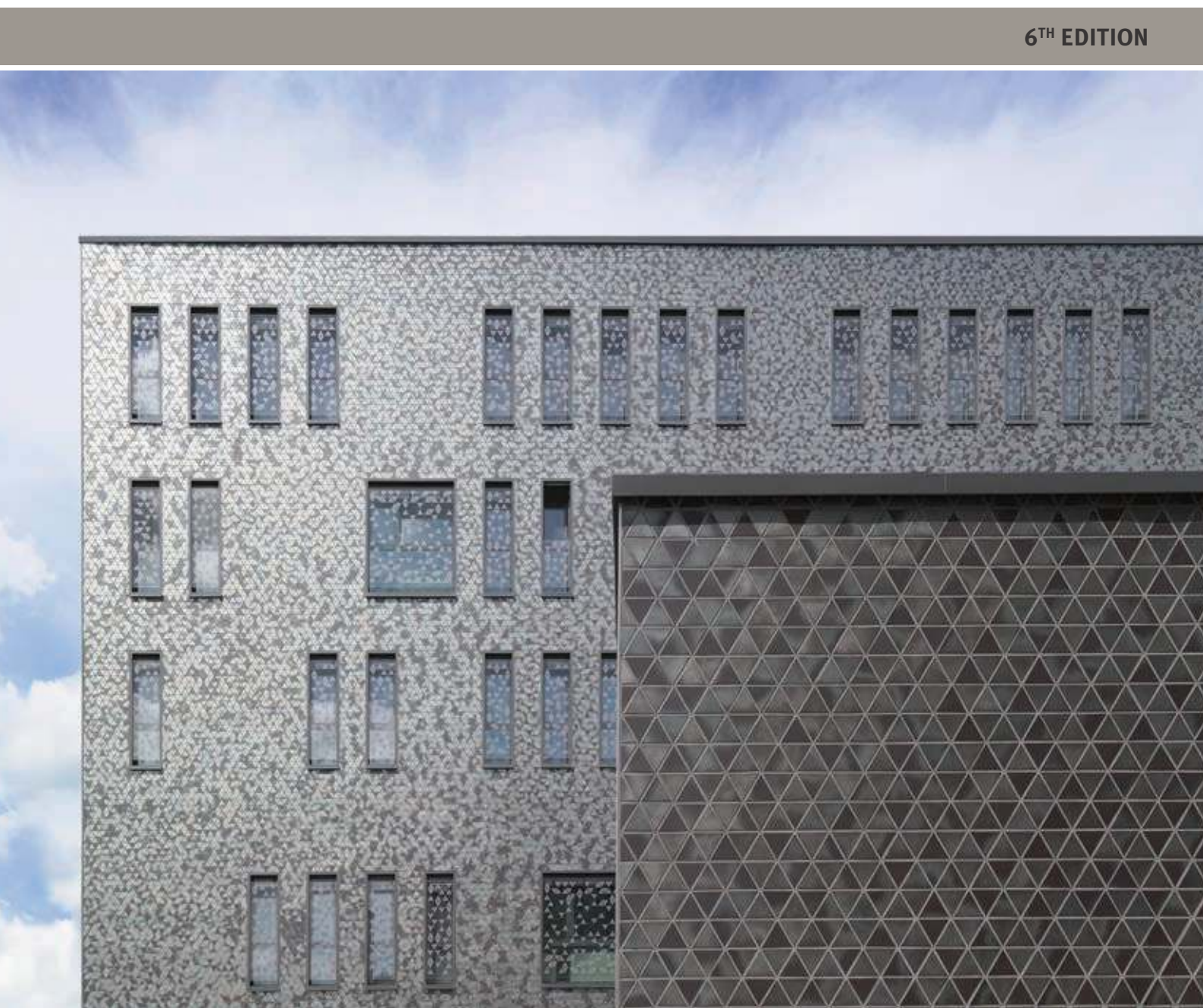


Фасадная клинкерная плитка ABC Klinkergruppe

6TH EDITION



ABC ceramic facades and brick slips.

Variable architectural format, Bautzen



2103 Winterhude black-blue coloured, Köln



R 0854 red coal-fired Hamburg



Images: Images on cover and facing page:
Medical Specialist Centre, Bonn-Beuel

INHALTSVERZEICHNIS

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German facade prize 2014 – honourable mention: Buchsbaumweg, Hamburg



The U-shaped block perimeter development on Buchsbaumweg in Hamburg, - designed in the early 1930s with brick facades - has been brought up to contemporary energy standards using brick slips with a ETIC system. Nevertheless, the new Street facade design adheres closely to the original concept from the period of construction: Brick slips, with colours that replicate the historic artifact, accentuated building corners, bays and projecting masonry courses are as much a reminder of the original condition as the sills and mullions of the new, built-in windows.

In the jury's view, "the replication of the original street elevations in the course of a ETICS facade renovation" was particularly deserving of honourable mention.

Project data

Prize:	German and Austrian facade prize 2014
Sponsor:	Brillux GmbH & Co. KG
Project:	Buchsbaumweg apartment complex, Hamburg
Execution:	AFB Fassadendämmung + Malereibetrieb GmbH, Hamburg
Design:	neumann + partner, Hamburg
Owner:	Baugenossenschaft dhu eG, Hamburg
ETIC System:	WDV-System I + III, Brillux, Münster

Old Hamburg special production





Old Hamburg special production

Neue Salzhalle Kiel.

The Neue Salzhalle at the Kiel Seafish Market is the rehearsal stage for Kiel Theatre. Rehearsals of numerous large theatre productions take place on the premises in the course of the season. In addition, the building and adjacent area also function as a location for special events.

2103 Winterhude black-blue coloured



Neue Salzhalle, Seafish Market, Kiel



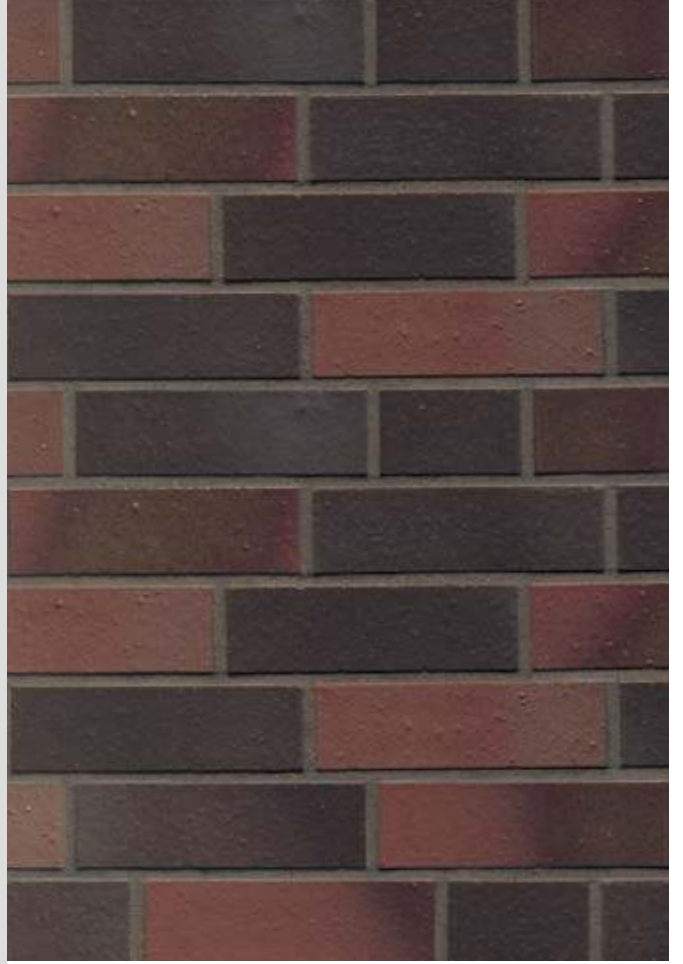
2103 Winterhude black-blue coloured



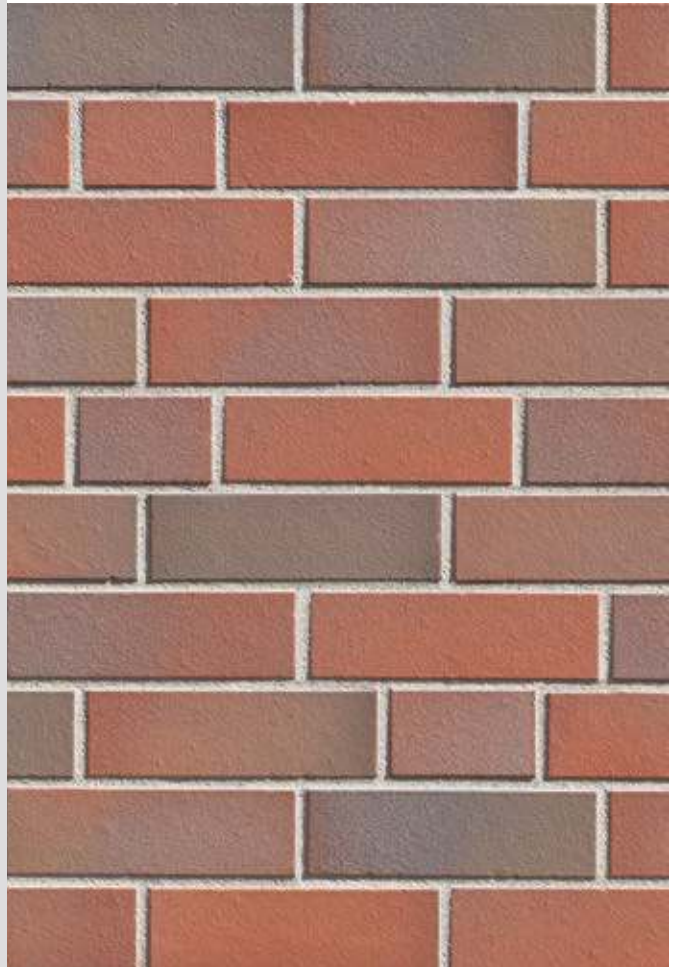
2103 Winterhude black-blue coloured



2100 + 2103 Blankenese-Winterhude dark coloured



2102 Altona red coloured



Vackov residential complex, Prague

The design of this residential complex satisfies a multitude of requirements that are placed on modern urban buildings today. Considering the urban density of the city, a high measure of privacy was achieved here and the desire for a private house with garden was widely achieved.

The entire project consists of three building groups, each with 3–4 buildings. Their size, character and spatial organization create the potential for neighbourly living.

The permeability of the complex is achieved by semi-public paths between the individual building groups. The paths meet at a central plaza that serves as an informal centre for the residential complex.

While the wooden facades of the interior courtyards convey a feeling of warmth and security, the externally oriented brick facades emphasize the high value of the buildings.

Project data

Project:	Vackov residential complex, Prague
Location:	Prague 3 - Zizkov, Czech Republic
Investor:	METROSTAV vackova Inc.
Floor area:	11.000 m ² 124 housing units, 3 meeting rooms
Completion:	2011
Architecture:	Jiran Kohout architekti, s.r.o. Nabidka slub architektonicke kancela e. www.jkarch.cz

1828/0 Aubergine glatt



1828/0 Aubergine smooth, corners manufactured to specified angle, Project: KerVita Hamburg



1828/0 Aubergine smooth



1828/0 Aubergine smooth



Investment in education - Osnabruck adult education centre.

The Osnabruck Land adult education centre (VHS) is delighted with the new construction of a training and administration building. 3800 m² of space is available for offerings in the areas of school leaving qualifications and adult education - a large piece of the future for the city's range of courses and events.

Project data

Project:	Osnabruck adult education centre (VHS)
Client:	VHS Osnabrücker Land gGmbH
Construction period:	11/2009 -10/2010
Gross story area:	3.700 m ²
Architecture:	Architekturbüro SHF, Werner Hüdepohl

1830/0 Texel smooth



1830/0 Texel smooth



1830/0 Texel smooth



2106 Atlantis



1005 Black glazed



2106 Atlantis



Ochtrup Factory Outlet Centre – new buildings in historic

BRICK ROTUNDA BY DOMINIKUS BÖHM

The company “rotunda” built in 1942 by the Cologne master church builder Dominikus Böhm counts as one of the highlights of pre-war modern in North Rhine-Westphalia. Originally built as a warehouse for fabrics, the brick rotunda now houses a portion of the covered area of the Ochtrup Factory Outlet Center.

Architecturally, the clearly articulated rotunda stands in sharp contrast to the classicist Beltman building. With its combination of masonry and bands of glass, the style is inspired by the clear, no-frills architecture of the Bauhaus.

Projektdaten

Project:	FOC Ochtrup
Site area:	85.000 m ²
Investment volume:	approx. 52 million Euros
Retail space:	11.500 m ²
	65 shops
FOC investor:	Thomas Dankbar
Architecture:	Schmiegel + Denne architecture, Ochtrup

FOC Ochtrup historic building



1831/2 Dresden structure



1831/0 Dresden smooth



1831/2 Dresden structure



1831/4 Dresden coal



FOC Ochtrup.

NEW USE FOR THE OLD PRODUCTION PLANT

The Schmiegel & Denne architectural and structural engineering office in Ochtrup was commissioned with the task of expanding the retail areas.

The textile company's historic production halls were removed. New, small-scale "village streets" that offer space for the required 65 shops were built in the core area on an 85,000 m² site.

The investor's objective was to build a "third place" where the customer feels comfortable when he goes shopping in his leisure time. The aim was to implement an architecture that the customer identifies with - an architecture with recognition value and a lasting impression.

