravel, crushed and double-crushed stone, and sand for the construction of roads, paths and concrete.

The Suhl quarry was taken over by FCN in 1951. As well as gravel, crushed and double-crushed stone for road and concrete construction, street construction products are also produced here at an asphalt plant.







EXCELLENT QUALITY

or FCN, product and service quality is a must. The products manufactured in our modern plants are supervised both by us and by external means.

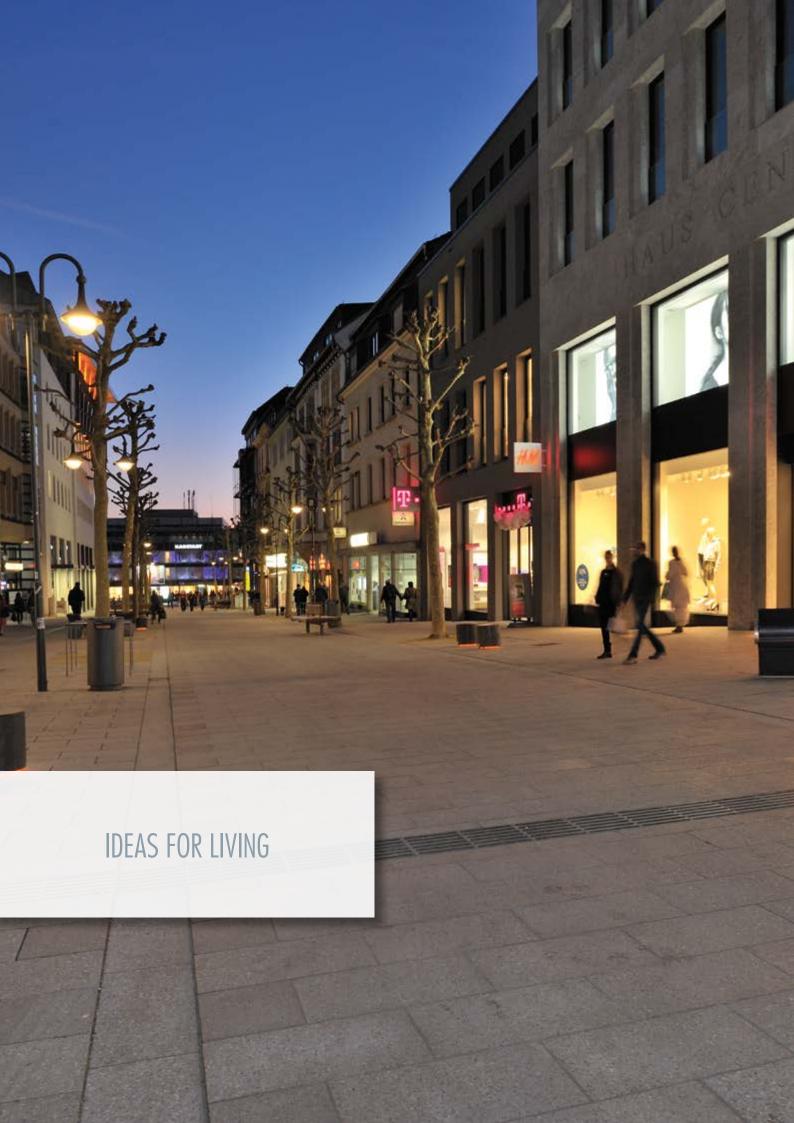
Our products are thus developed and made so that they can provide satisfaction for years and decades. The journey from raw substance to an FCN quality product begins with high-class materials from the region, spanning from quality-aware further processing to carefully monitored guidelines and quality standards, finishing on a comprehensive consultation and punctual delivery. The majority of our raw materials come from our own quarries, those in Rupsroth, Seiferts/Billstein or Suhl bei Haselstein, for example, enabling us to guarantee top-quality, secure workplaces in the region, and act independently of the world market.

After the extraction, highly-motivated employees and modern production facilities ensure the perfect refining of raw materials and appropriate availability.









