

# Ceramic staircases

Attractive design of steps and stairs using ceramic tiles

# A tribute to the staircase

Essentially, stairs open up different areas of a building. From an aesthetic point of view, however, stairs are a gift for designers. They often have a truly sculptural character, which is skilfully accentuated by the right choice of tile covering. For example, with a 145-centimetre-wide stair tile, as offered by AGROB BUCHTAL in many collections.

Thanks to this large format, the steps can be completely covered using a single tile without intermediate joints. This is a real gain, both aesthetically and in terms of workmanship.

For the leading international supplier of architectural ceramics, modular tile series with a wide range of colors, formats and slip-resistant surfaces are part of its brand identity. In addition to flat products for walls and floors, the focus is on functional products with solutions for architecturally and technically demanding spatial ideas and conditions. Thanks to the variety of designs in the collections, different style worlds can be harmoniously realised.



Factory series





**Physical building requirements**

Frost-resistant  
Impact-resistant

**Design requirements**

Variety of colors and shapes

**Technical requirements**

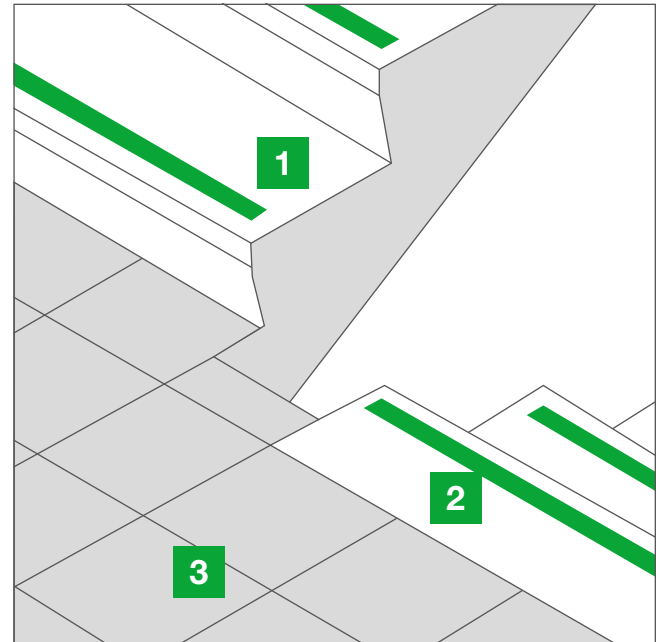
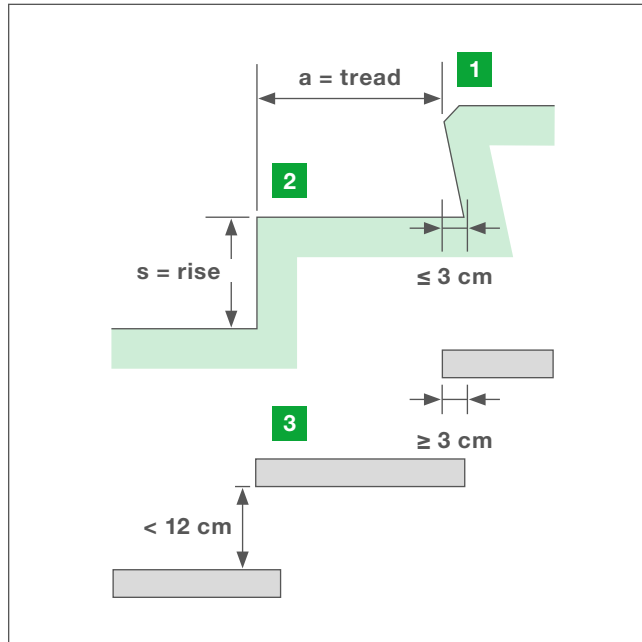
Substrate (gradient in outdoor areas)  
Detailed solutions  
Slip-resistant

**Environmental requirements**

Sustainable building material  
Resistant to environmental influences  
Increases the value of the property  
Low-maintenance thanks to Hytect coating

# Regulations / Standards

## Steps



### Gradient ratio (s/a)

The dimensions of the treads and risers depend on the length of stride. For adults, this is between 59 and 65 cm. Ideally, all stairs in the building should have the same rise ratio. However, this should always be the case within individual flights of stairs.

