

KERASHAPE®

CERAMIC IN PROFILE

With its extensive bandwidth, the “KeraShape®” is primarily aligned towards setting highlights and supporting architects in realising individual concepts. Apart from their function as elements of architectural design, these moulded parts also serve entirely practical purposes as visual and sun protection.

The standard range comprises rectangular tubes with cross-sections of 50 x 60 mm and 60 x 60 mm in lengths of up to 1,800 mm, with lengths of up to 1,500 mm for the 50 x 100 mm variants. These are complemented by rounded lamellar elements in 140 x 60 mm with a maximum length of 1,200 mm. Using special fastening sets, the individual elements can be merged to form compact units or extended practically infinitely.

Even these standard items – which are perfectly co-ordinated to the other facade systems offered by AGROB BUCHTAL – permit numerous design variants. Furthermore, individual special shapes and sizes are possible depending on the respective building. After a brief examination of the individual case, experts at AGROB BUCHTAL are delighted to provide a technical and economic feasibility analysis.

This also applies to individual fastening concepts deviating from standard fastening variants. As the moulded parts – glazed or unglazed – are supplied in practically any color nuance also available for facade panels, there is nothing to stand in the way of tone-in-tone design. But contrasting colors are also a popular option as they open up numerous possibilities for making large facades appear less monotonous. The same also applies to the actual moulded parts when used to achieve a visual rhythm.



Käpylän Posteljooni, Helsinki, Finland
Architect: Anttinen Oiva Architects, Helsinki, Finland
Year: 2017 / Products: KeraShape®





Sustainable realisation of a colorful vision

The unique color concept of Finchley Memorial Hospital in London integrates the new building in the green, low-rise surroundings while simultaneously creating an agreeable ambience for staff, patients and visitors alike. An integral component of this concept is represented by the facade ceramics by AGROB BUCHTAL.

This three-floor complex with around 10,000 m² of useful space is to replace an ensemble of older predecessor buildings over the long term. It is distinguished by its immediate vicinity comprising therapeutic gardens, playgrounds and public greens. In order to harmoniously integrate the new clinic in this ambience, Murphy Philipps Architects collaborated with the color designer Frances Tobin to develop a color concept envisaging clearly-defined transitions from the outside in: the dominating shades of blue and green appear in the facades first before continuing – in declining degrees of saturation – into the internal orientation system as well as into the treatment and patients' rooms.

In designing the building shell, the architects relied on products from AGROB BUCHTAL: the facade cladding

comprises 3,500 slim ceramic panels and 2,000 ceramic rectangular tubes with a cross-section of 60 x 60 mm which were installed in front of the curved glass facades of the access areas. One of the particular features of these filigree elements 120 cm in length is the glaze applied on four sides, whereby the aim was to comply with high requirements which not only demanded absolutely uniform surface quality, but also color co-ordination between the two-dimensional ceramic panels, despite various manufacturing techniques. While developing the six color shades defined exactly by the planners, AGROB BUCHTAL took advantage of its many decades of experience with project-specific customised solutions and carried out extensive series of tests. The fact that such tasks are among the core competencies of the company is proven by its stock of more than 15,000 formulations for special colors in its in-house glaze laboratory.





Finchley Memorial Hospital, Finchley, London, Great Britain / Architect: Murphey Philipps Architects, London, Great Britain
 Year: 2012 / Products: KeraShape® / Photos: Benedict Luxmore





The entire project was determined by individuality and an attention to detail: apart from its pixelated colorfulness, the elements of only 15 cm height are characteristic for the facade panels mounted swiftly and subtly using concealed clamps thanks to the modern KeraTwin® K20 fastening system. Accordingly, the various lengths of between 63 and 120 cm, the six glaze colors and various mitre-cut profiles on the edges of the building gave rise to 84 different items, all of which were produced and cut precisely in the Schwarzenfeld plant in Bavaria. Against the backdrop of the subtly elegant architecture, the play by these color surfaces lends the new hospital its unique charm.

