



# Operator manual Walk Slab Light system









CONTACTS

Offices and factory

GPRANDINA SRL Via Roma, 37 36060 Schiavon (VI) Italy Tel. +39 0444 665046 Fax. +39 0444 466289 web www.gprandina.it info@gprandina.it E-MAIL

Commercial office Technical office Administration commerciale@gprandina.it tecnico@gprandina.it amministrazione@gprandina.it

# OPERATOR MANUAL WALK SLAB LIGHT SYSTEM

This manual describes the operations for correct assembly of the WALK SLAB LIGHT system. The GPrandina invites you to observe all the provisions and prescriptions listed. In case of incorrect use and installation of the GPrandina products, we decline all responsibility in case of accidents and / or breakages.

Assembly must be carried out by qualified personnel and under the supervision of the site manager and / or a technician in charge of GPrandina.

The operations listed in this manual must be carried out in a workmanlike manner and in compliance with the safety standards regarding construction sites.

The GPrandina srl Building System wishes you

Good job.



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# 1.0.0 GENERAL PROVISIONS

#### **GENERAL REQUIREMENTS:**

The components must be installed as illustrated in this section of the manual. For the safe use of the GP-10 elements, the user must provide an adequate support base for the latter which supports the discharge to the ground of the forces generated by the casting of the concrete. It is strictly forbidden to use GP-10 systems on low resistant bases such as wood, gravel, earth, etc. It is strictly forbidden to make changes, add and subtract details to the GPrandina elements. The GPrandina srl Building System disclaims any responsibility for incorrect use of its construction systems.



# **GENERAL PROVISIONS**

The operations concerning the preparation, assembly, handling and disassembly of the WALK SLAB LIGHT system must be carried out by competent personnel and under the supervision of the site manager or by a GPRANDINA technician (upon customer request) who must ensure that:

- The aforementioned operations are carried out in a workmanlike manner in compliance with your rules regarding safety on construction sites and also with the instructions given in the drawings delivered with the supply of the material;
- All lifting and transport systems, supplied and not supplied by GPRANDINA, must be suitable for handling the equipment;
   All the accessories supplied have been checked before their use in order to eliminate those which, for the presence of
- breakages, deformation and corrosion, do not have sufficient guarantees of reliability;
- All the connection and anchoring accessories are well tightened before laying the concrete;
- The operators of the operations listed above have suitable tools, and, according to the specific risks to which they are exposed, make use of one or more personal protective equipment such as: safety belts, work gloves, protective helmets, high visibility work shoes and jackets where required.

The GPRANDINA SRL BUILDING SYSTEM declines all responsibility for the improper use of the equipment and / or its incorrect and / or different assembly as illustrated in this manual.

SYMBOLOGY LEGEND:

In this manual you will find some captions preceded by the following symbols:



Caution Safety requirement.



Caution Additional explanations.





# **PRE-ASSEMBLY INSTRUCTIONS**

Before assembly, make sure that:

- The formwork frame has no deformations and that the welds are in good condition (absence of detachments, cracks, etc.);
- The multilayer formwork is clean and without obvious signs of wear;
- The accessories for use are functional and do not show serious differences (vices, plates, nuts and bolts in general, service shelves, etc .;
- The lifting and handling systems are in good condition and fully functional;
- All the parts in direct contact with the cement have been well oiled with a special stripping oil to facilitate stripping and to maintain the integrity of each item;

For detailed explanations on assembly, distances and quantities to be respected, please carefully follow the instructions in this manual.

### **DISASSEMBLY INSTRUCTIONS**

Before total disassembly, make sure that:

- Before stripping, the maturation days indicated by the construction manager have passed and that the cement has completely hardened;
- All people on site are at a minimum safety distance when lifting the part dismantled;
- It is mandatory to raise and lower the formwork and all its accessories using suitable lifting equipment;
- It is strictly forbidden to throw the components (even the smallest one) from above to avoid accidents, breakage and / or deformation of the items.

### MAINTENANCE

Routine maintenance must be carried out every time you finish using the material and / or whenever it is deemed necessary: it is recommended to clean all components from concrete residues, paying particular attention to threads and nuts and bolts in general. Once the cleaning is finished, it is advisable to oil all the elements to protect them from the weather. Extraordinary maintenance must be carried out by GPRANDINA staff at our factories with specific equipment.

## **STORAGE OF THE MATERIAL**

The storage of the material on site must take place in a large area so as not to create an obstacle. This area must be located as close as possible to the area of use.

The storage of the material at the end of the construction site must take place, if possible, in a covered place; the formwork and all accessories must be raised by means of wooden walls, tied and laid in a stable position.



## STRUCTURAL CHARACTERISTICS OF THE ELEMENTS

#### THE ALUMINUM PANEL

The perimeter of the panels consists of the "FN2226" profile in EN AW-6005A T6 aluminum with the following characteristics:

 A=
 637,00 mm²

 Jx=
 119,00 cm<sup>4</sup>

 Jy=
 4,90 cm<sup>4</sup>

 Wx=
 19,11 cm³

 Wy=
 2,37 cm³

 Weight=
 1,72 Kg/m



The crosspieces of the panels are made of the EN AW-6005A T6 "FN442" aluminum profile with the following characteristics:

A= Jx= Jy= Weight= 248,00 mm<sup>2</sup> 17,88 cm<sup>4</sup> 0,40 cm<sup>4</sup> 0,671 Kg/m



The crosspieces of the panels consist of the "MC0712" profile in EN AW-6060 T6 aluminum with the following characteristics:

 A=
 127,00 mm²

 Jx=
 0,60 cm<sup>4</sup>

 Jy=
 1,40 cm<sup>4</sup>

 Wx=
 0,67 cm³

 Wy=
 0,93 cm³

 Weight=
 0,343 Kg/m









The panel is made of "PLYWOOD" plywood with phenolic gluing made exclusively with birch wood and with the surfaces covered with a phenolic film.

FEATURES	RULES	UNIT	VALUE
Thickness	EN 315	mm	9
Layers	-	-	6
Weight	EN 324.1	Kg/m <sup>2</sup>	6,04
Ranking	Uso esterno		
Resistance	EN 310	Мра	60 x
Flexion	EN 310	Мра	55 y
Module	EN 310	Мра	8700 x
Elasticity	EN 310	Мра	6300 y
Mass volume	EN 323	Kg/m³	700
Thermal conduction	UNI 7745	W/mK	0,15
Humidity	EN 322	%	max 15%
Bonding	EN 314	-	Classe 3
Abrasion	UNI 9116	RA	400
	Thickness	mm	min. 8,1 / max 9,1
Dimensional tolerances	Length / Width	mm	± 3
	Orthogonality	mm/m	1,0





#### CAUTION:

GPrandina srl Building Systems ensures that the multilayer used can guarantee a smooth finish for multiple uses. The number of uses can vary from 30 to 100 and these depend on: the use of the multilayer, the requirements of the finished concrete, the quality and quantity of the stripped oil used, the maintenance of the multilayer, the handling and the place of storage.



# STRUCTURAL CHARACTERISTICS OF THE ELEMENTS

#### **CLOSING PROFILE ALU**

The aluminum closing profile consists of the EN AW-6060 T6 aluminum profile "FN2831" with installed PVC springs with the following characteristics:

mm<sup>2</sup>

A=	821,00 mm <sup>2</sup>
Jx=	2,00 cm⁴
Jy=	9,90 cm⁴
Wx=	1,56 cm³
Wy=	2,54 cm <sup>3</sup>
Weight=	0,821 Kg/m

#### **CLOSING PROFILE PVC**

The PVC closing profile consists of the "RIM407" profile in rigid shockproof PVC with installed PVC springs with the following characteristics:

A= Weight= 746,35 mm<sup>2</sup> 1,06 Kg/m

#### FALLING HEAD LT - 391010LT FALLING HEAD LT - QUICK RELEASE - 391010LT-AR

The falling head is made up of tubes of different sections, cut and folded plates, all welded and assembled. The material used is S 275 JO carbon steel. The finish: cold galvanizing and / or cataphoresis.

