HEAVY RECTANGULAR GRATING WITH FRAME

INDEX

1. CODE REGISTRY

Code	Description	Flow class UNI 11002/2009	Dimensions (mm)	Weight	Colour	Pkg. / Pallet
ZIN09-6910P	Galvanized Steel Grating with Frame	Class 4	1.000 x 150	4,55 kg/pc.	Steel	12 pcs. / 161 pcs.
ZIN09-6911P	Galvanized Steel Grating with Frame	Class 4	1.000 x 200	5,74 kg/pc.	Steel	12 pcs. / 138 pcs.
ZIN09-6912P	Galvanized Steel Grating with Frame	Class 4	1.000 x 250	6,35 kg/pc.	Steel	12 pcs. / 115 pcs.
ZIN09-6913P	Galvanized Steel Grating with Frame	Class 3	1.000 x 300	7,00 kg/pc.	Steel	12 pcs. / 92 pcs.
ZIN09-6914P	Galvanized Steel Grating with Frame	Class 2	1.000 x 400	8,70 kg/pc.	Steel	12 pcs. / 69 pcs.
ZIN09-6915P	Galvanized Steel Grating with Frame	Class 2	1.000 x 500	10,27 kg/pc.	Steel	12 pcs. / 46 pcs.
ZIN09-6916P	Galvanized Steel Grating with Frame	Class 1	1.000 x 600	11,88 kg/pc.	Steel	12 pcs. / 23 pcs.
ZIN09-6917P	Galvanized Steel Grating with Frame	Class 1	1.000 x 700	13,63 kg/pc.	Steel	12 pcs. / 23 pcs.

MATERIAL Made of electro-welded galvanized steel.

2. DESCRIPTION

Used for the collection and runoff of rainwater, washing and/or wastewaters.

3. USE

Used for the collection and runoff of rainwater, washing and/or wastewaters.

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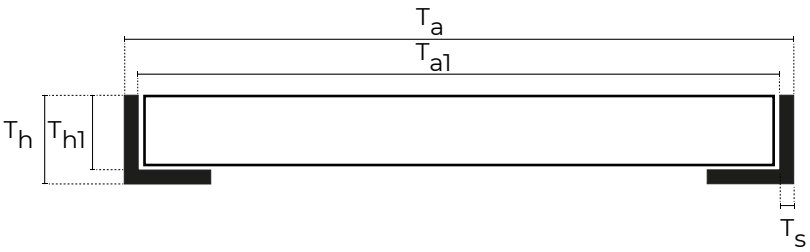
FRAME

LATERAL VIEW

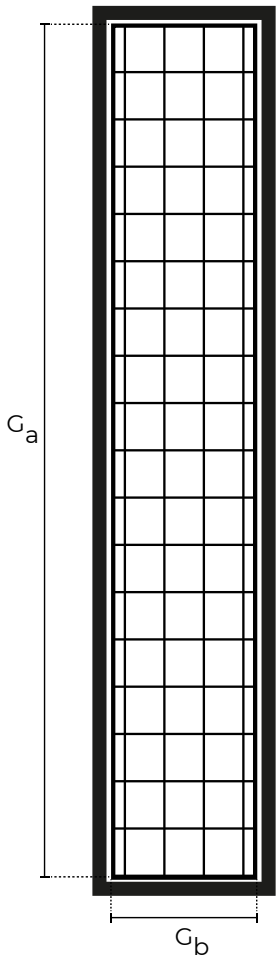


Frame (T)							
Code	ext. measures* mm			int. measures* mm			thickness sheet mm
	T_a	T_b	T_h	T_{a1}	T_{b1}	T_{h1}	T_s
ZIN09-6910P	1010	150	43	1004	144	40	3
ZIN09-6911P	1010	200	43	1004	194	40	3
ZIN09-6912P	1010	250	43	1004	244	40	3
ZIN09-6913P	1010	300	43	1004	294	40	3
ZIN09-6914P	1010	400	43	1004	394	40	3
ZIN09-6915P	1010	500	43	1004	494	40	3
ZIN09-6916P	1010	600	43	1004	594	40	3
ZIN09-6917P	1010	700	43	1004	694	40	3

* tolerance ± 2 mm

GRATING

TOP VIEW



Griglia (G)				
Code	ext. measures* mm			Grating mm
	G_a	G_b	G_h	
ZIN09-6910P	1000	140	40	34x38
ZIN09-6911P	1000	190	40	34x38
ZIN09-6912P	1000	240	40	34x38
ZIN09-6913P	1000	290	40	34x38
ZIN09-6914P	1000	390	40	34x38
ZIN09-6915P	1000	490	40	34x38
ZIN09-6916P	1000	590	40	34x38
ZIN09-6917P	1000	690	40	34x38

