# KUNSPURT

INDUSTRIAL FENCINGS

# KUNSPURT

# **TABLE OF CONTENTS**

ABOUT

ISO QUALITY

CHAIN-LINK FENCE

WELDED PANELS

PALISADE FENCE

FENCES FOR ROAD AND RAIL INFRASTRUCTURE



www.konsport.com.pl

3

5

11

33

45

# KUNSPURT ABOUT

#### **EXPERIENCE**

KONSPORT has been specialising in the production of system fencing for over 25 years. Advanced technology and professional team is the basis for the success of our company.

The acquired experience and knowledge enable continuous improvement of production processes, providing our Customers with the highest quality guarantee.

#### KNOWLEDGE

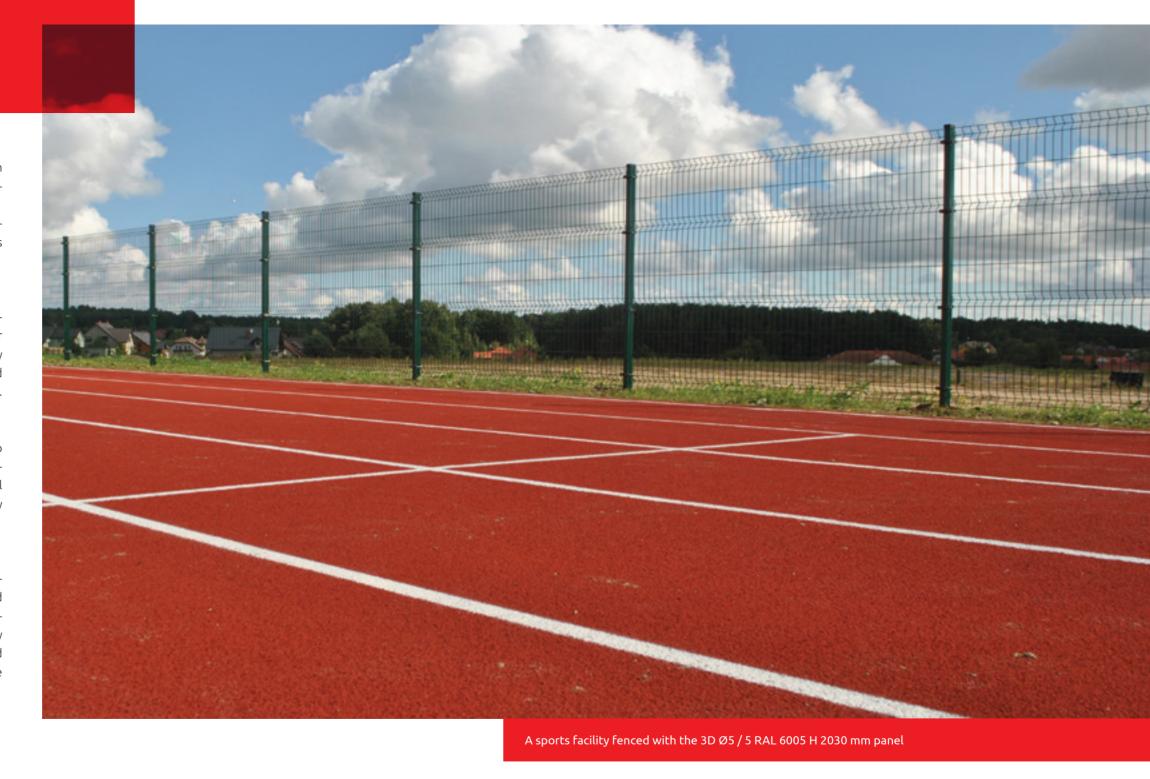
Continuous improvement and enriching professional knowledge enables comprehensive Customer servicing. We offer not only the highest category fences but also individual advisory services and technical support. Owing to our involvement and competences we have the trust of our Customers and Partners.

#### **I SUCCESSES**

KONSPORT is the brand recognised not only in Poland but also abroad. The highest quality fence systems, characterised by unique design and exceptional endurance are appreciated by all Europeans. The successes of KONSPORT are also confirmed by numerous certificates and awards.

#### I BEZPIECZEŃSTWO

KONSPORT means also safety while travelling. Owing to positive opinions issued by the Research Institute of Roads and Bridges, KONSPORT, as one of few companies, handles the production of materials used for the protection of road and railway infrastructure. While travelling in Poland along newly-opened highways and expressways, this is KONSPORT which takes care of your peace and safety.



KUNSPURT ISO Quality

The main objective of KONSPORT is providing our Customers with comprehensive service at the highest level possible. Therefore, all our products are characteristic for the highest performance quality. It is ensured by the Quality Management System with ISO 9001 certificate issued by the Office of Technical Inspection.

All the production stages are subject to strict monitoring; therefore, KONSPORT fences have a long-term guarantee and meet the expectations of even the most demanding Customers.





CHAIN-LINK fencing

Wire mesh fencing is the most popular and most commonly used fencing system in Poland.