Weight=

4,00 Kg

#### **FIX HEAD LT - 391012LT** FIX HEAD LT - QUICK RELEASE - 391012LT-AR

The fixed head consists of a cut and folded plate. The material used is S 275 JO carbon steel. The finish: cold galvanizing and / or cataphoresis.

Weight=

0,80 Kg

#### **COMPENSATION PROFILE**

The compensation profile consists of a cut and folded profile with a wooden mural installed inside. The material used is S 275 JO carbon steel. The finish: cold galvanizing and / or cataphoresis.













#### **CONNECTING ROD FOR REDUCED BEAM - 391140**

The tie rod for lowered beam consists of a cut and bent plate, an M30x30 nut, a DW15 bar; all welded. The material used is S 275 JO carbon steel. The finish: cold galvanizing and / or cataphoresis.

Weight=

1,60 Kg

#### JOIST IN WOOD LEADING L.120 - 391150

The bottom wooden joist consists of a cut and perforated mural. Finish: natural.

Weight=

3,00 Kg





# STRESS



#### **SIZING:**

In order to work in safety and to guarantee a perfect finishing of the floor, please respect the table below and the points listed below:

- Size the props according to the thickness of the floor to be built;

- Use the right configuration based on the thickness of the floor to be built.



#### **CAUTION:**

THE VALUES LISTED IN THE TABLE HAVE BEEN CALCULATED RESPECTING THESE FEES:

- SPECIFIC WEIGHT OF CONCRETE 26 KN / m2; - CONSIDER THE UNIFORMLY DISTRIBUTED LOAD.

CONFIGURATION 150x117,5 - PANEL 150x112,5					
SLAB THICKNESS	LOAD ON THE PANEL SUR-	LOAD ON THE PROP	PLANARITY	PLANARITY	
MONOLITHIC	FACE	(KN)	DIN 18218	AS3610-1	
(cm)	(KN/m²)				
10	2,60	4,58	7	1	
12	3,12	5,50	7	1	
14	3,64	6,42	7	1	
16	4,16	7,33	7	1	
18	4,68	8,25	7	1	
20	5,20	9,17	7	1	
22	5,72	10,08	7	2	
24	6,24	11,00	7	2	
26	6,76	11,91	6	2	
28	7,28	12,83	6	2	
30	7,80	13,75	6	2	





#### SIZING:

In order to work in safety and to guarantee a perfect finishing of the floor, please respect the table below and the points listed below:

- Size the props according to the thickness of the floor to be built;

- Use the right configuration based on the thickness of the floor to be built.



#### **CAUTION:**

THE VALUES LISTED IN THE TABLE HAVE BEEN CALCULATED RESPECTING THESE FEES:

- SPECIFIC WEIGHT OF CONCRETE 26 KN / m2; - CONSIDER THE UNIFORMLY DISTRIBUTED LOAD.

CONFIGURATION 150x80 - PANEL 150x75					
SLAB THICKNESS	LOAD ON THE PANEL SUR-	LOAD ON THE PROP	PLANARITY	PLANARITY	
MONOLITHIC	FACE	(KN)	DIN 18218	AS3610-1	
(cm)	(KN/m <sup>2</sup> )				
10	2,60	3,12	7	1	
12	3,12	3,74	7	1	
14	3,64	4,37	7	1	
16	4,16	4,99	7	1	
18	4,68	5,62	7	1	
20	5,20	6,24	7	1	
22	5,72	6,86	7	1	
24	6,24	7,49	7	1	
26	6,76	8,11	7	1	
28	7,28	8,74	7	1	
30	7,80	9,36	7	1	



# CORRECT USE OF THE SLAB LIGHT WALK SLAB SYSTEM



#### CAUTION:

Before proceeding with the application of the load on the WALK SLAB LIGHT floor system, check the points below.

- Check the integrity of all components;
- All the main and secondary elements that interact with the operation of the floor system must be assembled correctly;
- The system has been correctly anchored to the vertical walls and / or to the previous floor / floor;
- Check that the loading surface is perfectly horizontal and at the correct height as per the project;
- Check that all the props are perfectly vertical with respect to the support surface and that they are able to support the load of the floor;
- Check that the sizing parameters have been respected (see page 12-13);
- Respect the executive drawing provided by GPrandina srl. If you do not have the drawing, respect the steps of assembly present in this manual;
- Make sure you have complied with all the regulations in force on construction sites.
- For any special application, contact the technical office of GPrandina srl.

THE WALK SLAB LIGHT FLOOR SYSTEM IS USED ONLY AND EXCLUSIVELY FOR THE REINFORCED CONCRETE FLOOR JET, CONCRETE LATER FLOOR, LIGHTENED FLOOR.

When casting concrete, pay attention to the following details:

- Avoid loads concentrated above the props;
- Avoid the accumulation of concrete in limited areas of the floor system, this could cause the instability of the system or additure bring it to collapse;
- Proceed with uniform layers of concrete, respecting the methods and times indicated in this manual;
- Distribute the concrete while remaining within the flow ranges indicated in the tables on page 12-13.

When breaking out of the Walk Slab Light system, pay attention to the following details:

- Before breaking the slab system, make sure that the concrete has arrived at the site management ripeness;
- The early break-in of the panels can only take place after the concrete has reached the minimum strength of 8 Mpa;
- The scassero of the props must be decided by the construction management on the basis of the class of cement, on the basis of the degree of humidity, on the basis of temperature and atmospheric conditions;
- The assembly of the props on the brick-concrete floors must be installed orthogonally with respect to the underlying beams (see image alongside);
- All decisions must be taken by the works manager (Ministerial Decree 6.1.5-NTC 23-09-2005 ARTICLE 5.1.7 -EUROCODE 2 ENV / 206).









# NORMATIVE REQUIREMENTS

I calcoli strutturali vengono eseguiti con il consueto metodo della scienza delle costruzioni alle tensioni ammissibili in relazione alle seguenti norme:

CNR-UNI 10011/85 costruzioni in acciaio; CNR-UNI 10012/85 azioni sulle costruzioni; CNR-UNI 10027/85 strutture in acciaio per opere provvisionali; CNR-UNI 10029/87 costruzioni in acciaio ad elevata resistenza; DPR N° 547 del 27/04/55; DPR N° 164 del 07/01/56; CIRC. N° 80 del 07/07/86 Ministero del lavoro; CIRC. N° 15 del 19/03/90 Ministero del lavoro; D.M. del 09/01/1996 Norme Tecniche; CIRC. N° 65/AA.GG. del 10/04/1997 Istruzioni per l'applicazione delle Norme tecniche del D.M. del 16/01/1996

Le sopracitate norme trovano riscontro in EU:

DIN 1050 Prescrizioni per le costruzioni in acciaio; DIN 1055 Disposizioni uff. sulle ipotesi di carico; DIN 1912 Saldature con materiale d'apporto; DIN 4100 Norme relative alle saldature; DIN 4114 Criteri di calcolo; DIN 4420 Impalcature e ponteggi; DIN 17100 Acciai da costruzioni, prescrizioni di qualità.

