

REFERENCE PROJECTS



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 ABM, Binladin, ECC, DCC, Khansaheb, Sobha, UNEC and they were used in projects such as The Peninsula at Business Bay, City Tower, Sobha The Crest, City Walk, Serenia Living and Creek Beach since then.

**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.

**DINA ALMINAWI****PRODUCT SPECIALIST**

Dina Alminawi graduated from Applied Science University in Amman, Jordan, in 2018 with a bachelor's degree in civil engineering. During her final year, she specialized in specifications engineering. She began her career as a Technical Support Engineer at Salim Alteneiji Contracting in a waterproofing major. Later, Dina joined Styro Mat. Ind. LLC as a Senior Marketing and Specifications Engineer in the technical department, where she provided over three years of technical support to the sales team. Her expertise was particularly in the American Society for Testing and Materials (ASTM) code to prepare the technical proposal, submittals and prequalification. In 2024, Dina became a member of the ABS ME team.

TANVEER HUSSAIN**TECHNICAL SALES & OPERATION SPECIALIST**

Tanveer Hussain worked as a site supervisor for Habib Construction Services Ltd. in Pakistan from 2006 to 2009. In 2009, he moved to the UAE and continued as a site supervisor for Pearls General Maintenance L.L.C. until 2017. From 2017 to 2021, he transitioned into the role of Public Relations Officer at Pearls General Maintenance. Following this, he took on subcontractor roles with various companies, including Al Jaber ACC and Trojan Ali & Sons ECC. In 2022, Tanveer joined the ABS ME team, where he is responsible for Technical Sales and Operations.



OUR SOLUTIONS



ABS PLUS | ADJUSTABLE-HEIGHT VOID FORMWORK SYSTEM FOR LIGHTWEIGHT FILL APPLICATIONS

ABS Plus void formwork is an adjustable-height concrete formwork system made from recycled plastic. The system is also referred to as disposable formwork, void former, permanent formwork, or single-use formwork. It enables the creation of reinforced concrete raised floors up to 300 cm, offering a lightweight, fast, easy, and economical fill for any structure.



ABS LEVEL | FIXED-HEIGHT VOID FORMWORKS FOR LIGHTWEIGHT FILL APPLICATIONS

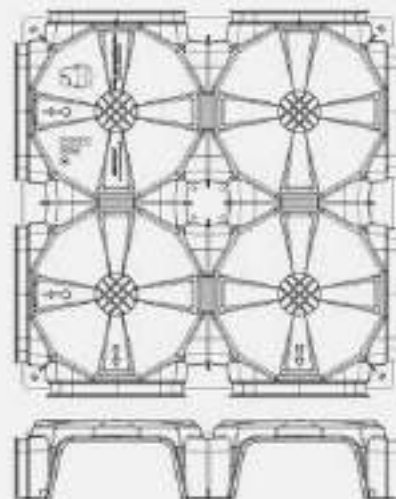
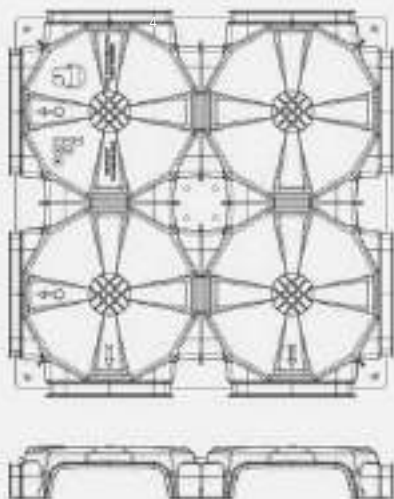
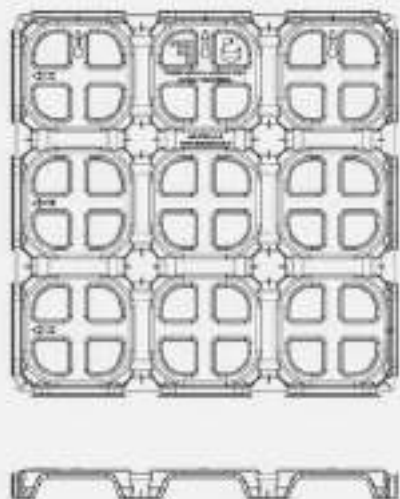
"The 'Level' series of ABS Void Formworks offers fixed heights of 5, 10, and 15 cm, allowing for the quick, easy, and highly economical creation of reinforced concrete raised floors in commercial or industrial structures. Made from recycled plastic, the formworks are specifically designed to accommodate cable trays and/or plumbing pipes.

