

Hospitals & Health Care

Architectural ceramics for medical establishments.

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Operating area, Harzklinik, Goslar, Germany, project-specific individual articles

Examination and treatment section, hospital, Berlin-Friedrichshain, Germany, series KerAion OP special glazes

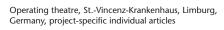
Cover: Series Plural two (wall), series Optima (floor) / Operating area, Harzklinik, Goslar, Germany, projectspecific individual articles / Harzburge Soletherme, Bad Harzburg, Germany, series Chroma non-slip, Swimming pool special programme

Back: Series Beach / Krankenhaus der Barmherzigen Brüder, Munich, Germany, series KerAion OP special glazes In the health care sector a conscoiusness for complete concepts is growing. Contemporary clinics and nursing institutions use state-of-the-art equipment and modern therapy methods, whilst applying the oldest wisdom in the world: body and soul form an inseparable whole. A relaxing environment is required for recovery and health maintenance.

It is a challenge for architects and planners to develop concepts to create such environments. The materials used need to meet both functional and aesthetic requirements. AGROB BUCHTAL has set new standards in this field. Innovative tile products prove that attractive architecture and medical progress can be harmonized.







Workshop for handicapped persons, Münnerstadt-Maria Bildhausen, Germany, series Chroma and project-specific individual articles



Examination and treatment section, hospital, Berlin-Friedrichshain, Germany, series KerAion OP special glazes

Thermes du Chevalley, Aix les Bains, France, series Chroma, Swimming pool special programme



The health sector is a major growth market. The demand for modern hospitals or first-class nursing and therapy centres will further increase during the coming years.

Providing appropriate products for medical establishments has long been a major speciality of AGROB BUCHTAL. The following pages document some of the possibilities that architectural ceramics offer in this sector. The highlights are innovative products such as barrier-free ceramic shower tubs or special tiles for rooms in which medical lasers are used. Examples of hospitals and health care institutions projects show the products in practical application.



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# Concentrating on the Essentials

Every single action in a hospital can be decisive. Working with concentration and in absolute hygiene is of great importance. Appropriate architecture is demanding: ensuring short distances, optimizing space usage, providing clear direction and using functional materials.

Product development at AGROB BUCHTAL concentrates on essentials: the people, the requirements of patients, doctors and nurses. Thereby the range of products offered is functional and complete.



Operating theatre, Harzklinik, Goslar, Germany, project-specific individual articles



Series Plural one



Steigerwaldklinik, Burgebrach, Germany, series KerAion OP special glazes



Series Michelangelo (wall and floor)



# Nursing Wards and Treatment Rooms

Absolute cleanliness is required in intensive care units, nursing wards and examination rooms. Easiness of care and robustness are the decisive criteria at the choice of the materials. Emotional aspects, however, are just as important. Practices and therapy rooms should convey a cheerful and friendly atmosphere.

The HT surface coating system \* from AGROB BUCHTAL contributes to en-suring maximum hygiene. This innovative development helps decompose germs, bacteria and fungi thereby reducing the risk of infection. Accurate size production enables joints to be minimized creating an atmosphere of space and simplifying cleaning. The functional advantages have been combined with aesthetics. Combinable colours and sizes contribute to the development of a pleasant environment helping relax patients.

\* For HT, also see page 26.

Series Plural one, Plural two (wall), series Plural Optima (floor)





X-ray area, Allgemeines Krankenhaus, Vienna, Austria, series KerAion ELA 10.6



# Special Glazes for Operating Areas

The number of operations carried out in hospital by out-patient treatment is growing constantly. Therefore the number of professionally equipped operating rooms is rising continuously.

Medical lasers are used more and more often and as a result the materials used have to satisfy special requirements. Incident laser beams must be diffusely split to avoid the risk of uncontrolled reflections. Special glazes for KerAion OP, Chroma II and Plural one and Plural two have been developed for this purpose. And KerAion ELA 10.6 enables static electricity to be discharged thereby avoiding damaging expensive medical equipments.

Krankenhaus der Barmherzigen Brüder, Munich, Germany, series KerAion OP special glazes



Operating theatre, hospital, St. Bernward, Hildesheim, Germany, series KerAion OP special glazes



Harzburger Soletherme, Bad Harzburg, Germany, series Chroma non-slip, Swimming pool special programme

## **Therapeutic Pools**

Water is an ideal medium for rehabilitation measures after an accident or an operation. The development of muscles can be trained without overstraining the body.

