

# **HELIMA - NIROTEC**

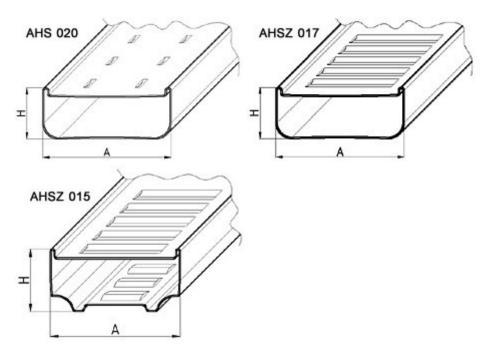
The development of our new product group Nirotec, the stainless steel spacer, is based on the requirement to fullfil the high-level demand of the warm-edge unit.

The results are the clear improvement of the thermal conduction as well as the perfect processing.

The process of the Muntin bar system with NIROTEC is also problem-free.

Thus the conditions for the traditional and proven production processes are guaranteed furthermore. The goal to improve the thermal conduction is impressively underpinned by the results of renowned test institutes.

# Standard Measurements



Helima Article	SZR		Measure A	Measure H	Wall Thickness
556		6 mm	5,5 mm	7 mm	0,17 / 0,20 mm
756		8 mm	7,5 mm	7 mm	0,17 / 0,20 mm
956		10 mm	9,5 mm	7 mm	0,17 / 0,20 mm
1156		12 mm	11,5 mm	7 mm	0,15 / 0,17 / 0,20 mm
1356		14 mm	13,5 mm	7 mm	0,15 / 0,17 / 0,20 mm
1456		15 mm	14,5 mm	7 mm	0,15 / 0,17 / 0,20 mm
1556		16 mm	15,5 mm	7 mm	0,15 / 0,17 / 0,20 mm
1756		18 mm	17,5 mm	7 mm	0,15 / 0,17 / 0,20 mm
1956		20 mm	19,5 mm	7 mm	0,20 mm

### Material

Special steel alloys 1.4301 (further alloys upon request)

# **Surface Features**

# **Shiny Metal Surface**

Style of execution and surface features "UNPOLISHED, shiny" in corrugated style.

#### **Coil-coated Surface**

Coating carried out using coil-coating process with colour wrap-around on the butyl flanks. Uniform quality of coating and colour features is checked constantly.

- Thickness of layer in accordance with ECCA T1 [1995]
- Mirror finish in accordance with ECCA T2 [1995]
  Colour uniformity in Lab Hunter in accordance with ECCA T3 [1995]
- Adhesion after ductility of coating films in accordance with ECCA T7 [1995]
- Cross-cut adhesion test in accordance with DIN 53151
- Degree of cross linkage of varnish systems that can be chemically cross-linked (MEK)

### **Surface Features**

Uniform shiny metal or coloured surface with colour wrap-around.

No fogging of coatings (DIN EN 1279-6:2002 Appendix F)

The degree of lustre of the colour coatings can be selected from a range of 10 = "unpolished" to 80 = "high finish".

# **Standard Colours**

HELIMA 9010 HELIMA 9005

# Types of Perforation

Based on processing, the opening cycle of the sprocket holes has been optimally adjusted for preceding or subsequent filling with a drying agent. The perforation openings have been adapted for metallic, coil-coated and subsequently coated spacer sections.

The selective use of raw materials as well as control of the manufacturing parameters ensures that facilities with preceding and subsequent filling of drying agents are flexible.

# Types of Packaging

Packed in boxes and containers 5 / 6 / 7 metres long.

### **System Components / Joining Elements**

Straight connectors and corner angles made of steel or poly as system components for the insulation glass industry; straight connectors also supplied in a version to be attached in front. Special designs for special applications are also available upon

Copyright © 2004 Helmut Lingemann GmbH & Co. KG