ABS LEVEL DATA SHEET

ABS Level - H5

ABS Level - H10

ABS Level - H15



Dimensions

710 x 710 x 50 mm
2 formworks per m²
1,78 kg/pcs

710 x 710 x 100 mm
2 formworks per m²
1,96 kg/pcs

710 x 710 x 150 mm
2 formworks per m²
2,16 kg/pcs

Net arch clearance

160 mm width
40 mm height

230 mm width
60 mm height

250 mm width
110 mm height

Concrete consumption w/o topping concrete

0,010 m³/m²



0,022 m³/m²



0,025 m³ / m²



Pallet dimensions

75 x 150 x 260 cm

75 x 150 x 260 cm

75 x 150 x 260 cm

Pieces per pallet and area covered

300 pcs and 150 m²

250 pcs and 125 m²

250 pcs and 125 m²

Pallet weight

545 kg

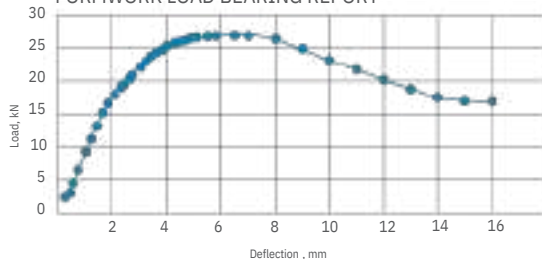
500 kg

550 kg

Material: recycled PP

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

FORMWORK LOAD BEARING REPORT



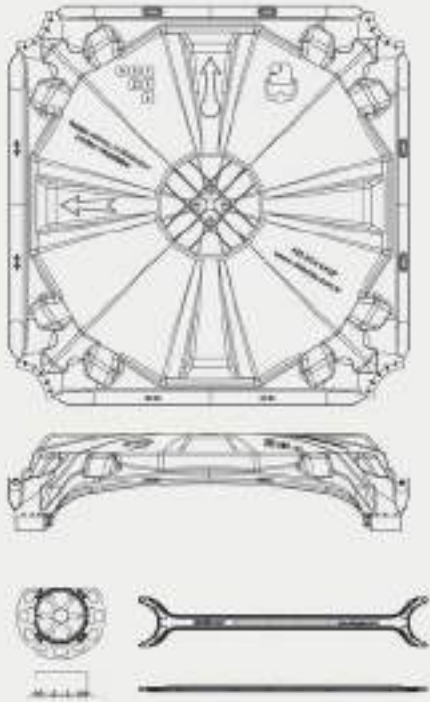
Sample No	Sample Type	Sample Size (mm)	Plate Size (mm)	Maximum Load	
				kN	kN/m ²
1	ABS Level H5	710x710x50	450x450	26.950	133.1

- Please contact us for more detailed information.



ABS PLUS DATA SHEET

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, H2,5 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)

3 - ABS Plus - Ayak
(2 adet/m², projeye uygun
uzunlukta kesilmiş, Ø125 mm)

2 - ABS Plus - Taban
(2 adet/m², Ø125 mm, H2,5 cm)



1 - ABS Plus - Kılavuz
(Projeye göre m² dolay az en fazla 4 adet)

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 x (h - 0,15)]

Leg height in m = h - 0,15 m - 0,025 m

Dome Concrete Consumption



0,036 m³/m²

ACCESSORIES

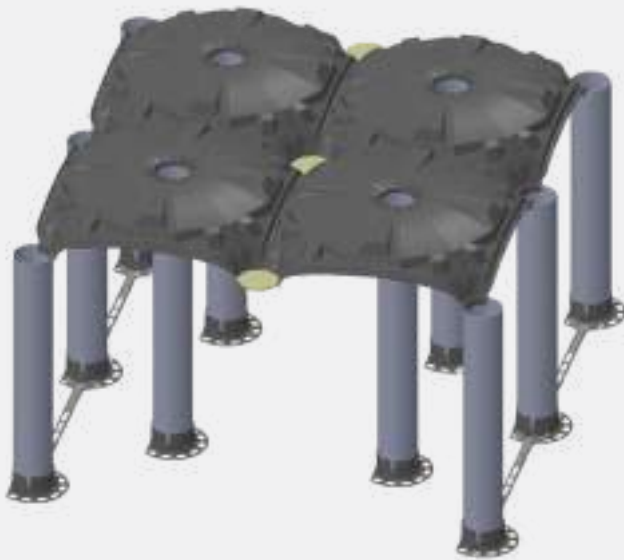
ABS PLUS | DOME SIDE SHUTTER

This unique design helps to cover the opening between uncut ABS Plus domes and perimeter wall completely even if the wall surface is uneven. The design covers the arch of the dome with minimum concrete consumption while keeping the leg entry completely open for concrete casting.



ABS PLUS | MIDDLE LEG

The 'middle leg', whose utility model design belongs to ABS Yapı, allows a leg to be passed through the middle of the ABS Plus Dome when necessary. In this way, space can be made for diagonal installation transitions without using the corner piers of the dome. In addition, the 'centre leg' also allows the dome to be strengthened at the edge ends if it will work as a cantilever.



