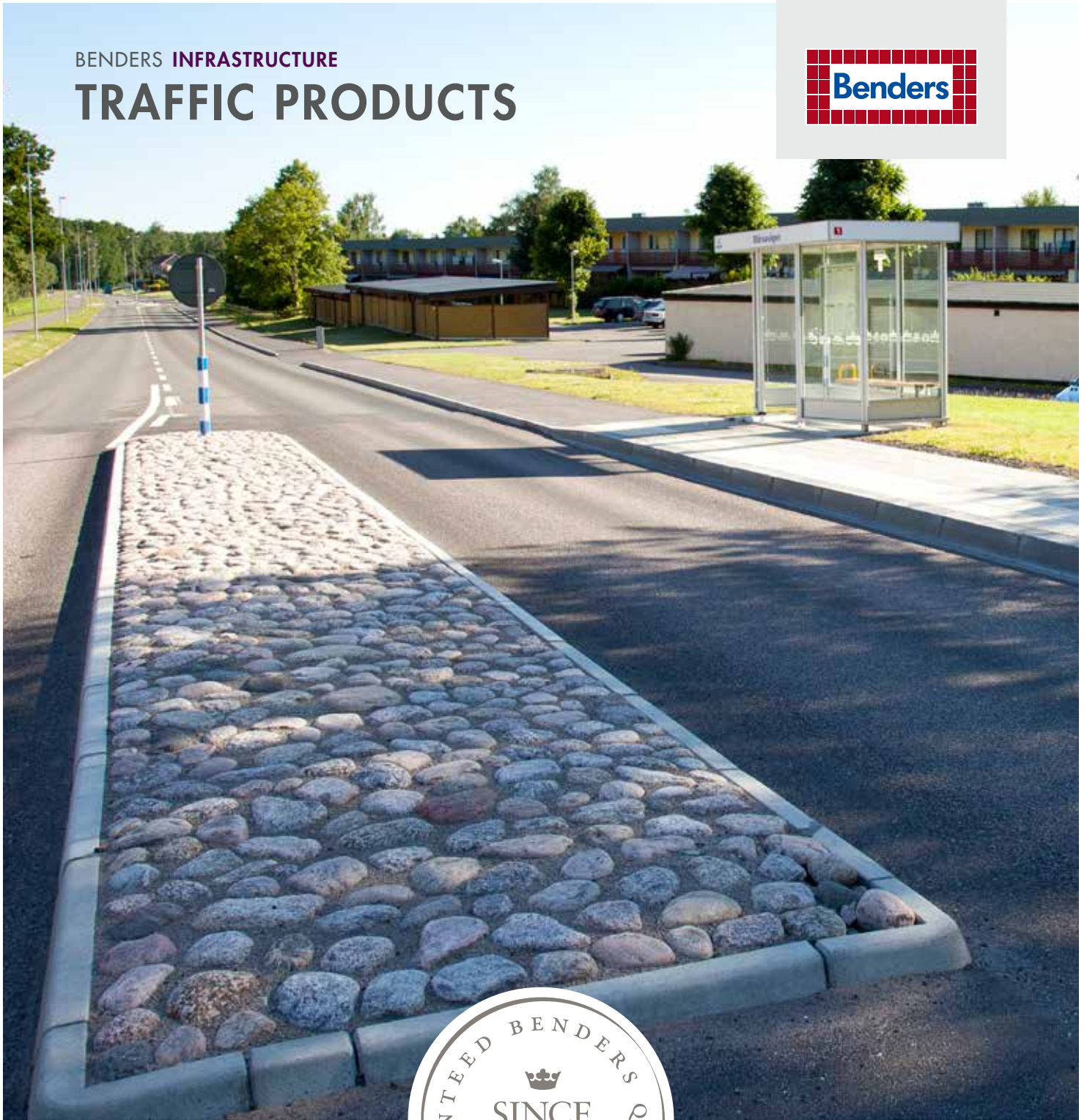


BENDERS INFRASTRUCTURE

# TRAFFIC PRODUCTS



*The natural choice*

More about Benders  
[www.benders.se/en](http://www.benders.se/en)



BENDER SPIKMA CURB

## KNOWLEDGE AND TRADITIONS

*With care and quality at all levels*

### FOCUS AT THE CUSTOMER

Ever since the start, at the farm in Edsvära in southern Sweden, in 1960, our clear ambition has been to meet our customers' needs. We believe that this underlying philosophy has strongly contributed to Benders today being one of the leading Nordic suppliers of products in concrete, clay and natural stone for the construction sector – with an increasing presence in Europe, a turnover of more than 2.2 billion SEK and more than 1000 employees. Our business is characterized by a local and responsive business acumen as a basis for long and strong relationships with both customers and suppliers.

### BUSINESS IDEA, VISION AND STRATEGIES

Our idea is to develop, produce and market competitive high-quality products and services for construction, which contribute to a long-term sustainable environment where people live, work and socialize. Our customer relationships are based on a long-term commitment where industry knowledge, experience and personal service are highly valued. Benders will combine experience, security and competence with curiosity about new trends. We will be one step ahead in the development of new products and develop together with our customers to create the best products of the future.

