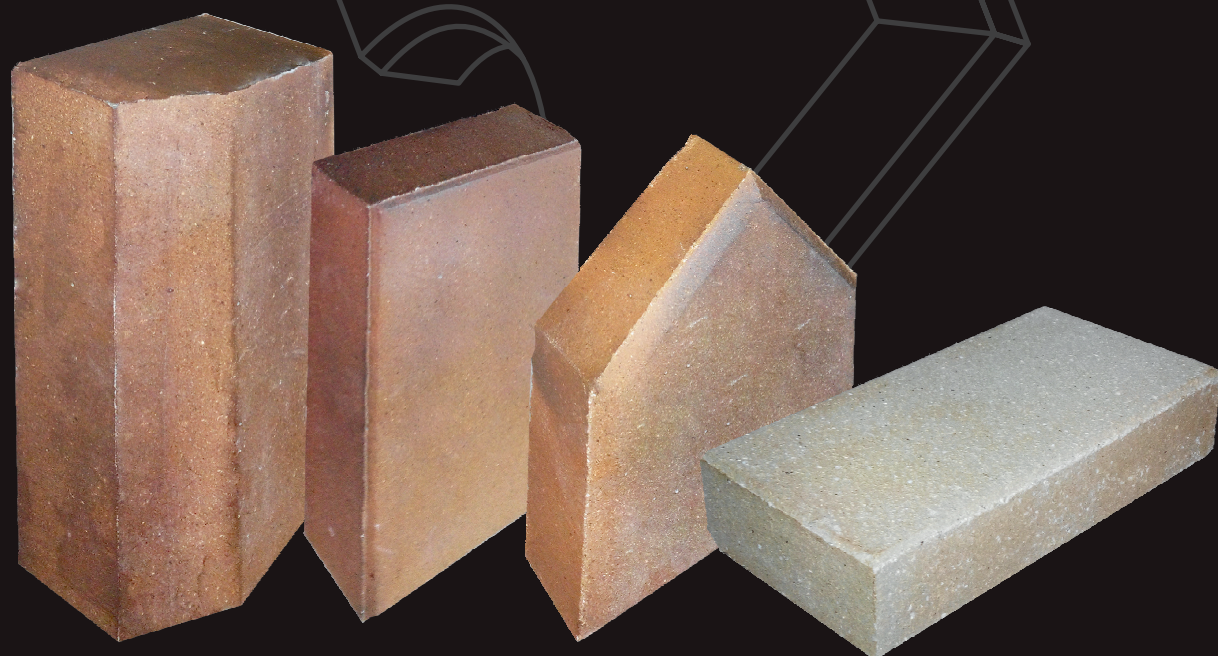




**CLINKER
PRODUCTS**





CLINKER PRODUCTS

TRUD JSC has a long tradition in the manufacturing of clinker products dating back to the beginning of the last century. In recent years, the company's specialists have developed and improved the production technology in accordance with the European standards. For the production of the clinker products the company uses only natural materials - without artificial additives and colorings.

Today TRUD JSC offers clinker products for pedestrian areas, streets and facades in two series: CLASSIC and AVANGARD.

The products from series CLASSIC are produced by classical technology and are offered in universal forms. The products from series AVANGARD are produced in advanced technology which has been developed to satisfy a wide range of customer requirements regarding forms and feasibility, for the implementation of various architectural solutions.

The products of both series meet all quality standards for clinker products.

CLINKER PRODUCTS

CHARACTERISTICS

Application	Thaw/frost resistance	Transverse rupture load N/mm	Abrasion resistance mm ³ /5000 mm ²	Resistance to slip/skid	Water absorption %	Flexural strenght N/mm ²
Pedestrian zones (solid application)	100 cycles (Class Fp100)	30 (Class T2)	< 12000	Very good Class U3	< 8	10
Zones with vehicles (flexible application)	100 cycles (Class FP100)	80 (Class T4)	< 12000	Very good Class U3	< 8	12

INSTRUCTIONS FOR LAYING, APPLICATION AND MAINTENANCE OF CLINKER PAVINGS PRODUCED BY TRUD JSC

Laying instructions

When laying paves, produced by TRUD JSC, the requirements of the classical European technology for clinker pavements in public places should be met, i.e.:

Sand layer should be laid on well rammed foundation in order to avoid wavy surface. After the tamping a specific fraction of sand should be used which provides a certain drainage - standard for all paved surfaces.