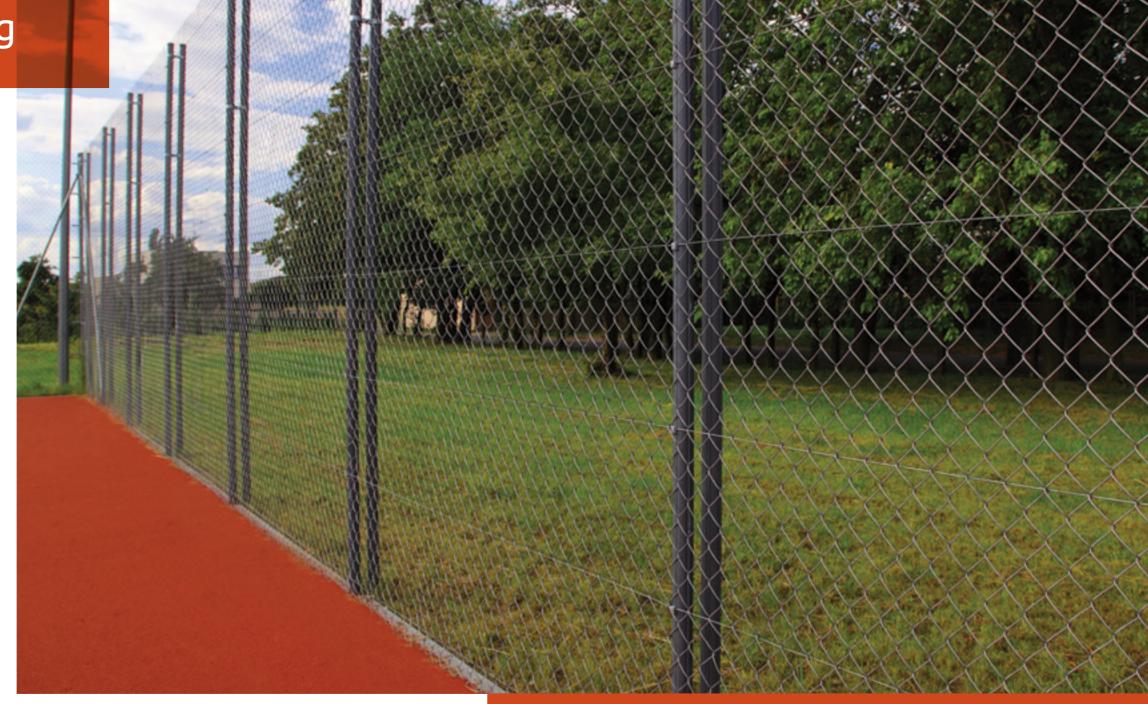
The most important features to be met by this system are resistance to mechanical damage and weathering. Mesh fencing is available in two versions - as galvanized and PVC-coated.

#### **I SYSTEM ADVANTAGES**

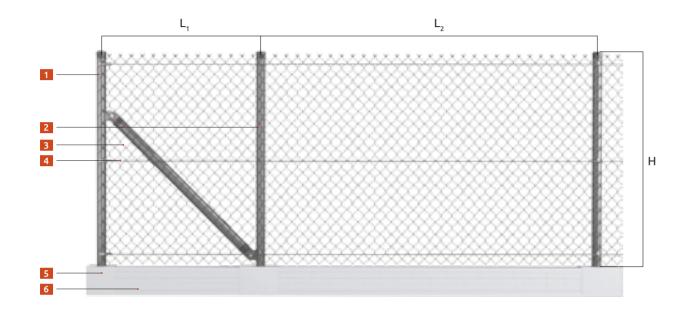
- Low price
- Functional and easy to assemble
- Solid and aesthetic
- Abundant sizes and optionsDurable
- Durable

#### SYSTEM APPLICATION

- Industrial fences
- Residential and recreation premises
- Sports facilities, parks and gardens
- Warehouses, storehouses, transport terminals



A galvanized mesh suspended on very rigid, specially joined double  $\emptyset$  60 mm posts



# **Exemplary dimensions**

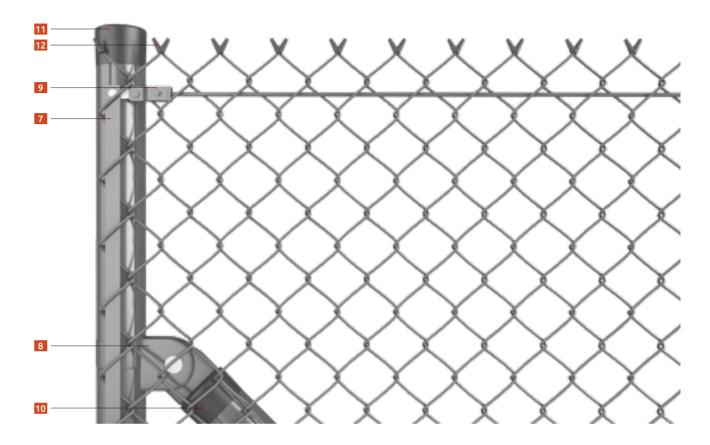
 $L_1 = 1,250 \text{ mm}$ 

 $L_2 = 2,540 \text{ mm}$ 

H = 1,500 mm

# System description

- 1 End post
- 2 Intermediate rail
- 3 Wire mesh
- 4 Tension wire
- 5 Concrete fastener
- 6 Reinforced slab



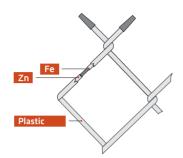
# System description

- 7 Fixing flat bar
- 8 Clamp for support
- 9 Wire tensioner
- 10 Support post cap
- 11 Post cap
- 12 Cap protecting against corrosion

Mesh is attached to end post by galvanized and coated flat bar. Support post is ended with a special plastic cap. It is attached to end (or corner) post by a clamp. Mesh is additionally protected by caps attached to upper mesh ends.

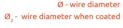
#### We manufacture chain-link fence in the following options:

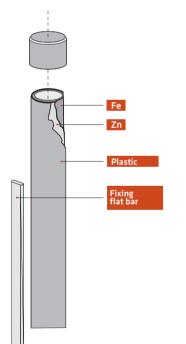
		Ø/Ø <sub>2</sub> *		Height		
Option	2/3	2,5/3,5	2,8	(mm)	Colour	Mesh size
Galvanized steel wire				1,000 1,250	dark	
Galvanized and coated steel wire				1,500 1,800 2,000	green	60 x 60 mm



# ON REQUEST, WE ALSO MANUFACTURE MESHES OF UNUSUAL HEIGHTS, COLOURS AND MESH APERTURES.

Ø - wire diameter





#### WE MANUFACTURE POSTS IN THE FOLLOWING OPTIONS:

Option	Hight (mm)	Colour
Galvanized steel tube	1,500	
Coated steel tube	1,750 2,000 2,200 2,500	dark green
Galvanized and coated steel tube		g

POSTS WITH NON-STANDARD HEIGHT ARE MADE TO ORDER AS WELL.







