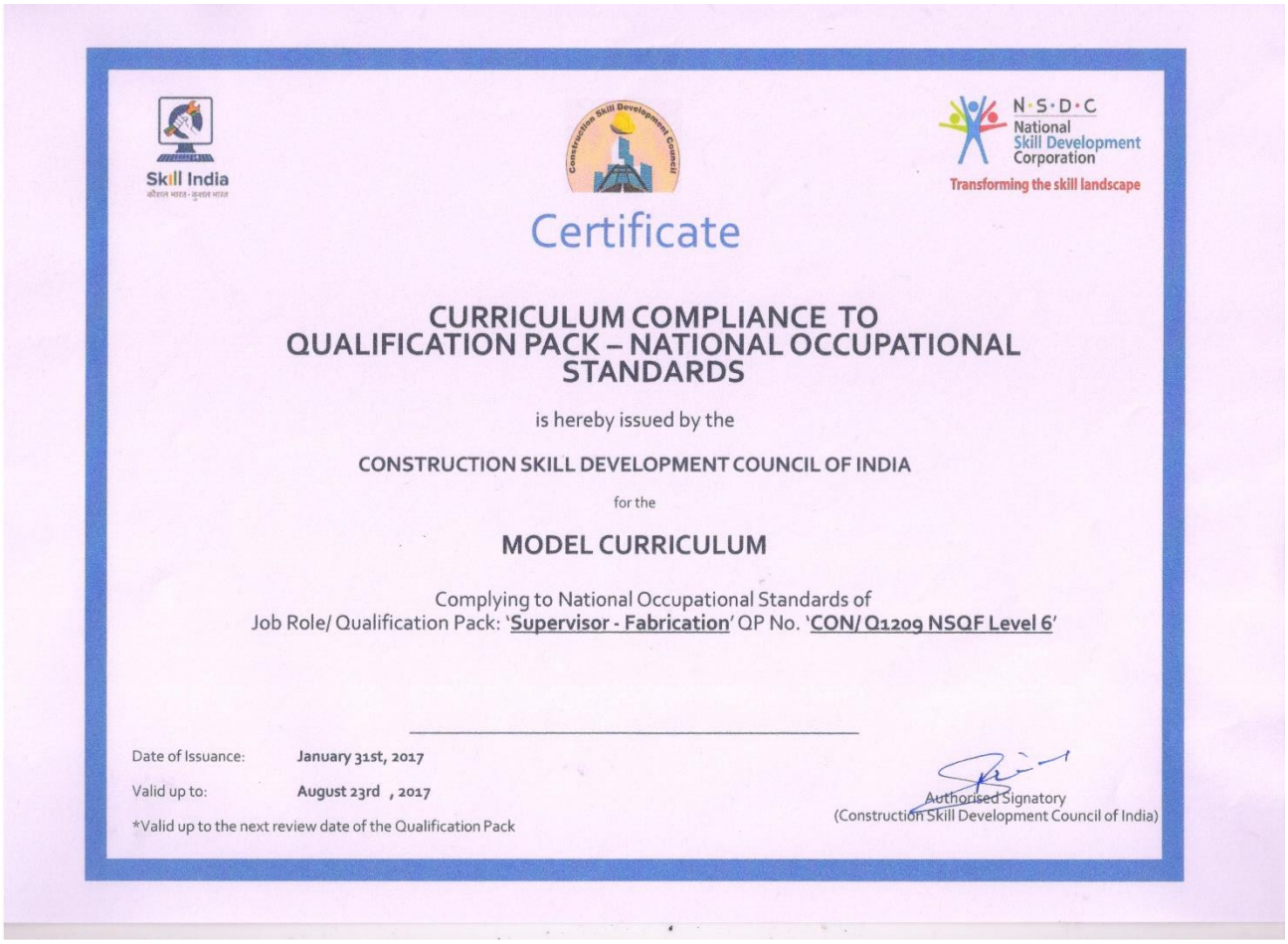
Model Curriculum

Supervisor Fabrication

SECTOR: Construction
SUB-SECTOR: Real Estate and Infrastructure Construction
OCCUPATION: Fabrication
REF ID: CON/Q01209, V1.0
NSQF LEVEL: 6



