



# Solaio Svelto



**FERRACIN**  
GROUP

PLASTIC SYSTEMS FOR THE  
BUILDING INDUSTRY

# Solaio Svelto

**SOLAIO SVELTO** is a polypropylene formwork which when used together with lattice beams creates lightened floors with very fast installation in both new buildings and renovations.



## Features and Advantages

**SOLAIO SVELTO** takes the place of traditional brick or lightweight concrete hollow blocks. It is a convenient and quick system that creates a high-performance floor with a lower structural weight and also allows the passage of wiring and small tubes.

The module has a good resistance to fire. On request, it can be produced in versions of class 1 and 0 for use in public buildings without a false ceiling.

**SOLAIO SVELTO** is manufactured so that the modules engage with each other. Thanks to its lightness, handling is easy and the job of workers is thus facilitated, with significant savings in labour costs: a team of three men can lay up to 200 square meters of floor per day.

**SOLAIO SVELTO**, designed with the needs that occur on site in mind, is designed to be easily cut lengthwise and widthwise if necessary.

The module can be used together with:

- An element made of polypropylene called **SHOULDER** which, at the beginning and end of each row, ensures the closure in order to carry out the pouring of the concrete cover to avoid overflow;

**SOLAIO SVELTO** has excellent mechanical strength and solidity. The module is safe and once the shoring of the floor at the beams has been performed, it bears the weight of the workers and concrete without any problems. Once the elements have been installed, a suitable mesh is placed above them and the casting of the concrete cover can proceed.

If necessary, both thermal and acoustic insulation can be inserted in the floor layers.



SHOULDER





# Applications

- floors of residential buildings
- floors of warehouses and prefabricated buildings
- floors of garages and cellars
- floors of intermediate floors
- floors of attics
- floor covering for pitched roofs
- floors for cemetery buildings
- floors for cold storage constructions
- plumbing spaces