Per il calcolo dei telai controterra sono state seguite le seguenti norme:

UNI EN 1990-2006 Criteri generali di progettazione strutturale;

UNI EN 1993-1-1:2005 Progettazione delle strutture in acciaio. Parte 1-1: Reole generali e regole per gli edifici; UNI EN 1993-1-8:2005 Progettazione delle strutture in acciaio. Parte 1-8: progettazione dei collegamenti; DECRETO MINISTERIALE 14/01/2008 - Norme tecniche per le costruzioni; PrEN 12811-1 " Temporary works equipment - Part 1: Scaffolds - Performance requirements and genral design; PrEN 13374 " Temporary edge protection systems - Product specification, test methods".

16 1.0.5 ..... Normative requirements











# 2.0.0 ASSEMBLY INSTRUCTIONS

#### **GENERAL REQUIREMENTS:**

The components must be installed as illustrated in this section of the manual. For the safe use of the GP-10 elements, the user must provide an adequate support base for the latter which supports the discharge to the ground of the forces generated by the casting of the concrete. It is strictly forbidden to use GP-10 systems on low resistant bases such as wood, gravel, earth, etc. It is strictly forbidden to make changes, add and subtract details to the GPrandina elements. The GPrandina srl Building System disclaims any responsibility for incorrect use of its construction systems.



# PRELIMINARY OPERATIONS EN1065 PROPS ADJUSTMENT

#### 1 - EN1065 PROPS ADJUSTMENT

Before starting the assembly of the WALK SLAB LIGHT system, adjust the height of the props using this simple formula and following the image below:

#### X= H-25-2

- H= clear height between the intrados and the extrados of the slab;
- 25= net height of the falling head in cm;
- 2= net height of the closing profile in cm.





#### **<u>1 - EN1065 PROPS ADJUSTMENT</u>**

Before starting the assembly of the WALK SLAB LIGHT system, adjust the height of the props using this simple formula and following the image below:

#### X= H-12-2

- H= clear height between the intrados and the extrados of the slab;
- 12= net height of the panel in cm;
- 2= net height of the fixed head in cm.





# **PRELIMINARY OPERATIONS FALLING HEAD - FIT OUT**



#### **STEP 1:**

Extract the wedge (blue detail) until it reaches the end of its stroke.

#### **USED MATERIAL:**

- 391010LT	Falling head SL	PCS. 01
- 391170	Bolt M10x30 mm	PCS. 02
- 391172	Nut M10	PCS. 02



**STEP 2:** 

Lift the box (red detail) and the wedge (blue detail) until you reach the end of the stroke.



**STEP 3:** Insert the wedge (blue detail).





Install Nr. 2 M10 x 30 mm bolts diagonally to secure the head to the prop.





**STEP 4:** Tighten the wedge (blue detail) with a couple of hammer blows.



# PRELIMINARY OPERATIONS FALLING HEAD QUICK RELEASE - FIT OUT



#### <u>STEP 1:</u>

Extract the wedge (blue detail) until it reaches the end of its stroke.

#### **USED MATERIAL:**

- 391010LT-AR Falling head SL

PCS. 01



<u>STEP 2:</u>

Lift the box (red detail) and the wedge (blue detail) until you reach the end of the stroke.



#### <u>N.B.:</u>

Se si è in possesso delle teste cadenti con aggancio rapido, inserire il perno nel foro della piastra del puntello; l'aggancio avverrà mediante l'apposito meccanismo a scatto.



STEP 3: Insert the wedge (blue detail).



**<u>STEP 4:</u>** Tighten the wedge (blue detail) with a couple of hammer blows.





# PRELIMINARY OPERATIONS FIX HEAD LT



#### **USED MATERIAL:**

- 391012LT	Fix head SL	PCS. 01
- 391170	Bolt M10x30 mm	PCS. 02
- 391172	Nut M10	PCS. 02





# PRELIMINARY OPERATIONS FIX HEAD WITH QUICK RELEASE



#### **USED MATERIAL:**

- 391012LT-AR Fix head SL

PCS. 01

#### <u>N.B.:</u>

R

If you have fixed heads with quick coupling, insert the pin in the hole of the prop plate; the coupling will take place through the appropriate snap mechanism.





#### **STEP 1:**

For the assembly of the WALK SLAB LIGHT floor system, it is recommended to start near a corner wall, in order to have a precise reference and a support point where to anchor the first link.

To avoid complications in the subsequent stitches, when starting, respect the measurements as shown in the images below. Position No. 03 fixed heads near the existing wall respecting the figure below and the figure alongside, position No. 01 falling head so as to close the first link.

#### **USED MATERIAL:**

Falling head SL	PCS. 01
Fix head SL	PCS. 03
Bolt M10x30 mm	PCS. 08
Nut M10	PCS. 08
Tripod for prop	PCS. 04
Prop EN1065	PCS. 04
	Falling head SL Fix head SL Bolt M10x30 mm Nut M10 Tripod for prop Prop EN1065









#### **STEP 2:**

After positioning N ° 03 fixed heads and N ° 01 falling head, position the first panel making sure that the profile enters the head seats; these are used to guarantee the correct configuration of the mesh and do not allow the panel to release and fall.

#### **USED MATERIAL:**

- 310122

Slab panel AL 150x112,5

PCS. 01









#### <u>STEP 3:</u>

To secure the WALK SLAB LIGHT system to the walls, use n ° 02 wall anchoring brackets.

They must be positioned in correspondence with an existing hole on the wall, then they must be fixed to the wall by means of a DW15 bar and DW15 nut plates.

This bracket must be installed on the first link, then alternately. (see image)

#### **USED MATERIALS:**

- 391100	Anchoring wall bracket	PCS. 02
- 811003	Tie rod DW15 - cm. 75	PCS. 02
- 811051	Wing nut DW15	PCS. 04







**STEP 1:** 

Insert, in an existing hole on the wall, a DW15 bar.



**STEP 2:** Install the anchoring wall bracket.



**<u>STEP 3:</u>** Secure everything with the nut plates.





#### **STEP 4:**

After securing the first link to the wall, place No. 01 prop with No. 01 fixed head and No. 01 prop and No. 01 falling head. Position everything as shown in the image below.

#### **USED MATERIALS:**

- 391010LT	Falling head SL	PCS. 01
- 391012LT	Fix head SL	PCS. 01
- 391170	Bolt M10x30 mm	PCS. 04
- 391172	Nut M10	PCS. 04
- 419104	Tripod for prop	PCS. 02
-	Prop EN1065	PCS. 02









#### **STEP 5:**

After positioning N ° 01 fixed head and N ° 01 falling head, position the second panel making sure that the profile enters the head seats; these are used to guarantee the correct configuration of the mesh and do not allow the panel to release and fall.

#### **USED MATERIALS:**

- 310122 Slab panel AL 150x112,5

PCS. 01








#### **STEP 6:**

Intallare n ° 01 Floor panel AL 150x112.5 in the special seats of the falling head. The panel will remain hung thanks to the special safety hooks. The inclination of the panel in this phase is approximately 55 °. At the same time, another worker will arrange n ° 01 prop with n ° 01 fixed head (see images).

- 310122	Slab panel AL 150x112,5	PCS. 01
- 391012L	Fix head SL	PCS. 01
- 391170	Bolt M10x30	PCS. 02
- 391172	Nut M10	PCS. 02
- 419104	Tripod for prop	PCS. 01
-	Prop EN1065	PCS. 01









### <u>STEP 7:</u>

Install n ° 01 AL 150x112.5 floor panel in the special seats of the falling head and of the fixed heads. In this case the panel will rest on 3 points; to stabilize everything, use the ASSEMBLY FORK as shown in the image.

