

QUALIFICATION FILE

Bricklaying (WorldSkills)

☒ Short Term Training (STT) ☐ Long Term Training (LTT) ☐ Apprenticeship

☒ Upskilling ☐ Dual/Flexi Qualification ☒ For ToT ☒ For ToA

☒ General ☐ Multi-skill (MS) ☐ Cross Sectoral (CS) ☐ Future Skills ☐ OEM

NCrF/NSQF Level: 4.5

Submitted By:

Construction Skill Development Council of India

Address: Tower 4B, DLF Corporate Park, 201&, 202 4B, Mehrauli-Gurgaon Rd, DLF Phase 3, Gurugram, Haryana 122002

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Section 1: Basic Details

1.	Qualification Name	Bricklaying (WorldSkills)																						
2.	Sector/s	Construction																						
3.	Type of Qualification: <input checked="" type="checkbox"/> New <input type="checkbox"/> Revised <input type="checkbox"/> Has Electives/Options <input type="checkbox"/> OEM	NQR Code & version of existing/previous qualification: (change to previous, once approved)			Qualification Name of existing/previous version: NA																			
4.	a. OEM Name b. Qualification Name (Wherever applicable)	NA																						
5.	National Qualification Register (NQR) Code &Version (Will be issued after NSQC approval)	QG-4.5-CO-01786-2024-V1-CSDCI			6. NCrF/NSQF Level: 4.5																			
7.	Award (Certificate/Diploma/Advance Diploma/ Any Other) (Wherever applicable specify multiple entry/exits also & provide details in annexure)	Certificate																						
8.	Brief Description of the Qualification	A bricklayer generally works on commercial and residential projects. They are responsible for building or repairing associated structures in accordance with the construction plans. There is a direct relationship between the nature and quality of the product required and the payment made by the customer. Therefore, the bricklayer has a continuing responsibility to work professionally in order to meet the requirements of the customer and thus maintain and grow the business. This includes working harmoniously with other trades in order to optimize efficiency and minimize mistakes.																						
9.	Eligibility Criteria for Entry for Student/Trainee/Learner/Employee	Entry Qualification & Relevant Experience: The Competitors must not be older than 22 years in the year of the Competition.																						
10.	Credits Assigned to this Qualification, Subject to Assessment (as per National Credit Framework (NCrF))	17			11. Common Cost Norm Category (I/II/III) (wherever applicable): I																			
12.	Any Licensing requirements for Undertaking Training on This Qualification (wherever applicable)	NA																						
13.	Training Duration by Modes of Training Delivery (Specify Total Duration as per selected training delivery modes and as per requirement of the qualification)	<input checked="" type="checkbox"/> Offline <input type="checkbox"/> Online <input type="checkbox"/> Blended <table border="1"> <thead> <tr> <th>Training Delivery Modes</th> <th>Theory (Hours)</th> <th>Practical (Hours)</th> <th>OJT Mandatory (Hours)</th> <th>OJT Recommended (Hours)</th> <th>Total (Hours)</th> </tr> </thead> <tbody> <tr> <td>Classroom (offline)</td> <td>150</td> <td>360</td> <td></td> <td></td> <td>510</td> </tr> <tr> <td>Online</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table> (Refer Blended Learning Annexure for details)					Training Delivery Modes	Theory (Hours)	Practical (Hours)	OJT Mandatory (Hours)	OJT Recommended (Hours)	Total (Hours)	Classroom (offline)	150	360			510	Online					
Training Delivery Modes	Theory (Hours)	Practical (Hours)	OJT Mandatory (Hours)	OJT Recommended (Hours)	Total (Hours)																			
Classroom (offline)	150	360			510																			
Online																								
14.	Aligned to NCO/ISCO Code/s (if no code is available mention the same)	NCO-2015/7112.0200																						

15.	Progression path after attaining the qualification <i>(Please show Professional and Academic progression)</i>	NA	
16.	Other Indian languages in which the Qualification & Model Curriculum are being submitted	NA	
17.	Is similar Qualification(s) available on NQR-if yes, justification for this qualification	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No URLs of similar Qualifications:	
18.	Is the Job Role Amenable to Persons with Disability	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If "Yes", specify applicable type of Disability:	
19.	How Participation of Women will be Encouraged	Participation of women in skill competitions is essential to empower them. Women today form a significant part of the workforce, however, the recognition of their participation in it has always been vastly underestimated. One way to improve their meaningful participation is improving their skill capacity. Women today possess a variety of advantages in both technical and soft skills. For example, social skills, analytical skills, managerial skills, mechanical skills, and more. Skill initiatives must be taken to help with the growth of women in the workforce, our economy and our society. By following the mentioned strategies, we can ensure the participation of females in Skill Competitions: Equal access to Education, Awareness and Outreach, Role Models and Mentorship, Flexible Learning Opportunities, Financial Support (if required), Safe and Inclusive Spaces, Employer Partnerships, Networking Opportunities, Recognition and Rewards.	
20.	Are Greening/ Environment Sustainability Aspects Covered <i>(Specify the NOS/Module which covers it)</i>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (CON/N4101)	
21.	Is Qualification Suitable to be Offered in Schools/Colleges	Schools <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Colleges <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
22.	Name and Contact Details of Submitting / Awarding Body SPOC <i>(In case of CS or MS, provide details of both Lead AB & Supporting ABs)</i>	Name: Neha Sharma Dave Email: neha@csdcindia.org Contact No.: 0124-4513915-18 Ext-22 Website: www.csdcindia.org	
23.	Final Approval Date by NSQC: 06/02/2024	24. Validity Duration: 2 YEARS	25. Next Review Date: 06/02/2026

Section 2: Module Summary

NOS/s of Qualifications

(In exceptional cases these could be described as components)

Mandatory NOS/s:

Specify the training duration and assessment criteria at NOS/ Module level. For further details refer curriculum document.