Project data

Project:	FOC Ochtrup
Site area:	85.000 m ²
Investment volume:	approx. 52 million Euros
Retail space:	11.500 m ²
	65 shops
FOC investor:	Thomas Dankbar
Architecture:	Schmiegel + Denne architecture, Ochtrup

1822/0 Nordkap NF

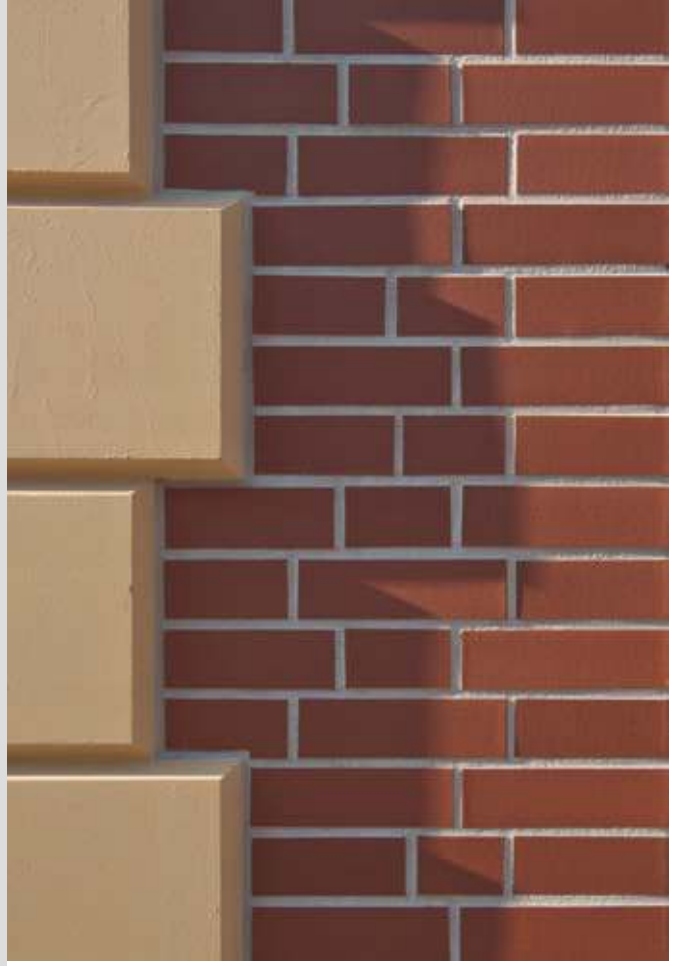
1004/0 Naturbrand smooth



1821/0 Malta smooth NF



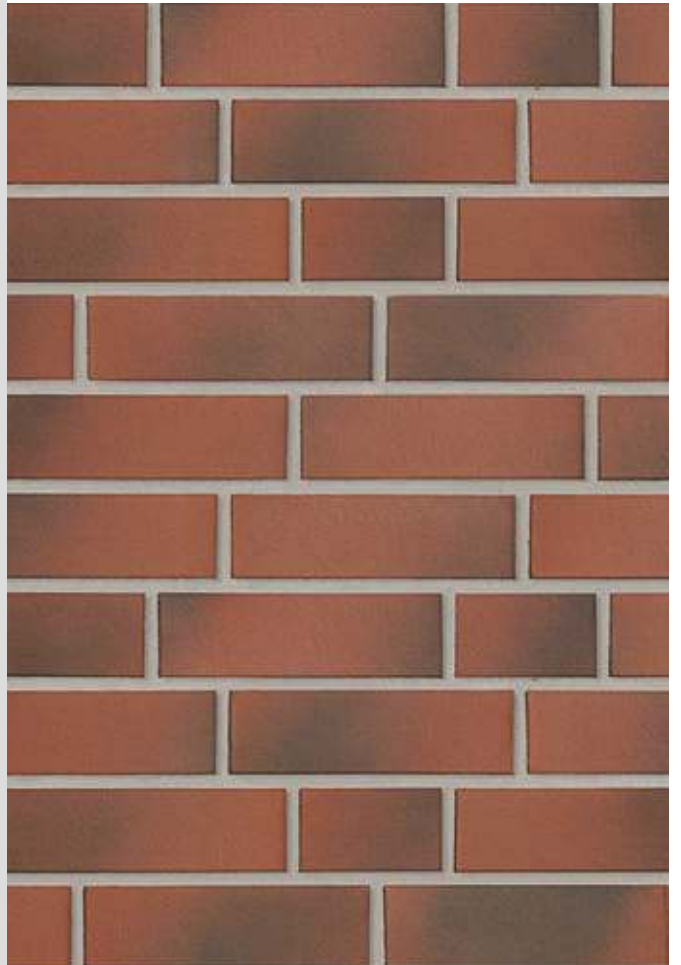
1821/0 Malta smooth NF



1004/0 Naturbrand smooth



1004/0 Naturbrand smooth



Value retention and energy savings for public buildings.

SECURING EXISTING STOCK

The potential for energy cost savings in public buildings is considerable. More and more, these savings potentials are being exploited by the bodies responsible for these facilities.

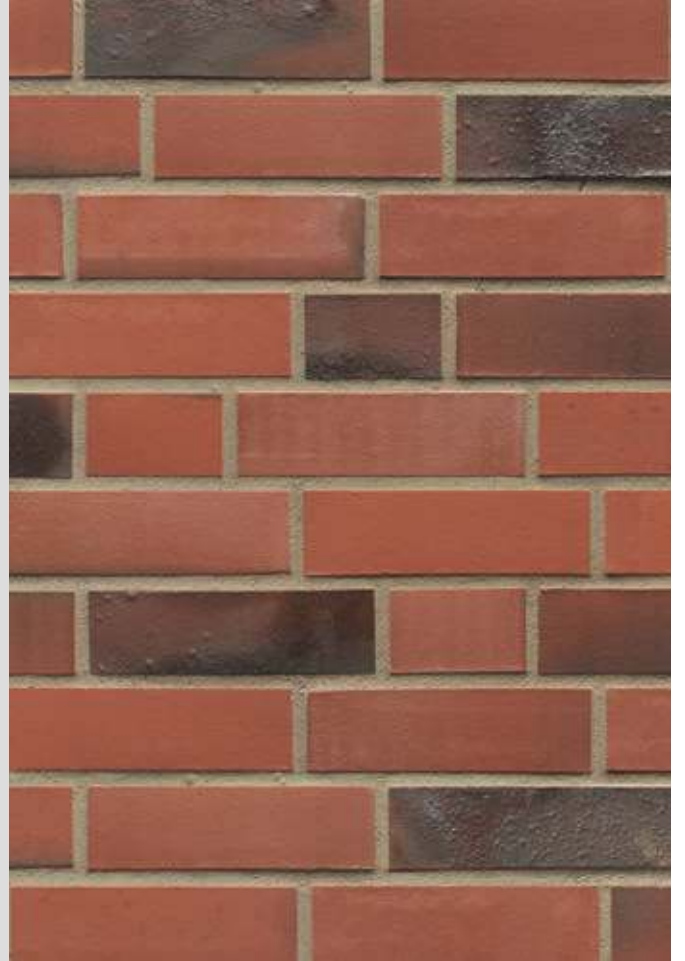
Extensive renovation and energy saving measures were also implemented with ABC brick slips on an ETIC system at the school building on Denksteinweg in Hamburg.

Schüttorf R 0854 red coal-fired Hamburg format

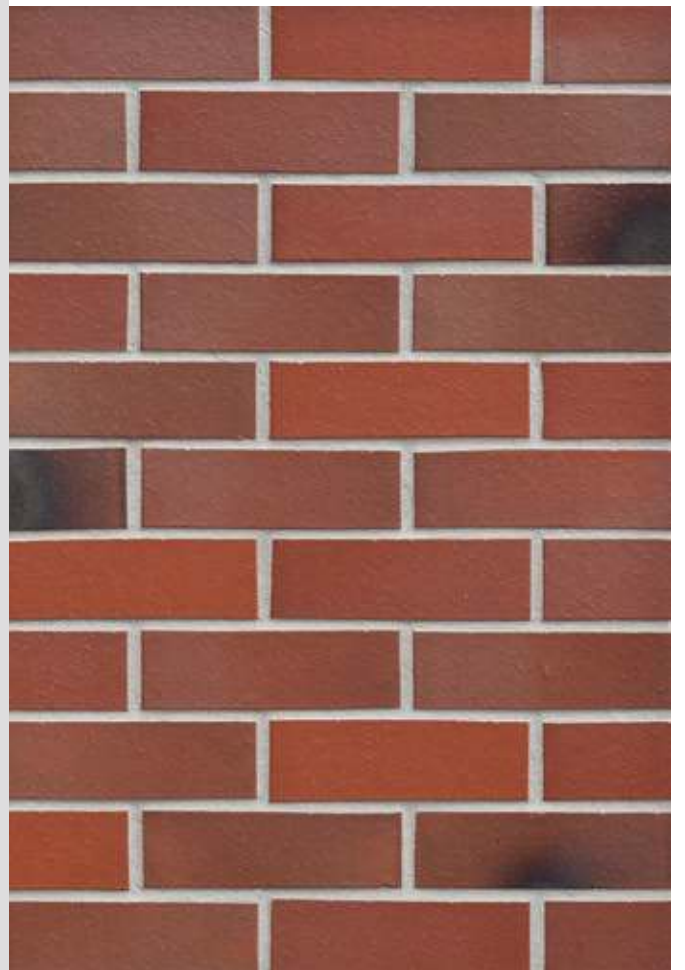




Schüttof R 0854, red coal-fired Hamburg format



Velper red coal-fired Hamburg format TO



ABC ceramic facade
in clinker format.



1826/0 Baltrum smooth

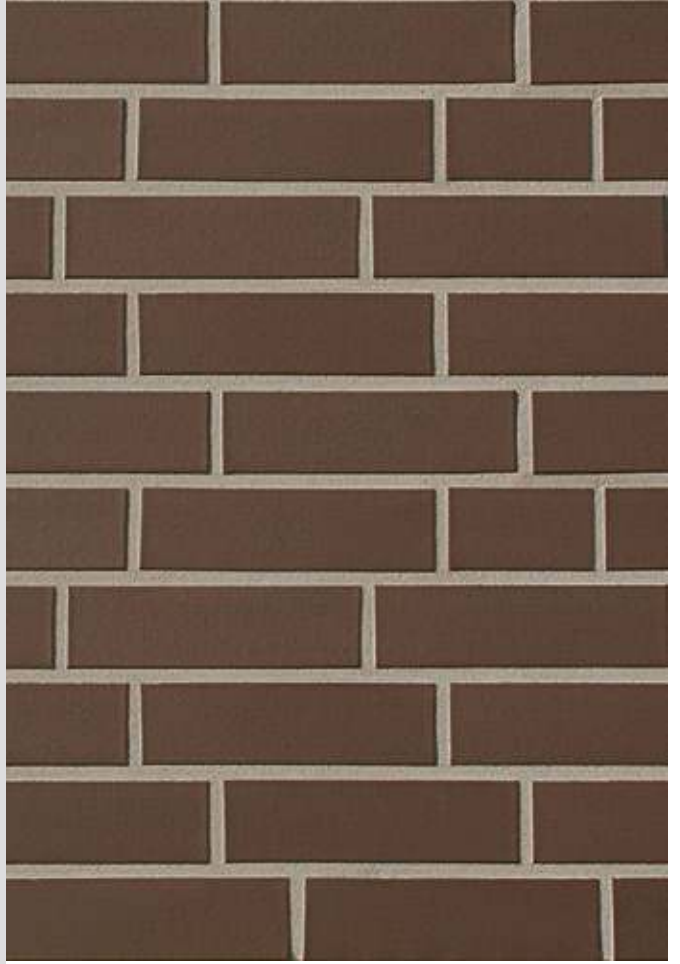
Administrative building in Laer / North Rhine-Westphalia (NRW)



1826/0 Baltrum smooth



1926/0 Brown smooth



1826/0 Baltrum smooth



1926/2 Brown grained



State library renovation and new construction, Berlin

AN IMPORTANT BERLIN BUILDING SITE

The centre that was lost to partial destruction has been given back to the Wilhelmine library building.

The new reading room was built in the middle of the great state library complex on “Unter den Linden” in Berlin. Germany’s largest scientific university library has been expanded by the new construction.

ABC quarter brick, Berlin state library

Project data

Project:	Berlin state library
Construction period:	anticipated completion 2016
Scope:	frontage length Unter den Linden: 107 metres length on Charlotten and Universitätsstrasse: 170 metres, Floors above ground: 13
New construction:	46,250 m ²
Estimated total cost:	approx. 800 million euros
Architecture:	HG Merz Architekten with offices in Stuttgart and Berlin





Berlin state library gate

ABC-Quarter brick 122 x 69 x 57 mm



View of ceramic facade



State library renovation and new construction, Berlin

BERLIN STATE LIBRARY, UNTER DEN LINDEN

The cubic light house of the new reading room picks up the proportions of its historic predecessor building. Its dimensions are constantly under-estimated: It fits almost modestly into the much larger, old Wilhelmine building, although Berlin Cathedral could easily be placed inside its area.

ABC 122 x 69 x 57 mm quarter bricks were used in the restoration of the large courtyard facades.

The new construction measures include the addition of two stories to the interior of the building and new construction of the reading room. The ceramic facade was created in the historic 122 x 69 x 12 mm quarter brick format on an ETIC system. ABC's ceramic developed the glaze colour for the new building based on the historic example of the courtyards.

ABC quarter brick, Berlin state library

PLENTY OF SPACE FOR GOOD THOUGHTS

The restored and newly created ceramic courtyard facades are visible. They surround the glass cube with its translucent shell. A 36.5 m high, open air space was created in the interior - impressive.

The special feature of the double layered glass facade is its thermal deformation, which refracts the light and distributes it in a more pleasant manner. In the lower part of the cube, there is a wooden book shell which houses the workplaces and books.

www.hgmerz.com - architects museum designers

www.staatsbibliothek-berlin.de





© Fotografie Jörg F. Müller

Interior view of the reading room



© Architektur Fotografie Krummow

Berlin state library, 2014

Ceramic facade manufactured in accordance with dimensional and colour specifications

ABC-Quarter brick



122 mm

Quarter brick format
122 x 69 x 12 mm

69 mm



Quarter brick
122 x 69 x 57 mm



Quarter brick angle
122 x 69 x 57 mm



ABC-Quarter brick on an ETIC system

New construction with ceramic facades in clinker format.

In 2007, a new district with up-scale, owner-occupied apartments was built in Stettin. The Magnolia housing complex is distinguished by the special design of the row houses, its courtyards and green spaces. The upscale residential area in natural surroundings with excellent infrastructure are among the additional advantages of this development.

The limited materials used in the facade architecture, such as wood, rendering, clinker slips and the factory style of the large window elements give the entire residential area high value without breaking the established budget.

230 apartments were built and successfully marketed in the first construction phase. The successful Magnolia concept will be continued in a second construction phase. An additional 170 apartments will be built in 2008. A total of 12.000 m² of clinker slips were installed on the facades.