<u>USED MATERIALS:</u>		
- 310122	Slab panel AL 150x112,5	PCS. 01
- 391158	Fork of assemblage	PCS. 01











#### **STEP 8:**

Using the ASSEMBLY FORK, as in the image alongside, lift the panel keeping the hooks on the falling heads as the rotation fulcrum. Once the panel is raised, use the mounting fork as a temporary support. At the same time, another worker will put an EN1065 prop in position with a fixed head (see image).

- 391012L	Fix head LT	PCS. 01
- 391158	Fork of assemblage	PCS. 01
- 391170	Bolt M10x30	PCS. 02
- 391172	Nut M10	PCS. 02
- 419104	Tripod for prop	PCS. 01
-	Prop EN1065	PCS. 01











#### **STEP 9:**

Place an EN1065 prop with a falling head and remove a mounting rod. Install a 150x112.5 floor panel and position a mounting rod as illustrated in the previous steps.

- 310122	Slab panel AL 150x112,5	PCS. 01
- 391010LT	Falling head SL	PCS. 01
- 391158	Fork of assemblage	PCS. 01
- 391170	Bolt M10x30	PCS. 02
- 391172	Nut M10	PCS. 02
-	Prop EN1065	PCS. 01









#### STEP 10:

Place an EN 1065 prop with a falling head and remove a mounting rod.

Falling head SL	PCS. 01
Bolt M10x30	PCS. 02
Nut M10	PCS. 02
Prop EN1065	PCS. 01
	Falling head SL Bolt M10x30 Nut M10 Prop EN1065









#### STEP 11:

Using the ASSEMBLY FORK, as in the image alongside, lift the panel keeping the hooks on the falling heads as the rotation fulcrum. Once the panel is raised, use the mounting fork as a temporary support.

- 391012LT	Fix head LT	PCS. 01
- 391158	Fork of assemblage	PCS. 01
- 391170	Bolt M10x30	PCS. 02
- 391172	Nut M10	PCS. 02
- 419104	Tripod for prop	PCS. 01
-	Prop EN1065	PCS. 01











#### STEP 12:

Using the ASSEMBLY FORK, as in the image alongside, lift the panel keeping the hooks on the falling heads as the rotation fulcrum. Once the panel is raised, use the mounting fork as a temporary support.

- 391012LT	Fix head LT	PCS. 01
- 391158	Fork of assemblage	PCS. 01
- 391170	Bolt M10x30	PCS. 02
- 391172	Nut M10	PCS. 02
- 419104	Tripod for prop	PCS. 01
-	Prop EN1065	PCS. 01









#### STEP 13:

After installing all the panels on the falling and fixed heads, mount the closing profiles.

### **USED MATERIALS:**

- 391030

Closing profile

PCS. 01









### **STEP 1:**

Insert the closing profile, inclined by about 45 °, in the channel created between the two panels.



### **STEP 2:**

Crush and rotate the closure profile simultaneously. It is recommended to apply pressure at the springs.



**<u>STEP 3</u>**: Make sure that the closing profile is perfectly coplanar with the adjacent panels.



# **COMPENSATIONS - PILLARS**



## <u>STEP 1:</u>

Do not place the panel near the pillars. Leave the space free to position the SL compensation bars and H20 wooden beams.



## <u>STEP 2:</u>

Install n ° 02 compensation crosspieces SL in correspondence of the falling head as shown in the pictures.

391080 Compensation profile	SL L.150	PCS. 01
391081 Compensation profile	SL L.112,5	PCS. 01
391082 Compensation profile	SI 1.75	PCS. 01

- 391084 Compensation profile SL L.50 PCS. 01
- 391086 Compensation profile SL L.37,5 PCS. 01









#### <u>STEP 3:</u>

Place n  $^\circ$  02 beams H20. They work in parallel with respect to the SL crosspieces.



<u>STEP 4:</u> Place multilayer or 3 - layer panel.

Nail the wood to the profiles and / or beams below.



#### **STEP 5:**

Install No. 02 Closing Profiles.

- 391080 Closing profile L.150 PCS. 01
- 391081 Closing profile L.112,5 PCS. 01
- 391082 Closing profile L.75 PCS. 01
- 391084 Closing profile L.50 PCS. 01
- 391086 Closing profile L.37,5 PCS. 01



# **COMPENSATIONS - PERIMETER**

### **COMPENSATION:**

Near the walls, where it is not possible to install a slab panel, use the compensation bars in combination with the heads and props. Use H20 beams and timber (user borne) in combination with the articles of the WALK SLAB LIGHT floor system.



150x112,5

150x112,5

150x112,5







# **CENTRAL LOWERED BEAMS**

#### LOWERED BEAMS:

With the WALK SLAB LIGHT floor system it is possible to form the lowered beams together with the floor. They must have maximum dimensions as in the image below.

By using panels, accessories and the traditional formwork system in combination, lowered beams of any geometry and section can be composed. The accessories of the WALK SLAB LIGHT system have been prized for the use of all the multilayers on the market.





### **STEP 1:**

Install the WALK SLAB LIGHT floor system as per previous instructions. Arrive near the lowered beams leave the space necessary for mounting the accessories for lowered beams.

Install the subsequent panels leaving the space necessary to install the accessories for lowered beams.





# **CENTRAL LOWERED BEAMS**

## <u>STEP 2:</u>

Install the compensation bars on the heads. Respect the assembly as shown in the images below.

## **USED MATERIALS:**

391080	Compensation profile SL L.150	PCS. 01
391081	Compensation profile SL L.112,5	PCS. 01
391082	Compensation profile SL L.75	PCS. 01
391084	Compensation profile SL L.50	PCS. 01
391086	Compensation profile SL L.37,5	PCS. 01





#### **CAUTION:**

It is recommended to use the compensation bars only for the use indicated in this manual.

GPrandina srl declines all responsibility for the incorrect use of the WALK SLAB LIGHT floor system.





## **STEP 3:**

Install the tie rods for lowered beam by hooking them to the compensation crossbar by inserting the appropriate pin. It is recommended to install the safety pin.

Respect the assembly as shown in the images below.

### **USED MATERIALS:** Connecting rod for reduced beams

- 391140

PCS. 01









# **CENTRAL LOWERED BEAMS**

### **STEP 4:**

Install the bottom joists L.120 (image "A") and fix them to the tie rods with n ° 02 DW15 nut plates (image "B").

- 391142	Wing nut DW15	PCS. 04
- 391150	Joist in wood leading L.120	PCS. 01









## <u>STEP 5:</u>

Place the plywood or plywood. Fasten the wood to the GPrandina articles using nails and / or self-tapping screws.





### **STEP 6:**

Place an H20 beam under the bottom beams L.120 to ensure perfect operation of the WALK SLAB LIGHT system.





**CAUTION:** Use H20 beams and lumber in perfect condition. GPrandina srl declines any responsibility in case of use of wood in bad condition.



# PERIMETER LOWERED BEAMS

#### LOWERED BEAMS:

With the WALK SLAB LIGHT floor system it is possible to form the lowered perimeter beams together with the floor, which have the maximum dimensions as shown in the image below.

By using panels, accessories and the traditional formwork system in combination, lowered perimeter beams of any geometry and section can be composed.

The accessories of the WALK SLAB LIGHT system have been prized for the use of all the multilayers on the market.





### **STEP 1:**

Install the WALK SLAB LIGHT floor system as per previous instructions. Arrive near the lowered beams leave the space necessary for mounting the accessories for lowered beams.





# PERIMETER LOWERED BEAMS

### **GENERAL ASSEMBLY INSTRUCTIONS:**

We recommend following the instructions below for the correct assembly of the WALK SLAB LIGHT system. Before starting assembly, secure the entire work area.









# PERIMETER LOWERED BEAMS

## **LOWERED BEAMS:**

Before proceeding with the assembly of all the WALK SLAB LIGHT components for lowered beams, anchor the panels to the stalls or to the previous floor using the appropriate clamps with the aid of dowels, chains and / or belts.