Skill India
GOVERNMENT OF INDIA
MINISTRY OF SKILL DEVELOPMENT & ENTREPRENEURSHIP
N·S·D·C National Skill Development Corporation
Transforming the skill landscape

Certificate

CURRICULUM COMPLIANCE TO QUALIFICATION PACK – NATIONAL OCCUPATIONAL STANDARDS

is hereby issued by the

CONSTRUCTION SKILL DEVELOPMENT COUNCIL OF INDIA

for the

MODEL CURRICULUM

Complying to National Occupational Standards of
Job Role/ Qualification Pack: '**Supervisor - Fabrication**' QP No. '**CON/ Q1209 NSQF Level 6**'

Date of Issuance: **January 31st, 2017**

Valid up to: **August 23rd , 2017**

*Valid up to the next review date of the Qualification Pack

Authorised Signatory
(Construction Skill Development Council of India)

TABLE OF CONTENTS

Supervisor Fabrication

CURRICULUM / SYLLABUS

This program is aimed at training candidates for the job of a "Supervisor Fabrication", in the "Construction" Sector/Industry and aims at building the following key competencies amongst the learner

Program Name	**Supervisor Fabrication**		
Qualification Pack Name & Reference ID. ID	CON/Q1209, v1.0		
Version No.	1.0	**Version Update Date**	23-08-2017
Pre-requisites to Training	Preferably Diploma in Civil / Mechanical with 15 years site experience in same occupation for Non trained worker / 3 years site experience as a certified Foreman Fabrication, CNC Cutter, Senior Construction Welder – TIG, Senior Construction Welder – MIG and Senior Construction Welder – SMAW		
Training Outcomes	**After completing this programme, participants will be able to:** • **Plan and organize resources for completion of construction fabrication works** • **Read and interpret specifications and fabrication drawings and assist in documentation of reports** • **Supervise cutting , drilling & edge preparation activity of structural steel elements** • **Supervise joint preparation activity of structural steel elements to meet desired quality standards** • **Supervise bolting and welding of structural steel elements according to standard procedures and to meet desired standards** • **Manage workplace for safe and healthy work environment**		

This course encompasses 6 out of 6 National Occupational Standards (NOS) of "Supervisor Fabrication" Qualification Pack issued by "Construction Skill Development Council of India".

Sr. No.	Module	Key Learning Outcomes	Equipment Required
1	**Introduction** **Theory Duration** (hh:mm) 08:00 **Practical Duration** (hh:mm) 00:00 **Corresponding NOS Code** Bridge Module	• Introduction to role and responsibilities of the job role • how to read, write and understand basic English and knowledge of numeracy • organizational procedures for obtaining approvals and indent of materials • how to read and interpret technical details like drawings, specifications, • charts, checklists etc. • units of measurement and conversion • career growth paths	• class room • White board • Computer • Projector

2	**Plan and organize resources for completion of construction fabrication works**
	
	Theory Duration
	(hh:mm)
	75:00
	Practical Duration
	(hh:mm)
	75:00
	
	Corresponding NOS Code
	CON/N1215
		Theory:
		Plan and sequence the activities for completion of assigned work
		• Knowledge of correct sequence as per work requirement
		• Knowledge to plan and sequence work activities based on the resources available and project priorities
		• Knowledge of various methods and equipment that can be used to obtain same results for
		  • Material shifting
		  • Cleaning and preparing material
		  • Cutting material
		  • Scalloping and edge preparation
		  • Drilling
		  • Welding
		  • Bolting
		  • Finishing and preparation for coating
		  • Housekeeping
		• Knowledge of various resources for effectively completing the task, these include resources like equipment, machines, consumables, manpower etc. knowledge shall include but not limited to standard productivity norms, quantity and quality of consumables, use of appropriate consumables, skills required for completion of task, etc.
		• Knowledge of basic repair works for different tools and consumables
		• Knowledge to estimate the time required for completion of any given task related to fabrication works
		• Knowledge of working and operational requirements of different tools and equipment,
		• Knowledge of correct usage and storage of different tools and equipment	