ABS PLUS | WIDE BASE SYSTEM

Standard void formwork systems for reinforced concrete raised floors typically use 125 mm diameter legs and bases. While effective on reinforced slabs or screeds, their small contact area (1.3%) poses a risk on natural ground, potentially causing punctures, sinking, and structural damage. To address this, a Wide Base with a 350 mm diameter has been introduced, increasing the contact area to 9.6%—about 7 times larger. This significantly reduces the risk of ground sinking and ensures safer load transfer, preventing deflection and damage to the raised floor.



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 columns, arches and domes, the reinforced concrete raised 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; it 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.



BINGHATI CANAL

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

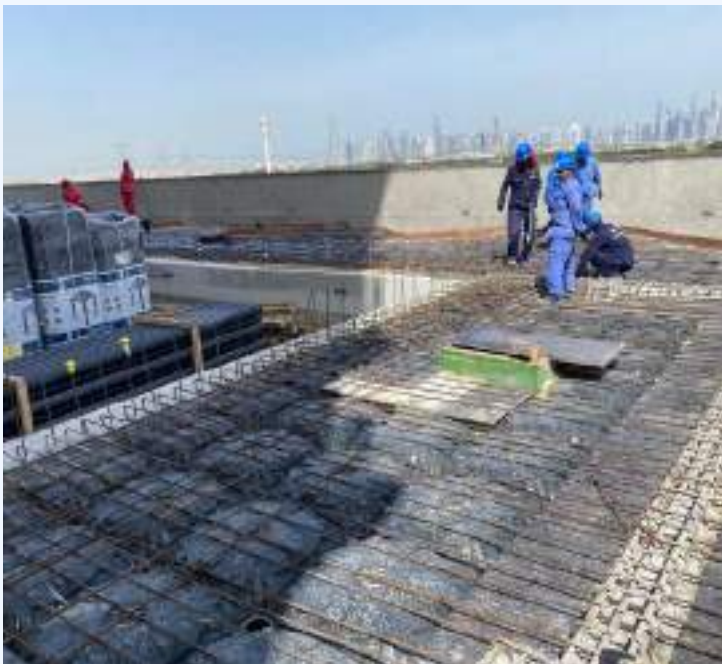




PARK INN HOTEL JVT

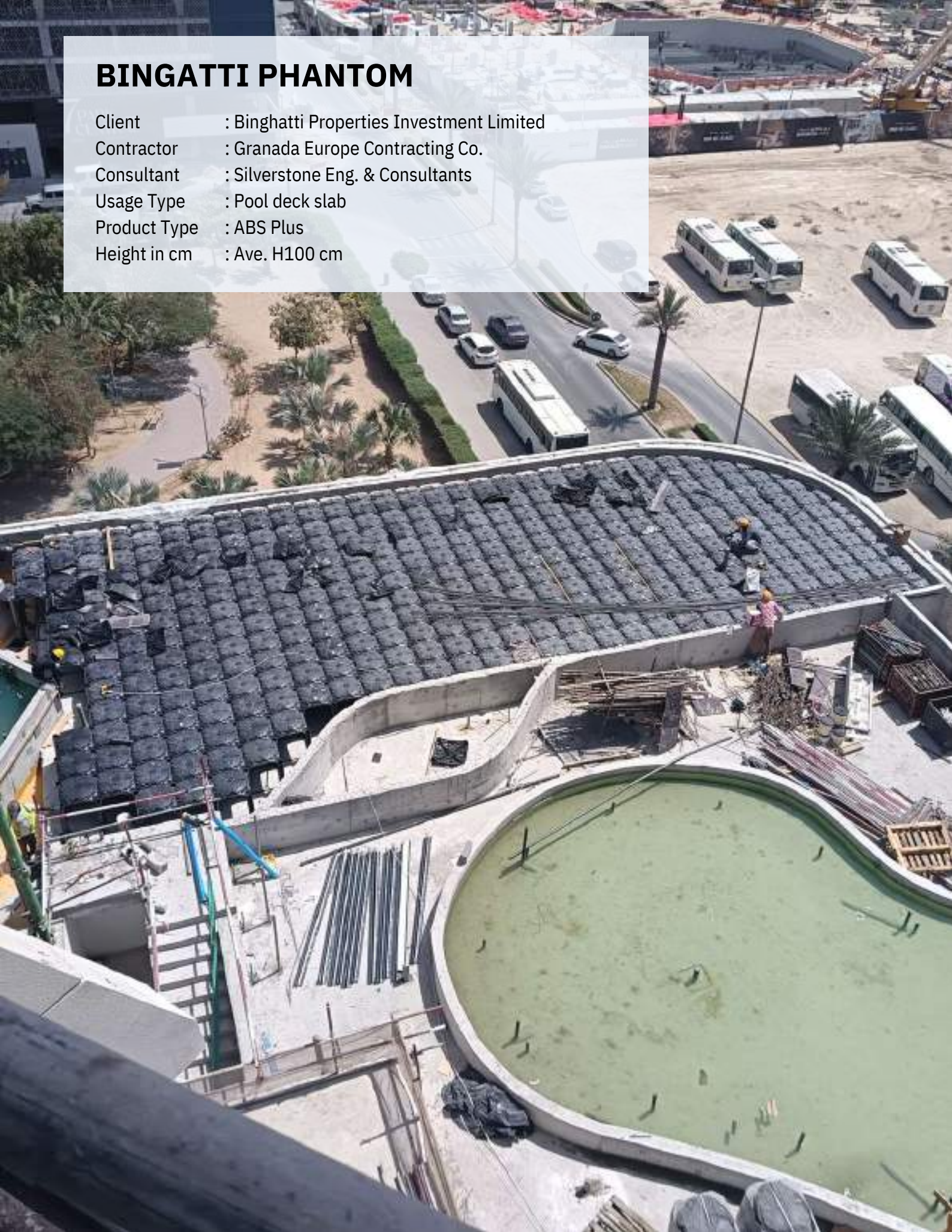
Client : City Investment Limited
Contractor : Atcon Construction LLC
Consultant : Chawla Architectural & Consulting
Usage Type : Pool Deck Slab Fill
Product Type : ABS Plus
Height in cm : H75cm & H35CM