### **USED MATERIALS:**

- 391106	Panel clamp	PCS. 01
- 391108	Panel clamp + 5	PCS. 01



<u>A</u>













## **STEP 1:**

Position the clamp as shown in the image. Insert the central body between the two panels.



STEP 2: Rotate the clamp 90 ° as shown in the image.



**STEP 3:** Slide the wedge into the seat.



## ANCHORAGE:

It is recommended to use certified anchors. Minimum anchoring: Ø 16x125 mm.





**<u>STEP 4:</u>** Tighten the wedge with the help of a hammer.



# PERIMETER LOWERED BEAMS

### <u>STEP 2:</u>

Install the compensation bars on the heads. Respect the assembly as shown in the images below.

391080	Compensation profile SL L.150	PCS. 01
391081	Compensation profile SL L.112,5	PCS. 01
391082	Compensation profile SL L.75	PCS. 01
391084	Compensation profile SL L.50	PCS. 01
391086	Compensation profile SL L.37,5	PCS. 01





## <u>STEP 3:</u>

Install the tie rods for lowered beam by hooking them to the compensation crossbar by inserting the appropriate pin. It is recommended to install the safety pin.

Respect the assembly as shown in the images below. Install the DW15 nut plate as shown below.

391142	Wing nut DW15	PCS. 01
391140	Joist in wood leading	PCS. 01





# PERIMETER LOWERED BEAMS

### **STEP 4:**

Install the bottom joists L.120 (image "A") and fix them to the tie rods with n ° 02 DW15 nut plates (image "B").

- 391142	Wing nut DW15	PCS. 02
- 391150	Joist in wood leading L.120	PCS. 01








#### <u>STEP 5:</u>

Place No. 02 wooden beams H20. Use all the accessories necessary for the correct assembly of the traditional floor. Make the two systems united with the help of nails.





#### CAUTION:



## PERIMETER LOWERED BEAMS

#### **STEP 6:**

Install the bottom panels and the wooden sides (to be paid by the user). Secure everything with nails. It is also possible to use the SYSTEM GP-10 or other types of panels.

After preparing the formwork, proceed with the installation of the iron cages and the plant engineering.









#### CAUTION:



## **ASSEMBLY PHASES WITHOUT PERIMETER WALL**

#### **GENERAL ASSEMBLY INSTRUCTIONS:**

We recommend following the instructions below for the correct assembly of the WALK SLAB LIGHT system. Before starting assembly, secure the entire work area.









## **ASSEMBLY PHASES WITHOUT PERIMETER WALL**

#### <u>STEP 1:</u>

Install the first link respecting the measurements as in the image below. This will allow the correct fitting of the subsequent links.

- 310122	Slab panel AL 150x112,5	PCS. 01
- 391010LT	Falling head SL	PCS. 04
- 391170	Bolt T.E. 8.8 M10X30	PCS. 08
- 391172	Nut M10	PCS. 08
- 391156	Current of connection L.150 - 117,5	PCS. 04
-	Prop EN1065	PCS. 04







**STEP 2:** Install the next links as shown in the image.

#### **MATERIALE UTILIZZATO:**

- 310122	Slab panel AL 150x112,5	PCS. 02
- 391010LT	Falling head SL	PCS. 04
- 391170	Bolt T.E. 8.8 M10X30	PCS. 08
- 391172	Nut M10	PCS. 08
- 391156	Current of connection L.150 - 117,5	PCS. 04
-	Prop EN1065	PCS. 04





## **ASSEMBLY PHASES WITHOUT PERIMETER WALL**

#### <u>STEP 3:</u>

Proceed with the assembly of the floor system.

310122	Slab panel AL 150x112,5	PCS.
391010LT	Falling head SL	PCS.
391170	Bolt T.E. 8.8 M10X30	PCS.
391172	Nut M10	PCS.
391156	Current of connection L.150 - 117,5	PCS.
	Prop EN1065	PCS.





#### <u>STEP 4:</u>

Install the panels near the perimeter of the floor. Use the mounting forks to support the panels before placing the props with fixed heads.

310122	Slab panel AL 150x112,5	PCS. 02
391158	Fork of assemblage	PCS. 04







## **ASSEMBLY PHASES WITHOUT PERIMETER WALL**

#### **STEP 5:**

Position the props EN 1065 with the fixed heads. Prepare an H20 beam supported by props and 4-pointed forks as in the image below.

#### **USED MATERIALS:**

- 391012LT	Fix head SL	PCS. 04
-	Prop EN1065	PCS.
- 419104	Tripod for prop	PCS.
-	Wood beam H20	PCS.



#### **MATERIAL ON CUSTOMER CHARGE:**

The H20 beams and the 4-pointed forks are the responsibility of the user.



#### **CAUTION:**



**STEP 6:** Place the panel.

#### MATERIALE UTILIZZATO:

- 310122 Slab panel AL 150x112,5

PCS. 01





# ASSEMBLY PHASES WITHOUT PERIMETER WALL

#### **STEP 7:**

Install the closing profiles.

Anchor the panels to the stalls or to the previous floor using the appropriate clamps with the aid of dowels, chains and / or belts.

#### **USED MATERIALS:**

391030	Closing profile L.150	PCS.
391106	Panel clamp	PCS.
391108	Panel clamp + 5	PCS.



<u>A</u>













#### **STEP 1:**

Position the clamp as shown in the image. Insert the central body between the two panels.



STEP 2: Rotate the clamp 90 ° as shown in the image.

**STEP 3:** Slide the wedge into the seat.



#### **ANCHORAGE:**

It is recommended to use certified anchors. Minimum anchoring: Ø 16x125 mm.





**<u>STEP 4:</u>** Tighten the wedge with the help of a hammer.



# ASSEMBLY STEPS WITH PERIMETER PILLARS

#### **GENERAL ASSEMBLY INSTRUCTIONS:**

We recommend following the instructions below for the correct assembly of the WALK SLAB LIGHT system. Before starting assembly, secure the entire work area.









## ASSEMBLY STEPS WITH PERIMETER PILLARS

#### **STEP 1:**

Install the first link respecting the measurements as in the image below. This will allow the correct fitting of the subsequent links.

#### **MATERIALE UTILIZZATO:**

- 310122	Slab panel AL 150x112,5	PCS. 01
- 391010LT	Falling head SL	PCS. 04
- 391170	Bolt T.E. 8.8 M10X30	PCS. 08
- 391172	Nut M10	PCS. 08
- 391156	Current of connection L.150 - 117,5	PCS. 04
-	Prop EN1065	PCS. 04





**STEP 2:** Install the next links as shown in the image.

- 310122	Slab panel AL 150x112,5	PCS. 02
- 391010LT	Falling head SL	PCS. 04
- 391170	Bolt T.E. 8.8 M10X30	PCS. 08
- 391172	Nut M10	PCS. 08
- 391156	Current of connection L.150 - 117,5	PCS. 04
-	Prop EN1065	PCS. 04





## **ASSEMBLY STEPS WITH PERIMETER PILLARS**

#### <u>STEP 3:</u>

Proceed with the assembly of the floor system.

310122	Slab panel AL 150x112,5	PCS.
- 391010LT	Falling head SL	PCS.
391170	Bolt T.E. 8.8 M10X30	PCS.
391172	Nut M10	PCS.
391156	Current of connection L.150 - 117,5	PCS.
	Prop EN1065	PCS.





#### <u>STEP 4:</u>

Install the panels near the perimeter of the floor. Use the mounting forks to support the panels before placing the props with the fixed heads.

