# **Wind fact sheet – Italy** External venetian blinds

Metalunic<sup>®</sup> V | Metalunic<sup>®</sup> V Sinus | Grinotex<sup>®</sup> III | Grinotex<sup>®</sup> III Sinus | Aluflex<sup>®</sup> | Lamisol<sup>®</sup> III | Lamisol<sup>®</sup> III Vento | Lamisol<sup>®</sup> III System | Solomatic<sup>®</sup> II | Solomatic<sup>®</sup> II System

Product	Permissible wind resistance class limit values <sup>1</sup>								
	Width (mm)	1500	2000	2500	3000	3500	4000	4500	5000
Metalunic® V / Metalunic® V Sinus		[7]	[7]	[7]	[7]	6	-	-	-
Grinotex <sup>®</sup> III / Grinotex <sup>®</sup> III Sinus		6	6	5	4	3	3	2	2
Lamisol® III 70		6	6	5	4	4	4	3	-
Lamisol® III 90		6	6	6	5	5	5	3	-
Lamisol® III Vento		[8]	[7]	[7]	6	-	-	-	-
Lamisol® III System 70		6	6	5	4	4	4	3	-
Lamisol® III System 90		6	6	6	5	5	5	3	-
Solomatic <sup>®</sup> II with guide rail		6	6	5	5	4	4	2	-
Solomatic <sup>®</sup> II with guide cable <sup>3</sup>		6	4	4	4	(3)	(3)	(3)	-
Solomatic <sup>®</sup> II System		6	6	5	5	4	4	2	-
Aluflex® 60 with guide rail <sup>2</sup>		4	4	3	(3)	(3)	(3)	(3)	(3)
Aluflex <sup>®</sup> 80 with guide rail <sup>2</sup>		4	4	3	(3)	(3)	(3)	(3)	(3)
Aluflex <sup>®</sup> 60 with guide cable <sup>3</sup>		4	4	4	3	(3)	(3)	(3)	(3)
Aluflex <sup>®</sup> 80 with guide cable <sup>3</sup>		5	4	4	4	(3)	(3)	(3)	(3)

<sup>1</sup> Tests in accordance with product standard EN 13659. Product limit dimensions in accordance with data sheet.

<sup>2</sup> from 2500 with additional cable

<sup>3</sup> from 3000 with additional cable

[] No wind resistance class in accordance with product standard, see below for significance.

<sup>()</sup> Tests not possible in accordance with product standard. Values from own tests/practical experience.

#### The values in the table apply with the following reservations:

- Product dimensions and use comply with the Griesser technical data sheet.
- Installation, fastening and operation are carried out in accordance with installation and operating instructions.
- The products should be installed in the soffit/directly on the facade, with the curtain <100mm away from the facade.
- If the distance from the facade is between 100 and 300 mm, the value in the table must be reduced by 1 class.
- If the distance from the facade is between 300 and 500 mm, the value in the table must be reduced by 2 classes. Furthermore, the table cannot be applied.

## 🖄 Instructions for automatic solar shading

The external venetian blinds cannot be protected with wind sensors against sudden gusts of wind. Make sure that the external venetian blinds remain retracted if a storm is imminent. Updrafts or fallwinds at facades could lead to the destruction of the external venetian blinds. Wind sensors cannot detect these as a rule.

#### Setting values for sensors according to producer

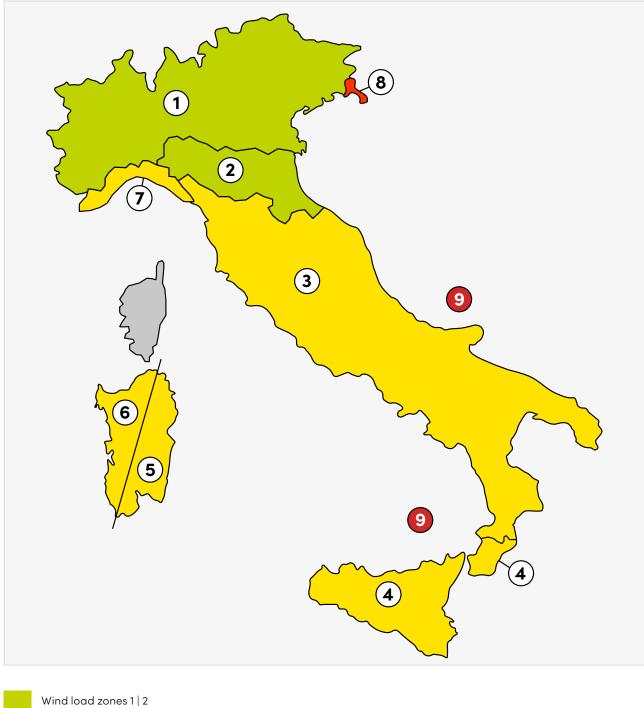
Sensors fitted next to product.