The sand layer should be with thickness of 1 to 3 cm. and then proceed to the arrangement of paves on standard technology. Use rubber hammers. The methods of joint making are defined.

In the application process joint dividers should not be used. Joints should not be less than 2 mm. If smaller joints are applied the sand cannot enter into the joints and this will result in their destruction during the cold months. After completion of the laying it is very important to refill the joints with sand on the third and on the sixth month from the beginning of the exploitation period.

Potential problems can occur as a result of poor rammed basis, wrong dimension of the joint and the use of incorrect sand fraction.

Application and maintenance

Clinker pavements built with paves with thickness of 30 mm. (hard laying method) should only be used for pedestrian areas according to standard BDS EN1344. Pavements built with paves with a thickness of 40 and 52 mm. (hard or flexible laying method) can be used for pedestrian areas and for areas with vehicles traffic according to standard BDS EN1344.

It is recommended to use the flexible laying method for construction of areas with vehicles traffic.

When cleaning areas built with clinker products manufactured by TRUD JSC one must comply with the acid resistance of the clinker products, which are Class C according to BDS EN1344. Abstergents and chemicals with pH > 8 should not be used.

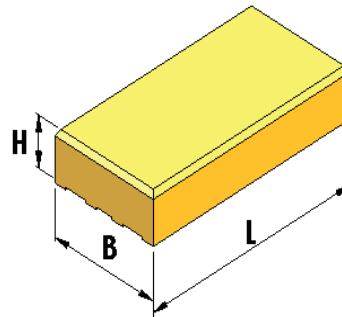
SERIES CLASSIC

CLINKER PRODUCTS

Clinker STANDART

Dimensions (mm)		
L	B	H
100	100	30*
100	100	40
100	100	52
200	100	30*
200	100	40
200	100	52
200	200	30*
200	200	40
200	200	52

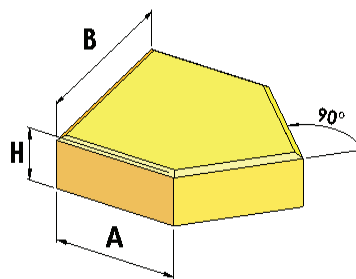
* Only for hard laying (for pedestrian areas)



Clinker PENTAGON

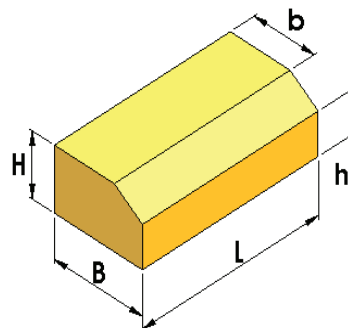
Dimensions (mm)		
A	B	H
100	141	30*
100	141	40
100	141	52

* Only for hard laying (for pedestrian areas)

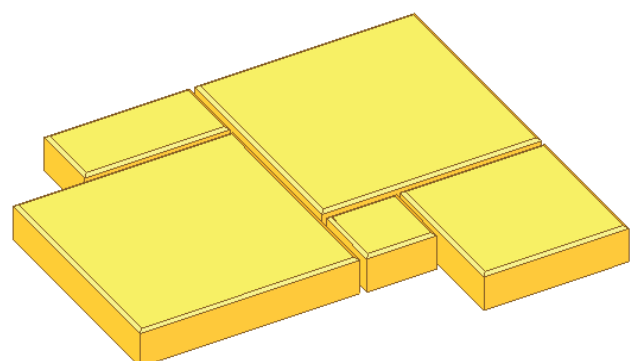
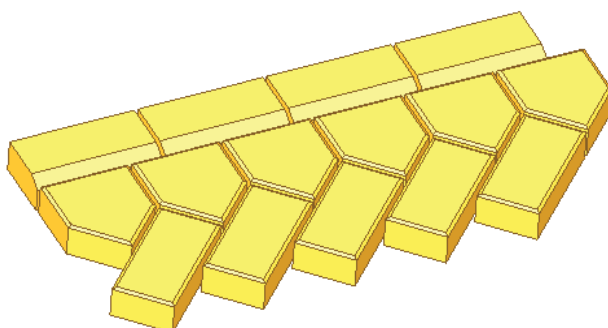


Clinker CURBSTONE

Dimensions (mm)				
L	B	H	b	h
200	100	50	68	30
200	100	60	68	40
200	100	72	68	52



Dimensional tolerances:
According to BDS EN1344 (R1)

