

# SAFETY ASSESSMENT CHECKLIST FOR NEW CONSTRUCTION PROJECTS

Project Identification/ Name of Construction Site: \_\_\_\_\_

Contractor Name: \_\_\_\_\_

Name of Project Manager (Contractor): \_\_\_\_\_

PMC Name, if any: \_\_\_\_\_

Name of Project Manager (PMC), if any: \_\_\_\_\_

Assessment Date and Time: \_\_\_\_\_

Assessment By: \_\_\_\_\_

Total Score \_\_\_\_\_ Obtained Score \_\_\_\_\_ and \_\_\_\_\_ %

## Filling Instructions

### 1. Context:

- This checklist will be used to evaluate level of Safety at new construction sites.
- Scoring for each checkpoint is mandatory.
- Each item to be assessed by the assessor i.e. PMC and/ or followed by representative of IIT Bombay.

### 2. Scoring System:

- Evaluate each item and assign scores as follows:
  - 4 - Good (above 91%): Implement best practices and deficiencies to be addressed.
  - 3 - Partial (71% - 90%): Partially compliant; some deficiencies observed; requires attention.
  - 2 - Poor (51% - 70%): Significant deficiencies observed; Immediate actions required.
  - 1 – Very Poor (41% - 50%): Major deficiencies observed; immediate action required to prevent serious incidents.
  - 0 - Unacceptable (0% - 40%): No compliance; imminent danger; work may need to be stopped.
  - NA - Not Applicable: it will not be included in any score calculation.

### 3. Date Corrected/ Remarks:

- For items marked as NA, briefly explain why it not applicable to the site.
- Contractor to provide a target date for correction.

### 4. Score Calculation:

- Overall Level of safety compliance will be calculated by averaging the total scores from each section.  
*Note: Some of the checkpoints have weightage considering their higher risk level and will impact on scoring by decrementing the mentioned percentage to the section score if not scoring 4.*

### 5. Review:

- This checklist shall be filled out and reviewed prior to the safety committee meeting for presentation in the site safety committee meeting, and it should also be reviewed during the project review meeting by PMC and OSD.

0 = Not acceptable (below 40%)	1 = Very Poor (41% - 50%)	2 = Poor (51% - 70%)	3 = Partial (71% - 90%)	4 = Good (above 91%)	NA = Not Applicable
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Sr. No.	Description of Checkpoint	Score	Date Corrected/ Remarks
<b>1</b>	<b>Safety Management ( _____/_____, _____%)</b>		
1.1	Posters and signages are displayed at prominent locations in multiple languages (Hindi, English, Local Language) to ensure understanding by the majority of the workforce.		
1.2	The use of mobile phones and earphones during work is strictly prohibited and strictly enforced.		
1.3	<i>Safety induction training is conducted for all workers in their respective languages, and its prerequisites (medical, ID card, issuance of PPEs) are ensured. Records are available. (Check Records). (-20%)</i>		
1.4	The display and enforcement of 'No Smoking/ No Alcohol/ No Drugs' policies are ensured. (Evidence: Display of posters & action records).		
1.5	A permit to work is issued and obtained for the work activities.		
1.6	A daily toolbox talk (TBT) is conducted, and records are maintained.		
1.7	Safety-related meetings with workers are conducted every month. (Evidence: Meeting photos and signed minutes).		
1.8	General and work-specific safety training is provided to workers, and supervisors. Training records are maintained.		
1.9	Safety Observation register is maintained and kept updated.		
1.10	Safety staff are deployed as per contract requirements or in greater numbers based on the site risk level.		
1.11	The last-minute risk assessment (LMRA) or site survey is conducted & observations are discussed during the TBT. (TBT & LMRA Records)		
1.12	A legal register for the management of BOCW and other legal requirements is prepared and updated. (Updated legal register)		
1.13	The site safety plan, work method statement, and risk assessment are prepared and followed on site.		
1.14	Welfare facilities (drinking water, washrooms, sitting areas) are provided and are kept clean and properly lit.		
1.15	All incidents (near misses, injuries, and accidents) are reported and investigated, and safety alerts are shared for lesson learning.		
1.16	The safety park, first aid room, and workers induction room are prepared with all required facilities and arrangements.		
1.17	Labour hutments, if any are provided with necessary facilities and welfare measures, and it is inspected regularly. (Inspection Records)		
<b>2</b>	<b>Access on Site ( _____/_____, _____%)</b>		
2.1	Everyone can safely reach their place of work.		
2.2	Access routes are kept clear of obstructions and are clearly signposted.		
2.3	Holes/pits are protected with clearly marked and securely fixed covers to prevent any falls.		
2.4	The site is kept tidy, and materials are stored safely (e.g. block heights, reinforcement and shuttering material). (-10%)		
2.5	Lighting is adequate both inside and outside buildings or work areas, especially when work is carried out in the dark. (Evidence: Illumination Monitoring records).		
<b>3</b>	<b>Scaffolds ( _____/_____, _____%)</b>		
3.1	Scaffolds are erected, altered, and dismantled by competent personnel.		

