

# Risk Assessment Report

<b>Risk Assessment UID</b>	H/APS/SRP/26/00011	<b>Site Name</b>	Avali, Akrida, 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
<b>Risk Assessment Name</b>	Suspended Rope Platform (SRP)	<b>Status</b>	Publish
<b>Next Revision Date</b>	28-Feb-2026	<b>Revision Number</b>	264
<b>Created By</b>	Rajkumar Pativada	<b>Created On</b>	25-Feb-2026 11:56:27 AM
<b>Approved By Name</b>	NA	<b>Published Date</b>	25-Feb-2026 11:56:43 AM

## Activity: Suspended Rope Platform (SRP)

### Sub-Activity: Erection / Installation

#### Hazard

<b>Hazard</b>	Improper anchoring of suspension beams
<b>Risk</b>	Collapse of SRP, multiple fatalities
<b>Likelihood</b>	NA
<b>Consequences</b>	NA
<b>RR</b>	0
<b>Risk Level</b>	NA

#### Control Measures

<b>E - Elimination</b>	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.
<b>SB – Substitution</b>	Replace temporary/weak anchors with engineered anchor systems. Use certified suspension beams with built-in locking and verification pins.
<b>EC – Engineering Controls</b>	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.
<b>AD – Administrative Controls</b>	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."
<b>PPE – Personal Protective Equipment</b>	Full body harness with double lanyard. Helmet with chin strap. Safety shoes. Gloves for grip during anchoring work.

<b>Additional Control Measures</b>	NA
<b>Opportunities</b>	NA

<b>Likelihood</b>	NA
<b>Consequences</b>	NA
<b>Residual RR</b>	0
<b>Risk level</b>	Low Risk

#### Hazard

<b>Hazard</b>	Rope not fixed/tightened properly
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<b>Risk</b>	Platform fall, Fatality
<b>Likelyhood</b>	NA
<b>Consequences</b>	NA
<b>RR</b>	0
<b>Risk Level</b>	NA

### Control Measures

<b>E - Elimination</b>	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
<b>SB – Substitution</b>	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.
<b>EC – Engineering Controls</b>	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.
<b>AD – Administrative Controls</b>	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.
<b>PPE – Personal Protective Equipment</b>	Cut-resistant gloves. Full body harness with fall arrest system. Safety helmet with chin strap.

<b>Likelyhood</b>	NA
<b>Consequences</b>	NA
<b>Residual RR</b>	0
<b>Risk level</b>	NA

<b>Additional Control Measures</b>	NA
<b>Opportunities</b>	NA

### Hazard

<b>Hazard</b>	Electrical fault in motor/control panel
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<b>Risk</b>	Electrocution, burns
<b>Likelyhood</b>	NA
<b>Consequences</b>	NA
<b>RR</b>	0
<b>Risk Level</b>	NA

### Control Measures

<b>E – Elimination</b>	Eliminate faulty motors, damaged cables, or unserviceable control panels from use. Remove temporary/unauthorized electrical connections.
<b>SB – Substitution</b>	Replace old motors/panels with new certified units having overload protection. Use low-voltage control units where possible.
<b>EC – Engineering Controls</b>	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.
<b>AD – Administrative Controls</b>	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.
<b>PPE – Personal Protective Equipment</b>	Electrical insulating gloves (when maintaining). Safety shoes with dielectric sole. Helmet and eye protection.

<b>Additional Control Measures</b>	NA
<b>Opportunities</b>	NA
<b>Likelihood</b>	NA
<b>Consequences</b>	NA
<b>Residual RR</b>	0
<b>Risk Level</b>	NA

### Hazard

<b>Hazard</b>	Wrong counterweight placement
<b>Risk</b>	Toppling of platform,Fatality
<b>Likelihood</b>	NA
<b>Consequences</b>	NA
<b>RR</b>	0
<b>Risk Level</b>	NA

### Control Measures

<b>E – Elimination</b>	Remove makeshift or unverified counterweights (stones, scrap metal, sandbags). Eliminate use of counterweights altogether where permanent anchors or parapet clamps can be used
<b>SB – Substitution</b>	Replace loose counterweights with factory-made rated counterweight blocks. Use modular counterweight systems with anti-slip bases.
<b>EC – Engineering Controls</b>	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.
<b>AD – Administrative Controls</b>	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.
<b>PPE – Personal Protective Equipment</b>	Safety shoes with steel toe. Gloves for handling heavy counterweights. Helmet with chin strap.

