Organisation Banner

Risk Assessment Report

Title		**Document Number**	APS-EHS-HIRA-25
Department	NA	**Site Name**	Avali, Grava Residences, Apas, Grava, MH99, Nishada, Precast Plant, Raka, Sayuk, Tridasa, Bommera, Casting Testing Site, New Location testing, City Center, City Center Road, VR Site, Simanchal
Risk Assessment Name	Suspended Rope Platform (SRP)	**Status**	Submitted
Next Revision Date	NA	**Revision Number**	NA
Created By	Rajkumar Pativada	**Created On**	16-Feb-2026 02:59:58 PM
Modified On	16-Feb-2026 02:59:58 PM		

Activity: Suspended Rope Platform (SRP)

Sub-Activity: Erection / Installation

Hazard

Hazard	Improper anchoring of suspension beams

Risk	Collapse of SRP, multiple fatalities
Likelyhood	NA
Consequences	NA
RR	0
Risk Level	NA

Control Measures

E - Elimination	Eliminate unsafe anchorage points by removing all untested or unauthorized anchor locations. Avoid makeshift anchoring using pipes, scaffold tubes, or structural elements not designed for loads.
SB – Substitution	Replace temporary/weak anchors with engineered anchor systems. Use certified suspension beams with built-in locking and verification pins.
EC – Engineering Controls	Use manufacturer-approved anchorage points and load-rated suspension beams. Install double anchorage or secondary safety lines for redundancy. Provide torque-limited fastening tools to ensure proper tightening. Conduct load testing of anchorage before operation.
AD – Administrative Controls	Train installation teams on anchoring procedures and load requirements. Follow approved method statements and suspended platform installation checklists. Supervisor to inspect & sign-off anchorage before use. Display signage: “Do Not Use Without Anchor Verification.”
PPE – Personal Protective Equipment	Full body harness with double lanyard. Helmet with chin strap. Safety shoes. Gloves for grip during anchoring work.

Additional Control Measures	NA
Opportunities	NA

Likelyhood	NA
Consequences	NA
Residual RR	0
Risk level	NA

Hazard

Hazard	Rope not fixed/tightened properly

Risk	Platform fall, Fatality
Likelyhood	NA
Consequences	NA
RR	0
Risk Level	NA

Control Measures

E - Elimination	Eliminate all worn, frayed, or uncertified ropes from site. Avoid rope-based systems where mechanical hoists or pre-rigged systems can replace manual rope fixing
SB – Substitution	Replace fiber ropes with steel wire ropes or high-strength synthetic ropes as recommended. Use ropes with anti-slip coatings or pre-fitted end terminations.
EC – Engineering Controls	Use rope-gripping devices and automatic locking systems. Ensure proper anchoring using thimbles, clamps, and rated rope-end fittings. Conduct tension checks using torque/tension meters. Use secondary safety ropes to prevent fall if primary rope slips.
AD – Administrative Controls	Train riggers on correct knotting, fixing, and tensioning. Implement pre-use inspection checklist for ropes and clamps. Supervisor to carry out rope tension verification before platform use.
PPE – Personal Protective Equipment	Cut-resistant gloves. Full body harness with fall arrest system. Safety helmet with chin strap.

Likelyhood	NA
Consequences	NA
Residual RR	0
Risk level	NA

Additional Control Measures	NA
Opportunities	NA

Hazard

Hazard	Electrical fault in motor/control panel

Risk	Electrocution, burns
Likelyhood	NA
Consequences	NA
RR	0
Risk Level	NA

Control Measures

E – Elimination	Eliminate faulty motors, damaged cables, or unserviceable control panels from use. Remove temporary/unauthorized electrical connections.
SB – Substitution	Replace old motors/panels with new certified units having overload protection. Use low-voltage control units where possible.
EC – Engineering Controls	Provide ELCB/RCCB protection for power supply. Use weatherproof (IP65/IP67) control panels. Ensure proper earthing/grounding of all electrical components. Install emergency stop buttons and limit switches. Use cable protectors to prevent damage.
AD – Administrative Controls	Only certified electricians to perform wiring or repairs. Conduct periodic electrical inspections and motor load testing. Maintain preventive maintenance schedules. Display “Electrical Panel – Authorized Personnel Only” signage.
PPE – Personal Protective Equipment	Electrical insulating gloves (when maintaining). Safety shoes with dielectric sole. Helmet and eye protection.

