

# Karim Mohamed Aboali

## BIM ENGINEER

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**Address:** Riyadh, Saudi Arabia. **Phone:** +966562179862. **Nationality:** Egyptian **DATE OF BIRTH:** 3/3/1997  
(Transferred iqama) **Language:** • Arabic • English (good) **Membership No:** 1138961  
**E-mail:** [karimaboali333@gmail.com](mailto:karimaboali333@gmail.com). **Linkedin:** [Linkedin.com/in/karimaboali/](https://www.linkedin.com/in/karimaboali/) **Driving License:** Valid Saudi Driving License.

### **SUMMARY:**

I am a BIM Structural Engineer and Coordinator with strong expertise in LOD 500 modeling for reinforced concrete and steel structures. Skilled in multidisciplinary coordination (ST, AR, MEP, Infra), clash detection, BEP, and automation using Dynamo and Revit API (C#). Proven ability to deliver high-quality BIM models, shop drawings, and quantity take-offs, while ensuring compliance with international BIM standards and protocols.

### **Professional Experience :**

#### **BIM Coordinator at First Fix-KSA :-**

**(01/2025 – Present)**

##### ❖ **Shura Island projects P06 at Red Sea (Building + Infra):-**

- Coordinated BIM models for buildings and infrastructure across ST, AR, MEP, and Civil disciplines.
- Lead clash detection and resolution processes using Navisworks, and managed uploads through BIM 360 /ACC and Aconex.
- Developed Dynamo scripts and custom Revit add-ins to automate documentation and modeling workflows.
- Reviewed models to ensure compliance with LOD 400/500 and supported implementation of BEP.
- Implement and maintain BIM standards, templates, and workflows in coordination with project teams.
- Civil 3D models up to LOD 500 and coordinator with other contractors.
- Generate schedules, drawings, and detailed documentation directly from BIM models.
- Coordinate with other Contractors & consultant & the owner.

#### **BIM Structural Engineer at FirstFix-KSA :-**

**(10/2023 – 12/2024)**

##### ❖ **Shura Island projects (P09) at Red Sea.**

- Created and managed structural BIM models (up to LOD 500) for high-rise buildings and infrastructure projects.
- Created and updated 3D BIM models and Revit families for Structural, Architectural, and MEP teams.
- Created reinforcement 3D Bim models in Revit, including accurate rebar placement and scheduling.
- Created Civil 3D models up to LOD 500 and coordinator with other contractors.
- Collaborate with multidisciplinary teams, including other BIM modelers, designers, and engineers, to ensure models are fully coordinated and integrated.
- Perform clash detection and resolve coordination issues using Navisworks and BIM issue trackers.
- Uploaded and managed federated models on **BIM 360** and **Aconex** platforms.
- Prepare Shop drawings & As Built drawings & Quantities take-off.
- Check design & Re-design drawings validation for Structure building.
- Developed custom Revit add-ins and Dynamo scripts to automate repetitive modeling and documentation tasks.

#### **EDECS El Dawlia for Engineering & Contracting :-**

**(3/2023 - 10/2023)**

- Bim Structural Engineer in New Giza.

#### **Egyptian Armed Forces Engineering :-**

**(12/2020 - 3/2023)**

- Technical Bim Engineer in Sharm-sheikh.
- Design + Re-Design Structure building in new administrative Capital.
- SHOP-Drawings of Constructure in New administrative Capital.

##### ❖ **BIM Automation Developer by (Professional Dynamo + APi C#).**

##### ❖ **Work Coordination & Clash detective by ( Naviswork + Revit )**

##### ❖ **Design of Constructure by Codes ( ACI318/19 – ECP203 )**

##### ❖ **Design of (Shallow-Deep) Foundation + Shoring system.**

##### ❖ **Calculation all of (Structure + Foundation + Steel + Soil parameters + Settlement).**

##### ❖ **SHOP-Drawings of Constructure (RFT + Concrete + Steel) By (Revit+ sofistik+Tekla) using Code (ACI 318/19 – ECP 203).**

## ❖ Education

- B.Sc. in Civil Engineering.
- El Shorouk Academy, Egypt — 2020.
- Grade: Very Good with Honours (80.47%)
- Graduation Project (Geotechnical): Excellent (88.35%)

