

REFERENCE PROJECTS



ABOUT ABS MIDDLE EAST

ABS YAPI founded its United Arab Emirates subsidiary "ABS Disposable Formworks Middle East Building Materials Trading L.L.C" (ABS ME) in 2022 and started supporting its customers more closely and directly in the GCC region. Prior this event ABS YAPI was represented by its local distributor since 2019. Our products were sold to main contractors such as Azizi, Sobha, Airolink and they were used in projects such as Meydan, Gardenia Residence and Seven Residences The Palm since then.



TEAM



Okan Cüntay
General Manager

Okan Cüntay graduated from 'German High School of Istanbul', and he completed his undergraduate studies at 'Northwestern University' in industrial engineering. In 2002 he graduated from 'Northwestern University Kellogg School of Management' specializing in finance, marketing and general business administration. ABS Yapi, which started to produce its own designed products in Turkey under the management of Cüntay since 2018, has made its innovative products accepted in both national and international projects, and was awarded the 2020 Building Catalog Gold Plumb award in this field.



Khalid Al-Hafiz
Area Manager

Khalid Alhafiz, graduated from Ain-Shams University, Cairo, Egypt in 2016. His major was Bachelor of Science in Civil Engineering specializing in structural engineering in his last year. He worked for MAHD Consultants & Engineering Group as a structural engineer. Later he worked for German Engineer Consultants in the structural analysis department for reinforced concrete. He continued his career with Cobiax Middle East specializing in voided slab systems for more than 3 years. Alhafiz provided technical support for sales teams in both ACI-318-14 and European codes, participated in concept structural design drawings and prepared structural models and reports. He became a member of the ABS team in 2021.



ABS PLUS | ADJUSTABLE-HEIGHT DISPOSABLE FORMWORK SYSTEM FOR LIGHTWEIGHT FILLINGS

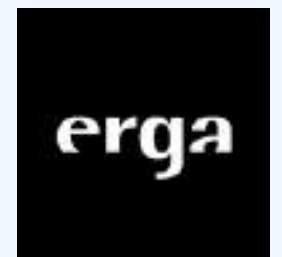
ABS Plus is an adjustable-height disposable concrete formwork system made of recycled plastic. The system is also called 'void formers', 'permanent formwork' or 'single-use formwork'. It creates reinforced concrete raised floors up to 300 cm, thus providing a light, fast, easy and economical filling in any structure.



ABS LEVEL | FIXED-HEIGHT DISPOSABLE FORMWORKS FOR LIGHTWEIGHT FILLINGS

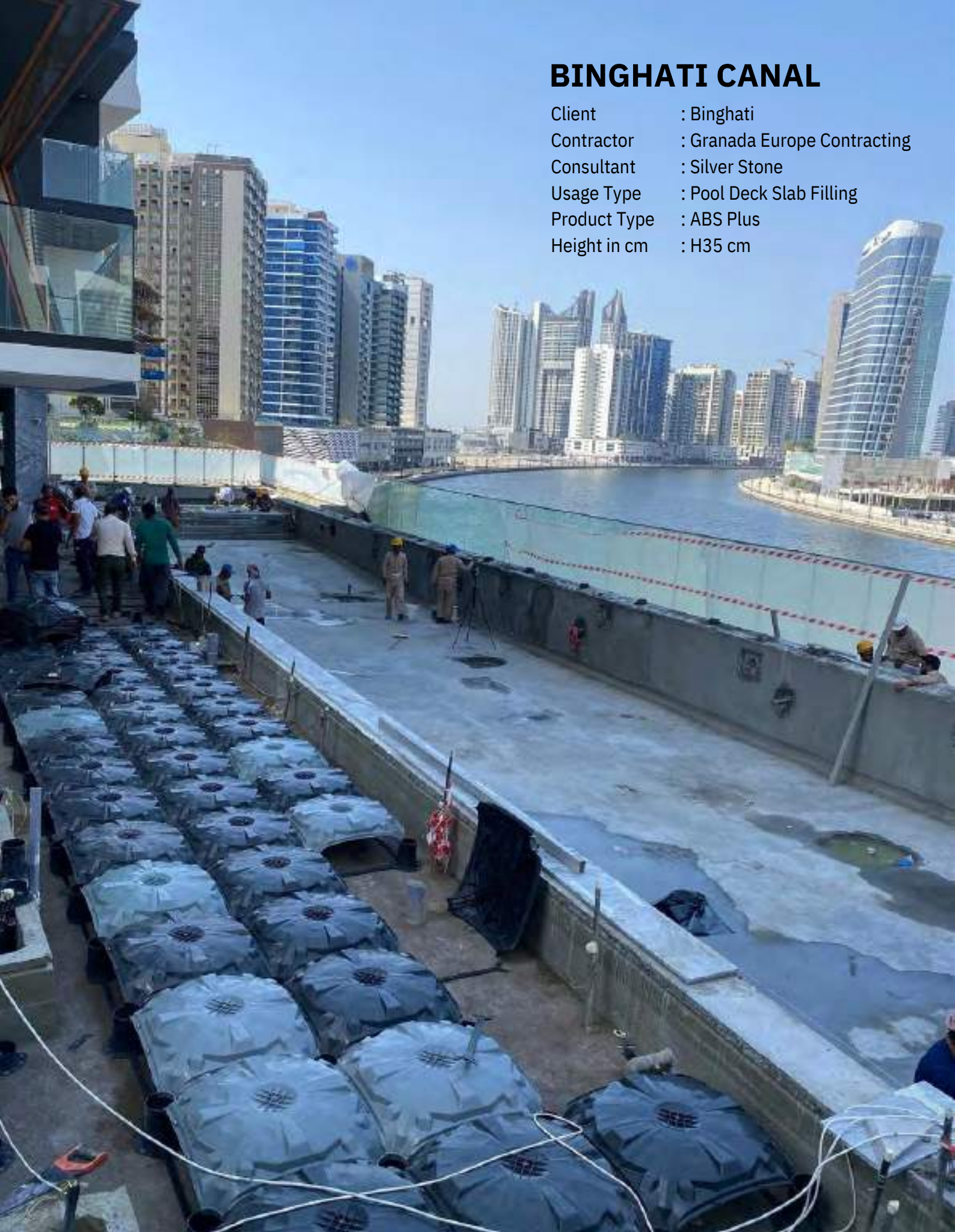
The 'Level' series of ABS Disposable Formworks offers fixed heights of 5, 10 and 15 cm to create reinforced concrete raised floors in commercial or industrial structures quickly, easily and extremely economically. The formworks are made of recycled plastic and are specifically designed to enable cable trays and/or plumbing pipes to pass through them.