Th.-Theory Pr.-Practical OJT-On the Job Man.-Mandatory Training Rec.-Recommended Proj.-Project

S. No	NOS/Module Name	NOS/Module Code & Version (if applicable)	Core/ Non-Core	NCrF/NSQF Level	Credits as per NCrF	Training Duration (Hours)					Assessment Marks					
						Th.	Pr.	OJT-Man.	OJT-Rec.	Total	Th.	Pr.	Proj.	Viva	Total	Weightage (%) (if applicable)
1.	Work Organization, Management and Communication	CON/N4101	Non-Core	4.5	2	20	40			60	30	70			100	15
2.	Interpretation of Drawings	CON/N4103	Core	4.5	1	10	20			30	30	70			100	10
3.	Setting out and Measurement	CON/N4104	Core	4.5	2	20	40			60	30	70			100	20
4.	Construction of Test Project (Bricklaying)	CON/N4107	Core	4.5	9	80	190			270	30	70			100	40
5.	Quality Check and Handover	CON/N4105	Non-Core	4.5	3	20	70			90	30	70			100	15
Duration (in Hours) / Total Marks					17	150	360			510	150	350			500	100

Assessment - Minimum Qualifying Percentage

Please specify **any one** of the following:

Minimum Pass Percentage – Aggregate at qualification level: 70% (Every Trainee should score specified minimum aggregate passing percentage at qualification level to successfully clear the assessment.)

Minimum Pass Percentage – NOS/Module-wise: ____% (Every Trainee should score specified minimum passing percentage in each mandatory and selected elective NOS/Module to successfully clear the assessment.)

Section 3: Training Related

1.	Trainer's Qualification and experience in the relevant sector (in years) (as per NCVET guidelines)	B. Tech in Relevant Trade (2 Year) Diploma in Relevant Trade (3 Years) ITI in Relevant Trade (6 Years) General BA/BSc. / EX-Army/ 12th in Relevant Trade (6 Years)
2.	Master Trainer's Qualification and experience in the relevant sector (in years) (as per NCVET guidelines)	Graduate (Civil or Mechanical Engineering (8 years) Diploma in (Civil Engineering/ Mechanical Engineering/ Manufacturing/ Mathematics/ Physics degree (10 years) ITI in Civil/ Mechanical/Electrical (13 Years)

3.	Tools and Equipment Required for Training	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (If "Yes", details to be provided in Annexure)
4.	In Case of Revised Qualification, Details of Any Upskilling Required for Trainer	NA

Section 4: Assessment Related

1.	Assessor's Qualification and experience in relevant sector (in years) (as per NCVET guidelines)	B. Tech in Relevant Trade (2 years) Diploma in Relevant Trade (5 years) ITI in Relevant Trade (7 years)
2.	Proctor's Qualification and experience in relevant sector (in years) (as per NCVET guidelines)	B. Tech in Relevant Trade (2 years) Diploma in Relevant Trade (5 years) ITI in Relevant Trade (7 years)
3.	Lead Assessor's/Proctor's Qualification and experience in relevant sector (in years) (as per NCVET guidelines)	Diploma in Relevant Trade (10 years) Graduate in Relevant Trade (8 years) ITI in Relevant Trade (13 Years) General BA/B.Sc/Ex-Army/12 th in Relevant Trade (13 Years)
4.	Assessment Mode (Specify the assessment mode)	Offline
5.	Tools and Equipment Required for Assessment	<input checked="" type="checkbox"/> Same as for training <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (details to be provided in Annexure-if it is different for Assessment)

Section 5: Evidence of the need for the Qualification

Provide Annexure/Supporting documents name.

1.	Latest Skill Gap Study (not older than 2 years) (Yes/No): NA
2.	Latest Market Research Reports or any other source (not older than 2 years) (Yes/No): NA
3.	Government /Industry initiatives/ requirement (Yes/No): NA
4.	Number of Industry validation provided: NA
5.	Estimated nos. of persons to be trained and employed: NA
6.	Evidence of Concurrence/Consultation with Line Ministry/State Departments: NA If "No", why:

Section 6: Annexure & Supporting Documents Check List

Specify Annexure Name / Supporting document file name

1.	Annexure: NCrf/NSQF level justification based on NCrf level/NSQF descriptors (Mandatory)	Attached
2.	Annexure: List of tools and equipment relevant for qualification (Mandatory, except in case of online course)	Attached
3.	Annexure: Detailed Assessment Criteria (Mandatory)	Attached
4.	Annexure: Assessment Strategy (Mandatory)	Attached
5.	Annexure: Blended Learning (Mandatory, in case selected Mode of delivery is "Blended Learning")	NA
6.	Annexure: Multiple Entry-Exit Details (Mandatory, in case qualification has multiple Entry-Exit)	NA
7.	Annexure: Acronym and Glossary (Optional)	Attached
8.	Supporting Document: Model Curriculum (Mandatory – Public view)	Attached
9.	Supporting Document: Career Progression (Mandatory - Public view)	NA
10.	Supporting Document: Occupational Map (Mandatory)	NA
11.	Supporting Document: Assessment SOP (Mandatory)	Attached
12.	Any other document you wish to submit:	Technical Description for Bricklaying