BINGATTI PHANTOM

Client : Bingham Properties Investment Limited
Contractor : Granada Europe Contracting Co.
Consultant : Silverstone Eng. & Consultants
Usage Type : Pool deck slab
Product Type : ABS Plus
Height in cm : Ave. H100 cm





CITY TOWER 1

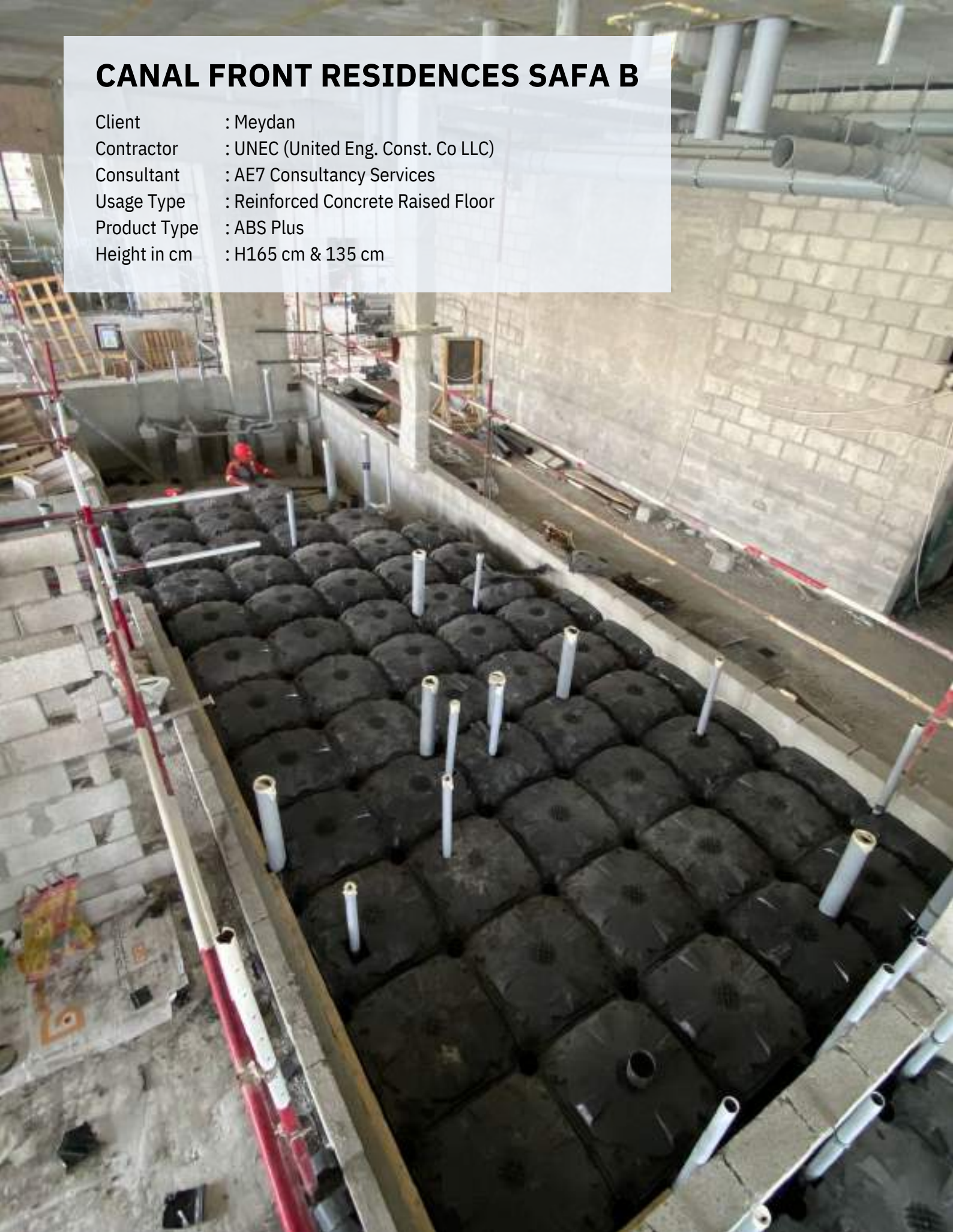
Client : The Galleir Investment LLC
Contractor : Dubai Contracting Company PSC
Consultant : Erga Progress Engineering Consultant
Usage Type : LV Room, Substation Room, Pool Deck Slab Fill
Product Type : ABS Plus
Height in cm : H80 cm