Fencing of a military facility with an increased access control throughthe use of posts with a single barbed wire angle bracket.

# WELDED panel

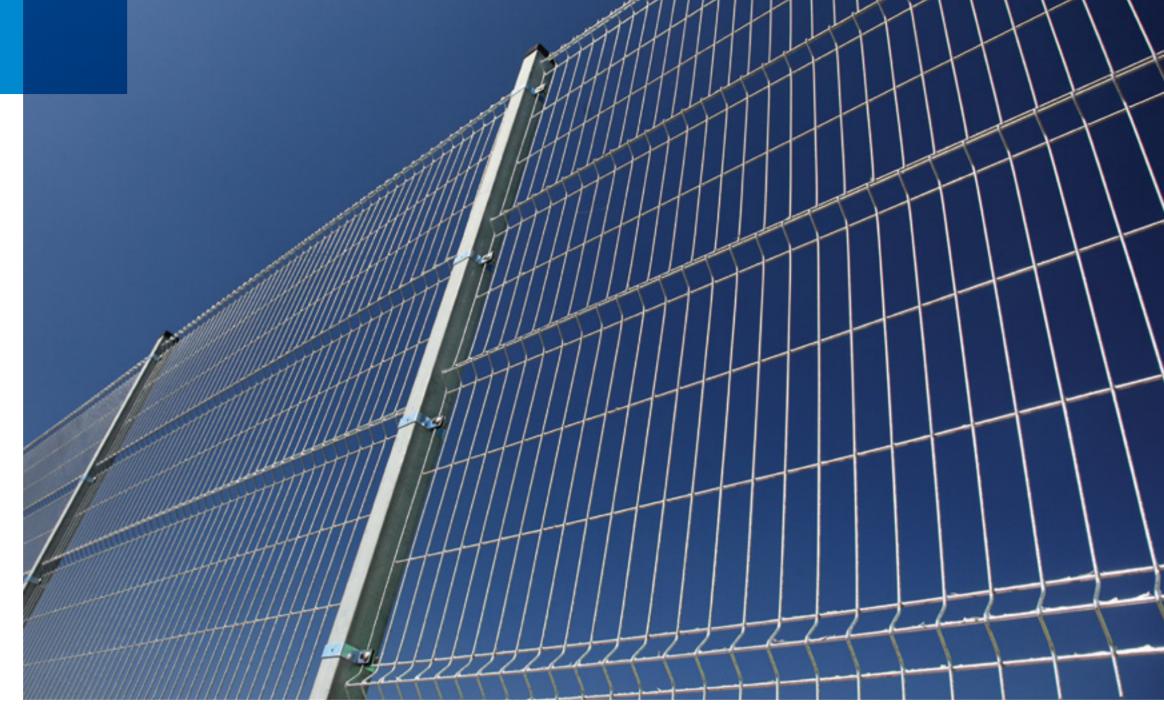
Welded panels are made as mates of welded horizontal and vertical wires of diameter. Depending on the system, the panel has 2, 3 or 4 horizontal stiff ribs. Thanks to optimum sizes of horizontal reforming as well as number and spacing of wires, they are perfectly stiff, emphasize their solidity and durability and increase fence aesthetic. Panel has got perfect protection against corrosion. All RAL colours of paint coating are available.

#### I SYSTEM ADVANTAGES

- Low price
- Aesthetic
- Highly durable
- Easy and quick assembly
- Abundant sizes are available
- Any RAL colour is available

#### I SYSTEM APPLICATION

- Residential fences and housing estates
- Sports facilities, parks and gardens
- Industrial fences



# **PANEL 3W**

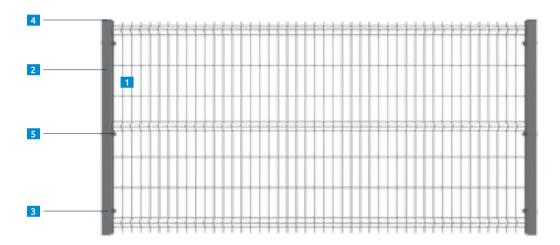
#### I TECHNICAL DESCRIPTION:

- The panel consists of spot welded steel wires (horizontal and vertical)
- Diameter of the horizontal and vertical wires –
   4 mm or 5 mm
- Mesh apertures: 50 x 200 m
- Panel width: 2,500 mm

#### I CORROSION PROTECTION:

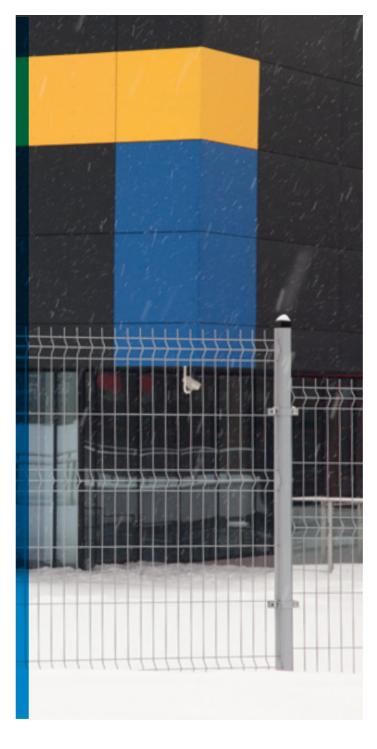
- Hot-dip galvanizing
- Hot-dip galvanizing + polyester powder coat

The panel is finished with 30-mm-long wires on both sides.