Annexure 1: Evidence of Level

NCrf/NSQF Level Descriptors	Key requirements of the job role/ outcome of the qualification	How the job role/ outcomes relate to the NCrf/NSQF level descriptor	NCrf/NSQF Level
Professional Theoretical Knowledge/Process	<ul style="list-style-type: none"> Process of marking the layout for brick/block works Process of carrying out brick laying work Process of carrying out block laying work Process of carrying out brick bat coba waterproofing Process of carrying out IPS (Indian Patent Stone) flooring Process of applying plaster on internal & external surfaces of masonry & RCC structure Process of carrying out VDF (Vacuum dewatered floor) flooring Process of building structures using random rubble masonry Process of working effectively in a team to deliver desired results at the workplace. Process of planning and organizing work to meet expected outcomes 	<p>As detailed, the entire process followed by a Bricklayer is to mark the layout for brick/block works, and carry out brick laying work and block laying work, carry out brick bat coba waterproofing, carry out IPS (Indian Patent Stone) flooring, apply plaster on internal & external surfaces of masonry & RCC structure, carry out VDF (Vacuum dewatered floor) flooring, build structures using random rubble masonry</p> <p>As the work is routine and is repeated multiple times, the work becomes predictable.</p> <p>As the Bricklayers are required to perform the task as per the required codes and standards following the method statement available for the task, they have a clear work situation.</p>	4.5

	<ul style="list-style-type: none"> Process of working according to personal health, safety and environment protocols at the construction site. 		
Professional and Technical Skills/ Expertise/ Professional Knowledge	<ul style="list-style-type: none"> Know standard practices of masonry works Understand layout sketches for foundation, walls and other masonry units Know the different types/grades of cement, aggregates and bricks including fly ash bricks and low water absorbing brick Know how to select and use tools and equipment Understand various techniques / procedures for cutting/chiseling/dressing different types of bricks to closure Know how to lay and fix blocks in position Know cement mix proportion and its importance Understand various adhesives used in block work Know the standard practices for waterproofing works Know the procedure of laying brick bat coba waterproofing course Know the standard practices for IPS flooring Know how to provide adequate slope in PCC (Plain Cement Concrete) in a base course Know the sequence of concrete pouring and placing Know the standard practices for plastering works, Know how to determine vertical and horizontal alignment Understand methods and techniques for plastering internal and external masonry and RCC structures Know the standard practices for VDF flooring Know the standard practices for random rubble masonry work 	<p>The knowledge required for a Bricklayer is factual, as it is specific and limited to the knowledge of standard practices of masonry works, layout sketches for foundation ,walls and other masonry units, different types/grades of cement, aggregates and bricks including fly ash bricks and low water absorbing brick, select and use tools and equipment, techniques / procedures for cutting/chiseling/dressing different types of bricks to closure, laying and fixing blocks in position, cement mix proportion and its importance, adhesives used in block work, standard practices for waterproofing, IPS flooring, plastering, VDF flooring and random rubble masonry works, procedure of laying brick bat coba waterproofing course, slope in PCC (Plain Cement Concrete) in a base course, sequence of concrete pouring and placing, vertical and horizontal alignment, methods and techniques for plastering internal and external masonry and RCC structures.</p> <p>Therefore, their knowledge is applicable to their field of work only.</p>	4.5
Employment Readiness & Entrepreneurship Skills & Mind-set/Professional Skill	<ul style="list-style-type: none"> Select required tools for the task and ensure they are in working condition Select appropriate Personal Protective Equipment (P.P.E.s) for the task Identify and transfer required levels using appropriate tools Select appropriate tools and equipment as per the tasks Estimate the quantity of raw material required Carry out various types of pointing works Ensure masonry works as per required bond, alignment and plumb 	<p>As indicated the skill set is required to select required tools for the task and ensure they are in working condition, select appropriate Personal Protective Equipment (P.P.E.s) for the task, identify and transfer required levels using appropriate tools, select appropriate tools and equipment as per the tasks</p> <p>estimate the quantity of raw material required, carry out various types of pointing works, ensure masonry works as per required bond, alignment and plumb, check visually the quality of blocks prior to use, check vertical and horizontal alignment using appropriate tools.</p>	4.5

