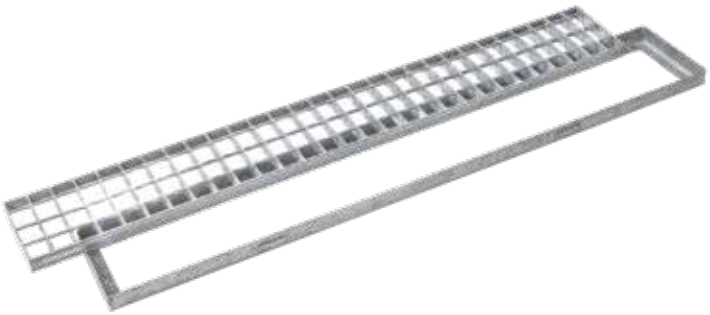
RECTANGULAR GRATING WITH FRAME



INDEX

1. CODE REGISTRY

Codice	Description	Load class	Measures (mm)	Weight (kg/pc.)	Color	Pkg. / Pallet
ZIN09-6909	Galvanized Steel Grating with Frame	Class 4	1.000 x 100	3,81	Steel	12 pz. / 396 pz.
ZIN09-6910	Galvanized Steel Grating with Frame	Class 3	1.000 x 150	4,55	Steel	12 pz. / 252 pz.
ZIN09-6911	Galvanized Steel Grating with Frame	Class 2	1.000 x 200	5,74	Steel	12 pz. / 216 pz.
ZIN09-6912	Galvanized Steel Grating with Frame	Class 2	1.000 x 250	6,35	Steel	12 pz. / 144 pz.
ZIN09-6913	Galvanized Steel Grating with Frame	Class 1	1.000 x 300	7,00	Steel	12 pz. / 108 pz.
ZIN09-6914	Galvanized Steel Grating with Frame	Class 1	1.000 x 400	8,70	Steel	12 pz. / 108 pz.
ZIN09-6915	Galvanized Steel Grating with Frame	Class 1	1.000 x 500	10,27	Steel	12 pz. / 72 pz.
ZIN09-6916	Galvanized Steel Grating with Frame	Class 1	1.000 x 600	11,88	Steel	12 pz. / 72 pz.
ZIN09-6917	Galvanized Steel Grating with Frame	Class 1	1.000 x 700	13,63	Steel	12 pz. / 36 pz.

MATERIAL Made of electro-welded galvanized stell.

2. DESCRIPTION

Grating provided with frame, with helical filaments 25 x 2 mm and mesh 34 x 38 mm

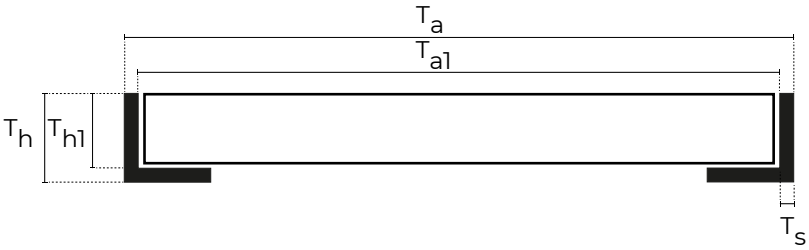
3. USE

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

RECTANGULAR GRATING WITH FRAME

FRAME

LATERAL VIEW

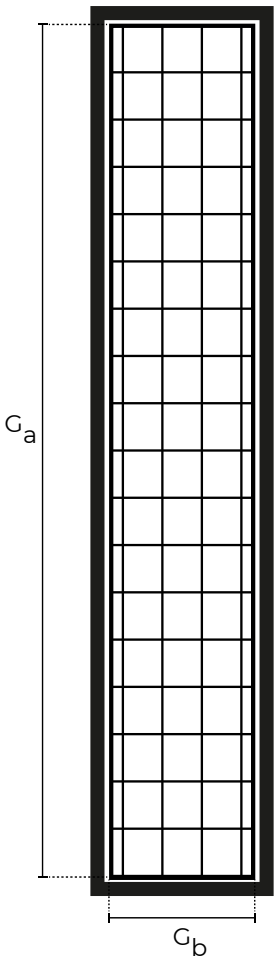


Frame (T)							
Code	ext measures* mm			int mesasures* mm			thickness mm
	T_a	T_b	T_h	T_{a1}	T_{b1}	T_{h1}	T_s
ZIN09-6909	1010	100	27	1006	96	25	2
ZIN09-6910	1010	150	27	1006	146	25	2
ZIN09-6911	1010	200	27	1006	196	25	2
ZIN09-6912	1010	250	27	1006	246	25	2
ZIN09-6913	1010	300	27	1006	296	25	2
ZIN09-6914	1010	400	27	1006	396	25	2
ZIN09-6915	1010	500	27	1006	496	25	2
ZIN09-6916	1010	600	27	1006	596	25	2
ZIN09-6917	1010	700	27	1006	696	25	2

tolerance ± 2 mm

GRATING

TOP VIEW



Grating (G)				
Codice	ext measures* mm			mesh mm
	G_a	G_b	G_h	
ZIN09-6909	1000	90	25	34x38
ZIN09-6910	1000	140	25	34x38
ZIN09-6911	1000	190	25	34x38
ZIN09-6912	1000	240	25	34x38
ZIN09-6913	1000	290	25	34x38
ZIN09-6914	1000	390	25	34x38
ZIN09-6915	1000	490	25	34x38
ZIN09-6916	1000	590	25	34x38
ZIN09-6917	1000	690	25	34x38