#### System description

- 1 Panel
- 2 Post
- 3 Attaching clamp
- 4 Post cap
- 5 Attaching screw



# **3W WELDED PANEL**

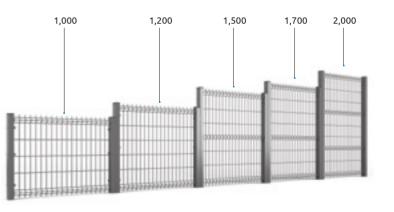
#### PARAMETER:

PANEL HEIGHT (mm)	NUMBER OF HORIZONTAL WIRES (piece)
1,000	9
1,200	10
1,500	13
1,700	13
2,000	15

MESH APERTURE - 50 x 200 mm DIAMETER OF VERTICAL/HORIZONTAL WIRES 5/5 lub 4/4 mm NUMBER OF VERTICAL BARS 46

3W WELDED PANELS (SERIES OF HEIGHTS)

#### H (mm):



# PANEL 3D

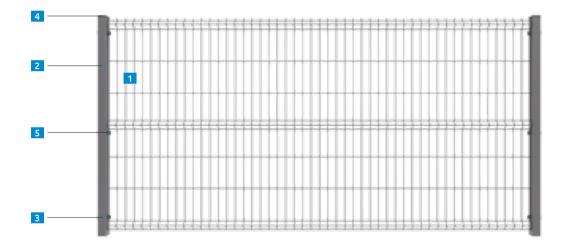
#### I TECHNICAL DESCRIPTION:

- The panel consists of spot welded steel wires (horizontal and vertical).
- Diameter of the horizontal and vertical wires –
   4 mm or 5 mm
- Mesh apertures: 50 x 200 mm
- Panel width: 2,506 mm

#### I CORROSION PROTECTION:

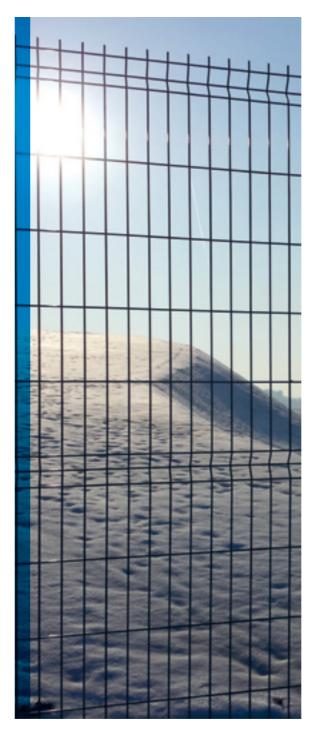
- Hot-dip galvanizing
- Hot-dip galvanizing + polyester powder coat

The panel is finished with 30-mm-long vertical wires on one side.



#### System description

- 1 Panel
- 2 Post
- 3 Attaching clamp
- 4 Post cap
- 5 Attaching screw



# **3D WELDED PANEL**

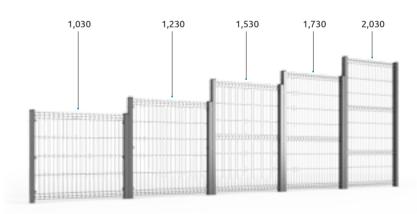
#### PARAMETER:

PANEL HEIGHT (mm)	NUMBER OF HORIZONTAL WIRES (piece)
1,030	9
1,230	10
1,530	13
1,730	14
2,030	17

MESH APERTURE (AXIALLY) - 50 x 200 mm DIAMETER OF VERTICAL/HORIZONTAL WIRES 5/5 lub 4/4 mm NUMBER OF VERTICAL BARS 51

3D WELDED PANELS (SERIES OF HEIGHTS)

#### H (mm):









## **PANEL 4W**

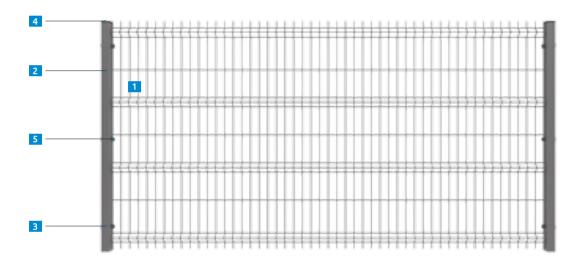
#### I TECHNICAL DESCRIPTION:

- The panel consists of spot welded steel wires (horizontal and vertical).
- Diameter of the horizontal and vertical wires 4 mm lub 5 mm
- Mesh aperture: 50 x 200 mm
- Panel width: 2,506 mm

#### I CORROSION PROTECTION:

- Hot-dip galvanizing
- Hot-dip galvanizing + polyester powder coat

The panel is finished with 30-mm-long vertical wires on both sides.