	<ul style="list-style-type: none"> • Check visually the quality of blocks prior to use • Check vertical and horizontal alignment using appropriate tools 		
Broad Learning Outcomes/Core Skill	<ul style="list-style-type: none"> • Carry out the process to mark layout for brick/block works. • Carry out brick laying work. • Carry out construction of various masonry structures using block • Carry out the process of plastering on internal and external surfaces of Masonry & RCC structures • Carry out the process of VDF flooring. • Carry out building structures using random rubble masonry 	The Bricklayer is expected to mark layout for brick/block works; carry out brick laying work; construct various masonry structures using block; carry out the process of plastering on internal and external surfaces of Masonry & RCC structures; carry out the process of VDF flooring; carry out building structures using random rubble masonry.	4.5
Responsibility	<p>The individual in this job role will be responsible for the below-mentioned activities:</p> <ul style="list-style-type: none"> • Carry out preparatory work for layout marking • Mark the layout for brick/block work • Check material used for brickwork • Lay bricks for construction of load bearing / non-load bearing wall, columns and footings • Check the line, level and alignment • Carry out pointing in brick masonry • Perform specialized masonry works such as arches, staircase, manholes and walkways • Repair and restore brick masonry • Carry out brick bat coba waterproofing • Carry out preparatory work prior to IPS flooring • Check for line, level, and alignment • Check the materials used for IPS flooring in case of manual mixing • Check the materials used for IPS flooring in case of machine mixing • Carry out IPS flooring • Carry out preparatory work before starting the plastering work • Check material used for plastering • Plaster internal & external masonry & RCC structures • Check for line, level & alignment • Carry out preparatory work prior to VDF flooring • Check for line, level and alignment. 	A Bricklayer is required to perform routine masonry works, such as brickwork, block work, laying paver blocks, plastering, brick bat coba waterproofing, random rubble masonry and IPS/Tremix flooring, etc.	4.5

	<ul style="list-style-type: none">• Check the materials used for VDF flooring in case of manual mixing• Check the materials used for VDF flooring in case of machine mixing• Carry out VDF flooring• Carry out preparatory work for rubble masonry• Check the material used for random rubble masonry• Lay out coursed and un-coursed Random Rubble Masonry with undressed or hammer dressed stones• Carry out pointing in stone masonry• Lay out course of Dry Rubble Masonry• Check for line, level and alignment• Interact and communicate in an effective manner• Support co-workers to execute the project requirements• Practice inclusion• Plan and prepare for work• Organise required resources as per work plan• Complete work as per the plan• Follow safety norms as defined by the organization• Adopt healthy & safe work practices• Implement good housekeeping and environment protection process and activities• Follow infection control guidelines as per applicability		
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Annexure 2: Tools and Equipment (Lab Set-Up / Competition Area)

List of Tools and Equipment

Batch Size: 30 Candidates

SI N	Tool / Equipment Name	Specification	Quantity
1	Stone cutting machine / clipper	Numbers	16 pcs per Skill
2	Diamond wheels for stone-cutting machines (400 mm) MUST BE LOW DECIBEL	Numbers	16 pcs per Skill
3	Extension	Numbers	16 pcs per Skill
4	Hydraulic trolley/ transpalette skill 20	Numbers	4 pcs per Skill
5	Construction wheelbarrow (unicycle)	Numbers	1 pcs per Competitor
6	Mortar mixer electric/ bétonnière électrique	Numbers	4 pcs per Skill
7	Scraper with metal handle	Numbers	1 pcs per Competitor
8	Drawing board (2440 x 1220 mm)	Numbers	1 pcs per Competitor
9	Mortar tub (type 1)	Numbers	2 pcs per Competitor
10	Mason level (120 cm)	Numbers	1 pcs per Competitor
11	Plastic round bucket 11 L	Numbers	3 pcs per Competitor
12	Stirrer MX 1200 E EF HS3R	Numbers	5 pcs per Skill
13	Digital electronic angle finder	Numbers	1 pcs per Competitor
14	mason level 80 cm	Numbers	1 pcs per Competitor
15	BM Measuring tape (5 m)	Numbers	1 pcs per Competitor
16	mason level 61 cm	Numbers	1 pcs per Competitor
17	Type 96-2 Spirit level (200 cm)	Numbers	1 pcs per Competitor
18	LBM 1000 FIBREGLASS 50m	Numbers	1 pcs per Skill
19	Powder FP	Numbers	3 pcs per Skill
20	Builders pencil	Numbers	2 pcs per Competitor
21	Chalk line SG Tracing line for bricklaying	Numbers	4 pcs per Skill
22	Plastic rubbish tank (75 L)	Numbers	1 pcs per Competitor
23	Shovel	Numbers	1 pcs per 2 Competitors
24	Sweeping brush	Numbers	1 pcs per Competitor
25	Vacuum cleaner dust skill 20	Numbers	6 pcs per Skill
26	retention lance	Numbers	5 pcs per Skill
27	Steel clamp (08-35 mm)	Numbers	4 pcs per Skill
28	Screw (4,5 x 50 mm) box of 500 pieces	Numbers	1 pcs per Skill
29	35 micron stretch film	Numbers	5 pcs per Skill
30	Double-side tape	Numbers	10 pcs per Skill
31	Waste container (8 m3)	Numbers	1 pcs per Skill
32	Screw Driver Set for bricklaying	Numbers	3 per Skill
33	Toolbox/ToolKit for bricklaying	Numbers	3 pcs per Skill
34	extension	Numbers	10 per Skill
35	cutter blades	Numbers	5 pcs per Skill
36	cutter	Numbers	5 pcs per Skill
37	stapler	Numbers	5 pcs per Skill
38	level 25cm with belt pouch	Numbers	1 pcs per Competitor