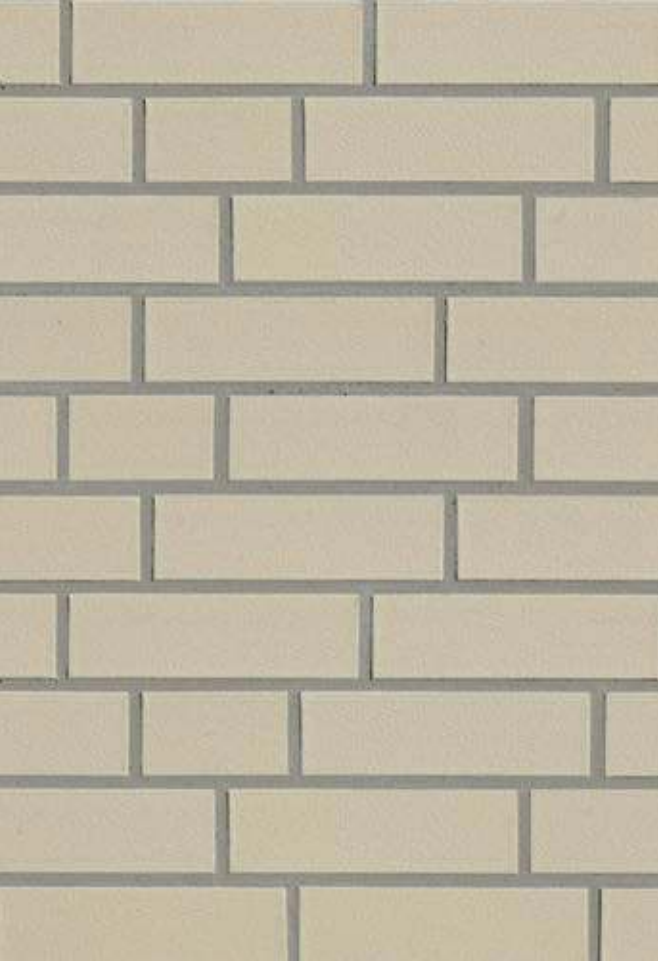
1924/0 Beige smooth



1924/0 Beige smooth



1924/0 Beige smooth



Skagen with slate texture



1924/0 Beige smooth



2108 Elmshorn ochre grey



Markona Wohnpark Köln.

The MARKONA.TWO building project in Cologne-Neu Ehrenfeld was expanded by a further 76 owner occupied apartments in the 2nd phase. The apartments are distributed between a total of eight new buildings, which completes development of the 17.000 m² Markona residential park. In the process, 4 city residences with a total of 48 owner occupied apartments were built along Äusseren Kanalstrasse. Four garden buildings with a total of 28 apartments that open onto both the Markona residential park and the public Taku park were built in the interior area. Every apartment has open areas such as gardens, loggia, terraces or balconies. The ceramic facades of the housing complex were created with different clinker slips on a ETIC system. Go to sleep the new MARKONA.ZWEI construction project was built to the KfW 70 energy efficiency standard with an attached biomass heating plant..richtet.

Sandyyellow smooth, Texel smooth, Winterhude, Juist smooth

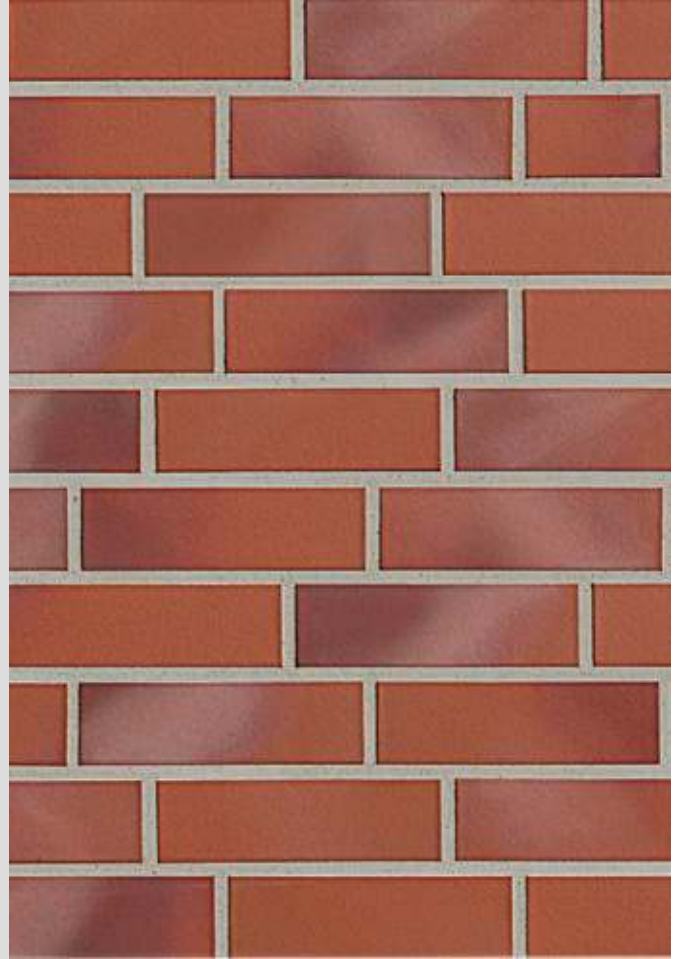


1927/0 Sandyyellow smooth

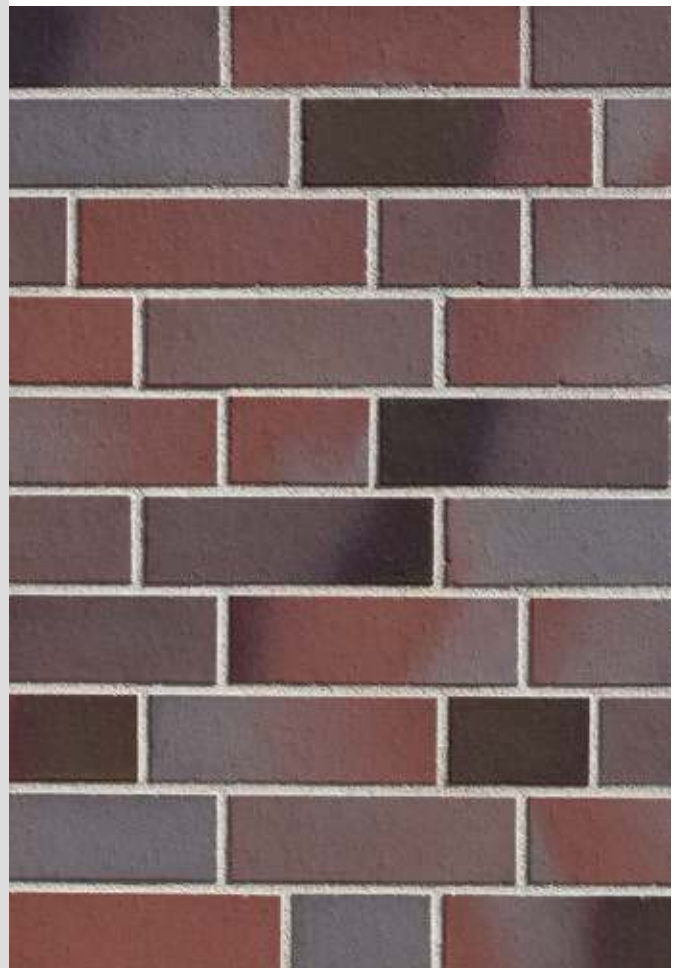




1827/0 Juist smooth



2100 Blankenese dark coloured



1830/0 Texel smooth



Markona residential park, Cologne.



Winterhude black blue coloured, Blankenese dark coloured, Juist smooth

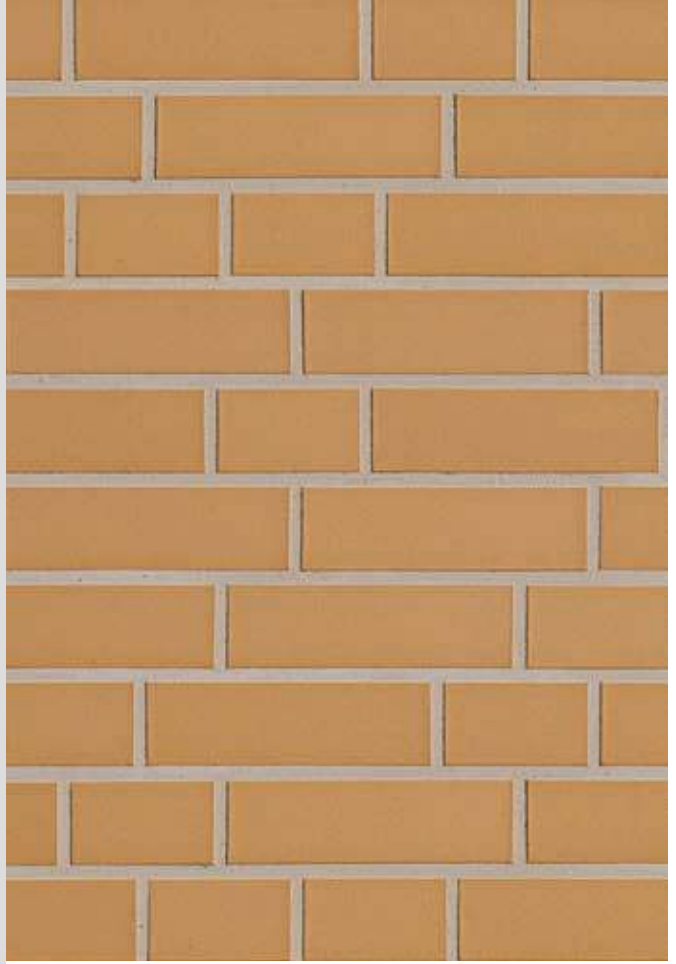
Sandyellow smooth, Winterhude black blue coloured



1927/0 Sandyellow smooth



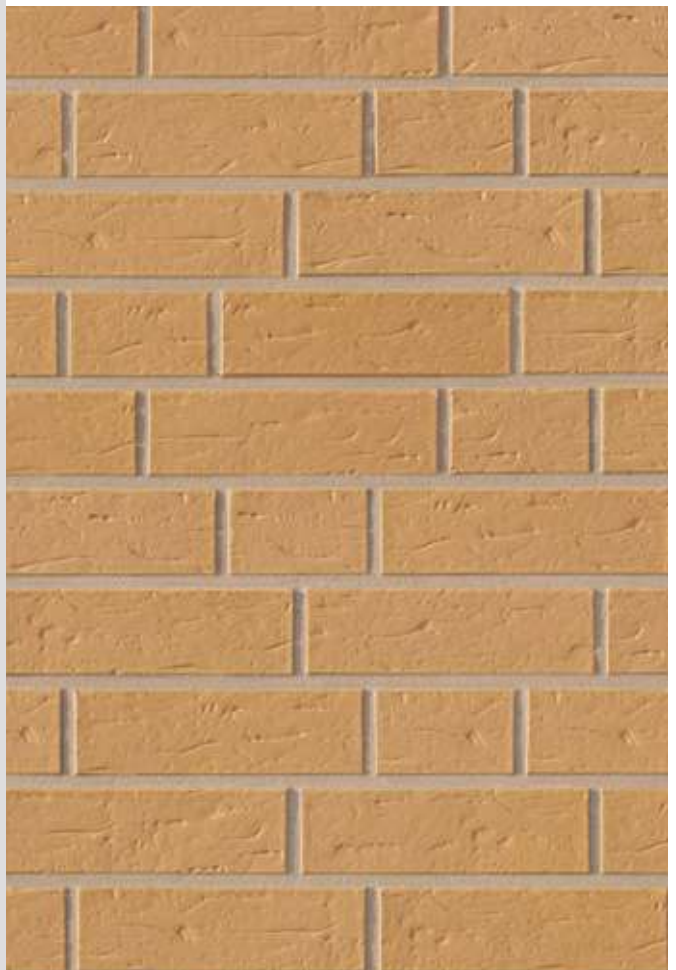
1927/0 Sandyellow smooth



2103 Winterhude black-blue coloured



1927/2 Sandyellow grained



ABC ceramic facade on thermal insulation / ETIC system.

E = External
T = Thermal
I = Insulation
C = Composite

The ETIC system in a few steps.

German Institute for Building Technology (DIBt), Berlin

The ETIC system shown has received an approval for:

Mineral fibre insulation

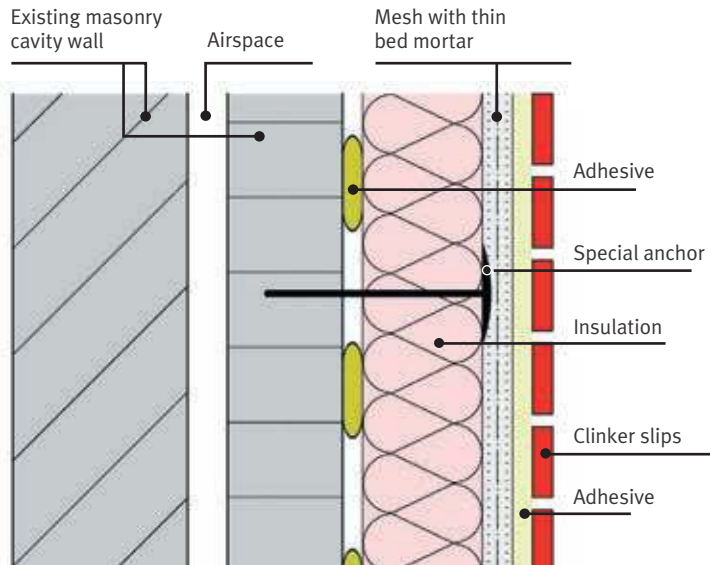
max. insulation thickness: 200 mm
max. building height: 100 m

Rigid polystyrene foam

max. insulation thickness: 200 mm
max. building height: approx. 20 m



Wall section, functional assembly



Example of workflow

- 1a. + 1b. Application of adhesive to the insulation panels.
- 2a.+ 2b. Application of insulation panels to the facade.
3. Installation of a reinforcement layer.
4. Fastening of insulation panels with special anchors.
5. Application and smoothing of the second mortar layer.
6. Adhesive application.
7. Application of adhesive to the slip (buttering-floating procedure)
8. Setting the slip in the adhesive.
9. If the adhesive is set and the slip facade is completely dry, grouting can begin. There are two possibilities here:
 - a. Smooth clinker slips can be grouted using a sponging procedure. The excess joint mortar is neatly washed off with a sponge float.
 - b. Classic grouting with dry grouting mortar, jointing iron and hawk. This procedure is suitable for all clinker slips.
10. Standard clinker cleaner should be used for cleaning if the installed areas are contaminated with mortar. In every case, the effectiveness and suitability of this cleaner must be tested on the building in advance. Remmers Klinkerreiniger Combi WR, diluted 1 : 15 has produced good results.



Important

We recommend that facade renovation is carried out by a specialist company.

Important

Also pay attention to the manufacturer's processing requirements.

