SAFE WORK METHOD STATEMENT

**(Roof Sheet Work)**

**i.e. Material Lifting Shifting, Roof Sheet/Cladding sheet& Turbo Ventilator Fixing, Polycarbonate sheet fixing on roof.**

**PROJECT:**

**- ENDURANCE TECHNOLOGIES LIMITED**

**ADDRESS: -AURANGABAD**

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| **Project Ref – Roofing Work At ENDURANCE TECHNOLOGIES LIMITED** |
| **SAFE WORK METHOD STATEMENT** |
| **Contract/Job Name** | **Roofing Work At ENDURANCE TECHNOLOGIES LIMITED** |
| **Date : 18/12/2022 Updated on :** | **Method Statement Written by:**Mrs.NIKITA DAMBIR (PROJECT MANAGER)**Method Statement Review by:**Mr. Farhan Mujawar (H.O.D. SAFETY -Maxroof)**Method Statement Approved by:** |
| **Name of contractor:**Max Roofing systems Pvt. Ltd.Mr. Sanjeev Rai:-Managing Director-Maxroof | **Address of contractor: - Pune** |
| **1. Introduction**This Method Statement describes the specific safe working methods which will be used to carry out the work. It gives details of how the work will be carried out and what health and safety issues and controls are involved. The content of this Method Statement reflects the finding of the relevant Risk Assessment(s). |
| **2. Duration****It is estimated that the job will be completed as per the front available on site.**During normal work condition the timing of the work will be from 8:00 till 18:30 hrs. and shall only commence with a due work permit. For any abnormal condition such as rain, thunderstorm, high- winds condition or any other emergency condition the work permit will be suspended / ceased. |
| **3. Location of Work****ENDURANCE TECHNOLOGIES LIMITED AURANGABAD.** |
| **4. Entry Procedure*** Worker will use the Path way which is allowed by a client.
* Medical Check-up of the employees will be done by Maxroof as per Hospital specified by M/s.**ENDURANCE TECHNOLOGIES LIMITED** & Reports will be submitted to M/s. **ENDURANCE TECHNOLOGIES LIMITED**  Admin/ Safety Department.
* All employees will undergo induction training which will be given by **ENDURANCE TECHNOLOGIES LIMITED**  SAFETY DEPARTMENT.
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| **5. Site Mobilization Plan****Personnel:** Only Medically fit, trained & competent person to be employed for this job. The contract employees shall be trained on work Method Statement be for start the work. Maximum 20 to 30 worker & staff will work on the job.* Supervisor/Site In charge will only look in the site work.
* Safety Officer will only look the safety of site.
* Tools & Tackles storage Provide By **ENDURANCE TECHNOLOGIES LIMITED** as discussed onsite.
* Site Office area provided by **ENDURANCE TECHNOLOGIES LIMITED** As discussed onsite.
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| **6. Permit and Start up Procedure*** First Maxroof team will take permit by **ENDURANCE TECHNOLOGIES LIMITED**
* Toolbox talk will be given by site supervisor and safety Officer at least 10 minutes before start of the work.
* Job specific PPE’s provided i.e.: - Full body harness, Helmet, Hand gloves, Goggles.Etc.
* After toolbox meeting, workers will check their PPE’s, if any PPE found faulty then worker will inform immediately to site supervisor or safety officer.
* Area will be soft barricaded while work in progress and one person for lookout will be stationed below work area.
* Ensure that the vehicle, Tools, PPE’S & Safety Belt condition is good and all documents are available.
* Workers to be trained for height work.
* Workers will use scaffolding stair case or permanent ladder for accessing the roof.
* Worker will use only approved anchorage point while working on roof.
* Worker will use safety belt properly and with 100%anchorage.
* Before using any electric equipment, it should be ensured that equipment is checked and is in good condition. All the cable and machines must be checked before use.
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| **7. Supervision**There will be one full time Supervisor & Safety officer from the contractor who will supervise this job at site. Work will be carried out only in the presence of the supervisor. |
| **8. Description of Work / the Sequence of Main Activities.****A. Approach to Roof*** We will use scaffolding/Boom lift/stair case for going on the roof.
* Ensure the scaffolding/Boom lift/staircase is safe to use.
* Safety officer will inspect each person that he has worn all PPE’s correctly.
* Ensure 100% anchorage while going up / working/ and coming down.
* Ensure 100%supervision.
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| **B.Life line.** * Ensure work permit is issued, before starting the life line fixing work.
* Job specific PPE’S should be provided for all Workers.
* Provide soft barricading.
* Toolbox meeting should be conducted before start of the work.
* We will use scaffolding/staircase for going on roof for life line fixing work.
* Ensurethatthevehicle,Tools,PPE’S,SafetyBeltconditionaregoodandalldocumentare available.
* Use of Safety harness with two lanyards.
* Workers to be trained for height work.
* We will use 18mm PP rope for life line fixing.
* Rope shall be tied in the top truss of columns/Rafter which is allowed by client.
* One lifeline one workers allowed only.
* We will not use lifeline with joints.
* Ensure 100%supervision.