Additional Control Measures	NA
Opportunities	NA

Likelyhood	NA
Consequences	NA
Residual RR	0
Risk Level	NA

Hazard

Hazard	Wrong counterweight placement

Risk	Toppling of platform,Fatality
Likelyhood	NA
Consequences	NA
RR	0
Risk Level	NA

Control Measures

E – Elimination	Remove makeshift or unverified counterweights (stones, scrap metal, sandbags). Eliminate use of counterweights altogether where permanent anchors or parapet clamps can be used
SB – Substitution	Replace loose counterweights with factory-made rated counterweight blocks. Use modular counterweight systems with anti-slip bases.
EC – Engineering Controls	Use counterweights with locking pins/chains to prevent displacement. Mark counterweight positions clearly to ensure correct placement. Use load-rated suspension beam systems with built-in counterweight guides. Install anti-skid mats under counterweight base.
AD – Administrative Controls	Provide training on correct counterweight positioning and load balancing. Use installation checklists specifying exact weight requirements. Supervisor sign-off after counterweight placement. Daily inspection for movement, displacement, or missing weights.
PPE – Personal Protective Equipment	Safety shoes with steel toe. Gloves for handling heavy counterweights. Helmet with chin strap.

Additional Control Measures	NA
Opportunities	NA

Likelyhood	NA
Consequences	NA
Residual RR	0
Risk Level	NA

Sub-Activity: Operation (Work at height)

Hazard

Hazard	Failure of suspension rope (break, wear & tear)

Risk	Fall of platform, multiple fatalities
Likelyhood	NA
Consequences	NA
RR	0
Risk Level	NA

Control Measures

E - Elimination	Do not allow work using damaged, rusted, kinked, bird-caged, or frayed wire ropes. Remove and scrap any rope that has exceeded its manufacturer-defined service life. Do not allow use of temporary anchoring arrangements (rebar, scaffolding pipes, handrails).
SB – Substitution	Use manufacturer-supplied, factory-certified galvanized steel wire ropes only. Replace standard ropes with higher diameter / higher SWL ropes if working conditions demand. Use pre-engineered suspended platforms instead of site-fabricated cradles.
EC – Engineering Controls	Provide two independent wire rope systems:One working rope,One independent safety rope Install automatic safety locks (anti-fall devices) on safety ropes. Provide certified anchorage points with proper counterweights. Rope ends to be properly terminated with thimbles and approved clamps. Ensure rope routing avoids sharp edges and friction points.
AD – Administrative Controls	Daily pre-use inspection checklist for wire ropes (done and signed by supervisor). Maintain rope inspection and replacement records. Allow operation only by trained and authorized platform operators. Conduct toolbox talk on rope failure hazards and warning signs
PPE – Personal Protective Equipment	Full body safety harness connected to independent lifeline. Safety helmet with chin strap

Additional Control Measures	NA
Opportunities	NA

Likelyhood	NA
Consequences	NA
Residual RR	0
Risk Level	NA

Hazard

Hazard	Overloading of platform

Risk	Rope snap, fall,Fatality
Likelyhood	NA
Consequences	NA
RR	0
Risk Level	NA

Control Measures

E - Elimination	Do not allow unnecessary materials, debris, or spare tools on the platform. Remove unused items immediately after task completion
SB – Substitution	Use higher load-rated platforms if heavier materials or more manpower is required. Use mechanical lifting methods to transfer materials instead of carrying them on the platform.
EC – Engineering Controls	Provide automatic overload sensing and cut-off system on the platform. Clearly display Safe Working Load (SWL) and maximum persons allowed. Provide material trays or racks to distribute load evenly.
AD – Administrative Controls	Supervisor to check and approve platform load before start of work. Toolbox talk explaining weight limits and consequences of overloading. Permit system controlling number of workers and material quantity
PPE – Personal Protective Equipment	Full body harness with lifeline. Helmet with chin strap.