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3.2	All scaffold parts (vertical, ledgers, transoms, and braces) are in position and securely fixed.		
3.3	<i>The scaffold is tied to the building or structure at sufficient points to prevent collapse. (-20%)</i>		
3.4	The scaffold is equipped with top and mid guardrails, toe boards, or other suitable protection at every edge to prevent falls.		
3.5	All vertical are provided with base plates (and, where necessary, sole plates).		
3.6	Working platforms are fully decked and boards fixed or arranged to prevent tipping or tripping.		
3.7	Red tags, warning notices, or barriers are in place to prevent unauthorized use of an incomplete or unsafe scaffold.		
3.8	Scaffold is strong enough to carry the weight of materials stored on it.		
3.9	<i>The scaffold is regularly inspected &amp; tagged by a competent person, at least weekly for platforms 2m or above, or at suitable intervals for lower platforms, and after any alterations, damage, or extreme weather conditions. (Inspection records) (-20%)</i>		
3.10	Mobile and tower scaffolds are inspected and used according to the supplier's instructions.		
3.11	The castor wheels of tower scaffolds are locked, outriggers are deployed, if any when in use. The platform is kept empty when moved.		
<b>4</b>	<b>Ladders ( _____ / _____, _____ %)</b> Note: Don't work from a ladder if there is a safer way using more suitable equipment like scaffold or areal work platform or platform.		
4.1	<i>Standard ladders are used; no makeshift or wooden ladders are permitted. (-20%)</i>		
4.2	Ladders are inspected before use & correctly utilized. (Evidence; Tag and checklist)		
<b>5</b>	<b>Roof Work ( _____ / _____, _____ %)</b>		
5.1	<i>There is edge protection (e.g. floor, staircase and platform) to prevent falls. (e.g., guardrails, lifelines, ropes, parapet) (-20%)</i>		
5.2	Standard safety nets are provided to arrest any falling object or person.		
5.3	Where nets are used, they are rigged safely by a competent person.		
5.4	<i>Adequate control measures are taken to prevent people falling through floor opening, cut-out, lift shaft, duct, expansion joint e.g. by providing barriers, covers, or working platforms. (-20%)</i>		
5.5	People are kept away from the area below roof work. If not possible, additional precautions are taken to prevent debris or any falling object. (e.g., safety net, temporary shed, canopy, barriers)		
5.6	People working at height are using appropriate PPE. e.g. Full body harness, lifelines, fall arrest systems, etc.		
<b>6</b>	<b>Powered Access Equipment &amp; material Hoist ( _____ / _____, _____ %)</b>		
6.1	Powered Access Equipment (PAE) such as hoist, lifts, Aerial work platform are installed as per manufacturer instructions by trained personnel.		
6.2	<i>Operators are trained and competent. (Evidence: Training records, certifications) (-20%)</i>		
6.3	The safe working load is clearly marked and respected.		