Sr. No.	Module	Key Learning Outcomes	Equipment Required
		• Knowledge of scope of work and timelines **Demonstration/ practical:-**	
3	**Read and interpret specifications and fabrication drawings and assist in documentation of reports** **Theory Duration** (hh:mm) 100:00 **Practical Duration** (hh:mm) 100:00 **Corresponding NOS Code** CON/N1216	**Theory:** Drawing and Specifications: • Knowledge of the various symbols used in fabrication drawings • Knowledge of different code of practices for fabrication works • knowledge of various technical terms related to fabrication and their common language synonyms for better understanding of specifications and code of practices • Knowledge of different specifications and parameters of fabrication activities and there interpretations in terms of work activities • Knowledge of applicable tolerances limit for the job being performed • In depth knowledge of mensuration, arithmetic and geometry • Knowledge to identify the required component or materials from the shop drawings • Knowledge to Identify the orientation and relative edge preparation from the drawing Documentation: • Knowledge of different checklists, permits and reports related to fabrication works, the information provided in each and consequence of providing incorrect information **Demonstration/ practical: -** • Practice the skills involved in Read and interpret specifications and fabrication drawings by undertaking exercises that emphasis on the following:	
4	**Supervise cutting , drilling & edge preparation activity of structural steel elements** **Theory Duration** (hh:mm) 100:00 **Practical Duration** (hh:mm) 100:00	**Theory:** Lifting and Shifting • Tools and materials required for lifting of heavy materials, their functions, load carrying capacity etc. • Different equipment like, gantry cranes, forklifts etc. used for lifting and shifting materials • Knowledge of the procedure of lifting and shifting, concept of load preparation and free passage. • Knowledge of signaling and use of walky-talky for communicating effectively with machine operator.	Since the demonstration/ practical training is being conducted on-site to get the required competencies the tools required will be acquirable at site

Sr. No.	Module	Key Learning Outcomes	Equipment Required
	Corresponding NOS Code CON/N1217	• Knowledge of the situations under which the material being shifted may get damaged and how to avoid such situations • Knowledge of different shapes, sizes and types of materials used in fabrication yard Measurement and Markings • Knowledge of least count, correction factor and its use, correct procedure to use , limitations and areas of application of Different tools and instruments used for conducting measurements like tapes, sat squares, Vernier calipers, screw gauge, weld gauge etc., • Knowledge to perform dimensional checks of the components and the operation of the tools used for the same • Effect of heat input on the shape and dimension of the materials, procedures to avoid and restrict the same. • Knowledge to identify the cut elements and providing correct nomenclature to each as per the drawing • Knowledge to understand the importance of the nomenclature provided and segregating the materials according to the procedure specified at site Cutting and Drilling • Knowledge of Kerf for different types of cuttings, standard values of kerf, its computations and accommodating the same in cutting calculations • Knowledge of shrinkage caused due to heating, its computations and accommodating the same in cutting calculations • Knowledge of the procedure **Demonstration/ practical: -**	
5	**Supervise joint preparation activity of structural steel elements to meet desired quality standards** **Theory Duration** (hh:mm) 100:00 **Practical Duration** (hh:mm) 100:00	**Theory:** • Knowledge of different procedures to executed for preparation of fabrication platform • Knowledge of different types of anchor, vices, jacks and other restraining devices used at site. The knowledge should include the following points: **a.** operations and ideal working conditions b. range and areas of applications c. procedures for placing and removing	

