

ISO 9001 certificate holder

# **BIRD CONTROL SYSTEM**

www.kraupner.cz

# KRAUPNER

Since 1995, we have developed fifteen different varieties of the spike system, which can be applied to the surfaces of almost any shape. We have sold and installed more than 750,000 metres of this system's components. In 2005, as the first Czech producer of protective spike systems for bird control, our company was certified as conforming to the ISO 9001 standard. We are currently the largest supplier of spike-system components in the Czech Republic.

# High-quality materials

The basic strip is made of Makrolon<sup>®</sup> UV stable polycarbonate, and the spikes are made of Swedish brand-name stainless spring steel with a strength of 1950MPa and a diameter of 1.3mm. The high quality of the material used is proven by its long-term resistance to UV radiation; the strip does not become yellow and does not disintegrate, and the spikes remain straight. The aforementioned top-quality materials are a matter-of-course for us, and they are essential for the quality of the product.

## **Use qualities**

The widest components of the spike system have up to 125 spikes per metre. The spacing between the spikes is 40mm. Depending on the variety selected, the Kraupner protective spike system can be installed on surfaces of a width of up to 300mm. As regards broader surfaces, the system can be installed in a number of rows. These qualities make the Kraupner spike system the densest system on the market and, at the same time, make it a system with the greatest effective width.



## **Design quality**

State-of-the-art computer controlled technology is used for the production of the basic strips and spikes. We can produce curves of any degree with an accuracy of 0.01mm, and the spikes can be shaped in 3D. When assembling spike system components, we adhere to a well-tested technological procedure. The finished products are subject to quality control.

## Discreetness

The Kraupner spike system is designed so as to maintain a high level of discreetness while being highly effective. The number, length, and spacing of the spikes respect both of the aforementioned requirements, and the appearance of the surface onto which the components are installed is only affected in a minimal degree.



# **High variability**

The Kraupner spike system uses a universal basic plastic strip with 24 fixing slots. Thanks to CNC technology, we can produce infinite numbers of shapes on this basic strip, even in 3D. Thus we can also produce a variety of the spike system outside of our standard product range.



H127

**SPIKE SYSTEM** 

# Availability

Products are always in stock for our customers in all their varieties. They can be purchased as whole packages and as individual items. Thus we can satisfy orders placed by both large companies and small households. As producers, we are able to respond very flexibly to special and large-volume inquiries.

320 mm

# PARAMETERS OF THE BASIC STRIP



- The same for all systems
- 32 cm long
- Made of eight 4 cm segments
- Can be easily broken off after each segment
- Can be easily shaped
- Can be mounted using glue or nails
- Bears markings for the direction of installation on ledges and window sills

Fixing slot for the middle spike Fixing slots for spikes with a lock Arrow for the correct direction of the strip during installation A hole for the mounting of the strip with a nail A slit for the easy breaking off of a segment

# **WORKING PROCESS**

## Surface preparation

• The system components are to be installed only on dry and thoroughly cleaned surfaces free from pigeon droppings, grease, and dust at a temperature of 5°C or more.

## Installation

• The strips are to be placed parallel to the edge of the surface in a row, side by side. For the drainage of water from the area behind the strips, a 5mm gap should be left between the individual strips.

#### • Mounting using a silicone glue

- For mounting using glue, we recommend Silirub 2<sup>®</sup> neutral transparent silicone glue by Soudal<sup>®</sup>.
- The glue must be applied on the full length of the basic strip.
- The strip with the silicone applied is to be lightly pressed onto the surface.
- Then we can check whether the strip is mounted in the required position.
- The glue sets in 24 hours. After 10 minutes the glue produces a hard shell.
  One cartridge of the glue can be used to mount 8m to 12m of the spike system, depending on the surface material.

