## Project System Audit Architectural Group

Note:

Not all items of the checklist shall be checked. It depends on the status of the work and whether it is the first, second or third audit.

## 1. Project Definition

**1.1** Is the Project Procedure and Execution Manual (PPEM) available?

What is the status, issue and date?

- Does the PPEM properly describe the scope of work and services expected from your discipline to execute the work?
- 1.3 Are the applicable governmental, local authorities design codes/ norms/rules/ standards design guides, listed in the PPEM?

Are they available in the discipline group?

1.4 Are Company/client, standards/norms/ guides/practices/procedures/forms and specifications, applicable and to be used by your discipline being listed in the PPEM??

Are they available in your group?

Are specific project (account) code specifications applicable and are they used?

Have these been certified, including client's comments incorporated?

- Does the PPEM contain an instruction on how to handle project variations of the original scope of work regarding administration, approvals and distribution prior to be implemented?
- **1.7** If client's standards/details/forms, etc. must be used:
  - a. are these documents available in the group?
  - b. are they technically acceptable for this type of job?

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# 2. Engineering Technical

**2.1** What is the status of the conceptual building design package?

Has subject package been reviewed/approved by client?

**2.2** What is the status of the building permit application package?

Has subject package been reviewed/approved by client?

**2.3** What is the status of the building design specification?

Has subject specification been reviewed/ approved by client?

What is the status of the Architectural Consultancy requisition?

Has subject requisition been reviewed/ approved by client?

- 2.5 How is it ensured that specifications prepared by Company are coordinated with other disciplines concerned, where required?
- **2.6** Based on which issue of the plot plan(s) are the overall building locations prepared? State issue no., date and status.
- 2.7 Are building materials in compliance with the applicable civil codes?
- 2.8 Is a soil report available containing all data required for detail design by the architectural consultant?
  - state issue, date and status.
- 2.9 Have decisions been made on the type of buildings to be designed, e.g. structural steel framing versus concrete, cast-in-situ versus prefabrication?
- **2.10** Has a typical top of finished floor elevation been established in view of underground facilities?

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- design of the building foundations?
- 2.12 How many architectural consultants have been invited to complete a questionnaire?

How many have been invited to bid?

- 2.13 What is the status of the building bid package?
- 2.14 Relative to building design and engineering, do particular risks exist which could ultimately make Company liable and add costs (Dfl.) to the project?

#### **Engineering General** 3.

- 3.1 Is home office quantification required?
- 3.2 What filing system has been followed?
- 3.3 Are checkprints and masterprints of documents available?
- 3.4 Are previous issues of documents kept with the discipline?

How have they been marked to distinguish them from the latest issue?

#### 4. **Consultant Control**

- 4.1 Has the Architectural Consultant questionnaire been filled out and backed up with sufficient documentation of experiences of both the organization and its employees?
- 4.2 Have CV's of assigned personnel been received?
- 4.3 Who have been involved in the bid evaluation and final selection of consultant(s)?
- 4.4 Does the architectural engineer attend preaward/bid clarification meetings for consultants and building sub-contractors?
- 4.5 Who is responsible for expediting and VPC of consultant documents?

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- **4.6** How does the Company architectural engineer control and coordinate:
  - design and construction packages for building services?
  - the definitive building design?
  - the building permit application package?
  - the building construction specifications?
  - color schemes, finishing schedules, material schedules, master key schedules and static and/or dynamic computations?
- **4.7** Does Company formally approve above documents?
- **4.8** What is the approval status of architectural/building materials?
- **4.9** What evidence can be shown that designs are in accordance with the design specifications?
- **4.10** Have the authority requirements been established, i.e.:

Which authorities are involved?

Which documents have to be submitted for approval and by whom?

What is the status of the authority permit application packages?

Who is responsible for timely submittal of these packages to the authorities?

**4.11** Who is responsible for the review/approval of technical sub-contract documents?

What is the current status of receipt?

**4.12** What procedure is used to select potential building contractors?

How are these contractors selected?

Who are involved?

**4.13** What is the review/approval status of construction documents?

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5.	Job Control				
5.1	Where has the budget for the architectural effort been defined?				
5.2	Did the architectural engineer prepare, or accept the manhour estimate, planning and manpower curve in executing his scope of work?				
5.3	Does a level IV schedule exist for documents to be produced by the discipline?				
5.4	Has the Project Execution Control System (PEC) been prepared for the scope of work and services required?				
	Is it used for progress measurement?				
5.5	How much is the progress measured against the PEC summary for the architectural group?				
	State date.				
5.6	What is the efficiency reported to date?				
5.7	How does the final manhour forecast relate to the assigned manhour budget?				
5.8	Are changes in the scope of work being processed in time.				
5.9	Are the PEC and scheduled manhours being adjusted based on the approved project variations?				
5.10	Does the architectural engineer receive a copy of the weekly LDS print-out?				
5.11	Are planned milestones met in time?				
5.12	Is there a regular coordination meeting with the project/engineering management and other lead engineers, including planning and cost control?				
5.13	To what extent and by whom, are the planning, cost and engineering managers informed, when changes and/or slippages are encountered?				

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## **Product Audit Checklist**

### Note:

Any major deviation from requirements shall be tagged in the 'No' column and be elaborated on in the main report under Product Audit Findings.

Documents reviewed:

reQuestions		YES	NO	NA
1.	Are input data available?			
2.	Have they been formally issued?			
3.	Have the data been qualified? (what is/is not included)			•
4.	Have they been screened for completeness?			
5.	Have calculations been performed?			
6.	Have these calculations been checked?			
7.	Has the product been formally checked?			
8.	Is checking evidence available?			
9.	Do the issued documents contain sufficient information?			
	Have multi-discipline input/comments been obtained?			
	Are the issued documents checked for compliance with client, licensor and authority specifications?			
12.	Have all deviations from client, licensor and authority specifications been discussed and formally agreed upon with the relevant party?			
13.	Are supplier data included in the document?			
14.	Have supplier data been qualified?			
15.	Have all requirements of the document been covered?			
16.	Have the document requirements been discussed with the internal client?			
17.	Have the document requirements been discussed with the external client?			
18.	Have any comments been received on earlier issues of the document?			
19.	Have all comments been incorporated in later issues?			
20.	If not, has agreement been reached about the implementation of comments?			
21.	Have changes been clearly indicated?			
22.	Has the PM or EM been involved in this discussion in case of comments from the client?			
23.	Has the document been reviewed by the discipline manager or his delegate, if required?			
24.	Has the document been formally approved at the proper authorization level?			

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