Sr. No.	Module	Key Learning Outcomes	Equipment Required
	Corresponding NOS Code CON/N1218	• Knowledge of different specification of joint like root gap, bevel angle etc and procedure to check the same. • Knowledge to check and confirm that the fit-up execute is as per drawing and the joint prepared is as per specification. • Knowledge to repair any defect identified in the joints, knowledge of different procedures and tools and equipments required for rectification. • Knowledge of preheating works, purpose and location of preheat, method • To be adopted for pre heating and their correct procedures **Demonstration/ practical: -** The skills required for Supervising joint preparation activity shall be acquired by conducting practice of the activities that emphasize on: • Check the working conditions of the tools and equipments and provide guidance and support for use of the same for fitup • Check drawings and specifications to ensure correct location, orientation and other specifications of the joints being prepared • Consult the method statement and supervise positioning and placing of the sections as per required sequence for joint preparation • Observe and confirm that the activity of clamping and anchoring of the elements/ sections is done as per standard procedure and complies with safety and quality norms • Check and confirm that the sections are aligned as per specifications and markings • Supervise and provide support and guidance in case adjustments are to be made for prepared joints. Ensure that the method used for adjustment is executed as per standard procedure • Supervise decamping activity for the completed joints and sections • Assist the engineer in charge in preparation of fit-up and joint confirmation report	
6	**Supervise bolting and welding of structural steel elements according to standard procedures and to**	**Theory:** • Knowledge of different tools and equipments used for bolting and reveting works, their range and capacity of operation, procedures for proper	

Sr. No.	Module	Key Learning Outcomes	Equipment Required

	meet desired standards
	
	Theory Duration
	(hh:mm)
	100:00
	Practical Duration
	(hh:mm)
	100:00
	
	Corresponding NOS Code
	CON/N1219
		handling and storage etc.
		• Knowledge of different consumables required in welding and related works, their specifications, criteria for selections, handling and storing
		• Knowledge of relationship of various parameters such as travel speed and feed rate and flow of shielding gas etc. , their implications while working, problems arising from mismatch of parameters and their remedial and repair procedures
		• Knowledge to use different gauges, scales or instruments to check the profile of welding and dimensions of the finished component,
		• Knowledge to check and measure the torque for HSFG bolts etc
		• Knowledge of different defects in welding like cracks, undercut, porosity etc., their causes,effects and remedies
		• Knowledge of different types of bolts, their specifications and use.
		• Knowledge of different tolerance limits related to bolting works
		
		Demonstration/ practical: -
		The skills required for Supervising bolting and welding of structural steel elements shall be acquired by conducting practice of the activities that emphasize on:
		• monitor the welding works and provide solution to problems related to
		  • heat input
		  • travel speed and feed rate
		  • current/amperage settings
		  • flow of shielding gas
		  • damage to the welding tip and methods to avoid the same
		  • equipment adjustments, tools and consumables etc.
		• Perform visual checks on welded joints to identify the defects such as spatters, undercut, over- reinforcement, porosity etc.
		• obtain completion report from foreman and process the completed components for quality checks
		• Obtain permission for and perform dimensional checks on completed components
		• Identify the defects as indicated by the quality department and recommend subordinates to carry out repair activities	

Sr. No.	Module	Key Learning Outcomes	Equipment Required
		• Check and remove bolts, nuts and washers which are damaged or not in useable condition • Ensure that all bolts are properly secured in respective places • Check the torque of HSFG bolts and ensure that it is as per specifications • Prepare bolting report describing the necessary parameters • Discuss any issues identified during supervision with engineer in charge and implement the necessary corrective measure	
7	**Manage workplace for safe and healthy work environment** **Theory Duration** (hh:mm) 21:00 **Practical Duration** (hh:mm) 21:00 **Corresponding NOS Code** CON/N9002	**Theory: -** **Understand the concept of:** • The policies, procedures and protocol set up by the EHS Department With respect to Health , Safety and Environment at the respective construction site • Reporting procedures in case of hazards at site, accidents or emergency situations • Emergency response system • safe working practices for tools, tackles and equipment used in fabrication & erection work • The appropriate personal protective equipment to be used in fabrication & erection work • Monitor working in workplace keeping safety & health in mind **Demonstration/ Practical: -** • Demonstrate procedures to be followed for accident recording and reporting as per organizational • and statuary requirements • Demonstrate response to emergency procedures / protocols • Demonstrate the use of fire protection Equipments for different type of fire Hazard • Demonstrate proper housekeeping at site • Ensure safety and protection Equipments are properly installed for erection work • Identify hazards associated with fabrication & erection operations	• Leather Hand Gloves • Jump suit • Wire brush • Hand & Leg guards leather • Safety goggles • Nose mask • Ear protection • Fire extinguishers • Sand buckets Flashback arrestors • Welding helmet • Welding glass
	Total Duration **Theory Duration** (hh:mm)	**Hand tools** Stud Wrenches, Open-End Wrenches, Crescent Wrenches, Hammer, Nibbler, pliers **Power tools**	