### A COMPLETE SUPPLIER

Over the years, we have engaged in intensive product development, with a constant broadening of the range – which over time has become so extensive that we can now proudly call ourselves a complete supplier for both public and private environments. But we also hope that you see us as a curious sounding board and a committed partner. If you have a problem that needs to be solved, we are happy to help, always with the goal that you will never need more than one supplier.

### MORE INFORMATION ON OUR WEBSITES

We have more to offer. On our website [www.benders.se](http://www.benders.se) there are more details, assembly instructions, inspiring environmental images – always updated. You will also find our wide range of accessories for Roof, Landscaping, Natural stone, Infrastructure, Insulation, Masonry block and Water and sewage systems. Contact information for our representatives and dealers, all our catalogs and brochures and much more, with the option to search in linked pdf files. At [www.bendersbyggsystem.se](http://www.bendersbyggsystem.se) you will find our solutions for complete frames, but also our range of Building components.

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# OUR CORE VALUES

## COMMITMENT

Commitment is important in our business. The company is characterized by entrepreneurship and simplicity, we take responsibility for our task with pride, participation and our own drive. We are flexible and have a personal approach to provide the highest service, we do that little extra for both our customers and for each other.

## SUSTAINABILITY

Our products will last for several generations and we constantly work to reduce our environmental impact and are

carefully weighing our decisions against environmental consequences. We also care for the individual, both in our internal work environment and our customers'.

## SECURITY

The family company's long history of stable growth and profitability creates security. We think long-term and reinvest our profits, something that has made us the company we are today. We are a company to trust, which remains and takes responsibility.

# BENDER SPIKMA CURBS

A nailed curb has a number of advantages over curbs that are glued or buried in the ground. It is completely independent of the weather and the mounting is easy regardless of precipitation and temperature. You adjust the curb very easily when laying it as it is not nailed down until you have reached the placement you want. It is also easy to replace individual curbs if it would break because the ground is not damaged during mounting – just remove the damaged curb, place a new one and nail it down. Another advantage of nailed curbs is that it is reusable if you have to move a refuge or similar.

Thanks to the simple mounting and our complete assortment, we can proudly say that Bender Spikma nailed curbs are the most efficient curbs on the market.

## MOUNTING

The surface shall, for the best results, be even so that the curb rests along its entire length, and it shall be cleaned from gravel or snow. The curb can be mounted on both the upper and lower asphalt layer. Fix points are being set up for a nice laying and easy mounting, and you use a chalk box to get straight lines. You place pallets with curbs at regular intervals and lay them out easily with our laying cart, that way you avoid heavy lifting.

## NAILING

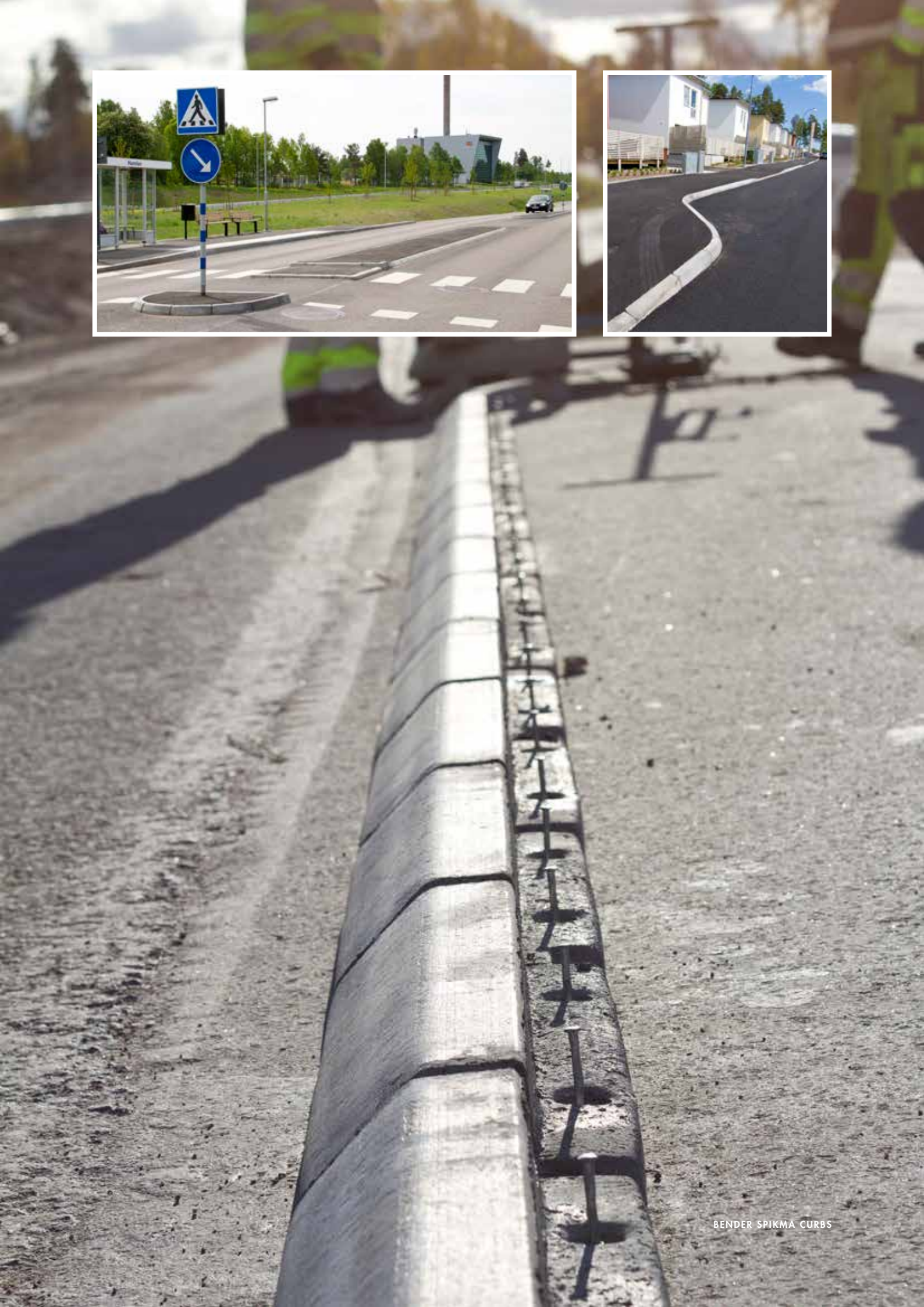
The curbs are delivered with pre-assembled rust-protected nails that are fixed with plastic plugs. For short distances you use our hand-puncher, but for longer distances a nail gun with our nail attachment can be used for the nailing. Both the hand-puncher and our nail attachments are designed so that the percussion mechanism is stopped when the nail is completely down, so you don't have to worry about hitting it too deep and thus causing any damage to the curbs.

