

Quality Assurance Plan and Environmental and Working Environment Control

Project Specific QA plan for Offices Building in Vejlevej 19

Building project: Offices Building in Vejlevej 19

Building owner: Lejerbo, Ramboll Danmark

Contract: Main Contract

1. Company - Project Identification

1.1 Building owner : Lejerbo and Ramboll Danmark

Building project : Construction of Offices Building in vejlvej 19
Building period : 9/04/15-31/12/15
Date of handing-over : 31/01/2015

1.2 Firm of architects : Extra 5 arkitekter A/S

address : Sankt Annæ passage G DK-12602 Kobenhavn K
telephone : +45 33850880
fax number : +45 33850881
e-mail : extra5@nova5.dk
supervising architect: Hans Jensson.

1.3 Engineering firm : Hundsbæk Henriksen

address : Karilinegade 3 6000 Kolding
telephone : +45 79435300
fax number : +45 79435301
e-mail : Hundsbæk@hh.dk
supervising engineer: Jan Henriksen

1.4 Managing building site firm: MGL Building Company

address : østergaards vej
telephone : +45 42369997
fax number : +45 42369998
e-mail : MGL@gmail.dk
building site manager: Maria Garcia

1.5 Turnkey/ principal contractor: MGL Building Company

address : østergaards vej
telephone : +45 42369997
fax number : +45 42369998
e-mail : MGL@gmail.dk
building site manager: Maria Garcia

2. The Company's Internal Organization of the Building Project

2.1 Name of the company: MGL Building Company

address : østergaards vej

telephone : +45 42369997

fax number : +45 42369998

e-mail : MGL@gmail.dk

Master: Maria Garcia

Deputy for the master: Jorge Perez

2.2 The master/ owner of the company and if required an employee attend meetings concerning:

Project inspection : Stefan J. Richter

Master / owner / the deputy, if required, attend site meetings

Deputy :, Maria Garcia and Jorge Perez

2.3 The master/ owner distributes drawings and project changes internally in the company and collects outgoing drawings from the building site. Outgoing drawings and other documents must be kept at the office until the 5th year control has been carried out and the case has been concluded. The master/ owner is responsible for matters regarding quality.

2.4 In charge of reception control: Stefan J. Richter

Deputy : Skuli Sigvaldason

2.5 In charge of process control : Maria Garcia

Deputy : Jorge Perez

2.6 In charge of working environment control:Skuli Sigvaldason

Deputy : Maria Garcia

2.7 In charge of environmental control: Maria Garcia

Deputy : Skuli Sigvaldason

2.8 The master/ owner and the employees working on the project participate in the company's internal final control. The master/ owner participate in the general survey according to AB 92.

2.9 Sub-contractor(s)

Company name : A/S Rasmus turner

address : Sundvej 2 8700 Horsens

telephone : +45 6669998

fax number : +45 6669999

e-mail : Rasmus@gmail.dk

master / owner : Rasmus Turner

3. Quality Assurance of the Building Project

The Company's Quality and Environmental Management

Immediately after entering the contract the company will carry out a review of the project. The review includes an identification and evaluation of any problems with respect to construction and quality, including environmental and safety-related matters. The company's total performance will be documented on schedules intended for this purpose, which, together with the present reference book, make up the quality control reference book for the building project in question. In connection with building projects which are carried out in cooperation with sub-contractors, the company must ensure that the sub-contractors complete the quality control in accordance with the guidelines below. The total working process includes the following activities:

3.1 Document Control

Changed drawings, summaries of site meetings etc. must be sent to the office address. All revised drawings must be accompanied by a revised drawing schedule and the corrections must be clearly marked.

The drawings must be sent in 3 copies.

Drawings and documents must be distributed by the company, cf. point 2.3.

Documents relevant to the quality control must be kept at Management cabin at building site and must be presented at site meetings.

The contract manager must record changes and distribute drawings and other documents to the building site and to any other work place outside the building site so that only valid drawings are used for the completion of the project, and only valid documents can be found on the building site and at any other work place. The foreman brings the changes to the work place(s), and ensures that invalid drawings and other documents are removed from the building site after certification.

3.2 Purchase Control

The company prepares a list of suppliers of product declarations, test certificates, certificates and other quality-relevant documentation that each supplier can deliver with the products. Building products and other products must only be purchased from suppliers who comply with the quality requirements of the project and the company, and documentation must be submitted. A copy of the list of suppliers must be available at the building site.

3.3 Process Review

The company must plan the work process before commencement, including a project review regarding:

- Working method and quality
- Working environment and safety
- Environmental conditions, including disposal of own waste etc.