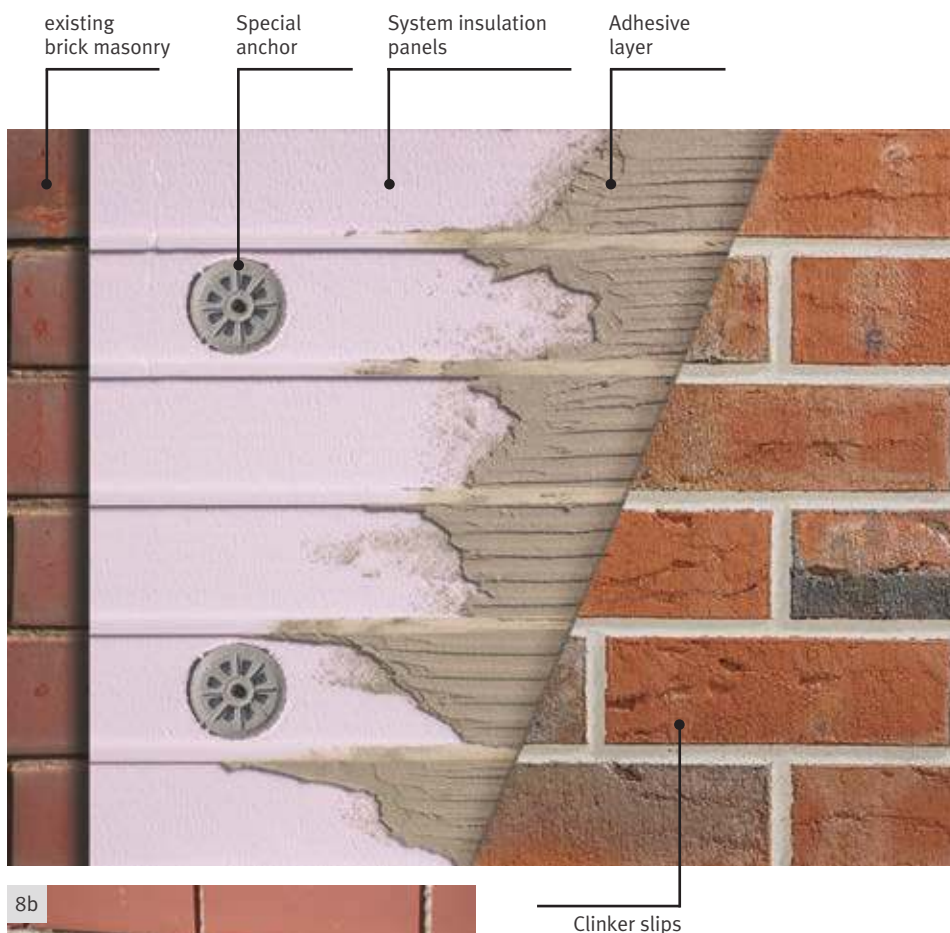
Thermal insulation and facade modernization in a few steps with the joint alignment system.

German Institute for Building Technology (DIBt), Berlin

The joint alignment system shown has received approval for:

- a max. insulation thickness: 100 mm
- a max. building height: approx. 20 m





8b

**Important**

We recommend that facade renovation is carried out by a specialist company.

Example of workflow

1. Application of adhesive to the insulation panels.
2. Setting insulation panels on the facade.
3. Fastening of insulation panels with special anchors.
4. Adhesive application.
5. Apply adhesive mortar to the clinker slips.
6. Firmly press the clinker slips into the adhesive bed.
7. Install the angle slips.
8. If the adhesive is set and the slip facade is completely dry, grouting can begin. There are two possibilities here:
 - a. Smooth clinker slips can be grouted using a sponging procedure. The excess joint mortar is neatly washed off with a sponge float.
 - b. Classic grouting with dry grouting mortar, jointing iron and hawk. This procedure is suitable for all clinker slips.
9. Standard clinker cleaner should be used for cleaning if the installed areas are contaminated with mortar. In every case, the effectiveness and suitability of this cleaner must be tested on the building in advance. Remmers Klinkerreiniger Combi WR, diluted 1 : 15 has produced good results.

Important

Also pay attention to the manufacturer's processing requirements.

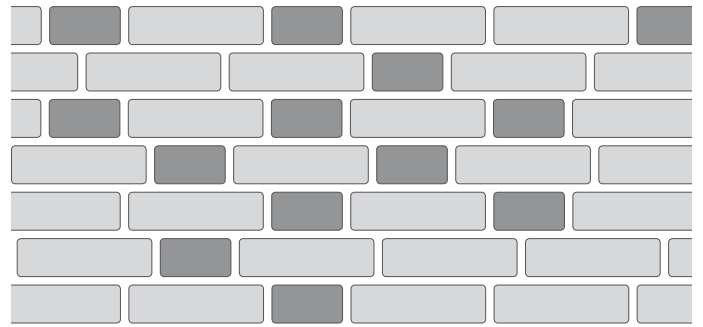
A beautiful facade is not an accident.

THE RANDOM BOND IS TYPICAL FOR A TRUE CLINKER FACADE.

In this style of brick laying, stretchers and headers alternate irregularly. The authentic appearance of a brick facade has its origins in monolithic construction. The header bricks ensure bonding of the masonry. This natural brick wall appearance has proven itself up to the present day.

With clinker slips, you are building on the traditional knowledge of good craftsmen, because the arrangement of half bricks in the masonry bond permits a multitude of natural masonry effects. Of course, other masonry bonds are also possible.

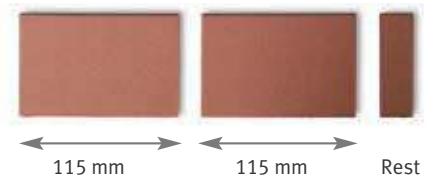
Building corners with angle slips - Buchsbaumweg, Hamburg



The random bond

Decide on the random bond.

Two headers can easily be cut out of a clinker slip with a tile cutter, a flex or a wet saw.





Building corner with ledge, Buchsbaumweg, Hamburg



building corner with angle slip - 2100 Blankenese dark coloured

Shaped ledge brick



The correct execution of window lintels:

1. with angle slips
2. with header bricks and angle slips



Window lintel laid in running bond.

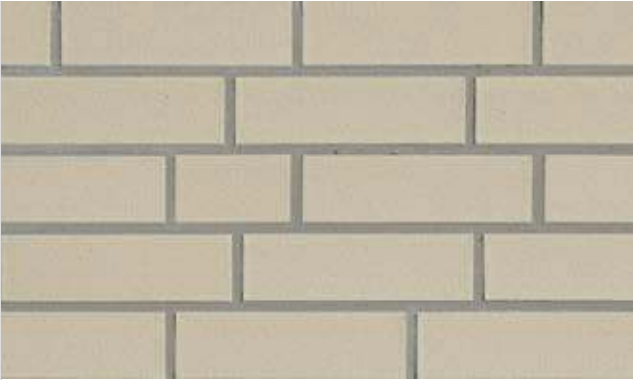
We have developed a special lintel element with drip edge for execution of window lintels in running bond. For DF and NF bonds. The long leg of the angle groups deep into the masonry niche and clads the structural elements.

3. with window lintel angle



Product overview – ABC ceramic facade in clinker format.

1924/0 Beige smooth



1924/2 Beige grained



1925/0 Grey smooth



1925/2 Grey grained



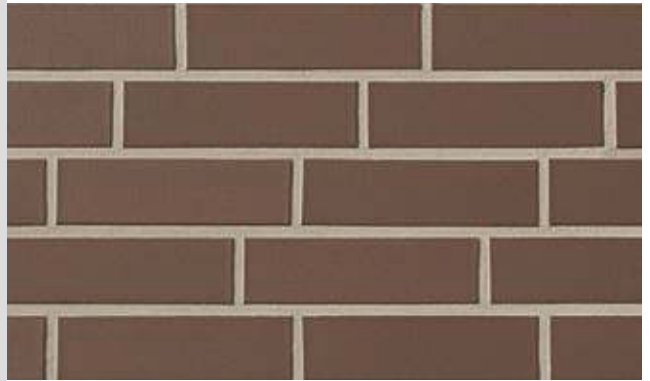
1927/0 Sandyellow smooth



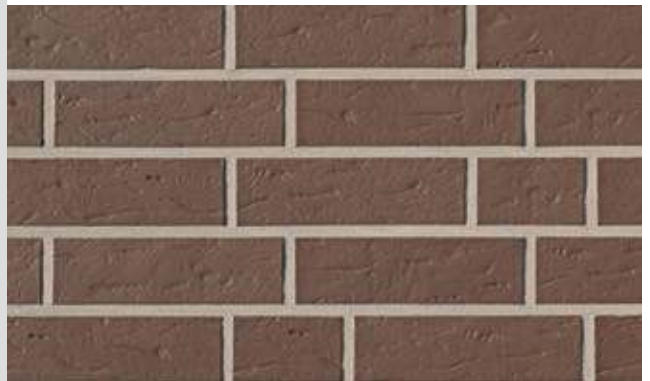
1927/2 Sandyellow grained



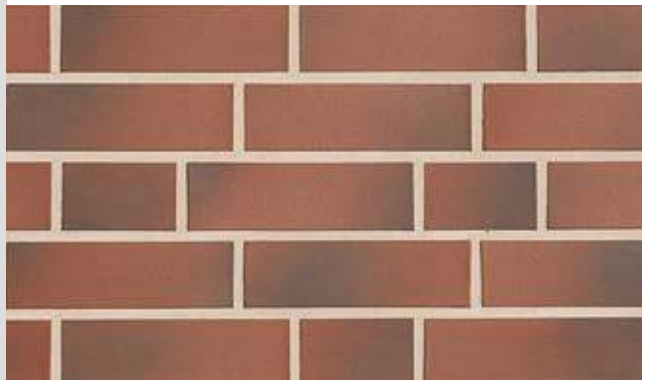
1926/0 Brown smooth



1926/2 Brown grained



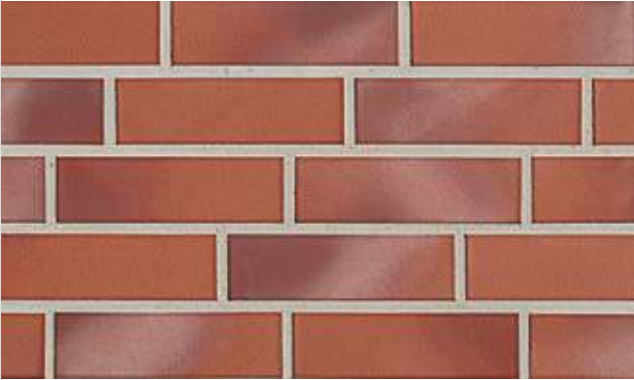
1004/0 Natural fired smooth



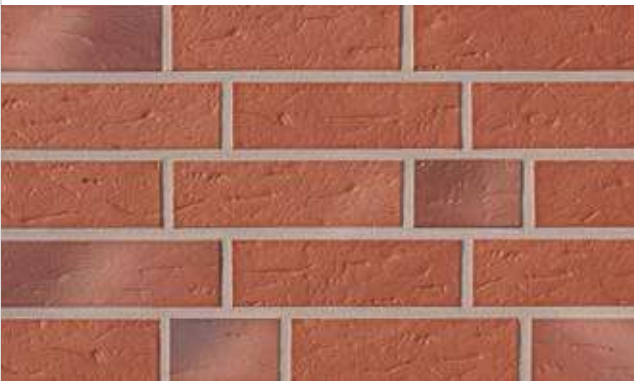
1004/2 natural fired grained



1827/0 Juist smooth



1827/2 Juist grained



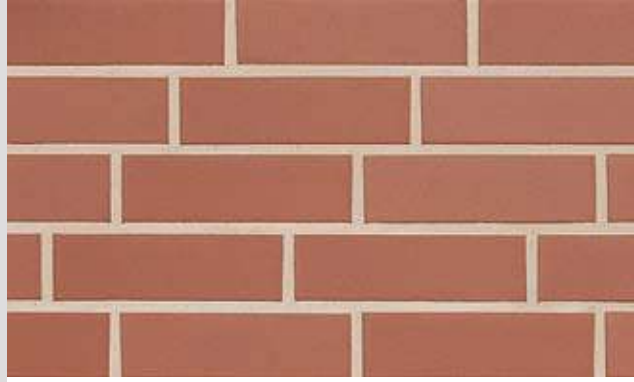
1823/0 Lanzarote smooth



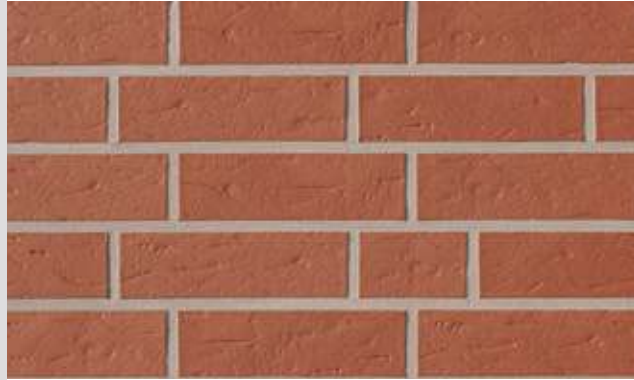
1823/2 Lanzarote grained



1821/0 Malta smooth



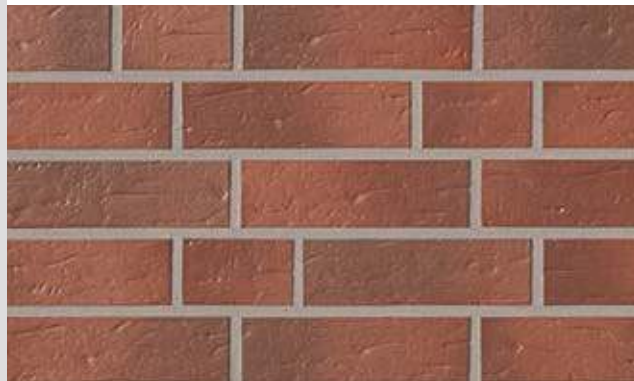
1821/2 Malta grained



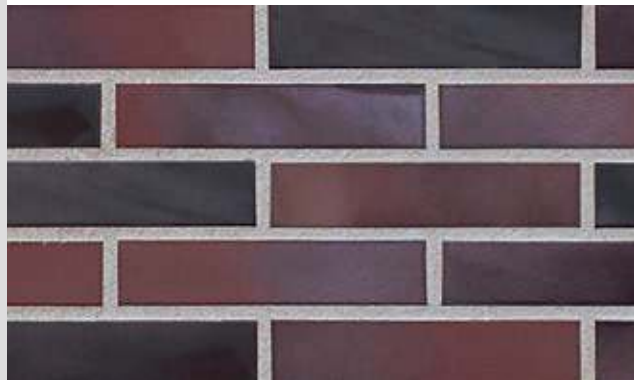
1822/0 Nordkap smooth



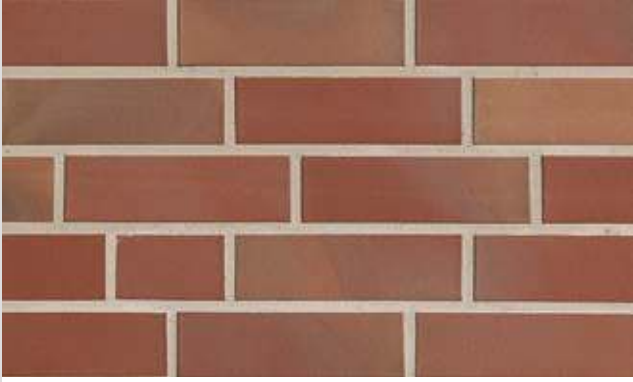
1822/2 Nordkap grained



Bern



1825/0 Borkum smooth



1825/2 Borkum grained



1828/0 Aubergine smooth



1830/0 Texel smooth



1831/0 Dresden smooth



1831/2 Dresden grained

1826/0 Baltrum smooth
1826/2 Baltrum grained (not shown)

