



geotub panel

the first reusable formwork in ABS



- REUSABLE
- LIGHT
- MODULAR





GEOTUB PANEL VISION

CONSTRUCTION and RESPECT: This is the vision which characterizes the work of Geoplast. To build buildings respecting the environment. Beginning from the choice of the raw materials. Our plastic formwork perfectly embody this principle.

THE ANNUAL WORLD CONSUMPTION OF WOOD IS EQUAL TO 1,5 BILLION M³, OF WHICH 55% IS USED IN CONSTRUCTION

After having exhausted the resources of timber in Southeast Asia and Central Africa, logging is causing the deforestation of the Amazon Rainforest, which is considered the green lungs of our Planet.

In the last three decades 55 million hectares of rainforest have been cleared, an area corresponding to the territory of France.

This is why we decided to make our contribution creating a line of formwork in plastics, a recyclable material that is the only sustainable alternative to wood and cardboard.

We have made them with special attention to their light weight to reduce the waste of energy required for their handling: this is one more form of respect.

Geoplast S.p.A. in Green Building Council Italia,
The Network of Green Building.





GEOTUB PANEL THE REUSABLE FORMWORK IN ABS

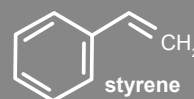
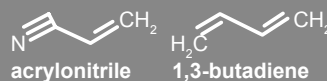
GEOTUB PANEL is a formwork system in technopolymer for the construction of square and rectangular columns.

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.



Why ABS

(Acrylonitrile Butadiene Styrene)



High mechanical strength

Shock resistance

Thermal stability
(-30°C / +70°C; -22°F / +158°F)

Very high surface quality

Recyclable material

GEOTUB PANEL ADVANTAGES



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

lightness



Weighting just 10 kg, **GEOTUB PANEL** can be handled quickly on site without having to use cranes or other mechanical lifting devices

quickness



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

modularity



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

reuse



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

dismantling



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

storage



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

GEOTUB PANEL THE MODULAR FORMWORK

Up to 60 kN/m² fresh concrete pressure

REUSABLE

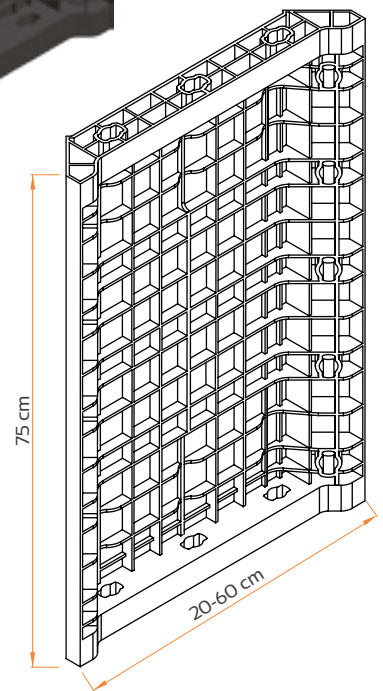
max
10Kg

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



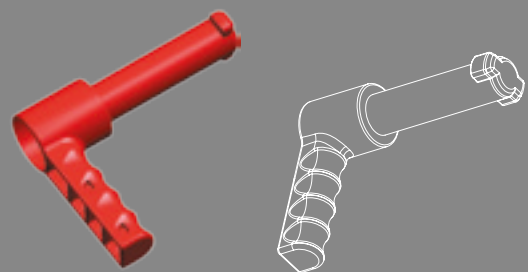
The handle

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: POLYAMIDE - COEFFICIENT OF THERMAL EXPANSION 7-10 (1/K 10⁻⁵)

Items and accessories

DIMENSIONAL TABLES

actual size (mm)
material
weight (kg)
package dim. (mm)
No. pieces per pallet
No. handles


GEOTUB PANEL 20
200 x 750 x 60
ABS
3.25
750 x 1200 x H2100
112
6


GEOTUB PANEL 23
230 x 750 x 60
ABS
3.63
750 x 1200 x H2220
114
7

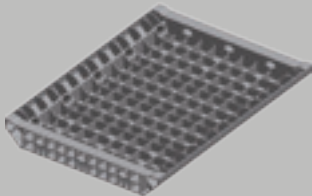

GEOTUB PANEL 25
250 x 750 x 60
ABS
3.67
750 x 1200 x H2030
96
7

actual size (mm)
material
weight (kg)
package dim. (mm)
No. pieces per pallet
No. handles


