

Geoplast Building beyond together

English

# FORMANORK FOR WALLS, ROUND AND SQUARE COLUMNS



GEOTUB



**GEOTUB PANEL** 



**GEOPANEL STAR** 



GEOPANEL

# LIGHT PRACTICAL REUSABLE

Geoplast.it



# **INDEX**



### **GEOTUB**

Reusable formwork system in ABS technopolymer for circular and oval colums.

**P.** 4



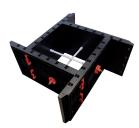


### **GEOTUB PANEL**

Reusable formwork system in ABS technopolymer for square and rectangular colums.

**P. 13** 





### **GEOPANEL STAR**

Reusable adjustable columns formwork in ABS technopolymer.

**P. 19** 





### GEOPANEL

Reusable formwork system in ABS technopolymer for walls.

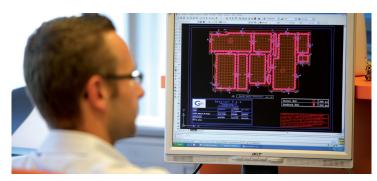




# **DESIGN & ASSISTANCE** FROM PREDIMENSIONING TO FINAL DRAWING

Geoplast Technical Unit is at the disposal of architects and engineers to offer the required assistance during the implementation of a project. From the statistical calculations to the working drawings.





### **TECHNICAL ANALYSIS**

**FEASIBILITY ANALYSIS** 

Technical Analysis of the project which includes the choice of the most suitable Geoplast's solution, material and manpower estimates and cost analysis.

Structural Analysis and writing of all the documentation that tests the performance of the proposed systems.

### **EXECUTIVE DESIGN**

Support by design professionals. The in-depth analysis together with the formwork positioning plan and the related accessories can be supplied on request.

# 



### **ON-SITE ASSISTANCE**

When necessary, Geoplast's technical unit can be present on-site and help the company during the installation stage.

To contact the technical unit : Tel. +39 049 949 0289 - ufficiotecnico@geoplast.it To download the updated technical sheets, the support material, new images and new case studies, visit our website: **Geoplast.it** 



# GEOTUB



**REUSABLE FORMWORK SYSTEM IN ABS TECHNOPOLYMER FOR CIRCULAR AND OVAL COLUMS** 



# **GEOTUB ADVANTAGES**



The only light, reusable and modular system for the production of round and oval columns.



Weighing max 10 kg, GEOTUB can be handled quickly on site without having to use cranes or other mechanical lifting devices



GEOTUB is cost effective as it can be reused more than 100 times when properly used and mantained



Light and easy to assemble, it can be installed and handled by a single person



All elements are 600 mm long and only the elements necessary for the pour are used



Concrete does not stick to plastic: dismantling is extremely easy, the forms can be cleansed using just a little water, avoiding any need of detergents





GEOTUB can be safely and conveniently stored even in damp places



### **GEOTUB THE MODULAR FORMWORK** UP TO 80 KN/M<sup>2</sup> FRESH CONCRETE PRESSURE



### **GEOTUB MATERIAL**

Acrylonitrile Butadiene Styrene	ABS
Coefficient of thermal expansion	0.05 mm/m/°C

### SIZE

Minimum diameter	250 mm
Maximum diameter	1000 mm
Height	600 mm (actual size 605 mm)



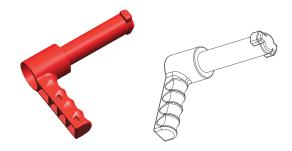
### THE HANDLE THE STANDARD FIXING ITEM FOR ALL GEOPLAST FORMWORK

Light and intuitive

Firmly locks with a simple 90 degree turn

Strength (guaranteed by specially engineered materials)

HANDLE MATERIAL: NYLON - COEFFICIENT OF THERMAL EXPANSION 7-10 (1/K 10-5)

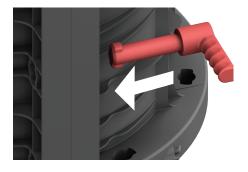


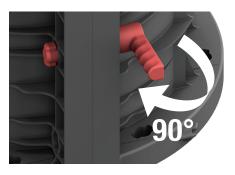
# **GEOTUB INSTALLATION GUIDE**



A GEOTUBB HANDLE

### **HANDLE INSTALLATION**









# **GEOTUB POUR HEIGHTS** GEOTUB CONFIGURATION OF A COLUMN

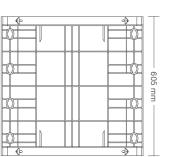
	O ø Nominal diameter (mm)	O Length of single form (mm)	O Forms per column of 3 mt (pcs.)	O No. handles per column of 3 mt (pcs.)	O Column Length (mm)
ø25	250	605	10	60	3000
ø30	300	605	10	60	3000
ø35	350	605	10	70	3000
ø40	400	605	10	70	3000
ø45	450	605	10	80	3000
ø50	500	605	10	80	3000
ø60	600	605	10	90	3000
ø70	700	605	10	100	3000
ø80	800	605	10	100	3000
ø90	900	605	10	110	3000
ø100	1000	605	10	110	3000

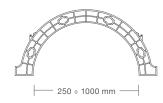
### **MAX. POUR HEIGHT (SINGLE POUR)**

ø**25 - 40** 6000 mm **ø45 - 60** 4800 mm

ø**70 - 100** 3600 mm









### DIMENSIONAL TABLE GEOTUB

	PRODUCT	Actual size (mm)	Material	Weight (kg)	Package dimension (mm)	Nr. pieces per pallet	Nr. handles
	GEOTUB ø25	ø250 H605	ABS	2.99	810 x 1210 x H2200	60	6
	GEOTUB Ø30	ø300 H605	ABS	3.68	930 x 1210 x H2450	60	6
	GEOTUB Ø35	ø350 H605	ABS	4.31	1030 x 1210 x H2260	50	7
	GEOTUB ø40	ø400 H605	ABS	4.83	1140 x 1210 x H1900	40	7
	GEOTUB Ø45	ø450 H605	ABS	5.36	1210 x 1230 x H2330	48	8
	GEOTUB Ø50	ø500 H605	ABS	5.47	770 x 1210 x H2100	20	8
	GEOTUB Ø60	ø600 H605	ABS	6.16	770 x 1210 x H2350	20	9
	GEOTUB Ø70	ø700 H605	ABS	7.96	870 x 1210 x H2380	18	10
	GEOTUB Ø80	ø800 H605	ABS	8.88	970 x 1210 x H2350	16	10
V							
	GEOTUBø90	ø900 H605	ABS	9.89	1070 x 1210 x H2530	16	11
V							
	GEOTUB Ø100	ø1000 H605	ABS	10.82	1170 x 1210 x H2400	14	11
V							

### **ACCESSORIES**\*



PRODUCT	Actual size (mm)	Material	Weight (kg)	Package dimension (mm)	Nr. pieces per pallet
HANDLE	-	NYLON	0.1	-	200 (bag)

\*See pag. 44 for more accessories



# **REUSABLE COLUMNS**

GEOTUB is the first reusable plastic formwork for the construction of round columns. It allows a fast and easy dismantling without using releasing agents. The panels are very light: they can be handled and installed by a single person.