39	Spirit Level (40 cm)	Numbers	1 pcs per Competitor
40	coconut broom handle	Numbers	1 per Competitor
41	Pole broom handle 28mm	Numbers	1 per Competitor
42	pliers	Numbers	4 pcs per Skill
43	pliers	Numbers	3 pcs per Skill
44	workbench for Bricklaying	Numbers	1 pcs per Competitor
45	Dirty water recycling machine for bricklaying	Numbers	1 per Skill
46	brick pliers	Numbers	1 pcs per 2 Competitors
47	square	Numbers	1 pcs per Competitor
48	Builders apron	Numbers	1 pcs per Competitor
49	Electronic level 40cm	Numbers	1 pcs per Competitor
50	Electronic level 61cm	Numbers	1 pcs per Competitor
51	alligator saw	Numbers	2 per Skill
52	Straight edge AL (300 cm)	Numbers	1 pcs per Competitor
53	circular saw	Numbers	4 per Skill
54	LBM 1000 STEEL 50m	Numbers	1 pcs per Skill
55	Jigsaw skill 20	Numbers	4 per Skill
56	screwdriver	Numbers	4 per Skill
57	mixer	Numbers	4 per Skill
58	Tripod Lampe	Numbers	20 per Skill
59	Charger +Batterie	Numbers	13 per Skill
60	Charger +Batterie	Numbers	13 per Skill
61	Level	Numbers	1 pcs per Competitor
62	Electronic Level 1200MM	Numbers	1 pcs per Competitor
63	Diesel telescopic trolley	Numbers	2 pcs per Skill
64	Recovery timmet	Numbers	2 pcs per Skill
65	Tip box	Numbers	2 pcs per Skill
66	Pipe	Numbers	1 pcs per Skill
67	Pipe connection	Numbers	1 pcs per Skill
68	Watering lance	Numbers	1 pcs per Skill
69	shovel handle 1,30m	Numbers	1 per 2 Competitors
70	Brick yellow	Numbers	200 pcs per Competitor
71	White Brick	Numbers	100 pcs per Competitor
72	Brick red	Numbers	550 pcs per Competitor
73	Polycimat	Numbers	250 pcs per Skill
74	Wood block (30 x 40 mm, 3 m) skill 20	Numbers	75 pcs per Skill
75	Sound insulation for saws	Numbers	110 pcs per Skill
76	Plywood laminated Plyterra (2440 x 1220 x 18 mm)	Numbers	110 pcs per Skill
77	Construction adhesive (310 ml)	Numbers	20 pcs per Skill
78	sable 0/2. (sand)	Numbers	13 pcs per Skill
79	staple	Numbers	3 pcs per Skill
80	Lightweight concrete block (600 x 250 x 100 mm) skill 20	Numbers	10 pcs per Competitor
81	Stool	Numbers	6 per Skill

82	Grating	Numbers	90 pcs per Skill
83	Led strip	Numbers	8 pcs per Skill
84	Jigsaw blade set skill 20	Numbers	2 per Skill
85	Filtering Big bag	Numbers	10 pcs per Skill
86	Waste big bag	Numbers	40 pcs per Skill
87	Big bag support	Numbers	14 per Skill
88	Set of screwdriver bits	Numbers	2 per Skill
89	Lino	Numbers	900 m2 per Skill
90	Carpet for competitor area	Numbers	600 m2 per Skill
91	Plywood (2440x1220x18 mm) for mortar tub	Numbers	4 pcs per Skill
92	Maintenance case	Numbers	1 pcs per Skill
93	WD 40	Numbers	5 pcs per Skill
94	Plasticizer	Numbers	200 pcs per Skill
95	Garbage bag 130 L	Numbers	4 per Skill
96	Marker (Black) skill 20	Numbers	1 per Competitor
97	Site plotter	Numbers	10 per Skill
98	Areated cement adhesive	Numbers	1 pcs per 3 Competitors
99	Batterie AA	Numbers	2 pcs per Skill
100	Batterie AAA	Numbers	2 pcs per Skill
101	Mass	Numbers	5 pcs per Skill
102	Cable HDMI (10 m)	Numbers	8 pcs per Skill
103	Acoustic system with 2 wireless microphones	Numbers	1 pcs per Skill
104	CIS Laptop - Type 1	Numbers	2 pcs per Skill
105	Mouse	Numbers	6 pcs per Skill
106	Color Laser Printer + Scan (A3/A4)	Numbers	1 pcs per Skill
107	Network filter with, at least, 5 sockets	Numbers	6 pcs per Skill
108	Screen and projector	Numbers	2 pcs per Skill
109	TV Stand to mount	Numbers	2 pcs per Skill
110	Cable HDMI (10 m)	Numbers	2 pcs per Skill
111	USB Flash Drive (64 GB)	Numbers	1 pcs per Skill
112	USB Flash Drive (64 GB)	Numbers	1 pcs per Skill
113	Color Laser Printer + Scan (A3/A4)	Numbers	1 pcs per Skill
114	Tablet for marking	Numbers	10 pcs per Skill
115	Computer	Numbers	2 per Skill
116	Ultra Short Throw Projector with Big screen	Numbers	1 pcs per Skill
117	Screen TYPE 2 : Curved Monitor 34"	Numbers	2 per Skill
118	roadside broom skill 20	Numbers	1 pcs per Competitor
119	200 micron plastic cover for floor	Numbers	4 pcs per Skill
120	Chair -Type1 (without wheels)	Numbers	60 pcs per Skill
121	Scoop for cleaning	Numbers	1 pcs per 2 Competitors
122	Water cooler	Numbers	1 pcs per Skill
123	Trash bin (120 L)	Numbers	2 pcs per Skill
124	Side Table	Numbers	1 pcs per Skill