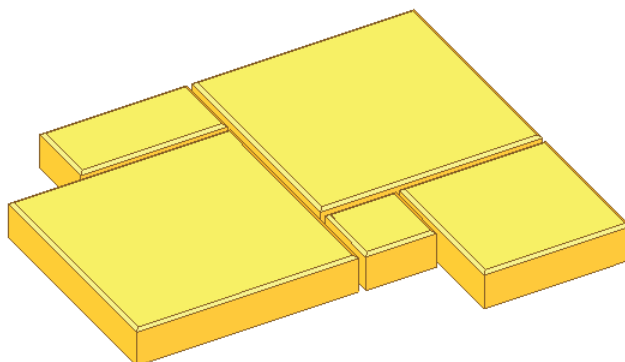
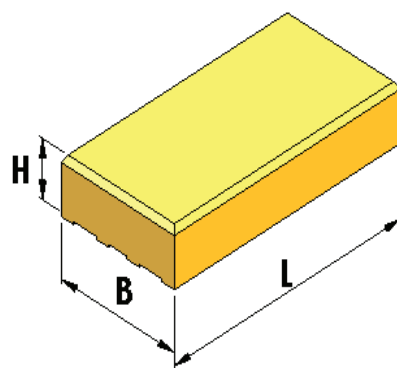


CLINKER PRODUCTS

SERIES AVANGARD

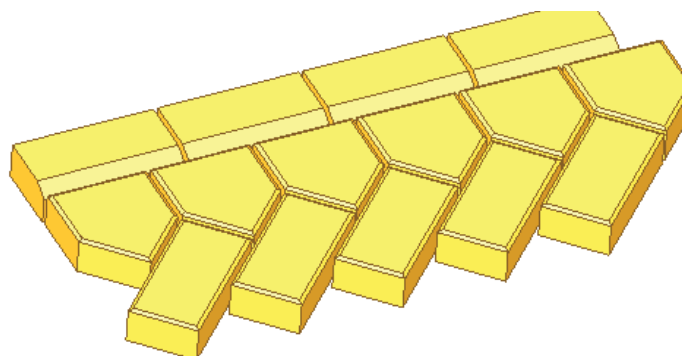
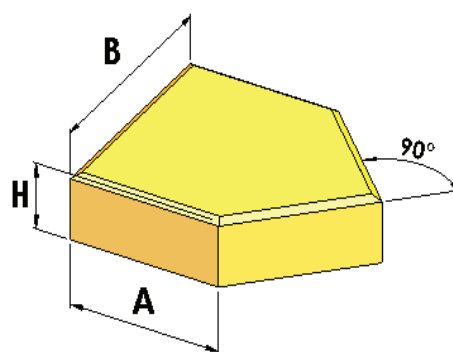
Clinker STANDART

L mm	B mm	H mm
95	95	30
95	95	40
95	95	52
195	95	30
195	95	40
195	95	52
195	195	30
195	195	40
195	195	52
295	295	52



Clinker PENTAGON

A mm	B mm	H mm
94	136	30
94	136	40
94	136	52



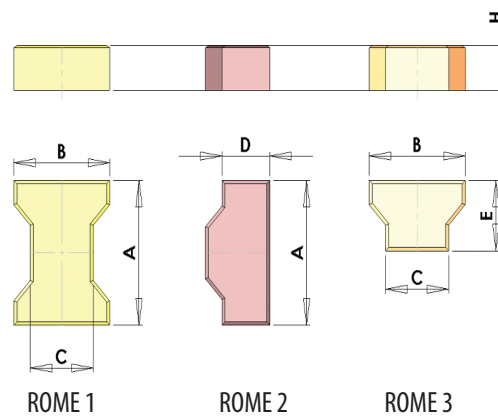
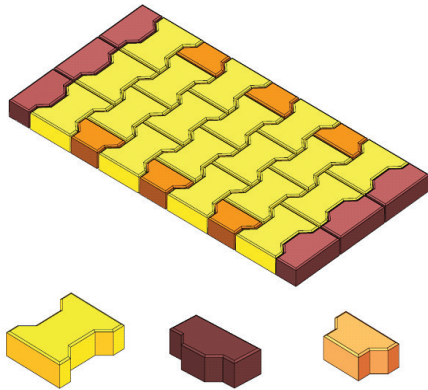
Dimensional tolerances:
According to BDS EN1344 (R1)