CONSTRUCTION WITH CONCRETE ELEMENTS F. C. NÜDLING BETONELEMENTE GMBH + CO. KG



A t six locations in Hesse and Thuringia, FCN Betonelemente produces concrete elements for garden and landscape design, as well as for road and house production. This includes paving stones and terrace tiles in diverse designs and various types of bricks.

The firm's factories are located in Fambach, Heringen, Rupsroth, Seiferts, Themar and Wandersleben, while the distribution area includes the entire federal territory as well as the bordering states.

The Fambach factory was rebuilt and extended in 1994. Alongside paving stones, the main focus was on walls and support elements. In the Heringen factory, which has belonged to FCN since 2003, products for the garden and landscape are primarily manufactured.

The factory in Seiferts has been producing concrete parts since 1943. Today, the production of high-quality, shot-blasted plaster and attractive garden wall systems, as well as custom-made products, are the main focus here.

In Themar, the concrete factory has been producing concrete elements for garden and landscape construction since 1998. The core area here is the manufacture of particularly durable monolayer curbstones.





The concrete factory in Wandersleben in the Gotha county has been manufacturing products for garden and landscape construction since mid-1992. With the construction of a cutting-edge tile manufacturing plant in 2016, completely new opportunities were created for manufacturing terrace tiles. Particular value was placed on the diversity of post-production, such as blasting, grinding, brushing, calibrating, and various types of coating.



INNOVATIVE WALL CONSTRUCTION MATERIALS F. C. NÜDLING BETONELEMENTE GMBH + CO. KG





At the Rupsroth and Themar factories, F. C. Nüdling Betonelemente produces a comprehensive brick and wall construction material programme. This includes FCN cellar bricks and Liapor® wall construction materials in a wide range of designs.

We only use classified raw materials such as clinkstone from our own quarries, natural sand and the lightweight aggregate Liapor® for the manufacture of our wall construction materials and cement with water is used as a binding agent.

Clinkstone, the raw material, is a valuable aggregate for the manufacture of wall construction materials. The volcanic stone is around twenty per cent lighter than basalt, yet simultaneously offers the same strength, making it very easy to process.

The base material Liapor® is made from natural clay and is a diverse and powerful building material. This so-called expanded clay is extremely heat-insulating and conserving, absorbs noise and allows water to be diffused. At a lower weight, Liapor® has optimum grain strength. In addition, the clay balls are exceptionally heat-resistant and score highly when it comes to fire prevention.







FCN CONCRETE WALLS F. C. NÜDLING FERTIGTEILTECHNIK GMBH + CO. KG

Energy-efficient construction in no time: Our operating company F. C. Nüdling Fertigteiltechnik specialises in high-performance shell-construction systems and prefabricated floor-height wall parts for the construction of apartments.

In terms of economy and structural physics, the FCN Liapor® concrete wall represents an ideal alternative to construction methods with conventional masonry. Accurately prefabricated, loaded according to plan and punctually delivered, FCN concrete walls are quickly and easily replaced with the truck-mounted crane. Assembling a detached house generally takes a maximum of five days. Efficient manufacturing and easy processing for the subsequent workers lead to an optimization in the price-performance ratio for all involved — from planers through producers to builders, who particularly profit from the short construction period.

ECOLOGICAL · HEALTHY · ALLERGY-FRIENDLY

Environmental protection and apartment health play enormously important roles for modern builders when it comes to selecting materials. The FCN concrete wall bears the "Geprüft und empfohlen [examined and recommended]" seal of approval from the IBR (Institute of Building Biology in Rosenheim). Only products that



do not pose a risk to health and are free from any environmental poisons such as biocides, heavy metals, volatile organic connections and radioactivity, received the certification. The wall system is manufactured from completely harmless materials according to the principles of building biology. What's more, they stand out with their heat conservation values that exceed standards and the best heat and acoustic technology features: all optimum conditions for improving the living climate. The concrete walls are additionally breathable, non-flammable and incredibly suited for allergy-sufferers thanks to the absence of pollutants.







NOISE PROTECTION F. C. NÜDLING FERTIGTEILTECHNIK GMBH + CO. KG

There's no question about it, noise is disturbing and has a negative effect on general wellbeing. In order to protect people from noise pollution, FCN offers the highly-absorbent 'Sonalith System'.