125	Clothes hanger	Numbers	3 pcs per Skill
126	Office Chair - Chair 2	Numbers	3 pcs per Skill
127	Clothes hanger	Numbers	3 pcs per Skill
128	Office Chair - Chair 2	Numbers	2 pcs per Skill
129	Side Table	Numbers	1 pcs per Skill
130	Shelving	Numbers	12 pcs per Skill
131	Brush for cleaning	Numbers	1 pcs per Skill
132	Trash bin (10 L)	Numbers	1 pcs per Skill
133	Brush for cleaning skill 20	Numbers	1 pcs per Competitor
134	Water cooler	Numbers	1 pcs per Skill
135	Refrigerator	Numbers	1 pcs per Skill
136	Timer skill 20	Numbers	4 pcs per Skill
137	small horn speaker	Numbers	6 pcs per Skill
138	Fire extinguisher (Powder)	Numbers	1 pcs per Skill
139	Fire extinguisher (Powder)	Numbers	4 pcs per Skill
140	Protective Glasses (plastic, transparent) - Skill 41	Numbers	2 pcs per Competitor
141	Earplugs	Numbers	1 pcs per Skill
142	Hand Antiseptic with Moisturizers (61% w/w ethyl alcohol)	Numbers	5 pcs per Skill
143	HSE First Aid Kit	Numbers	1 pcs per Skill
144	Dust mask	Numbers	1 pcs per Competitor
145	Anti-cut gloves (size M)	Numbers	2 pcs per Competitor
146	Anti-cut gloves (size L)	Numbers	2 pcs per Competitor
147	band Aid	Numbers	1 boxes per Competitor
148	Band aid small (pack of 100)	Numbers	10 per Skill
149	Paper for print A4	Numbers	15 pcs per Skill
150	Paper for print A3	Numbers	5 pcs per Skill
151	Pen (Blue)	Numbers	80 pcs per Skill
152	Pen (Black)	Numbers	80 pcs per Skill
153	Pen (Red)	Numbers	80 pcs per Skill
154	Set of markers	Numbers	15 pcs per Skill
155	Set of markers	Numbers	15 pcs per Skill
156	Highlighter Set	Numbers	5 pcs per Skill
157	Pencil (HB) with rubber in one end	Numbers	80 pcs per Skill
158	Paper clips (100 pieces)	Numbers	5 pcs per Skill
159	Folder for A4 paper format	Numbers	32 pcs per Skill
160	File for A4 paper format	Numbers	5 pcs per Skill
161	Stapler (20 mm)	Numbers	3 pcs per Skill
162	Staple remover	Numbers	2 pcs per Skill
163	Staples pin	Numbers	3 pcs per Skill
164	Steel ruler (300 mm)	Numbers	5 pcs per Skill
165	Scotch tape (small) 10 rolls 19 mm x 33 m + dévidoir manuel	Numbers	5 pcs per Skill
166	Scotch tape (Large/wide)	Numbers	8 pcs per Skill
167	Rubber/eraser	Numbers	10 pcs per Skill

168	Notebook (A4)	Numbers	65 pcs per Skill
169	Flip Chart	Numbers	5 pcs per Skill
170	Paper for print A4 Self-adhesive	Numbers	15 pcs per Skill
171	Pencil Sharpener	Numbers	3 pcs per Skill
172	Rubber Bands	Numbers	2 pcs per Skill
173	File for A4 paper format	Numbers	5 pcs per Skill
174	Notes (3x3 inch, four colors)	Numbers	10 pcs per Skill
175	Paper for print A4 Self-adhesive	Numbers	2 pcs per Skill
176	Hole Punch (2 hole)	Numbers	2 pcs per Skill
177	Battery (AAA)	Numbers	10 pcs per Skill
178	Battery (AAA)	Numbers	10 pcs per Skill
179	Thumb Tacks	Numbers	10 pcs per Skill
180	A4 document box	Numbers	5 pcs per Skill
181	Folder for A4 paper format	Numbers	5 pcs per Skill
182	Wet Wipes boxes	Numbers	5 pcs per Skill
183	Bin Bags 15 L	Numbers	10 pcs per Skill
184	Folder for A4 paper format	Numbers	3 pcs per Skill
185	Utility Knife Replacement Blades	Numbers	10 pcs per Skill
186	Craft Knife	Numbers	40 pcs per Skill
187	Scissors SKILL 12	Numbers	5 pcs per Skill
188	Super Glue	Numbers	5 pcs per Skill
189	Scientific Calculator - Stock WS FRANCE	Numbers	3 pcs per Skill
190	Folder for A3 paper format	Numbers	1 pcs per Competitor

NOTE: For regular updates on tool and equipment list (Infrastructure List) for Skill Competition for “**Bricklaying**”, kindly refer to the WorldSkills Competition Website: <https://il.worldskills.org/#/events/579/lists/1158/public>

Classroom Aids

The aids required to conduct sessions in the classroom are:

1. Training Kit (Trainer Guide, Presentations)
2. Whiteboard/ Blackboard
3. Marker
4. Projector
5. Working Model

[Annexure 3: Industry Validations Summary](#)

Provide the summary information of all the industry validations in the table. This is not required for OEM qualifications.

