Safe Work Method Statement

Work health and safety controls for FRP construction and installation activities

SWMS

Safe Work Method Statement

APPLIES TO

DM Composites worksites and FRP installation activities

FRAMEWORK

Hazard identification, risk assessment, controls and ongoing review

PRIMARY FOCUS

Manual tasks, fatigue, work at height, plant movements and other site hazards

OUTCOME

A structured, practical approach to safe work and risk reduction

SAFETY COMMITMENT

DM Composites Pty Ltd is committed to maintaining a safe workplace by identifying, assessing and controlling hazards and risks associated with its operations. This SWMS provides clear, step-by-step procedures to manage the hazards associated with construction and FRP structure installation activities.

CORE SAFETY CYCLE

01

Identify

Recognise task hazards

02

Assess

Evaluate likelihood and consequence

03

Control

Apply practical risk controls

04

Review

Monitor and improve

Introduction, Scope and Objectives

The SWMS establishes a consistent approach to identifying hazards and implementing safe work controls.

INTRODUCTION

At DM Composites Pty Ltd, ensuring the health and safety of our employees, subcontractors, and visitors is a core value. We are committed to maintaining a safe workplace by identifying, assessing, and controlling hazards and risks associated with our operations. To achieve this, we have developed comprehensive Safe Work Method Statements (SWMS) and Job Safety Analyses (JSA) tailored to our specific activities. These documents provide clear, step-by-step procedures to manage potential hazards related to manual tasks, fatigue, working at heights, plant movements, and other risks present in construction and FRP structure installation projects.

This SWMS is prepared in compliance with the Work Health and Safety (WHS) Act 2012 and other relevant Australian standards, ensuring a proactive approach to managing workplace risks.

SCOPE

- Manual handling tasks are required.
- Workers are exposed to fatigue-inducing activities.
- Work is conducted at height.
- Movements of plant and machinery are present.
- Other hazardous conditions may arise, such as exposure to chemicals, noise, or extreme weather.
- This document outlines the procedures to safely manage these risks and minimize the likelihood of incidents occurring.

OBJECTIVES

- Identify workplace hazards associated with specific tasks.
- Assess the risks of injury or harm associated with those hazards.
- Control the risks through the implementation of appropriate safety measures.
- Monitor and review the effectiveness of these safety measures to ensure continual improvement.
- Ensure compliance with WHS regulations and Australian standards across all operations.

1. Manual Handling and Repetitive Tasks

Manual handling is a common source of workplace injury, particularly when FRP products are lifted, carried, pushed, pulled or positioned.

HAZARDS

- Back strains and sprains from improper lifting techniques.
- Fatigue from repetitive manual tasks.
- Injuries from carrying heavy loads over long distances.

CONTROL MEASURES

Training

Workers will receive training on safe manual handling techniques, including how to lift, carry, and manoeuvre materials to avoid injury.

Mechanical Aids

Use of mechanical aids such as trolleys, cranes, or forklifts will be encouraged to minimize the manual handling of heavy loads.

Task Rotation

Workers will rotate between different tasks to prevent repetitive strain injuries.

Proper Lifting Techniques

Workers are trained to keep the load close to the body, use leg muscles to lift, and avoid twisting motions while carrying loads.

Weight Limitations

No worker will be expected to lift a load that exceeds safe lifting limits without assistance from mechanical equipment or additional workers.

PPE REQUIRED

- Gloves with good grip.
- Steel-capped boots for foot protection.
- High-visibility clothing for easy identification during manual handling activities.

2. Managing Fatigue

Fatigue can impair judgment and reaction time, increasing the likelihood of errors and incidents during physically demanding or extended work.

HAZARDS

- Reduced concentration and alertness leading to mistakes and accidents.
- Increased risk of injury from operating plant and machinery while fatigued.
- Long working hours leading to physical exhaustion.

CONTROL MEASURES

Work Scheduling

Shift patterns will be designed to minimize long working hours and ensure adequate rest periods. No worker will be allowed to work more than 12 hours in a single shift without prior approval and adequate rest.

Monitoring Fatigue

Supervisors will monitor workers for signs of fatigue and ensure regular breaks are taken.

Job Rotation

Where possible, rotating workers through different tasks will reduce fatigue caused by monotonous, physically demanding tasks.

Rest Areas

Designated rest areas with appropriate facilities will be provided on-site to allow workers to recover during breaks.

Worker Education

Workers will receive training on the importance of adequate rest, nutrition, hydration, and sleep to combat fatigue.