SERIES AVANGARD

CLINKER PRODUCTS

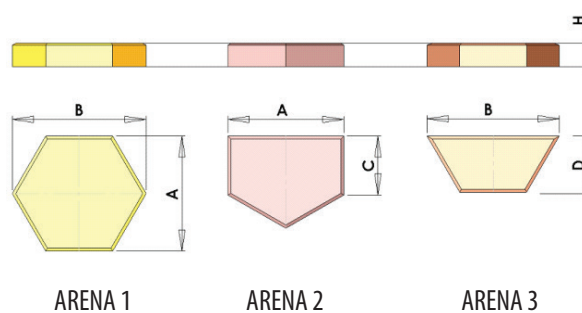
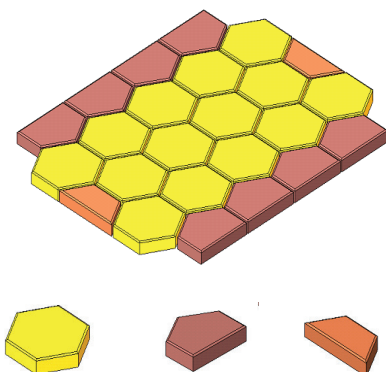
Clinker ROME

A	B	C	D	E	H
mm	mm	mm	mm	mm	mm
195	160	105	80	95	30
195	160	105	80	95	40
195	160	105	80	95	52



Clinker ARENA

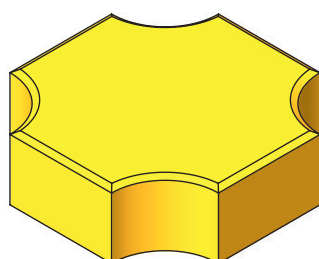
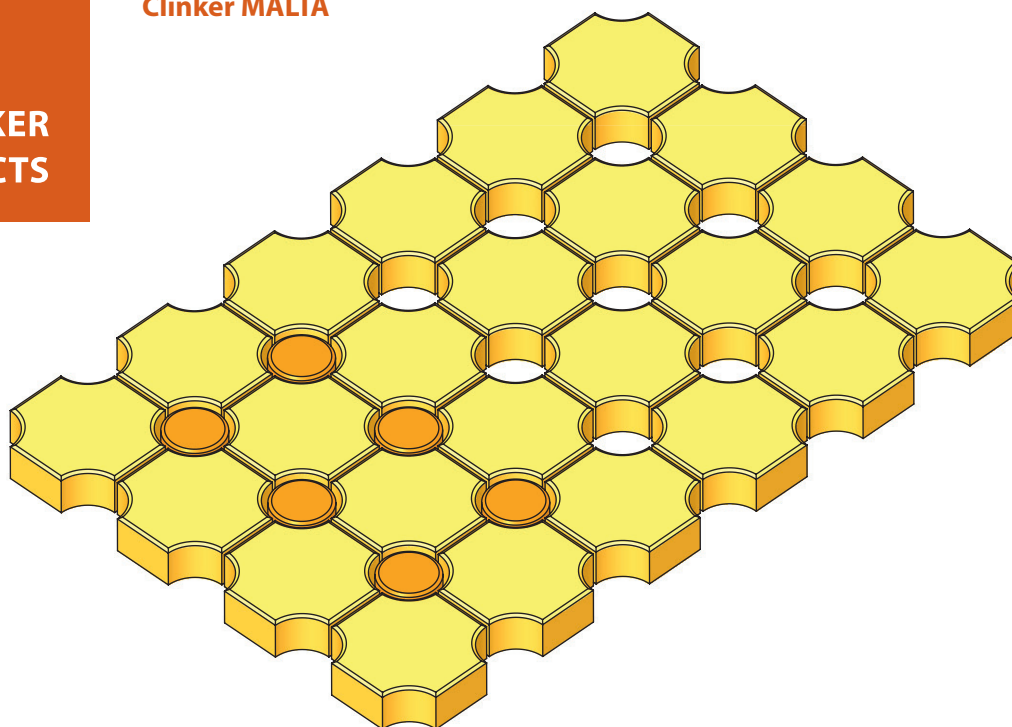
A	B	C	D	H
mm	mm	mm	mm	mm
195	225	100	95	30
195	225	100	95	40
195	225	100	95	52