Sr. No.	Module	Key Learning Outcomes	Equipment Required
	504:00 **Practical Duration** (hh:mm) 496:00	Drilling machine with bits, Electric screw gun, Electric hexa saw Welding tools and accessories, Gas cutting tools and accessories **Measuring tools** Measuring tape, Plumb Bob, Spirit level, Chalks line, Try square Water level **Equipments and Machinery** Tower crane, Mobile crane, Forklift, Scissor lift, Hydraulic jacks, Electric Wire Rope Hoist, Electrical winch, Electrical chain hoist, derrick **Lifting accessories** **Belts,** Slings, Wire ropes, Shackles, Spreader board, Chain, Link , Eye hook, Eye bolts, Bull dog grips, Clamp, socket **Safety instruments** Safety Helmet , Safety goggles , Safety shoes , Safety belt, Cotton gloves, Ear plugs , Reflective jackets, Dust mask, Fire Prevention kit, Barricade tape, Safety Tags	

Grand Total Course Duration: **1000 Hours, 0 Minutes**

(This syllabus/ curriculum has been approved by ***Construction Skill Development Council of India)***

Trainer Prerequisites for Job role: "Supervisor Fabrication" mapped to Qualification Pack: "CON/Q1209", v1.0"

Sr. No.	Area	Details
1	**Description**	To deliver accredited training service, mapping to the curriculum detailed above, in accordance with the Qualification Pack "CON/Q1209".
2	**Personal Attributes**	Aptitude for conducting training, and pre/ post work to ensure competent, employable candidates at the end of the training. Strong communication skills, interpersonal skills, ability to work as part of a team; a passion for quality and for developing others; well-organised and focused, eager to learn and keep oneself updated with the latest in the mentioned field
3	**Minimum Educational Qualifications**	ITI/12th standard pass
4a	**Domain Certification**	Trainer/Assessor- 70% in each NOS of Qualification Pack "CON/Q1209" & 80% overall , Lead trainer/Lead Assessors- 70% in each NOS of Qualification Pack "CON/Q1209" & 90% overall
4b	**Platform Certification**	Trainer/Assessor-80% in each NOS of Qualification Pack "MEP/Q0102" or "MEP/Q0104", Lead trainer/ Lead Assessors- 90% in each NOS of Qualification Pack "MEP/Q0101" or "MEP/Q0103"and overall 90%
5	**Experience**	i. Technical Degree holder with minimum three years of Field experience and preferably two years of teaching experience or, ii. In case of a Diploma Holder five years of field experience and preferably two years of teaching experience or, iii. In case of ITI/12th pass minimum eight years of field experience and preferably two years of teaching Experience.

