

# TECHNICAL CONSTRUCTION SPECIFICATIONS



**KOLANIS**  
MODULAR CONSTRUCTIONS

# TECHNICAL CONSTRUCTION SPECIFICATIONS

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# TECHNICAL CONSTRUCTION SPECIFICATIONS

All construction will be done according to the plans, technical specifications and instructions by the management and consultants of the company Dim. Kolanis Modular Constructions Ltd. The quality of construction shall be in accordance with the high standards jointly set by the company and the project consultants, which are in accordance with the regulations and laws of the Republic of Cyprus.

## 1. FRAME

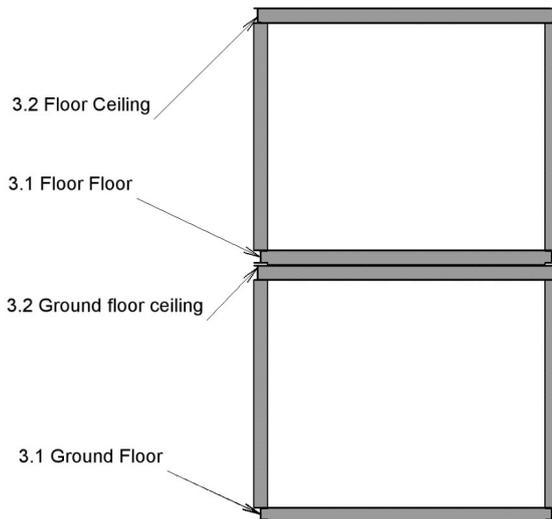
### 1.1 Building Frame

Construction of a metal frame comprising of a combination of Hot Rolled Sections and reinforced concrete and will include columns, walls and slabs.



The metal frame of the building is comprised of supporting walls transferring the load to the foundation base and they will be coated with dry building systems.

The frame shall be designed and constructed in accordance with the Eurocode and other laws and regulations of the Republic of Cyprus in force.



# TECHNICAL CONSTRUCTION SPECIFICATIONS

## 2. WALL CONSTRUCTION

### 2.1 Exterior Walls

The exterior wall construction will be covered with open “C” type metal sections as follows: :

**C184mm x 41mm x 1 mm**

**The exterior metal wall structure will be covered by the following materials:**

#### **Outside the exterior Walls - From the wall outwards**

- » OSB - 11mm
- » Thermal Insulation System - Expanded polystyrene 80mm
- » Exterior rendering with plaster of the type KAM - 700 of Sakret Zeipekkis or equivalent - in between coats, a fiberglass 160g/m<sup>2</sup> type netting will be installed
- » 2 coatings of Superplast or equivalent for finishing the surface
- » 3 coating of Santex type paint

#### **In between the Exterior Wall**

Thermal and Sound Insulating Mineral Wool (100mm)

#### **Inside the Exterior Wall - From the wall inwards**

- » OSB 11mm
- » Fire resistance Plasterboard (Knauf) - 12.5mm or equivalent
- » 3 coats of emulsion type paint
- » The waterproof type of panel Techno Board will be installed on W.C rooms
- » Plaster (spatula)

# TECHNICAL CONSTRUCTION SPECIFICATIONS

## 2. WALL CONSTRUCTION

### 2.2 Interior Walls

The interior walls will comprise of open "C" type metal sections as follows:

**C103mm x 41mm x 1mm**

**The interior wall structure will be covered by the following materials:**

**Interior wall surface - on both sides.**

- » OSB 11mm
- » Fire resistance Plasterboard (Knauf) - 12.5mm or equivalent
- » Plaster (spatula)
- » 3 coats of emulsion type paint

**In between the Interior Wall**

Thermal and Sound Insulating Mineral Wool (50mm)

# TECHNICAL CONSTRUCTION SPECIFICATIONS

## 3. FLOORS / ROOFS

### 3.1. Ground Floor and Upper / Building Floor

The ground floor/building floor will consist of a combination of Hot Rolled Sections as follows:

#### Upper surface Hot Rolled Sections

- » Special shock absorption tape
- » Trapezoidal sheet metal (AD55 Steel Decking thickness 1mm)
- » Styrofoam for slats up to 70mm
- » Thermal insulation RAVATHERM (50mm)
- » Concrete c25 for flow slats
- » Ceramic or laminated parquet