Environmental responsibility also played a central role when planning and realising the new building. This is also confirmed by the BREEAM certificate of sustainability awarding a top grade of "Excellent". Permanently fired into the ceramics, the **Hytect** technology by AGROB BUCHTAL also contributes to this award. It ensures that rainwater infiltrates dirt as a thin film and simply washes it away. Furthermore, **Hytect** has an antibacterial effect and prevents the development of moss and algae – highly efficiently and without chemicals, i.e. permanently clean, free of charge and environmentally neutral. And if that was not enough: **Hytect** facades even break down industrial and car fumes.

Sustainable building for scientists

The Centre for Science, Technology and Innovation in the Argentinian capital of Buenos Aires is the first of its kind in Latin America – and it also sets architectural standards. Its shining white exterior and energetic optimisation are made possible by a rear-ventilated KeraTwin® facade by AGROB BUCHTAL.



Ministerio de Ciencia, Buenos Aires, Argentina / Architect: Arch. Juan Carlos Angelomé / Products: KeraTwin®, KeraShape®



The Minister for Science Lino Barañao, whose department is housed in the new building complex along with research institutes and scientific organisations, regards the centre as a bridge between the past and the future of science in Argentina. The past – which rewarded the country with three Nobel Prizes in scientific areas – is also present in the form of some historical structures nearby: encompassing almost 45,000 m², the Centre was built on the site of a once famous winery which had fallen into disrepair over the years. Meanwhile, the buildings have not only been restored on the outside – they have also been practically integrated in the Science Centre.



The plans for the second construction phase lead the way into the future and will include an interactive science museum, a library, a media centre and auditoriums. This project is linked to an aspiration to provide knowledge to solve national problems, strengthen industrial productivity and create a new basis for social integration.

Sustainability plays a key role in the plans by the Argentinian architect Juan Carlos Angelomé. Water consumption, for example, was reduced by 50 per cent thanks to a treatment plant for process water. And solar thermal elements on the roof ensure the supply of hot water. Sustainability was also the clincher when selecting the KeraTwin® ceramic facade system by AGROB BUCHTAL. In total, approx. 8,000 square metres of white ceramic panels measuring 35 x 120 cm and 14 kilometres of rectangular tubes glazed on three sides were used as a rear-ventilated facade which covers all walls exposed to the sun. This construction enables the effects of solar radiation during the hot season to be reduced by more than 95 per cent – accompanied by the corresponding savings in air-conditioning. A key bonus for the architect Angelomé was also represented by the **Hytect** technology which generates a self-washing effect every time it rains, thereby guaranteeing that the building retains its shimmering white appearance.





KeraShape®



Ministerio de Ciencia, Buenos Aires, Argentina / Architects: Arch. Juan Carlos Angelomé /
Year: 2011 / Products: KeraTwin®, KeraShape®

A bank with style

Although the Raiffeisenforum Mödling sets some significantly contemporary highlights, it integrates seamlessly into the historic surroundings of the old town. This new building is also distinguished by manifold use and shines a spotlight on the topic of sustainability.

The curtain-type, rear-ventilated facade comprising KeraTwin® panels attributes the building an excellent energy footprint while simultaneously supporting the aesthetic concept pursued by the architects. Graded nuances of sand and filigree, three-dimensional ceramic elements in the area of the light strips attribute texture to the building while also picking up on the detailed design of its environment. In giving the building its cubic shape, there was a focus on the technical advantages of the ceramic system. Vertical wall and inclined roof areas were therefore possible throughout, which was an express request in Mödling. The construction without an offset in levels was possible by using various system profiles for the roof and walls.

Despite all of this clarity and modernity, the architecture still boasts an attention to detail, apparent in the special snow guard hooks on the sloping roofs which are significantly less conspicuous than conventional snow guards, but just as effective. When viewed from the street, they also represent a visual attraction.

And finally, this new building in the small town on the outskirts of Vienna also makes a key contribution to sustainability: the ceramic facade system is extremely weather-resistant and color-fast. Thanks to **Hytect**, each rain shower can be seen as a free wash preventing algae and moss from gaining a foothold. Furthermore, the facade also helps to keep the air clean by breaking down gaseous pollutants.