#### System description

- 1 Panel
- 2 Post
- 3 Attaching clamp
- 4 Post cap
- 5 Attaching screw

# **2W WELDED PANEL**

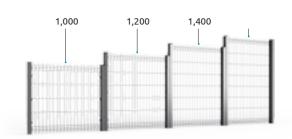
#### PARAMETER:

PANEL HEIGHT (mm)	NUMBER OF HORIZONTAL WIRES (piece)
1,000	9
1,200	10
1,400	11
1,600	12

MESH APERTURE (AXIALLY) - 50 x 200 mm DIAMETER OF VERTICAL/HORIZONTAL WIRES 5/5 mm 4/4 mm NUMBER OF VERTICAL BARS 51

#### 2W WELDED PANELS (SERIES OF HEIGHTS)

#### H (mm):



# **4W WELDED PANEL**

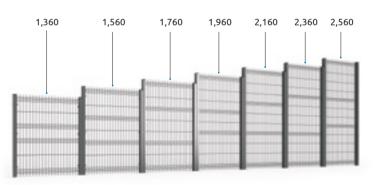
#### PARAMETER:

PANEL HEIGHT (mm)	NUMBER OF HORIZONTAL WIRES (piece)
1,360	14
1,560	15
1,760	16
1,960	17
2,160	18
2,360	19
2,560	20

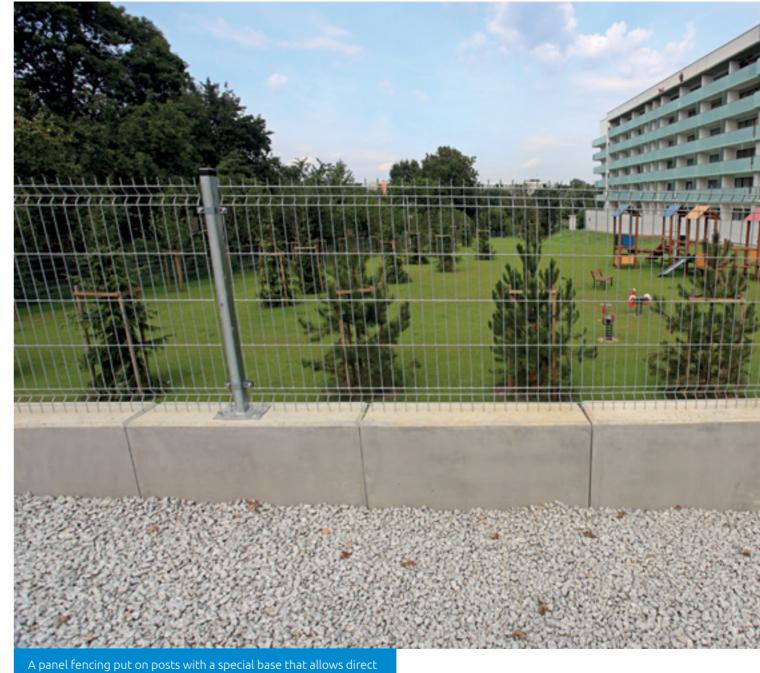
MESH APERTURE (AXIALLY) - 50 x 200 mm DIAMETER OF VERTICAL/HORIZONTAL WIRES 5/5 mm 4/4 mm LICZBA PRETÓW PIONOWYCH 51

#### 4W WELDED PANELS (SERIES OF HEIGHTS)

#### H (mm):







A panel fencing put on posts with a special base that allows direct mounting to concrete blocks

# PANEL 2D

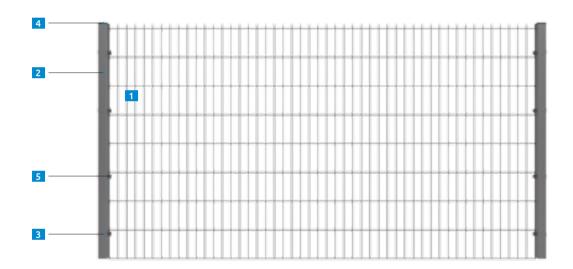
#### TECHNICAL DESCRIPTION:

- The panel consists of spot welded steel wires (horizontal and vertical).
- Diameter of the vertical wires: 5 mm
- Diameter of horizontal wires (double): 6 mm
- Mesh aperture: 50 x 200 mm
- Panel width: 2,510 mm

#### I CORROSION PROTECTION:

- Hot-dip galvanizing
- Hot-dip galvanizing + polyester powder coat

Ended one-side with 30 mm long vertical wires.



## System description

- 1 Panel
- 2 Post
- 3 Attaching clamp
- 4 Post cap
- 5 Attaching screw



## **AVAILABLE HEIGHTS: PANEL 2D**

PANEL	WEIGHT IN KG		
HEIGHT	GALVANIZED LINK	POWDER COATED	
630	10.8	11.1	
830	13.9	14.3	
1,030	17.0	17.5	
1,230	20.2	20.8	
1,430	23.3	24.0	
1,630	26.4	27.2	
1,830	29.6	30.5	
2,030	32.7	33.7	
2,230	36.0	37.0	
2,430	39.1	40.2	



# **PANEL 2DS**

#### TECHNICAL DESCRIPTION:

- Panel zgrzewany punktowo z prętów stalowych (poziomych i pionowych).
- Średnica drutów pionowych: 6 mm
- Średnica drutów poziomych (podwójne): 8 mm
- Wielkość oczek: 50 x 200 mm
- Szerokość panela: 2,510 mm

#### I CORROSION PROTECTION:

- Hot-dip galvanizing
- Hot-dip galvanizing + polyester powder coat

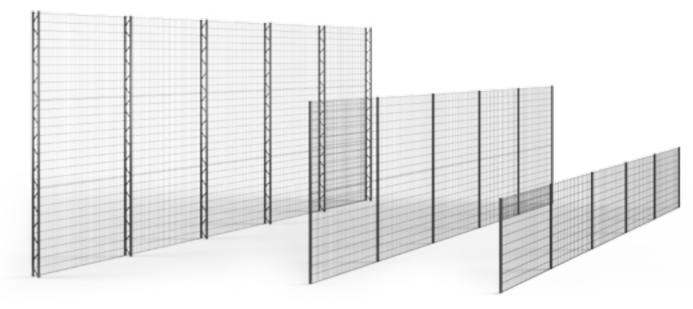
Ended one-side with 30 mm long vertical wires.