SOME OF OUR RECENT CLIENTS



BINGHATI CANAL

Client : Binghati
Contractor : Granada Europe Contracting
Consultant : Silver Stone
Usage Type : Pool Deck Slab Filling
Product Type : ABS Plus
Height in cm : H35 cm

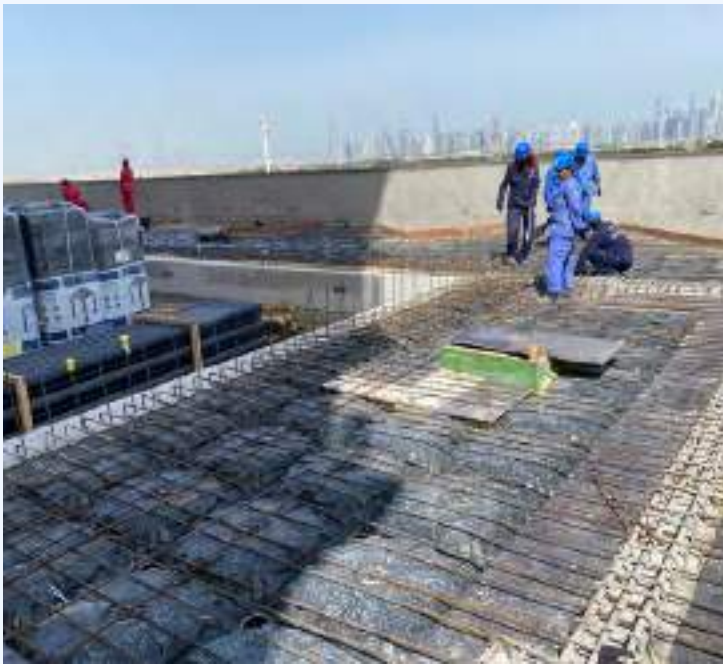




PARK INN HOTEL JVT

Client : City Investment Limited
Contractor : Atcon Construction LLC
Consultant : Chawla Architectural & Consulting
Usage Type : Pool Deck Slab Filling
Product Type : ABS Plus
Height in cm : H75cm & H35CM





SOBHA THE CREST

Client : PNC Investments
Contractor : Sobha Construction LLC
Consultant : PNC Architects
Usage Type : Landscape Filling
Product Type : ABS Plus
Height in cm : Various Heights