# **MARINE SOLUTIONS**

As all Geoplast formwork, GEOTUB is particularly suitable when working in presence of water, which can make working conditions more difficult and complicated. In some cases GEOTUB is the only possible solution, since it is made of ABS and is not affected by moisture.



# **PRECAST COLUMNS**

GEOTUB is ideal for the mass production of serial columns as it is very strong and it produces a very smooth concrete finish. Additionally it can be reused more than 100 times.



# **RENOVATION OF DETERIORATED COLUMNS**

In the case of deteriorated concrete and exposed rebar it is necessary to repair columns by restoring an adequate concrete cover. GEOTUB Formwork system is ideally suited for this kind of repair job as it is usually installed around existing columns.





# **OVAL COLUMNS**

Most of the GEOPLAST formwork panels share the same module and different systems are compatible with one another. GEOPANEL and the GEOTUB circular column formwork work together very efficiently to produce elliptic columns.

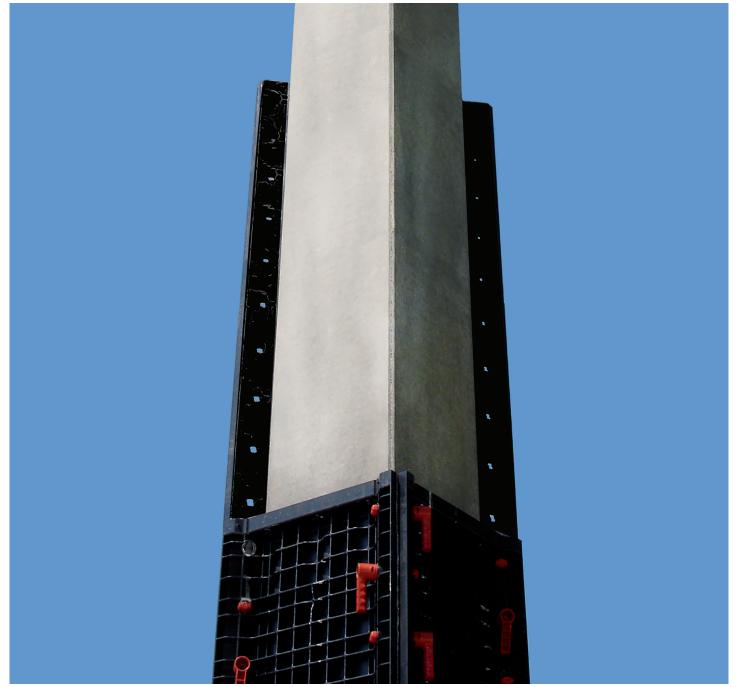


# **ELECTRICAL GRID PYLON FOUNDATIONS**

GEOTUB is particularly suited for the construction of foundations for electricity pylons: this kind of construction site consists on series of relatively small works, often in remote or scarcely accessible locations. The low weight and ease of use make it very simple to handle and transport the GEOTUB forms from one site to another.



# **GEOTUB PANEL**



REUSABLE FORMWORK SYSTEM IN ABS TECHNOPOLYMER FOR SQUARE AND RECTANGULAR COLUMS





# **GEOTUB PANEL ADVANTAGES**



The light, reusable and modular system for the construction of square and rectangular columns



With a max. unit weight of 8 kg, GEOTUB PANEL can be handled quickly on site without having to use cranes or other mechanical lifting devices



GEOTUB PANEL is cost effective as it can be reused more than 100 times when properly used and mantained



Light and easy to assemble, it can be installed by a single person



All elements are 750 mm long and only the elements necessary for the pour are used



Concrete does not stick to plastic, thus dismantling is extremely easy, and the form can be cleaned with just a little water, avoiding other detergents



GEOTUB PANEL can be completely dismantled and stored even in damp places

## **GEOTUB PANEL THE MODULAR FORMWORK** UP TO 60 KN/M<sup>2</sup> FRESH CONCRETE PRESSURE

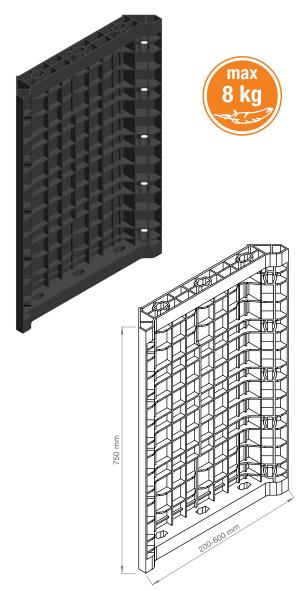


### **GEOTUB PANEL MATERIAL**

Acrylonitrile Butadiene Styrene	ABS
Coefficient of thermal expansion	0.05 mm/m/°C

### SIZE

Minimum side	200 mm
Maximum side	600 mm
Height	750 mm

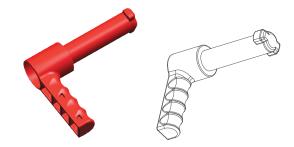


### THE HANDLE THE STANDARD FIXING ITEM FOR ALL GEOPLAST FORMWORK

Light and intuitive

Firmly locks with a simple 90 degree turn

Strength (guaranteed by specially engineered materials)



HANDLE MATERIAL: NYLON - COEFFICIENT OF THERMAL EXPANSION 7-10 (1/K 10-5)



### DIMENSIONAL TABLE GEOTUB PANEL

•	PRODUCT	Actual size (mm)	Material	Weight (kg)	Package dimension (mm)	Nr. pieces per pallet	Nr. handles
	GEOTUB PANEL 20	200 x 750 x 60	ABS	3.21	750 x 1200 x H2100	112	6
	GEOTUB PANEL 23	230 x 750 x 60	ABS	3.58	750 x 1200 x H2200	114	7
	GEOTUB PANEL 25	250 x 750 x 60	ABS	3.60	750 x 1200 x H2030	96	7
	GEOTUB PANEL 30	300 x 750 x 60	ABS	3.89	750 x 1200 x H2300	96	7
	GEOTUB PANEL 35	350 x 750 x 60	ABS	4.59	750 x 1200 x H2130	80	8
	GEOTUB PANEL 40	400 x 750 x 60	ABS	5.36	750 x 1200 x H2300	80	8
	GEOTUB PANEL 45	450 x 750 x 60	ABS	5.99	750 x 1220 x H2300	64	8
	GEOTUB PANEL 50	500 x 750 x 60	ABS	6.62	750 x 1230 x H2440	48	9
	GEOTUB PANEL 55	550 x 750 x 60	ABS	7.04	750 x 1350 x H2100	48	9
	GEOTUB PANEL60	600 x 750 x 60	ABS	7.36	750 x 1450 x 2080	48	9
- ABA							