#### **AVAILABLE HEIGHTS: PANEL 2DS**

PANEL	WEIGHT IN KG		
HEIGHT	GALVANIZED LINK	POWDER COATED	
630	14.3	14.6	
830	18.3	18.8	
1,030	22.3	23.0	
1,230	26.4	27.1	
1,430	30.4	31.3	
1,630	34.4	35.4	
1,830	38.5	39.5	
2,030	42.5	43.7	
2,230	46.5	48.0	
2,430	50.5	52.0	



# **SPORTS FENCING**



3x Panel 2D	2x Panel 2D	Panel 2D
H = 6,090 mm	H = 4,060 mm	H = 2,030 mm
Post	Post	Post
Lattice post	60 x 40 x 3 mm	60 x 40 x 2 mm



# **GATES AND WICKET GATES**

#### I CORROSION PROTECTION

The panel corrosion protection is based on applying a special paint coat on the zinc coat prepared beforehand, it is a polyester powder coat applied electrostatically. Preparing the galvanized steel is the key factor accting the durability of the paint coat. Being aware of that fact we use so-called rasping (stream and abrasive treatment) or it's also called sweeping, thanks to the process, the paint coats have superior adhesion, in turn, superior quality. The paint coat protects zinc against oxidation, expands its life by 40% and allows for obtaining expected colour results.

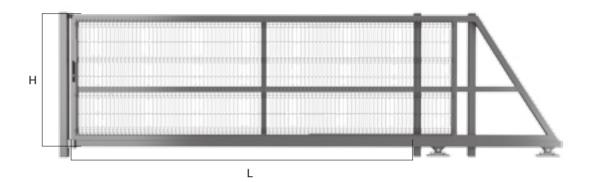
All gates and wickets are equipped in adjustablegalvanized hinges allowing for easy assembling andadjusting them during operation.

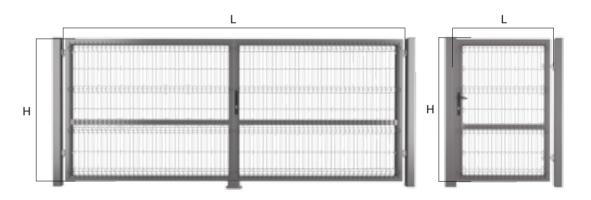
Gates and wicket gates with non-standard sizes aremade to order. Filling of gates and wicket gates isavailable at any option.



#### Self-supporting gates

maximum dimensions: L = 1,0000 mm H = 2,000 mm





# Mobile gates

maximum dimensions: L = 1,0000 mm H = 2,000 mm

# Wicket gates

maximum dimensions: L= 1,500 mm H = 2,000 mm









Fencing of a sports facility. The overhead gate filled with the 2D panel.

# PALISADE fence

KONSPORT palisade fencings constitute an investment in safety and functionality. A complete line of modular elements, gates, overhead gates and self-supporting gates allows to adjust the fence to the requirements of the facility and terrain. This system offers not only a modern and representative design, but also the highest quality and long-term anti-corrosion warranty.

#### SYSTEM ADVANTAGES

- Aesthetic
- Highly durable
- Easy and quick assembly
- Abundant sizes are available

#### I SYSTEM APPLICATION

- Residential fences and housing estates
- Sports facilities, parks and gardens
- Industrial fences



Model: PP 002

#### PALISADE fence

# **PP 001**

#### | TECHNICAL DESCRIPTION:

- Load-bearing structure:40 x 40 mm section
- Filling: 25 x 25 mm section steel, galvanized

#### I CORROSION PROTECTION:

- Hot-dip galvanizing
- Hot-dip galvanizing + polyester powder coat

#### I FILLING OF A PALE SPAN:

- traditional (PP 001 W)
- caro "cut" (PP 001 CC)
- caro (PP 001 C)
- outside pale (PP 001 N)





## System description

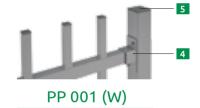
1 25 x 25 mm section

2 40 x 40 mm section

3 Post

4 Attaching component

5 Cap











Hot galvanized 3D panels and the self-supporting PP 002 gate. KONSPORT industrial fencing system provides safety and guarantees trouble-free operation.

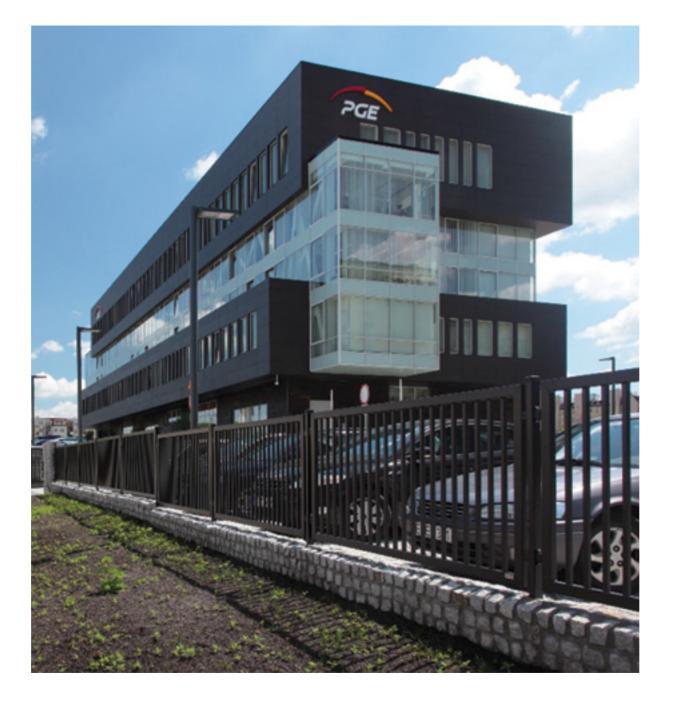
# **PP 002**

#### I TECHNICAL DESCRIPTION:

- Load-bearing structure: 60 x 40 mm section
- Filling: 25 x 25 mm section steel, galvanized