**Minimum breaking strength and safe load of polypropylene rope are indicated below.** |
|  | **Rope Diameter** | **Minimum Breaking Strength** | **Safe Load (Safety Factor 12)** | **Weight** |  |
| ***(in)*** | ***(mm)*** | ***(lbf)*** | ***(kN)*** | ***(lbf)*** | ***(kN)*** | ***(lbm/ft)*** | ***(kg/m)*** |
| 1/4 | 6 | 1125 | 5.00 | 93.8 | 0.417 | 0.01 | 0.02 |
| 5/16 | 8 | 1710 | 7.61 | 143 | 0.634 | 0.02 | 0.03 |
| 3/8 | 10 | 2430 | 10.8 | 203 | 0.90 | 0.03 | 0.04 |
| 9/16 | 14 | 4590 | 20.4 | 383 | 1.70 | 0.06 | 0.09 |
| 5/8 | 16 | 5580 | 24.8 | 465 | 2.07 | 0.07 | 0.11 |
| **3/4** | **18** | **7650** | **34.0** | **638** | **2.84** | **0.10** | **0.15** |
| 7/8 | 22 | 10350 | 46.0 | 863 | 3.84 | 0.14 | 0.21 |

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| **C. Material lifting shifting, from ground to top and top to ground i.e.: - Roof Sheets, Wall Cladding, Flashings, Louvers, Ridge Vent etc.*** Ensure wind speed is normal while lifting the sheet. If heavy wind pressure, then work will be stopped.
* Area will be soft barricaded while work in progress and one exclusive person for lookout should be stationed below work area who will restrict the other people movement.
* We will use PP rope for safe Shifting/lifting the sheet from bottom to top & top to bottom.
* While scaffolding erection work start ensure FBSH for all engaged workers and staff.
* If scaffolding height is more than 4 meter then support will be provided.
* After scaffolding erecting work complete we will start the cladding& Louver fixing work with help of self-tapping screw machine.
* Erection should be done as per standard only and approved by client.

**D. Fixing of Roof Sheet (Double Skin), Wall Cladding, Louvers & Ridge Vent*** Only trained and authorized person will do this job.
* Before start the work it is duty of supervisor to ensure the permit is taken by client.
* Area will be soft barricaded while work in progress and one exclusive person for lookout should be stationed below the work area.
* Toolbox is to be taken before start of the work and discuss the hazards and corrective actions for particular activity.
* Maxroof team will install scaffolding for wall cladding & Louver fixing work.
* After scaffolding erecting work complete we will start the cladding & Louver fixing work with help of self-tapping screw machine.
* Prior to start single skin linear sheet installation and fix with self-tapping screw machine.
* After single skin sheet fixing application of insulation and top layer sheet with the help of self-tapping screw machine.
* After top layer sheet fixing us will start ridge vent installation fixing by using self-tapping screw machine.
* The Max-seam standing seam profile roof panels shall be side lapped with seaming process involves the male female ribs snuggly anchored on the clip head and clips are fixed to structural members by self-drilling screws.
* Cover all openings and gaps by flashings also ensure all screw properly done.
* Before using any electrical equipment, it should be ensured that equipment is checked and is in good condition. Check all the cable and machine before use.
* All scrap material stored in designated place provide by client.
* After fixing lifeline install metal sheets one by one and fix with self-tapping screw machine
* After one layer sheet fixed on that Z section will be installed and then insulation lay on the sheet after that second layer of sheet will be fix with the help of self-tapping screw machine.
* After properly fixing of metal sheets, Air Ventilator will be install by manually and fix with self-tapping screw machine.
* We will arrange collection trays/buckets for collecting the bolts, screw, washers etc.
* We will not leave lose material on roof during Lunch or during end of the day.

**E. Polycarbonate Sheet Fixing on Roof For Day Light.*** This work should done after all work completion. Because there is chance of falling person from PC sheet.
* One by one fixing polycarbonate sheets by help of self-drilling screw machine.
* While fixing work carried out only trained persons allowed for roof access.
* While fixing of PC sheet do not walk on PC sheet.
* We will provide soft barricade for fixed PC sheet.