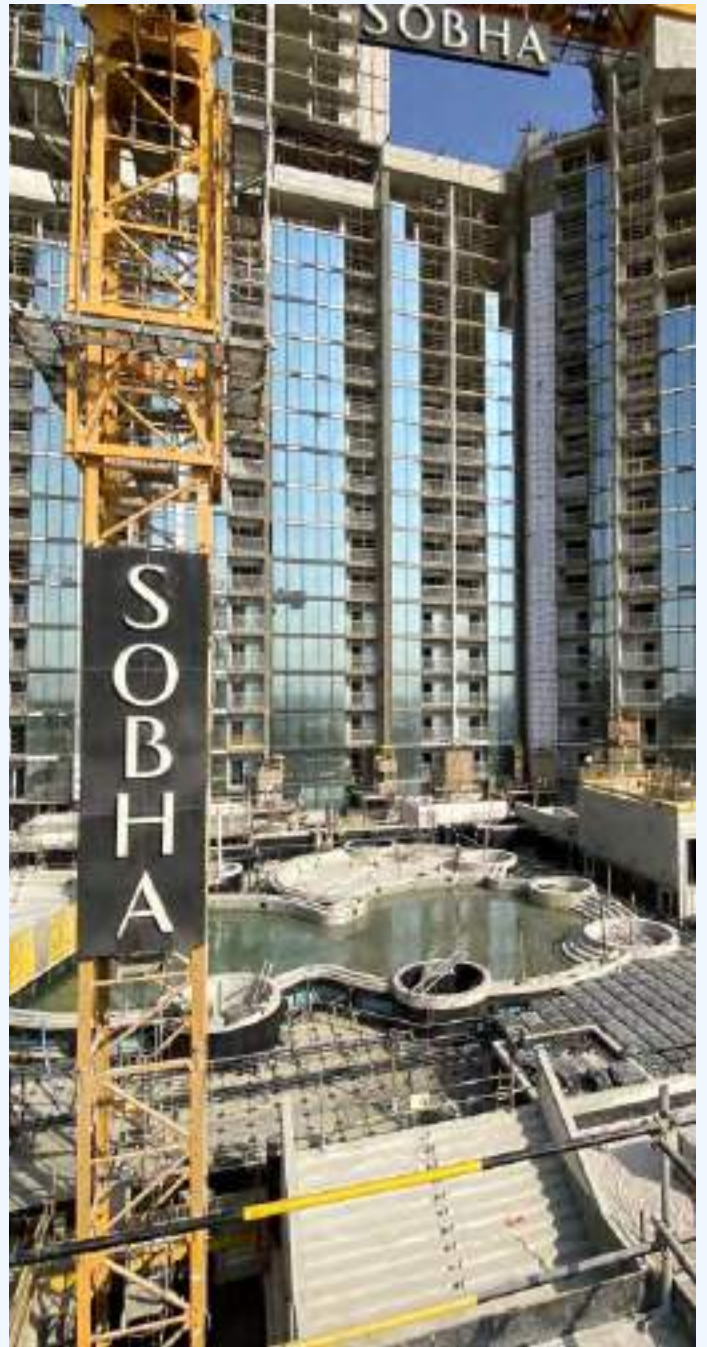
Stair construction



Ramp construction



Podium area and swimming pool construction



Reinforced concrete raised floor application



CITY TOWER 1

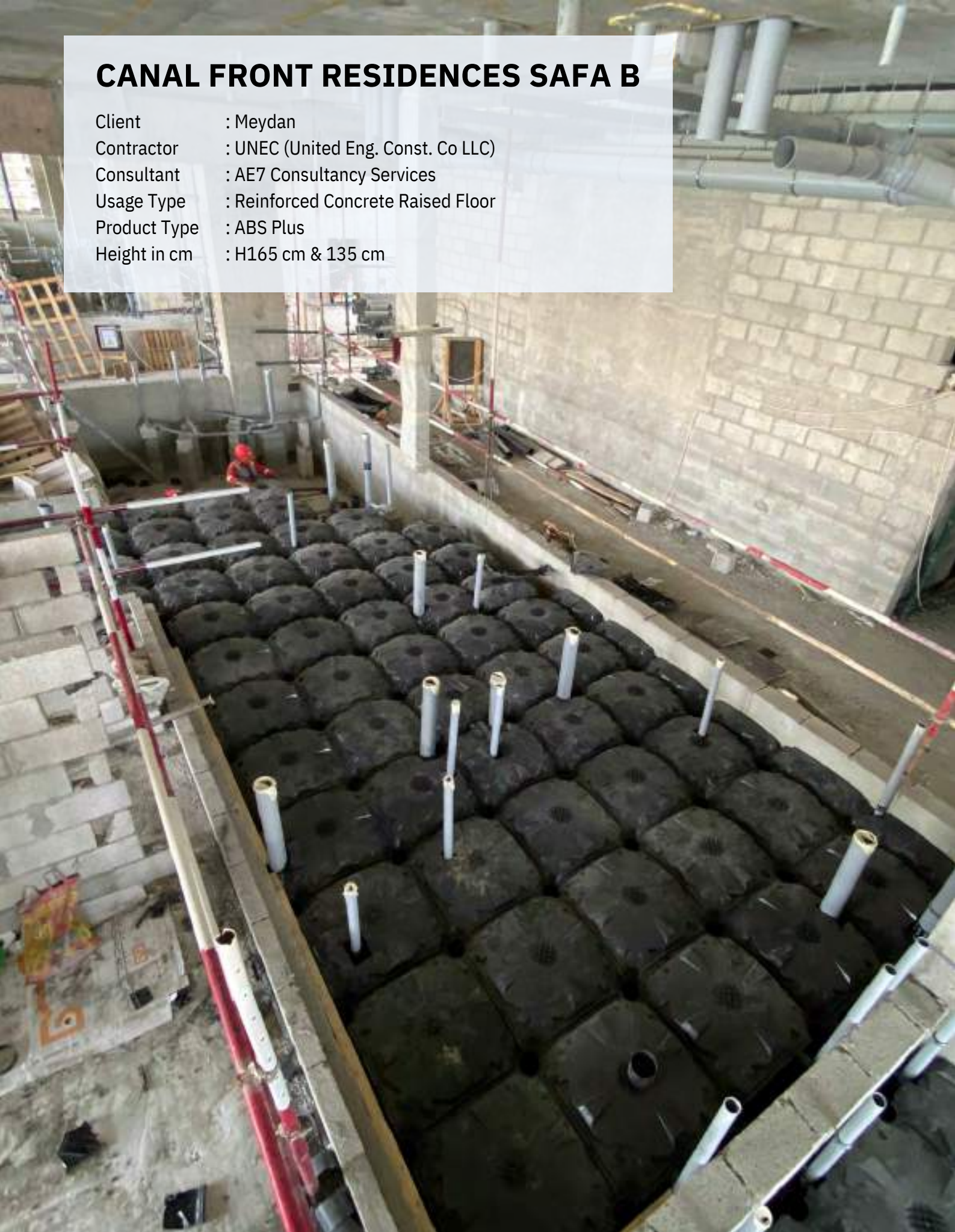
Client : The Galleir Investment LLC
Contractor : Dubai Contracting Company PSC
Consultant : Erga Progress Engineering Consultant
Usage Type : LV Room, Substation Room, Pool Deck Slab Filling
Product Type : ABS Plus
Height in cm : H80 cm





CANAL FRONT RESIDENCES SAFA B

Client : Meydan
Contractor : UNEC (United Eng. Const. Co LLC)
Consultant : AE7 Consultancy Services
Usage Type : Reinforced Concrete Raised Floor
Product Type : ABS Plus
Height in cm : H165 cm & 135 cm





THE PENINSULA @ BUSINESS (PLOT D)

Client	: Select Group
Contractor	: ABM Al Basti & Muktha LLC
Consultant	: Dubai Consultant DC
Usage Type	: Landscape Filling
Product Type	: ABS Plus
Height in cm	: Various Heights





MR.C RESIDENCES

Client : Alta Real Estate Development
Contractor : Dubai Dawn Distinguished Construction
Consultant : Access Engineering Consultancy
Usage Type : Reinforced Concrete Raised Floor
Product Type : ABS Plus
Height in cm : H35 cm





VOLANTE 2 TOWER

Client : Volante Ltd., Xtreme Visions
Contractor : The FNP Arch. & Eng.
Consultant : ACC (Arabian Construction Co.)
Usage Type : Pool Deck Slab Filling
Product Type : ABS Plus
Height in cm : H145cm & H100cm