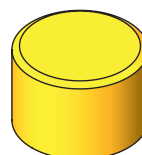
CLINKER
PRODUCTS

SERIES AVANGARD

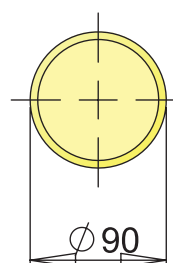
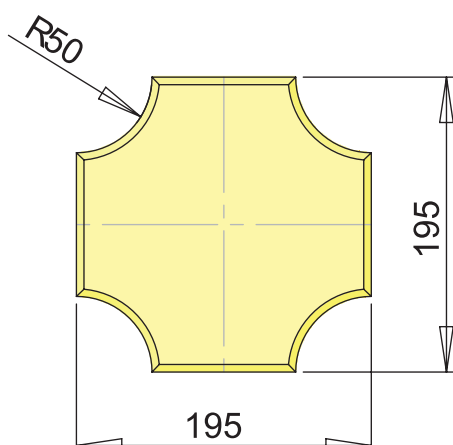
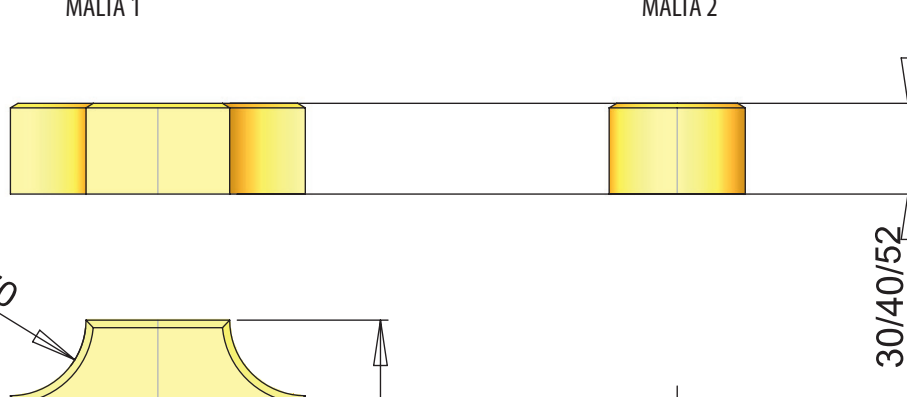
Clinker MALTA



