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| **S.N.** | **ACTIVITY** | **HAZARD** | **CAUSES OF HAZARD** | **CONSEQUENCES/ IMPACT** | **RISK EVALUATION** | | **RISK LEVEL** | **IMPLEMENTED CONTROL MEASURES** | **RESIDUAL RISK** | | | **ACCEPT Y/N?** |
| **P** | **S** | **H/M/L** | **P** | **S** | **H/M/L** |
| 1 | Mobilization and delivery of the materials | Mobilization/Manual/  Mechanical Handling | Untrained/Improper handling of materials and equipments/ Obstructions /Unauthorized personnel | Injury to back, hands and feet while handling materials and equipments/ Obstruction to free movement/  Injuries/fatalities | 5 | 5 | 25 | * Safety induction and training for operatives working * Specific training must be given to those working with hot work, operators of certain equipments and scaffolding * Proper manual lifting methods to be applied * Use of proper PPE * Stacking shall be made in a designated location and the area shall be secured by using barriers and signs * Access for vehicles and walkway should not be obstructed * Proper stacking procedure must be followed * TBT for operatives together with this risk assessment * Provide training for the employee for safe manual handling techniques | 1 | 5 | 5 | Y |
| 2 | Surface preparation for installation | Fall of Materials | Loose materials/  Poor Housekeeping | Death / Major Injury | 5 | 5 | 25 | * Do not keep loose material at the edge. * Do not over stack materials. * Clean all the waste materials from the scaffold platform. * Ensure toe boards are available. * Overhead protection should be ensured to prevent fall of material from top. * Barricade the area below the scaffolding. | 1 | 5 | 5 | Y |
| 3 | Use of portable tolls , machines etc. | Unsafe use of electrical machineries | No proper maintenance of electrical equipments/ machineries  Failure to deploy skilled electricians | Electrocution of personnel | 3 | 4 | 12 | * Periodic check of electrical equipments/ machineries * Electrical connection of power supply/ cable management and arrangements | 1 | 4 | 4 | Y |
| 4 | Application of Chemical (Glue/adhesive, Primer Coat) | Contact with skin, fire | Chemical splashes, Lack of supervision | Illness, irritation, injuries, property damage | 5 | 5 | 25 | * Workmen are trained on safe applications * Mixing procedures to be complied with manufacturer’s instruction * Unauthorized mixtures shall not be done * Safe control measures which stipulated in MSDS are complied without any deviation * Responding to hazardous label appropriately\ * Use necessary PPE * Do not stack nearby fire causing agent and other substances * Electrical cables or leakages are controlled through proper way | 1 | 5 | 5 | Y |
| 5 | Installation of carpets | Inhalation of dust during floor cleaning  Lifting heavy carpet manually  slip, trip, fall | Improper use of PPEs  Unqualified workers  Poor house keeping | Lungs infection  Personal Injury, Muscle strain | 2 | 4 | 4 | -Ensure trained and experienced employees are assigned to the job.  -Respiratory *protection*, and standard PPEs to be worn at all the times.  -Lifting should be done according to lifting plan in a proper sequence.  Ensure thorough housekeeping and material stacking throughout the workplace.  Provide adequate manpower. | 1 | 1 | 1 | Y |

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| Persons in danger |
| * Workers undertaking the work |
| * Persons passing the site location/ truck routes, e.g. members of the public and persons in the Vehicles. |
| Personal protective equipment |
| * Safety Helmet, Gum Boot, Proper Gloves & Safety Goggles |
| Information, instruction and training |
| * All personnel in the team are to be made aware of the safe systems of work. |
| * Ensure that good housekeeping standard is maintained throughout. * Training and experience for personnel to use electrical equipments and vibratory equipments. * Educate the personnel to handle chemicals such as concrete… |
| Emergency procedures |
| * Site emergency procedures should make provision for the rescue of individuals from heights. |
| * First-aid facilities should be available to cope with any significant injuries that may arise from the work. |
| Monitoring and review |
| * Work should be monitored by Foreman and charge hand who are trained to ensure that any additional precautions or equipment required are provided. |

**RISK ASSESSMENT COMMITTEE**: Project Manager/ Project Engineer

Safety Manager/ Safety Officer

**Reviewed by:** (Safety Officer) **Approved by:** (Project Manager)

**RISK MATRIX**

**Risk Rating (RR) – Severity x Likelihood**

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| **LIKELIHOOD**  **(PROBABILITY)**  **(P)**  **SEVERITY**  **(IMPACT)**  **(S)** | | **Rare**  Remote possibility (once every 3 years or more)  **1** | **Unlikely**  Could happen but rare (typically once in a year)  **2** | **Possible**  Could happen occasionally (on average quarterly)  **3** | **Likely**  Could happen often (on average once a month or more)  **4** | **Almost certain**  Could happen frequently (once a week or more)  **5** |
| **Insignificant** | **1** | **Low**  **1** | **Low**  **2** | **Low**  **3** | **Low**  **4** | **Medium**  **5** |
| **Minor** | **2** | **Low**  **2** | **Low**  **4** | **Medium**  **6** | **Medium**  **8** | **Medium**  **10** |
| **Moderate** | **3** | **Low**  **3** | **Medium**  **6** | **Medium**  **9** | **Medium**  **12** | **High**  **15** |
| **Significant** | **4** | **Low**  **4** | **Medium**  **8** | **Medium**  **12** | **High**  **16** | **High**  **20** |
| **Major** | **5** | **Medium**  **5** | **Medium**  **10** | **High**  **15** | **High**  **20** | **High**  **25** |

**RISK BASED CONTROL PLAN**

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| **RISK LEVEL** | **ACTION AND TIMESCALE** |
| **1-4**  **Low** | Quick, easy controls should be implemented immediately and further action planned for when resources permit. Monitoring required ensuring controls are maintained. Manage through routine procedures. Go for economic improvements where possible. Incident report must be completed. |
| **5-12**  **Medium** | Aim to reduce risks but costs of prevention may be limited. Undertake a risk assessment of the situation / task and implement the appropriate actions. Actions should have a timescale and should be monitored. Where the risk involves work in progress undertake a risk assessment as soon as possible to ensure the safety of the situation or task. **Work should not start until the risk is reduced to an acceptable level.** Considerable resources may have to be allocated. Contact your Manager and Risk Manager by telephone about the actions that should be taken to reduce the risk/s. incident report must be completed. Incident must be added to service risk register. |
| **15-25**  **High** | **Do not commence the activity until** a risk assessment has been completed to ensure the safety of the situation or task. If it is not possible to reduce or eliminate the risk even with unlimited resources, work must remain prohibited. Inform your relevant Director, your Manager and the Risk Manager immediately by telephone. Incident report must be completed. Incident must be added to service risk register. |