The jury for the Construction Prize of Lower Austria was sufficiently impressed by its architectural quality and skilful realisation to award it third place among 100 contestants.



Raiffeisen Forum, Mödling, Austria
Architects: arge X42, Vienna, Austria
Year: 2014 / Products: KeraTwin®, KeraShape®
Photos: Rich Hiebl





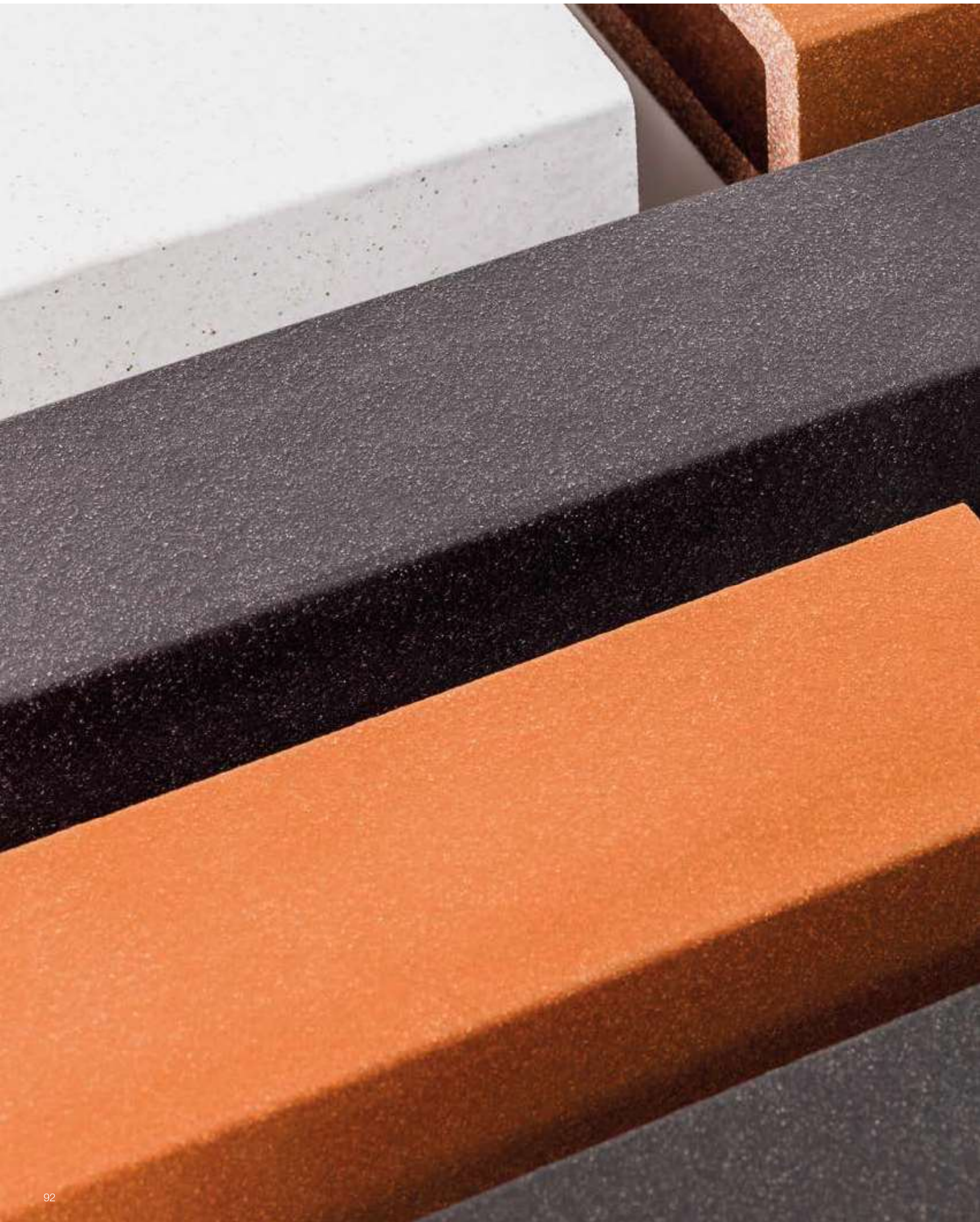
Eden Business Park Grotte Portella, Rom-Frascati, Italy / Architect: Daniela Capulli, Rome /
Year: 2012 / Products: KeraTwin®, KeraShape®