310122	Slab panel AL 150x112,5	PCS. 02
391158	Fork of assemblage	PCS. 04





## ASSEMBLY STEPS WITH PERIMETER PILLARS

#### **STEP 5:**

Position the EN1065 props with the fixed heads. Prepare an H20 beam supported by props and 4-pointed forks as in the image below.

#### **USED MATERIALS:**

- 391012LT	Fix head SL
-	Prop EN1065

PCS. 04 PCS.





**STEP 6:** Place the panel.

#### MATERIALE UTILIZZATO:

- 310122 Slab panel AL 150x112,5

PCS. 01





## **ASSEMBLY STEPS WITH PERIMETER PILLARS**

#### **STEP 7:**

Prepare an H20 beam supported by props and a 4-point fork as shown in the image below.

#### **USED MATERIALS:**

-	Prop EN1065	PCS.
- 419104	Tripod for prop	PCS.
-	Wood beam H20	PCS.





#### **MATERIALS ON CUSTOMER CHARGE:**

The H20 beams and the 4-pointed forks are the responsibility of the user.



#### **CAUTION:**



#### <u>STEP 8:</u>

Position the second frame of beams H20.

#### **MATERIALE UTILIZZATO:**

Wood beam H20

PCS.





## **MATERIALS ON CUSTOMER CHARGE:**

The H20 beams and the 4-pointed forks are the responsibility of the user.



#### CAUTION:



## ASSEMBLY STEPS WITH PERIMETER PILLARS

<u>STEP 9:</u>

Install the infill timber.

**USED MATERIALS:** 

Various timber

PCS.





### **MATERIALS ON CUSTOMER CHARGE:**

The H20 beams and the 4-pointed forks are the responsibility of the user.



#### **CAUTION:**



#### STEP 10:

Install the closing profiles.

Anchor the panels to the previous floor or floor using the appropriate clamps with the aid of dowels, chains and / or belts.

- 391030	Closing profile L.150	PCS.
- 391106	Panel clamp	PCS.
- 391108	Panel clamp + 5	PCS.











#### **STEP 1:**

Install the formwork support bracket to create the support for the GP-10 panel which will act as a retaining rail and support for the safety parapet.

#### **USED MATERIALS:**

399002	Substaining bracket GP-10	PCS.
811003	Tie rod DW15	PCS.
811051	Wing nut DW15	PCS.





#### **CAUTION:**

Maximum permissible width of the parapet rail support and parapet post equal to 150 cm.



#### **MATERIALS ON CUSTOMER CHARGE:**

The H20 beams and the 4-pointed forks are the responsibility of the user.



#### CAUTION:







#### **STEP 2:**

Place the GP-10 panels in a horizontal position on the previously prepared formwork support brackets. Fasten the panels with the appropriate clamps.

	Panel GP-10	PCS.
291012	Alignement clamp GP-10	PCS.
291042	Adjustable clamp for external corner	PCS.









#### **STEP 3:**

Install the front railing support and the front railing column. This will act as an anti-fall railing system.

#### **USED MATERIALS:**

- 296018 Frontal parapet column

- 296019 Bracket frontal parapet column











#### **STEP 1:**

Position the front parapet support in correspondence with the reinforcement crosspiece of the panel and fix it with the plug L.90 mm.

Install the front parapet post as shown in the image.





<u>STEP 4:</u>

Install the wooden boards.

USED MATERIAL:

Various planks

PCS.









#### MATERIALS ON CUSTOMER CHARGE:

The H20 beams and the 4-pointed forks are the responsibility of the user.



#### CAUTION:



#### **STEP 1:**

Install the parapet rail support to create the anti fall safety system and the floor retaining system.

#### **USED MATERIALS:**

- 391118	Square for side edge	PCS.
- 391072	Frontal support for parapet column	PCS.







#### **CAUTION:**

Maximum permissible width of the parapet rail support and parapet post equal to 150 cm.



#### MATERIALS ON CUSTOMER CHARGE:

The H20 beams and the 4-pointed forks are the responsibility of the user.



#### CAUTION:











### <u>STEP 1:</u>

Position the front railing support as shown in the image.

#### <u>STEP 2:</u>

Make sure that the support is fixed on the edge profile of the panel and that it is in correspondence with one of the reinforcement crosspieces of the panel. Secure the head with a lever or hammer.

STEP 3: Place the square for the side rail.

Position the double fixing screw and tighten the latter

Adjust the position of the

with No. 02 nuts.







STEP 5:

project.

<u>STEP 4:</u>



#### **STEP 2:**

Install the railing column to create the anti-fall safety system.

#### **USED MATERIALS:**

- 391070 Parapet column

PCS.










# RAILING SYSTEM AND RETAINING RAIL WITHOUT PERIMETER WALL

### **STEP 3:**

Install the planks that will act as a clip and anti-fall system.

#### **USED MATERIALS:**

Various planks

PCS.







#### **STEP 1:**

Raise the movable flap and place a table. This will act as a heel and anti-fall system of things and people.

**STEP 2:** 

Lower the movable flap and fix the latter to the flap using nails (charged to the customer).



#### <u>STEP 3:</u>

Position the clip board in adherence to the side rails. Fasten everything with nails (charged to the customer) in correspondence with the holes on the square.

## CAUTION:

Maximum permissible width of the parapet rail support and parapet post equal to 150 cm.



!

MATERIALS ON CUSTOMER CHARGE:

The H20 beams and the 4-pointed forks are the responsibility of the user.



#### CAUTION:

Use H20 beams and lumber in perfect condition. GPrandina srl declines any responsibility in case of use of wood in bad condition.





## DISASSEMBLY

#### **DISASSEMBLY:**

After 5 days of concrete curing, the falling heads and the fixed heads can be disarmed to remove the panels.

These can be used in subsequent floors or packed in the appropriate containers to be transported to another construction site or to your own garage.



#### **DISASSEMBLY PROGRESSION:**

- 1) Lower the fixed heads by acting on the prop ring nut;
- 2) Disarm the falling heads acting on the wedge with the hammer;
- 3) Remove the panels starting from the starting point used for the initial assembly;
- 4) Leave the props with the falling heads in the armed position until the concrete has fully matured (28 days).
- \_\_\_\_\_















<u>4)</u> 5)











# 3.0.0 PROPS EN 1065

#### **GENERAL REQUIREMENTS:**

The components must be installed as illustrated in this section of the manual. For the safe use of the GP-10 elements, the user must provide an adequate support base for the latter which supports the discharge to the ground of the forces generated by the casting of the concrete. It is strictly forbidden to use GP-10 systems on low resistant bases such as wood, gravel, earth, etc. It is strictly forbidden to make changes, add and subtract details to the GPrandina elements. The GPrandina srl Building System disclaims any responsibility for incorrect use of its construction systems.