#### I CORROSION PROTECTION:

- Hot-dip galvanizing
- Hot-dip galvanizing + polyester powder coat





## System description

- 1 60 x 40 mm section
- 2 25 x 25 mm section
- 3 Post
- 4 Attaching component
- 5 Cap





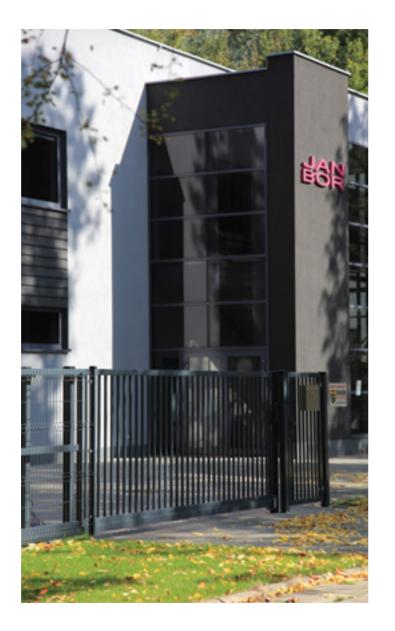
## **GATES AND WICKET GATES**

#### CORROSION PROTECTION

All components of the palisade fence are hot-dip galvanized inaccordance with EN-ISO 1461 DIN 50976 tZn0. The componentthat additionally improves corrosion resistant properties is a paintcoat which is applied upon customer's request. All RAL colours areavailable.

All gates and wickets are equipped in adjustable CORROSION PROTECTIONgalvanized hinges allowing for easy assembling and adjusting them during operation.

Gates and wicket gates with non-standard sizes aremade to order. Filling of gates and wicket gates isavailable at any option.

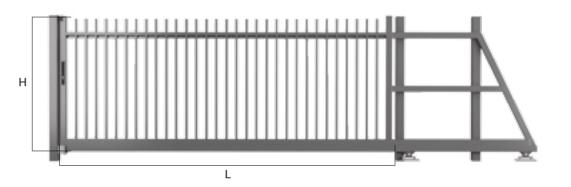


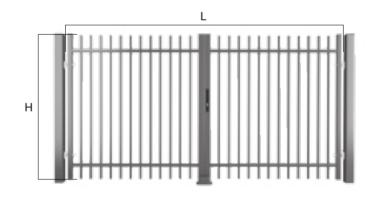
#### **SELF - SUPPORTING GATES**

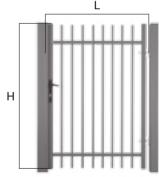
model maximum dimensions:

PP 001 L = 5,500 mm H = 2,000 mm

PP 002 L = 10,000 mm H = 2,000 mm







#### MOBILE GATES

 WICKET GATES

maximum dimensions: L = 1,500 mm H = 2,000 mm



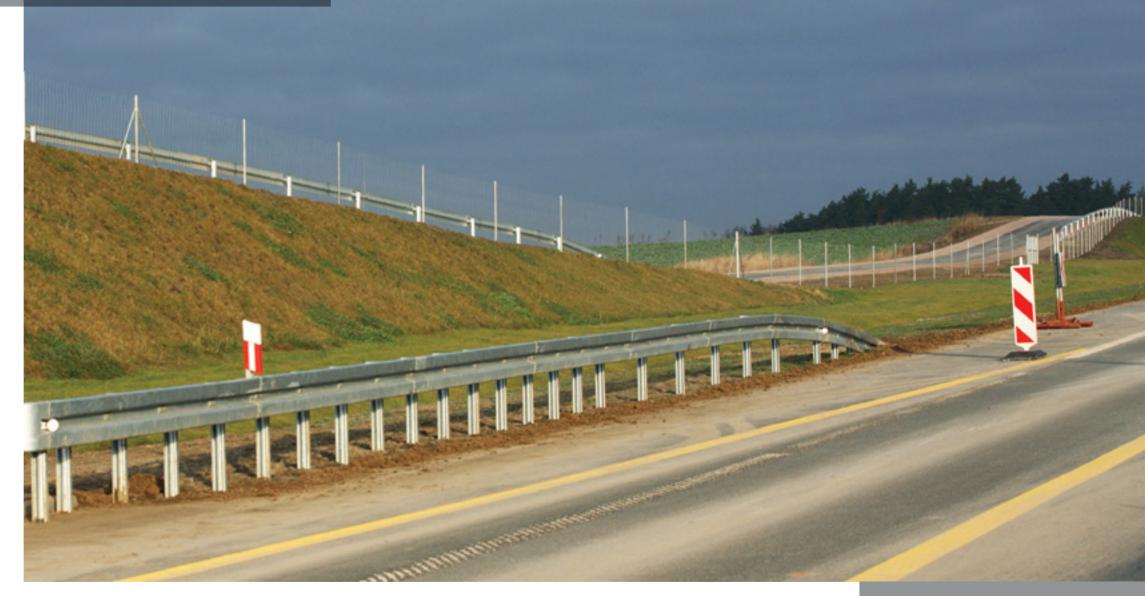


# fences FOR ROAD AND RAIL INFRASTRUCTURE

The road and rail infrastructure system hasbeen approved by the Road and Bridge ResearchInstitute (IBDIM), technical approval no.AT/2007-03-2240/2.

Detailed information on the system to be downloaded from our website www.konsport.com.pl

Thanks to Road and Bridge Research Institute's approval, KONSPORT is one of the few contractors ensuring road and rail infrastructure safety. Travelling through newly opened roads and highways you can be sure, that KONSPORT products look out for your safety.