## REINFORCEMENT

The curbs are often mounted in environments where, for example, corner curbs and sharp curves are exposed to high loads. As an alternative to filling with asphalt or concrete behind the curbs, there is an alternative to type B and D with 2 extra holes to drive down a rebar as reinforcement. Drilling is done with a 14 mm drill and then a 12 mm rebar is driven in, which results in a large reinforcement in the curbs.

With Bender Spikma's nailed curbs, preparation and mounting is easy and you are completely independent of the weather.



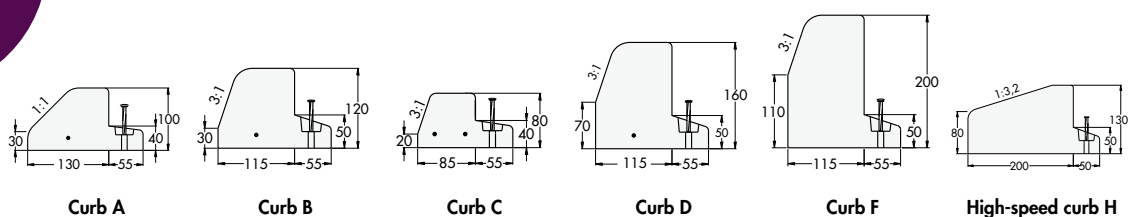


# BENDER SPIKMA CURBS TYPE A-F AND HIGH-SPEED CURBS TYPE H

Benders nailed curbs are the most effective curbs on the market. Each curb has pre-assembled rust-protected steel nails that are easily driven into the ground. The method provides a stable attachment and enables mounting all year round regardless of the weather. All curbs have a special double tongue and groove to facilitate mounting and increase the individual curb's ability to absorb lateral forces by 50 percent. Transition pieces between different profiles och heights along with straight parts, convex and concave radii in several lengths provides a complete construction and minimizes working time with adjustments and cuts.



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ACCESSORIES**



	Curb A	Curb B	Curb C	Curb D	Curb F	High-speed curb H
Area of use	Villa and townhouse areas.	Streets, thoroughfares etc.	Gardens, parks etc.	Main traffic route etc.	High traffic streets and roads.	High-speed roads, a non-repellent curb.
Height mm	100	120	80	160	200	130
Kg/m	31	37	20	48	59	59

## Bender Spikma for gluing

All types of curbs can be used for gluing where it is required. Glue strip and curb glue are also available in our assortment.



## Drained curbs

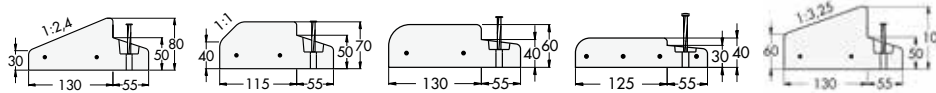
Several of above curbs are also available as drained, straight. Length 500 mm.





# BENDER SPIKMA CROSSING- AND WALKWAY CURBS TYPE R-Z

Our crossing curbs are available in several different designs depending on where they are to be used. Type R is often used at the garage driveway to villas where you want a soft passage for the car. For new construction of roads where you want to lay the top pavement of the asphalt against the curb, there is Type Z for garage driveways. Type S is excellent where walkways cross the street and at pedestrian crossings. Type T is well suited for accessibility adaptation of, for example, a pedestrian crossing. Thanks to its straight front edge, it gives clear signals to the visually impaired where the street begins and ends. Type U has the same function as Type T but provides an even smoother transition – however, it is not drivable.



