

Revised Application Documentation: Version 5 /22 May, 2015

QUALIFICATION FILE – CONTACT DETAILS OF SUBMITTING BODY

Name and address of submitting body:

Construction Skill Development Council of India

Address:- 204, Aashirwad Complex, D-1, Green Park, New Delhi - 110016

Tel: +91-11-46584466

Name and contact details of individual dealing with the submission

Name: Ms. Jancy Mathew

Position in the organisation: Head Standards and Research

Address if different from above:

Same as above

Tel number(s): +91-11-46584466

E-mail address: standards@csdcindia.org

List of documents submitted in support of the Qualifications File

1. Career Map of Assistant Shuttering Carpenter - Annexure 1
2. QP CON/Q 0302- Annexure 2

3. QUALIFICATION FILE SUMMARY

Qualification Title	Assistant Shuttering Carpenter CON/Q0302		
Body/bodies which will assess candidates	<ul style="list-style-type: none"> • MCG • Star Projects 		
Body/bodies which will award the certificate for the qualification.	CSDCI		
Body which will accredit providers to offer the qualification.	CSDCI		
Occupation(s) to which the qualification gives access	Shuttering Carpentry		
Proposed level of the qualification in the NSQF.	2		
Anticipated volume of training/learning required to complete the qualification.	350 hrs		
Entry requirements / recommendations.	5th Standard / Helper Carpenter – Shuttering & Scaffolding Level-1 qualified		
Progression from the qualification.	Carpenter (Conventional and System)		
Planned arrangements for RPL.	The curriculum is in place for 56 hrs & 120 hrs. It has pre assessment having components of generic NOS and technical NOS and demonstration as well		
International Comparability	Compared with UK NOS		
Formal structure of the qualification			
Title of unit or other component (include any identification code used)	Mandatory/ Optional	Estimated size (learning hours)	Level
CON/N0013:Health, Safety & Environment	Mandatory	32	2
CON/N0015:Material Handling & Storing	Mandatory	36	2
CON/N0042:Making of Shutter for Formwork	Mandatory	72	2
CON/N0017:Erection and Dismantling of different types of scaffolding	Mandatory	48	2
CON/N0043:Assembling & Dismantling of Conventional Formwork foundation, Column, Wall and Tie-Beam	Mandatory	162	2
CON/N0044:Assembling & Dismantling of System Formwork for Foundation, Column, Wall and Tie Beam	Mandatory		2

Please attach any document giving further detail about the structure of the qualification – eg a Curriculum or Qualification Pack.

Give details of the document here:

1. QP CON/Q0302- Annexure 2

SECTION 1

ASSESSMENT

Name of assessment body:

If there will be more than one assessment body for this qualification, give details.

- MCG
- Star Projects

Will the assessment body be responsible for RPL assessment?

Give details of how RPL assessment for the qualification will be carried out and quality assured.

Give details of how RPL assessment for the qualification will be carried out and quality assured.

The RPL assessment will be carried out through screening, identifying the skills gaps, provide bridge training to cover the competency gap and then conduct final assessment of the candidates

Describe the overall assessment strategy and specific arrangements which have been put in place to ensure that assessment is always valid, consistent and fair and show that these are in line with the requirements of the NSQF:

trained & certified by CSDCI through Training of Trainers program. The assessment involves two processes. The first process is gathering the evidence of the competency of individuals. The second part of the assessment process is the judgement as to whether a person is competent or not. The assessment plan contains the following information:

- What will be assessed, i.e. the competency based on each NOS
- How assessment will occur i.e. methods of assessment
- When the assessment will occur
- Where the assessment will take place i.e. context of the assessment (workplace/simulation)
- The criteria for decision making i.e. those aspects that will guide judgements and
- Where appropriate, any supplementary criteria used to make a judgement on the level of performance.

The assessment is conducted through theory, viva voce and practical.

Please attach any documents giving further information about assessment and/or RPL.

Give details of the document(s) here:

ASSESSMENT EVIDENCE

Complete the following grid for each grouping of NOS, assessment unit or other component as per the assessment criteria. Insert the required number of rows.

CRITERIA FOR ASSESSMENT OF TRAINEES

Assistant Shuttering Carpenter

CON/Q0302

Construction Skill Development Council of India

Guidelines for Assessment

1. Criteria for assessment for Qualification Pack has been created based on the NOSs and performance criteria by CSDCI. Each Performance Criteria (PC) has been assigned marks proportional to its importance within NOS and weightages have also been given among the NOSs accordingly. CSDCI has laid down the proportion of marks for Skills, Theory/Knowledge and Behaviour / Attitudes for each PC.
2. The assessment of the theory/knowledge will be based on written test/viva-voce or both while skill test shall be hands on practical. Behavior and attitude will be assessed while performing the task.
3. The assessment shall be done as per the assessment sheets devised by CSDCI and accordingly the assessment agencies in consultation with CSDCI will create unique question papers for theory/knowledge and attitude for each candidate at each CSDCI accredited testing centers (as per assessment criteria below).
4. The assessment agencies will conduct the assessment as per the guidelines given by CSDCI giving unique evaluations for skill & knowledge for every student at each CSDCI accredited testing center.
5. To pass the Qualification Pack, every trainee should score a minimum of 80% in Skill, 50% in Knowledge & Behavior and 50% in Written test separately in each attribute. In addition, he should pass in each NOS with minimum 40% marks.
6. Each student at Level-2 has to pass in Skill, Knowledge and Behavior as per the percentage given below in totality while individual failing to score minimum pass marks of 40% in any one of the NOS then he will have to re-appear for that one NOS only within 60 days of his test for final certification. After 60 days he will have to appear in all NOSs