MALTA 1

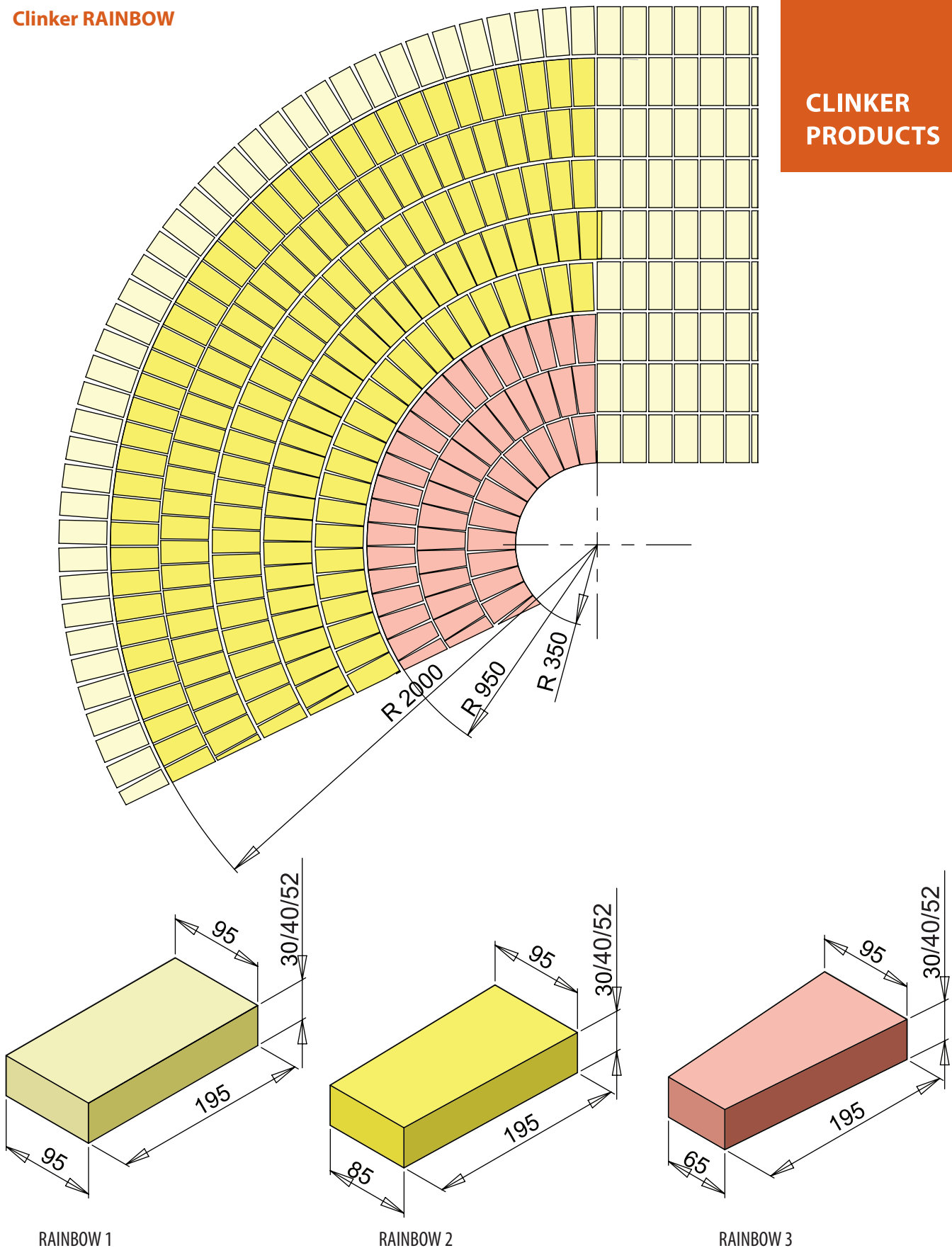


MALTA 2



Clinker RAINBOW

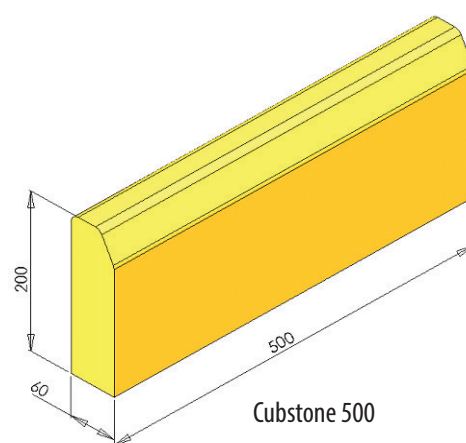
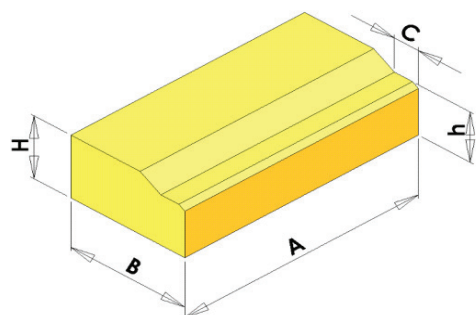
CLINKER
PRODUCTS