### **ACCESSORIES\***

PRODUCT	Actual size (mm)	Material	Weight (kg)	Package dimension (mm)	Nr. pieces per pallet
HANDLE	-	NYLON	0.1	-	200 (bag)

\*See pag. 44 for more accessories

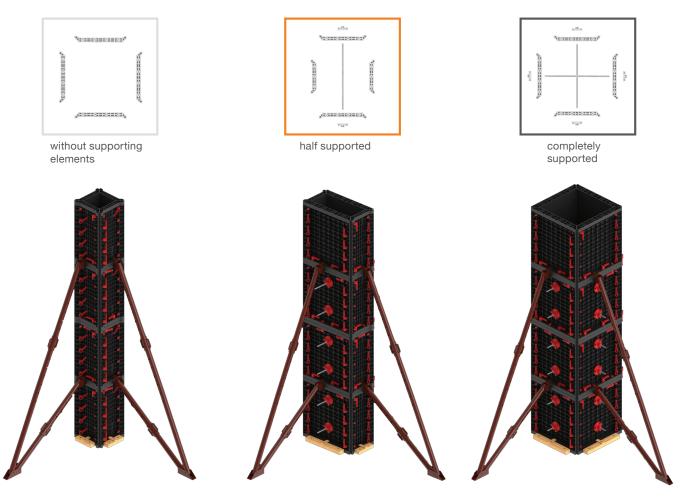
### ALL THE COMBINATIONS CUSTOMIZABLE MODULAR SYSTEM

	0	0	0	0	0	0	0	0	0	0
size (cm)	20	23	25	30	35	40	45	50	55	60
20	20 x 20	20 x 23	20 x 25	20 x 30	20 x 35	20 x 40	20 x 45	20 x 50	20 x 55	20 x 60
23		23 x 23	23 x 25	23 x 30	23 x 35	23 x 40	23 x 45	23 x 50	23 x 55	23 x 60
25			25 x 25	25 x 30	25 x 35	25 x 40	25 x 45	25 x 50	25 x 55	25 x 60
30				30 x 30	30 x 35	30 x 40	30 x 45	30 x 50	30 x 55	30 x 60
35					35 x 35	35 x 40	35 x 45	35 x 50	35 x 55	35 x 60
40						40 x 40	40 x 45	40 x 50	40 x 55	40 x 60
45							45 x 45	45 x 50	45 x 55	45 x 60
50			55					50 x 50	50 x 55	50 x 60
55			COMBINATIONS						55 x 55	55 x 60
60										60 x 60

H 3 meters = 16 GEOTUB PANEL (8+8 with handles)

H 3 meters = 16 GEOTUB PANEL (8+8 with handles + 6 tie rods of 1 m + 12 anchor nuts)

H 3 meters = 16 GEOTUB PANEL (8+8 with handles + 12 tie rods of 1 m + 24 anchor nuts)





# **REUSABLE COLUMNS**

No more timber or steel panels: a single light and fast installable formwork is enough. GEOTUB PANEL is a modular formwork system in high resistance ABS which allows to build quickly square and rectangular columns. It does not require cuts or adaptations: only the necessary elements are used.



## DOES NOT STICK TO CONCRETE, NO RELEASING AGENTS NEEDED

The panels are very light: they can be manually moved and easily installed by a single person. The particularly smooth internal surface of GEOTUB PANEL system allows the installation of pillars and columns without using dismantling agents.



# **GEOPANEL STAR**

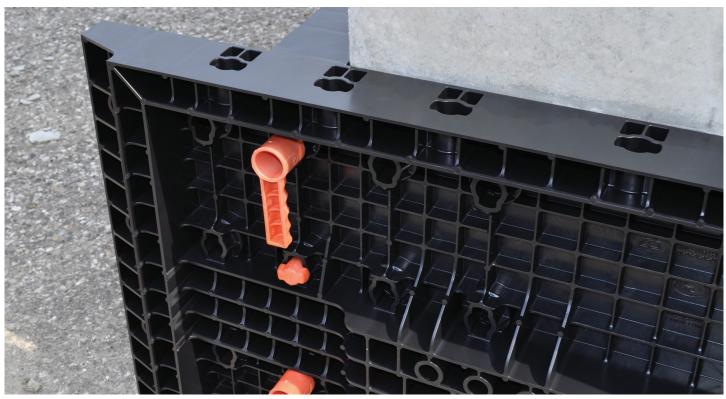


### **REUSABLE ADJUSTABLE COLUMNS FORMWORK IN ABS TECHNOPOLYMER**





# **GEOPANEL STAR ADVANTAGES**



GEOPANEL STAR is an adjustable formwork for square and rectangular concrete columns. Made of ABS technopolymer, it is a new idea of formwork: light and modular, it's easy to handle and mantain, convenient to transport and to store for further use.



Weighing just 10 kg, GEOPANEL STAR can quickly be handled on-site without the use of cranes or mechanical lifting devices



GEOPANEL STAR is cost effective as it can be used more than 100 times with an appropriate cleaning and use



Light and easy to assemble, it can be installed and handled by a single person



All the elements are 600 mm long. The elements needed for the pour are assembled and used as required



Concrete doesn't stick to plastic: dismantling is extremely easy, the form can be cleaned using just a little water, without any need of detergents



GEOPANEL STAR can be safely and conveniently stored even in a damp and wet environment



## **GEOPANEL STAR THE MODULAR FORMWORK** UP TO 80 KN/M<sup>2</sup> FRESH CONCRETE PRESSURE

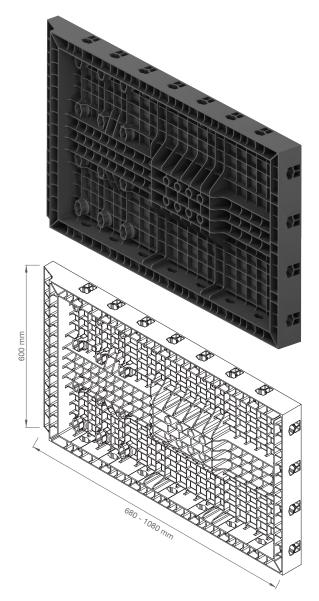


### **GEOPANEL STAR MATERIAL**

Acrylonitrile Butadiene Styrene	ABS
Coefficient of thermal expansion	0.05 mm/m/°C