**Crossing curb R**

**Crossing curb S**

**Crossing curb T**

**Walkway curb U**

**Crossing curb Z**

Area of use	Garage driveways etc.	Garage driveways and pedestrian crossing	Accessibility-adapted pedestrian crossing	Walkways	Garage driveways etc. for new construction
Height mm	80	70	60	40	100
Kg/m	24	24	24	18	34



BENDER SPIKMA CURBS AND CROSSING CURBS

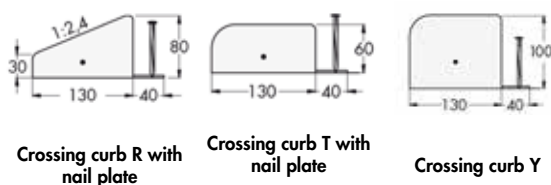


# BENDER SPIKMA CROSSING CURBS WITH NAIL PLATE TYPE R, T AND Y, ALSO BENDER SPIKMA REFUGE AND BENDER REFUGE TRIND

To enable paving in direct connection behind the supports, the R and T profiles are also available without a heel. The curbs have several parts as well as convex and concave radii. Crossing curb Y is well suited for the construction of new pedestrian crossings with accessibility adaptation.



## BENDER SPIKMA CROSSING CURBS WITH NAIL PLATE

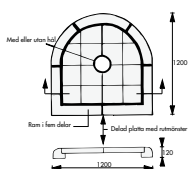


Area of use	Crossing curbs with nail plate, used when tiles and paving stones are to be laid behind the curbs		Construction of new pedestrian crossings with accessibility adaptation
Height mm	80	60	100
Kg/m	20	20	34

Refuge type B is a complete system with radius stones, angles and slab with or without holes. Refuge Trind is used if you temporarily want to have a traffic divider or a sign in, for example, a residential area. The refuge is equipped with a fastening for single pipes or a sign arch.



## BENDER SPIKMA REFUGE TYPE B



Refuge Type B	Length mm	Height mm	Kg/pc	Pcs needed
Radius 0,6 m convex	600	120	20	3
Angle 90° convex	600+600	120	37	2
Split slab with hole	1050	80	146	1
Split slab without	1050	80	73	1

## BENDER REFUGE TRIND



Refuge Trind	Length mm	Height mm	Kg/pc
Refuge Trind	1100	240	1100

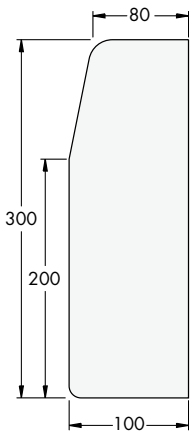


# BENDER SPIKMA STREET CURB

Our embedded Street curb has a smooth surface and gray color. The curb provides a stable edge and is used to advantage with our stone or slabs of concrete and granite. Bender Spikma street curb are manufactured as straight pieces in 1.0 and 0.5 meter lengths as well as convex and concave radii from 0.5 meters and upwards.



The Street curb is an alternative to the nailed curbs. Mounted on a gravel bed or in moist concrete. Concave radii in a radius of 6.0-12.0 meters are laid with a straight fitting piece of 500 mm.



	Length m	Weight/pc
Straight	1,0	70,00
Straight, fitting piece	0,5	35,00
Radius 0,5 m convex	0,785	49,00
Radius 1,0 m convex	0,785	52,00
Radius 2,0 m convex	0,785	52,00
Radius 3,0 m convex	0,785	54,00
Radius 4,5 m convex	0,785	54,00
Radius 6,0 m convex	0,785	55,00
Radius 8,0 m convex	0,785	55,00
Radius 10,0-12,0 m convex	0,785	55,00
Radius 0,5 m concave	0,785	61,00
Radius 1,0 m concave	0,785	52,00
Radius 2,0 m concave	0,785	54,00
Radius 3,0 m concave	0,785	54,00
Radius 4,5 m concave	0,785	54,00
Sinking piece left	1,0 m	63,00
Sinking piece right	1,0 m	63,00



BENDER SPIKMA STREET CURB AND BENDER STEPBLOCK

COMBINE  
WITH PAVE-  
MENT STONE, SEE  
OUR SELECTION AT  
BENDERS.SE



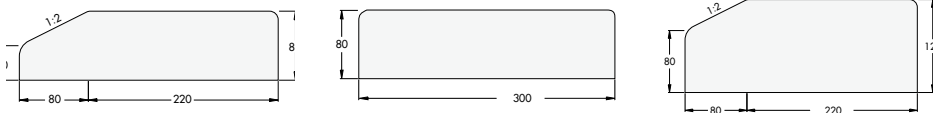
BENDER SPIKMA WIDE EDGE AND BENDER FLAT SLABS 350X170 MM



BENDER SPIKMA WIDE EDGE AND BENDER SUPERFÖRBAND

# BENDER SPIKMA WIDE EDGE

Our horizontal curb is softly repellent. The Wide Edge is available in heights of 80 and 120 mm and is drivable. It is excellent between less busy streets and sidewalks, areas with slow traffic where different groups of road users are mixed such as pedestrian streets and square environments. It also works great to use Bender Wide Edge between two paving stone areas in different levels. The complete assortment with, amongst others, radii, angles, large and small wedges gives you the opportunity to switch between the heights and lay radii from 1.0 meters and up.