### • Mounting using nails

- Nails are to be used for mounting
- onto wooden surfaces.
- For the nails, the holes in the basic strips are to be used.
- ure to be



Mounting using nails



# **EXAMPLES OF USE**



# LEDGES AND WINDOW SILLS



Systems with spikes vertical to the surface Varieties based on the width of the surface: H111, H111D, H114, H118 The treatment of ledges and window sills from 10 mm to 100 mm



**Systems with skew spikes** Varieties based on the width of the surface: H112, H113, H123, H126, H127, H133 The treatment of ledges and window sills from 100 mm to 300 mm



**Double-row mounting on surfaces** Varieties based on the width of the surface: 2x H123,2x H126, 2x H127, 2x H133 The treatment of ledges and window sills of a width exceeding 300 mm

# **EAVES GUTTERS AND SHARP EDGES**





Eaves gutters H112 The treatment of a heavily used eaves gutter. The H112 system protects the bird landing edge and the area of the gutter. Eaves gutters H111 The treatment of a lightly used eaves gutter. Enables easier access for cleaning.



Eaves gutters H111V The treatment of a lightly used eaves gutter with a very narrow bead.



Sharp edges H111V The treatment of sharp vertical edges.

# BEAMS, CYLINDRICAL SURFACES, AND RIDGE TILES



Beams H113, H123, H126, H127, H133 The treatment of beams, trusses, or wall plates requires spikes overlapping both bird landing edges.

# **OVERHANGING SURFACES**



Overhanging surfaces H118 The treatment of overhanging surfaces to prevent the nesting of house martins.



**Cylindrical surfaces** A variety based on diameter: H113, H123, H126 Very narrow bead of cylindrical surfaces, eaves conductors, or air-conditioning pipes.

# SURFACE UNEVENNESS



Minor unevenness The basic strip can adapt to minor surface unevenness. In the case of major unevenness, each strip can be easily shortened by breaking a piece off, and the mounting of the spike system can continue after the obstacle.



**Ridge tiles** Varieties based on the sharpness of the angle and the width of the ridge: H113, H123, H126 The treatment of roof ridges.



#### **Convex surfaces** Thanks to its flexibility and shape memory, the basic strip can be bent in a way that it enables it to be mounted on convex surfaces. The bending is carried out using scored lines between the individual segments of the basic strip. The level of bending is determined by

the radius of the convex surface

the detailing of an alter in the difference



Roofs made of two-piece tiles Varieties based on span: H113, H123, H126, H127 The treatment of the edges of roofs made of two-piece tiles.



#### **Concave surfaces**

For the treatment of concave surfaces, it is necessary to break the strip into individual segments and place those in a way that the spacing between the tops of the spikes is 30 mm to 40 mm. The breaking is carried out using scored lines between the individual segments of the basic strip.









H 111

	H 118
16 mm	System width:
108 mm	Spike length:
unning	Number of spi
25 Pcs	metre of the s
50 - 100 mm	Effective syste

pikes per 1 running 50 Pcs system: 100 mm Effective system width: Against the nesting of house martins

35 mm

120 mm





H 111D



123			
ystem width:	155	mm	
pike length:	115	mm	
lumber of spikes per 1 running			
netre of the system:	100	Pcs	
ffective system width:	200	mm	



H 123





9 mm Spike length: 108 mm Number of spikes per 1 running metre of the system: 25 Pcs Effective system width: 50 mm Vertical surface for gluing

## H 126

System width: 200 mm Spike length: 135 mm Number of spikes per 1 running 125 Pcs metre of the system: Effective system width: 250 mm





H 112

### H 112 System width: Spike length: Number of spikes per 1 running metre of the system:

Number of spikes per 1 running

50 Pcs Effective system width: 70 mm **Eaves gutter specials** 

85 mm

108 mm

135 mm

108 mm

75 Pcs

180 mm

### H 127

System width: 255 mm Spike length: 140 mm Number of spikes per 1 running metre of the system: 125 Pcs Effective system width: 300 mm A system with the greatest effective width



H 127





## H 114

H 113

System width:

Spike length:

metre of the system:

Effective system width:

System width: 55 mm Spike length: 108 mm Number of spikes per 1 running metre of the system: 50 Pcs Effective system width: 110 mm

# System supplied by:





H 133