1829/0 silver black



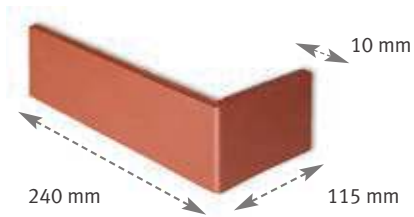
Slate grey texture



Slate coloured texture



brick slips + angle slip · 10 mm thickness



Nr.	Bezeichnung	Farbe	240 x 52 x 10 mm angle slip		240 x 71 x 10 mm angle slip		240 x 115 x 10 mm angle slip		Base Mineral fibre insulation	Base Rigid polystyrene foam
			DF	DF	NF	NF	2 DF	2 DF		
1828/0	Aubergine / smooth	blue violet flamed	*				*			
1826/0	Baltrum / smooth	blue brown					*			
1826/2	Baltrum / grained	blue brown	*				*			
1924/0	Beige / smooth	beige self coloured								
1924/2	beige / grained	beige self coloured	*				*			
1825/0	Borkum / smooth	red brown flamed								
1825/2	Borkum / grained	red brown flamed	*				*			
1926/0	Brown / smooth	Brown self coloured								
1926/2	Brown / grained	Brown self coloured	*				*			
1925/0	Grey / smooth	Grey self coloured								
1925/2	Grey / grained	Grey self coloured	*				*			
1827/0	Juist / smooth	Red blue coloured flamed					*			
1827/2	Juist / grained	Red blue coloured flamed	*				*			
1823/0	Lanzarote / smooth	yellow flamed								
1823/2	Lanzarote / grained	yellow flamed					*			
1821/0	Malta / smooth	red self coloured								
1821/2	Malta / grained	red self coloured					*			
1004/0	Naturally fired TO / smooth	red black flamed	*				*			
1004/2	Naturally fired TO / grained	red black flamed	*				*			
1822/0	Nordkap / smooth	red coloured								
1822/2	Nordkap / grained	red coloured					*			
1927/0	Sandyellow / smooth	yellow self coloured	*							
1927/2	Sandyellow / grained	yellow self coloured					*			
1829/0	silver black / smooth	black, matte gloss	*				*			
1830/0	Texel / smooth	grey black	*				*			
1831/0	Dresden / smooth	black flamed	*				*			
1831/2	Dresden / texture	black flamed	*				*			
	slate grey texture		*	*			*			
	Slate coloured texture		*	*			*			
	Bern		*	*			*			

* available upon request

10 mm

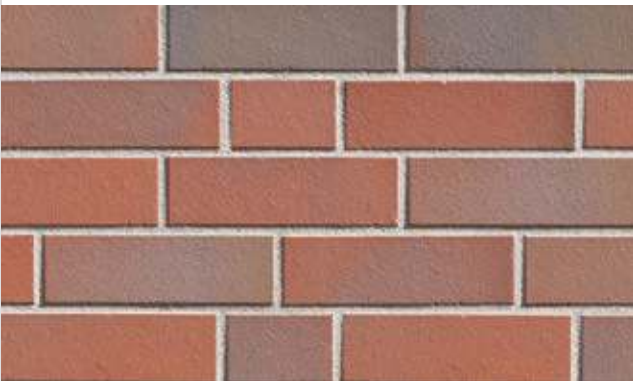
2106 Atlantis



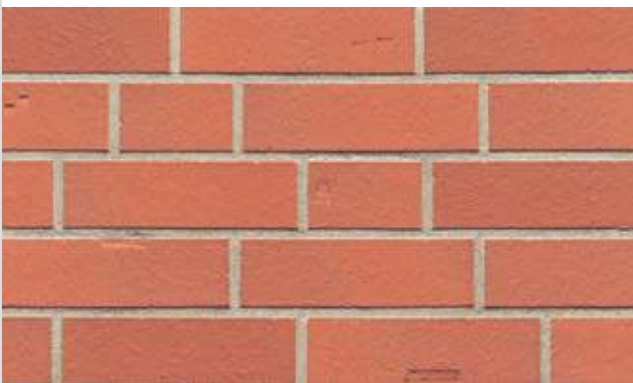
2104 Buxtehude



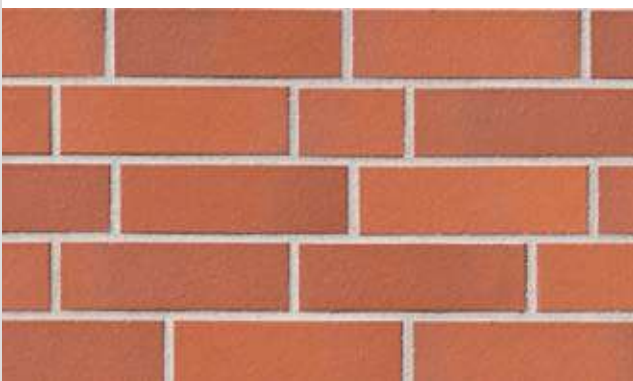
2102 Altona red coloured



2101 Finkenwerder FS red



2101 Finkenwerder red



2108 Elmshorn ochre grey



1831/4 Dresden coal



2103 Winterhude black-blue coloured



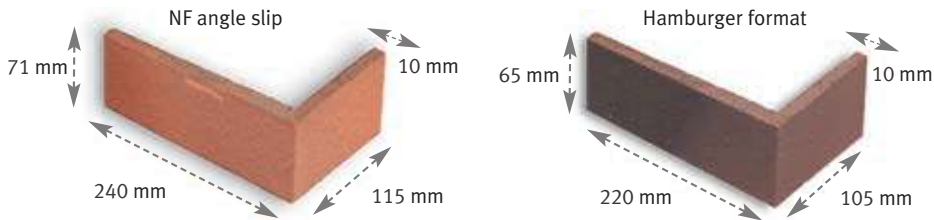
2100 + 2103 Blankenese-Winterhude dark coloured



2100 Blankenese dark coloured



brick slips + angle slip · 10 mm thickness



Colour no.	Designation and Colour	Surface	NF	DF	HF	OF	base	base
2102	Altona red coloured	raw brick	●	*	*	*	●	●
2100	Blankenese dark coloured	raw brick	●	*	*	*	●	●
2101	Finkenwerder red	raw brick	●	*	*	*	●	●
2103	Winterhude black blue coloured	raw brick	●	*	*	*	●	●
2104	Buxtehude red brown coloured	raw brick	●	*	*	*	●	●
2106	Atlantis grey coloured	raw brick	●	*	*	*	●	●
2108	Elmshorn ochre grey	raw brick	*	*	*	*	●	●
1831/4	Dresden / coal black flamed	raw brick	●	*	*	*	*	●
* available upon request								

2106 Atlantis



ABC ceramic facade in the living room.

INTERIOR DESIGN

ABC ceramic facades offer a real alternative to brick patterned, artificial stone panels in interiors. A true brick wall can be achieved with an added thickness of as little as 16-20 mm.

The authentic character of brick slips is immediately impressive. They shape the space and create a comfortable, natural ambience in living rooms, restaurants and businesses. A decorative option that interior designers also know how to use. Lasting protection of interior walls must be achieved with every element of the ceramic facade. This offers numerous design options for schools, staircases and corridors (with graffiti protection).

The ABC colour and form programme enables implementation of diverse, creative concepts.

No individual approval for use in interior spaces is required for long formats greater than 490 mm and max. 665 mm.

2100 Blankenese dark coloured



Brick slips in ABC long format®.

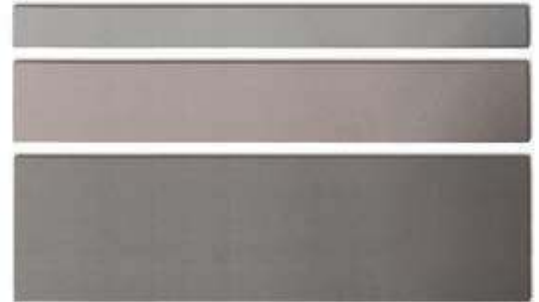
Basic format
365 mm length
Application in grid dimension:
115 – 240 – 365 mm



Basic format
490 mm length
Application in grid dimension:
115 – 240 – 365 – 490 mm



Special format *
600 mm length



* An individual approval for use in
outdoor areas is required for
lengths over 490 mm!

Atlantis, Long format 365 mm, in random masonry bond



Long format building corners with angles

The basic format corners (365 mm length) are optimally designed with an angle of 240 x 115 mm. In the random masonry bond, stretchers and headers alternate irregularly.

Masonry pattern in ABC long format®.

Layout example:

Random masonry bond with 365, 240 and 115 mm.



ABC long format® in random bond

Length	Percentage distribution in terms of area	DF pcs/m ²	NF pcs/m ²
365 mm	70%	30	19
240 mm	20%	12	10
115 mm *	10%	12	9

* cut from 240 mm slip on site

Long format

- Long format in classic masonry pattern with lengths of 365 mm, 240 mm, 115 mm*.
- Long format in 490 mm-grid (pcs per m²)
DF = 32 pcs/m² - NF = 24 pcs/m² - 2DF = 18 pcs/m²
- An individual approval is necessary for long formats of more than 490 mm length to a max. of 600 mm length on ETIC systems.
Not required when used **in interiors spaces**.

Product overview –
Brick slips in
ABC long format[®]
10 - 13,5 mm.

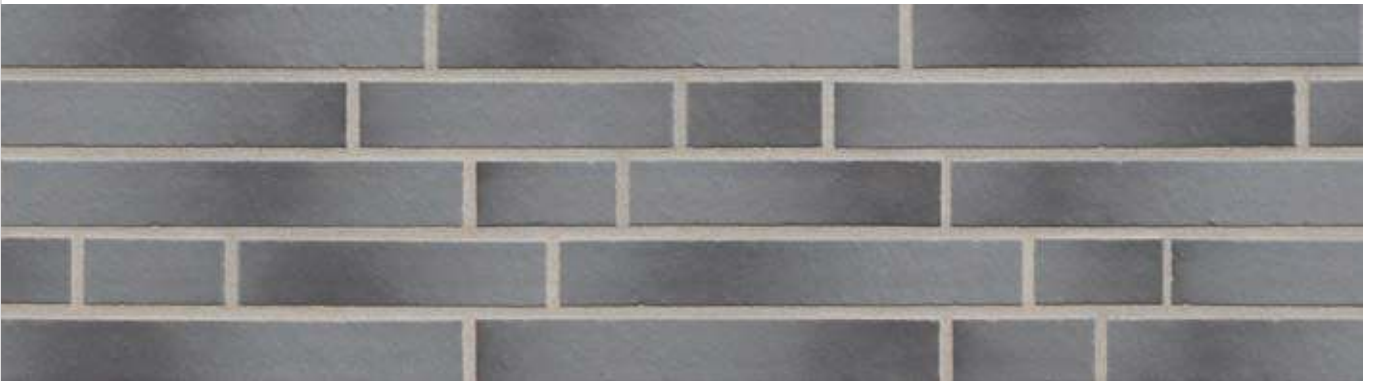
Atlantis, Long format 365 mm, in random masonry bond



2106-L Atlantis long format
DF 365 mm



1830-L Texel smooth long format
DF 365 mm



2878-L Amrum seashell white smooth
long format DF 365 mm



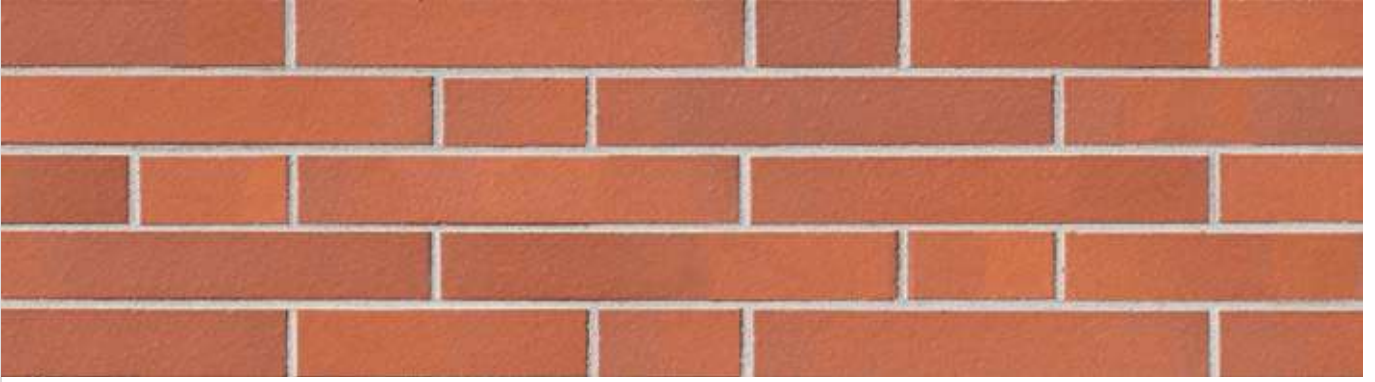
2108-L Elmsborn ochre grey
long format DF 365 mm