Wide edge 80 mm	Length mm	Height mm	Kg/pc
Straight	700	80	40
Small wedge convex	200	80	10
Large wedge convex	300	80	15
Radius 6,0 convex	700	80	40
Radius 8,0 convex	700	80	40
Radius 10-12 m convex	700	80	40
Radius 12-15 m convex	700	80	40
Angle 90° convex	1000+700	80	80
Angle 45° convex	700+700	80	70
Radius 6,0 concave	700	80	40
Radius 10-12 m concave	700	80	40
Radius 12-15 m concave	700	80	40
Angle 90° concave	400+400	80	60
Termination left	700	80	40
Termination right	700	80	40
Uncanted wide edge	700	80	42

Wide edge 120 mm	Length mm	Height mm	Kg/pc
Straight	700	120	60
Small wedge convex	200	120	12
Large wedge convex	300	120	17
Radius 6,0 convex	700	120	60
Radius 8,0 convex	700	120	60
Radius 10-12 m convex	700	120	60
Angle 90° convex	1000+700	120	120
Radius 10-12 m concave	700	120	60
Angle 90° concave	400+400	120	50
Termination left	700	120	60
Termination right	700	120	60



BENDER SPIKMA WIDE EDGE STRAIGHT AND BENDER SUPERFÖRBAND



BENDER SPIKMA WIDE EDGE



BENDER SPIKMA PBM DIVIDERS

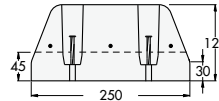
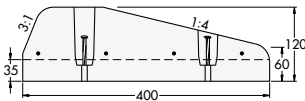


BENDER SPIKMA CENTER DIVIDERS

# BENDER SPIKMA PBM AND CENTER DIVIDERS

Due to the different heights, our PBM (Pedestrian, Bicycle, Moped) dividers are strongly repellent to vehicle traffic and softly repellent to the pedestrian and cycle path, in order to separate the group of road users easily and safely. The dividers comes with pre-assembled rust-protected steel nails in plastic plugs for stable attachment and mounting all year round. The PBM divider is available with holes for reflective posts or 2 inch tubes for signmarking.

Spikma Center divider is an obvious choice for delimiting car parks and storage areas or as file marking at terminals. Thanks to the drained construction, water accumulations in the wrong places are avoided. Soft terminations are available, as well as dividers with holes for reflective posts or 2 inch tubes for signmarking.



PBM dividers	Length mm	Height mm	Kg/pc
Straight divider	700	120	63
Straight divider for gluing	700	120	63
Straight divider drained	700	120	62
Straight divider with hole for post	700	120	62
Radius 6,0 m convex	700	120	63
Radius 8,0 m convex	700	120	63
Radius 10,0 m convex	700	120	63
Radius 12,0-15,0 m convex	700	120	63
Termination left	700	120	36
Termination right	700	120	36
Termination with hole for post left	700	120	36
Termination with hole for post right	700	120	36
Flexible post white with white reflex	-	900	0,5
Flexible post white with yellow reflex	-	900	0,5
Flexible post yellow with yellow reflex	-	900	0,5

Center divider	Length mm	Height mm	Kg/pc
Straight divider	700	120	46
Straight divider for gluing	700	120	46
Straight divider drained	700	120	45
Straight divider with hole for post	700	120	45
Termination left	700	120	41
Termination right	700	120	41
Termination with hole for post left	700	120	41
Termination with hole for post right	700	120	41
Flexible post white with white reflex	-	900	0,5
Flexible post white with yellow reflex	-	900	0,5
Flexible post yellow with yellow reflex	-	900	0,5

## BENDER SPIKMA POST FOR PBM AND CENTER DIVIDER

The flexible reflector post shows the way in a clear and efficient manner. White post with yellow reflex at openings / entrances, white post white reflex on the long distances in between and yellow post yellow reflex for temporary or extra clear markings.





BENDER SPIKMA TRAFFIC CIRCLE ELEMENT



BENDER HIPPED SLAB



BENDER SPIKMA TRAFFIC CIRCLE ELEMENT



# BENDER SPIKMA TRAFFIC CIRCLE CURB AND TRAFFIC CIRCLE ELEMENT

Our Traffic circle curb is a non-repellent curb that with counter-support on the front and back fulfills its function effectively year after year. It is manufactured in a straight design with angled ends, which makes it easy for you as a customer to mount the traffic circle in the radius you want. With the help of our flexible lifting aids, the elements are mounted quickly and easily, contact your representative for more info.

