

TECHNICAL SHEET

Topguard[®] Fire Resistant

12 & 18 mm

Developed in collaboration with
the University of Ghent

*The best fire resistant solution for
the busiest entrances*



DESCRIPTION

This sectional entrance mat consists of specially developed rubber layers containing a fire resistant component. The rubber strips are laced with 8 layers of continuous polyester fibres* creating a soft drying surface on both the top and bottom of the mat. The mat has been uninterruptedly vulcanised which guarantees the strength of the mat as well as the longevity of the textile. As the mat consists of new rubber strips, it has a uniform colour surface. The drying strips are alternated with anodised aluminium scraping profiles and are tightened through galvanized steel wires. At the extremities, the steel wires are clamped in edge profiles. Thanks to the identical appearance of both sides, the mat can be used double sided in case of symmetrical forms.



APPLICATION

The mat has been developed for indoor use or outdoor only if the mat is fully covered (without direct precipitation). Thanks to the closed construction, the Topguard Fire Resistant is very appropriated for high traffic and rolling materials. For heavy rolling materials, we recommend the mat in 18 mm with double drying strips.

Traffic 5.000+ passages daily

Locations Emergency routes and exits, airports, schools, public buildings, offices, shopping malls etc.

PRODUCTION

The mat is made to size. In the walking direction, the Topguard Fire Resistant consists of different sections of 35 cm up to 65 cm. Aesthetically, the different sections form a harmonious whole. In case the width exceeds 3 meters, the lay-out and splitting up of the mat are discussed with the customer. Consequently, the sections are installed next to one other, separated by an inverted T-bar. The required function and surroundings are relevant for the width of the mat. The Topguard Fire Resistant is available in a closed or open structure (4 mm distance) with single or double rubber strips.

Warranty 10 years

Personalisation Logo strip in stainless steel is possible.

INSTALLATION

The height of the mat is 12 or 18 mm and is installed in an even matwell of respectively 15 or 20 mm. The corresponding built-in frame is made of anodised aluminium or brass (the latter is only available in 20 mm). If the mat has to be installed on the floor, an anodised aluminium ramping profile is possible. Taking into consideration the influence of the used materials, we do not recommend to install underfloor heating under the matwell.

MATERIAL CHARACTERISTICS

Profiles	
Material	anodised aluminium (25 microns) (min 78% recycled) hard high resistant brass
Sizes	11,4 mm height (mat height 12 mm) 15 mm height (mat height 18 mm)
Coefficient of linear thermal expansion	aluminium 0,0238 mm/m per °C (± 1 mm per 40 °C) brass 0,0238 mm/m per °C (± 1 mm per 40 °C)

Steel wire	
Material	hard full cold galvanised
Thickness galvanisation	30 to 35 microns, 260 gm zinc/m ² wire
Diameter	min. 2 mm
Hardness	1180 to 1370 N/mm ²

Rubber strips	
Material	rubber layers with continuous layers of tissue, min. 50% vulcanised solid rubber, specially developed rubber with a incombustible, fire retardant component
Composition drying textile	8 tissue layers of polyester fibres 7 intermediate layers SBR rubber thickness 1,6 mm 2 outer layers SBR rubber thickness 0,5 mm chain 109 dr/dm polyethylene weft 43 dr/dm polyester
Thickness rubber sheet	14,5 mm (± 0,5 mm)
Hardness rubber	71 shore A
Density rubber	1,23
Height rubber strips	12 or 18 mm
Width rubber strips	15 mm
	<i>High temperatures in combination with moisture can result in a possible shrink of the mat.</i>

MAT CHARACTERISTICS

The total height of the mat is 12 or 18 mm. The steel wires run through and hence connect the profiles. The distance between the tension cables is max. 38 cm. The weight of the mat is:

	SINGLE 18 mm	DOUBLE 18 mm	SINGLE 12 mm	DOUBLE 12 mm
Aluminium	17,7 kg	16,6 kg	13,6 kg	13,0 kg
Brass	28,5 kg	26,4 kg	x	x

TESTS

In collaboration with Ghent University

Fire test	The mat is conform to class Bfl in both the walking direction as the transverse direction (unique!), in accordance with EN ISO 11925-2 and EN ISO 9239-1 (2012).
Smoke test	The mat is conform to class S1 (2012).
Light fastness test (resistance to photo-degradation)	This test is carried out in accordance with ISO 105 B02 (1994) and gives as result class 6-7. Class 8 is the best result (2002).
Wronz test (heavy wear test)	The mat achieves a value of 25.000, being the equivalent of 500.000 to 1.200.000 steps. See testing reports 02-801 and 02-802A.
Static load test	The mat withstands a pressure of 800 kg per cm ² for the version in 12 mm and 1000 kg per cm ² for the version in 18 mm. See testing reports 03-601 and 03-601 bis. There is no restriction for the load created by normal passages, shopping carts and wheelchairs. For heavy traffic, Verimpex recommends to always use a security plate and to avoid all circular movements.
Moisture absorption test	The capacity of the mat to absorb moisture is up to 500 ml/m ² for the version with single rubber strips and 600 ml/m ² for the version with double rubber strips. See testing reports 02-787A and 02-788.

Fire and smoke tests have been performed following the classification EN13501-1 (2007+A1:2009). The products are neither impregnated nor coated; it always concerns sustainable characteristics of the used materials.

ECOLOGICAL FOOTPRINT

Verimpex intends to reduce its ecological footprint for each of its products. For that reason, all products are manufactured in line with 100% renewable energy and local materials.

All materials used for the production of this mat are recyclable and can receive another life at Verimpex. For more details, please consult our website.



Verimpex Matting reserves the right to make adjustments to the products without prior communication.