CLINKER PRODUCTS

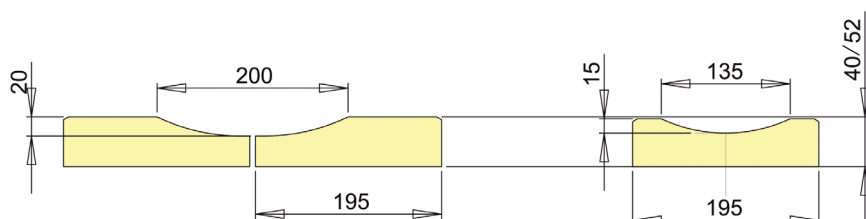
SERIES AVANGARD - CUBSTONES

mm	mm	mm	mm	mm
195	95	20	40	30
195	95	20	50	40
195	95	20	62	52



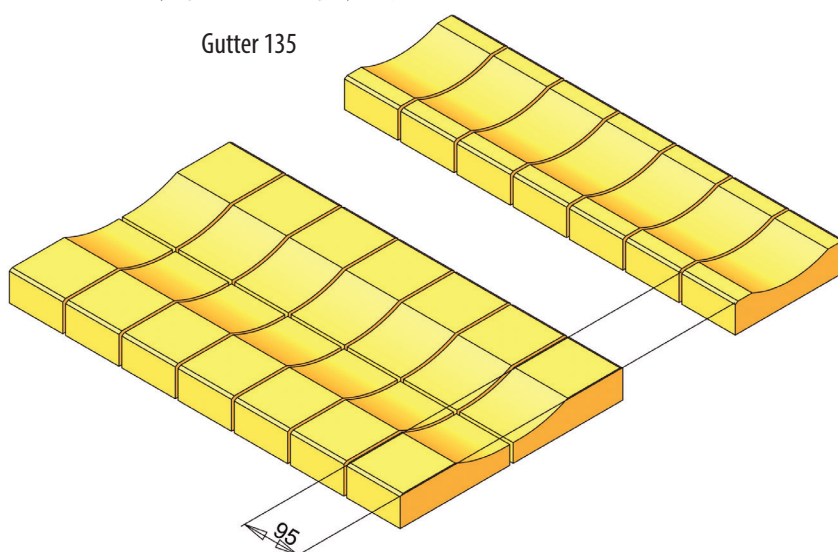
Cubstone 500

SERIES AVANGARD - GUTTERS

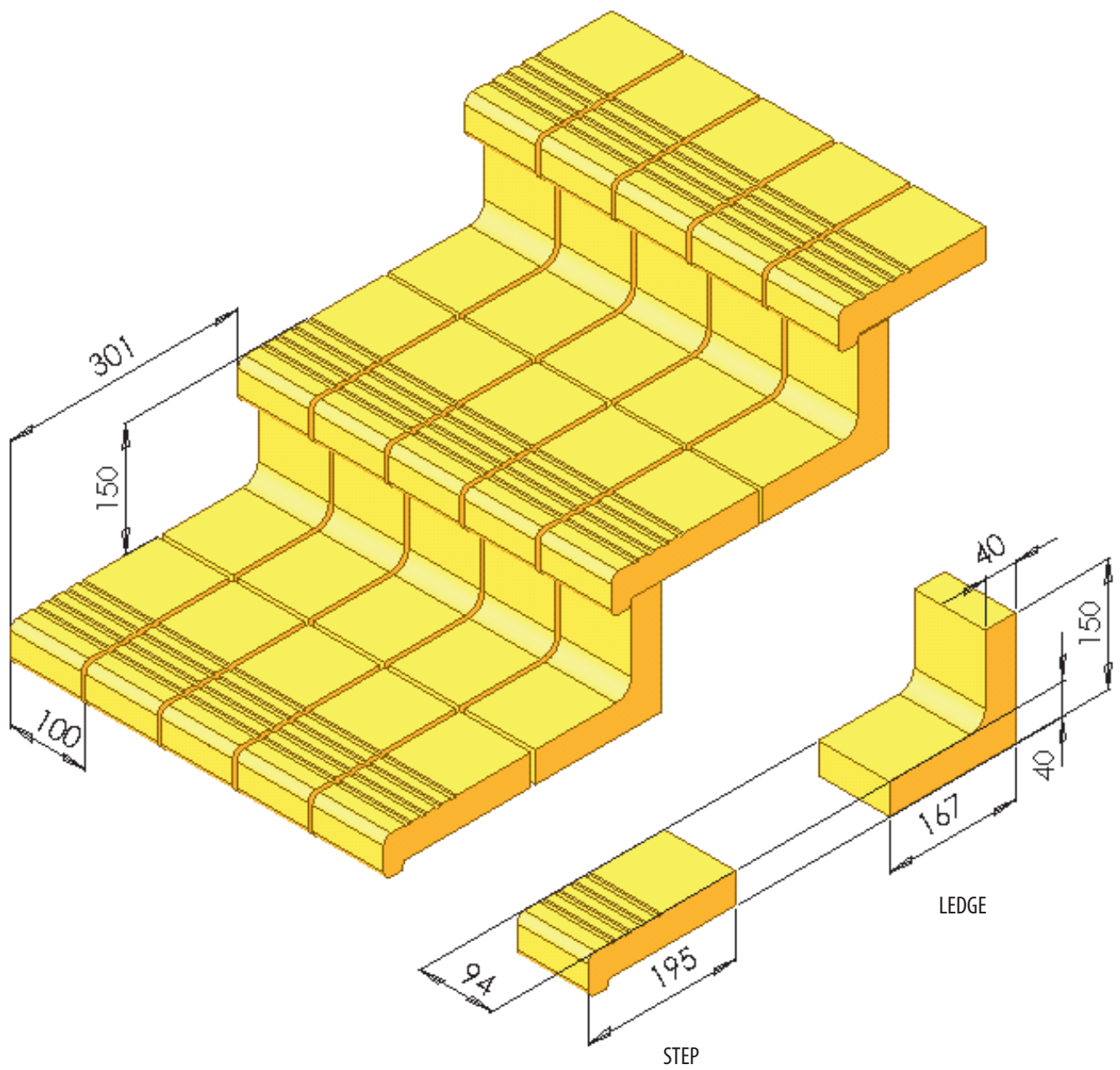


2 x Gutter 100

Gutter 135



SERIES AVANGARD - STAIRS

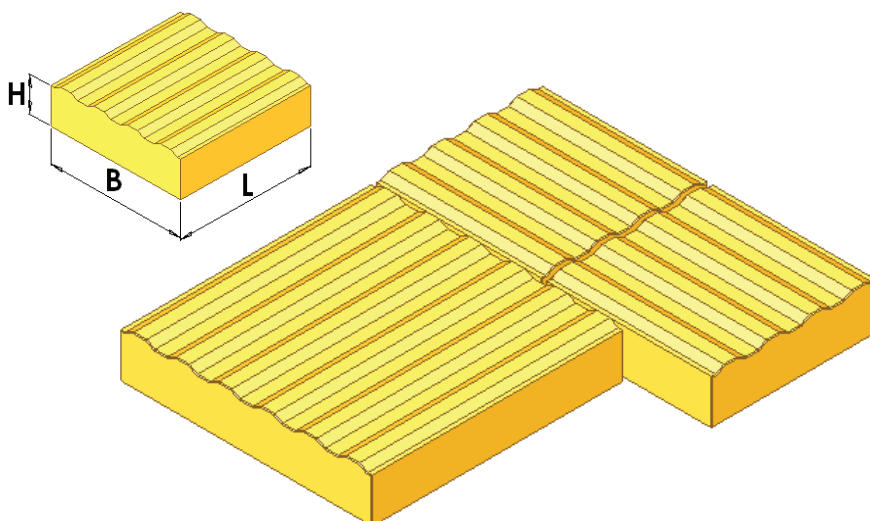


CLINKER PRODUCTS

SERIES AVANGARD - TACTILE PLATES R1

The steering plate type R1 is used for construction of tactile strips leading people with visual disabilities along the sidewalks, passing through wide urban areas, squares and others.