FROM OTHER PARTS OF THE WORLD





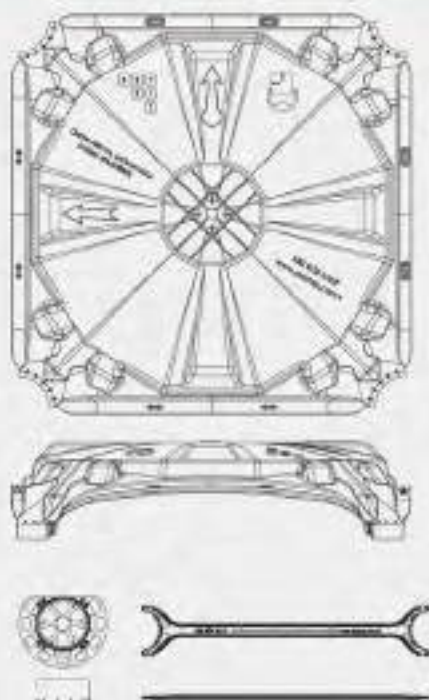




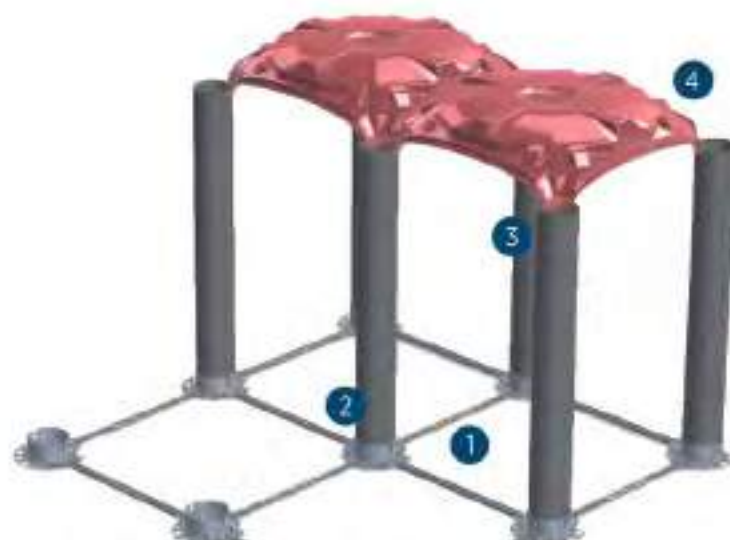




ABS Plus (20 cm - 300 cm)



- 1 ABS Plus - Spacer (min. 2 max. 4 pcs per m², depending on the project)
- 2 ABS Plus - Base (2 pcs = 1 m², Ø125 mm, H 25 cm)
- 3 ABS Plus - Leg (2 pcs = 1 m², cut to the heights required by the project, Ø125 mm)
- 4 ABS Plus - H15 Dome (2 pcs = 1 m²)



Dimensions

Dome size	710 x 710 mm, 2 domes per m ²
Dome height	150 mm, net height w/o leg connections
Net arch clearance	width 590 mm, height 59 mm
Base height	25 mm, 2 bases per m ²
Leg diameter	Ø 125 mm, 2 legs per m ²
Leg height	variable heights, depending on requirement
Number of spacers needed	max 4/m ² lower than 50 cm heights may not require use of spacers, however all spacers are need for heights for more than 120 cm

Pallet dimensions

Pallet dimensions (dome)	75 x 150 x 255
Pieces per pallet (dome)	170 pcs
Area covered per pallet (dome)	85 m ²
Pallet weight (dome)	350 kg

Material: dome, base and spacer recycled PP, leg recycled PVC
Application speed: 20 m²/man-hour on a rectangular area

Formulas

d = height in m of the topping concrete calculated separately depending on the service loads needed
h = total height of the ABS Plus system in m before concrete casting

Total concrete consumption in m³/m² = $d + 0.03554 + [0.02454 \times (h - 0.15)]$