S. No	Organization Name	Representative Name	Designation	Contact Address	Contact Phone No	E-mail ID	LinkedIn Profile (if available)
NA	NA	NA	NA	NA	NA	NA	NA

[Annexure 4: Training & Employment Details](#)**Training and Employment Projections:**

Year	Total Candidates		Women		People with Disability	
	Estimated Training #	Estimated Employment Opportunities	Estimated Training #	Estimated Employment Opportunities	Estimated Training #	Estimated Employment Opportunities
NA	NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA	NA

Data to be provided year-wise for next 3 years

Training, Assessment, Certification, and Placement Data for previous versions of qualifications:

Qualification Version	Year	Total Candidates				Women				People with Disability			
		Trained	Assessed	Certified	Placed	Trained	Assessed	Certified	Placed	Trained	Assessed	Certified	Placed
NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Applicable for revised qualifications only, data to be provided year-wise for past 3 years.

List Schemes in which the previous version of Qualification was implemented:**Content availability for previous versions of qualifications:**

☐ Participant Handbook ☐ Facilitator Guide ☐ Digital Content ☐ Qualification Handbook ☐ Any Other:

Languages in which Content is available:[Annexure 5: Detailed Assessment Criteria](#)

Detailed assessment criteria for each NOS/Module are as follows:

NOS/Module Name	Assessment Criteria for Performance Criteria/Learning Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Work Organization, Management and Communication	Explain health and safety legislation, obligations, and documentation	30	70		
	check and ensure the availability of appropriate and usable Personal Protective Equipment (PPE) at the workplace				
	use the appropriate PPE according to the nature of work and ensure other personnel also do the same				
	follow and promote the appropriate measures to ensure hygiene in the workplace, e.g.regular cleaning and sanitization				
	follow the applicable emergency procedures and ensure the personnel also do the same				
	Learn precautions for the safe use of power and cordless tools				
	Apply standards and laws relating to security, safety, and hygiene in plastering and drywall systems				
	establish methods for optimal and economically organized construction site. regarding construction plan and equipment, organization and procedures, material management, staffing and timelines				
	determine the correct calculations and estimates by using principles and methods				
	store plasterboards and related products safely and securely				
	be proactive in own continuous professional development in order to keep abreast of methods of working in the construction industry and changing technologies, for example acoustics, sustainability and environmental impact				
	Work effectively as part of teams				
	Work effectively with other trades				
	Establish and maintain high quality standards and working processes				
	identify problems promptly and manage their resolution				
	select, use and store all materials safely				
	plan work areas to maximize efficiency and maintain the discipline of regular tidying				
	principles and methods for determine the correct calculations and estimates				
	understand technical terminology and symbols				
	visualize and translate customer wishes making recommendations which meet/improve their design and budgetary requirements where qualified to do so				
	Produce a cost and time estimate for customers				
	introduce related trades to support customer requirements				
	work effectively in a team to facilitate efficiency/productivity/quality and cost control				
	recognize the needs of architects and related trades				
	explain the importance of swiftly resolving misunderstandings and conflicting demands				
	Total Marks	30	70		
Interpretation of Drawings	Prepare site measurement drawings	30	70		
	Accurately interpret all plans, elevations, sections and enlarged details				
	Produce basic outline drawings (hand and CAD) including elevations, plans, and sections to full size				
	produce accurate complex drawings on wood to make figure on the wall/floor				

	Identify drawing errors or items that require clarification				
	Determine and check quantities of materials required				
	Calculate a cost and price for the work				
	Identify horizontal and vertical key dimensions and all angles				
	Identify curved work and mortar joint finishes				
	Interpret all project features and their required construction methods				
	Establish any features that need special equipment or templates and source these				
	Recognize specified bonding patterns and obey bonding rules during construction				
	Provide advice and guidance to other professionals such as architects and quantity surveyors				
	Keep essential notes on each installation process				
	Explain complex specialist and technical information about installations to clients and other professionals				
	Apply mathematic geometry principles to the calculation of angles, areas, perimeters, curves, arcs, volumes, ratios, etc.				
	Prepare the materials requirements, taking into account increased requirements due to compression, wastage, breakage, etc.				
	Calculate formwork surfaces and materials requirements				
	Calculate formwork surfaces and materials requirements for face concrete formwork				
	Interpret, analyse, and work with construction plans (e.g. design plans, formwork plans, reinforcement plans, detail drawings, etc.) and material and parts lists				
	Total Marks	30	70		
Setting out and Measurement	Check measurements of the wall/floor conform to the drawing specifications	30	70		
	Produce setting out for templates				
	Visualize and think through projects, identifying potential challenges early and taking the necessary preventative action				
	Set out the locations, starting points and lines of projects according to plans and specifications				
	Set out highly technical designs including brick-on-end, brick-on edge, raked/inclined, curved projecting, recessing brickwork, archways, corbelling, decorative bonding, and battered walling				
	Accurately interpret the dimensions from drawings and ensure the design is set out within a given tolerance				
	Check all horizontal and vertical angles				
	Accurately interpret dimensions from drawings and ensure designs are set out within a given tolerances				
	Produce any templates/building aids that may be helpful when constructing				
	Set out datum points of reference for projects				
	Carry out setting out work using the necessary surveying equipment (pocket rule, tape measure, distance meter, set square, level, etc.)				
	Measure predetermined structures, joints, and materials for the subsequent face concrete surfaces (anchor holes, shuttering frames, board inserts, distribution and alignment of formwork boards, etc.)				