# **STEEL PROP DIN EN CLASS A**

CAPACITY (KN)				
EXTENSION (cm)	A30	A35	A40	
180	25,88			
190	24,93			
200	22,50	25,88		
210	20,41	23,81		
220	18,60	21,69		
230	17,01	19,85	22,68	
240	15,63	18,23	20,83	
250	14,40	16,80	19,20	
260	13,31	15,53	17,75	
270	12,35	14,40	16,46	
280	11,48	13,39	15,31	
290	10,70	12,49	14,27	
300	10,00	11,67	13,33	
310		10,93	12,49	
320		10,25	11,72	
330		9,64	11,02	
340		9,08	10,38	
350		8,57	9,80	
360			9,26	
370			8,77	
380			8,31	
390			7,89	
400			7,50	



## **STEEL PROP DIN EN CLASS B**

CAPACITY (KN)						
EXTENSION (cm)	B30	B35	B40	B45		
180	30,00					
190	30,00					
200	30,00	30,00				
210	27,21	30,00				
220	24,79	28,93				
230	22,68	26,47	30,00			
240	20,83	24,31	27,78	30,00		
250	19,20	22,40	25,60	28,80		
260	17,75	10,71	23,67	26,63		
270	16,46	19,20	21,95	24,69		
280	15,31	17,86	10,41	22,96		
290	14,27	16,65	19,02	21,40		
300	13,33	15,56	17,78	20,00		
310		14,57	16,65	18,73		
320		13,67	15,63	17,58		
330		12,86	14,69	16,53		
340		12,11	13,84	15,57		
350		11,43	13,06	14,69		
360			12,35	13,89		
370			11,69	13,15		
380			11,08	12,47		
390			10,52	11,83		
400			10,00	11,25		
410				10,71		
420				10,20		
430				9,73		
440				9,30		
450				8,89		



## **STEEL PROP DIN EN CLASS C**

CAPACITY (KN)					
EXTENSION (cm)	C/E30	C/D35	C40	C45	C55
180	35,00				
190	35,00				
200	35,00	35,00			
210	35,00	35,00			
220	35,00	35,00			
230	34,03	35,00	35,00		
240	31,25	35,00	35,00		
250	30,00	33,60	35,00	35,00	
260	30,00	31,07	35,00	35,00	
270	30,00	28,81	32,92	35,00	
280	30,00	26,79	30,61	34,44	
290	30,00	24,97	28,54	32,10	
300	30,00	23,33	26,67	30,00	35,00
310		21,85	24,97	28,10	34,34
320		20,51	23,44	26,37	32,23
330		20,00	22,04	24,79	30,30
340		20,00	20,76	23,36	28,55
350		20,00	19,59	22,04	26,94
360			18,52	20,83	25,46
370			17,53	19,72	24,11
380			16,62	18,70	22,85
390			15,78	17,75	21,70
400			15,00	16,87	20,62
410				16,06	19,63
420				15,31	18,71
430				14,60	17,85
440				13,95	17,05
450				13,33	16,30
460					15,60
470					14,94
480					14,32
490					13,74
500					13,20
510					12,69
520					12,20
530					11,75
540					11,32
550					10,91



## **STEEL PROP DIN EN CLASS D**

	CAPACITY (KN)						
EXTENSION (cm)	B/D25	B/D30	C/D35	D40	D45	D50	D55
180		30,00					
190		30,00					
200		30,00	35,00				
210		27,21	35,00				
220		24,79	35,00				
230		22,68	35,00	20,00			
240		20,83	35,00	20,00			
250		20,00	33,60	20,00			
260		20,00	31,07	20,00	20,00		
270		20,00	28,81	20,00	20,00		
280		20,00	26,79	20,00	20,00	20,00	
290		20,00	24,97	20,00	20,00	20,00	
300		20,00	23,33	20,00	20,00	20,00	20,00
310			21,85	20,00	20,00	20,00	20,00
320			20,51	20,00	20,00	20,00	20,00
330			20,00	20,00	20,00	20,00	20,00
340			20,00	20,00	20,00	20,00	20,00
350			20,00	20,00	20,00	20,00	20,00
360				20,00	20,00	20,00	20,00
370				20,00	20,00	20,00	20,00
380				20,00	20,00	20,00	20,00
390				20,00	20,00	20,00	20,00
400				20,00	20,00	20,00	20,00
410					20,00	20,00	20,00
420					20,00	20,00	20,00
430					20,00	20,00	20,00
440					20,00	20,00	20,00
450					20,00	20,00	20,00
460						20,00	20,00
470						20,00	20,00
480						20,00	20,00
490						20,00	20,00
500						20,00	20,00
510							20,00
520							20,00
530							20,00
540							20,00
550							20,00



# **STEEL PROP DIN EN CLASS E**

CAPACITY (KN)					
EXTENSION (cm)	E25	C/E30	E35	E40	E45
150	30,00				
160	30,00				
170	30,00				
180	30,00	35,00			
190	30,00	35,00			
200	30,00	35,00	30,00		
210	30,00	35,00	30,00		
220	30,00	35,00	30,00		
230	30,00	34,03	30,00	30,00	
240	30,00	31,25	30,00	30,00	
250	30,00	30,00	30,00	30,00	30,00
260		30,00	30,00	30,00	30,00
270		30,00	30,00	30,00	30,00
280		30,00	30,00	30,00	30,00
290		30,00	30,00	30,00	30,00
300		30,00	30,00	30,00	30,00
310			30,00	30,00	30,00
320			30,00	30,00	30,00
330			30,00	30,00	30,00
340			30,00	30,00	30,00
350			30,00	30,00	30,00
360				30,00	30,00
370				30,00	30,00
380				30,00	30,00
400				30,00	30,00
410					30,00
420					30,00
430					30,00
440					30,00
450					30,00











# 4.0.0 STORAGE

### **GENERAL REQUIREMENTS:**

The components must be installed as illustrated in this section of the manual. For the safe use of the GP-10 elements, the user must provide an adequate support base for the latter which supports the discharge to the ground of the forces generated by the casting of the concrete. It is strictly forbidden to use GP-10 systems on low resistant bases such as wood, gravel, earth, etc. It is strictly forbidden to make changes, add and subtract details to the GPrandina elements. The GPrandina srl Building System disclaims any responsibility for incorrect use of its construction systems.



# STORAGE PLATFORM FOR FLOOR PANELS



#### PLATFORM FOR FLOOR PANELS:

This accessory allows you to store the floor panels in an orderly way and allows easy and safe movement using the forklift.

#### **USED MATERIAL:**

- 391080	Platform for floor panels	PCS. 01
- 391082	Ratchet with belt - 8,5 m	PCS. 04

## CAPACITY:

The platform for floor panels can contain Nr. 32 panels 150x112.5.

Total weight: 893,20 kg.



### PLATFORM FOR FLOOR PANELS:

This accessory allows you to store the floor panels in an orderly way and allows easy and safe movement using the forklift.

#### **USED MATERIAL:**

- 391080	Platform for floor panels	PCS.
- 391082	Ratchet with belt - 8,5 m	PCS.

#### CAPACITY:

The platform for floor panels can contain Nr. 48 panels 150x112.5.

01 05

Total weight: 945,80 kg.



# STORAGE CONTAINER FOR FLOOR PANELS



#### PLATFORM FOR FLOOR PANELS:

This accessory allows you to store the floor panels in an orderly way and allows easy and safe movement using the forklift.

#### **USED MATERIAL:**

- 391084 (	Container for floor panels	PCS. 01
	CAPACITY: The platform for floor panels of tain Nr. 18 panels 150x112.5.	an con-
	Total weight: 593,80 kg.	



#### **CAPACITY:**

The platform for floor panels can contain Nr. 27 panels 150x75.

Total weight: 621,70 kg.



## STORAGE CONTAINER FOR BEAMS AND PROPS



#### **DESCRIPTION:**

Thanks to the container for beams and props it is possible to stack and / or move the props used for the floor in complete safety.

N.B.: the accessory containers can overlap.

#### USED MATERIAL:

391086 Container for beams and prop

PCS. 01



## MAXIMUM CAPACITY: 1200 KG



## STORAGE CONTAINER FOR ACCESSOIRES



#### **DESCRIPTION:**

Thanks to the accessory container you can store all the accessories that are used for the assembly of the formworks: vices, DW bars, nut plates, etc.

N.B.: N.B.: the accessory containers can overlap.