Leg height in m = $h - 0.15 \text{ m} - 0.025 \text{ m}$

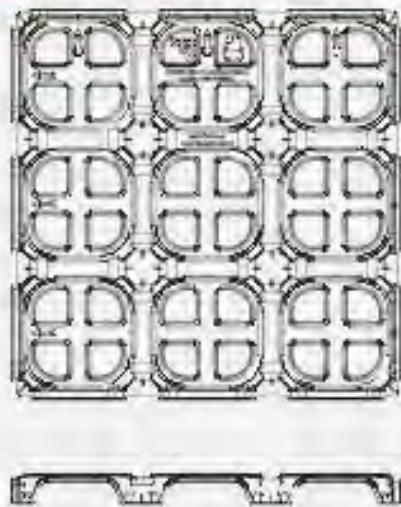
Dome Concrete Consumption



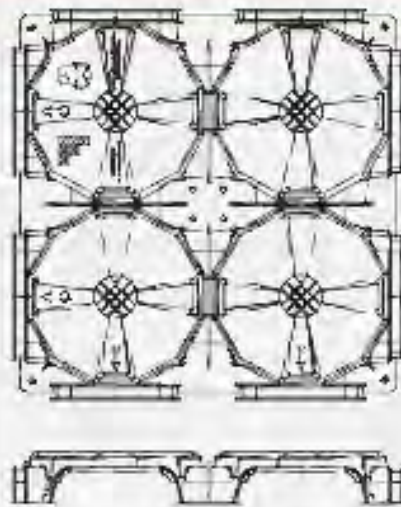
0.036 m³/m²

ABS LEVEL DATA SHEET

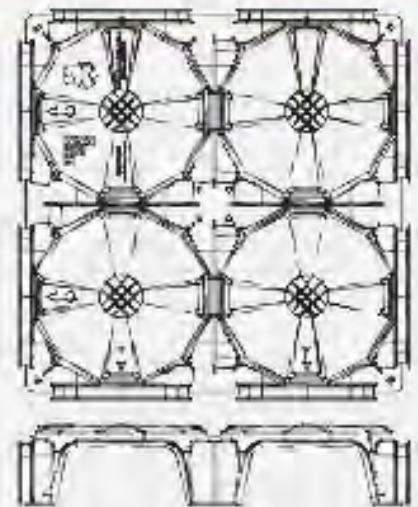
ABS Level - H5



ABS Level - H10



ABS Level - H15



Dimensions

770 x 770 x 50 mm
2 (bottom) x 1 (top) mm
27 mm x 27 mm

770 x 770 x 100 mm
2 (bottom) x 2 (top) mm
128 mm x 128 mm

1070 x 1070 x 150 mm
2 (bottom) x 2 (top) mm
178 mm x 178 mm

Net arch clearance

100 mm width
40 mm height

100 mm width
40 mm height

100 mm width
40 mm height

Concrete consumption w/o topping concrete

0.010 m³/m²



0.020 m³/m²



0.030 m³/m²



Pallet dimensions

75 x 150 x 250 cm

75 x 150 x 250 cm

75 x 150 x 250 cm

Pieces per pallet and area covered

100 pcs / 150 m²

200 pcs / 300 m²

300 pcs / 450 m²

Pallet weight

50 kg

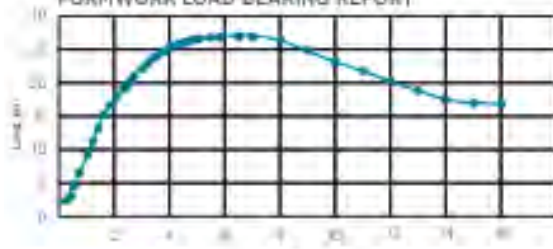
100 kg

150 kg

Material: recycled PP

Application speed: 100 m²/man-hour on a rectangular area

FORMWORK LOAD BEARING REPORT



Sample No	Sample Type	Sample size (mm)	Plate size (mm)	Maximum Load	
				Up	Down
1	ABS Level H5	1000x1000	400x400	20000	10000

Source: Formwork Engineering & Construction



ADVANTAGES



THE LIGHTEST SOLUTION

Regardless of the height, only the weight of the topping concrete is added to the structure.



EASE OF LOGISTICS

Unmatched logistical advantage; products are designed to be stackable, nesting in each other. At a sample height of 100 cm, 1 truck of disposable formwork equivalents 50 trucks of alternative filling material!



HIGH LOAD BEARING

Through the creation of hundreds of column arches and domes, the reinforced concrete raise floor has a very high load bearing capacity.



REDUCED CONSTRUCTION TIME

Construction activities on upper floors can proceed without having to wait for the filling application on lower floors, as the filling application can be done anytime, saving very valuable construction time.



VOID SPACE CREATION

The void space that gets created can be used for installations (electrical, mechanical, etc.) to pass through; columns have a net opening of 59 cm.



FAST AND EASY

The installation does not require any skilled labor; can be done very fast and easy.



RAMP CONSTRUCTION

The legs can be cut at any size needed to create a ramp.



CONTINUOUS CONCRETE SURFACE

Any sort of covering application can be applied on the concrete surface very easily.



HEAT AND SOUND INSULATION

The void space that gets created provides heat and sound insulation.



RADON AND DAMP BARRIER

If used above foundations and properly ventilated, it is the most economical and safest way to removing radon gas, humidity and dampness from living quarters.



SEPARATOR WALL CONSTRUCTION

Separator walls can be installed directly on the newly created concrete surface.



ENVIRONMENTAL VALUE

Because the disposable formworks are made of recycled PP, they help to gain considerable LEED certificate points.

ABS Disposable Formwork System for lightweight fillings is the first and only domestic product group in its field with National Technical Approval and G marking.



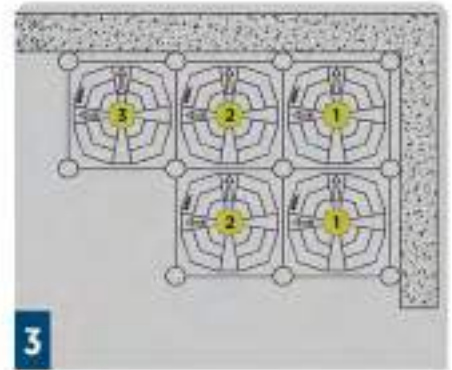
INSTALLATION



Place the bases using the spacers so that the base's flat side is adjacent to the wall. Cut the base creating a second edge so that it fits into a corner.



Press the legs that have been cut according to the project firmly into the base slots.



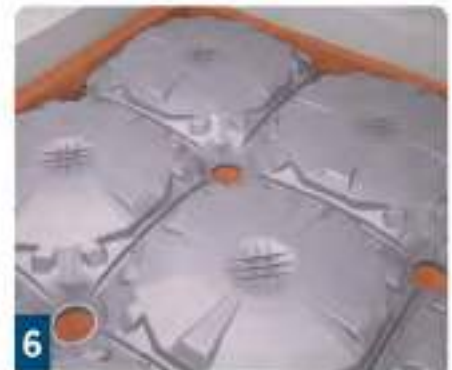
Place the domes on the legs, from right to left and from top to bottom, checking that the domes fit over each other and on the legs firmly. The arrows on the domes should always indicate the direction in which the installation operator looks.