### SIZE

Smallest side	120 mm
Largest side	1000 mm
Height	600 mm (605 mm)

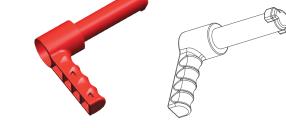


### THE HANDLE THE STANDARD FIXING ITEM FOR ALL GEOPLAST FORMWORK

Light and intuitive

Firmly locks with a simple 90 degree turn

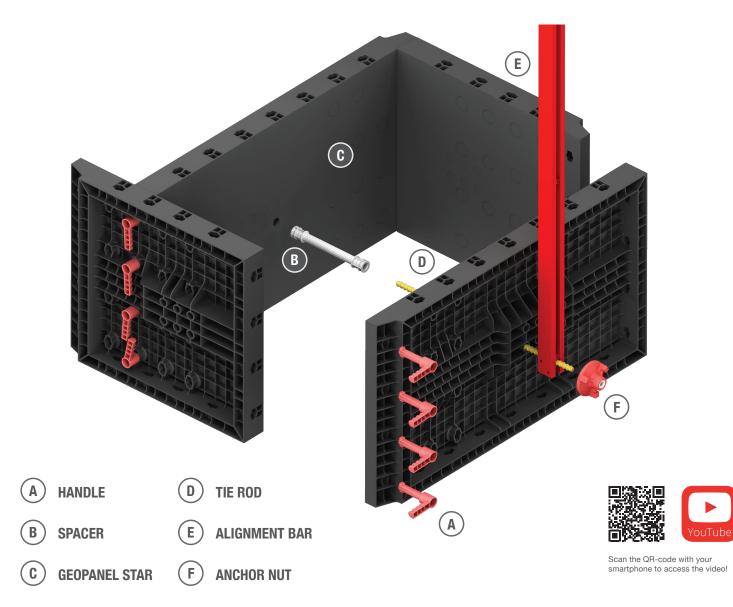
Strength (guaranteed by specially engineered materials)



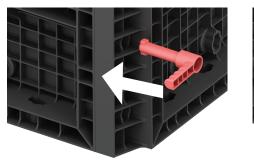
HANDLE MATERIAL: NYLON - COEFFICIENT OF THERMAL EXPANSION 7-10 (1/K 10-5)



# **GEOPANEL STAR INSTALLATION GUIDE**



### **HANDLE LOCKING**







# **COMBINATIONS AND ELEVATIONS**

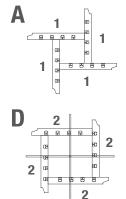
COMBINATION SIZES	◆ STAR 12-15/20-60	◆ STAR 25 - 65	◆ STAR 70 - 100
STAR 12-15/20-60	A - B - D	A - B - D	C - E
STAR 25 - 65		A - B - D	C - E
STAR 70 - 100			F

The GEOPANEL STAR panel range is adjustable to a range of column sizes from 120 to 1000 mm. The different panels can be combined with each other in order to obtain the desired size combination.

### ELEVATION FOR SIDES EQUAL TO: 120,150,200,250,300,350,400 mm

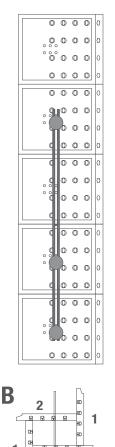
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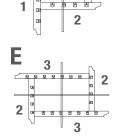
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	O	O	O	O	0
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	0	0	O	O	0
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	0	0	O	Ø	0
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	. O.	)	O	O	0
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	0	0	O	Ø	0
	. O.		0	Ø	0
	Ô	°	O	O	0
	Ø	O	O	O	0



**2** ELEVATION FOR SIDES EQUAL TO: 450,

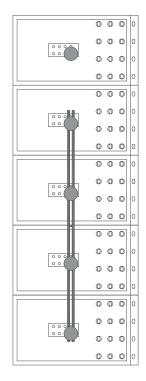
500, 550, 600, 650 mm

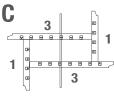


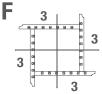


### 3

ELEVATION FOR SIDES EQUAL TO: 700, 800, 900, 1000 mm









### **DIMENSIONAL TABLES** ITEMS AND ACCESSORIES

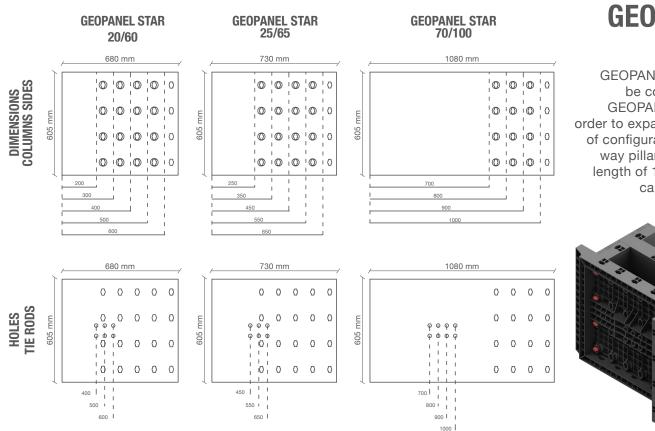
<b>GEOPANEL</b>	STAR

PRODUCT	(mm)	Material	(kg)	dimension (mm)
<b>GEOPANEL STAR 20-60</b>	680 x 605 x 80	ABS	6.46	750 x 1200 x H2580
<b>GEOPANEL STAR 25-65</b>	730 x 605 x 80	ABS	6.77	750 x 1200 x H2580
<b>GEOPANEL STAR 70-100</b>	1080 x 605 x 80	ABS	9.62	750 x 1200 x H2580



PRODUCT	Actual size (mm)	Material	Weight (kg)	Package dimension (mm)	Nr. pieces per pallet	Nr. handles
GEOPANEL 35 x 60	353 x 605 x 80	ABS	3.47	750 x 1210 x H2350	118	6
HANDLE	-	NYLON	0.1	200 (bag)		-

\*See pag. 44 for more accessories



### FOCUS GEOPANEL 35X60

Package

Waight

Nr.

pieces

per pallet

64

58

40

Nr.

handles

8

8

11

GEOPANEL STAR can be combined with GEOPANEL 35x60 in order to expand the range of configurations. In this way pillars with a side length of 12 and 15 cm can be created.



# **COLUMN APPLICATION**

GEOPANEL STAR is a high-strength column formwork made of tough ABS polymer.