#### USED MATERIAL:

296053 Container 120x80

PCS. 01



## MAXIMUM CAPACITY: 1000 KG









# 5.0.0 MAINTENANCE AND CLEA-NING

## **GENERAL REQUIREMENTS:**

The components must be installed as illustrated in this section of the manual. For the safe use of the GP-10 elements, the user must provide an adequate support base for the latter which supports the discharge to the ground of the forces generated by the casting of the concrete. It is strictly forbidden to use GP-10 systems on low resistant bases such as wood, gravel, earth, etc. It is strictly forbidden to make changes, add and subtract details to the GPrandina elements. The GPrandina srl Building System disclaims any responsibility for incorrect use of its construction systems.



## MAINTENANCE AND CLEANING



#### **DESCRIPTION:**

Before each jet, apply a thin layer of stripping oil on the multilayer and on the metal frame. This oil prevents and facilitates the dismantling of the formworks

This oil prevents and facilitates the dismantling of the formworks. We recommend applying the oil with a spray pump.

#### **MATERIALE UTILIZZATO:**

880121 Dismantling oil

PCS. 01



### CAUTION:

USE ONLY PRODUCTS SUITABLE FOR FORMWORKS. THE USE OF PRODUCTS NOT SUITABLE FOR FORMWORKS IS FORBIDDEN: THESE COULD RUIN THE MULTI-LAYER AND METALLIC FRAME.

#### **DISMANTLING OIL:**

6





#### CAUTION:

- DISMANTLING OIL CONTAINS HARMFUL SUBSTANCES FOR THE ENVIRONMENT;
- DO NOT DISPERSE IN THE ENVIRONMENT;
- USE IN WELL-VENTILATED AREAS;
- DO NOT INHALE AND / OR SWALLOW.



#### **DESCRIPTION:**

The special coating of the formwork and the multilayer allow cleaning with the use of high-performance pressure washers.

It is recommended to observe the following requirements:

- Performance from 200 bar to a maximum of 300 bar;
- Pay attention to the distance and speed of the jet;
- The higher the pressure, the greater the distance to keep;
- Pay the utmost attention to the silicone joint;
  - Excessive pressure can damage the silicone joint;
- Do not linger too long in the same place.











# 6.0.0 DAMAGE ON PLYWOOD

#### **GENERAL REQUIREMENTS:**

The components must be installed as illustrated in this section of the manual. For the safe use of the GP-10 elements, the user must provide an adequate support base for the latter which supports the discharge to the ground of the forces generated by the casting of the concrete. It is strictly forbidden to use GP-10 systems on low resistant bases such as wood, gravel, earth, etc. It is strictly forbidden to make changes, add and subtract details to the GPrandina elements. The GPrandina srl Building System disclaims any responsibility for incorrect use of its construction systems.



## **DAMAGE ON PLYWOOD - RIPPLING**



#### CAUTION:

THE DAMAGES LISTED BELOW ARE NOT COVERED BY WARRANTY BY GPRANDINA SRL BUILDING SYSTEMS.



#### **DESCRIPTION:**

The micro-sways formed on the multilayer panel are caused by the penetration of moisture into the multilayer itself. It can occur more easily in the perimeter edges, in the holes of the fixing screws or in any other point where the multilayer is not protected by the phenolic film.

The ripple should disappear when moisture penetrates evenly through the holes, generally occurs after 6/8 times use.

## DAMAGE ON PLYWOOD - VARIOUS DRILLS (NAILS, SCREWS, ECC)



### CAUTION:

THE DAMAGES LISTED BELOW ARE NOT COVERED BY WARRANTY BY GPRANDINA SRL BUILDING SYSTEMS.



#### **DESCRIPTION:**

The GP-10 frame formwork multilayer can present these defects due to punctures caused by the fixing / extraction of nails, screws or drill holes which cause the splintering of the phenolic film of various sizes compromising the quality of the surface and promoting a greater penetration of moisture into the multilayer.





## **DAMAGE ON PLYWOOD - VIBRATOR**



#### CAUTION:

THE DAMAGES LISTED BELOW ARE NOT COVERED BY WARRANTY BY GPRANDINA SRL BUILDING SYSTEMS.



#### **DESCRIPTION:**

These damages are caused by the vibrator needle which, coming into contact with the phenolic protection film for too long, causes non-uniform, circular or length abrasion which, by removing the phenolic film, causes wear to the multilayer of a few millimeters of depth.













# 7.0.0 ARTICLES

### **GENERAL REQUIREMENTS:**

The components must be installed as illustrated in this section of the manual. For the safe use of the GP-10 elements, the user must provide an adequate support base for the latter which supports the discharge to the ground of the forces generated by the casting of the concrete. It is strictly forbidden to use GP-10 systems on low resistant bases such as wood, gravel, earth, etc. It is strictly forbidden to make changes, add and subtract details to the GPrandina elements. The GPrandina srl Building System disclaims any responsibility for incorrect use of its construction systems.



## ARTICLES

#### **SLAB PANELS:**



PAINTED

ARTICLE

391010IT-AR

391010LT

ARTICLE

391012LT

100

ARTICLE

391012LT-AR

ARTICLE	DESCRIPTION	WEIGHT (kg)	(m²)
310110	Slab panel AL 150x75	17,10	1,125
310112	Slab panel AL 150x50	13,10	0,75
310114	Slab panel AL 150x37,5	11,00	0,5625
310116	Slab panel AL 75x75	9,60	0,5625
310118	Slab panel AL 75x50	7,30	0,375
310120	Slab panel AL 75x37,5	6,10	0,2812
310122	Slab panel AL 150x112,5	24,10	1,6875
310124	Slab panel AL 75x112,5	13,10	0,8437
310126	Slab panel AL 50x112,5	10,00	0,5625
310128	Slab panel AL 37,5x112,5	8,50	0,4218
	·		

DESCRIPTION

Falling head LT - Quick release

DESCRIPTION

DESCRIPTION

Fix head LT - Quick release

GALVANIZE

GALVANIZE

Falling head LT

Fix head LT

WEIGHT (kg)

WEIGHT (kg)

WEIGHT (kg)

0,80

0,80

4,50

4,50

(m²)

(m²)

(m<sup>2</sup>)

0,075

0,0375

0,025

0,0187

(m²)

0,075

0,0375

0,025

0,0187

(m²)

1,30

#### ACCESSOIRES:



6









PAINTED - GALVANIZE

Compensation profile SL L.37,5

391086







DESCRIPTION

Anchoring wall bracket

PAINTED - GALVANIZE

WEIGHT (kg)

8,60

(m²)



ARTICLE

391100



PAINTED - GALVANIZE











# ARTICLES



ARTICLE	DESCRIPTION	WEIGHT (kg)	(m²)
391086	Container for beams and props	40,50	
PA	INT - GALVANIZE		



ARTICLE	DESCRIPTION	WEIGHT (kg)	(m²)
296053	Container 120x80	60,00	

### **MATERIALS TO LOSE:**



ARTICLE	DESCRIPTION	WEIGHT (kg)	(m²)
880121	Disarming oil - 20 LT.	22,00	
880122	Disarming oil - 220 LT.	230,00	
880123	Disarming oil - 1000 LT.	1.035,00	



ARTICLE	DESCRIPTION	WEIGHT (kg)	(m²)
880126	Disarming inox pomp 25 LT	10,00	
880128	Steel pressure pump 25 LT	13,00	





## NOTES









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## How to get



## **GPrandina Srl Building System** via Roma, 37 - 36060 Schiavon (VI) Italy Tel +39 0444 665046 Fax +39 0444466289

www.gprandina.it - info@gprandina.it





**GPrandina Srl Building System** via Roma, 37 - 36060 Schiavon (VI) Italy Tel +39 0444 665046 Fax +39 0444466289

www.gprandina.it - info@gprandina.it