# Laying method

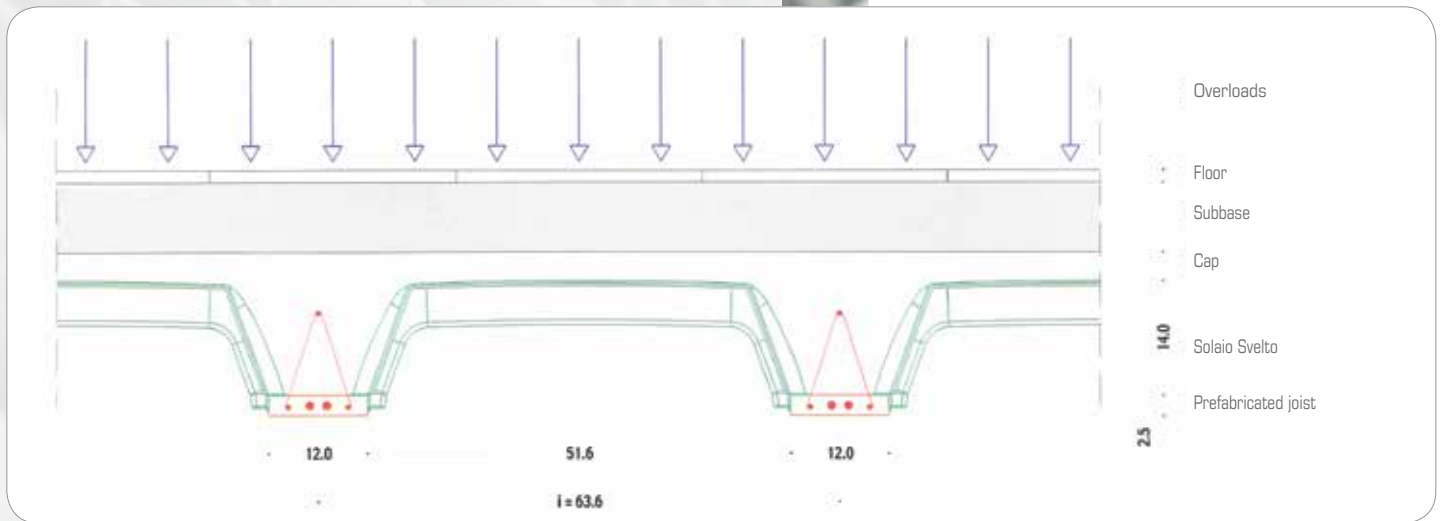


TABLE OF PARAMETERS

Description	Height H (cm)	Length (cm)	Width (cm)	Weight (kg/pcs)	Laying (Pcs/m <sup>2</sup> )	Packaging Wooden pallet (cm)	No. of Pieces Pallet	No. Mq Pallet	Weight Pallet (kg)
SOLAIO SVELTO H-9	9	79.2	50.8	1.400	2.48	120x80x230	200	80.64	290
SOLAIO SVELTO H-14	14	79.2	50.8	1.600	2.48	120x80x230	200	80.64	330

Description	Height H (cm)	Weight (kg/pcs)	Packaging Box	No. of Pieces Pallet	Weight Box (kg)
SHOULDER H-9 cm	9	0.400	60x40x50	50	20
SHOULDER H-14 cm	14	0.500	60x40x50	50	25

## ELEMENTS FOR THE DESCRIPTION OF THE ITEM IN THE BUILDING SPECIFICATIONS

- Supply of formwork in recycled polypropylene measuring 79.2 x 50.8 cm in plan and height ... as planned, with dry strength kg.150 (Legislative Decree 7.2.4 09/01/1996) called SOLAIO SVELTO, including cuts, scraps and any additional tooling for the passage of systems.
- Laying lattice type beams with a centre to centre distance of ..... cm and shoring of the floor.
- Installation and engaging of the SOLAIO SVELTO formworks on the beams.
- Laying of the SHOULDER element at the ends of the rows and where a cut has been made along the length of the formwork.
- Supply and installation of Ø 6 mm electrowelded mesh with 20 x 20cm mesh. including the scrap and overlapping, directly above the formwork.
- Supply and laying of concrete Rck = 250 kg / cm<sup>2</sup> To create a cap with a thickness of ..... cm

# Solaio Svelto Technical Details

## SOLAIO SVELTO H-9

CATEGORY LEGISLATION	CATEGORY DESCRIPTION	ACTUAL FLOOR SPAN (NET DISTANCE CONSTRAINT-CONSTRAINT)	CENTRE TO CENTRE OF BEAMS	H TOTAL STRUCTURAL FLOOR	H CAP	PP STRUCTURAL FLOOR SVELTO H-9	PERMANENT LOAD (PARTITION WALLS, FLOORING AND SUB-BASE)	INCIDENTAL LOAD	TOTAL LOADS
		cm	cm	cm	cm	(Kg/m <sup>2</sup> )	(Kg/m <sup>2</sup> )	(Kg/m <sup>2</sup> )	(Kg/m <sup>2</sup> )
CAT. 1	Environments not subject to overcrowding (housing and related services, hotels, offices not open to the public) and relative practicable terraces 200 kg / m <sup>2</sup>	≤ 357	63.6	15	3,5	175	200	Cat. 1:200	370
		from 358 to 381	63.6	15	3,5	175	200	Cat. 1:200	370
		from 382 to 405	63.6	15	3,5	175	200	Cat. 1:200	370
		from 382 to 405	63.6	17	5,5	225	200	Cat. 1:200	400
		from 406 to 429	63.6	17	5,5	225	200	Cat. 1:200	400
		from 430 to 453	63.6	17	5,5	225	200	Cat. 1:200	400
CAT. 2	Environments subject to overcrowding (restaurants, cafes, banks, hospitals, public offices, barracks) and relative practicable terraces 300 kg / m <sup>2</sup>	≤ 357	63.6	15	3,5	175	200	Cat. 2:300	430
		from 358 to 381	63.6	15	3,5	175	200	Cat. 2:300	430
		from 358 to 381	63.6	17	5,5	225	200	Cat. 2:300	465
		from 382 to 405	63.6	17	5,5	225	200	Cat. 2:300	465
		from 406 to 429	63.6	17	5,5	225	200	Cat. 2:300	465
CAT. 3	Environments subject to high level overcrowding (conference rooms, cinemas, theatres, churches, shops, stands with fixed seats) and relative practicable terraces - 400 kg / m <sup>2</sup>	≤ 357	63.6	15	3,5	175	200	Cat. 3:400	495
		≤ 357	63.6	17	5,5	225	200	Cat. 3:400	525
		from 358 to 381	63.6	17	5,5	225	200	Cat. 3:400	525