### Step dimension formula: $62 \text{ cm} \leq 2s + a \leq 65 \text{ cm}$

Safety formula:  $45 \text{ cm} \leq a + s \leq 47 \text{ cm}$

Comfort formula:  $a - s \approx 12 \text{ cm}$

### Step designs

1. Closed risers with an undercut  $\leq 3 \text{ cm}$  are among the safest types of steps.
2. Vertically closed steps with short treads can be dangerous when walking downstairs if the tread area is too small. When walking upstairs, they harbour the risk of tripping by getting stuck.
3. For open risers: undercut  $\geq 3 \text{ cm}$  and openings  $< \varnothing 12 \text{ cm}$

### Stair treads

The following designs have proven to be effective in preventing tripping or injuries when falling on stairs:

1. Bevelled/chamfered leading edge  $\leq 10 \text{ mm}$
2. Rounded leading edge;  $2 \text{ mm} \leq r \leq 5 \text{ mm}$

### Visibility of tread edges / leading edges

Highlighting the leading edges of steps using additional systems can help to prevent tripping or slipping on the edge as a safety measure. In addition, leading edges 1 and 2 should contrast with the rest of the floor covering 3.

Make visible through:

- Color and light/dark contrasts
- Change of material

### Non-slip and Hytect

Slip-resistance classes R10 and R11 as well as variants with grooves ensure a safe tread even in wet conditions. The Hytect surface finish reduces cleaning effort to a minimum, degrades air pollutants and odours, and has an antibacterial effect without chemical substances – an important criterion when stairs are not only walked on, but also used for lingering on or learning, for example in schools.

**Standards (D)**

The individual stair elements must be easily recognisable for visually-impaired people.

This is achieved, for example, by step markings:

- 4 cm to 5 cm wide on treads
- min. 1 cm, better 2 cm, on risers

A tactile guide tile should be positioned at the beginning and end.