Assessable Outcome	Assessment criteria	Total Mark	Out Of	Theory	Skills Practical
CON/ N 0013: Health, Safety & Environment	PC1. Identify and right use of Personal Protective Equipments for Head Protection, Fall Protection, Foot Protection, Face & eye Protection, Ear Protection, Hand & BodyProtection and Respiratory Protection.	16	2	5	11
	PC2. Follow Do's and Don'ts during working at heights		3		
	PC3. Carry out various safety measures, mock drills relevant to task during work and evacuating at emergency.		2		
	PC4. First Aid practice such as use of basic dressing materials and bandages, resuscitation practices.		2		
	PC5. Safe waste disposal and pollution control of organic and inorganic waste material, use of sound control and protection methods.		3		
	PC6. Handle all health hazards relevant to formwork assembly / preparation and handling of materials		2		
	PC7. Safe coordination during erection of formwork and take precautions while working at heights.		2		
	Total	16	11	5	
CON/ N 0015: Material Handling &	PC1. Load, unload and shift formwork material as per standard practice.	19	4	1	3
	PC2. Follow standard procedure for storage, stacking and maintenance of formwork material		5	2	3

Storing	PC3. Handle loose material & fluids efficiently		5	2	3
	PC4. Understand, identify and use hooks, rings and shackles and arrange slings as per configurations.		5	1	4
	Total		19	6	13
CON/ N 0042: Making of Shutter for Formwork	PC1. Identify and use tools, components & materials required for making Shutter	39	4	1	3
	PC2 Mark, measure, cut raw timber and ply woods manually & mechanically		5	1	4
	PC3. Plane timber both by mechanical and manual means		5	1	4
	PC4. Utilize different type of joints as per requirement		5	1	4
	PC5. Make shutters as per specification requirements relevant to use		5	1	4
	PC6. Make Shutter as per tolerance given below: Ø Length : ±1mm Ø Breadth : ±1mm Ø Diagonal : ±2mm Ø Edge planeness : ±1mm Ø Edge Squareness : ±1mm		5	2	3
	PC7. Keep work place clean and tidy		5	1	4
	PC8. The sequence of the task should be as per method of statement		5	1	4
Total		39	9	30	
CON/ N 0017: Erection and Dismantling of different types of scaffolding	PC1: Arrange, shift, and stack required materials, tools and tackles at the identified location.	26	4	1	3
	PC2. Identify, select and use scaffolding materials platforms, props, timber, etc. as per quality, type, handling and quantity measurement.		5	2	3
	PC3. Identify the basic checking tools such as plumb bob and water tube level		5	1	4
	PC4. Erect and dismantle different types of scaffoldings		4	1	3
	PC5. Complete all task as per the Productivity requirement.		4	1	3
	PC6. Maintain site tidiness.		4	1	3
	Total			26	7
CON/ N 0043: Assembling & Dismantling of Conventional Formwork for Foundation, Column, Wall and Tie- Beam	PC1. Right selection and use of ballies, planks, pipe, coupler and plates to withstand concrete loads	42	4	1	3
	PC2. Identify tools, safety gadgets and consumables required		4	1	3
	PC3. Tie different knots effectively		4	1	3
	PC4. Shift shutter without any damage		4	1	3
	PC5. Position the formwork in predetermined grids		4	1	3
	PC6. Inspect Line, label, alignment and dimension of Formwork		4	1	3
	PC7. Dismantle as per sequence and instruction		4	1	3

