

Construction work guide

Review hazards and checks for each example, then prepare an assessment and work documents for your actual site.

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01 Local documents and scope

Use the Risk Assessment (RA) to identify hazards and controls, then describe the work sequence in a Safe Work Procedure (SWP). Communicate the plan at the Toolbox Meeting. Select a Permit to Work (PTW) after checking the activity, workplace and applicable rules; it is not automatically required for every task. Keep the RA, SWP and current site checks consistent.

Risk Assessment (RA)

Safe Work Procedure (SWP)

Permit to Work (PTW)

Toolbox Meeting

Safety Inspection Checklist

This is a planning reference. Verify numerical limits, permits and qualifications for the jurisdiction, sector and equipment. Record fresh site measurements, people and signatures for each job.

02 From example to site use

1 Define the job

Identify equipment, location, sequence, people, nearby activities and access. Separate preparation, execution and close-out, and record hazards observed at the site.

2 Match controls to each step

Consider elimination, substitution and engineering controls first, then procedures and PPE. Assign an owner, a verification method and stop-work conditions for each control.

3 Connect documents and site checks

Choose the local assessment, procedure and applicable permits, then brief the crew. Add drawings and checklists, reassess changes and retain the output for this job.

CONST-01

Ceiling Frame Installation and Drywall Attachment

Potential hazards

Fall from unlocked ladder hinges, nail gun accidents

Checks to verify and specify on site

- Avoiding height work; platforms and collective fall protection; Fall restraint/arrest equipment, anchors and required clearance; Access, fragile surfaces, openings and falling-object controls; Weather, work conditions, equipment inspection and stop criteria; Site rescue method, people, equipment, communication and readiness.
- Check manufacturer procedures, guards, energy isolation and release of stored energy; account for people and tools before restart.

CONST-02

Main Piping Welding and Pump Installation in Mechanical Room

Potential hazards

Fire from welding spatter, burst during pressure testing

Checks to verify and specify on site

- Combustible removal/shielding; opposite faces, lower areas and openings; Fire watch, extinguishing equipment, post-work watch duration and completion time; Gas, vapour, fume and dust assessment, testing and ventilation; Vessel/pipe residues, cylinders, hoses, flashback protection and equipment checks.
- Isolate, release and verify pressure and contents before opening. Use the design code and approved procedure for test pressure, medium and sequence; define exclusion and stop criteria.

CONST-03

Excavation and Backfilling for Drainage Systems

Potential hazards

Explosion from underground utility damage, burial due to slope failure

Checks to verify and specify on site

- Survey utilities, soil and adjacent structures. Plan support or slopes for depth and ground conditions; check access, drainage, plant separation and inspections after changes.

CONST-04

Roof Urethane Waterproofing and Exterior Water-based Painting

Potential hazards

Fall from roof edges, asphyxiation from solvent vapors

Checks to verify and specify on site

- Avoiding height work; platforms and collective fall protection; Fall restraint/arrest equipment, anchors and required clearance; Access, fragile surfaces, openings and falling-object controls; Weather, work conditions, equipment inspection and stop criteria; Site rescue method, people, equipment, communication and readiness.
- Check the SDS, compatibility, containment, extraction, leak isolation and emergency response. Select test targets, limits and respiratory protection for the actual substances and exposure.

CONST-05

Exterior Wall Maintenance and High-elevation Equipment Installation

Potential hazards

Fall due to rope failure, crushing by MEWPs (Rental)

Checks to verify and specify on site

- Avoiding height work; platforms and collective fall protection; Fall restraint/arrest equipment, anchors and required clearance; Access, fragile surfaces, openings and falling-object controls; Weather, work conditions, equipment inspection and stop criteria; Site rescue method, people, equipment, communication and readiness.
- Check manufacturer procedures, guards, energy isolation and release of stored energy; account for people and tools before restart.

CONST-06

System Scaffolding Installation and Dismantling for Exterior Work

Potential hazards

Entire structure collapse, impact from falling components

Checks to verify and specify on site

- Avoiding height work; platforms and collective fall protection; Fall restraint/arrest equipment, anchors and required clearance; Access, fragile surfaces, openings and falling-object controls; Weather, work conditions, equipment inspection and stop criteria; Site rescue method, people, equipment, communication and readiness.
- Verify task-specific training, qualifications and procedures. Record process and equipment protections, exposure controls, emergency arrangements and the responsible person's checks in the work plan.

CONST-07

Rebar Processing and Crane Lifting Work

Potential hazards

Material fall due to hitching gear failure, processing machine entanglement

Checks to verify and specify on site

- Verify weight, centre of gravity, lifting points, rated capacity and sling angles. Define ground conditions, route, exclusion zone and signals; follow the lift plan.
- Check manufacturer procedures, guards, energy isolation and release of stored energy; account for people and tools before restart.

CONST-08

Slab and Beam Concrete Pouring Work

Potential hazards

Pump truck tip-over, impact from hose detachment and whipping

Checks to verify and specify on site

- Isolate, release and verify pressure and contents before opening. Use the design code and approved procedure for test pressure, medium and sequence; define exclusion and stop criteria.
- Verify weight, centre of gravity, lifting points, rated capacity and sling angles. Define ground conditions, route, exclusion zone and signals; follow the lift plan.

CONST-09

Demolition of Old Low-rise Structures and Waste Removal

Potential hazards

Sudden collapse during demolition, risk of asbestos exposure

Checks to verify and specify on site

- Verify task-specific training, qualifications and procedures. Record process and equipment protections, exposure controls, emergency arrangements and the responsible person's checks in the work plan.
- Check the SDS, compatibility, containment, extraction, leak isolation and emergency response. Select test targets, limits and respiratory protection for the actual substances and exposure.

CONST-10

Ceiling Electrical Wiring and Fire Safety Equipment Installation

Potential hazards

Electric shock from live parts, fall due to body over-extension on ladders

Checks to verify and specify on site

- Equipment, circuits, supplies, backfeed, induced voltage and stored energy; Disconnection, prevention of re-energisation, locks and tags; Voltage detector, functional check, absence-of-voltage result and tester; Earthing/short-circuiting where required; adjacent live-part protection and boundaries; Completion, personnel clearance, lock removal and re-energisation authority.
- Avoiding height work; platforms and collective fall protection; Fall restraint/arrest equipment, anchors and required clearance; Access, fragile surfaces, openings and falling-object controls; Weather, work conditions, equipment inspection and stop criteria; Site rescue method, people, equipment, communication and readiness.

04 Fresh site records

Record date, location, equipment ID, responsible people, crew, permit references, measurements, times, testers, inspections and changes. Do not reuse previous signatures or readings.

05 Official references

These sources support local terminology and scope. The examples are editorial planning prompts from Smart JSA Bridge, not official forms.

- MOM · Risk management ↗
- MOM · Safety and health management systems ↗
- Singapore Statutes Online · Risk Management Regulations, regulation 5 ↗
- MOM · When to review risk assessments ↗
- WSH Council · Code of Practice on Risk Management ↗
- MOM · Permit-to-Work systems (OPEC guidance) ↗

<https://smartjsabridge.com/en-SG/guideline/construction>