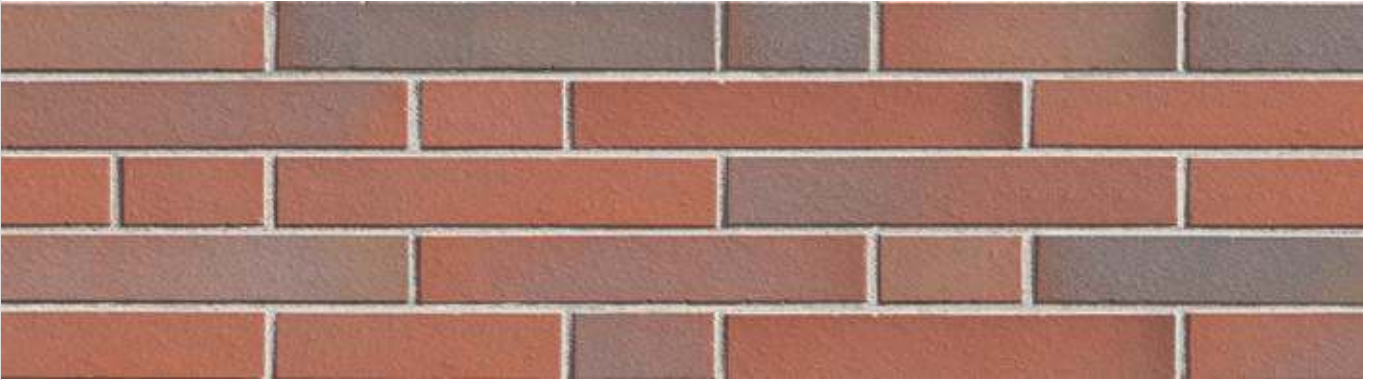
2104-L Buxtehude long format
DF 365 mm



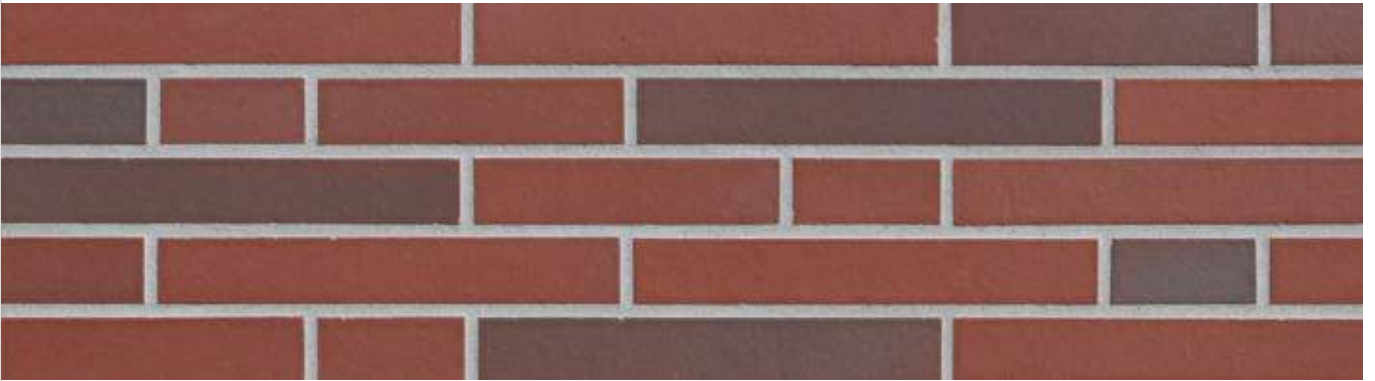
2101-L Finkenwerder long format
DF 365 mm



2102-L Altona red coloured
long format DF 365 mm



2107-L Teuto red coloured
long format DF 365 mm



2100-L Blankenese dark coloured
long format DF 365 mm



2100-L/2103-L Blankenese-Winterhude
dark coloured long format DF 365 mm



2103-L Winterhude long format
DF 365 mm

ABC long format brick slips • 10 mm thickness

Also available in 13.5 mm thickness upon request.

Colour no.	Designation and colour	Surface	365 x 71 x 10 mm		365 x 52 x 10 mm	
			NF	DF	base Mineral fibre insulation	base Rigid polystyrene foam
2106-L	Atlantis • long format	smooth	●	*	●	●
1830-L	Texel smooth • long format	smooth	●	*		●
2108-L	Elmshorn ochre grey • long format	smooth	●	*	●	●
2104-L	Buxtehude • long format	raw brick	●	*	●	●
2102-L	Altona red coloured • Long format	raw brick	●	*	●	●
2100-L	Blankenese dark coloured • long format	raw brick	●	*	●	●
2101-L	Finkenwerder red • long format	raw brick	●	*	●	●
2103-L	Winterhude black-blue coloured • long format	raw brick	●	*	●	●
2104-L	Buxtehude red brown coloured • long format	raw brick	●	*	●	●
2106-L	Atlantis grey coloured • long format	raw brick	●	*	●	●
2107-L	Teuto red coloured • long format	raw brick	●	*	●	●
2100-L / 2103-L	Blankenese-Winterhude • long format	raw brick	●	*	●	●
2110-L	Othmarschen grey coloured • long format	raw brick	●	*	●	●
2878-L	Amrum seashell white • long format	raw brick	●	*	●	●

* auf Anfrage lieferbar

Glazed ABC ceramic facade.



ABC-3D-ceramic
Shaped parts to architectural
and colour specifications



Glazed ABC ceramic facade, "Mitte" underground station / restoration and historic preservation, Berlin underground stations



E-Werk Berlin



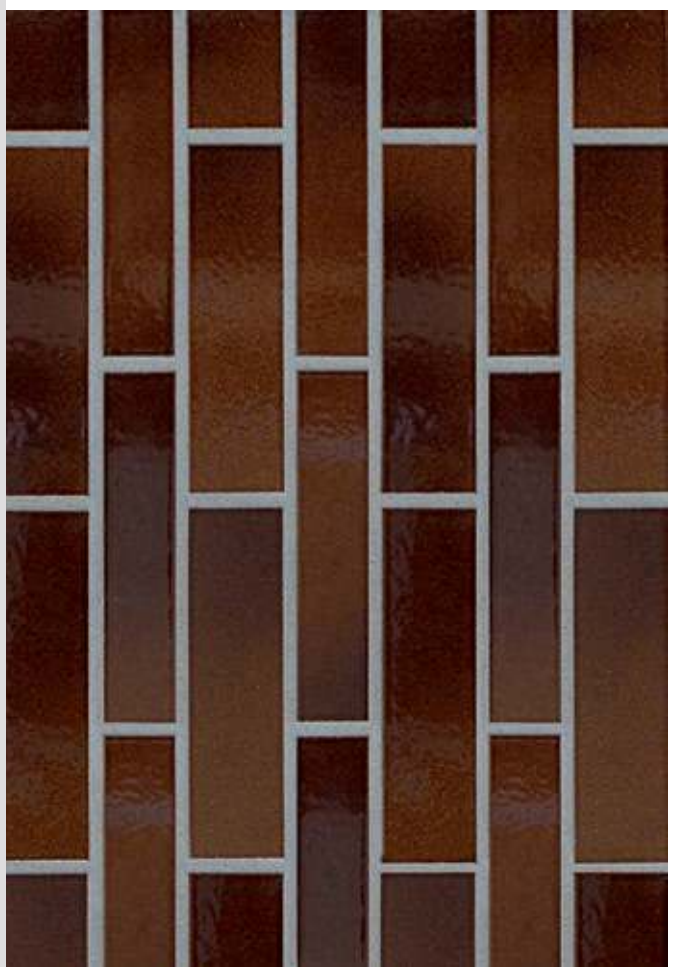
Restoration and historic preservation, Berlin underground stations



360 fern green, Wilhelm-Busch school, Glinde/Hamburg

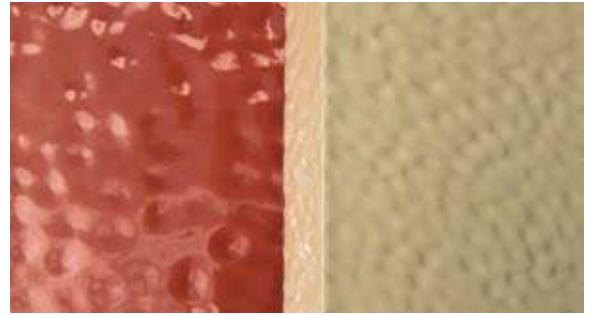


Special colour and formats, Swiss project



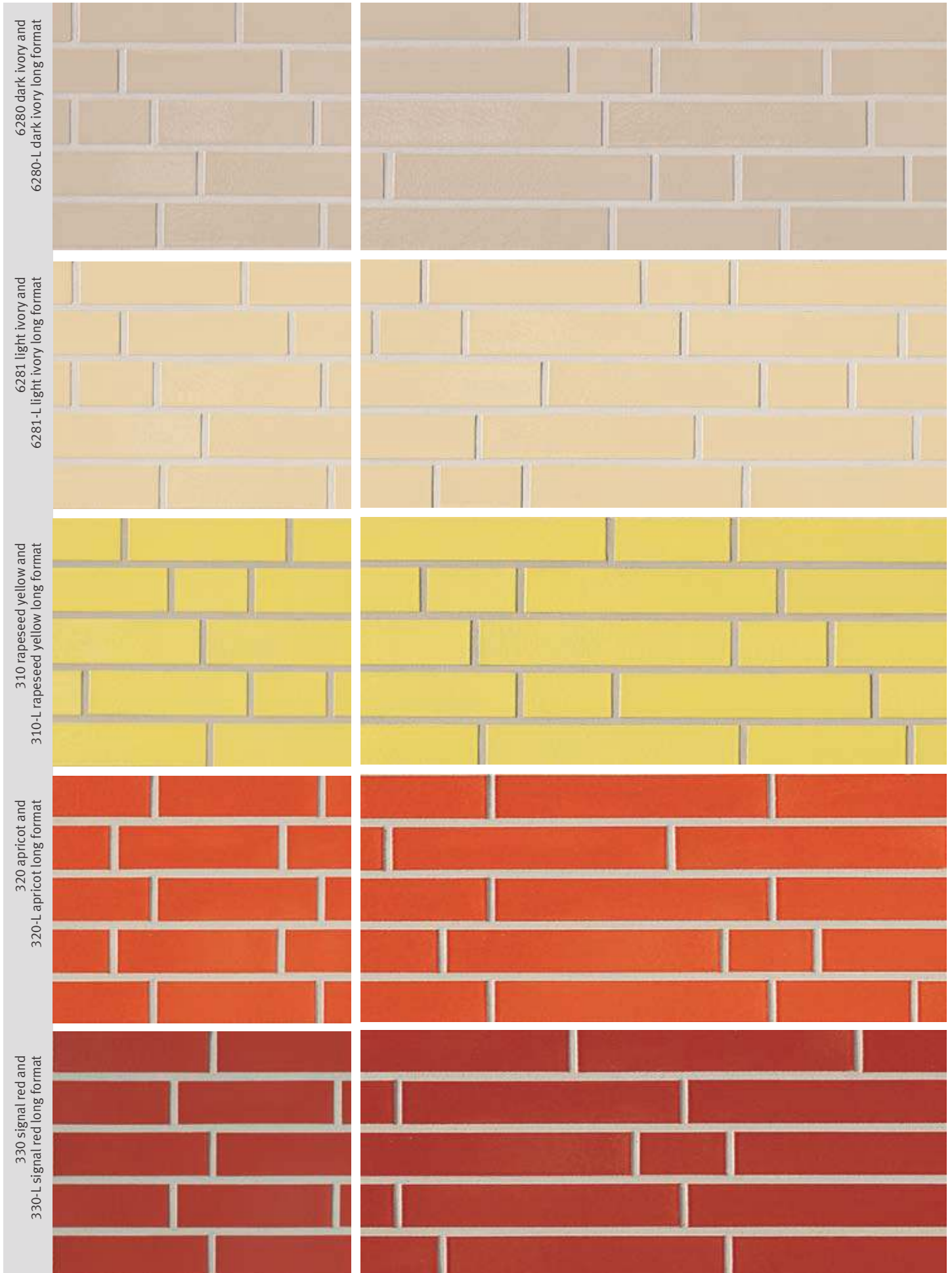
Product Overview – glazed ceramic facade.

Individual object colors with selected surfaces are available by default and in coordination with the planners for special architectural projects. The pictured colors are available in a short time.

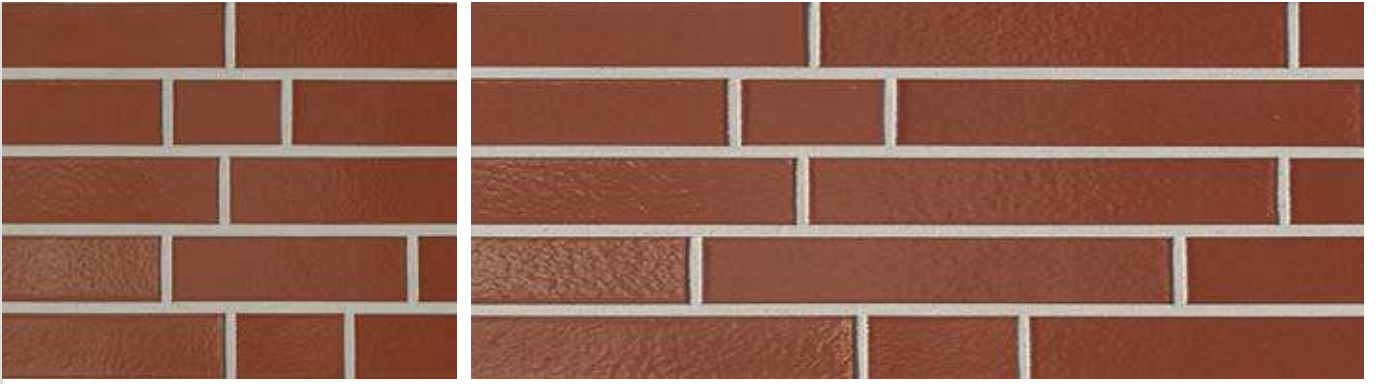


textured surface, high gloss

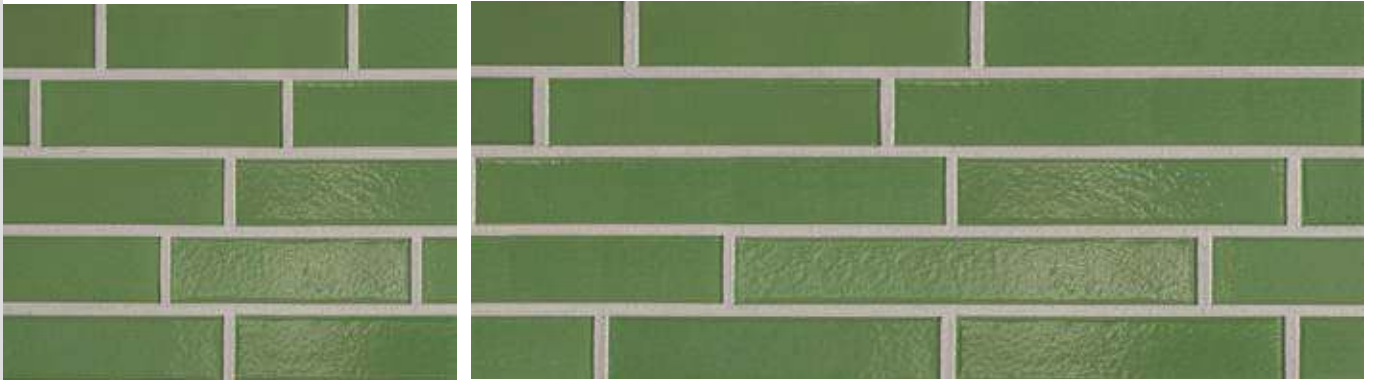




370 chestnut brown and
370-L chestnut brown long format



360 fern green and
360-L fern green long format



400-L apple green long format



350 navy blue and
350-L navy blue long format

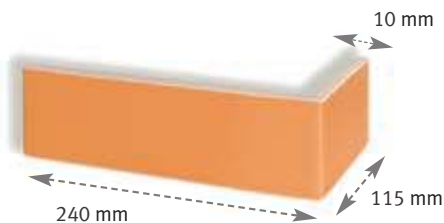


Glazes and variable formats

to individual specifications for distinctive architecture are available by arrangement.