Strata series

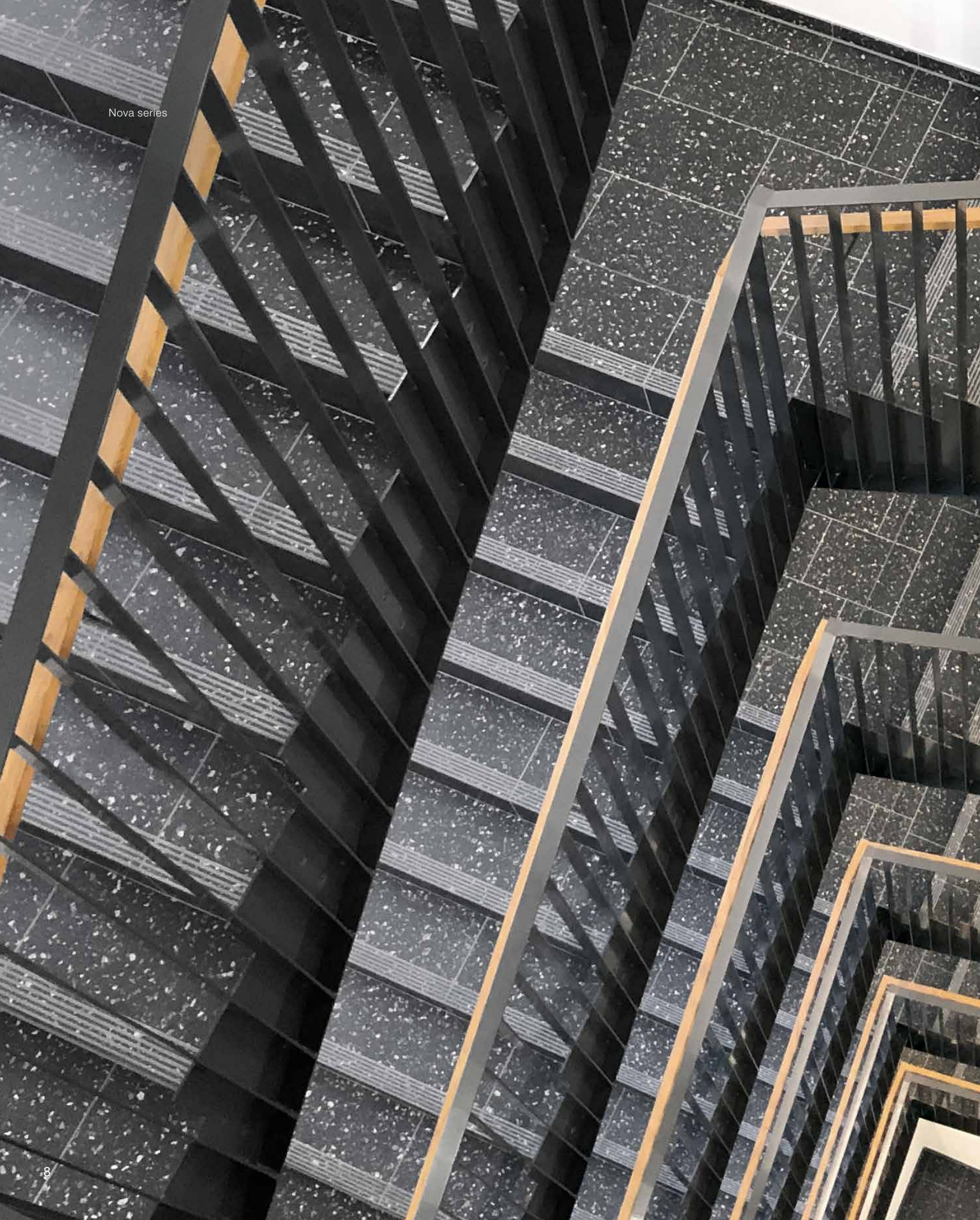




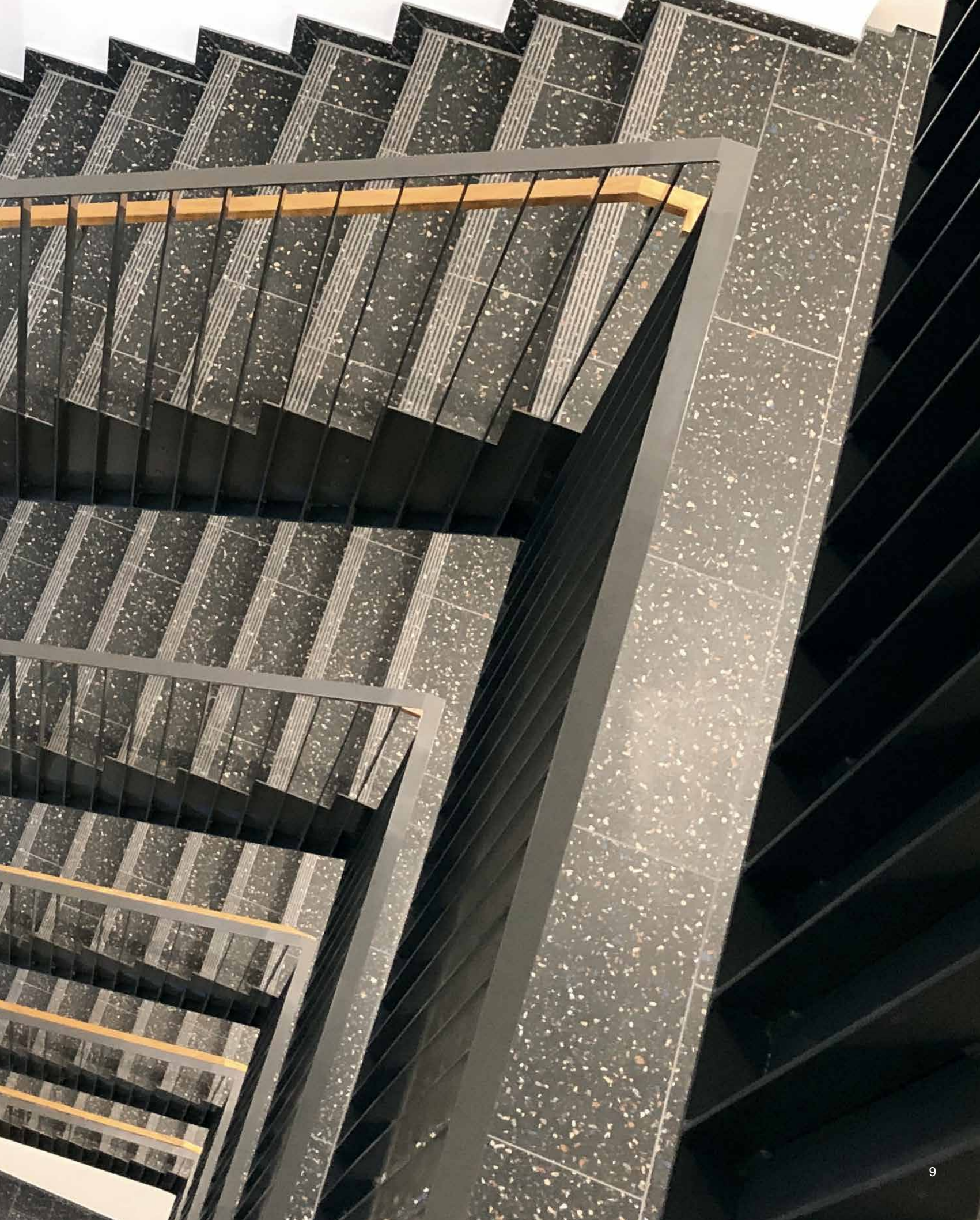
## Beautiful and functional staircase design with just one tile