FCN has decades of experience in manufacturing noise protection walls. The Sonalith noise-protection walls are produced in the Fulda concrete factory and are made from a statically stable steel-concrete supporting plate that is connected to a highly-absorbent facing panel made of lightweight concrete. The sound waves penetrate the pores of the facing panel and are absorbed there.

NATURAL STONE NOISE PROTECTION WALLS

Noise protection walls from F. C. Nüdling Fertigteiltechnik are pure concrete constructions and therefore maintenance-free. Furthermore, they are not sensitive to moisture, heat, frost or de-icing salt. The concrete material guarantees not only a long service life for the parts, but also makes diverse designs possible. This means that surfaces can be made with various relief characteristics and sinus profiling. Different absorption levels are also possible — yet another advantage of the FCN-noise protection wall.





COMPANY MUSEM — RHÖN HISTORY COMES TO LIFE



W hat does clinkstone look like? What role does basalt play in the history of the Nüdling company? What is so special about the Rhön railway (Rhöneisenbahn)? Our company museum in the FCN customer centre in Seiferts-Thaiden has a lot of interesting things to offer about the Rhön region and our company's history.

True to our slogan "Out of the past into the future", visitors can discover everything about the Franz Carl Nüdling company from 1893 to today. Families, travellers and history buffs can experience how the first employees mixed concrete, performed controlled demolitions of tunnels, or manufactured paving stones by hand. The exhibition in an old forge displays how the tools for quarry work were repaired and even manufactured. The museum has also gathered intriguing information on each of the FCN concrete factories, such as how crushed stone was produced in the early days.

In addition to the FCN timeline, the museum provides many discoveries concerning the earth history of the Rhön region, the former inner German border, the value of the Rhön railway as well as local volcanic stones, minerals and fossils. The centre of the exhibition is a display with colourful crystals in all possible colours and forms, colourful sandstone fossils and shell limestone from the Rhön and Vogelsberg mountains. Young dino fans will be amazed by the traces of a real dinosaur. Well-known experts and scientists — among them Professor Dr. Hugo Bücking, who has already directed over 120 years of research in the Rhön region — accompany visitors through the comprehensive exhibition.

OPENING TIMES

From spring to late autumn, the museum is open Mondays to Fridays from 10.00 to 17.00 and additionally every first Sunday of the month from 11.00 to 17.00.

You can find out more by calling: +49 661 8387-0.



MODEL GARDENS — INSPIRATION FOR THE GARDEN

It's not always easy to imagine products from the catalogue in real life. So FCN offers their customers four model gardens, in which many products from the FCN range are presented. The model gardens are each around two thousand square metres in size and are located in Fambach, Heringen, Seiferts and Wandersleben.

24/7 — at weekends too — visitors can stroll through the grounds free of charge and collect new ideas for garden and landscape design. Advisors from the FCN team are on site at weekends from spring to autumn. The gardens are designed in such a way that planners have the most comprehensive overview possible of the application possibilities and can familiarize themselves with the installation and combination alternatives of the whole product range.

One focus is on paving, tiles and slope reinforcement systems that are particularly effective both laid and mounted.

With the combination of products with flowers and green plants, and artistic features such as a garden pond the FCN model gardens provide plenty of examples for private builders.



Consultation times with FCN sale advisors can be requested by calling $\pm 49\,661\,8387\text{-}0.$

Those interested can also be advised on location in the materials trade.



»CONSULTING HOURS«

FAMBACH CONCRETE FACTORY

from April to October Friday: 13.00 — 17.00

SEIFERTS CONCRETE FACTORY

from April to October Friday: 14.00 — 18.00 Saturday: 10.00 — 14.00

HERINGEN CONCRETE FACTORY

from April to October Friday: 13.00 — 17.00

WANDERSLEBEN CONCRETE FACTORY

from April to October Thursday and Friday: Friday: 13.00 — 17.00

ADMINISTRATION | PRODUCTION PLANTS

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PRODUCTION PLANTS





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