PPE REQUIRED

- Comfortable and weather-appropriate clothing to minimize discomfort while working.

3. Work at Height

Work at height is inherently dangerous and may occur during the installation of bridges, elevated platforms and other FRP structures.

HAZARDS

- Falls from ladders, scaffolding, or elevated work platforms.
- Falling objects that may cause injury to workers below.
- Unsafe working platforms.

CONTROL MEASURES

Fall Prevention Systems

Use of guardrails, scaffolding, or mobile elevated work platforms (MEWPs) will be mandatory where work is performed at height.

Harness Systems

Where guardrails or fixed barriers are not feasible, workers will be equipped with fall-arrest systems such as harnesses and lanyards, anchored to secure points.

Ladder Safety

Workers will be trained on the safe use of ladders, including ensuring that ladders are properly secured and used at the correct angle.

Tool Tethers

Tools and equipment used at height will be tethered to prevent them from falling.

Exclusion Zones

The area below the elevated worksite will be marked as a no-go zone for other workers to prevent injuries from falling objects.

PPE REQUIRED

- Full-body harnesses with shock-absorbing lanyards.
- Hard hats to protect from falling objects.
- Non-slip footwear for better grip on elevated surfaces.

4. Plant and Machinery Movements

Cranes, forklifts, excavators and other plant used during FRP installation can create serious interaction and movement hazards.

HAZARDS

- Crushing or striking incidents involving vehicles and pedestrians.
- Machinery overturning during operation.
- Poor visibility for machinery operators leading to accidents.

CONTROL MEASURES

Traffic Management Plan

A detailed Traffic Management Plan (TMP) will control the movement of plant equipment and vehicles on-site, including designated travel paths, speed limits, and signage.

Operator Competency

Only qualified and trained personnel will be permitted to operate plant machinery. All operators must have valid licenses and certificates.

Spotters

Spotters will be used to guide plant operators in areas with poor visibility or tight working conditions.

Pedestrian Zones

Dedicated pedestrian walkways will be established to keep workers away from areas where plant and machinery are operating. These walkways will be clearly marked with barriers or fencing.

Pre-Start Inspections

All plant and machinery will undergo a pre-start inspection to ensure they are in safe working condition before operation.

Reversing Alarms

Plant machinery and vehicles will be fitted with reversing alarms to alert pedestrians of potential danger.

PPE REQUIRED

- High-visibility vests.
- Safety boots with steel toes.
- Hearing protection where machinery noise exceeds safe limits.

5. Working in Confined Spaces

Pits, trenches and enclosed work areas can present risks associated with ventilation, oxygen levels, hazardous substances and restricted access.

HAZARDS

- Asphyxiation due to lack of oxygen or the buildup of harmful gases.
- Limited access or egress in the event of an emergency.
- Physical injury from working in cramped conditions.

CONTROL MEASURES

Risk Assessment

A thorough risk assessment will be carried out before entering any confined space, including testing for oxygen levels and the presence of harmful gases.

Ventilation

Where necessary, mechanical ventilation will be used to ensure adequate airflow within the confined space.

Permit to Work

Entry into confined spaces will require a permit, ensuring that all necessary precautions have been taken and that a trained supervisor is present.

Communication

Workers entering confined spaces will be equipped with radios or other communication devices to maintain contact with the surface team.

Rescue Equipment

Emergency rescue equipment, including retrieval systems and first aid, will be readily available in case of an emergency.

PPE REQUIRED

- Respirators or air-supplied breathing apparatus where air quality is poor.
- Harnesses and retrieval lines for safe entry and exit.
- Protective clothing and gloves.

6. Emergency Procedures and Incident Reporting

Emergency arrangements must be communicated, accessible and supported by prompt incident reporting.

HAZARDS

- Delayed response to incidents due to lack of planning.
- Workers not knowing the proper steps to take during emergencies such as fire, chemical spills, or injury.

CONTROL MEASURES

EMERGENCY RESPONSE PLAN

A site-specific emergency response plan will be in place, detailing procedures for fire, medical emergencies, chemical spills, and other potential incidents.

FIRST AID

First aid stations will be strategically located, and trained first aid officers will be available at all times on-site.

INCIDENT REPORTING

Incidents, near misses, or unsafe conditions will be reported immediately to the Site Supervisor and logged in an incident register. Incidents will be investigated to identify the root cause and prevent recurrence.

EVACUATION DRILLS

Regular evacuation drills will be conducted to ensure workers are familiar with emergency exit routes and procedures.