Glazed clinker and angle slips · 10 mm thickness



Colour no.	Designation	Colour	240 x 52 x 10 mm angle slips		240 x 71 x 10 mm angle slips		Base Mineral fibre insulation	Base Rigid polystyrene foam
			DF	DF	NF	NF		
300	Astral white / smooth	white self-coloured gloss	*		●		●	
310	Rapeseed yellow / smooth	yellow self-coloured gloss	*		●		●	
320	Apricot / smooth	orange self-coloured gloss	*		●		●	
330	Signal red / smooth	red self-coloured gloss	*		●		●	
340	Frisian blue / smooth	light blue self-coloured gloss	*		●		●	
350	Navy blue / smooth	dark blue self-coloured gloss	*		●		●	
360	Fern green / smooth	green self-coloured gloss	*		●		●	
370	Chestnut brown / smooth	brown self-coloured gloss	*		●		●	
380	Icelandic grey / smooth	dark grey self-coloured gloss	*		●		●	
390	Deep black / smooth	black self-coloured gloss	*		●		●	
400	Apple green / smooth	light green self-coloured gloss	*		●		●	
6281	Ivory / light	light yellow self-coloured gloss	*		●		●	
6280	Ivory / dark	light ochre self-coloured gloss	*		●		●	
6270	Greenland / smooth	light grey self-coloured gloss	*		●		●	

* available upon request

12 mm thick, **glazed ABC clinker and angle slips** always have a **thin-bed back side**. The 13.5 mm clinker slips are available with a **dovetail back side**. Glazed clinker slips for use on **mineral fibre insulation** are available upon request.

ABC ceramic facade Creativa.



1208 Kitzbühel

1660/0 Cordoba smooth



Product overview – Creativa.

1207 Salzburg



1309 White textured



1659/2 Kesch textured



1659/0 Kesch smooth



1208 Kitzbühel



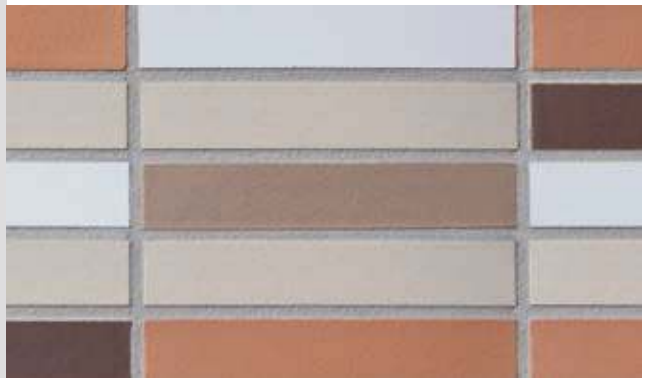
1308 Red coloured textured sanded



1307 Red coloured textured



Mixed colour



1666/0 Tasna smooth



1666/2 Tasna textured



2001 Granite grey



1701 Sandstone



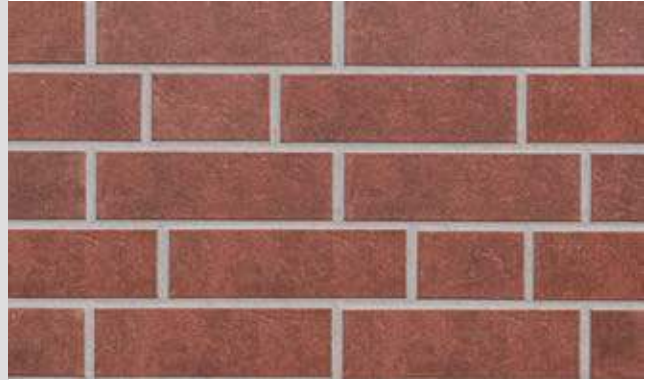
1702 Copper



1704 Bronze



2003 Granite red



1707 Manganese

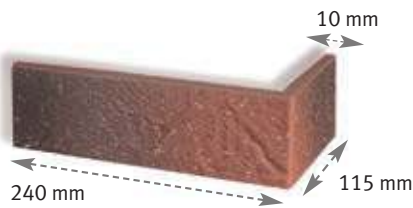


1005 Black glazed

Blankenese rustic
(rustic texture can be produced in all colours)

1666/0 Tasna smooth long format
and 6290/L Light grey

Creativa glazed clinker and angle slips · 10 mm thickness



Colour no.	Designation	DF 240 x 52 Angle slip	NF 240 x 71 Angle slip	2 DF 240 x 115 angle slips	Base Mineral fibre insulation	Base Rigid polystyrene foam
1207	Salzburg	*	●	*	●	●
1208	Kitzbühel	*	●	*	●	●
1307	Red coloured textured	●	●			●
1308	Red coloured textured sanded	*	●			●
1309	White textured	*	●	*	●	●
1659/0	Kesch smooth	●	*	*	●	●
1659/2	Kesch textured	●	*	*	●	●
1666/0	Tasna smooth	●	●	*	●	●
1666/2	Tasna textured	●	●	*	●	●
1701	Sandstone	*	●	*	●	●
1702	Copper	*	●	*	●	●
1704	Bronze	*	●	*	●	●
1707	Manganese	*	●	*	●	●
2001	Granite grey	*	●	*	●	●
2003	Granite red	*	●		●	●
1005	Black glazed	*	●	*	●	●
	Blankenese rustic (rustic texture can be produced in all colours)	*	●	*	●	●

* available upon request

ABC ceramic facade mixed formats.

Mixed long formats • light and medium grey matte surface, dark grey gloss



Size overview ceramic facade and brick slips.

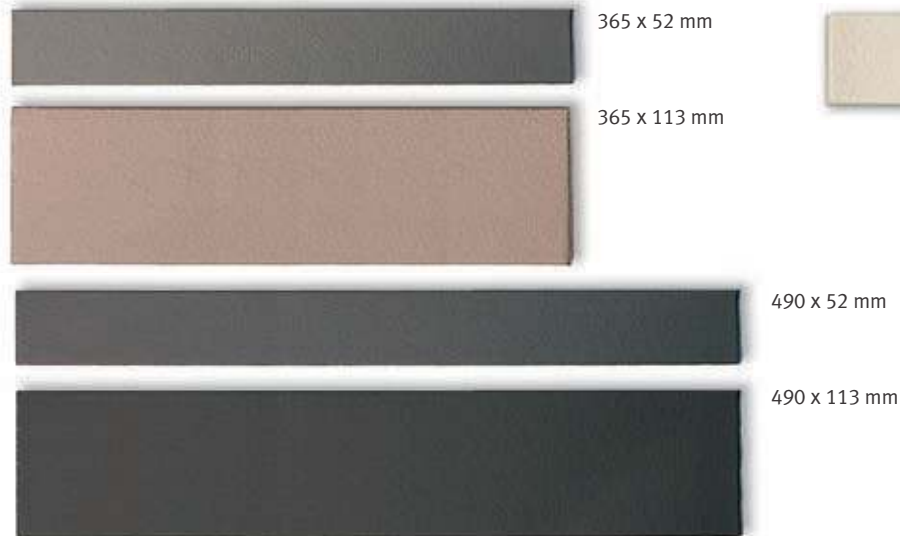
Brick slips



Brick slips



Ceramic facade long format



Quarter stone format



Special ceramic facade formats



Package and delivery data - ABC ceramic facades.



Packing data · 13.5 mm + 15 mm thickness

Packing data	Slips 239/50/13.5	Slips 239/50/13.5	Slips 239/69/15	Corner slips 239/112/69/15	Slips 239/69/13.5	Slips 365/52/10
pcs / sq. m / vert. m	64 pcs/sq. m	64 pcs/sq. m	48 pcs/sq. m	12 pcs/vert. m	48 pcs/sq. m	42 pcs/sq. m
kg / sq. m / pc	21 kg/sq. m	24 kg/sq. m	24 kg/sq. m	0,72 kg/pcs	21,5 kg/sq. m	18 kg/sq. m
pcs/package	36 pcs/package	30 pcs/package	34 pcs/package	7 pcs/package	36 pcs/package	34 pcs/package
sq. m / package	0,56 sq. m/pack.	0,46875 sq. m/pack.	0,708 sq. m/pack.		0,75 sq. m/pack.	0,8 sq. m/pack.
sq. m / pallet	40,32 sq. m/pal.	33,75 sq. m/pal.	42,48 sq. m/pal.		45 sq. m/pal.	62,4 sq. m/pal.
pcs / pallet	2592 pcs/pal.	2160 pcs/pal.	2040 pcs/pal.	840 pcs/pal.	2160 pcs/pal.	2652 pcs/pal.
packages / pallet	72 packages/Pal	72 packages/pal.	60 packages/pal.	120 packages/pal.	60 packages/pal.	78 packages/pal.
kg / pallet	847 kg/pal.	810 kg/pal.	1020 kg/pal.	605 kg/pal.	968 kg/pal.	1123 kg/pal.

Slips are manufactured in pairs. They must be separated on site.

Packing data · slips DF + NF

Slips Packing data	Slips DF	Slips DF 240/52/8	Corner slips DF 240/52/10	Slips DF 240/115/52/10	Corner slips DF 240/52/14	Slips NF 240/115/52/14	Slips NF 240/71/7	240/71/8
pcs / sq. m / vert. m	64 pcs/sq. m	64 pcs/sq. m	16 pcs/sq. m	64 pcs/sq. m	16 pc/vert. m	48 pcs/sq. m	48 kg / sq. m / pc	
kg / sq. m / pc	15 kg/sq. m	17 kg/sq. m	0,5 kg/ pc	25 kg/sq. m	0,5 kg/ pc	14,05 kg/sq. m	14 kg/sq. m	
pcs/package	60 pcs/package	48 pcs/package	10 pcs/package	30 pcs/package	8 pcs/package	68 pcs/package	60 pcs/package	
sq. m / package	0,938 sq. m/pack.	0,75 sq. m/pack.		0,47 sq. m/pack.		1,417 sq. m/pack.	1,25 sq. m/pack.	
sq. m / pallet	67,536 sq. m/pal.	54 sq. m/pal.		33,84 sq. m/pal.		85,02 qm/Palette	75 sq. m/pal.	
pcs / pallet	4320 pcs/pal.	3456 pcs/pal.	1200 pcs/pal.	2160 pcs/pal.	768 pcs/pal.	4080 pcs/pal.	3600 pcs/pal.	
packages / pallet	72 packages/pal.	72 packages/pal..	120 packages/pal..	72 packages/pal..	96 packages/pal..	60 packages/pal..	60 packages/pal..	
kg / pallet	1013 kg/pal.	918 kg/pal.	600 kg/pal.	846 kg/pal.	384 kg/pal.	1195 kg/pal.	1050 kg/pal.	

Slips are manufactured in pairs. They must be separated on site.

Verpackungsdaten · Riemchen NF + 2DF + HF

Riemchen Verpackungsdaten	Riemchen NF 240/71/10	Eckriemchen NF 240/115/71/10	Riemchen 2DF 240/115/10	Eckriemchen 2DF 240/115/113/10	Riemchen HF 220/65/14	Eckriemchen HF 220/105/65/14	Riemchen NF 240/71/14	Eckriemchen NF 240/115/71/14
pcs / sq. m / vert. m	48 pcs/sq. m	12 pcs/vert. m	33 pcs/sq. m	8 pcs/vert. m	56 pcs/sq. m	13 pcs/vert. m	48 kg/sq. m/pc	12 pcs/vert. m
kg / sq. m / pc	18,5 kg/sq. m	0,6 kg/pcs	20 kg/sq. m	1,1 kg/sq. m	26 kg/sq. m	0,9 kg/pcs	29,4 kg/sq. m	0,9 kg/pcs
pcs/package	48 pcs/pack.	10 pcs/pack.	24 pcs/pack.	20 pcs/pack.	24 pcs/pack.	8 pcs/pack.	24 pcs/pack.	8 pcs/pack.
sq. m / package	1 sq. m/pack.	–	0,727 sq. m/pack.	–	0,4286 sq. m/pack.	–	0,5 sq. m/pack.	–
qm / pallet	60 sq. m/pal.	–	52,344 sq. m/pal.	–	32,145 sq. m/pal.	–	37,5 sq. m/pal.	–
pcs / pallet	2880 pcs/pal.	1200 pcs/pal.	1728 pcs/pal.	720 pcs/pal.	1800 pcs/Pal	768 pcs/pal.	1800 pcs/pal.	768 pcs/pal.
packages / pallet	60 Pakete/Pal	120 pack./pal.	72 pack./pal.	36 pack./pal.	75 pack./pal.	96 pack./pal.	75 pack./pal.	96 pack./pal.
kg / pallet	1110 kg/pal.	720 kg/pal.	1047 kg/pal.	792 kg/pal.	836 kg/pal.	691 kg/pal.	1103 kg/pal.	691 kg/pal.

Slips are manufactured in pairs. They must be separated on site.