Fencing of the A1 motorway









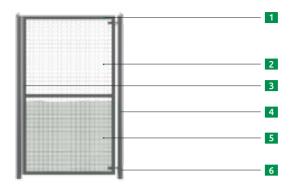
# fencings SECURING TRANSPORT ROUTES AGAINST THE INTRUSION OF HUMANS AND ANIMALS

Intensive development of the road and rail infrastructure results in new routes running through areas previously occupied by animals or in the vicinity of their natural habitats. These routes often intersect natural animal migration routes, and thus they are places where there is a risk of collision. Therefore the problem of a proper route protection is very important from the point of view of ecology, traffic safety and costs generated by collisions caused by human or animal intrusion on the routes designed for road and rail traffic. Many years of experience gained by the KONSPORT company in collaboration with entities building and managing roads and railway lines (in Poland and in other countries of the European Union) show that a properly made fencing system substantially reduces high costs associated with compensations for the victims and the costs of infrastructure repairs related to collisions with animals and humans. The fence should therefore protect against intrusion by outside persons and animals, as well as effectively channel them into specially created overground and underground passages for animals and people. In this regard, a fencing system remains the only effective solution. One should keep in mind that the fencing should serve its purpose at any time of the year, it should not cause injuries while being durable.

In order to fulfil the basic functions, the fence should consist of a system, which includes:

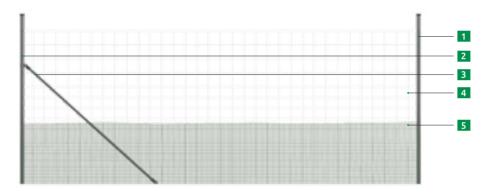
- Knot mesh
- Herpetofauna protection mesh
- Indirect, supporting and tensioning posts
- Gates and wickets
- Mounting accessories

Each properly constructed fencing must include all of the above items. A mesh properly stretched on posts plays a primary role in fencing off motorway lanes. The task of the wickets and gates is to enable movement of the policing and emergency services within the lanes. An important role is also played by the mounting accessories without which it would not be possible to attach the mesh to the ground (anchor hooks), to link two rolls of mesh (Gripple connectors), to secure the post tops (caps) and to attach the mesh to the posts (grommets).



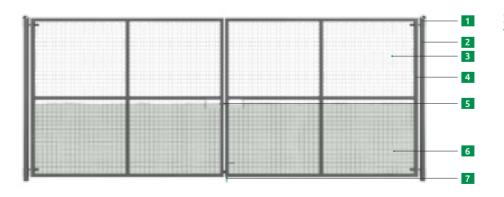
#### System description

- 1 Section 40 x 40 x 1.5 mm
- 2 Mesh Ø 3.00 mm, aperture 50 x 50 mm
- 3 Lock with a gate
- 4 Wicket gate post Ø 60.3 x 3.00 mm
- Woven mesh Ø 1 mm, aperture 5 x 5 mm
- 6 Hinge bushing



#### System description

- 1 Intermediate post Ø 60 x 1.25 mm
- 2 Tensioning post Ø 60 x 2.00 mm
- 3 Supporting post Ø 38 mm
- 4 Motorway mesh
- 5 Woven mesh Ø 1 mm, aperture 5 x 5 mm



#### System description

- 1 Hinge bushing
- 2 Gate post Ø 60.3 x 3.00 mm
- 3 Mesh Ø 3.00 mm, aperture 50 x 50 mm
- 4 Section 40 x 40 x 1.5 mm
- 5 Lock
  - Woven mesh Ø 1 mm, aperture 5 x 5 mm
- 7 Vertical lock

# "KONSPORT" GUIDING FENCES

The system of KONSPORT guiding fences prevents mortality of amphibians, reptiles and other small animals during their migration that increases especially in their breeding season or in the summer after heavy rains. The reduction in mortality of the aforementioned animals is possible due to:

- 1) the fences block individual animals when they are moving
- 2) they guide animals to a passage giving them an opportunity to cross the road safely.

With the implementation of culverts and guiding fences not only amphibians can safely cross the road. Also drivers traveling along it are not forced to perform dangerous maneuvers in order to evade the animals.

Guiding fences must be used with a system of animal crossings installed in culverts in the form of ramps. This ensures the continuity of routes for amphibians, reptiles and other small animals.

KONSPORT animal guiding fences are made as a steel mesh fence coated with a zinc and aluminum alloy (ZnAl) with a height adjusted to the requirements of the Technical Documentation. In the upper part of the mesh there is small roof with a width of ~ 100 mm, inclined towards the vertical surface at an angle of 45° to 90°. The system also includes posts with a length adapted to the requirements of the Technical Documentation, made of steel sheet coated with a zinc and aluminum alloy (ZnAl).





#### KONSPORT animal guiding fences provide:

- an effective protection of amphibians and small mammals
- a sufficient height of the fence to prevent getting to its other side
- a wide overhanging element
- tightness to eliminate the risk of animal confinement in the fence
- stability of the fence achieved by installing it on independent posts
- corrosion resistance
- a low cost of manufacture and maintenance of the fence for amphibians
- a many-year durability



# A MAP PRESENTING KONSPORT PROJECTS COMPLETED TO DATE WITHIN WORKS CARRIED OUT TO PROTECT THE ROAD INFRASTRUCTURE





# **KUNSPURT**

Mieczysław Majewski

ul. Kilińskiego 75 95-083 Lutomiersk/Kazimierz

+48 43 677 50 63 biuro@konsport.com.pl

REGON: 730191012 NIP: 831-100-23-01

All the materials presented, including leaflets, advertisements, brochures, exhibitions are for reference only. The Seller reserves the right to introduce technological changes for the improvement of quality and functionality of the products, without notifying the buyer. The products presented in the brochure may have extra equipment.