AGROB BUCHTAL stair tiles in a width of 145 cm cover a stair without joint and are easy to install. This makes the staircase appear more spacious and elegant.

Nova series

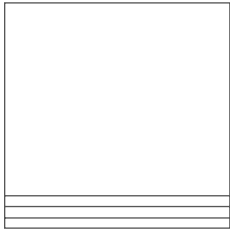




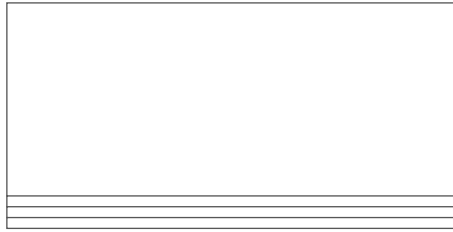


# Formats

## Stair tiles



30 x 30 cm (with grooving)



30 x 60 cm (with grooving)



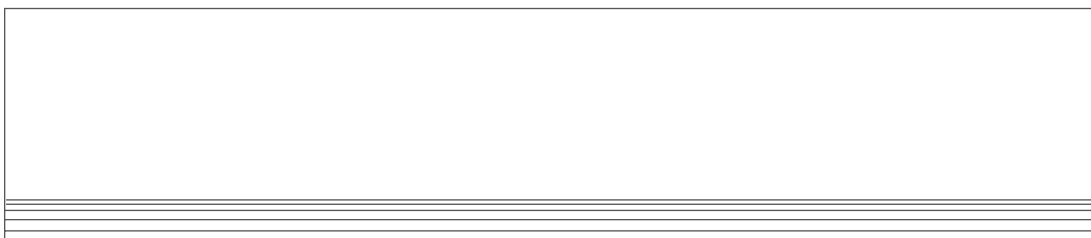
30 x 120 cm (with grooving)



60 x 120 cm (with grooving)

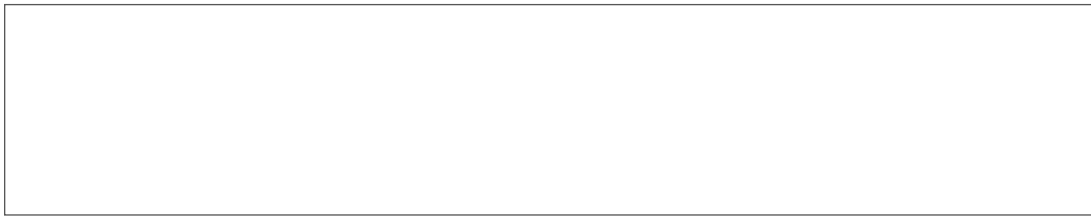


31 x 145 cm (with bevel)



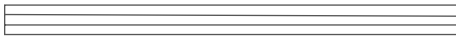
31 x 145 cm (with bevel and grooving)