* tolerance ± 2 mm

LATERAL VIEW

RECTANGULAR GRATING WITH FRAME

4. LOAD CLASS

Electrofused and/or pressed grating panels are divided into the following load-bearing classes:

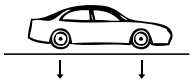
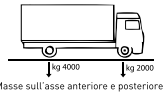
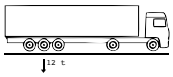
- Class 1: Pedestrian load
- Classes 2–3–4: Road vehicle load

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.

CARICO PEDONALE		
CLASS	**LOAD (type)**	**DYNAMIC LOAD (daN/m2) 1daN =~1Kg**
CLASS 1 	DENSELY PACKED CROWD (pedestrian capacity)	600 daN/m^2

CARICO DI VEICOLI STRADALI		
CLASS	**LOAD (tipo)**	**DYNAMIC LOAD (daN/m2) 1daN =~1Kg**
CLASS 2 	TRAFFIC LIMITED TO PASSENGER CARS	Total static ground load up to 3000 kg. Dynamic load 1000 daN on a 200x200 footprint
CLASS 3  Masse sull'asse anteriore e posteriore	TRAFFIC LIMITED TO LIGHT TRUCKS	Total static ground load up to 6,000 kg. Dynamic load 3,000 daN on a 400x400 footprint
CLASS 4 	TRANSIT OF ARTICULATED TRUCKS	Total static ground load up to 45,000 kg. Dynamic load 9,000 daN on a 600x250 footprint

5. GALVANIZED ARTICLES AND PROFILES: WARNINGS FOR USE AND INSTALLATION

All carbon steel items and profiles in the DAKOTA catalog undergo a galvanization treatment, i.e., a coating of zinc on the materials (referred to as Galvanizing), aimed at protecting them from the oxidation process.

However, the lifecycle of the product does not stop at production, but sees its use in various environments and uses, with its final placement in flooring and manufactured goods exposed to various potential criticalities that can significantly damage the protective zinc coating, leading to the manifestation of rust phenomena. These are some of the most frequent critical conditions:

- The installation of DAKOTA's galvanized steel products involves the use of concrete, adhesives, fillers, cement mortars, etc., depending on the applicator and end utilities.
- Once laid, DAKOTA galvanized steel products may come into contact with products of various chemical compositions used for cleaning adjacent surfaces and joints;
- The places where they are laid can present different levels and situations of high environmental corrosiveness;

Laboratory tests have led to the conclusion that both laying and cleaning products with Ph less than 6 or greater than 11 can compromise the zinc coating and trigger the oxidation process of the steel, to the point of causing deterioration and ultimately the destruction of the item.

Therefore, it is critical that::

- The installer as well as the end user thoroughly check in advance the manufacturer's technical specifications of the bonding and/or cleaning products to be used
- The installer provides protection for galvanized steel parts so that they do not come into contact with bonding and/or grouting and/or cleaning materials that can damage them
- The designer, installer, maintainer and even the end user are aware of using stainless steel items, as an alternative to galvanized steel items, in places where environmental corrosivity is high.

RECTANGULAR GRATING WITH FRAME

6. TECHNICAL SPECIFICATION

Item	Description	Unit	Price
Dak.D.ZIN09.69xx	Supply and installation of a grating complete with frame, featuring 25 x 2 mm bars and a 34 x 38 mm mesh. Made of hot-dip galvanized, electrically welded steel. Used for the collection and drainage of rainwater, wash water, and/or wastewater.		
Dak.D.ZIN09.6909	Dimensions 1.000 x 100 mm.....	pz.	-
Dak.D.ZIN09.6910	Dimensions 1.000 x 150 mm.....	pz.	-
Dak.D.ZIN09.6911	Dimensions 1.000 x 200 mm.....	pz.	-
Dak.D.ZIN09.6912	Dimensions 1.000 x 250 mm.....	pz.	-
Dak.D.ZIN09.6913	Dimensions 1.000 x 300 mm.....	pz.	-
Dak.D.ZIN09.6914	Dimensions 1.000 x 400 mm.....	pz.	-
Dak.D.ZIN09.6915	Dimensions 1.000 x 500 mm.....	pz.	-
Dak.D.ZIN09.6916	Dimensions 1.000 x 600 mm.....	pz.	-
Dak.D.ZIN09.6917	Dimensions 1.000 x 700 mm.....	pz.	-