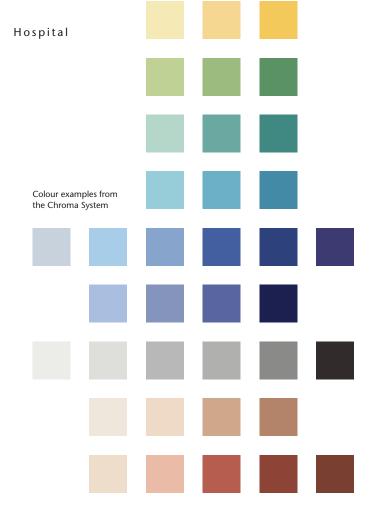
As a result therapeutic pools are important in modern hospitals and rehabilitation clinics. AGROB BUCHTAL provide planners and architects with support gained from years of experience with swimming pool construction.

The Chroma System enables a systematic and comprehensive design – from the therapeutic pool to the pool surroundings and through to the showers and changing rooms. The products comply with all current slip-resistance requirements and thus permit safe transitions from one area to another. In addition, the colours of the Chroma System also harmonize with tiles from the Plural System.

An extensive programme of special pieces in the Chroma System is available in numerous colours. Innovative pool edge systems, the pool base water flow system Vertical Macro or the patented low-noise pool edge channel Wiesbaden Silent, which halves the noise level perceptible by the human ear, complete the product range. This facilitates the communication between therapist and patient, and contributes to a quick recovery.



Photo on top left: Therapeutic pool, Langen-Debstedt, Germany, series Chroma, Swimming pool special programme / Photo on top right: Therapeutic pool, district hospital, Miesbach-Agatharied, Germany, series Chroma, Chroma non-slip / Photo down on the left: Regional hospital, Regensburg, Germany, series Chroma, Chroma non-slip / Photo down on the right: Low-noise channel Wiesbaden Silent



## **Colour Systems**

Are clinical white and pale lime green really the dominating colours in medical establishments? Fortunately, this is a thing of the past. For the design of hospitals, doctor's practices and other medical areas, AGROB BUCHTAL offers architects an extensive range of colours, helping create contemporary colour schemes.

Both the recently revised Chroma System and the Plural System provide a great variety of modern, harmonious colours. Discreet pastel and natural shades are complimented by striking signal colours. Sizes are modular to allow combination and design freedom.



Hans-Prinzhorn-Klinik, Hemer, Germany, series Plural two Children's clinic, Bremen, Germany, series Plural one, Plural two

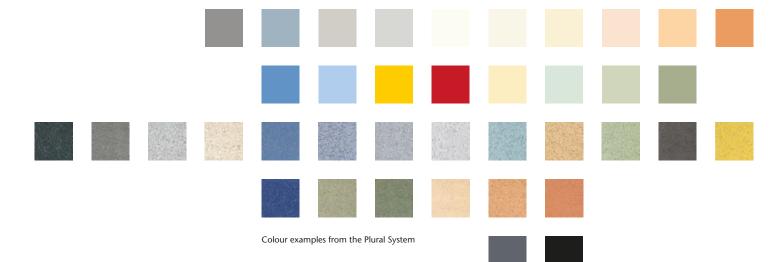


Annastift, Hanover, Germany, series Plural two



Hospital, Ochsenfurt, Germany, series Chroma and project-specific individual articles

Senior citizens' centre, Annaberg, Germany, project-specific individual articles / Children's clinic, Bremen, Germany, series Plural one, Plural two







# Living without Restrictions

Demographics show that society is ageing. But there is a fundamental difference between modern day senior citizens and the aged in previous generations. Old people should be able to live as independently and autonomously as possible.

This new approach has been supported by modern architecture in the design of old people's homes. Using the appropriate design, senior citizens can care for themselves much longer releasing capacity for nursing staff to care for the move needy. AGROB BUCHTAL has developed intelligent solutions with ceramic products supporting barrier-free, attractive environments in which aged and handicapped people can live comfortably. AOK, Rosenheim, Germany, series KerAion, Quantum



Photo on top left: Series Plural two (wall), series Optima (floor) / Photo on top right: Series Plural Optima / Photo down on the left: Series Plural three / Photo down on the right: Therapeutic pool, Erityisosaamiskeskus, Turku, Finland, series Chroma, Quantum

Series Plural Optima

### Slip Resistance

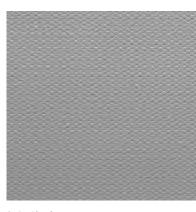
One of the most important considerations whilst selecting products for use in hospitals and health care institutions is slip resistance. The Plural System offers architects and planners a variety of sophisticated solutions ranging from profiled products for barefoot and wet areas to non-profiled, velvet-rough surfaces to provide security for wheelchair or crutches use. Slip resistance tiles are available in a wide range of modern colours.