<b>Additional Control Measures</b>	NA
<b>Opportunities</b>	NA
<b>Likelihood</b>	NA
<b>Consequences</b>	NA
<b>Residual RR</b>	0
<b>Risk Level</b>	NA

### Sub-Activity: Operation (Work at height)

#### Hazard

<b>Hazard</b>	Failure of suspension rope (break, wear & tear)
<b>Risk</b>	Fall of platform, multiple fatalities
<b>Likelihood</b>	NA
<b>Consequences</b>	NA
<b>RR</b>	0
<b>Risk Level</b>	NA

### Control Measures

<b>E - Elimination</b>	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).
<b>SB – Substitution</b>	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.
<b>EC – Engineering Controls</b>	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.
<b>AD – Administrative Controls</b>	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
<b>PPE – Personal Protective Equipment</b>	Full body safety harness connected to independent lifeline. Safety helmet with chin strap

<b>Additional Control Measures</b>	NA
<b>Opportunities</b>	NA

<b>Likelihood</b>	NA
<b>Consequences</b>	NA
<b>Residual RR</b>	0
<b>Risk Level</b>	NA

## Hazard

<b>Hazard</b>	Overloading of platform
<b>Risk</b>	Rope snap, fall, Fatality
<b>Likelihood</b>	NA
<b>Consequences</b>	NA
<b>RR</b>	0
<b>Risk Level</b>	NA

## Control Measures

<b>E - Elimination</b>	Do not allow unnecessary materials, debris, or spare tools on the platform. Remove unused items immediately after task completion
<b>SB – Substitution</b>	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.
<b>EC – Engineering Controls</b>	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.
<b>AD – Administrative Controls</b>	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
<b>PPE – Personal Protective Equipment</b>	Full body harness with lifeline. Helmet with chin strap.

<b>Additional Control Measures</b>	NA
<b>Opportunities</b>	NA
<b>Likelihood</b>	NA

Consequences	NA
Residual RR	0
Risk level	NA

### Hazard

Hazard	Sudden power failure
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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
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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

<b>Additional Control Measures</b>	NA
<b>Opportunities</b>	NA
<b>Likelihood</b>	NA
<b>Consequences</b>	NA
<b>Residual RR</b>	0
<b>Risk Level</b>	NA

### Hazard

<b>Hazard</b>	Fall of tools/materials from platform
<b>Risk</b>	Serious head injuries to workers/public
<b>Likelihood</b>	NA
<b>Consequences</b>	NA
<b>RR</b>	0
<b>Risk Level</b>	NA

### Control Measures

<b>E – Elimination</b>	Do not allow loose materials or unsecured tools on the platform. Remove unused tools immediately.
<b>SB – Substitution</b>	Use tool bags with zipper closure instead of loose tools
<b>EC – Engineering Controls</b>	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.
<b>AD – Administrative Controls</b>	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
<b>PPE – Personal Protective Equipment</b>	Safety helmet with chin strap (workers and ground personnel). Tool lanyards.

<b>Additional Control Measures</b>	NA
<b>Opportunities</b>	NA
<b>Likelihood</b>	NA
<b>Consequences</b>	NA
<b>Residual RR</b>	0
<b>Risk Level</b>	NA

### Hazard

<b>Hazard</b>	Workers not tied with lifeline
<b>Risk</b>	Fall from height, Fatality
<b>Likelihood</b>	NA
<b>Consequences</b>	NA
<b>RR</b>	0
<b>Risk Level</b>	NA

### Control Measures

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

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

<b>Additional Control Measures</b>	NA
<b>Risk Level</b>	NA

<b>Likelihood</b>	NA
<b>Consequences</b>	NA
<b>Residual RR</b>	0
<b>Risk Level</b>	NA

#### History

Created On	Created By	Comment	Attachments
25-Feb-2026 11:56:43 AM	Rajkumar Pativada	Hira Status has been updated to 'Publish' Testing	
25-Feb-2026 11:56:27 AM	Rajkumar Pativada	A new record was created: Hira Type set to 'Suspended Rope Platform (SRP)' Hira Status set to 'Submit' Next Revision Date set to '28-Feb-2026' Revision Number set to '264'	