Inserting the last row of ABS Plus domes. Example 1: full dome on the wooden console attached to the wall.



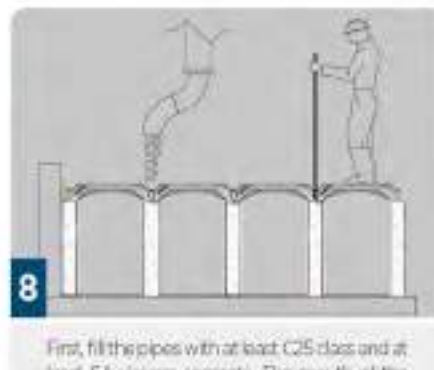
Inserting the last row of ABS Plus domes. Example 2: Placing a cut dome on the wooden console attached to the wall.



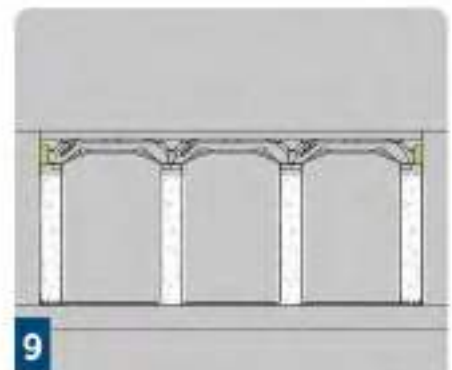
In the case of full-dome wall finishes where the PVC pipes legs are adjacent to the walls, place ABS Plus dome side closer or 5x10 wooden wedges on the pipes and close the cavities against concrete leaks.



Place project specific welded steel mesh on the concrete-sealed disposable formworks and place vertical steel rebars into the legs.



First, fill the pipes with at least C25 class and at least S4 viscose concrete. The mouth of the pump hose should be kept up to 20 cm above the domes. Every legs should be stabbed with a steel rod to release the air trapped in the leg. Fill the domes and topping concrete after filling the pipes.



Use a vibrator when pouring the concrete of the domes and topping slab. Depending on the ambient conditions, the concrete should be moistened sufficiently.

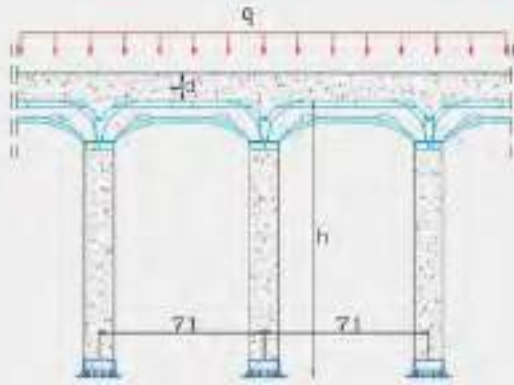
INSTALLATION VIDEO
dipsasableformwork.com/videos



INSTALLATION GUIDE
dipsasableformwork.com/documents



DESIGN DATA SHEET



TYPICAL SECTION

ABS PLUS

The design calculation of reinforced concrete raised floors is made based on a simple structure consisting of columns and a slab, as in other reinforced concrete structures. The configuration is just like the column-beam-floor structure of any building. The intended use of the structure is considered when determining the live and dead (fixed) design loads.

The transfer of loads from the slab to the columns takes place through the arches of the domes. However, to stay on the safe side, the load design of the domes and arches is not considered, only the slab and column calculations are made.

Table: Maximum Allowable Live Load - q_{max} (kN/m²)