### 3.2. Ground and Upper Floor / Building Roof

The ground floor/building roof will consist of a combination of Hot Rolled Sections as follows:

#### Upper surface Hot Rolled Sections

- » Special shock absorption tape
- » Trapezoidal sheet metal (AD55 Steel Decking thickness 1mm)
- » Polystyrene concrete for flow slats up to 70mm
- » Thermal insulation - expanded polystyrene 80mm
- » Concrete c25 for flow slats
- » Waterproofing with 4mm bituminous membrane with pebbles

#### In between and under surface Hot Rolled Sections

- » Mineral wool 50mm
- » Fire resistance Plasterboard (Knauf) -12.5mm or equivalent on the Roof

# TECHNICAL CONSTRUCTION SPECIFICATIONS

## 4. FLOORING

### 4.1 Interior Floors

The interior floors in the living room, dining room, kitchen, corridor, WCs and bathrooms will be covered by ceramic tiles.

Bedrooms will be fitted with laminated parquet or ceramic tiles.  
(m/v €18/m<sup>2</sup>)

### 4.2 Internal Staircase

Covered with ceramic (m/v €18 per running metre)

# TECHNICAL CONSTRUCTION SPECIFICATIONS

## 5. PAINT, COATING, DECORATING

### 5.1 Walls

#### 5.1.1 Exterior Walls

To be constructed as described in paragraph 2.1  
Part of the residence façade as well as part of the side view will be painted with Santex type paint.

#### 5.1.2 Interior Walls

To be constructed as described in paragraph 2.2  
with three coats of Emulsion type paint, one colour for all walls of the residence.

#### 5.1.3 Bathroom and WC walls

The walls will be covered with ceramic tiles up to the ceiling.  
(The ceramic tiles will be m/v €18/m<sup>2</sup>)

#### 5.1.4 Kitchen Walls

The wall between the cabinets and the worktop will be covered with ceramic tiles.  
(The ceramic tiles will be m/v €18/m<sup>2</sup>)

### 5.2 Ceilings

The ceilings will be coated with three coats of plaster (spatula) and three coats of white paint type Emulsion except the bathrooms and WCs where waterproof plasterboard will be used and painted with anti-mold paint.

# TECHNICAL CONSTRUCTION SPECIFICATIONS

## 6. DOORS AND WINDOWS

In general the exterior openings will be prepared to receive window sills, doors, sliding window and verandah doors of aluminium series MU-3000 thermal type with fly screens and MU-2075 opening systems in the bathrooms and staircase (if any).

- 6.1 Residence entrance - to be made of Aluminium  
Door handles on the residence entrance - m/v €40).
- 6.2 Exterior openings (windows and doors) – will be sliding aluminium MU-3000 series THERMAL type with double glazing and sliding fly screens.
- 6.3 The external kitchen door will be aluminium MU-2075 series with double glazing.
- 6.4 Interior doors and doorframes will be of embossed melamine.
- 6.5 Handles and locks on interior doors (m/v €15)
- 6.6 Marble windowsills of 20mm thickness will be placed on the lower part of the windows

# TECHNICAL CONSTRUCTION SPECIFICATIONS

## 7. KITCHEN CABINETS

The kitchen will be made of embossed melamine.

- 7.1 The frame, interior separations and shelves will be made of melamine of a colour chosen by the purchaser (brown or white colour)
- 7.2 The cabinet doors of the kitchen will be made of embossed melamine.
- 7.3 The kitchen worktop will be made of synthetic granite (m/v €150 per running metre)
- 7.4 Handles on kitchen cabinets (m/v €7)

## 8. WARDROBES

The wardrobe doors will be made of embossed melamine.

- 8.1 The frame, interior separations and shelves will be made of melamine (either white or brown colour) and will contain one set of drawers with three single drawers and a hanging mechanism, where necessary
- 8.2 The wardrobe doors will open and will be made of embossed melamine
- 8.3 Wardrobe handles (m/v €7)

# TECHNICAL CONSTRUCTION SPECIFICATIONS

## 9. SANITARY WARE

All bathrooms, WCs and kitchen will be fitted with sanitary ware and mixers of excellent quality from recognised manufacturers.

All sanitary wares will be supplied and installed by our company.