It can take all the wear and tear of a construction site while simplifying the concrete forming tasks, reducing the crane workload and improving the site logistics.



# **COMBINATION WITH GEOPANEL**

GEOPANEL STAR panels are perfectly compatible with the GEOPANEL wall formwork. All panels of the two ranges interlock creating very interesting possibilities: extend over and beyond the size limits of the GEOPANEL STAR panels, seamlessly to form columns inserted in RC walls and produced in a single pour.







# LARGE SCALE STRUCTURES

GEOPANEL STAR formwork is the ideal tool for RC frames: fast to erect and dismantle, can be handled both with and without a crane, is adjustable to large size range, does not need highly trained personnel for operation. A time saver and a cost-cutter.





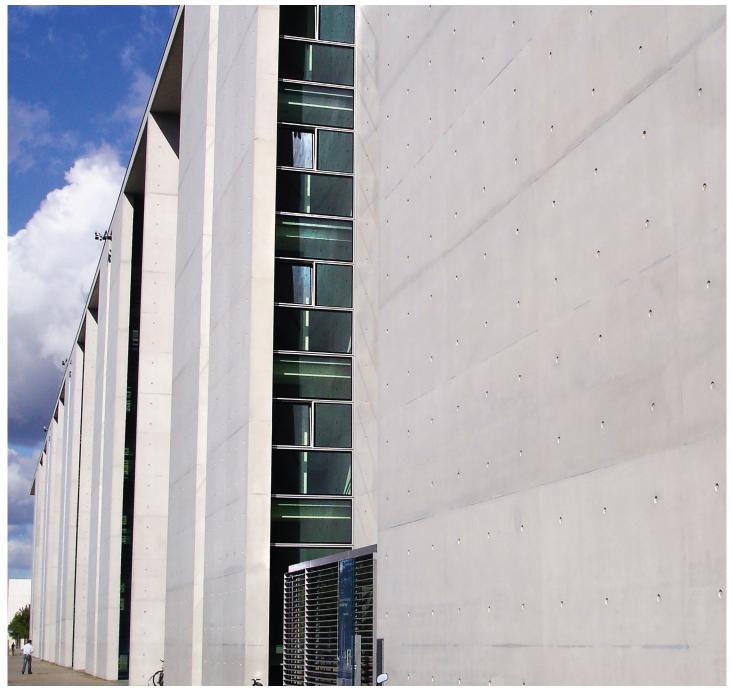
# **FOUNDATION SPECIALIST**

The GEOPANEL STAR formwork panels come into its own when used as a foundation formwork. Its versatility and ease of use make it ideal as footing and plinth-formwork.





# GEOPANEL



### **REUSABLE FORMWORK SYSTEM IN ABS TECHNOPOLYMER FOR WALLS**





# **GEOPANEL ADVANTAGES**



GEOPANEL is an easy and intuitive system of modular formwork in ABS used to build walls, foundations and columns in concrete. The wide range makes it easy to produce structures of any size and shape.



Weighing just 11 kg, GEOPANEL can be handled quickly on site without having to use cranes or other mechanical lifting devices



GEOPANEL is cost effective as it can be reused more than 100 times when properly used and mantained



Light and easy to assemble, it can be installed and handled by a single person



All elements are 600 mm long and only the elements necessary for the pour are used

### 

Concrete does not stick to plastic: dismantling is extremely easy, the forms can be cleansed using just a little water, without any need of detergent







GEOPANEL can be safely and conveniently stored even in damp places

## **GEOPANEL 120 X 60 THE MAIN PANEL** UP TO 60 KN/M<sup>2</sup> FRESH CONCRETE PRESSURE



### **GEOPANEL MATERIAL**

Acrylonitrile Butadiene Styrene	ABS
Coefficient of thermal expansion	0.05 mm/m/°C

### SIZE

Length	1200 mm (actual size 1210 mm)
Height	600 mm (actual size 605 mm)
Thickness	80 mm

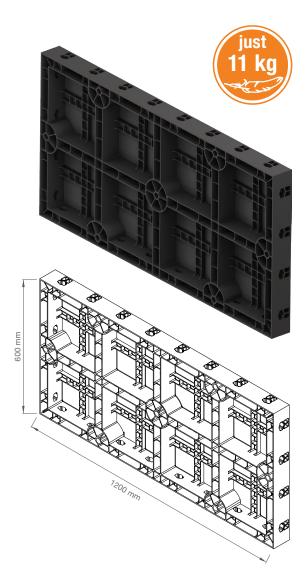
### THE HANDLE THE STANDARD FIXING ITEM FOR ALL GEOPLAST FORMWORK

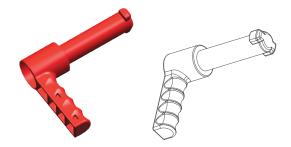
Light and intuitive

Firmly locks with a simple 90 degree turn

Strength (guaranteed by specially engineered materials)