Breathing building

The Eden Business Park in the Via Grotte Portella was planned and realized according to strict targets set with regard to energy efficiency. A part of the concept also was the curtain-type, rear-ventilated facade as well as the shade-producing elements in front of the window areas, for which a total of eleven kilometres of rectangular tubes were installed.





Forms, colors and formats for KeraShape®

Whether as protection against view and sun or for giving large facade surfaces a rhythm – KeraShape® elements are extremely versatile and set visual accents. They are available as rectangular tubes with three or four glazed sides in three different cross-sections and lengths of up to 180 cm as well as in rounded lamellar form. The great variety of colors comprises the SpectraView range with its harmoniously matched color families with silky-matt glaze and glossy glazed contrasting colors as well as the unglazed Natura shades. On request, a special production according to individual specifications is also possible.

KeraShape® forms and formats



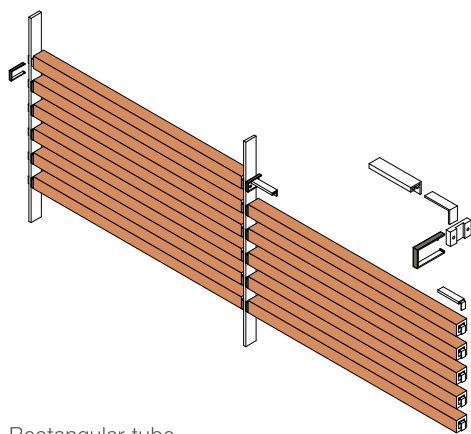
Rectangular tube
50 x 60 mm / 60 x 60 mm
Work size: 50 x 60 mm / 60 x 60 mm
Weight: 50 x 60 mm: 4.29 kg / lin. m.
60 x 60 mm: 4.49 kg / lin. m.
available unglazed as well as with
4 glazed sides. Possible up to
a length of 1,800 mm on request



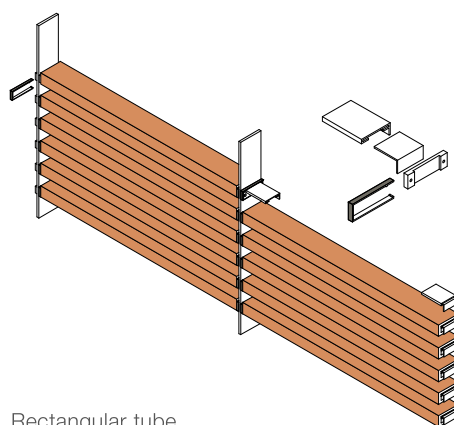
Rectangular tube
50 x 100 mm*
Work size: 50 x 100 mm
Weight: 6.84 kg / lin. m.
available unglazed as well as with
4 glazed sides. Possible up
to a length of 1,500 mm on request



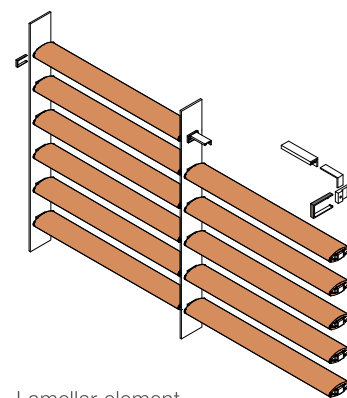
Lamellar element
Work size: 140 x 60 mm
Weight: 9.00 kg / lin. m
possible up to a length
of 1,200 mm,
available only unglazed



