ISO 9001:2015 > Architecture

This table translates the structure and language of ISO 9001:2015 to the structure and language of architectural practice. It is intended to be read with Chapter 5.2 in *Managing Quality in Architecture, 2nd Edition*.

The Standard		Commentary	Relationship to Design Practice
4.0	**Quality management system** (heading only)	This Section sets out the overall structure and methodology for a compliant quality system, specifically to "establish, document, implement, maintain … and continually improve" such a system	Fundamental to the decision to pursue a formal quality management system
4.1	General requirements	Sets out six steps needed for implementation, beginning with identification of the processes needed for the quality management system	These six steps apply to all aspects of the firm's QMS, including non-documented procedures Documentation not required – the steps will be evident in the other procedures
4.2	Documentation requirements	(heading only)	
4.2.1	General	Defines general documentation requirements and discusses the extent of such as system	Here the firm identifies which procedures are, or are not documented, and why – documentation needed
4.2.2	Quality manual	Outlines quality manual requirements	A quality manual is required, but not a procedure for developing it
4.2.3	Control of documents	Outlines seven requirements for document control	Documented procedure is mandatory
4.2.4	Control of records	Outlines basic record-keeping requirements	Documented procedure is mandatory
5.0	**Management responsibility**	(heading only)	
5.1	Management commitment	Describes how top management demonstrates its commitment to its QMS, in five ways	The firm will need a corresponding description, however brief
5.2	Customer focus	Describes how top management demonstrates its approach to customer satisfaction	The firm will need a corresponding description, however brief
5.3	Quality policy	Describes top management's responsibility for overseeing the quality policies, in five ways	The firm will need a corresponding description
5.4	Planning	(heading only)	
5.4.1	Quality objectives	Describes requirements for quality objectives	The firm will need written objectives
5.4.2	Quality management system planning	Describes management's quality planning responsibilities	Applies to all organizations, but may not need to be documented where effective communication channels exist

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5.5	Responsibility, authority and communication	(heading only)	
5.5.1	Responsibility and authority	States management's responsibility for defining and communicating responsibilities and authorities	Applies to all organizations; documentation not required
5.5.2	Management representative	Describes appointment and duties of the representative (generally referred to in the QM handbook as the "Quality Manager")	Applies to all organizations, and should be documented
5.5.3	Internal communication	States the need for effective communication	Not required to be documented, but this is the place to describe how your communication works if you are using that as a reason not to document some processes
5.6	Management review	(heading only)	
5.6.1	General	Describes top management's review responsibilities, and the need for recording them	Review is required, to plan – but documentation is redundant; the records will demonstrate compliance
5.6.2	Review input	Describes seven types of required inputs	Documentation not required, but prepared review agendas will facilitate compliance
5.6.3	Review output	Describes review output requirements	Output records will demonstrate compliance
6	**Resource management**	(heading only)	
6.1	Provision of resources	Sets minimum HR requirements, for system operation and customer satisfaction	Documentation not needed where the HR function includes appropriate references
6.2	Human resources	(heading only)	
6.2.1	General	Sets need for competence	Documentation not needed where the HR function identifies competence
6.2.2	Competence, awareness and training	Sets standards in these areas, and the need for records	The required records are the documentation needed; procedure documentation not needed where the intent is embedded in the HR policies and procedures
6.3	Infrastructure	Sets simple standards for facilities and supporting services	Documentation not required
6.4	Work environment	Sets simple standards for the work environment, with the criteria being the ability to achieve "uniformity of product"	This might not appeal to architects who believe "uniformity" is bad design! As the environment is apparent, documentation is not needed
7	**Product realization**	(heading only)	
7.1	Planning of product realization	Definition and requirements, for what we would call "design planning"	Good planning is so critical to the processes of design; documentation of the planning process is essential Records are required

