

Safe Work Method Statement

Rafter Fallguard (0004)

To be used in conjunction with SWMS 0001 General Site Activities and Fallguard Installation Manual.

JOB DETAILS			
Principal Contractor		ABN	
Project		Site Manager	
Job Address			
Job Description			

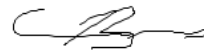
SWMS developed in consultation with Buildsafe Installers and:

Grant Edwards Director



SWMS documented by Bo Cernja

Peter Horton Director








Chris Maddick Construction Manager



National Safety and Compliance Manager

Feb 2020

PERSONNEL RESPONSIBLE FOR MONITORING AND MANAGING ACTIVITY			
Name		Contact	
Signature			

PERSONAL PROTECTIVE EQUIPMENT		
	Safety Footwear	Enclosed safety footwear with steel toe caps shall be worn AT ALL TIMES onsite, in the warehouse, factory and yard or where plant and machinery are being used.
	High Visibility Clothing	Buildsafe issued high visibility clothing or vests shall be worn AT ALL TIMES onsite, in the warehouse, factory and yard or where plant and machinery are being used.
	Head Protection	Hard hats shall be worn AT ALL TIMES whilst onsite (including whilst loading and unloading of trucks onsite) and/or where there is a danger of falling objects. Hard hats are not required when installing temporary fence. Sun hats (and SPF 30+ sunscreen lotion) shall be worn when working outside.
	Eye Protection	Eye protection shall be worn when in designated areas, whilst operating saws, grinders or in other situations where there is a risk of injury to the eyes or where recommended by a supplier of goods or tools.
	Hand Protection	It is strongly recommended that Gloves be worn when handling equipment, tools or material that may be of extreme temperatures or contain sharp or dangerous edges or where recommended by a supplier of goods or materials.
	Hearing Protection	Hearing protection in the form of ear plugs or ear muffs shall be used when operating saws, grinders, drills or in other situations where the noise level is excessive or where recommended by a supplier of plant or tools.
	Respiratory Protection	P2 Respirator Masks should be worn when drilling into concrete or slabs where there may be exposure to inhaling dust or airborne particles.

This SWMS covers general safety aspects associated with the installation and dismantling of Buildsafe proprietary Rafter Fallguard system. It does not contain detailed information in relation to plant and equipment (such as Truck mounted cranes, Forklifts, etc.) as these require a dedicated SWMS.

Main hazards: Manual tasks, Gravity, Electricity, Machinery & Equipment, Extreme Temperatures, Noise.

METHOD OF IDENTIFYING, ASSESSING & MANAGING WORK HEALTH & SAFETY RISKS

For each potential hazard identified, a risk level will be determined by referring to the Risk Matrix below. The Hierarchy of Control will be used to manage the risks identified.

Step 1 Determine Likelihood – What is the possibility that the effect will occur?

Step 2 Determine Consequence - What will be the expected effect?

Step 3 Determine The Risk Level

Step 4 Hazard Elimination or Risk Control

RISK MATRIX

		STEP 1: Likelihood				
		Certain to occur	Very Likely	Possible	Unlikely	Rare
STEP 2: Consequences	Fatality	1H	1H	1H	2M	2M
	Permanent disability	1H	1H	1H	2M	2M
	Lost time injury	1H	2M	2M	3L	3L
	Medical treatment injury	2M	2M	3L	3L	3L
	First aid injury	3L	3L	3L	3L	3L

Risk Level	Likelihood/Consequence
1H: High Risk	Has the potential to: <ul style="list-style-type: none"> permanently disable or kill cause major damage to the structure have significant impact on the surrounding population and environment
2M: Medium Risk	Has the potential to: <ul style="list-style-type: none"> temporarily disable or seriously injure cause minor damage to the structure breach the site boundary and pollute local environment
3L: Low Risk	Has the potential to: <ul style="list-style-type: none"> cause minor injury be contained within the site boundary

HAZARD ELIMINATION & RISK CONTROL

The risk levels are ranked from highest to lowest using the following control measures.