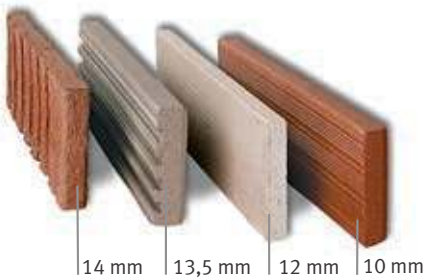
Specifications.



Mortar contamination

Standard clinker cleaner must be used for cleaning mortar contamination from installed areas. In every case, the effectiveness and suitability of this cleaner must be tested on the building in advance.

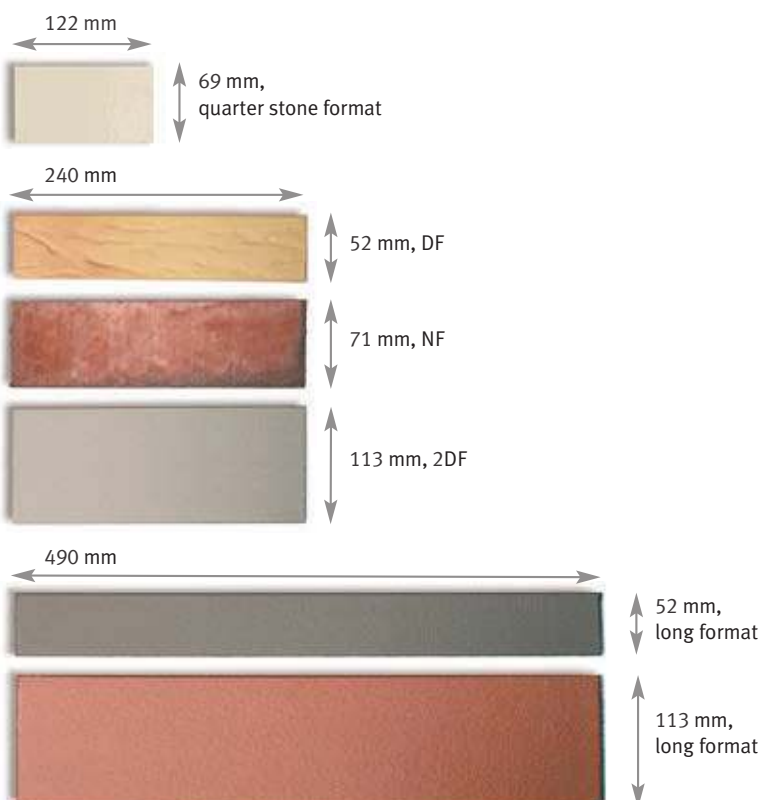
We recommend: Remmers-Klinkerreiniger Combi WR, diluted 1 : 15.



Material thicknesses

ABC clinker and angle slips are available in 10 mm, 12 mm, 13.5 mm and 14 mm thicknesses.

Formats



Requirements for ceramic facade on external thermal insulation composite systems.

Proven by test certificates:

ABC ceramic clinker slips comply with building regulation specifications.

1. DIN EN 771-1/May 2011, Part 1 regulates:

- frost resistance
- and additional properties

2. According to DIN 18515, Part 1

for exterior wall claddings, the following apply:

Section 1, area of application, rules:

- slip area $\leq 0.12 \text{ m}^2$
- Slip side length $\leq 0.49 \text{ m}$
- Slip thickness $\leq 15 \text{ mm}$

Section 4.3, building materials, rules:

- a maximum pore radius over $0.2 \mu\text{m}$ (2×10^{-4})
- an adhesion layer pore volume of at least $20 \text{ mm}^3/\text{g}$

3. According to specifications of the

German Institute of Building Technology (DIBt), Berlin, the following apply:

- maximum water absorption of 3%, with mineral fibre insulation
- maximum water absorption of 6%, with rigid polystyrene foam insulation panels

Clinker slip requirement

The stated clinker slip quantities per m^2 include joints (12 mm).

- quarter brick format

122 x 69 mm	96 pieces pro m^2
-------------	----------------------------
- DF

240 x 52 mm	64 pieces pro m^2
-------------	----------------------------
- NF

240 x 71 mm	48 pieces pro m^2
-------------	----------------------------
- 2DF

240 x 113 mm	33 pieces pro m^2
--------------	----------------------------
- long format

365 x 52 mm	43 pieces pro m^2
-------------	----------------------------
- long format

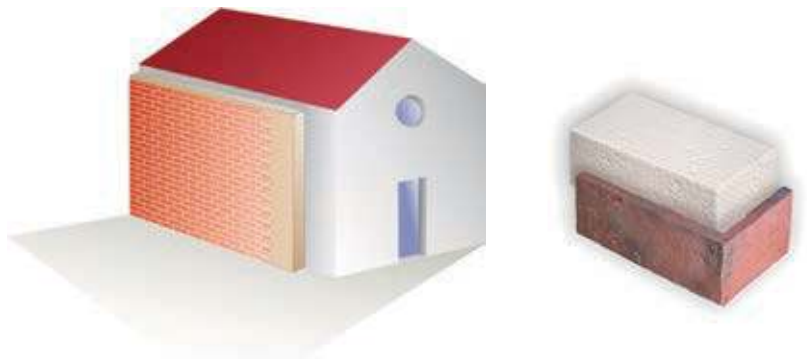
490 x 52 mm	32 pieces pro m^2
-------------	----------------------------

Warm a wrapping saves heating costs.

FROM OLD BUILDING TO ENERGY-SAVING PROPERTY.

Example: Residential building built in 1950

Uninsulated exterior walls compared with exterior walls with 12 cm of thermal insulation



Energy consumption with uninsulated exterior walls	295 kWh/m ²
Energy consumption with insulated exterior walls, 12 cm	210 kWh/m ²
	Energy savings approx. 30%

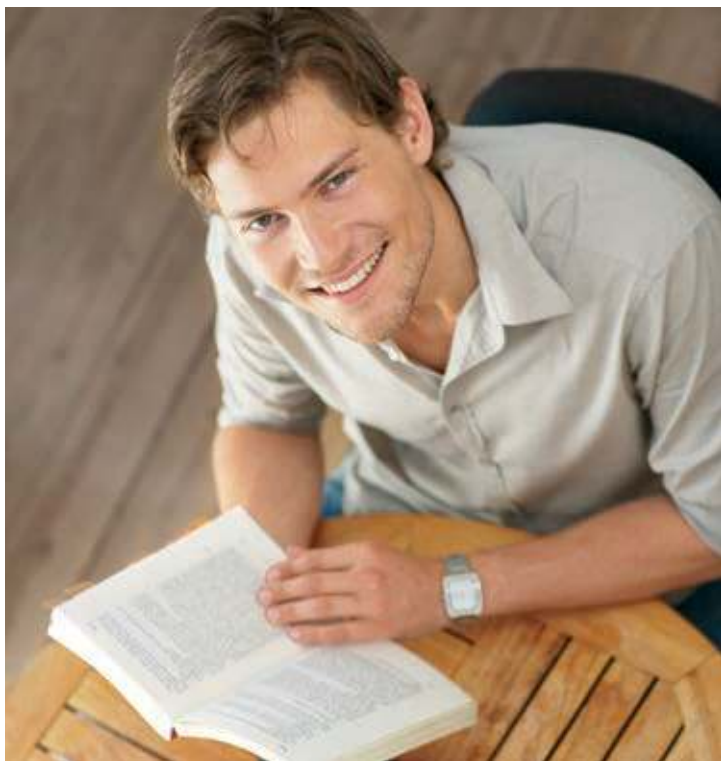
Thermal insulation of the exterior walls significantly lowers consumption of heating energy.

In the residential building example, built in 1950, the annual heating energy consumption is reduced from 295 kWh/m² to 210 kWh/m².

The potential energy savings with insulated exterior walls (12 cm) is approx. 30 percent.

With every additional energy-saving measure, such as installation of thermally insulated windows and roof insulation, the savings impact increases.

In addition to the significant energy savings of approx. 30 percent in the residential example with 120 m² of living area, the annual output of environmentally harmful CO² is reduced by approx. 71 kg/m². You can find more information about thermal insulation composite systems (ETIC systems) at: www.heizkosten-einsparen.de



Helpful building renovation partners.

An energy expert can lead you safely through the thermal jungle.

Make the correct energy-saving decisions - nowadays, an expert is indispensable.

Advice can be obtained from architects, engineers, insulation experts and energy consultants. The district and municipal administrations and environmental offices in your region have lists of local energy consultants and will be happy to provide information.

You can also find a list of insulation experts online. www.energie-effizienz-experten.de/expertensuche/

THE STATE PROMOTES THERMAL INSULATION OF EXTERIOR WALLS

Energy savings consultation

The federal government promotes energy consultation for residential buildings in accordance with the Federal Ministry for Economic Affairs and Energy directive concerning promotion of on-site energy consultation for residential buildings - On-site consultation - dated 29/10/2014 (German Federal Gazette BAnz AT 12/11/2014). Energy-oriented renovation of residential buildings plays a key role in the success of the energy system transformation. The objective of the support is to trigger private investments that lower energy consumption in residential buildings and reduce environmental pollution, especially CO₂ emissions. This supports the energy policy goal of a largely climate-neutral building stock in 2050.

Experts

Get advice from an expert. You will need one anyway, if you apply for a grant from the KfW. This also applies to individual measures such as exterior wall insulation. We also recommend that you consult an expert for qualified construction monitoring, which can also be subsidized.

Energy certificate for buildings

Like a wanted poster, the energy certificate documents the energy standard of the building. The owner must present an energy certificate when renting or selling an apartment or house. Potential buyers or tenants are thus informed about the anticipated amount of energy costs, which represent an ever-increasing percentage of housing

costs in unrenovated buildings. Non-residential buildings (such as offices, administrative buildings, commercial or shopping centres) require a so-called “energy certificate for non-residential buildings”.

Funding programmes for energy oriented renovation

There are numerous federal and regional funding programmes. They should be scrutinised, based on the latest information, because they change very quickly. References to important current federal funding programs are listed below:

Energy-efficient renovation - 151/152 loan

For renovation to KfW efficient house standard or individual energy oriented measures

[www.kfw.de/inlandsfoerderung/Öffentliche-Einrichtungen/Wohnwirtschaft/Finanzierungsangebote/Energieeffizient-Sanieren-Kredit-\(151-152\)/](http://www.kfw.de/inlandsfoerderung/Öffentliche-Einrichtungen/Wohnwirtschaft/Finanzierungsangebote/Energieeffizient-Sanieren-Kredit-(151-152)/)

IKK - Energy oriented city renovation - Energy efficient renovations for municipalities that renovate buildings

www.kfw.de/inlandsfoerderung/Partner-der-KfW/Kommunen/Relevante-Förderprodukte/218.html

Energy-efficient renovation - construction monitoring

For design and construction monitoring by experts

[www.kfw.de/inlandsfoerderung/Privatpersonen/Bestandsimmobilien/Finanzierungsangebote/Energieeffizient-Sanieren-Baubegleitung-\(431\)/](http://www.kfw.de/inlandsfoerderung/Privatpersonen/Bestandsimmobilien/Finanzierungsangebote/Energieeffizient-Sanieren-Baubegleitung-(431)/)

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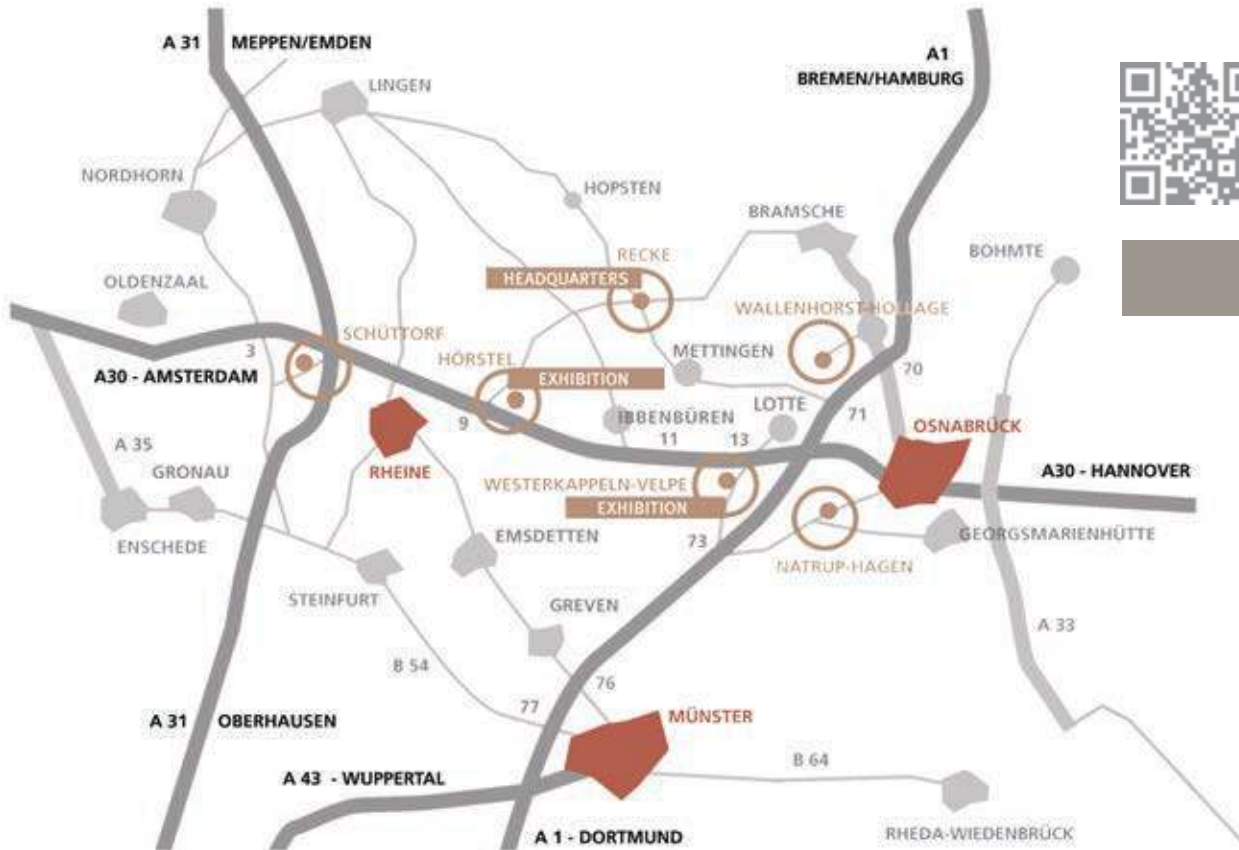
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