GEOTUB PANEL 30
300 x 750 x 60
ABS
3.97
750 x 1200 x H2300
96
7


GEOTUB PANEL 35
350 x 750 x 60
ABS
4.84
750 x 1200 x H2130
80
8


GEOTUB PANEL 40
400 x 750 x 60
ABS
5.32
750 x 1200 x H2300
80
8



**GEOTUB
PANEL 45**

450 x 750 x 60

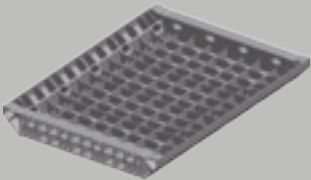
ABS

6.09

750 x 1220 x H2300

64

8



**GEOTUB
PANEL 50**

500 x 750 x 60

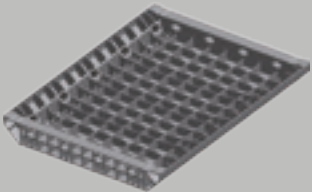
ABS

6.56

750 x 1230 x H2440

48

9



**GEOTUB
PANEL 55**

550 x 750 x 60

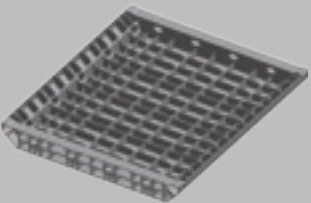
ABS

7.14

750 x 1350 x H2100

48

9



**GEOTUB
PANEL 60**

600 x 750 x 60

ABS

7.49

750 x 1450 x 2080

48

9



HANDLE

NYLON

0,1

200 pcs. (bag)

5000

actual size (mm)
material
weight (kg)
package dim. (mm)
No. pieces per pallet
No. handles

actual size (mm)
material
weight (kg)
package dim. (mm)
No. pieces per pallet
No. handles

GEO TUB PANEL ACCESSORIES



HANDLE

WEIGHT (kg)

0.1

MATERIAL

NYLON



CAP 25

0.006

PE HD



**ANCHOR NUT
for tie rod**

0.370

NYLON



**SPACER
15/20/25/30/35/40**

WEIGHT (kg)

0.035 -> 0.070

MATERIAL

PE HD



**TIE ROD
75/100/150**

1.075 -> 2.150

STEEL



**BRACE
CONNECTOR**

WEIGHT (kg)

1.20

MATERIAL

STEEL



**CONNECTOR
PLATE**

0.85




STEEL

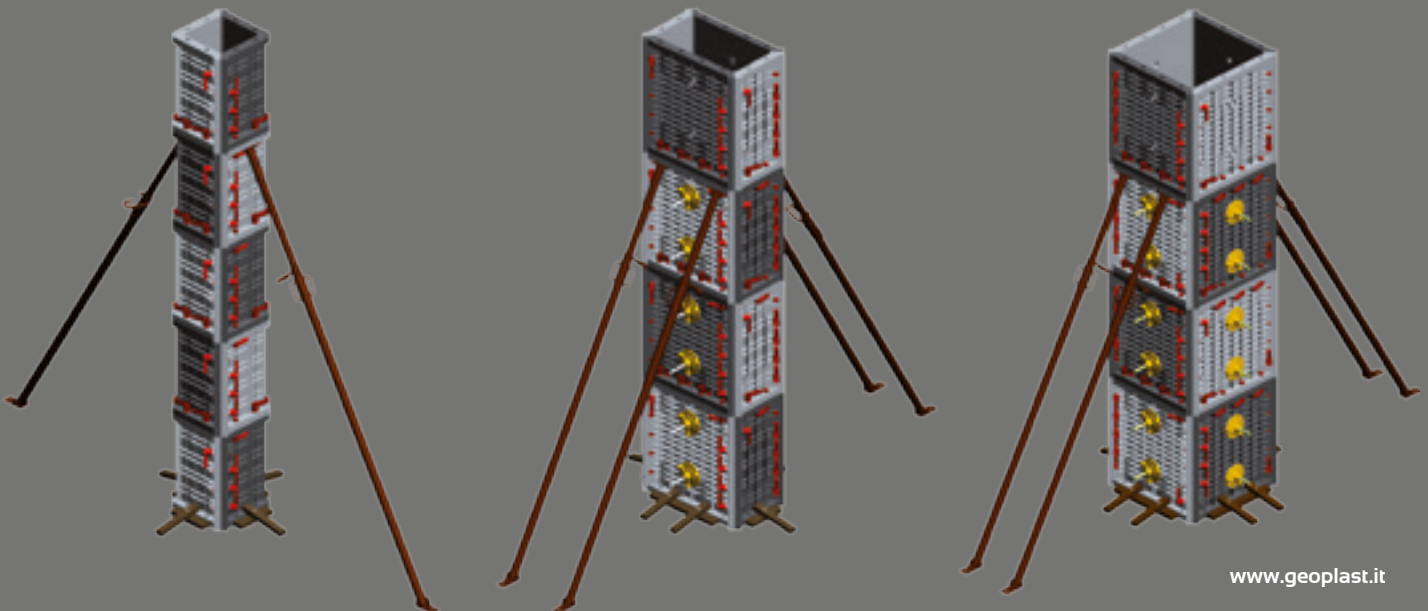
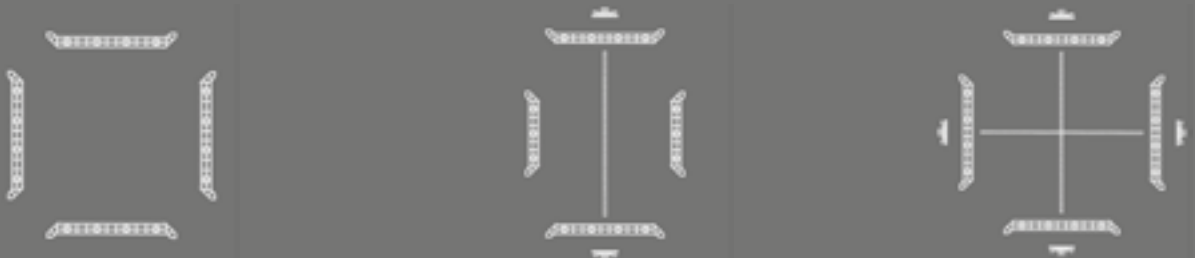
ALL THE COMBINATIONS

customizable modular system

size	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								50 x 50	50 x 55	50 x 60
55									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



Simple! Geotub Panel

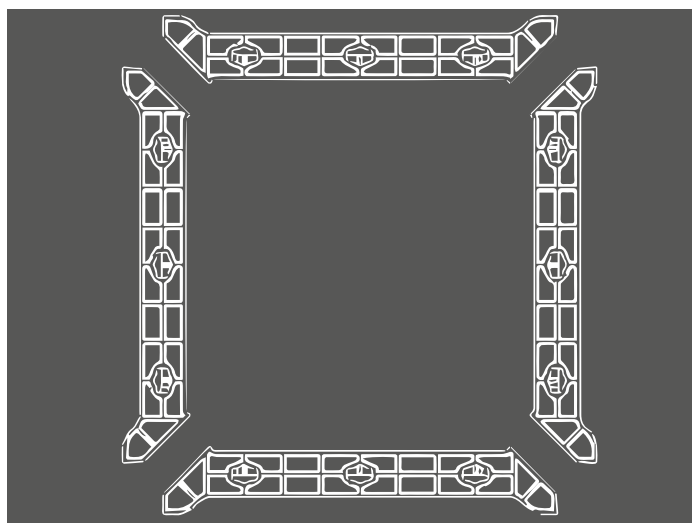
No more timber or steel panels: a single light and fast installable formwork is enough. **GEOTUB PANEL** is a modular formwork system in high resistance ABS

which allow to build quickly square and rectangular columns. It does not require cuts or adaptations: only the necessary elements are used.

Light
Easy to install
Resistant



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COMPARISON WITH TRADITIONAL SYSTEMS



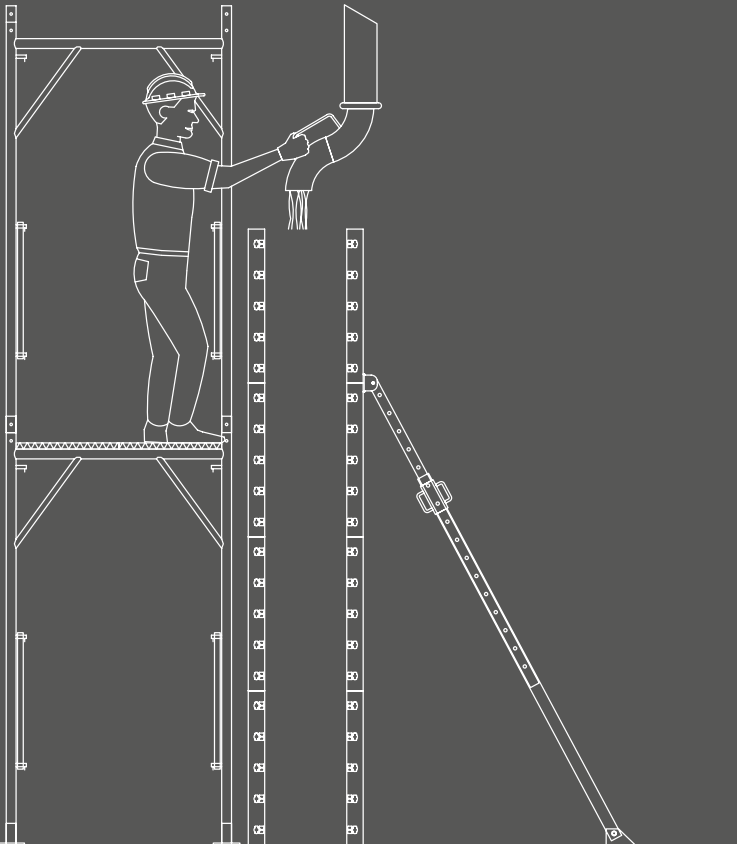
CARACTERISTICS	TRADITIONAL SYSTEMS	GEOTUB PANEL
Hindrance		Modular system (standard height 750 mm)
Waterproof	10%	100%
Resistance	LIMITED	Up to 60 kN/m ²
Concrete adherence	Requires dismantling agents	Being made of plastics, GEOTUB PANEL does not stick to concrete
Protection	10%	The best protection for the columns until the end of the operations
Plumbing	Requires long operations and it is often inaccurate	Quick and accurate thanks to the external structure that allows easy shoring and plumbing
Dismantling agents	Required	Not required