CRITERIA FOR ASSESSMENT OF TRAINEES

Job Role	Supervisor Fabrication
Qualification Pack	CON/Q1209
Sector Skill Council	Construction

Guidelines for Assessment

1. Criteria for assessment for each Qualification Pack will be created by the Sector Skill Council. Each Performance Criteria (PC) will be assigned marks proportional to its importance in NOS. SSC will also lay down proportion of marks for Theory and Skills Practical for each PC.
2. The assessment for the knowledge part will be based on knowledge bank of questions created by Assessment Bodies subject to approval by SSC
3. Individual assessment agencies will create unique question papers for knowledge/theory part for assessment of candidates as per assessment criteria given below
4. Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/training centre based on assessment criteria.
5. The passing percentage for each QP will be 70%. To pass the Qualification Pack, every trainee should score a minimum of 70% individually in each NOS.
6. The Assessor shall check the final outcome of the practices while evaluating the steps performed to achieve the final outcome.
7. The trainee shall be provided with a chance to repeat the test to correct his procedures in case of improper performance, with a deduction of marks for each iteration.
8. After the certain number of iteration as decided by SSC the trainee is marked as fail, scoring zero marks for the procedure for the practical activity.
9. In case of successfully passing only certain number of NOSs, the trainee is eligible to take subsequent assessment on the balance NOSs to pass the Qualification Pack within the specified timeframe set by SSC.
10. Minimum duration of Assessment of each QP shall be of 4hrs/trainee.

				Marks Allocation	
Assessment outcomes	Assessment Criteria for outcomes	**Total Mark**	**Out Of**	**Theory**	**Skills Practical**
CON/N1215: Plan and organize resources for completion of construction Fabrication works	PC1. plan activities as per schedule and sequence	**100**	7	3.5	3.5
	PC2. determine requirement of manpower to complete works for each fabrication activity like welding, cutting, grinding etc.		7	3.5	3.5
	PC3. ascertain type and range of equipment to be used for different operations such as welding, cutting, grinding etc.		8	4	4
	PC4. provide inputs regarding requirements for manpower, tools, and materials as per work requirements to superiors		8	4	4
	PC5. determine resources to be used in accordance with safety practices to be observed during various operations		7	3.5	3.5
	PC6. check the working of different equipment and consumables to identify any defects and mark the same for replacement or repair as applicable.		8	4	4
	PC7. ensure that the tools and consumables are used for appropriate purpose only as specified by manufacturers and with complete safety		8	4	4
	PC8. ensure that materials and consumables are appropriately used and wastage of such is avoided		7	3.5	3.5
	PC9. employ tools, tackles and equipment with care to avoid damage to the same		8	4	4
	PC10. ensure that all scrap is disposed as per organisational norms.		8	4	4
	PC11. allocate manpower to respective activities on the basis of work requirement		8	4	4
	PC12. ensure productivity of manpower by providing instruction, checking completed works as per drawing and reporting to senior authorities		8	4	4
	PC13. report efficiently to the concerned authorities for discrepancies found in the jobs		8	4	4
		Total	**100**	**50**	**50**
CON/N1216: Read and interpret specifications and fabrication drawings and assist in	PC1. read and interpret working drawings, schematics etc.	**100**	11	5.5	5.5
	PC2. interpret symbols, terms and other labels used in the drawings for respective works.		11	5.5	5.5
	PC3. read and interpret the code of practices, specifications, charts and tables and other documents regarding the use and application of various tools and materials employed in the fabrication yard		11	5.5	5.5