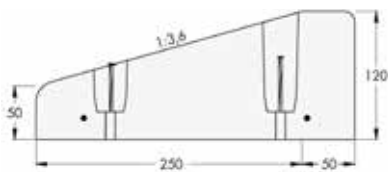
The shape and character of the Traffic circle element reduces damage to the vehicles wheels. The element is drivable, and provides space for large vehicles to turn.



For suitable lifting aids, contact your representative.

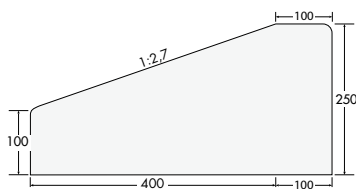


## BENDER SPIKMA TRAFFIC CIRCLE CURB



	Length mm	Height mm	Kg/pc
Radius 1,5 m	600	120	35
Radius 2,5 m	600	120	35
Radius 3,5 m	600	120	35
Radius 7,0 m	600	120	35
Radius 12,0 m	600	120	35

## BENDER SPIKMA TRAFFIC CIRCLE ELEMENT



	Length mm	Height mm	Kg/pc
Radius 10-12 m	780	250	175
Radius 12-15 m	780	250	175
Radius 15-19 m	780	250	175
Radius 19-27 m	780	250	175
Radius 27-40 m	780	250	175

## BENDER HIPPED SLAB

Benders range of special tiles all have common denominators in great functionality and appearances that blend well into the surrounding environments. Bender Hipped slab is intended to be used as a traffic separating slab and on surfaces where vehicle traffic is not desirable.

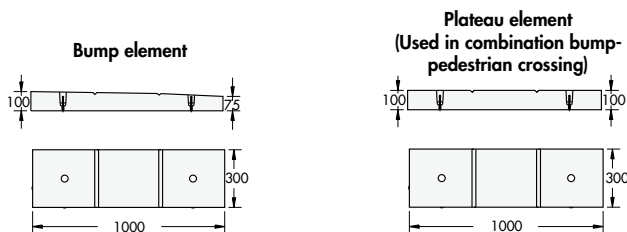




# BENDER SPIKMA SPEED BUMP AND ROAD CUSHION

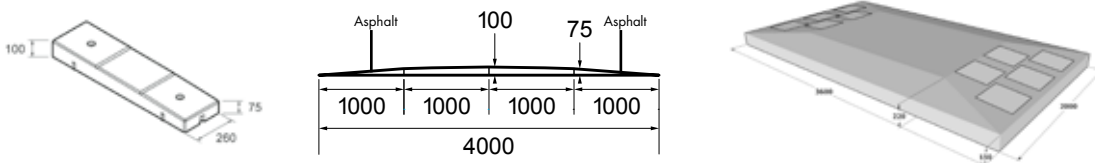
Through various combinations of bump and plateau elements and asphalt, Spikma Speed bump can be adapted for speed reductions in the range 20-50 km/h with high precision – an excellent way to protect pedestrians and cyclists at intersecting pedestrian and cycle paths.

Our speed-reducing Road cushion is used to advantage if the street is heavily trafficked by buses. The design allows buses to straddle the obstacle with a minimum of discomfort for drivers and passengers, while passenger cars with narrower track widths are forced up on the obstacle. Our Road cushion is cast in one piece with contrast markings and is easily mounted in existing ground cover.



Product	Length mm	Height mm	Kg/pc
Bump element width 300 mm	1000	100/75	65
Plateau element width 300 mm	1000	100	74
Steel pipe post, indicator sign 0,9 m	-	900	13

**Road cushion**  
Cushion element width 260 mm  
Complete Road cushion 8 elements, length 1,0 m.



Road cushion	Length mm	Height mm	Kg/pc
Cushion element width 260 mm	1000	100	57
Fully cast Road cushion 2 000 mm	3600	150/220	3 500

Use Bender's curb glue if leveling needs to be performed before mounting the bump.

## STEEL PIPE POST WITH INDICATOR SIGN

We also have a steel pipe post with a base of hot-dip galvanized angle iron that is easily nailed down and asphalted over. The post is equipped with a break pin that facilitates replacement in the event of a collision.

