

## Steel Structure Projects Contractor Guidelines

### First Stage: Design and drawings review:

In addition to the documents uploaded to the Malath website, the following documents must be provided:

Structural design with specific sections, fabrication, and assembly plans
The design model with calculation notes demonstrates structural analysis for vertical and lateral load calculations with base plate design, beam-column connection, and beam-beam connection.
Connection details.
Bracing structures in the horizontal, and vertical directions if exist.
Façade structure connection details.
Façade and roof waterproofing details.
Method of a statement outlining the construction approach and sequencing.
Corrosion protection system details with technical data sheets.

### Second stage: Site inspections visits stage:

The contractor must request the inspection visit 4 days before the visit date.

The technical inspection visit will be after the supervisor engineer's visit and before pouring concrete as follows:

#### **1) Inspection visit for foundations:**

- The Contractor must apply the work requirements as mentioned in the soil report for excavation level, blinding concrete, backfilling, soil type, tests required, compaction under the foundations, and the ground slab.
- The contractor must provide the compaction test results in case of soil improvement and must document the soil improvement works with pictures and send them to the inspector.
- The technical inspection visit will be after the foundation reinforcement works are completed.

#### **2) Inspection visit for Grade Beams:**

- The contractor must provide photos and tests of the waterproofing of the foundations and column necks before grade beam inspection visit.
- The contractor must provide the compaction test results of the backfilling before the grade beam inspection visit.
- The technical inspection visit will be after the Grade Beams (steel reinforcement, installing anchors and plates) work are completed.

#### **3) Inspection visit for Steel Framing:**

- The technical inspection visit will be after installing steel structure frames works is completed.

#### **4) Inspection visit for Steel Decking:**

- The technical inspection visit will be after all decking works (sandwich panel, all rain and water drainage works) are completed.

#### **5) Final Inspection visit:**

- The Technical inspection visit will take place after the end of all works on the project including finishing works.

#### **6) Building Envelope Inspection Visit:**

- The Technical inspection visit will take place One Year after the Final Inspection Visit.

#### **Requirements must be provided before the final visit:**

- The concrete compressive strength test results.
- Samples of used steel reinforcement delivery notes.
- Results of any tests mentioned in the soil report before issuance of the final report.
- Steel Structure delivery notes.
- Welding tests.
- Steel Structure warranty certificate stamped by the execution body.
- Waterproofing warranty certificate with waterproofing technical data sheet.
- Facade warranty certificate stamped by the execution body.

#### **Notes:**

- Any violation of the Saudi Building Code, or non-conformity with the construction plans represented by the client, the inspection visit will be rejected, and the client must pay the additional visit fees to the TIS company (690 SR including VAT), after which the additional visit will take place for the rejected stage. If the client ignores the observations and casts concrete for the rejected stage, a technical report will be issued to the insurance company documenting the rejected stage.
- A warranty certificate must be provided for construction items for which no design files, structural analysis reports, data sheet or specifications manual have been sent, as well as for the use of innovative and new building materials or techniques.
- In the case of skipping any inspection stage, the client must pay the post-pouring inspection fees, which will be quoted separately for issuing technical reports and performing tests on site.