### Step riser



28 x 145 cm

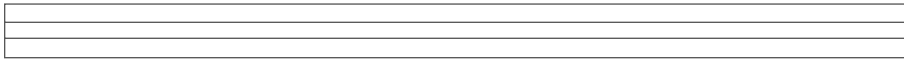
### Stair edges



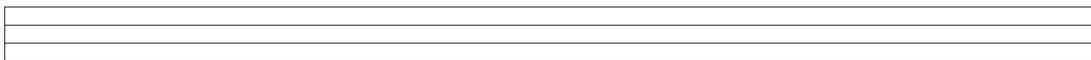
4 x 60 cm



7.2 x 60 cm



7.2 x 120 cm



7.2 x 145 cm (with bevel)

### Internal angle



10.2 x 2,0 cm

### External angle



10.2 x 3,5 cm

### Skirtings



10 x 20 cm, skirting with bevel (Emotion Grip)



7 x 20 cm (rounded, cut)



7 x 30 cm (rounded, cut)



6 x 50 cm (cut)



6 x 60 cm (cut)



7 x 60 cm (rounded, cut)

### Cove skirtings, decorative



10 x 10 cm



10 x 15 cm



10 x 20 cm



10 x 25 cm



10 x 30 cm



10 x 50 cm



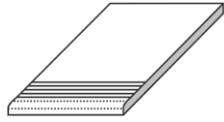
10 x 60 cm



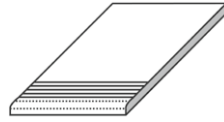
15 x 60 cm

# Formats

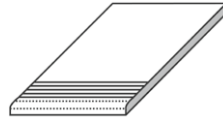
## Stair system with natural ceramic



Stair tile,  
25 x 30 cm

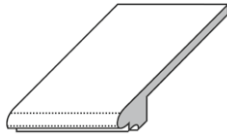


Corner left,  
25 x 30 cm

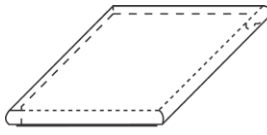


Corner right,  
25 x 30 cm

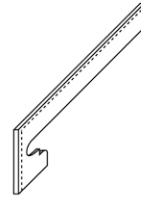
## Florentine step system



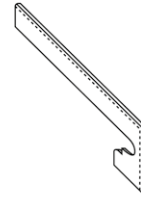
Step tile,  
25 x 35 cm



Corner piece left/right,  
35 x 35 cm



Skirting (left)



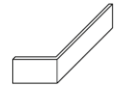
Skirting (right)

## Florentine Piccolo

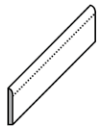


12.5 x 25 cm

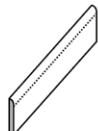
## Corner piece



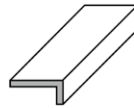
## Skirtings



8.3 x 25 cm (rounded)



8.3 x 30 cm (rounded)



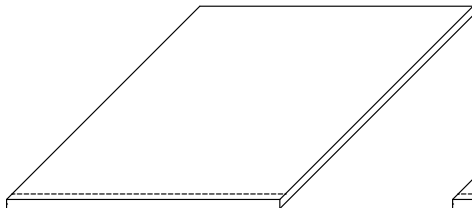
12.5 x 25 cm



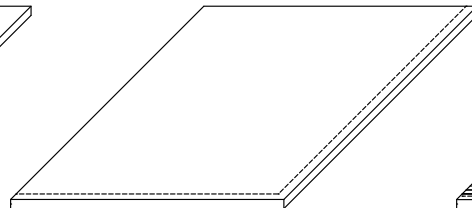
12.5 x 30 cm

## Nosing tiles

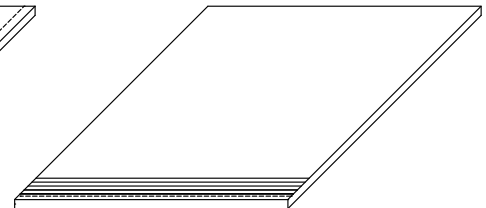
## Area Pro shaped pieces as patio tiles