	Create horizontal levels and measure heights using spirit levels, water level gauges, and optical devices				
	Total Marks	30	70		
Construction of Test Project (Bricklaying)	Construct projects in accordance with drawings provided	30	70		
	Construct template or arch supports to meet the design requirements				
	Select bricks which are true to shape and angle and reject bricks which are chipped				
	Construct brickwork, maintaining accuracy in dimension to within a given tolerance				
	Check dimensions regularly and correct where necessary				
	Maintain accuracy of levels to within given tolerances				
	Transfer levels accurately				
	Ensure top courses are flat and smooth				
	Check the undersides of projecting brickwork are level				
	Maintain accuracy in plumb to within given tolerances				
	Check the quality of materials				
	. Maintain accuracy of horizontal, vertical, or diagonal alignments to within given tolerances				
	Check alignments regularly to ensure all surfaces are flat				
	Maintain accuracy in angles to within given standard tolerances				
	Check angles regularly and correct where necessary				
	Render small components of brickwork to smooth and consistent finishes				
	Construct basic paving, ensuring surfaces are flat and within given tolerances				
	Total Marks	30	70		
Quality Check and Handover	Inspect equipment, structures, and/or material to identify the nature and causes of errors, defects, or problems	30	70		
	Think critically by using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems				
	Identify actual and potential problems				
	Analyse information and evaluate options to choose and use the best solution				
	Evaluate solutions and optimize results				
	The need for all work to be presented to meet customer and related trades needs and expectations				
	The importance of joint finishing in line with the specifications provided				
	The different techniques of applying different joint finishes				
	understand the process of marking and assessment criteria of respective trade				
	respond to the queries on the queries being raised by them				
	Make and follow through decision				
	Apply appropriate techniques according to buildings' history and fabrication, whilst maintaining their integrity for both internal and external surfaces				
	Leave work areas in a suitable condition for inspection and subsequent work				
	Report positive and negative variances in work processes and results, together with their implications				
	Organize any waste material so that it can be disposed of or recycled efficiently				
	Total Marks	30	70		

Grand Total	150	350		
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NSQC Approved

Annexure 6: Assessment Strategy

Assessment Strategy

- 0: performance below industry standard
- 1: performance meets industry standard
- 2: performance meets and, in specific respects, exceeds industry standard
- 3: performance wholly exceeds industry standard and is judged as excellent
- Dimensions, level, plumb, alignment, and angles: Measured at reference points and according to the Marking Scheme
- Details can include plumb, level, dimension, alignment, and angle checks of detailed components of the Test Project to ensure accuracy is maintained within given tolerances; Number of bricks correct; Cuts; Consistency; Radius of curves; Projections
- Jointing: Flush and recessed joints – all joints full, no holes, smooth finish; Render finish – clean and neat, no holes, smooth finish; A sample panel of the jointing finishes (made and approved by the Experts) are on display for Competitors and marking teams to refer to
- Finish: Brick cuts – straight, consistent and no chipping; Drawing interpretation; Cleanliness and finished appearance
- Deductions:
 - A proportion of the available mark is deducted according to the amount of error. The amount of the deduction varies depending on the aspect and is identified on the Measurement Marking Form;
 - In regard to level, plumb, alignment angles, and dimension, the error deductions are determined by the Independent Test Project Designer as part of the Marking Scheme development. As a reference, the deductions used at the previous international competition are: For aspects that are of 1.0 mark value there is a 0.1 deduction per 1 mm of error; For aspects that are of 0.5 mark value there is a 0.1 deduction per 1 mm of error.
 - The Experts are divided into marking groups to deal with each section of the marking criteria. The marking of modules will start when all Competitors have finished their module. Experts do not receive the marking information for their group until the Competitors have completed the module that is being assessed.
 - Horizontal dimensions are checked level with the top of the first course;
 - Plumb and level are checked 10 mm back from the corner;
 - The marking of alignment must include checks across the full face of the module;
 - When checking alignment, the Competitor's levels must be used. For any checks that are longer than the standard levels, a straight edge which is the same thickness as a standard level must be used.

For more updates, kindly visit: <https://worldskills.org>

Annexure 7: Acronym and Glossary

Acronym

Acronym	Description
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AA	Assessment Agency
AB	Awarding Body
CSDCI	Construction Skill Development Council of India
ISCO	International Standard Classification of Occupations
NCO	National Classification of Occupations
NCrF	National Credit Framework
NOS	National Occupational Standard(s)
NQR	National Qualification Register
NSQF	National Skills Qualifications Framework
WSC	World Skills Competition

Glossary

Term	Description
National Occupational Standards (NOS)	NOS defines the measurable performance outcomes required from an individual engaged in a particular task. They list down what an individual performing that task should know and also do.
Qualification	A formal outcome of an assessment and validation process which is obtained when a competent body determines that an individual has achieved learning outcomes to given standards
Qualification File	A Qualification File is a template designed to capture necessary information of a Qualification from the perspective of NSQF compliance. The Qualification File will be normally submitted by the awarding body for the qualification.
Sector	A grouping of professional activities on the basis of their main economic function, product, service or technology.
Long Term Training	Long-term skilling means any vocational training program undertaken for a year and above. https://ncvet.gov.in/sites/default/files/NCVET.pdf