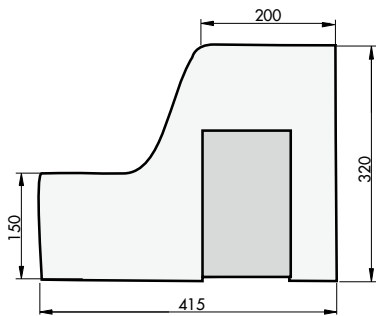




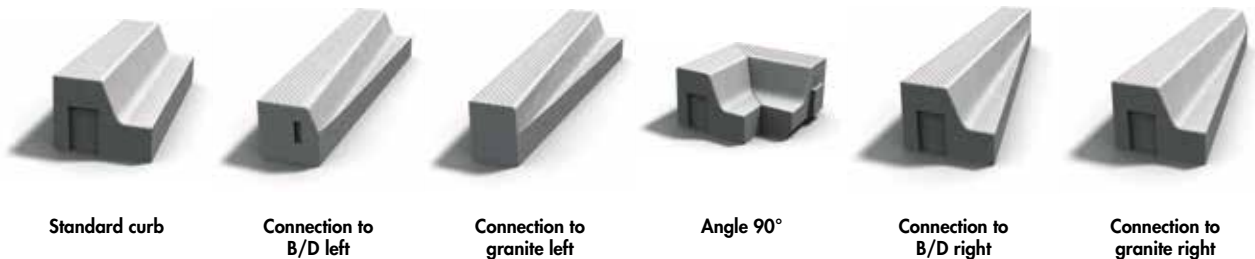
COMBINE WITH  
SLABS,  
SEE OUR RANGE AT  
[BENDERS.SE](http://BENDERS.SE)

# BENDER SPIKMA BUS STOP CURB

Our Bus stop curbs function as an elevated sidewalk where the bus is guided in safely along the smooth curbs without risk of damage to tires or vehicles. The connection curbs with a 3.5 percent slope provide increased accessibility for the disabled and meet current requirements for disability adaptation. All curbs have a rifled top that minimizes the risk of slipping accidents. The stability and design also contribute to increased safety at bus stops. The construction is stable, requires a minimum of maintenance and is well suited for both rebuilding and new production.



	Length mm	Height mm	Kg/pc
Standard curb	1000	320	265
Connection to granite, left	1500	320	310
Connection to granite, right	1500	320	310
Connection to B/D, left	1500	320	310
Connection to B/D, right	1500	320	310
Connection to D, left	1130	320	285
Connection to D, right	1130	320	285
Angle 90° concave	580+580	320	400



## BENDER SPIKMA LIFTING CHAIN

For the bus stop curb, we offer a CE-marked lifting chain, which facilitates the handling of the product. The bus stop curb has pre-drilled holes on the long sides where the chain is attached.



# BENDER BUS STOP STAR

Our new Bus stop Star offers a new faster way to build bus stops. It works in the same way as traditional bus stop curbs like an elevated sidewalk where the bus is safely steered in without risk of damage to tires, vehicles or passengers. Unlike traditional bus stop curbs, Bus stop Star is a ready-made solution with slabs embedded in the same element, smooth or tactile. For connections, Bender's connection curbs for concrete or natural stone is used. The construction is stable, due to its relatively high weight, requires no maintenance and is suitable for both rebuilding and new construction. You also avoid weeds when you get a hard joint between the slabs.



	Length mm	Width mm	Height mm	Kg/pc
Bender Star Bus stop	2110	1107	320	1750



BENDER SPIKMA BUSHÅLLPLATS STAR



# BENDER CONCRETE BARRIERS

With Bender Concrete barrier Large, you can easily create a stable and safe closure or separator. The areas of use are many, for example traffic separators, closures at parking lots, etc. Due to its construction with recesses for forklifts, the concrete barrier is moveable.



Bender Concrete barrier Small is suitable when you want to create a clear delimitation or closure at, for example, an entrance or in a car park. They have a dense, smooth surface and are easy to move thanks to the distances in the bottom. There are two different models, one with a hole that works excellently as a foundation for sign poles and one without holes. To increase visibility, and thereby reduce the risk of accidents, you can buy a reflector for your own installation for both models.



## CONCRETE BARRIER LARGE



	Length mm	Width mm	Height mm	Kg/pc
Concrete barrier Large	2500	450	860	1400

## CONCRETE BARRIER SMALL



	Length mm	Width mm	Height mm	Kg/pc
Concrete barrier Small with hole	1070	435	510	273
Concrete barrier Small without hole	1070	435	510	278



BENDER CONCRETE BARRIER S WITHOUT HOLE



BENDER CONCRETE BARRIER S WITH HOLE



BENDER CONCRETE BARRIER L



# BENDER BOLLARD AND PARKING PLINTH

Bender Concrete bollards are used for simple and elegant delimitation on, for example, pedestrian streets, squares or quays and are used to advantage in combination with smooth slabs. Available in two different designs.



Bender Parking plinth Flexi is for a simple and flexible delimitation of a parking area. The plinths are placed on top of the ground and tied together with the help of, for example, a pressure-impregnated wooden plank.