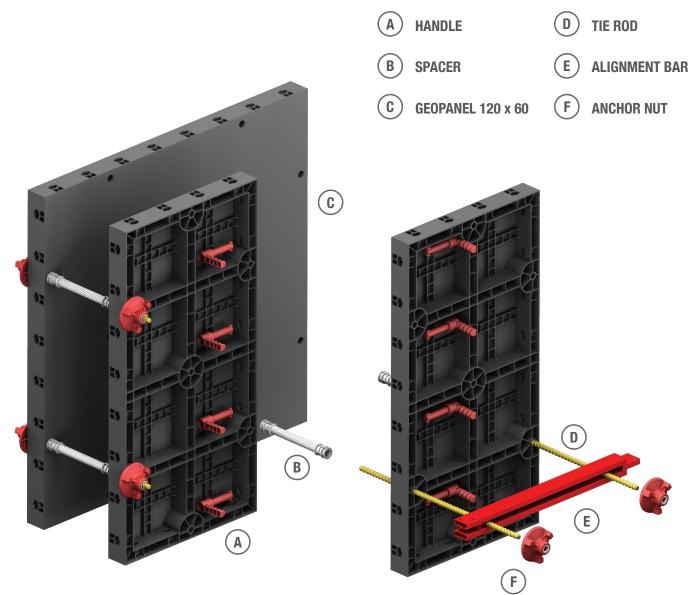






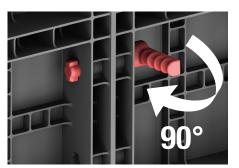


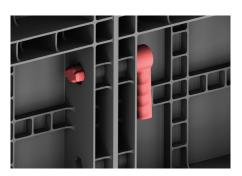
# **GEOPANEL INSTALLATION GUIDE**



### **HANDLE INSTALLATION**







# **DIMENSIONAL TABLE**

### **GEOPANEL**

PRODUCT	Actual size (mm)	Material	Weight (kg)	Package dimension (mm)	Nr. pieces per pallet	Nr. handles
GEOPANEL 120 x 60	1210 x 605 x 80	ABS	11.03	750 x 1210 x H2580	38	12
GEOPANEL 20x60	202 x 605 x 80	ABS	2.36	770 x 1210 x H2350	204	5
<b>GEOPANEL 25x60</b>	252 x 605 x 80	ABS	2.73	770 x 1210 x H2400	166	5
<b>GEOPANEL 30x60</b>	303 x 605 x 80	ABS	3.05	770 x 1210 x H2400	140	5
GEOPANEL 35x60	353 x 605 x 80	ABS	3.47	750 x 1210 x H2350	118	6
<b>GEOPANEL 40x60</b>	404 x 605 x 80	ABS	3.68	770 x 1210 x H2400	104	6
<b>GEOPANEL</b> inner corner	303 x 605 x 80	ABS	3.89	810 x 1210 x H2400	128	5
<b>GEOPANEL</b> outer corner	252 x 605 x 80	ABS	3.10	800 x 1210 x H2300	130	5

### **GEOPANEL WP / CL**

PRODUCT	Actual size (mm)	Material	Weight (kg)	Package dimension (mm)	Nr. pieces per pallet	Nr. handles
GEOPANEL WP	100 x 605 x 80	ABS	1.52	800 x 1200x H2450	450	4
GEOPANEL CL 20-25-30	460 x 605 x 80	ABS	5.25	750 x 1200 x H2500	91	6
GEOPANEL CL 35-40-45	610 x 605 x 80	ABS	6.30	750 x 1200 x H2550	76	7

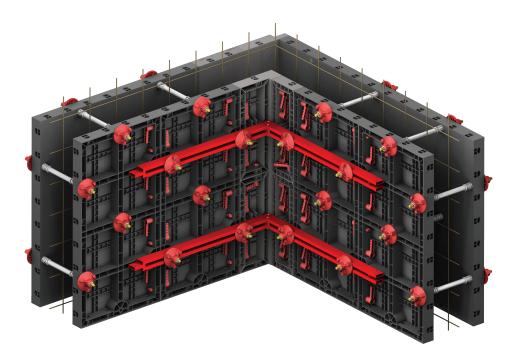
### **ACCESSORIES**\*

PRODUCT	Actual size (mm)	Material	Weight (kg)	Package dimension (mm)	Nr. pieces per pallet
HANDLE	-	NYLON	0.1	-	200 (bag)

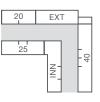
\*See pag. 44 for more accessories



# **CORNER CONFIGURATION**



THICKNESS 100 mm



25 EXT -20

THICKNESS 150 mm

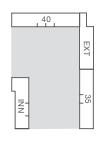




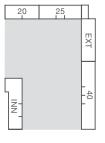




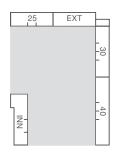
THICKNESS 300 mm

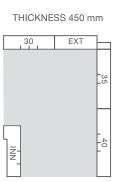


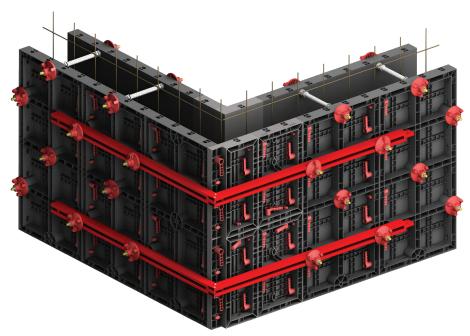




THICKNESS 400 mm



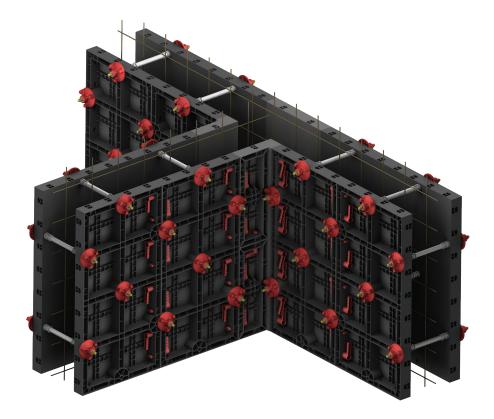






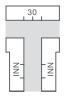


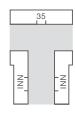
# **T-INTERSECTIONS**



THICKNESS 100 mm

THICKNESS 150 mm





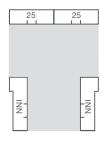
THICKNESS 200 mm



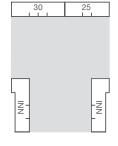


THICKNESS 250 mm

THICKNESS 300 mm



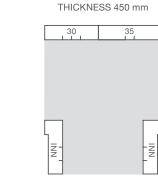
THICKNESS 350 mm

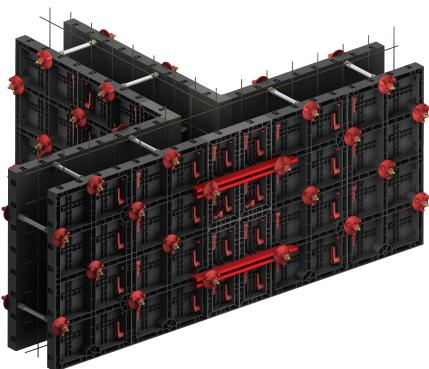


THICKNESS 400 mm 60

-Z

Z-











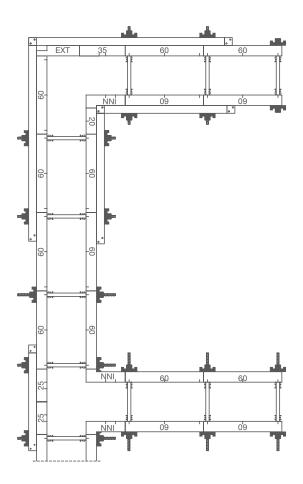
# **GEOPANEL WALLS**



### **GEOPANEL SYSTEM**

GEOPANEL allows the production of walls of any thickness and height. The wide range of items and sizes meets any requirement. As the panels are made of plastic material (ABS), the concrete finish is extremely smooth and uniform and ensures high quality. The panels can be handled effortlessly as they are extremely light (max. 11 kg). In this way they can easily be handled by a single worker.





# **PILE CAPS & STRIP FOUNDATIONS**

GEOPANEL is also perfect to be used as a foundation formwork. Its versatility and ease of use make it ideal for the creation of footings and plinths.