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 Fill
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 Fill
Product Type : ABS Plus
Height in cm : H145cm & H100cm





IPC VILLA PALM JUMEIRAH

Client : Green Dunes Lanscaping LLC
Contractor : Khansaheb
Consultant : DAT Engineering Consultancy
Usage Type : Hardscape Surface
Product Type : ABS Plus
Height in cm : H50 cm





SERENIA LIVING

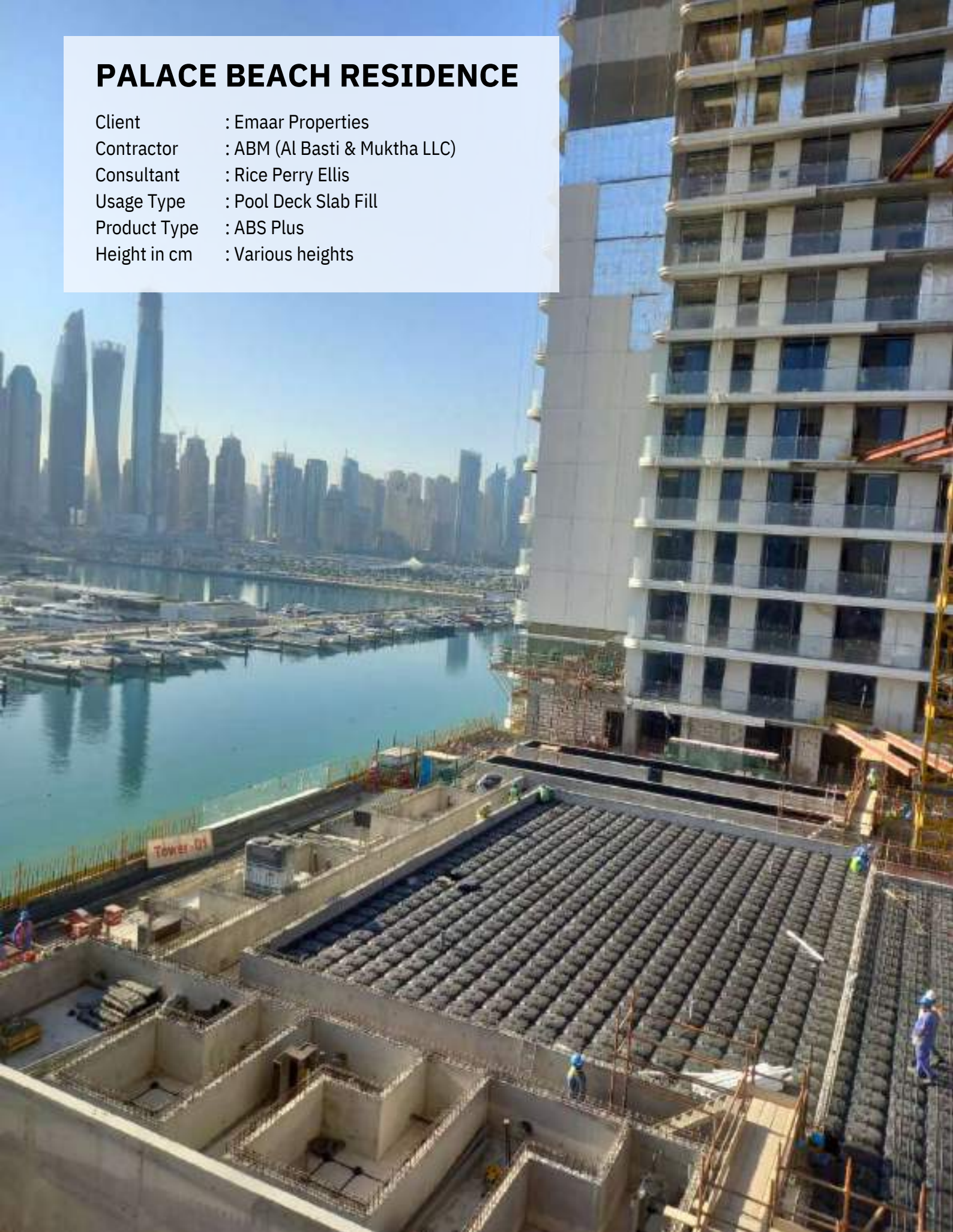
Client : Serenia Residences Limited
Contractor : Khansaheb Civil Engineering L.L.C.
Consultant : Godwin Austen Johnson - Architects
Usage Type : Landscape
Product Type : ABS Plus
Height in cm : Ave. H80 cm