documentation of reports	PC4. employ correct drawings for confirming the orientations, joint and surface preparations etc. as per requirement.		11	5.5	5.5
	PC5. carry out necessary calculations and computations from the drawings		11	5.5	5.5
	PC6. read and understand the equipment specifications related to operations, storage and capacity.		11	5.5	5.5
	PC7. fill up checklists, permits and relevant formats as applicable to allotted work		11	5.5	5.5
	PC8. provide necessary inputs for preparation of reports such as o Details, specification and progress of joints o Details , specification and progress of welds o Parameters such as preheat temp, root gap, repair points etc. o Details of cutting patterns and progress o Details of drilling, output and progress		12	6	6
	PC9. assist in completion of dimensional checking and make relevant entries		11	5.5	5.5
		Total	**100**	**50**	**50**
CON/N1217: Supervise cutting , drilling & edge preparation activity of structural steel elements	PC1. instruct the subordinates for shifting required materials	**100**	6	3	3
	PC2. oversee the lifting and shifting of structural steel elements/components and provide support to the riggers as and when necessary for the same		6	3	3
	PC3. check the physical conditions of the structural steel elements		6	3	3
	PC4. oversee the marking and measuring activity and guide the gang for correctly measuring the elements, using the tool and instruments according to standard procedures		6	3	3
	PC5. determine the shrinkage allowance by estimating the heat input and relative shrinkage.		6	3	3
	PC6. inspect the markings and confirm it is matching with the drawings while incorporating thereof and shrinkage factor in appropriate locations		7	3.5	3.5
	PC7. check the section post cutting to confirm their dimension and shape and instruct to put appropriate markings on the same as per organizational procedures		6	3	3
	PC8. check the edges prepared for dimensional accuracy and compliance with drawing, provide repair solutions in case of non-compliance		6	3	3
	PC9. check the markings for positions of holes for bolts and rivets and ensure that they are within tolerance limit shown in the applicable standards		7	3.5	3.5

	PC10. provide support in cutting, drilling, beveling, scalloping etc. by suggesting appropriate solutions to problems relating to production and quality		6	3	3
	PC11. check the compliances of the holes drilled in the sections/ components are within the tolerance limits specified by the approved standard and comply with respective drawings		7	3.5	3.5
	PC12. confirm the restriction of movement of sections of cutting platform to avoid incorrect cutting of sections		7	3.5	3.5
	PC13. check the positions of cutting torch with reference to the cutting diagram in case of CNC cutting		6	3	3
	PC14. check and confirm the orientation of sections with cutting drawings.		6	3	3
	PC15. ensure proper ventilation in the cutting yard to expel the toxic fumes emitted during cutting operation		6	3	3
	PC16. report any HSE non-compliance to appropriate authorities		6	3	3
		Total	**100**	**50**	**50**
CON/N1218: Supervise joint preparation activity of structural steel elements to meet desired quality standards	PC1. oversee the measuring and marking of prepared sections and confirm their locations and positions as per drawings	**100**	7	3.5	3.5
	PC2. supervise the preparation of fitup platform as per requirement		7	3.5	3.5
	PC3. oversee the lifting and shifting of components to ensure all safety parameters are followed		7	3.5	3.5
	PC4. provide technical support in operations of tools and equipments like vices, jigs and fixtures, clamps and supports etc.		6	3	3
	PC5. check on the working conditions of various equipments and tools required for fit-up operation		6	3	3
	PC6. consult drawings and specifications to ensure correct location, orientation and other specs of the joints		6	3	3
	PC7. check the materials for any for any distortion or damage that may have occurred post cutting, drilling or other activities		6	3	3
	PC8. supervise positioning and placing of the sections as per required sequence mentioned in the method statement		7	3.5	3.5
	PC9. observe and confirm that the activity of clamping and anchoring of the elements as per standard practice and by complying with relevant safety norms prevalent on site		7	3.5	3.5
	PC10. check the positioning of the section by conducting required measurements and confirm that the sections are aligned as per markings		7	3.5	3.5