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6.4	Equipment is inspected by a competent person at set intervals. (Inspection records maintained)		
6.5	Working platform of the PAE has barriers or arrangements to prevent people and materials falling off.		
6.6	There is a suitable enclosure or guards to prevent people from being struck by any moving part of the hoist.		
6.7	Landing gates are kept shut except when the platform is at the landing.		
6.8	Controls are arranged so that the hoist can be operated from one position only.		
6.9	The material hoist is not used for carrying persons.		
<b>7</b>	<b>Construction and other Vehicles ( _____/_____, _____%)</b>		
7.1	Vehicles and pedestrians are kept apart, with warning signs displayed.		
7.2	Adequate clearance is ensured around slewing vehicles (e.g., excavators).		
7.3	Reversing is avoided; if not, a trained signalman or helpers are used.		
7.4	A person is appointed to ensure safe movements of construction vehicle/s in the IIT premises and at site.		
7.5	<i>Vehicles are maintained to be fit for both legal and operational requirements. (Evidence: legal and maintenance records)</i> <b>(-10%)</b>		
7.6	Drivers and operators are competent for the vehicles or machines they are operating. (Evidence: Licenses and certifications)		
7.7	Loads are within the vehicle body, properly secured, and covered in case of dust-generating materials. e.g. boulders & soil. <b>(-10%)</b>		
7.8	<i>A wheel washing plant is set up and functioning to clean vehicle tires, ensuring that they do not make outer roads dirty or slippery.</i> <b>(-10%)</b>		
<b>8</b>	<b>Steel Yard and Machine ( _____/_____, _____%)</b>		
8.1	The machine and equipment (e.g. Bar cutting, Bar bending, etc) has been installed and inspected by a trained person.		
8.2	Operators are trained and competent (Evidence: Training records, certifications)		
8.3	<i>Safe electrical connection, cable management and earthing ensured to all machines and equipment.</i> <b>(-20%)</b>		
8.4	Work-specific PPE is provided, including shoulder pads for manual handling, gloves for workers and operators, and face shields or goggles for operators.		
8.5	Steel yard Shed to prevent water ingress to machines specially electrically operated.		
8.6	Foot pedals are covered to prevent accidental operation.		
8.7	All safety guards are in place and functioning before operating the machine.		
<b>9</b>	<b>Cranes ( _____/_____, _____%)</b>		
9.1	The crane is suitable for the job and placed on a firm and level base.		
9.2	<i>Crane ASLI and limit switches is working and calibrated (Records of inspections maintained)</i> <b>(-20%)</b>		
9.3	A crane supervisor is appointed who is responsible for controlling the lifting operation on site.		
9.4	Lift is properly planned by the appointed person. (Lift plan available for lifting items over 1T, or lift study for less than 1T).		

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9.5	The crane driver and signaler are trained and competent. (Evidence: Training records, certifications)		
9.6	The load is checked to ensure it is fully secured with proper slinging before each lift.		
9.7	People are informed and stopped from standing, walking or working below suspended load or in the swing area.		
9.8	<i>The crane, lifting tools, &amp; tackles have valid third-party test certificates (TPC), which are displayed or readily available. (-20%)</i>		
<b>10</b>	<b>Excavations ( _____/_____, _____%)</b>		
10.1	The excavation plan is prepared in consultation with PMC project Manager and PMC Safety In charge.		
10.2	<i>There is adequate support for the excavation, or has it been sloped or battered back to a safe angle (-20%)</i>		
10.3	Safe access and egress are provided for the excavation, such as a sufficiently long, secured ladder or steps.		
10.4	Barricades, barriers, or other protection measures are taken to prevent people and vehicles from falling into the excavated pit.		
10.5	<i>The excavation does not affect the stability of neighboring structures or services and necessary precautions are taken. (-20%)</i>		
10.6	Materials, excavated earth, vehicle are stored away from the edge of the excavation to reduce the chance of a collapse or falling in.		
10.7	The excavation is regularly inspected by a competent person. (Records of inspections maintained)		
10.8	Dewatering arrangements are in place for excavated pits to prevent water accumulation and to ensure its stability & safe work conditions.		
<b>11</b>	<b>Manual Handling ( _____/_____, _____%)</b>		
11.1	Workers have been instructed and trained on how to perform manual handling. e.g. long objects, bars, and cylinders. (Training records)		
11.2	Heavy materials are handling using wheelbarrows, hoists, loader, and other suitable equipment.		
<b>12</b>	<b>Hazardous &amp; Flammable Substances ( _____/_____, _____%)</b>		
12.1	All harmful substances (e.g., cement, solvents, paints, fuel, oil) have been identified in the project.		
12.2	These substances are labelled, and Material Safety Data Sheets (MSDS) are displayed.		
12.3	Provision is made to prevent spillage of hazardous substances or secondary containment is in place.		
12.4	Substances are properly stored (separate storage areas and ventilation).		
12.5	Suitable fire extinguishers are provided nearby storage areas.		
<b>13</b>	<b>Electricity ( _____/_____, _____%)</b>		
13.1	<i>Cables protected from damage by proper cable management and use of cable protectors. Three-wired cables (2.5mm<sup>2</sup>) are used, with no single-wire cables. (-20%)</i>		
13.2	All cable connections are made with industrial plugs-tops.		
13.3	Panels, boards, and equipment are visually checked before use and regularly inspected by a competent person. (Checklist and Records)		
13.4	Fire extinguishers are placed near electrical distribution boards (DB).		
13.5	All temporary lighting arrangements are done in a safe manner.		