PALACE BEACH RESIDENCE

Client : Emaar Properties
Contractor : ABM (Al Basti & Muktha LLC)
Consultant : Rice Perry Ellis
Usage Type : Pool Deck Slab Fill
Product Type : ABS Plus
Height in cm : Various heights





EMAAR PARK FIELDS AND LIME GARDEN

Client : Emaar Development PJSC
Contractor : China Railway 18th Bureau Group LLC
Consultant : Mirage Leisure and Development
Usage Type : Landscape fills & swimming pool decks
Product Type : ABS Plus
Height in cm : Ave. H110 cm





CREEK BEACH

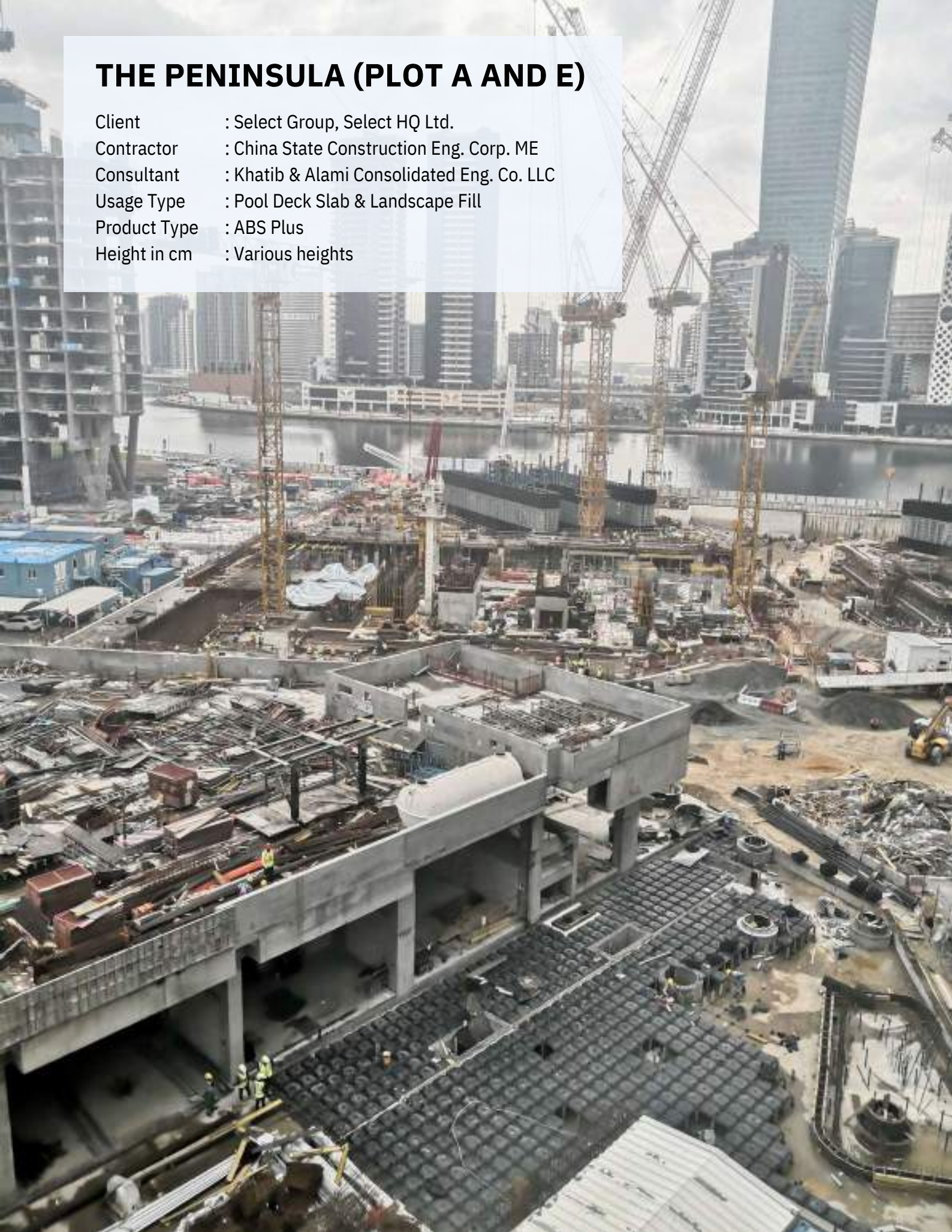
Client : Dubai Creek Harbour
Contractor : Engineering Contracting Co. LLC.
Consultant : SSH
Usage Type : Pool Deck Slab Fill
Product Type : ABS Plus
Height in cm : H35cm & H90 cm





THE PENINSULA (PLOT A AND E)

