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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**  1 | Mobilization and Delivery of Materials, tools and equipments at site. | Hit by fallen object, slip ,trip and fall. | Improper handling, access restriction and space constrained | Injury to workers ,ergonomics related injury ,and damaged of property | 2 | 3 | 6 | Pre job task briefing to all by supervisor undertaking activity.  Ensure correct use of PPE  Correct method of handling and equipments used for materials transfer  Only trained personnel engaged for the task  Close supervision by designated charge hand  . | 1 | 2 | 2 | Y |
| **2** | Verification and barricading of affected area, preparation for execution of work. | Sharp edges Hit by fallen object, slip ,trip and fall ,pinched points ,caught by rotating tools | Lack of focus and concentration on what they’re doing.  Weight not balanced. Materials use for Barricading might collapse | .  Injury to workers ,ergonomics related injury ,and damaged of property | 2 | 3 | 6 | Pre job task briefing to all by supervisor undertaking activity.  Ensure correct use of PPE  Correct method of handling and equipments used for materials transfer  Only trained personnel engaged for the task  Close supervision by designated charge hand  .  Provide sufficient supports before permanent securing.  Engage only experienced and trained workers for shifting and fixing of glass.  Provide obstruction free access for shifting of materials.  Use adequate manpower to lift and shift materials Use gripping tools for handling glass. Cordon off the area at ground level and restrict entry.  Post warning signs.  Train employees on manual handling and ergonomics safety  Barricade and isolate work area | 1 | 3 | 3 | Y |
| **3** | Preparation for Installation of Louvers using portable power tools (Drill Machine, Cutting Machine, Knife, Chisel, Tighter machine. | Sharp edges Hit by falling object, slip ,trip and fall ,pinched points ,caught by rotating tools | Lack of focus and concentration  Weight not balanced. Materials use for Barricading/securing might collapse | .  Injury to workers ,ergonomics related injury ,and damaged of property | 2 | 3 | 6 | Pre job task briefing to all by supervisor undertaking activity.  Ensure correct use of PPE  Correct method of handling and equipments used for materials transfer  Only trained personnel engaged for the task  Close supervision by designated charge hand  .  Provide sufficient supports before permanent securing.  Engage only experienced and trained workers for shifting and fixing of glass.  Provide obstruction free access for shifting of materials.  Use adequate manpower to lift and shift materials Use gripping tools for handling . Cordon off the area at ground level and restrict entry.  Post warning signs.  Train employees on manual handling and ergonomics safety  Barricade and isolate work area | 1 | 3 | 3 | Y |
| **4** | Preparation for Installation of Louvers by erection of mobile scaffoldings, ladder, if required (in working in high places). | Sharp edges Hit by fallen object, slip ,trip and fall ,pinched points | Screws are not tightened and locks are not properly locked.  Scaffolding unstable or might not be balanced | Injures to workers and damaged of property | 3 | 3 | 9 | Deploy trained and experienced personnel.  Use hand gloves, Eye protection.  Use glass-gripping tools.  All material to be secured at heights and in position before permanent bolting.  Cordon off the area at ground restrict entry.  Use safety harness at heights.  Provide close supervision.  Train employees on manual handling and ergonomics safety  Barricade and isolate work area | 1 | 3 | 3 | Y |
| **5.** | Installation of Aluminum Louver Outer Frames for door and windows | falling materials | Improper Installation of louvers | Injuries to personnel and damaged of property | 2 | 3 | 6 | Ensures that workers are using proper tools during installation  Ensures that louvers are fixed with proper anchors  Ensure that louvers are installed as per the drawings  Engage only experienced and trained workers for shifting and fixing of glass.  Provide obstruction free access for shifting of materials.  Use adequate manpower to lift and shift materials Use gripping tools for handling. Cordon off the area at ground level and restrict entry.  Post warning signs.  Train employees on manual handling and ergonomics safety  Barricade and isolate work area | 1 | 2 | 2 | Y |
| **6** | Housekeeping and finishing. | Hit by fallen object, slip ,trip and fall | Materials placement in sub standard and haphazard condition | Injuries to personnel and damage | 1 | 3 | 3 | * Area surrounding the materials/ equipment should be kept in a tidy condition. * All work area must be maintained in a clean and orderly fashion. * Close supervision/monitor by designated person | 1 | 2 | 2 | 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. |