## SOLAIO SVELTO H-14

CATEGORY LEGISLATION	CATEGORY DESCRIPTION	ACTUAL FLOOR SPAN (NET DISTANCE CONSTRAINT-CONSTRAINT)	CENTRE TO CENTRE OF BEAMS	H TOTAL STRUCTURAL FLOOR	H CAP	PP STRUCTURAL FLOOR SVELTO H-9	PERMANENT LOAD (PARTITION WALLS, FLOORING AND SUB-BASE)	INCIDENTAL LOAD	TOTAL LOADS
		cm	cm	cm	cm	(Kg/m <sup>2</sup> )	(Kg/m <sup>2</sup> )	(Kg/m <sup>2</sup> )	(Kg/m <sup>2</sup> )
CAT. 1	Environments not subject to overcrowding (housing and related services, hotels, offices not open to the public) and relative practicable terraces 200 kg / m <sup>2</sup>	from 430 to 453	63.6	20	3,5	210	200	Cat. 1:200	390
		from 454 to 477	63.6	20	3,5	210	200	Cat. 1:200	390
		from 478 to 501	63.6	20	3,5	210	200	Cat. 1:200	390
		from 502 to 525	63.6	20	3,5	210	200	Cat. 1:200	390
		from 526 to 549	63.6	20	3,5	210	200	Cat. 1:200	390
		from 550 to 573	63.6	20	3,5	210	200	Cat. 1:200	390
		from 550 to 573	63.6	22	5,5	260	200	Cat. 1:200	420
CAT. 2	Environments subject to overcrowding (restaurants, cafes, banks, hospitals, public offices, barracks) and relative practicable terraces 300 kg / m <sup>2</sup>	from 574 to 597	63.6	22	5,5	260	200	Cat. 1:200	420
		from 406 to 429	63.6	20	3,5	210	200	Cat. 2:300	455
		from 430 to 453	63.6	20	3,5	210	200	Cat. 2:300	455
		from 454 to 477	63.6	20	3,5	210	200	Cat. 2:300	455
		from 478 to 501	63.6	20	3,5	210	200	Cat. 2:300	455
		from 478 to 501	63.6	22	5,5	260	200	Cat. 2:300	485
CAT. 3	Environments subject to high level overcrowding (conference rooms, cinemas, theatres, churches, shops, stands with fixed seats) and relative practicable terraces 400 kg / m <sup>2</sup>	from 502 to 525	63.6	22	5,5	260	200	Cat. 2:300	485
		from 358 to 381	63.6	20	3,5	210	200	Cat. 3:400	520
		from 382 to 405	63.6	20	3,5	210	200	Cat. 3:400	520
		from 406 to 429	63.6	20	3,5	210	200	Cat. 3:400	520
		from 430 to 453	63.6	20	3,5	210	200	Cat. 3:400	520
		from 430 to 453	63.6	22	5,5	260	200	Cat. 3:400	550
		from 454 to 477	63.6	22	5,5	260	200	Cat. 3:400	550

NOTES: The tables are indicative and generic, therefore they do not take account of particular cases, for each action which is not covered the manufacturer should be consulted, in order to assess the most suitable solution. For structural calculations a beam-type lattice was considered with a base of 12 cm, height 2.5 cm made of concrete and R'ck 250 Kg/cm<sup>2</sup> and steel FeB 44K and an electro-welded mesh Ø5 mesh 20x20 cm.

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