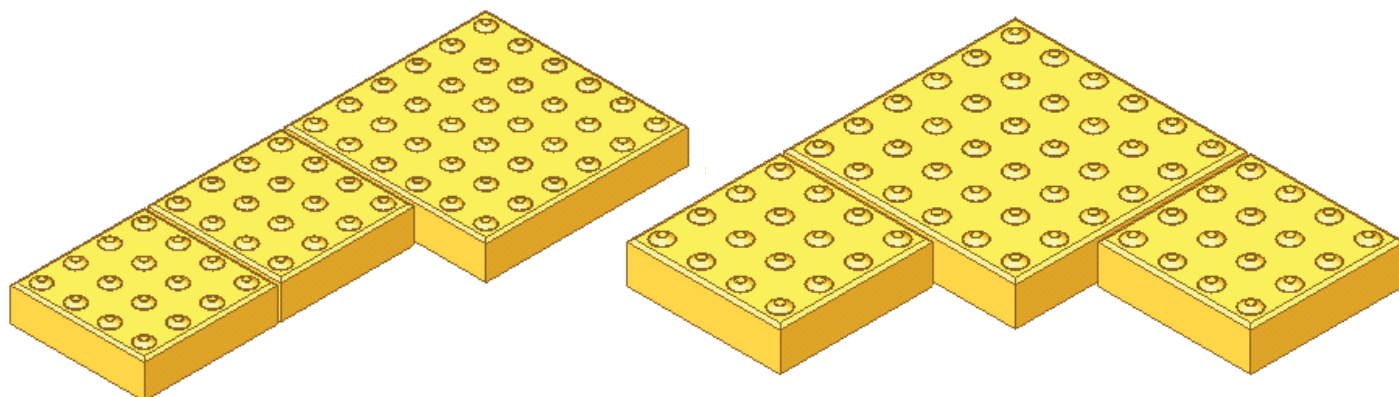
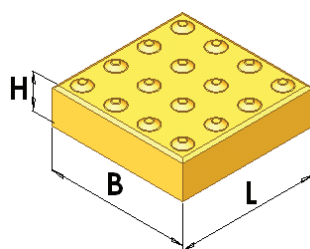
L mm	B mm	H mm
195	195	30
195	195	40
195	195	52
295	295	52



SERIES AVANGARD - TACTILE PLATES B1

The warning plate type B1 warns visually disabled people to continue cautiously toward controlled or uncontrolled crossings. This type of paving also indicates direction changes or areas for direction choice /usually at 90°/.

L mm	B mm	H mm
195	195	30
195	195	40
195	195	52
295	295	52



The tactile plates are manufactured according to the requirements of the Bulgarian standardization document SD CEN/TS 15209.