## ❖ Software Skills:

- **REVIT (STR+AR+MEP)** ●●●●●●
- **Navisworks Manage** ●●●●●●
- **Dynamo** ●●●●●●
- **Tekla Structures** ●●●●●●
- **CSI Program ( SAP2000 – ETABS– SAFE – CSICOL )** ●●●●●●
- **(AutoCAD + Auto rebar)** ●●●●●●
- **Prokon** ●●●●●●
- **MIDAS GTS NX – MIDAS GEN – MIDAS N GEN )** ●●●●●●
- **PRIMAVERA P6** ●●●●●●
- **Microsoft Office ( WORD – EXCEL – POWERPOINT )** ●●●●●●
- **Sofistik (R.F.T)** ●●●●●●
- **BIM360** ●●●●●●
- **CIVIL 3D** ●●●●●●
- **STAAD.Pro** ●●●●●●
- **ASD** ●●●●●●
- **Limcon** ●●●●●●
- **WALLAP Program** ●●●●●●

## ❖ COURSES

- BIM MANAGEMENT – niqat global (8/2024-12/2024)
- CIVIL 3D INFRASTRUCTURE (12/2023-8/2024)
- ITI BIM Automation Developer 3 month online (2/2023-6/2023)
- Steel Design + Tekla Shop Drawing Course ( online/2023 )
- Cad master Shop-Drawings Course ( offline/2023 )
- Cad master CSI Structure Design Diploma ( offline/2019 )
- **REVIT Structure Course (online /2019 )**
- **Cad master AutoCAD Course ( offline/2019 )**
- **Midas Course ( online/2020 )**
- **BIM Bits Course ( online/2020 )**
- **Primavera P6 Course ( online/2020 )**
- **Certificate of Autodesk ((AutoCAD - Revit Structure - BIM Advance))**
- **Certification of Saudi council of Engineering**

## ❖ Works using Dynamo ([\(2\) Activity | karim aboali | LinkedIn](#))

- **Dynamo for Civil 3D:**
  - Create (Element IDs+STYLE+NAME) SCRIPT.
  - Import Shred Parameter From Excel.
  - Rename ( Pipe +Strcture) in Civil 3d.
  - Import Shred Parameter from Excel.
  - Select element in civil by (Element IDs).
- **Convert Cad To Revit :**
  - CAD to Revit ( Column+Beam+Slab + Opening-slab + Walls + Footing + Girds ).
- **Create reinforcement Structural :**
  - Beams\_(RFT+Stirrups+sections)with-column.
  - Neck\_Columns (RFT+stirrups) with foundation.
  - Footing-RFT-shape(U)+sections.
  - Columns\_( RFT+stirrups)--with—beam.
  - Footing-RFT-shape(L+U)+sections.
- **Create Dimension Element :**
  - Dim\_ (Columns axis) & Dim\_ (Foundations axis).
  - Dim\_ (Grids axis + Fix-Rename-(GRIDS)).
  - Dim elements.
  - Dim\_ (Walls with Girds).
  - Dim\_Slab.
- **Cal\_Area\_Insulation\_Founadtion.**
- **Clash\_from\_Navisworks\_Elements\_id\_color by Excel.**
- **Create\_ (Level + Plan\_Structure & Floor &ceiling) View + Create sheet + Set (viewport in sheet identity date sheet) from Excel.**
- **Create Family (Column+Beam+Foundation) from Excel.**
- **Create Section:**
  - Section View.
  - Column\_Section\_views.
  - Beam\_Create\_SectionView-(Elevation Cut)
- **Remove\_duplicated\_elements ((Structure +Arch+Mep + Elec)) + Split-Element ((Columns +Walls)) with Levels.**



Membership No. 1138951  
In accordance with the Regulation of Saudi Council of Engineers by Royal Decree M/36 Date 26/9/1423H and the Engineering Professions Practice Regulation by Royal Decree M/36 Date 19/1/1423 H.  
KARIM MOHAMED ABDELELAH ABOALI  
Membership Category: Engineer  
Specialization: Civil Engineering  
Membership Start Date: 5/8/2025



شهادة  
Certificate  
Professional Registration  
أسنداً إلى نظام الترخيص المهني للمهندسين المدنيين بالمملكة العربية السعودية رقم م/36 تاريخه 26/9/1423هـ الموافق 19/1/2023م  
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1447 هـ / 2025 م



عضوية رقم 1138951  
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Secretary General  
م. عبد المحسن بن صالح العتيبي



1447 هـ / 2025 م