## CONCRETE BOLLARD

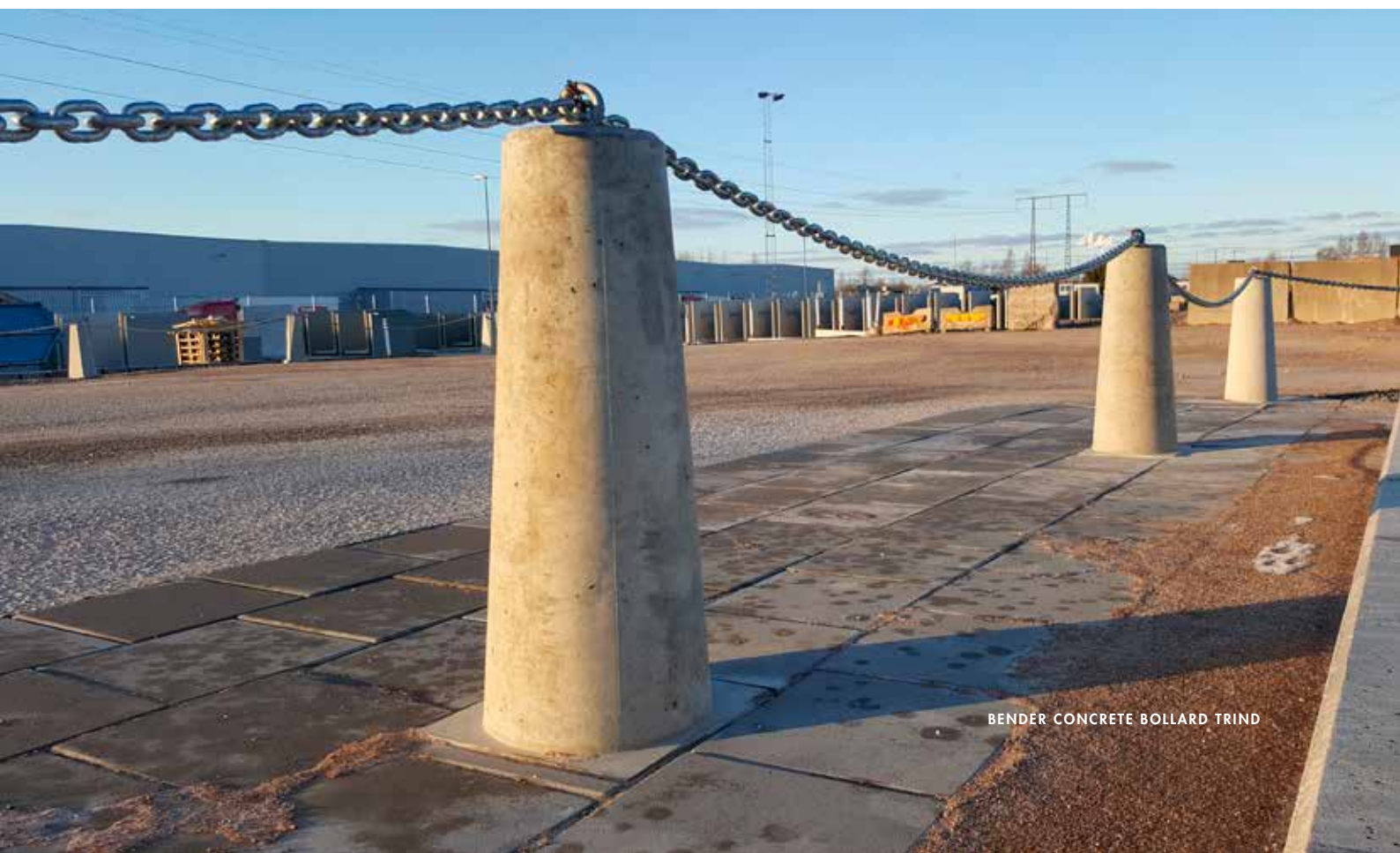


	Height mm	Visible height	Width mm	Kg/pc
Concrete bollard Trind	1100	750	350	200
Concrete bollard Hexagon	1100	750	350	200

## PARKING PLINTH FLEXI



	Length mm	Width mm	Height mm	Kg/pc
Parking plinth Flexi	400	290	450	55



BENDER CONCRETE BOLLARD TRIND



BENDER SIENA BENCH



BENDER SIENA BOLLARD

# BENDER NEWLINE AND SIENA CONCRETE FURNITURE

Bender Newline Bench, Bender Siena Bench and Bender Siena Bollard are stylish and modern concrete furniture that fit in all the city's meeting places – entrances, squares, schoolyards, courtyards, bus stops, pedestrian streets, etc. The furniture is easily placed in the intended environment.

Bender Siena Bench and Bollard are equipped with 2 pcs 24 mm cast-in screw sleeves at the bottom. Threaded rods can be anchored in a cast-in-place foundation which makes the bench withstand the impact force from a vehicle even better.



## NEWLINE BENCH



	Length mm	Width mm	Height mm	Kg/pc
Straight	1900	470	650	1380
Fitting piece	950	470	650	690
Corner	800+800	470	650	820
Radius 2,5 m	1920	470	650	1230
Radius 6,0 m	1880	470	650	1190
Radius 9,0 m	1770	470	650	1170

## SIENA BENCH



	Length mm	Width mm	Height mm	Kg/pc
Straight	1500	350	500	545
Radius	1500	350/290	500	765

## SIENA BOLLARD



	Length mm	Width mm Ø	Height mm	Kg/pc
Siena Bollard	350	290	500	95

WE SUPPORT:



BENDERS | SE | 2021 - 08

## HEADOFFICE

Benders Sverige AB  
Box 20  
535 21 Kvänum

**Visiting address:** Edsvära

**Phone:** 010-888 00 00

**E-mail:** [info@benders.se](mailto:info@benders.se)

**Homepage:** [www.benders.se](http://www.benders.se)