# **RING BEAMS LINTELS & INFILL WALLS**

GEOPANEL is light and manageable.

These features make it ideal to be used inside buildings and in other areas of a construction site that are inaccessible to lifting devices.





# **ELEVATOR SHAFTS STAIRWELLS**

GEOPANEL is ideal for the construction of stairwells and elevator shafts.

They are light and easy to handle and this allow carpenters to speed up the installation and dismantling, with the possibility of repeating the operations quickly in all the floors of the building.



# **GEOPANEL BUNKER**

The manuel handling and the ease of installation make it suitable for any type of on-site requirement. The accessories included in the system make it easy to form corners and wall intersections without any fill-in element.



# **GEOPANEL & GEOPANEL STAR**

GEOPANEL panels are compatible with the GEOPANEL STAR range.

GEOPLAST system's modularity allows the construction of particular configurations such as columns integrated in concrete walls. It is thus possible to achieve this technical solution with a single pour.





## **GEOPANEL COLUMNS**

GEOPANEL can be used to build large columns if combined with GEOPANEL STAR. The two panel systems work very well together as they share the same module.







# **GEOPANEL POOLS**

Using the large range of panels and accessories it is possible to create infinite custom variations of size and shape. GEOPANEL will work perfectly with the complex equipment of the pool. It is also possible to create sloping floors, thus creating diving areas and relax zones.

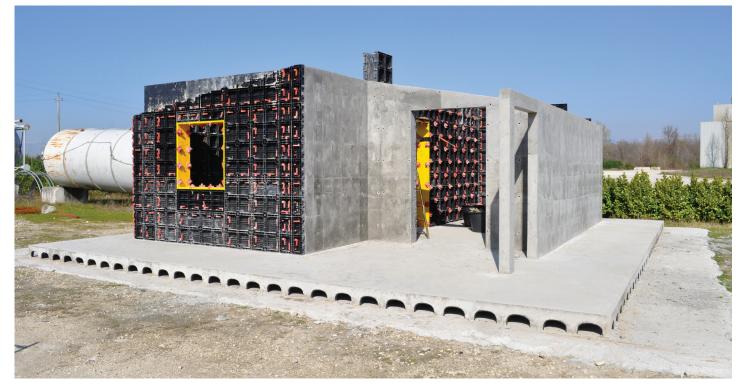


## **GEOPANEL SHEAR WALLS**

Shear walls are built to counter the effects of the lateral loads such as wind or earthquakes that usually acts on a structure. Moreover, GEOPANEL is easy to handle and it is excellently suited for this type of application.



## **GEOPANEL HOUSING SYSTEM**



### **HIGH PRODUCTIVITY CONCRETE HOUSES**

Governs, builders and individuals of developing countries are facing an exponential growth in demand for housing: it is therefore increasingly urgent to find a solution to build houses quickly and cost-effectively. Thanks to its lightness and maneuverability, GEOPANEL is the ideal solution to build customized buildings like social houses or terraced houses in a short period of time and at a low cost. Not requiring the use of mechanical devices to handle it, GEOPANEL can be used and installed in any plot of land, even in the most inaccessible ones. In order to complete the construction a good price/quality house, we recommend GEOPLAST MODULO system to ventilate the foundations.



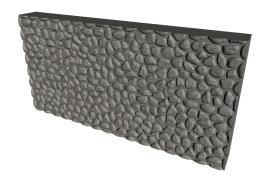


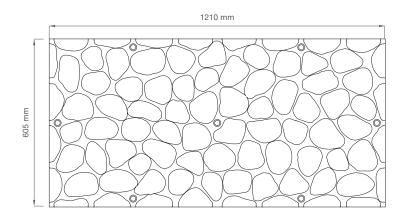
# **GEOPANEL ART**



## PANELS FOR TEXTURED WALLS

This is a reusable and modular high-resistance formwork panel used to create textured reinforced concrete walls. Made of ABS, Geopanel Art is used in combination with Geopanel. The two elements are assembled to create a high-productivity mold for the production of textured concrete. The concrete surface receives the decoration from the panels and the result is a wall ready to be painted or further decorated in order to achieve an even more realistic and creative look. Replicating the pebbles of a mountain stream, the River Stone panel is irregularly shaped to obtain a very"real looking" result.





### **GEOPANEL ART**

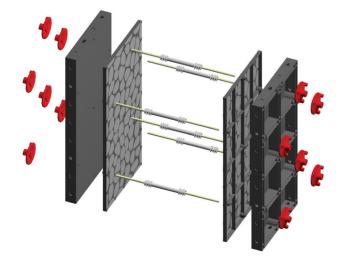
actual size (mm)	1210 x 605 x 25
material	ABS
weight (kg)	4.24
package size (mm)	1200 x 750 x H2020
No. pcs.	80

# **GEOPANEL ART ADVANTAGES**

Simple and easy to use, Geopanel Art helps to save time and money. Results are immediate and no further actions are needed on the decorated wall. It is also light and easy to handle, that's why it offers an excellent benefit-cost ratio.

### IMMEDIATE RESULT HIGH QUALITY CONCRETE FINISH REUSABLE CUSTOMIZABLE





## **HOW TO ASSEMBLE**

Geopanel Art panels are clipped onto the Geopanel 1200 x 600 mm panels using the tie rods holes as latching points. Standard tie rods and anchor nuts are used to hold them thightly in position. Plastic spaces sleeves are inserted between the panels and are lost after the concrete pour. The panels can be assembled in any combination without interrupting the decorative texture. Geopanel Art is easy to handle and can be simply dismantled from Geopanel after use. The forms can be then cleaned just with water.



# **ON REQUEST**

WOODLINE



### PRUN



#### WALL



### LINE





## **GEOSKY: GEOPANEL FOR SLABS**



## **GEOPANEL TURNS INTO A SLAB**

GEOSKY is a reusable roof slab formwork system which is provided with a series of plastic supporting beams. The panels ensure a very good and consistent concrete surface quality.

The plastic beams are designed to allow the stripping of the concrete slab shortly after the pour, significantly decreasing the turn-around time of the formwork thus allowing a much tighter pour schedule. The whole system rests on standard H20 timber beam.