**9. Licenses**All equipment’s to be inspected & certified before use at site by (**ENDURANCE TECHNOLOGIES LIMITED** Electrical dept.)**10. Reference Document**Approved Drawing. HIRA.Site instruction of client’s engineer in charge**11. As Build Drawing**After Completion of work as build drawing should be prepared and submitted to client for records and reference.**12. Handing Over Document**After completion of installation work, a document should be prepared regarding handing over of sheeting work and duly signed by client and self.**13. Method statement to mitigate other risks*** **Medical Emergency:**

The work will be done under constant supervision. The people working Should take periodic breaks to avoid fatigue. First aid team to be informed immediately. Site procedures to be followed.* **Evacuation during emergency**

Follow site emergency procedure. Contractor’s Supervisor must maintain daily head count and ensure that all workers are safely removed from the work site and reached to assembly point |

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| **General Instructions and Safety Guideline*** All employees will undergo induction training which will be given by (**ENDURANCE TECHNOLOGIES LIMITED**) SAFETY DEPARTMENT.
* Toolbox talk given by site Supervisor, Engineer and Safety Officer.
* Daily tool box and frequent rounds will be done by Safety Person/Supervisor. Daily toolbox talks topics as per site status.
* All employees must have RID cards i.e. Aadhar card, company ID etc.
* Without permission, worker will not enter in prohibited area in (**ENDURANCE TECHNOLOGIES LIMITED**) (If any person found in other area, they will be penalized by Maxroof Safety Dept.
* Medical Check-up of the employees will be done by Maxroof as per Hospital specified by. **ENDURANCE TECHNOLOGIES LIMITED** & Reports are to be submit to the **ENDURANCE TECHNOLOGIES LIMITED**  Admin/Safety Dep.
* Maxroof will provide a dedicated Safety officer & Supervisor for the job that will be present on site during the entire closure of work.
* Food will be arranged by max roof team.
* Our cook will come at gate with Tiffin and we will receive the tiffin from gate.
* Only supervisors and safety officer can use mobile phones for communication purpose and two mobile near Fitter of roof for emergency will be used.
* The contractor will appoint a supervisor who will be present throughout the work.
* The supervisor will ensure strict supervision of the job at all times, and will not indulge in construction activity. No work will be allowed without the presence of the supervisor. If the supervisor is absent alternate supervision will be appointed by the supervisor.
* Workmen shall ensure to display photo identity during work.
* Normal Work Timing will be 8:00 hours to 18:30hours.
* Any Extension of the permit beyond permitted time shall be done with approval.
* Work area shall be barricaded for Safety.
* All Safety precautions shall be taken for safe working
* Workmen shall be not allowed to work under influence of Alcohol or if drowsiness is caused by medicine being taken by the worker.
* No Smoking or spitting in the plant premises. Person found spitting will be fined.
* Discipline shall be maintained.
* Any incident if happens on site, it must be reported immediately to **ENDURANCE TECHNOLOGIES LIMITED**

/Maxroof personnel’s.First Aid box will be available on the Site.* All Worker/Supervisor shall ensure use of Helmets and safety shoes throughout the work period.
* Any electrical equipment/ Mechanical Equipment used by the contractor shall be inspected by (**ENDURANCE TECHNOLOGIES LIMITED**) Maxroof Supervisor and certified to be safe to use. All Machine guards shall be intact.
* Electrical wire shall not be un-insulated & Cut.
* Daily 15 min tool box / safety discussion before start of the work each day, by the safety officer/Site supervisor.
* No work at height should be done without proper work permit, lifeline, and safety harness.
* Vehicle brought in by Contractor shall be in good condition, Driver shall be licensed and PUC/Registration documents shall be valid (Concerned person issuing the permit shall ensure)
* Daily Cleaning of work area shall be ensured. Debris shall be disposed to location as agreed.

Escape route will be kept clear.* Any additional guideline given by the client should be used atsite.
* In case of emergency siren, the supervisor will ensure that all his workers are evacuated from the work site and report to the assembly point near the main gate.
* The supervisor should take head count and report the Maxroof safety Person or project manager.
* In case of any incidence (spill/injury/near miss/accident) report the same immediatelyto

Maxroof project TEAM.**Any incident during course shall be immediately reported.****Important Telephone numbers:*** Mr. Sanjeev Rai (Managing Director Maxroof) -8055555155
* Mr. Randhir Rai (H.O.D. Projects Maxroof)–8411960618
* Mrs. NIKITA DAMBIR (Project Manager) - 8411906907
* Safety Manager (H.O.D Safety)- 7218688672
* Site Supervisor Maxroof) - Mr.
* Site Safety Officer Maxroof)-Mr.

Construction workers will go through the process of safety induction before commencement of work on site.Note - This Work statement method is common for all the working area of Sheeting Work at ENDURANCE TECHNOLOGIES LIMITED for working in specified area, the working method at each different location will be submitted with sign on Maxroof Letter head by Maxroof Supervisor after confirming the same by (ENDURANCE TECHNOLOGIES LIMITED)I have fully understood all the above stated safety requirements of the company and agree to abide by them.Date: 19/12/2022Project Manager:Mr. Company: Max roofing systems Pvt. Ltd. |

**Reviews & Approval**

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| **Reviewed By** | **Name & Signature of Contractor Site Engineer/Supervisor**  | **Name & Signature Of Contractor Safety Engineer/Officer** |
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| **Approved By** | **Name & Signature of Client Site Engineer/Manager** | **Name & Signature of Client Safety Engineer/Officer** |
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