Series Plural three



Workshop for handicapped persons, Münnerstadt-Maria Bildhausen, Germany, series Chroma, Quantum

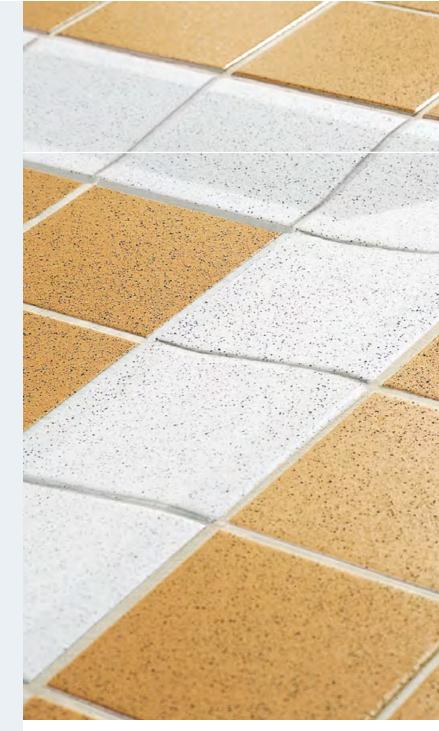


Series Plural two, honeycomb structure

# Ceramic Shower Tub Systems

Shower tub systems for barrier-free building are an ideal basis for a life without restrictions. Thanks to their ergonomic design and optimal slip resistance, which makes shower mats susceptible to mould superfluous, they permit above all senior citizens and disabled persons, but also people without handicaps, to take a comfortable and safe shower.

In barrier-free bathrooms, the shower tubs are directly integrated in the tile covering. The sloping edge with a height of 10 mm prevents inundations, is easy to pass on foot and with a wheel-chair. For a visual contrast of the sloping edge, alternative colours can be used. Shower tub systems are available in the Chroma and Plural ranges. The ceramic shower tub systems from AGROB BUCHTAL meet the requirements of DIN 18024 for barrierfree building and have been awarded the "Barrier-free - DIN tested" test symbol. The ergonomic design and optimal slip resistance, making mould attracting shower mats redundant, allow people of all ages, with or without handicaps, to take a comfortable and safe shower.



Series Plural Optima



Series Beach

# Healthy Diet

Hundreds of portions and a variety of diets – and all meals have to be served within half an hour: this is everyday routine in the canteen kitchens of hospitals, old people's homes and health spas. Despite all these challenges, taste should not suffer. Neither should the equipment in the dining rooms and tea kitchens.

Architectural ceramics from AGROB BUCH-TAL provide architects and planners with almost unlimited design possibilities.

Series Chroma and project-specific individual articles



Hospital, Ochsenfurt, Germany, series Chroma and project-specific individual articles









Hospital, Ochsenfurt, Germany, series Chroma and project-specific individual articles

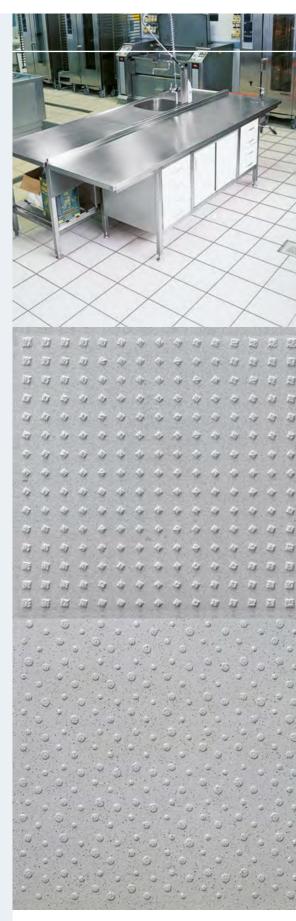


## Canteen Kitchens

The working procedures in the canteen kitchens and cafeterias of hospitals are subject to strict hygienic conditions and controls. In addition, highest slip-resistance and hygiene standards have to be complied with in all areas where food is prepared.