	PC11. identify the requirements of jacking, striking etc. for accurate fitup if any		6	3	3
	PC12. monitor the procedures implemented for adjusting fixed elements to confirm their sequence is as per method statements		7	3.5	3.5
	PC13. check and confirm if there is a requirement for heat input for tack welding the components		7	3.5	3.5
	PC14. check the root gap for the joint for their depth both before and after tack welding		7	3.5	3.5
	PC15. supervise the activities involved in removing anchorages and clamping equipments and confirm that the procedure is conducted safely, without damaging the sections		7	3.5	3.5
		Total	**100**	**50**	**50**
CON/N1219: Supervise bolting and welding of structural steel elements according to standard procedures and to meet desired standards	PC1. confirm that consumables required like shielding gas, electrodes, filler rods, equipment consumables etc. are of required specifications are available	**100**	5	2.5	2.5
	PC2. monitor the welding works and confirm its compliance to the applicable standards		6	3	3
	PC3. ensure that the elements/ sections are properly clamped during welding to avoid distortion		5	2.5	2.5
	PC4. confirm the availability of required power source for conducting welding operations		5	2.5	2.5
	PC5. trouble shoot problems related to: •Heat input •Travel speed and feed rate •Current/amperage settings •Flow of shielding gas •Damage to the welding tip and methods to avoid the same •Equipment adjustments, tools and consumables etc. and provide guidance to the welders to avoid such errors in future works		6	3	3
	PC6. carry out primitive quality checks for welded joints as per requirements and standard procedures		5	2.5	2.5
	PC7. identify defects such as spatters, undercut, over-reinforcement, porosity etc. in the welded by visual inspections		5	2.5	2.5
	PC8. confirm the completion of job from foreman/ welder and process the job for quality inspections as per the standard practices observed at site.		6	3	3
	PC9. check the dimensions of the completed section to ensure all dimension are within tolerances as specified in the applicable standards		6	3	3
	PC10. identify the defects as indicated by the quality department and instruct subordinates to carry out recommended repair activities		5	2.5	2.5

	PC11. ensure that the work is completed within the specified time and safety.		6	3	3
	PC12. notify the superiors of any errors encountered during supervision, discuss possible corrective actions and implement the instructions as applicable.		6	3	3
	PC13. check and expel bolts, nuts and washers which are damaged or not in useable condition		5	2.5	2.5
	PC14. check the bolt holes and groups to identify any deviations from drawings or specifications		5	2.5	2.5
	PC15. check the requirements of the bolt assemblies from the drawings and specification documents		6	3	3
	PC16. ensure that all bolts are properly secured in respective places		6	3	3
	PC17. check the torque of HSFG bolts and ensure that it is as per specifications		6	3	3
	PC18. prepare bolting report describing the necessary parameters		6	3	3
		Total	**100**	**50**	**50**
CON/N9002: Manage workplace for safe and healthy work environment	PC1. ensure proper housekeeping at workplace		5	2.5	2.5
	PC2. implement safe handling , stacking methods at workplace / store		5	2.5	2.5
	PC3. insure that health and safety plan is followed by all subordinates		5	2.5	2.5
	PC4. identify any hazard in workplace and notify them to appropriate authority		5	2.5	2.5
	PC5. ensure that all safety and protection installation are correctly placed & adequate		5	2.5	2.5
	PC6. ensure safe access is available at work place for movement of workers & materials		5	2.5	2.5
	PC7. ensure safe use of tools and tackles by the workmen as per applicability		5	2.5	2.5
	PC8. ensure appropriate use of following Personal Protective Equipment (PPE) as per applicability: • Head Protection (Helmets) • Ear Protection • Fall Protection • Foot Protection • Face and Eye Protection, • Hand &Body Protection • Respiratory Protection	**100**	10	5	5

	PC9. maintain entrances & exit from confined spaces , excavated pits and other location in concurrence with safety parameters or instruction form safety personals.		5	2.5	2.5
	PC10. ensure organizational policies and procedures are followed for health , safety and welfare, in relation to: • methods of receiving or sourcing information • dealing with accidents and emergencies associated with the work and environment • reporting • stooping work • evacuation • fire risks and safe exit procedures		10	5	5
	PC11. follow procedures for accident recording and reporting as per organizational and statuary requirements		5	2.5	2.5
	PC12. ensure effective adherence to response to emergency procedures / protocols		7.5	3.75	3.75
	PC13. report any case of emergency / risks to the concern people at the construction site		7.5	3.75	3.75
	PC14. report any perceived risk hazards to the superiors / concerned EHS		7.5	3.75	3.75
	PC15. demonstrate the use of fire protection equipments for different type of fire hazard		7.5	3.75	3.75
	PC16. implement control measures to reduce risk & meet legal requirement as per organizational policies		5	2.5	2.5
		Total	**100**	**50**	**50**