Rectangular tube

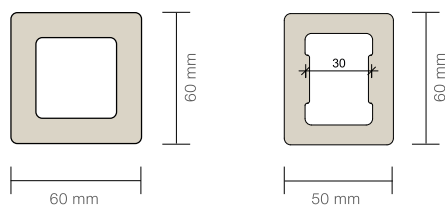


Rectangular tube

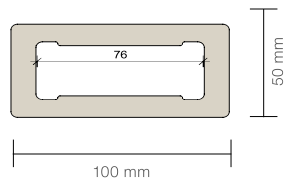


Lamellar element

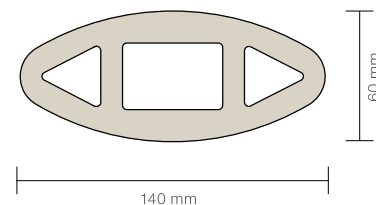
Cross-section of rectangular tube



Cross-section of rectangular tube



Cross-section of lamellar element



In addition to the variants shown, the production of individual articles is also possible. After a short check of the individual case for technical and economical feasibility, we will be pleased to provide you with project-specific information.

Matching rubber spacers available on request.

Mounting instructions for KeraShape®

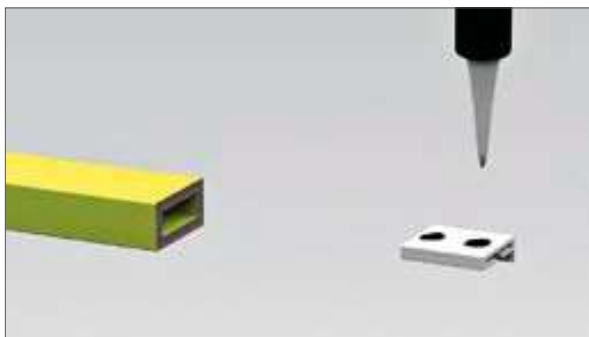
Substructure

The mounting of the substructure must be carried out according to project-specific, static calculation.

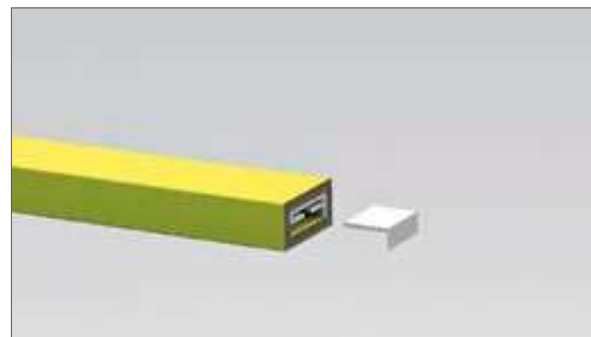
- For horizontal laying, the mounting sets (Art. no. 606, 607) can be used.
- One has to decide whether only base plates with hole and counterbore or also with M5 thread in addition have to be used.
- The “supports for mounting parts” must be fixed in the special pieces by means of polyurethane adhesive.
- For vertical laying, the clamps (Art. no. 685, 686, 687 and 685R, 686R, 687R respectively) can be used.
- The clamps can be fastened with stainless steel screws (Art. no. 659).



Mounting instructions as video film:
www.agrob-buchtal.de



Punctually glue the support for mounting part in place with polyurethane adhesive



Slide angular insert in support for mounting part



Fix base plate at the basic substructure



Hang the 3D Facade Ceramics with the angular insert in the base plate








Slide securing clip on the base plate

SpectraView glazed, silky-matt

				
6201 cream 1	6202 cream 2	6203 cream 3	6204 cream 4	6205 cream 5
				
6211 yellow 1	6212 yellow 2	6213 yellow 3	6214 yellow 4	6215 yellow 5
				
6221 apricot 1	6222 apricot 2	6223 apricot 3	6224 apricot 4	6225 apricot 5
				
6231 salmon-red 1	6232 salmon-red 2	6233 salmon-red 3	6234 salmon-red 4	6235 salmon-red 5
				