### **ADVANTAGES**

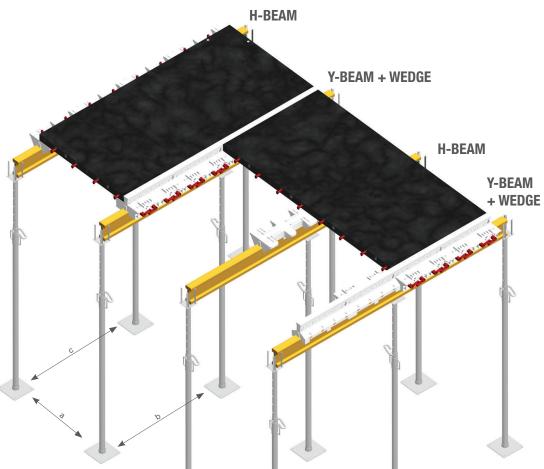
ADVANCED DISMANTLING MODULAR SAFE





# **COMPLETE GEOSKY SYSTEM**

Thanks to the access from below, GEOSKY allows safer working conditions, avoiding fall hazard from heights, during both setup and dismantling. GEOSKY is suitable for the production of roof slabs for commercial, industrial and residential buildings.



## **SYSTEM ITEMS AND SHORING CRITERIA**



#### **Y-BEAM**

It is installed onto standard H20 timber beams with WEDGES which allow the advanced dismantling of the formwork panels.





#### WEDGE

This item allows the early dismantling. When detatched from the Y-beam eases the removal of the panels.

### **SLAB THICKNESS**



**H-BEAM** It works as a support element, it is one of the first elements to be removed during the dismantling.



**HS-BEAM** Panel support element. Useful replacement of the HS-Beam in some formwork configuration.

PROP SPACING	Up to 20 cm	Up to 25 cm	Up to 35 cm*	Up to 40 cm
H20 BEAM (A)	124 cm	124 cm	63,5 cm	63,5 cm
PROPS FOR Y-BEAM + WEDGE (B)	140 cm	130 cm	160 cm	140 cm
PROPS FOR H-BEAM (C)	180 cm	220 cm	180 cm	160 cm

\*with additional intermediate elements



## **FORMWORK ACCESSORIES**

	ACCESSORIES	MATERIAL	WEIGHT (kg)	GEOTUB	GEOTUB PANEL	GEOPANEL STAR	GEOPANEL
<	HANDLE	Nylon	0.1	~	~	~	~
T	CAP 25	HD PE	0.003	×	~	~	~
	CAP 43	ABS	0.010	×	×	~	~
lin lin	SPACER 150/200/250/300/350/400	HD PE	0.030 -> 0.080	×	~	~	~
	TIE ROD 300/750/1000/1500	ABS	0.420 -> 2.140	×	~	~	~
	ANCHOR NUT	NYLON	0.360	×	~	~	~
J	TIE ROD BRACKET	Steel	0.360	×	×	~	~
1	FIXING BRACKET	Steel	0.260	~	~	~	~
	F-UN2000	Steel	8.960	×	×	~	~
	ALIGNMENT BAR UN-500/750/1000/1500	Steel	2.51 -> 6.98	×	×	~	~
<b>A</b>	LIFTING HOOK	Steel	1.780	~	~	~	~
<b>J</b>	BRACE CONNECTOR	Steel	0.720	~	~	~	~
R	CONNECTOR PLATE	Steel	1.150	×	~	~	~
	CORNER BAR STUD	Steel	0.350	×	×	×	~
	BAR CONNECTOR	Steel	0.340	×	×	~	~

# **GEOPLAST FORMWORK TECHNICAL GUIDELINES**

## A) SHORING BRACE CONNECTOR



### **CONNECTOR PLATE**



The shoring is performed using a steel bracket to connect the push-pull props to the formwork. The brackets are available in various sizes to suit any commercially available prop.

## **B) GROUND ANCHORING** FIXING BRACKET



### **WOODEN ANCHORING**



The anchoring to the ground is useful to avoid lifting of the formwork and it is done using metal or timber brackets.



### **OPERATION AND MAINTENANCE REQUIREMENTS**

#### POUR

Only immersion concrete vibrators are allowed. ABS formwork are not fireproof, so do not place them close to hot objets or open flames.

#### HANDLING

Use lifting clamp to lift the already assembled panels with a crane. Use lifting cables to lift the formwork.

#### PANEL CLEANSING

After every use, cleanse the panels with water (preferably with a pressure washer). Any deposit of concrete should be removed with a spatula or a wire brush.

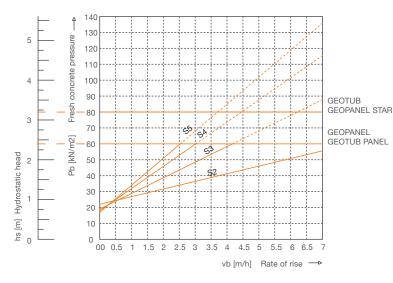
#### **RELEASING AGENT**

As long as the contact surface of the panels shows no signs of wear, no releasing agent is required.

#### **STORAGE**

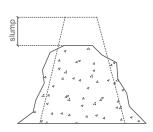
In order to facilitate the handling and lifting of the panels and all accessories, store them on pallets or battens to keep them off the ground. Although the product does not suffer weathering, it is preferable to store the panels in a dry place away from direct sunlight.

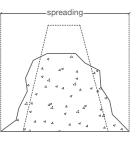
### **RATE OF RISE DIAGRAM**



		UNI EN 206:2006		DIN 18218	
	ISISTENCY CLASS	CLASSIFICATION	SLUMP	CLASSIFICATION	SPREADING
	Wet	\$1	10 ÷ 40 mm		
	Stiff	\$2	50 ÷ 90 mm	F1 (K1)	≤ 340 mm
	Plastic	\$3	100 ÷ 150 mm	F2 (K2)	350 ÷ 410 mm
	Soft	S4	160 ÷ 210 mm	F3 (K3)	420 ÷ 480 mm
F	lowing	S5	≥ 220 mm	F4 (flowing)	490 ÷ 550 mm

**ABRAMS CONE** 





### **SAFETY REQUIREMENTS**

The operations of positioning, assembling, dismantling, plumbing, handling and cleaning of GEOPANEL products, as well as the pouring of the concrete, must be carried out by competent and properly trained personal or under supervision of the site manager or a Technician of Geoplast S.p.A., who must ensure that:

- All above mentioned operations are carried out properly,
- Every person working with the formwork is equipped with suitable tools and personal protective equipment to perform all necessary actions in full compliance of the safety standards,
- All panels and the supplied accessories are checked before use, discarding those which should not meet the minimum standard of reliability and safety because of the presence of any breakage and/or deformation,
- The formwork is installed on a perfectly flat surface, so as to work safely and ensure a perfect shoring and plumbing,
- All connection, alignment and plumb accessories of the formwork are properly tightened and secured to the ground before starting the pour.

Geoplast S.p.A. disclaims any liability or responsibility arising from improper use of GEOPANEL formwork. Any assembly of molds and/or use of accessories otherwise described in these guidelines must first be approved by Geoplast S.p.A.









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