	PC8. Fix the Formwork as per the given tolerance Ø Columns plumb up to 3m height : ±3mm Ø Piers plumb 3 to 6m height : ±6mm Ø Walls plumb above 6 m height : ±6m Ø Variation in label 6mm in 6m : ±10mm maximum Ø Variation from plan position up to 60mm : +6mm/-3mm Ø Variation from plan position over 6m bay : ±25mm Ø Variation in footings C/S dimension thickness : +25mm/-12mm		4	1	3
	PC9. Anchor supports as per sketch / instructions		4	1	3
	PC10. Follow method statement for sequence of task		3		2
	PC11. Follow standard safety procedure and housekeeping practices		3	1	3
		Total	42	10	32
CON/ N 0044: Assembling & Dismantling of System Formwork for Foundation, Column, Wall and Tie Beam	PC1. Identify & use required tools, components and materials relevant to task	45	4	1	3
	PC2. Selection and use of consumables such as nails, shuttering oil, cotton waste etc.		4	1	3
	PC3. Shift & lift shutters using lifting hook		5	1	4
	PC4. Position Formwork in predetermined grids		4	1	3
	PC5. Lap vertical shutters with H-Beam splice		5	1	4
	PC6. Brace & support formwork using CT prop and anchor the support as per standard norms		4	1	3
	PC7. Fix the Formwork as per the given tolerance Ø Column plumb upto 3m height : ±3mm Ø Piers plumb 3 to 6m height :±6mm Ø Wall plumb above 6m height : ±6mm Ø Variation in level 6mm in 6m : ±10mm maximum Ø Variation from plan position 6m bay : ±12mm Ø Variation from plan position over 6m bay : ±25mm Ø Variation in C/S upto 600mm : +6mm / -3mm Ø Variation in C/S over 600mm : ±6mm Ø Variation in footings C/S dimension thickness : +25mm/-12mm		7	1	6
	PC8. Keep work place clean and tidy		4	1	3
	PC9. The sequence of the task should be as per method of statement		4	1	3
	PC10. Follow standard safety procedure and housekeeping practices		4	1	3
	Total	45	10	35	

SECTION 2

EVIDENCE OF NEED

What evidence is there that the qualification is needed?

Please refer to the attached list of job roles and occupations as per the attachment and their career paths as per Annexure 1, which have been derived through extensive industry interactions facilitated from 10 workshops and site visits conducted and interaction with 500+representatives from different organizations all over the country.

What is the estimated uptake of this qualification and what is the basis of this estimate?

The incremental Manpower Gap between 2008 and 2022 is 1892000 under Shuttering Carpentry Occupation

What steps were taken to ensure that the qualification(s) does/do not duplicate already existing or planned qualifications in the NSQF?

QPs for Job Roles of various related SSC's were studied to ensure that there is no duplicity.

What arrangements are in place to monitor and review the qualification(s)? What data will be used and at what point will the qualification(s) be revised or updated?

The comments, feedback and suggestions were collected through interaction with industry during August'14 to Feb'15. The same will be compiled and justifiable changes will be incorporated in the next/updated version of the QP. This QP is set to be revised post 31st March 2015.

Please attach any documents giving further information about any of the topics above.

Give details of the document(s) here:

SECTION 3

SUMMARY EVIDENCE OF LEVEL

Summary of Direct Evidence:

Justify the NSQF level allocated to the QP by building upon the five descriptors of NSQF. Explain the reasons for allocating the level to the QP.

Generic NOS is/are linked to the overall authority attached to the job role.

Assistant Shuttering Carpenter CON/Q0302					
Process required	Professional Knowledge	Professional Skills	Core Skills	Responsibility	Level
<p>Job holder performs works which are regular and repetitive such as loading, unloading, shifting of materials, making of shutter boards for formwork, support in erection and dismantling of scaffolding & formwork. The major activities undertaken by the job holder are more practical in nature which are less complex and are always performed under instruction of superior and therefore Job holder is kept at Level 2</p>	<p>Job holder is expected to have basic knowledge about tools, components and equipments, their standard size and use. He/she should also have knowledge related to handling of different types of formwork materials, basic sequential steps for making of shutter boards, erection and dismantling of scaffolding and formwork. The job holder is also expected to understand working instruction and work under close supervision and therefore it kept at Level 2</p>	<p>Job holder is expected to select and use hand & power tools, equipments which are regularly required for lifting & shifting operation, cutting of timber & plywood for making of shutter boards, able to identify & use personal protective equipments and take regular safety measures such as fixing safety nets. He/she performs task and demonstrate skills which are routine and repetitive in nature such as erection and dismantling of formwork and scaffolding under the assistance of trade senior, therefore it is</p>	<p>Job holder is expected to have reading and writing skills in atleast one language along with basics of arithmetic calculation. Job holder is expected to read and understand instructions, guideline, sign boards, safety rules and shall be able to communicate orally and effectively with team members in atleast one language. Since the required skill level refers to be entry levelled as it may be obtained by very basic educational qualification, the job role can be placed at level 2</p>	<p>Job holder always works under instructions and close supervision of trade senior. The job holder is not responsible for the completion of activity or quality of outcome as main work is to assist in erection and dismantling of scaffolding erection or making of shutter boards. The overall work is always checked by superiors and outcomes are measured in quantitative terms rather than qualitative terms therefore job holder is kept at Level 2</p>	<p>2</p>

		kept at Level 2			
Level 2	Level 2	Level 2	Level 2	Level 2	

OTHER EVIDENCE OF LEVEL [This need only be filled in where evidence other than primary outcomes was used to allocate a level] (**Optional**)

Summary of other evidence (if used):

SECTION 4

EVIDENCE OF RECOGNITION OR PROGRESSION

What steps have been taken in the design of this or other qualifications to ensure that there is a clear path to other qualifications in this sector?

Please refer to attached career path as per annexure 1 which clearly defines the career path.

Please attach any documents giving further information about any of the topics above.

Give details of the document(s) here:

1. Career Map of Assistant Shuttering Carpenter - Annexure 1
2. QP CON/Q0302- Annexure 2

Annexure 1

Career Map