* tolerance ± 2 mm

LATERAL VIEW

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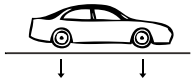
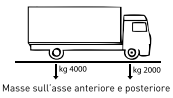
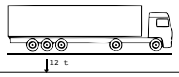
4. LOAD CLASS

Electrofused and/or pressed grating panels are divided into the following load-bearing classes:
- Class 1: Pedestrian load
- Classes 2–3–4: Road vehicle load

Each class is determined by two key factors:
- THE LOAD
- THE FOOTPRINT

For load-bearing class 1, the load is considered to be uniformly distributed over the entire surface of the panel (Fig. 1) and does not include any other specific loads.
For load-bearing classes 2, 3, and 4, the load is considered to be applied to the footprint corresponding to its respective class (Fig. 2). The loads and footprints were selected based on the total ground masses at full load and the load distribution per footprint of the various types of vehicles currently in circulation. The intended use of the panels must be specified by the client. The dynamic load was obtained by multiplying the static ground masses by an average dynamic coefficient of 1.5 in accordance with standard technical specifications.

PEDESTRIAN TRAFFIC		
CLASS	**LOAD CLASS**	**DYNAMIC LOAD (daN/m2) 1daN =~1Kg**
CLASS 1 	DENSE CROWN (pedestrian load)	Dynamic load 600 daN/m^2

LOADING OF ROAD VEHICLES		
CLASS	**LOAD CLASS**	**DYNAMIC LOAD (daN/m2) 1daN =~1Kg**
CLASS 2 	TRANSIT LIMITED TO PASSENGER CARS	Total ground mass (static) up to 3,000 kg. Dynamic load 1,000 daN on a 200x200 footprint
CLASE 3  Masse sull'asse anteriore e posteriore	TRANSIT LIMITED TO LIGHT TRUCKS	Total ground weight (static) up to 6,000 kg. Dynamic load: 3,000 daN on a 400x400 footprint
CLASS 4 	TRANSIT OF ARTICULATED TRUCKS	Total ground weight (static) up to 45,000 kg. Dynamic load 9,000 daN on a footprint of 600x250

5. GALVANIZED STEEL PROFILES AND SECTIONS: INSTRUCTION FOR USE

All carbon steel products and profiles in the DAKOTA catalog undergo a galvanization process, which involves applying a zinc coating to the materials (known as galvanizing) to protect them from oxidation.

However, the product's lifecycle does not end with production; rather, it is used in various environments and applications, with its final placement in flooring and structures exposed to various potential critical conditions that can significantly damage the protective zinc coating, leading to the onset of rust. These are some of the most common critical conditions:

- The installation of DAKOTA galvanized steel products involves the use, depending on the installer and intended application, of concrete, adhesives, fillers, cement mortars, etc.
- Once installed, DAKOTA galvanized steel products may come into contact with cleaning products of various chemical compositions used to clean surfaces and adjacent joints;
- The locations where they are installed may present varying levels and situations of high environmental corrosivity;

Laboratory tests have concluded that both installation and cleaning products with a pH lower than 6 or higher than 11 can compromise the zinc coating and trigger the oxidation process of the steel, leading to deterioration and ultimately the destruction of the product.

Therefore, it is essential that:

- Both the installer and the end user thoroughly and proactively verify the technical specifications provided by the manufacturer of the adhesives and/or cleaning products to be used
- The installer must protect the galvanized steel parts to prevent them from coming into contact with adhesives, grouts, and/or cleaning agents capable of damaging them
- The designer, installer, maintenance technician, and end user must be aware of the need to use stainless steel products as an alternative to galvanized steel in areas where environmental corrosivity is high.

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6. TECHNICAL SPECIFICATION

Specification	Description	Unity	Price
Dak.D.ZIN09.691xP	Supply and installation of grating provided with frame, with helical filaments 40 x 3 mm and mesh 34 x 38 mm. Made of electro-welded galvanized steel. Used for the collection and runoff of rainwater, washing and/or wastewaters.		
Dak.D.ZIN09.6910P	Dimensions 1.000 x 150 mm.....	pc.	-
Dak.D.ZIN09.6911P	Dimensions 1.000 x 200 mm.....	pc.	-
Dak.D.ZIN09.6912P	Dimensions 1.000 x 250 mm.....	pc.	-
Dak.D.ZIN09.6913P	Dimensions 1.000 x 300 mm.....	pc.	-
Dak.D.ZIN09.6914P	Dimensions 1.000 x 400 mm.....	pc.	-
Dak.D.ZIN09.6915P	Dimensions 1.000 x 500 mm.....	pc.	-
Dak.D.ZIN09.6916P	Dimensions 1.000 x 600 mm.....	pc.	-
Dak.D.ZIN09.6917P	Dimensions 1.000 x 700 mm.....	pc.	-