Some examples of customers choices if and provided they have not been fitted are the following:

- 9.1** Possible customer choices  
(if and provided they have not yet been fitted)
  - 9.1.1** Mixers may be with a single or double switch.
  - 9.1.2** The kitchen sink (and laundry room sink, if existing) may be stainless steel or granite-type (m/v € 200).
  - 9.1.3** The tops of the wash basins in the WCs may be made of granite (m/v € 200 per running meter) when on plan they are built-in with a wash basin leg or half leg the above is not applicable.
  - 9.1.4** The fittings in the bathrooms and WCs such as mirrors, towel rail, bathtub and shower cabins or anything else will be for the customer's choice.
  - 9.1.5** Selection of ceramic wall/floor tile (m/v €18/m<sup>2</sup>).
- 9.2** Sanitary ware budget based on architectural plans  
Per room (m/v €2.000)

# TECHNICAL CONSTRUCTION SPECIFICATIONS

## 10. ELECTRICAL INSTALLATION

### 10.1 Electrical Installation

- 10.1.1** Adequate number of sockets (13amp) to be installed in all interior areas of the residence.
- 10.1.2** A waterproof socket to be installed in the back side of the residence and on at the side.  
A television point to be installed at the back side of the residence.
- 10.1.3** Light fixture points to be installed in all areas and spotlight fixtures to be installed in the bathrooms. Exterior light fixture points to be installed on all covered verandahs.  
In all cases LED type bulbs to be installed for saving electricity.
- 10.1.4** Telephone and internet points to be installed in all bedrooms/sitting room. To be of the radial type.
- 10.1.5** Electrical provision for a pressure solar heater and a pressure pump.
- 10.1.6** Provision for a central television antenna.

### 10.2 Electrical Provisions

- 10.2.1** Provision for Air Conditioning Units (including the wiring)

### 10.3 Photovoltaics

- 10.3.1** Provision for photovoltaic installation

# TECHNICAL CONSTRUCTION SPECIFICATIONS

## 11. MECHANICAL INSTALLATIONS

### 11.1 Plumbing and Sewage

The plumbing pipe system will be radial with “Manifold” and pipes of a “pipe-in-pipe” type.  
The sewerage system, gutters and UPVC pipes.  
Gutter and ventilation pipes will be installed on the roof, where necessary.

**11.1.1** A one-ton cold water tank and a 150lt hot water tank (boiler) of stainless steel will be installed which will be connected with solar receptors. The hot and cold water will be in a closed circuit assisted by a pressure pump which will be installed in the ground floor area of the residence (m/v €1500).

### 11.2 Air condition Provisions

The air condition provisions include electrical wiring, water drainage and pipes, cooling and heating.

### 11.3 Heating Provision (optional)

A provision is included for under floor heating on the ground floor with pipes of a PEX-C type placed over a floor insulation of special polystyrene. On the upper floor piping is included for provision of water type heaters.

## 12. THERMAL INSULATION OF BUILDING

The thermal insulation of the building shall be in accordance with the study made by an ETEK (Cyprus Scientific and Technical Chamber) engineer. It will be constructed as described in paragraph 2.1 Exterior Walls, 3.4 Upper Floor/Building Roof 3.2.Ground floor Ceiling Slab.

**12.1** Based on the above a Class “A” Certificate of Energy Efficiency for the above residence has been obtained (which is attached as **Schedule D**).

# TECHNICAL CONSTRUCTION SPECIFICATIONS

## 13. EXTERIOR BUILDING CLADDING

- 13.1 Exterior Cladding (Optional HPL Decorative panel High precision Laminate with hidden placement).
- 13.2 Exterior Cladding (Optional Alucobond Aluminium Panel with hidden placement).
- 13.3 Exterior Cladding (Optional Wood with hidden placement).
- 13.4 Exterior Cladding (Optional Building of single leaf stone).

### NOTES:

1. No changes to the exterior appearance of the building are allowed. The responsibility for choosing the materials, colours and construction details shall only be borne by the architect and/or the decorator of the project.
2. Each piece of our structure consists of its own floor and roof (example on page 4).
3. Samples for melamine or embossed melamine may be found at an associate of our company.
4. All the above specifications relate only to the interior covered areas of the structure.
5. In case materials of a different value from the market value specified above are chosen by the purchaser, the resulting difference will be debited or credited, as the case may be, to the purchaser.
6. Our company does not undertake any responsibility for the quality of the materials supplied by the customer.
7. The prices presented may change depending on any relevant changes that may take place in the market prices.