During the preparation it must be planned e.g. which control effort to imply in connection with the building project.

The results of the review must be documented using the provided schedules as a basis for a project review meeting. Empty schedules for registration of the review have been enclosed.

3.4 The Project Review Meeting

The company expects a project review meeting with the counsellors and the building owner to take place. The master/ owner and possibly an employee who will be working on the project, will partici-

pate in the meeting. At the project review meeting the company will, in accordance with the project material, present a plan for the receiving and process control effort that will be carried out in connection with the building project. Furthermore, the company will present a plan for the management of safety and environmental matters as regards the building project.

3.5 Control Plan

The control plan is a description of the inspection activities, which, as a minimum, must be carried out and documented. The control plan, which is prepared by the company, must provide information of the quality requirements of the project and the company to the deliveries as well as the work that has been carried out on the project. Documentation of this inspection will appear from the receiving and process control schedules respectively.

3.6 Receiving Inspection

When the materials and building products arrive at the building site, it must be checked that the agreed amount and the correct quality have been delivered. This receiving inspection must be carried out by the master/ owner or an employee working on the building project, cf. point 2.4. This inspection must be documented. If required by the project plan or if the company finds it of importance in relation to the quality of its work, an additional receiving inspection of particular materials/ building products must be made. This particular inspection will be shown in a receiving inspection scheme. The receiving inspection includes matters relevant to safety and environment. An example of an empty receiving inspection scheme has been enclosed.

3.7 Process Control

In the course of the project the master/ owner or someone appointed by the master/ owner, cf. point 2.5, performs an inspection of the work that has been carried out. This inspection must be documented in a process control scheme. If required by the project plan or if the company finds it of important, an additional process inspection of particular work processes must be made. This particular inspection will be shown in a process control scheme and may be documented by photographs in connection with certain agreements. The process control includes matters relevant to safety and health. An empty process control scheme has been enclosed.

3.8 Final Control

When the work or defined parts hereof have been completed, the contract manager and the foreman or an employee appointed by him performs a final inspection of the work. This inspection is an internal activity, and documentation may be presented. Defects, if any, must be registered and remedial action must be taken immediately.

Furthermore, control documentation, certificates and other documentation that has been agreed must be checked and handed over to the building owner. An empty final control scheme has been enclosed.

3.9 Information.

Before commencement of the work, skilled workers and apprentices must be informed of the current and particularly difficult work processes, including quality, safety and environmental requirements. In special cases project technicians, building site inspection or suppliers may be desired to attend. This may be agreed at the project review meetings. Furthermore, a sketch illustrating the project work or a written instruction, e.g. description of procedures, user instructions or a "*Byg-Erfa*"- magazine, may be prepared.

3.10 Handling Errors and Defects in Materials and Work

In order to prevent an unintentional use of non-conforming materials, products or services, the company must ensure that all materials or building products which do not conform with the requirements of the project, are returned or taken aside according to an agreement with the supplier, or that these materials or products can be used according to a documented authorization from the building owner. Rejected deliveries must be clearly marked until it has been decided whether the materials are to be used or discarded. Discarded materials or building products must be removed from the building site as soon as possible.

Non-conforming services must be clearly defined until the matter has been corrected or accepted by the building owner, and this acceptance has been documented.

3.11 Handling Deviations from the Project Material

If the company identifies errors or inconsistencies in the project material, the work or delivery in question must be terminated. The building owner and/or his counsellors must be contacted immediately in order to clarify the deviation. The work or delivery must not be resumed before the deviation has been corrected or accepted by the building owner/his counsellors, and this acceptance has been documented.

3.12 Documentation

A copy of the documentation of the quality control must be handed over to the building owner or his counsellors according to agreed conditions. All documents including documentation of the quality and environmental control must be kept on file for at least five years after the case has been closed.

3.13 Quality Management Revision

In order to ensure that the quality management system conforms to the company's objectives as regards quality and politics, random visits at the building site will be carried out to control that quality and control plans are complied with. These random visits will be made at least once during the contract/work to assess the system, and ongoing adjustments will be made. Comments from expert supervisions must also be included in the assessment.

CASE Offices building in Vejlevej 19

no.	Subject	Method/how	Scope/frequency	Time	Requirements	Requirements doc	Responsability/ who	Performed reference
	Documents							
	Materials	Visual	Every material delivered				Maria	
	Process control	Visual	Every activity done				Maria/Jorge	
	Final control	Visual	End of activities				Maria	