RESPONSE PRINCIPLE

Emergency arrangements should be understood before work begins. Site personnel must know how to raise the alarm, where first aid resources are located, who to contact, and how to evacuate safely. Immediate reporting supports corrective action and helps prevent recurrence.

7. Location of Services

This procedure applies to excavation, drilling and construction activities where underground or overhead services may be present.

PRIMARY HAZARD

Unintentional damage to underground and overhead utilities such as electrical, water, gas, telecommunications, and sewer lines during excavation or construction activities.

CONTROL MEASURES

PRE-WORK ASSESSMENT

Conduct a comprehensive assessment to identify existing services by reviewing site plans and consulting utility providers, including BYDA (Before You Dig Australia).

UTILITY LOCATING

Utilize ground-penetrating radar and electromagnetic locators to accurately locate underground services before commencing work.

MARKING SERVICES

Clearly mark all identified services on-site using industry-standard color codes in accordance with AS 5488 to ensure visibility and understanding among workers.

EXCLUSION ZONES

Implement exclusion zones around marked services to prevent any activities that may lead to accidental damage.

COMMUNICATION AND TRAINING

Provide training on the significance of service markings, procedures to follow if unexpected utilities are encountered, and the importance of adhering to exclusion zones.

EMERGENCY PROCEDURES

Develop and communicate emergency procedures in case of accidental damage to any utility service.

PPE REQUIRED

- High-visibility clothing.
- Hard hats.
- Safety boots.
- Gloves.
- Eye protection where flying debris may be present.

Risk Assessment Table

Risk ratings combine likelihood and consequence to prioritise controls and management attention.

Risk	Likelihood	Consequence	Risk Rating	Control Measures	PPE Required
Damage to underground services	Likely	Major	High (14)	Conduct utility locating prior to excavation; mark services clearly on-site.	High-visibility clothing, gloves
Injury from manual handling	Possible	Moderate	Moderate (11)	Provide training on safe lifting techniques; use mechanical aids where possible.	Safety boots, gloves, back support
Falls from height	Likely	Major	High (15)	Use fall protection systems (harnesses, guardrails); conduct regular inspections.	Hard hats, safety harnesses
Fatigue due to long working hours	Possible	Moderate	Moderate (10)	Implement work/rest schedules; monitor work hours to prevent fatigue.	N/A
Vehicle collisions on site	Likely	Major	High (15)	Implement traffic management plan; use spotters during vehicle movements.	High-visibility clothing, hard hats
Exposure to hazardous materials	Likely	Major	High (12)	Provide Material Safety Data Sheets (MSDS); conduct regular training on handling.	Gloves, safety goggles, respirators
Slips, trips, and falls on site	Likely	Minor	Moderate (8)	Maintain clear walkways; ensure proper housekeeping and surface maintenance.	Safety boots
Equipment malfunction	Possible	Moderate	Moderate (19)	Conduct regular maintenance and inspections; provide operator training.	N/A

RISK RATING GUIDANCE

LIKELIHOOD

Likely: Expected to occur in most circumstances.
Possible: Could occur at some time.
Unlikely: Not expected, but may occur in rare circumstances.

CONSEQUENCE

Major: Significant impact requiring extensive resources to manage.
Moderate: Noticeable impact that can be managed with routine resources.
Minor: Minimal impact, easily managed.

RISK RATING

The risk rating is calculated based on the likelihood and consequence to prioritize risks for management.

PRIORITY

High-rated risks require prompt control and review.
Moderate risks require planned controls and ongoing monitoring.

Monitoring, Review and Communication

Safety controls remain effective only when they are inspected, reviewed, communicated and improved.

REGULAR INSPECTIONS

- Conduct weekly safety audits to ensure compliance with safety protocols.
- Review and update risk assessments and SWMS as necessary based on new hazards or changes in work practices.

INCIDENT REPORTING

- Establish a clear procedure for reporting incidents, near misses, and unsafe conditions.
- Maintain a register of incidents for analysis and review to prevent recurrence.

TRAINING AND COMMUNICATION

- Conduct training sessions for all workers on the risks associated with installation tasks and the importance of adherence to SWMS.
- Implement regular toolbox talks to reinforce safe practices and discuss any emerging safety concerns.

SAFETY COMMITMENT

This SWMS outlines the systematic approach taken by DM Composites Pty Ltd to ensure safety during FRP installation work. By identifying hazards, assessing risks, and implementing appropriate control measures, the aim is to minimize accidents and injuries on-site. Continuous monitoring, training, and communication are essential components of a safe working environment.

AUTHORISATION

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