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7.2	Customer-related processes	(heading only)	
7.2.1	Determination of requirements related to the product	General guidelines for determining customer (client) requirements	Good briefing is critical to the processes of design; documentation of the briefing process is essential
7.2.2	Review of requirements related to the product	Guidelines for review of client and other requirements (such as building codes), and amendments	Unless the review process is embedded in the firm's culture and is compliant with 7.2.2, documentation is required
7.2.3	Customer communication	Guidelines for maintaining same	In most firms, embedded processes would be adequate and compliant – check yours – particularly in respect to scope, time and cost changes
7.3	Design and development	(heading only)	There are seven subclauses to this clause, all of which are critical to the design firm's output, and which therefore require documentation
7.3.1	Design and development planning	Design planning requirements, including stage and interface control	See 7.3 comment
7.3.2	Design and development inputs	Input definition, control and review	See 7.3 comment
7.3.3	Design and development outputs	Output documentation requirements, specifically to enable verification against input requirements	See 7.3 comment
7.3.4	Design and development review	Review requirements, aimed at determining if outputs CAN meet input requirements, and identification of problems and follow-up actions	See 7.3 comment. Refer Section 10.5 Review results must be recorded
7.3.5	Design and development verification	A special kind of review, to ensure that outputs HAVE met input requirements	See 7.3 comment Review results must be recorded
7.3.6	Design and development validation	Validation looks at the degree to which design outputs meet *intended use*, which may be different from stated requirements	The design process equivalent of validation is post-occupancy evaluation (POE) Review results must be recorded
7.3.7	Design and development changes	Requirements for identification, documentation and control of design/development changes The definition of "change" is important here - refer Section 10.5	See 7.3 comment Review results must be documented
7.4	Purchasing	(heading only)	
7.4.1	Purchasing process	Purchasing control, and evaluation and selection of suppliers	For design firms, this requirement applies primarily to subconsultant selection, and typically would require documentation Review results must be recorded

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7.4.2	Purchasing information	Requirements for purchasing information	For design firms, this requirement applies primarily to briefing of subconsultants, and typically would require documentation
7.4.3	Verification of purchased products	Requirements for checking that suppliers' output meets their input requirements	Checking of subconsultants' work is typically institutionalized in most design firms, and usually should only require reference rather than separate documentation
7.5	Production and service provision	(heading only) Different authorities will have different views on the degree to which this clause group applies to the design firm	If you take the view that "production and service provision" means construction of the project, and is the responsibility of the contractor, then this clause group would apply only if you are a design builder
7.5.1	Control of production and service provision	Defines methods of achieving productions and service operations control	See 7.5 comment
7.5.2	Validation of processes for production and service provision	This is the production and services operations version of design and development validation	See 7.5 comment
7.5.3	Identification and traceability	Simple requirements for same	See 7.5 comment Where firms choose to include this requirement, the usual "title block" controls typically satisfy this clause
7.5.4	Customer property	Simple requirements for the care of same, including care of intellectual property	Where the design firm takes control of the client's property (as many interior designers do), documentation would be required
7.5.5	Preservation of product	Requirements for handling, shipping and delivery	See 7.5 comment
7.6	Control of monitoring and measuring devices	Requirements for maintaining the integrity of calibratable systems	Generally only applies to design firms when they use surveying instruments to lay out or check sites or construction
8	**Measurement, analysis and improvement**	(heading only)	
8.1	General	Outline requirements for the measurement, analysis and improvement functions, including (where applicable) statistical techniques	Documentation required for design firms, because these functions include mandatory documentation items (see comments below)
8.2	Measuring and monitoring	(heading only)	
8.2.1	Customer satisfaction	Monitoring of client satisfaction is required	Most firms will not have adequate processes for this requirement; documentation is recommended
8.2.2	Internal audit	Establishes minimum requirements for internal audits	Documented procedure is mandatory

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8.2.3 Monitoring and measurement of processes	Establishes minimum requirements for monitoring realization processes, which become the records that are subject to audit	Most firms will not have adequate processes for this requirement; documentation is essential in order to enable the audit function
8.2.4 Monitoring and measurement of product	Establishes minimum requirements for monitoring product and service operations, which become the records that are subject to audit	Required only to the extent that clause group 7.5 applies Some design firms use this category to describe monitoring of construction, but this properly refers to the contractor's monitoring of construction
8.3 Control of nonconforming product	Identification and control requirements for product (including services) which do not meet requirements	Documented procedure is mandatory
8.4 Analysis of data	Establishes requirements for methods to collect and analyze data required for management review of quality system functioning	Most firms will not have adequate processes for this requirement; documentation is essential in order to enable the management review function
8.5 Improvement	(heading only)	
8.5.1 Continual improvement	Establishes requirements, including planning, for continual improvement function	Most firms will not have adequate processes for this requirement; documentation is essential in order to enable the corrective and preventative action functions
8.5.2 Corrective action	Establishes requirements for actions to eliminate the *causes* of nonconformities, to prevent recurrence	Documented procedure is mandatory
8.5.3 Preventative action	Establishes requirements for actions to eliminate the causes of *potential* nonconformities, to prevent occurrence	Documented procedure is mandatory