Class 0	Class 1	Class 2	Class 3	Class 4	Class 5	Class 6	Class [7]	Class [8]
<9.0 m/s	9.0 m/s	10.7 m/s	12.8 m/s	16.7 m/s	21.0 m/s	25.6 m/s	29.2 m/s	33.3 m/s
<28 km/h	32.5 km/h	38.5 km/h	46 km/h	60 km/h	76 km/h	92 km/h	105 km/h	120 km/h

[] No wind resistance class in accordance with product standard.

# **Planning Notes**

#### Wind load zones



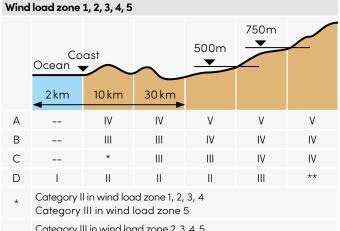
Wind load zones 1 | 2
Wind load zones 3
Wind load zones 4 | 5 | 6 | 7
Wind load zones 8
Wind load zones 9

### **Planning Notes**

Terrain roughness class	Description
А	Urban areas where at least 15% of the area is covered by buildings with an average height of more than 15m.
В	Urban areas (not class A), suburban, industrial and wooded areas.
С	Areas with widespread obstacles (trees, houses, walls, fences,). Areas with roughness not attributable to classes A, B, D.
D	<ul> <li>a) Sea and its coastline (within 2 km of the coast).</li> <li>b) Lake (with a maximum width of at least 1 km and its coastline (within 2 km of the coast).</li> <li>c) Areas free of obstacles or with at most rare obstacles (open country, airports, agricultural areas, pastures, swampy or sandy areas, snowy or icy surfaces).</li> </ul>

- The assignment of the roughness class does not depend on the orographic and topographic conformation of the ground.
- It can be assumed that the site belongs to Class A or B, as long as the construction is in the relative area for not less than 1 km and in any case for not less than 20 times the height of the building, for all sectors of origin of the wind wide at least 30°.
- It must be assumed that the site belongs to Class D, if the construction rises in the areas indicated with letters a) or b), or within the areas indicated with letter c).
- Where there are doubts as to the choice of the roughness class, the most unfavourable class must be assigned (the action of the wind is generally minimum in Class A and maximum in Class D).

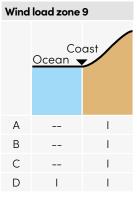
#### Category of areas



\*\* Category III in wind load zone 2, 3, 4, 5 Category IV in wind load zone 1

#### Wind load zone 7, 8

	Ocean	Co	ast						
	1.5 km	0.5 km							
А			IV						
В			IV						
С			III						
D	I	П	*						
*	Category II in wind load zone 8 Category III in wind load zone 7								





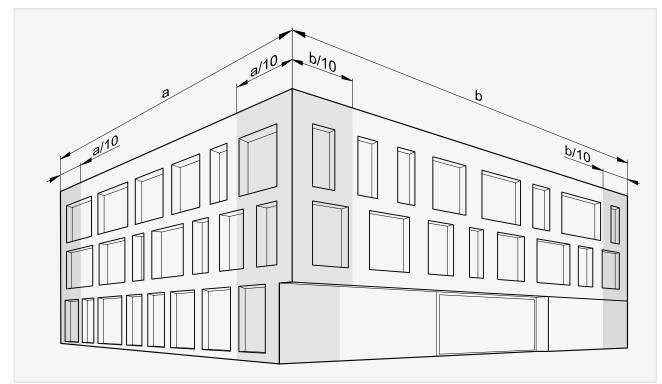
## **Planning Notes**

Wind load zone	Terrain category	Installation height [m]				n]	Wind load	Terrain	Installation height [m]				
		≤9	≤18	≤28	≤50	≤100	zone	category	≤9	≤18	≤28	≤50	≤100
1 2	1	4	4	4	4	5	4 5 6 7	1	4	4	5	5	5
	II	3	4	4	4	5		II	4	4	4	5	5
	III	3	4	4	4	4		III	4	4	4	5	5
	IV	3	3	4	4	4		IV	3	4	4	4	5
	V	2	3	3	4	4		V	3	3	4	4	4
3	1	4	4	5	5	5	8	1	4	5	5	5	5
	II	4	4	4	5	5		Ш	4	4	5	5	5
	III	4	4	4	4	5		III	4	4	5	5	5
	IV	3	4	4	4	5		IV	4	4	4	5	5
	٧	3	3	4	4	4	9	1	5	5	5	5	6

#### Wind resistance classes depending on the terrain category and the installation height

#### Higher wind resistance class

Wind speeds can be considerably higher at building corners and should be taken into consideration. Separate proof must be submitted for buildings without a square floor plan or buildings above 1100 m ground level.



# Inspired by the **Sun**.

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