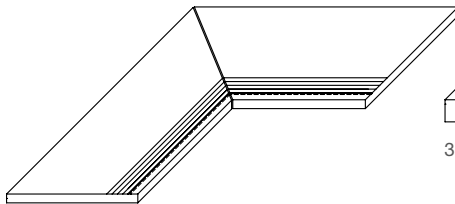
60 x 60 cm (rounded on one side)



60 x 60 cm (rounded corner)



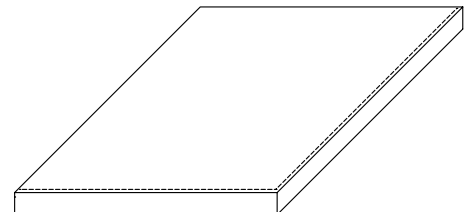
60 x 60 cm (rounded on one side and grooved)



30 x 60 cm (with rounded edge on one side  
and grooves as corner solution 2-pieces)



30 x 60 cm (with nosing)



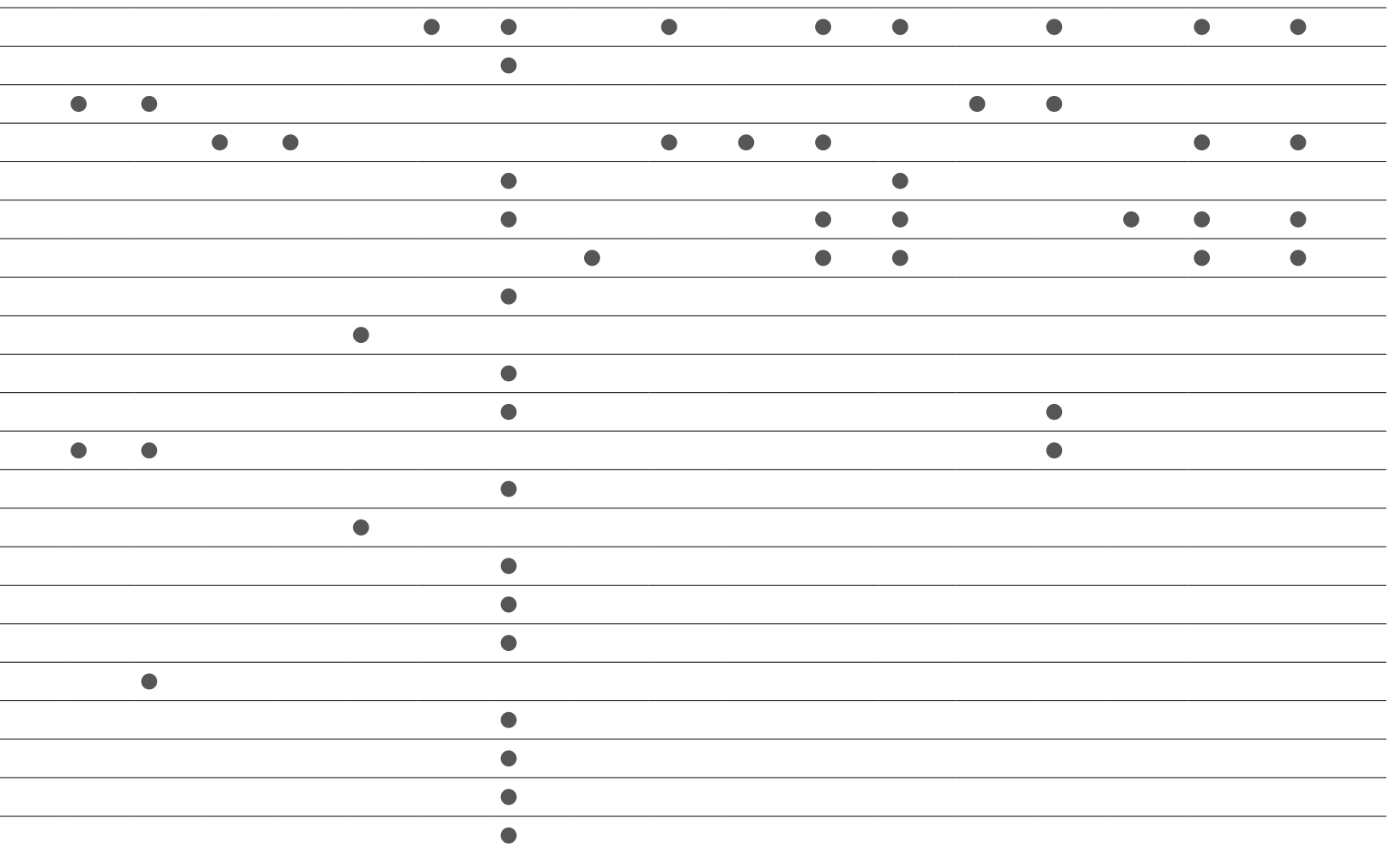
60 x 60 cm (with nosing as corner solution)