Client : Select Group, Select HQ Ltd.
Contractor : China State Construction Eng. Corp. ME
Consultant : Khatib & Alami Consolidated Eng. Co. LLC
Usage Type : Pool Deck Slab & Landscape Fill
Product Type : ABS Plus
Height in cm : Various heights





CITY WALK PHASE 05

Client : Dubai Holding Real Estate
Contractor : Engineering Construction & Reconstruction Company (CRC)
Consultant : Dewan Architects + Engineers
Usage Type : Attic / MEP Floor
Product Type : ABS Plus
Height in cm : H95 cm





GRANADA EUROPE

Client : Binghatti Properties Investment Limited
Contractor : Granada Europe Contracting Co.
Consultant : Silverstone Eng. & Consultants
Usage Type : Car Park Ramp & Foundation Leveling
Product Type : ABS Plus
Height in cm : Ramp & H50 cm





SOBHA THE CREST

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



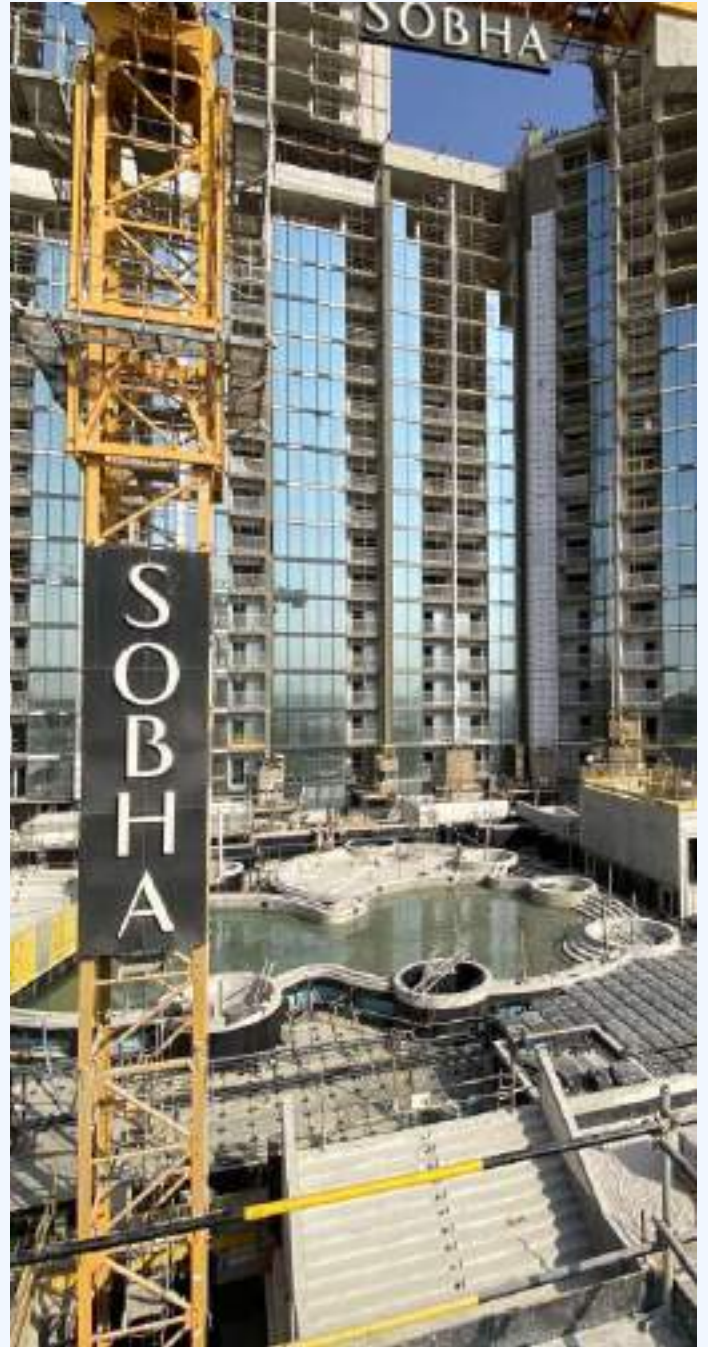
Stair construction



Ramp construction



Podium area and swimming pool construction



Reinforced concrete raised floor application



SOME OF OUR RECENT CLIENTS



FROM OTHER PARTS OF THE WORLD





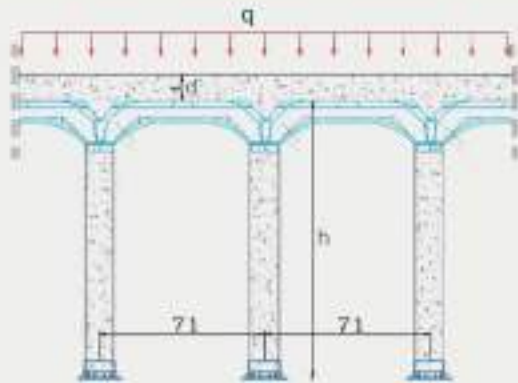








DESIGN DATA SHEET



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

Applicable for both C25 and C30 concrete classes		Disposable Framework Height, H (mm)																			
		Column Reinforcement				100				150				200				250			
		Slab Thickness, t (mm)	5	10	20	10	15	20	25	15	20	25	30	20	25	30	35	25	30	35	
Slab	Slab	4 x Ø10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Reinforcement	Reinforcement	4 x Ø8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
(mm)	(mm)	2 x Ø10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		2 x Ø8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		Ø10	29	50	55	78	78	78	78	78	78	78	78	78	78	78	78	78	78	78	
		Ø8	29	50	55	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	
		w/o rebar	29	50	55	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	
			29	50	55	79	83	92	92	92	92	92	92	92	92	92	92	92	92	92	
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			29	50	55	79	83	86	86	86	86	86	86	86	86	86	86	86	86	86	
			29	50	55	79	83	86	86	86	86	86	86	86	86	86	86	86	86	86	
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			29	50	55	79	83	98	98	98	98	98	98	98	98	98	98	98	98	98	