Additional Control Measures	NA
Opportunities	NA

Likelyhood	NA

Consequences	NA
Residual RR	0
Risk level	NA

Hazard

Hazard	Sudden power failure

Risk	Platform stuck mid-air, panic
Likelyhood	NA
Consequences	NA
RR	0
Risk Level	NA

Control Measures

E – Elimination	Avoid work during known unstable power supply periods. Do not operate platforms with faulty electrical connections.
SB – Substitution	Use platforms with manual descent system or battery backup.
EC – Engineering Controls	Provide manual emergency lowering mechanism accessible on the platform. Install emergency alarm / communication system between platform and ground. Independent lifeline system for each worker.
AD – Administrative Controls	Prepare and display emergency rescue procedure at site. Train operators on manual lowering operation. Conduct mock rescue drills periodically. Keep standby rescue personnel on ground during operation
PPE – Personal Protective Equipment	Full body harness. Helmet with chin strap.

Additional Control Measures	NA
Opportunities	NA

Likelyhood	NA
Consequences	NA
Residual RR	0
Risk level	NA

Hazard

Hazard	Swinging of platform due to wind

Risk	Collision with facade, fall of workers
Likelyhood	NA
Consequences	NA
RR	0
Risk Level	NA

Control Measures

E – Elimination	Stop work during high wind, rain, or storm conditions. Eliminate work at exposed elevations during adverse weather.
SB – Substitution	Use guided suspended platforms or mast climbers where feasible.
EC – Engineering Controls	Install guide rollers or tie-in restraints to prevent swinging. Provide wind speed monitoring device at height. Guardrails, mid-rails, and toe boards on platform.
AD – Administrative Controls	Define maximum permissible wind speed as per manufacturer. Supervisor to continuously monitor weather conditions. Authority given to safety officer to stop work immediately if wind increases.
PPE – Personal Protective Equipment	Full body harness with double lanyard. Non-slip safety shoes

Additional Control Measures	NA
Opportunities	NA

Likelyhood	NA
Consequences	NA
Residual RR	0
Risk Level	NA

Hazard

Hazard	Fall of tools/materials from platform

Risk	Serious head injuries to workers/public
Likelyhood	NA
Consequences	NA
RR	0
Risk Level	NA

Control Measures

E – Elimination	Do not allow loose materials or unsecured tools on the platform. Remove unused tools immediately.
SB – Substitution	Use tool bags with zipper closure instead of loose tools
EC – Engineering Controls	Provide toe boards, guardrails, and mid-rails on platform. Use tool lanyards for all hand tools. Install debris nets or safety nets below working area.
AD – Administrative Controls	Barricade area below platform with warning tape. Display “Danger – Overhead Work” signage. Assign a ground-level spotter where public access exists. Enforce good housekeeping at height
PPE – Personal Protective Equipment	Safety helmet with chin strap (workers and ground personnel). Tool lanyards.

Additional Control Measures	NA
Opportunities	NA

Likelyhood	NA
Consequences	NA
Residual RR	0
Risk Level	NA

Hazard

Hazard	Workers not tied with lifeline

Risk	Fall from height, Fatality
Likelyhood	NA
Consequences	NA
RR	0
Risk Level	NA

Control Measures

E – Elimination	Prohibit work at height without fall protection. Stop work immediately if lifeline is not used.
SB – Substitution	Use self-retracting lifelines (SRL) instead of fixed lanyards where possible.
EC – Engineering Controls	Independent lifeline anchored to certified anchor points. Double lanyard with shock absorber for continuous tie-off.

AD – Administrative Controls	Enforce 100% tie-off policy. Work-at-height permit system. Continuous supervision and random safety checks. Disciplinary action for non-compliance
PPE – Personal Protective Equipment	Full body safety harness. Double lanyard with shock absorber. Helmet with chin strap.

Additional Control Measures	NA
Risk Level	NA

Likelyhood	NA
Consequences	NA
Residual RR	0
Risk Level	NA

History

Created On	Created By	Comment	Attachments
16-Feb-2026 02:59:58 PM	Rajkumar Pativada	A new record was created: Hira Type set to 'Suspended Rope Platform (SRP)' Hira Status set to 'Submitted'	