6241 pink 1	6242 pink 2	6243 pink 3	6244 pink 4	6245 pink 5

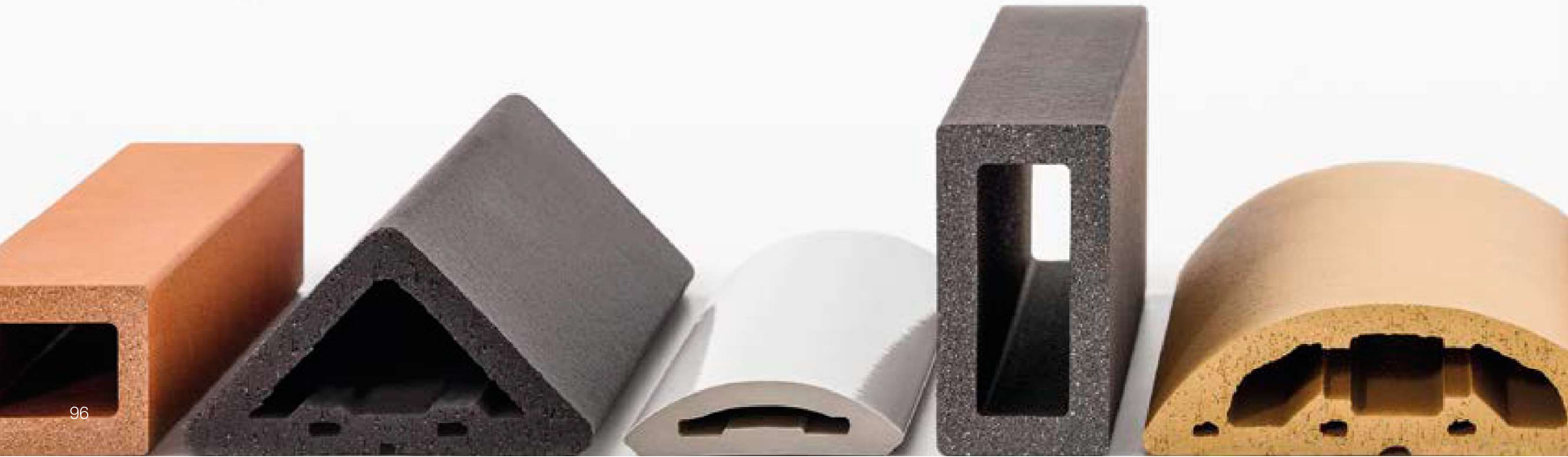
Contrasting colors, glazed, glossy

				
150 lemon-yellow	151 orange	152 apple-green	153 violet	154 contrasting red

Natura unglazed

				
407 white*	410 cream	411 ochre	412 salmon	396 salmon-red
				
414 light-grey	409 iron-grey	415 vulcan-grey	419 black*	416 smoky-blue*

* Not available as lamellar element special piece.





6251 neutral-grey 1



6252 neutral-grey 2



6253 neutral-grey 3



6254 neutral-grey 4



6255 neutral-grey 5



6261 grey 1



6262 grey 2



6263 grey 3



6264 grey 4



6265 grey 5



6271 blue 1



6272 blue 2



6273 blue 3



6274 blue 4



6275 blue 5



6281 green 1



6282 green 2



6283 green 3



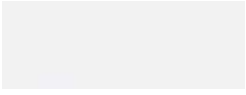
6284 green 4



6285 green 5



4230 glacier-white, glossy



4234 chalk-white, matt



4530 black, glossy



4534 black, matt



144 intense blue



403 red



397 brick-red*



408 red-brown



418 brown*



417 patina-green*

Due to production reasons, color deviations compared to the KeraTwin® panels as well as slight differences in nuances can not be excluded.



KeraShape® with horizontal laying

System description

Three-dimensional ceramic special pieces in natural colors or also in glazed version are used for making large facade surfaces less monotonous or for

producing shade at buildings. For developing individual, project-related fastening proposals, please contact us. Information about the standard fastening

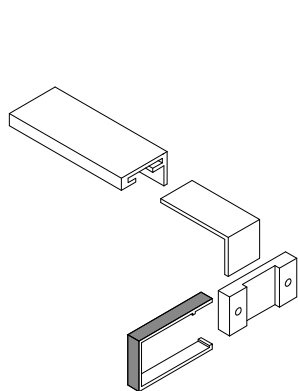
systems is to be found in the respective technical details. Fastening sets are available for the horizontal laying.