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13.6	A competent or licensed electrician is deployed, provided with necessary resources and PPE.		
13.7	<i>Standard electrical distribution boards for construction with suitable IP ratings and 30mA RCCB are used. No wooden-mounted boards, domestic plug-tops, or exposed conductors are used. (-20%)</i>		
<b>14.</b>	<b>Tools and Machineries ( _____/_____, _____ %)</b>		
14.1	The right tools or machinery are being used for the job.		
14.2	<i>All rotating and dangerous parts are guarded, e.g., gears, chains, belts, pulleys, sprockets, cutting wheels (-20%)</i>		
14.3	Safe working procedures are established and followed, with appropriate training given. (Evidence: training records)		
14.4	Tools and machineries are properly maintained and serviced.		
14.5	Workers using vibrating tools (e.g., concrete breakers, angle grinders, hammer drills) are identified, informed, and trained on the risks of hand-arm vibrations and their controls.		
14.6	Vibrating tools are properly maintained and inspected. (Records)		
<b>15.</b>	<b>Emergencies including Fire ( _____/_____, _____ %)</b>		
15.1	An emergency plan is in place, and workers are trained on what to do in case of an emergency. (Emergency plan available, training records).		
15.2	Means of raising the alarm are in place and tested. (e.g., hooter).		
15.3	Adequate escape routes are provided and kept clear.		
15.4	<i>Mock drills are conducted as per plan and on set frequency. (Records of drills maintained) (-20%)</i>		
15.5	Emergency contacts including details of tie-up hospital and the reporting structure are displayed at prominent places. (Pictures and letter of tie-up)		
15.6	Fire extinguishers are located throughout the site and regularly checked. (Fire extinguisher inspection records)		
15.7	First-aid facilities are made available, and the first-aid box(es) are periodically inspected and properly stocked.		
<b>16.</b>	<b>Hot work ( _____/_____, _____ %)</b>		
16.1	<i>A safe and inspected equipment is used for welding, cutting, grinding at the site. e.g. gas cutting set or electrical welding machine. (-25%)</i>		
16.2	Pre-work inspection checklist is filled and records are made available		
16.3	Welder or fitter is competent and equipped with all required PPE. (Training records, Certifications)		
16.4	Suitable fire extinguishers provided nearby during hot work.		
16.5	<i>Before hot work, the area is ensured to be free from combustible and flammable materials to prevent any risk of fire or explosion involving cylinders. (-15%)</i>		
<b>17.</b>	<b>Protecting the Public ( _____/_____, _____ %)</b>		
17.1	Work area is properly fenced off to prevent access by the public and unauthorized individuals		
17.2	The public is protected from falling objects.		
<b>18.</b>	<b>Personal Protective Equipment (PPE) ( _____/_____, _____ %)</b>		
18.1	Workers are provided with PPEs and trained to use correctly.		
18.2	Violations of PPE usage are dealt with strictly. (Disciplinary Action)		

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18.3	PPE is inspected and maintained regularly. No expired PPEs in use.		
18.4	<i>Full-body harnesses are provided to workers with a safe anchorage point if a fixed hook point is not available. (-25%)</i>		
18.5	Suitable hearing protection provided and worn in noisy areas.		
<b>19.</b>	<b>Environmental Aspects ( _____ / _____, _____ %)</b>		
19.1	The controls are in place to minimize water pollution and dust generation.		
19.2	A waste management plan and protocols are in place and implemented.		
<b>20.</b>	<b>Other ( _____ / _____, _____ %)</b>		
20.1			
20.2			
20.3			

Signatures: