



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 M<sup>3</sup>, 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** 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.



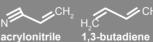


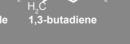




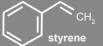
### Why ABS

(Acrylonitrile Butadiene Styrene)





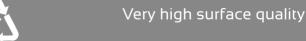




Shock resistance



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



Recyclable material





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 \_\_dismantling

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

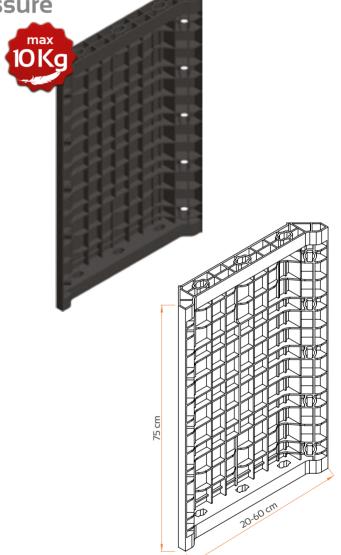


#### **GEOTUB PANEL MATERIAL**

Acrylonitrile Butadiene Styrene ABS

Coefficient of thermal expansion 0,05
mm/m/°C

SI	IZE
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



#### 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 AB5 3.63 750 x 1200 x H2220 114 7



#### GEOTUB PANEL 25

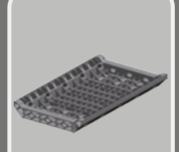
250 x 750 x 60 ABS 3.67 750 x 1200 x H2030 96 7





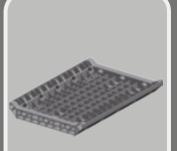
#### GEOTUB PANEL 30

300 x 750 x 60 ABS 3.97 750 x 1200 x H2300 96



#### GEOTUB PANEL 35

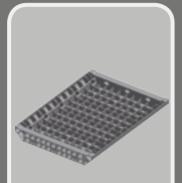
350 x 750 x 60 AB5 4.84 750 x 1200 x H2130 80 8



#### GEOTUB PANEL 40

400 x 750 x 60 ABS 5.32 750 x 1200 x H2300 80 8

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



#### GEOTUB PANEL 45

450 x 750 x 60 ABS 6.09 750 x 1220 x H2300 64 8



#### GEOTUB PANEL 50

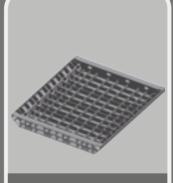
500 x 750 x 60 ABS 6.56 750 x 1230 x H2440 48 9