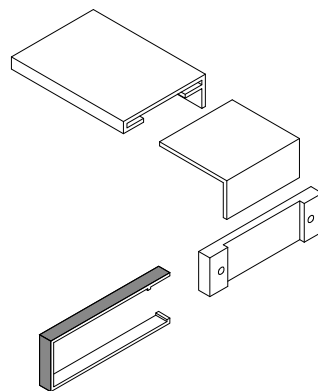
- 1 Built-in unit
- 2 Angular insert
- 3 Base plate
- 4 Securing clip

Accessories: KeraShape® with horizontal laying Fastening sets:

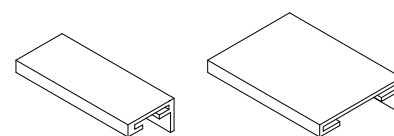
The sets comprise: 1 built-in unit, 1 angular insert, 1 base plate, 1 securing clip (black)



Article 606
For rectangular tube 60 x 50,
60 x 60 and lamellar element
Securing clip (black)
Base plate optionally available
with M5 thread
Weight: 0.14 kg / set



Article 607
For rectangular tube 50 x 100
Securing clip (black)
Base plate optionally available
with M5 thread
Weight: 0.21 kg / set

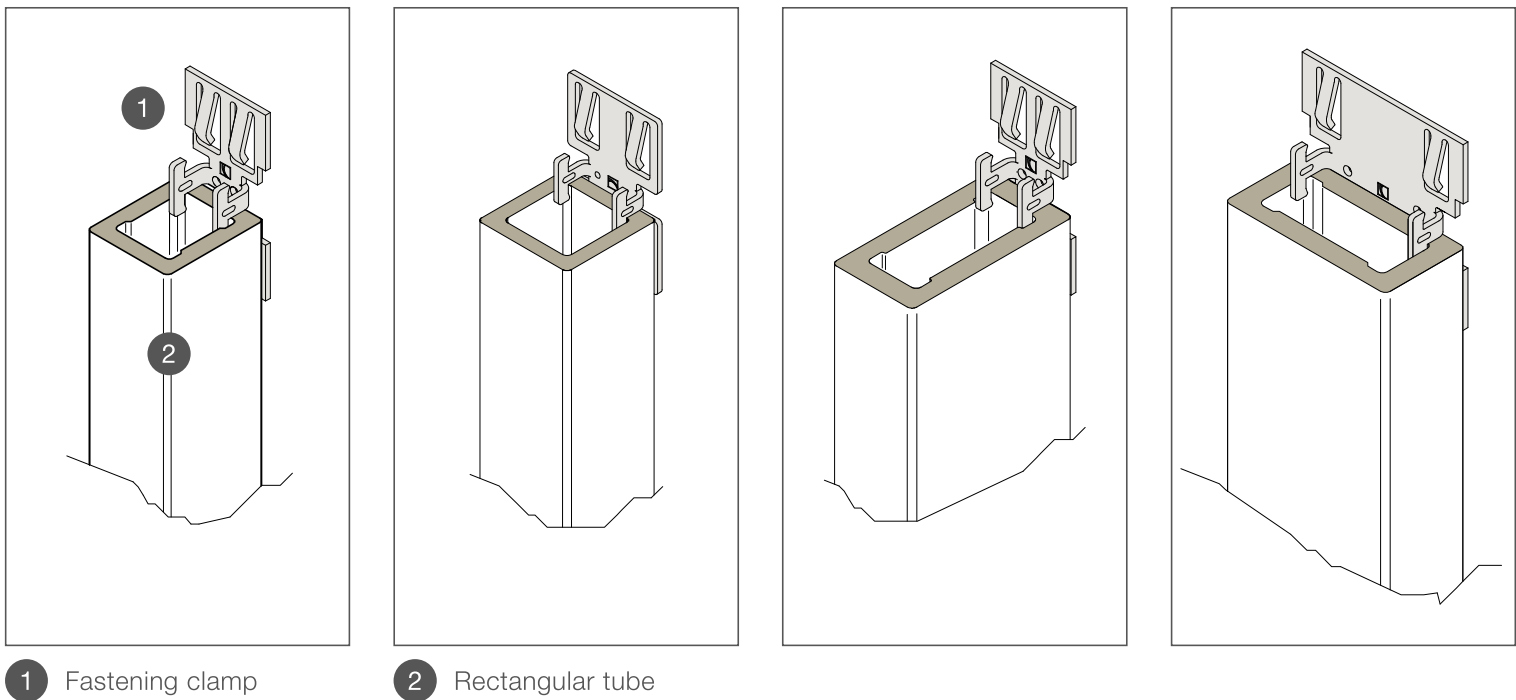


Built-in unit
also available as continuous
profile on request

KeraShape® with vertical laying

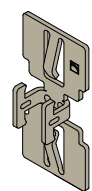
System description

Rectangular tubes in various dimensions and colors in unglazed or glazed version can also be vertically installed. For developing individual, project-related fastening proposals, please contact us. Special fastening clamps are available for all standard variants of the ceramic rectangular tubes.

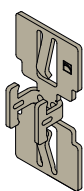


Accessories: KeraShape® with vertical laying

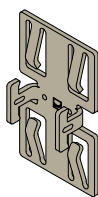
Fastening clamps:



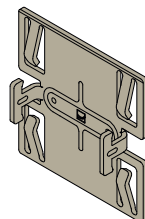
Article 685-50100
Twin-clamp
for 50 mm width in case of rectangular tube 50 x 100
Perforation: 2 x 4.9 mm
Material: AlMg3 H22 (EN AW-5754) painted black
Weight: 35 kg / 1,000 pcs.



Article 685-5060
Twin-clamp