The ceramic wall and floor coverings from AGROB BUCHTAL meet these requirements. Profiled floor tiles ensure that nobody slips in the hospital kitchen: Oil, fat or food residues are transported downwards into the so-called displacement space, so that serious falls are prevented. At the same time, the tiles can be kept clean and functional by means of customary industrial cleaning agents. The products have been developed to minimize vibrations and noise levels while loaded trollies are being moved over the floor.

In addition, the tiles are supplied with a factory applied surface treatment – Protecta – to ensure easy cleaning. The treatment is applied during the firing process and bonds with the tile body closing the micropores which are a natural characteristic of unglazed products. The surface is sealed preventing penetration of substances and ensuring longevity.



Groot keuken, Hartenkamp, Netherlands, project-specific individual articles / Series Plural three, Carostic / Series Plural three, Perlcorn 2



Waldhausklinik, Berlin, Germany, series Plural three

### **Dining Halls**

Whether in the dining halls of a health spa, a rehabilitation clinic or an old people's home or even in a cafeteria of a hospital – an attractive environment stimulates an appetite.

The product range offers a variety of application possibilities. Wall and floor tiles are attractive and easy to clean, while the floor tiles provide non-slip security and also minimize vibration and disturbing noise. People can work and dine in safety. Functional and non-functional areas can be combined in a colour scheme ensuring the surface achieve the appropriate slip resistance and remain aesthetically harmonious.



Therapeutic pool, Langen-Debstedt, Germany, series Quantum



Waldhausklinik, Berlin, Germany, series Plural three



Hospital, Neustadt am Rübenberge, Germany, series Plural three



#### ΗT

HT proves valuable in all areas where utmost hygiene is required. The surface coating for wall and floor tiles offers three important advantages:

- it has an antibacterial effect\*
- it is extremely easy to clean
- it eliminates disagreeable odours

The effects are based on the principle of photocatalysis. The catalyst, titanium oxide, is fired into the glaze and facilitates a reaction between light, oxygen and humidity. In this process, oxygen molecules become activated decomposing bacteria, fungi, algae and moss.

HT-coated tile surfaces are hydrophilic: as opposed to repelling water, the reaction relieves surface tension thereby inhibiting the creation of globules of water and transforming the water into a fine film which spreads behind dirt lifting it from the tile surface. In addition, HT decomposes the exhaust fumes created by industry and cars. Scientific analyses prove that a HT facade surface of 1000 m<sup>2</sup> cleans the air as effectively as 70 medium-sized deciduous trees. The coating, which is unique in this form, is practically indestructible. The photocatalytic effect already activated by normal indoor lighting or natural light is permanently conserved.

For further information, please order our HT special brochure or ask to see a demonstration DVD film.

Water







With HT, dirt is washed down by the water and can then be easily wiped off.

<sup>\*</sup> Documentation and approval regarding the antibacterial characteristics of HT are pending in the USA



Photo on top left: Children's after-care clinic, Villingen-Schwenningen, Germany, series Chroma, Quantum / Photo down on the right: Hans-Prinzhorn-Klinik, Hemer, Germany, series Plural two

# In-House Planning Department

At AGROB BUCHTAL, high-quality products and competent services are supplied. In this way, planners and architects using our products can benefit from the know-how of our in-house planning department free of charge when specifying our products.

A committed team of qualified technicians, engineers, architects, designers and colour experts ensures a quick and problem-free realization of individual concepts. The range of services includes laying plans, determinations of quantities, detailed estimates, texts for bidding purposes or project-specific advice regarding application techniques on the project location. In addition, a person to contact will be at your disposal on location by request. You will find detailed information about the complete range of our products in our publication "Programme of Delivery".

Series Plural one, Plural two (wall), series Plural Optima (floor)











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#### Deutsche Steinzeug Keramik GmbH

D-92519 Schwarzenfeld Phone: +49 (0) 94 35-391-0 Fax: +49 (0) 94 35-391-35 55 E-Mail: architekturkeramik@deutsche-steinzeug.de

#### Deutsche Steinzeug America, Inc.

367 Curie Drive Alpharetta, GA 30005 USA Tel.: +1 770 442 55 00 Fax: +1 770 442 55 02 E-Mail: info@dsa-ceramics.com www.dsa-ceramics.com

You will find contact names for other countries on the Internet at: www.agrob-buchtal.de