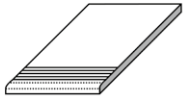
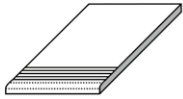
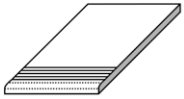














# Matrix

Formats in cm	Stair tiles with grooving				Stair tiles with bevel	Stair tiles with bevel and grooving	Step riser	Stair edges			Stair edges with bevel
	30 x 30	30 x 60	30 x 120	60 x 120	31 x 145	31 x 145	28 x 145	4 x 60	7.2 x 60	7.2 x 120	7.2 x 145
Area Pro	●	●		●	●	●	●	●	●	●	●
Aruba		●									
Ascona					●	●	●				
Basis 3	●										
Basis Pro		●									
Emotion		●									
Emotion GRIP	●										
Factory			●								
Kiano		●									
Like		●									
Nova		●			●		●				
Quarzit					●		●				
Sierra		●									
Skill		●	●								
Solid Rock		●									
Strata		●		●	●	●	●	●	●	●	●
Stories		●									
Streetlife			●								
Trias		●									
Trio		●	●								
Unique		●									
Valley		●									

Skirting, cut		Skirting, rounded					Skirting, with bevel	Cove skirting, decorative					Internal angle	External angle		
6 x 50	6 x 60	7 x 20	7 x 30	7 x 60	7 x 30	7 x 60	10 x 20	10 x 10	10 x 15	10 x 20	10 x 30	10 x 50	10 x 60	15 x 60	10.2 x 2.0	10.2 x 3.5



# Natural ceramic matrix

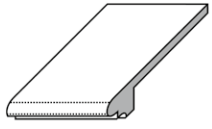
Formats in cm	Stair system			Skirting, rounded		Nosing tiles	
	25 x 30	25 x 30	25 x 30	8.3 x 25	8.3 x 30	12.5 x 25	12.5 x 30
							
	Stair tile	Corner left	Corner right				
				●	●	●	●
gold-ochre							
				●	●	●	●
gold-cream							
				●	●	●	●
gold-grey							
				●	●	●	●
gold-black							
	●	●	●	●		●	
autumn leaves							
	●	●	●	●		●	
natural red							
	●	●	●	●		●	
portofino							
				●		●	
brown range							
				●		●	
brick-red							
				●		●	
tobacco							

More detailed information can be found in our current programme of delivery.



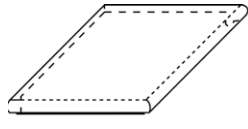
Florentiner step system

25 x 35

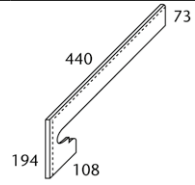


Step tile

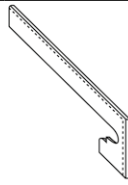
35 x 35



Corner piece



Skirting left



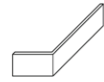
Skirting right

Florentine Piccolo

12.5 x 25



Corner piece



●	●	●	●	●	●
●	●	●	●	●	●
●	●	●	●	●	●
●	●	●	●	●	●
●	●	●	●	●	●
●	●	●	●	●	●
●	●	●	●	●	●
●	●	●	●	●	●
●	●	●	●	●	●
●	●	●	●	●	●

Natural ceramic series





AGROB BUCHTAL Solar Ceramics GmbH

Buchtal 1  
D-92521 Schwarzenfeld  
Phone: +49 (0) 94 35-391-0  
Fax: +49 (0) 94 35-391-34 52

E-Mail: [info@agrob-buchtal.de](mailto:info@agrob-buchtal.de)  
Internet: [www.agrob-buchtal.de](http://www.agrob-buchtal.de)



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