#### GEOTUB PANEL 55

550 x 750 x 60 ABS 7.14 750 x 1350 x H2100 48 9

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



#### GEOTUB PANEL 60

600 x 750 x 60 ABS 7.49 750 x 1450 x 2080 48

9



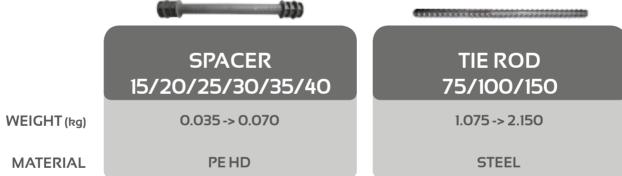
#### **HANDLE**

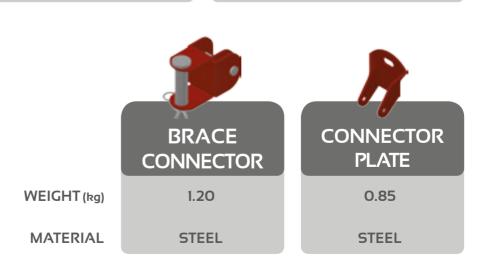
NYLON 0,1 200 pcs. (bag) 5000

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

# GEOTUB PANEL ACCESSORIES







# ALLTHE COMBINATIONS

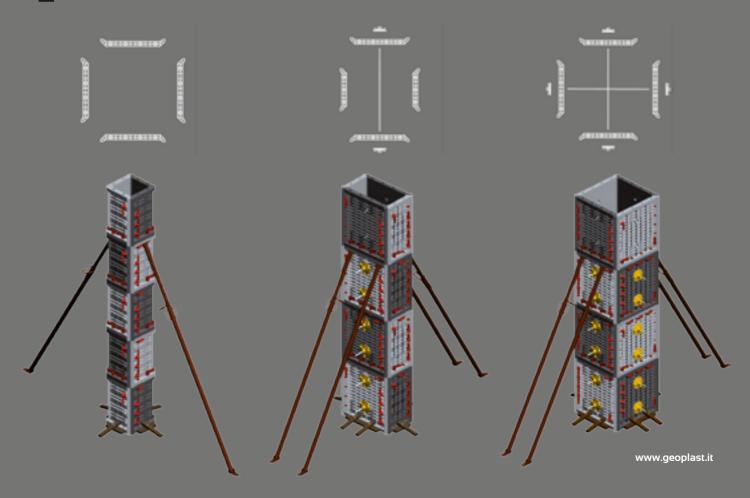
customizable modular system

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	Æ					40 x 40	40 x 45	40 x 50	40 x 55	40 x 60
45	55 COMBINATIONS						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	L									60 x 60
H 2 maters - 14 CEOT IP DANIEL (9.9 with handles)										

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)





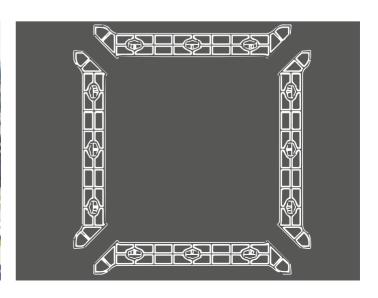
#### Simple! **Geotub Panel**

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

















CARACTERISTICS	TRADITIONAL SYSTEMS	GEOTUB PANEL
Hindrance		Modular system (standard height 750 mm)
Waterproof	10%	100%
Resistance	LIMITED	Up to 60 kN/m²
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





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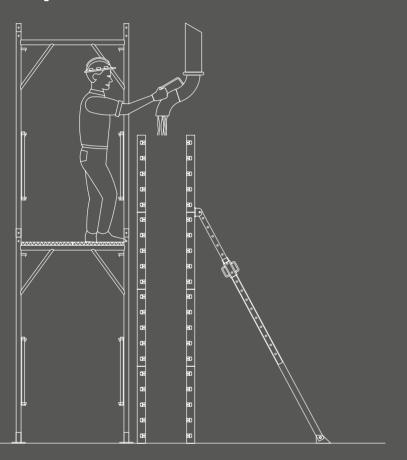






# GEOTUB PANEL TECHNICAL GUIDELINE

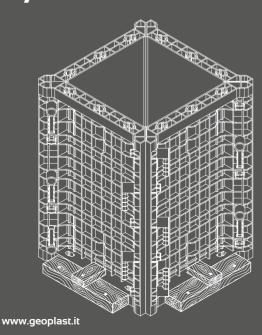
### A) SHORING





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 objets 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.

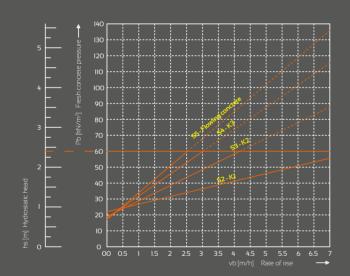
#### **RELEASING AGENT**

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

#### STORAGE

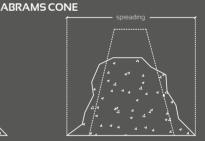
In order to facilitate the handling and lifting of the panels and all accessories, store them on pallets or battens to keep them off the ground. Although the product does not suffer weathering, it is preferable to store the panels in a dry place away from direct sunlight.

#### RATE OF RISE DIAGRAM



	UNI EN 206	:2006	DIN 18218		
CONSISTENCY CLASS	CLASSIFICATION	SLUMP	CLASSIFICATION	SPREADING	
Wet	SI	10 ÷ 40 mm			
Stiff	<b>S</b> 2	50 ÷ 90 mm	F1 (K1)	≤ 34 cm	
Plastic	<b>S</b> 3	100 ÷ 150 mm	F2 (K2)	35 ÷ 41 cm	
Soft	<b>S</b> 4	160 ÷ 210 mm	F3 (K3)	42 ÷ 48 cm	
Flowing	S5	≥ 220 mm	F4 (flowing)	49 ÷ 55 cm	





#### 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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