for 50 mm width in case of rectangular tube 50 x 60
Perforation: 2 x 4.9 mm
Material: AlMg3 H22 (EN AW-5754) painted black
Weight: 35 kg / 1,000 pcs.



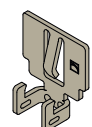
Article 686-6060
Twin-clamp
for 60 mm width in case of rectangular tube 60 x 60
Perforation: 2 x 4.9 mm
Material: AlMg3 H22 (EN AW-5754) painted black
Weight: 45 kg / 1,000 pcs.



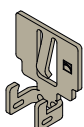
Article 687-10050
Twin-clamp
for 100 mm width in case of rectangular tube 50 x 100
Perforation: 2 x 4.9 mm
Material: AlMg3 H22 (EN AW-5754) painted black
Weight: 90 kg / 1,000 pcs.



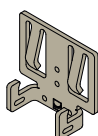
Article 659
A4 stainless steel screw, bright
Weight: 2.8 kg / box
Nominal dimensions: 4.8 x 16 mm
Box contents: 1,000 pieces + 1 bit



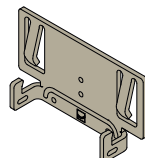
Article 685R-50100
Terminal-clamp
for 50 mm width in case of rectangular tube 50 x 100
Perforation: 2 x 4.9 mm
Material: AlMg3 H22 (EN AW-5754) painted black
Weight: 20 kg / 1,000 pcs.



Article 685R-5060
Terminal-clamp
for 50 mm width in case of rectangular tube 50 x 60
Perforation: 2 x 4.9 mm
Material: AlMg3 H22 (EN AW-5754) painted black
Weight: 20 kg / 1,000 pcs.



Article 686R-6060
Terminal-clamp
for 60 mm width in case of rectangular tube 60 x 60
Perforation: 2 x 4.9 mm
Material: AlMg3 H22 (EN AW-5754) painted black
Weight: 24 kg / 1,000 pcs.



Article 687R-10050
Terminal-clamp
for 100 mm width in case of rectangular tube 50 x 100
Perforation: 2 x 4.9 mm
Material: AlMg3 H22 (EN AW-5754) painted black
Weight: 48 kg / 1,000 pcs.