			29	50	55	79	83	109	109	109	109	109	109	109	109	109	109	109	109	109	
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			29	50	55	79	83	98	98	98	98	98	98	98	98	98	98	98	98	98	
			20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	

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 (mm)	Rebar in Legs	Total Height (cm)	Maximum Load Record (kN)
H250	250	20	Yes (4xØ10)	270	570,2
H200	200	15	Yes (4xØ10)	210	484,2
H100	100	10	Yes (2xØ10)	110	276,6
H50	50	10	Yes (2xØ10)	60	285,2
H50	50	10	No	60	236,5
H50	50	5	No	55	123,9

Istanbul Technical University Framework Resistance Report 2018

Sample No.	Sample Type	Sample Size (mm)	Comp. Surface (mm)	Maximum Load	
				(kN)	(kN/m ²)
1A	ABS PLUS	710x710x300	Ø245	1.5462	8,6

INSTALLATION



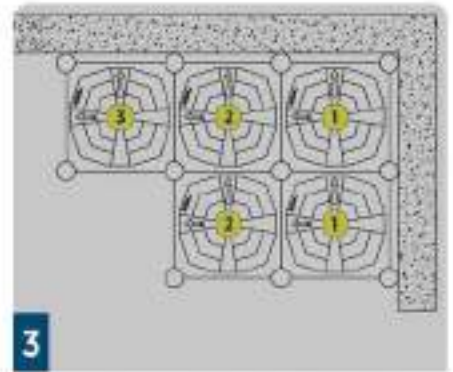
1

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.



2

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



3

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.



4

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



5

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



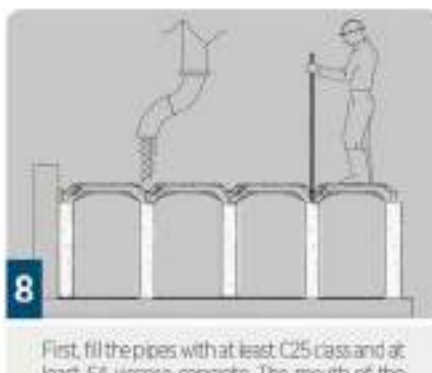
6

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.



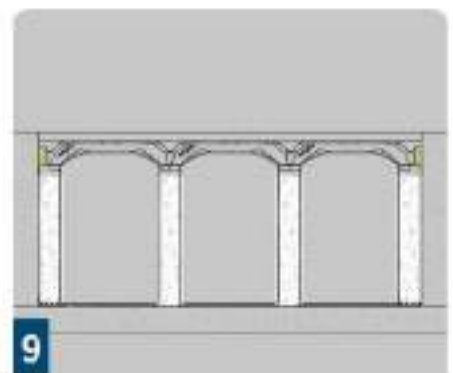
7

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



8

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 leg 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.



9

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

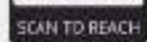
INSTALLATION VIDEO

disposableformwork.com/videos



INSTALLATION GUIDE

disposableformwork.com/documents



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.



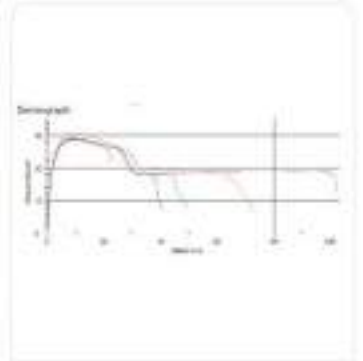
Quality Control Laboratory



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 2021 009059

Industrial Design Registrations

- 2017 07565
- 2019 01005
- 2020 03500
- 2021 006515

Brand Registrations

- 2016 75201
- 2016 105429
- 2016 22882
- 2018 42433
- 2018 41887
- 2012 85630
- 2015 101236
- 2015 101238
- 2016 22908
- 2016 75187

For more information



GET IN TOUCH

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- ✉ khalid.alhafiz@abs-me.ae
- 🌐 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 void 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.