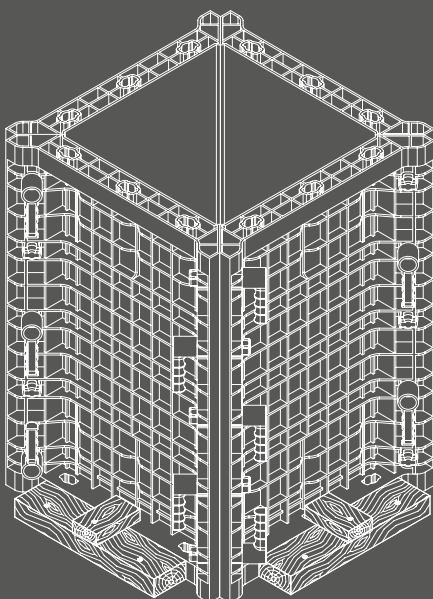
GEO TUB PANEL TECHNICAL GUIDELINE

A) SHORING



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

B) GROUND ANCHORING



Anchoring to the ground to avoid lifting of the formwork is done using metal brackets or otherwise with timber.

OPERATION AND MAINTENANCE REQUIREMENTS

POUR

Only immersion concrete vibrators are allowed. ABS formworks are not fireproof, so do not place them close to hot objects or open flame.

HANDLING

Use the Geoplast lifting hook to move the assembled elements with a crane. Before lifting make sure that the lifting cables have an uniform draft.

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.

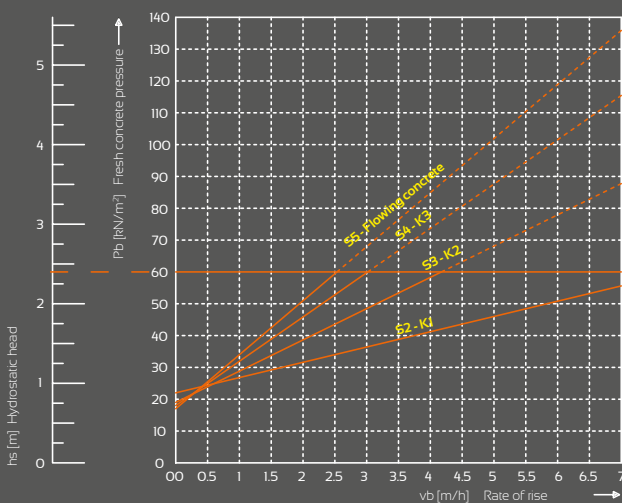
RELEASING AGENT

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

STORAGE

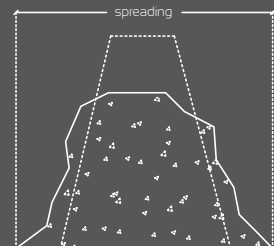
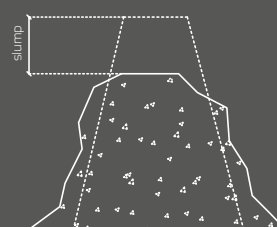
In order to facilitate the handling and lifting of the panels and all accessories, store them on pallets or battens to keep them off the ground. Although the product does not suffer weathering, it is preferable to store the panels in a dry place away from direct sunlight.

RATE OF RISE DIAGRAM



CONSISTENCY CLASS	UNI EN 206:2006		DIN 18218	
	CLASSIFICATION	SLUMP	CLASSIFICATION	SPREADING
Wet	S1	10 ÷ 40 mm		
Stiff	S2	50 ÷ 90 mm	F1 (K1)	≤ 34 cm
Plastic	S3	100 ÷ 150 mm	F2 (K2)	35 ÷ 41 cm
Soft	S4	160 ÷ 210 mm	F3 (K3)	42 ÷ 48 cm
Flowing	S5	≥ 220 mm	F4 (Flowing)	49 ÷ 55 cm

ABRAMS CONE



SAFETY REQUIREMENTS

The operations of positioning, assembling, dismantling, plumbing, handling and cleaning of **GEOTUB PANEL** 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 formworks 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 formworks 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 **GEOTUB PANEL** 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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