Istanbul Technical University, Product Report 2018

Disposable Formwork Height, H (cm)	Column Reinforcement	Slab Reinforcement (mm)	Slab Thickness, t (cm)															
			5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80
250	4 x Ø10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4 x Ø8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2 x Ø10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2 x Ø8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
200	2 x Ø10	28	50	55	78	78	78	78	78	78	78	78	78	78	78	78	78	78
	2 x Ø8	28	50	55	78	78	78	78	78	78	78	78	78	78	78	78	78	78
	Ø10	28	50	55	78	78	78	78	78	78	78	78	78	78	78	78	78	78
	Ø8	28	50	55	78	78	78	78	78	78	78	78	78	78	78	78	78	78
150	2 x Ø10	28	50	55	78	83	92	92	92	92	92	92	92	92	92	92	92	92
	2 x Ø8	28	50	55	79	83	92	92	92	92	92	92	92	92	92	92	92	92
	Ø10	28	50	55	79	83	92	92	92	92	92	92	92	92	92	92	92	92
	Ø8	28	50	55	79	83	92	92	92	92	92	92	92	92	92	92	92	92
100	2 x Ø10	28	50	55	79	83	98	98	98	98	98	98	98	98	98	98	98	98
	2 x Ø8	28	50	55	79	83	98	98	98	98	98	98	98	98	98	98	98	98
	Ø10	28	50	55	79	83	98	98	98	98	98	98	98	98	98	98	98	98
	Ø8	28	50	55	79	83	98	98	98	98	98	98	98	98	98	98	98	98
50	2 x Ø10	28	50	55	79	83	104	104	104	104	104	104	104	104	104	104	104	104
	2 x Ø8	28	50	55	79	83	104	104	104	104	104	104	104	104	104	104	104	104
	Ø10	28	50	55	79	83	98	98	98	98	98	98	98	98	98	98	98	98
	Ø8	28	50	55	79	83	98	98	98	98	98	98	98	98	98	98	98	98
w/o rebar	2 x Ø10	28	50	55	79	83	104	104	104	104	104	104	104	104	104	104	104	104
	2 x Ø8	28	50	55	79	83	104	104	104	104	104	104	104	104	104	104	104	104
	Ø10	28	50	55	79	83	98	98	98	98	98	98	98	98	98	98	98	98
	Ø8	28	50	55	79	83	98	98	98	98	98	98	98	98	98	98	98	98

Laboratory Test Results



Please visit our website at disposableformwork.com/documents for all and more precise data tables.

Istanbul Technical University Load Test Report 2018/2021

Type	ABS Plus System Height (cm)	Slab Concrete Thickness (cm)	Rebar in Slab	Total Height (cm)	Maximum Load Record (kN)
H250	250	30	Yes (4xØ 10)	280	1302
H200	200	35	Yes (4xØ 10)	235	4842
H100	100	30	Yes (2xØ 10)	130	2785
H50	50	30	Yes (2xØ 10)	80	2832
H50	50	30	No	60	1385
H50	50	5	No	55	1259

Istanbul Technical University Formwork Resistance Report 2018

Sample No.	Sample Type	Sample Size (mm)	Comp. Surface (mm)	Maximum Load	
				(kN)	(kN/m ²)
W	ABS PLUS	700x700x300	Ø245	13462	8.6

QUALITY CONTROL

Our Quality Standards

Each stage, from raw material procurement to the use of products in the field, is regularly controlled by separate units with separate methods for quality.

Raw Material Procurement

Our ready-to-inject raw material, which is manufactured specifically to our specifications, is taken from the bags with strict sampling methods before production and checked for melt flow and tensile strength in our laboratory.



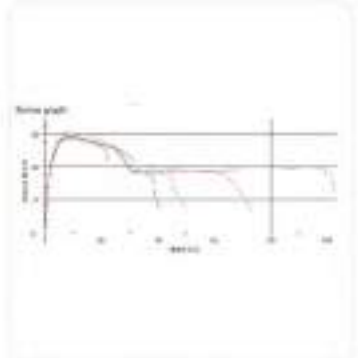
Quality Control Laboratory



Melt Flow Control



Tensile Strength Inspection



Comparative Result Check

Production Process

At predetermined intervals during production, each batch of products is checked for compliance with the National Technical Approval standards, as well as the specifications set by the ABS quality team.



The resistance of domes is checked at regular intervals as standard.



Flexibility and strength of the legs are checked at regular intervals as standard.



Actual lengths of cooled and rested products after production is checked



Length control of the complete system consisting of dome, base spacer and legs is performed at regular intervals.

CERTIFICATES



**National Technical
Approval
19-1915 TTO**



**Technical Product Report
Istanbul Technical
University**



**Load Test Report
Istanbul Technical
University**



**Load Test Report
Kuwait University**



**Formwork Resistance Report
Istanbul Technical
University**



**Formwork and Leg Resistance
Report
Eskişehir Technical University**



**Fire Resistance Report
and Certificate
TSE**



**Thermal Conductivity
Report
TSE**



**Sound Insulation Report
TSE**



**NFPA 259 Test Report
Intertek**



**REACH Certificate
Eurocert**



**Declaration of Conformity to
G Mark**

Utility Model & Patents

- TR 2015 15942
- TR 2015 15948
- TR 2017 15699
- TR 2021009059

Industrial Design Registrations

- 2017 07565
- 2019 01005
- 2020 03500
- 2021006515

Brand Registrations

- 2016 75201
- 2016 105429
- 2016 22882
- 2018 42433
- 2018 41887
- 2012 05630
- 2015 101236
- 2015 101238
- 2016 22908
- 2016 75187

For more information



GET IN TOUCH

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🌐 abs-me.ae

We have implemented our 'reinforced concrete raised floor solution' in more than 32 million sqft of applications all around the world. Our disposable formworks are produced at the highest quality standards, and we have the largest production capacity in the market to deliver our products to your jobsite.

Please call us or drop us an email with your drawings and we will do our best to come up with the best solution for your needs.