Control measures should be considered and implemented in the following order with Level 1 the highest level of protection and level 3 the lowest:

Level	Preference of Control	Hierarchy of Control	Example of Control Measures to Implement
Level 1	Highest level of protection	<ul style="list-style-type: none"> Eliminate the hazard 	<ul style="list-style-type: none"> The most effective control involves eliminating the hazard and associated risk. e.g. eliminating the risk of fall from height by working from the ground
Level 2	Acceptable level of protection if Level 1 is not reasonably practicable	<ul style="list-style-type: none"> Substitute the hazard with a safer option Isolate the hazard from people Reduce the risk through engineering controls 	<ul style="list-style-type: none"> Use a different, less dangerous piece of equipment or replace chemicals with safer materials. Separate noisy equipment by soundproofing or install guard rails to exposed edges and hole in floors Add machine guarding or use trolleys or hoists to move heavy loads
Level 3	Lowest level of protection and should only be used as a last resort or in conjunction with other levels of control	<ul style="list-style-type: none"> Reduce exposure to the hazard using administrative actions Use personal protective equipment 	<ul style="list-style-type: none"> Establish work methods or safe work procedures for tasks or erect signage to warn people of the hazard Limit the exposure to the hazard by implementing PPE such as; gloves, protective eyewear, UV protection and train people in their use.

TASK	HAZARD	RB	CONTROL MEASURE	RA	PERSON RESPONSIBLE
RB: Risk Rating before controls implemented. RA: Risk Rating after controls are implemented.					
Site Planning	Structural Failure	1H	1. Inspect all structures where Fallguard is to be installed: <ol style="list-style-type: none"> Ensure all rafters, trusses, joists, walls, beams etc are adequately fitted and secured. If not structurally secure, inform site supervisor and Branch Manager and DO NOT install. Refer to the <i>Fallguard Installation Manual and Safe Operating Guidelines – Inspecting House Frames</i> 	3L	Buildsafe: <ul style="list-style-type: none"> Installer Assistant
Preparation of Site	Electrocution through exposure to power lines	1H	1. There are clear NO GO or EXCLUSION ZONES when working around power lines. These are: <p>VICTORIA Domestic/low voltage power lines – Less than 4.6m horizontally and 5m vertically Industrial/high voltage power lines – Less than 8m all round</p> <p>QUEENSLAND Domestic/low voltage power – Less than 3m all round Industrial/high voltage power lines – Less than 6m all round</p> <p>NSW Any work within 4m of ALL power lines need referral to the network operator for any special conditions which need to be complied with.</p> <ol style="list-style-type: none"> Prior to commencing work, check for overhead power lines including domestic service and lead in power lines. If the works, including unloading the truck, installation of system or client use of the system will be within the NO GO ZONE then DO NOT COMMENCE WORK. Advise your Branch Manager or the office. The principal contractor must then put in place control measures and obtain a permit from the power supplier. A Site Specific SWMS must also be created by the Branch Manager. 	3L	Buildsafe: <ul style="list-style-type: none"> Installer Assistant Supervisor Truck Driver Site Supervisor (PC)

TASK	HAZARD	RB	CONTROL MEASURE	RA	PERSON RESPONSIBLE
			6. Buildsafe employees must familiarise themselves with these control measures, the Permit and the Site Specific SWMS before commencing work.		
Installing Fallguard Brackets and Posts	Falling from Structure	1H	<p>Installation of brackets can be completed from the most reasonably practicable access method based on individual site conditions identified during the JSA. Refer to the <i>Fallguard Installation Manual</i> for procedures specific to each bracket.</p> <p>Access methods can include:</p> <ol style="list-style-type: none"> 1. Ground <ul style="list-style-type: none"> • Undertake work from ground or solid construction. 2. Scaffold <ul style="list-style-type: none"> • Only trained and competent personnel should alter/relocate scaffold. • Scaffold/mobile to be complete with full deck, handrail, and handover certificate before use. 3. EWP <ul style="list-style-type: none"> • Only trained and competent personnel are to operate the EWP. • Refer SWMS Plant Operation – EWP 4. Harness <ul style="list-style-type: none"> • Only trained and competent Installers to use and attach harnesses and anchor points where required. • Safe access to roof must be present in order to set up and use harness • A fall restraint system CANNOT be used on pre floor installations – another procedure must be used (Scaffold, EWP, Ladder) • Inspect safety harness, adjustable lanyard and all components prior to use. DO NOT USE LANYARD OR HARNESS IF COMPONENTS ARE FRAYED, WORN OR TORN • The system must be attached to structurally capable item. 5. Ladders <ul style="list-style-type: none"> • Refer <i>Buildsafe Safe Operating Guidelines for Use of Ladders</i> <p>Not all access methods listed above are suitable for all brackets and configurations. In these instances, suitable access methods for these are described within their section (further in this document).</p>	3L	<p>Buildsafe:</p> <ul style="list-style-type: none"> • Installer • Assistant • EWP Operator

TASK	HAZARD	RB	CONTROL MEASURE	RA	PERSON RESPONSIBLE
	Fall from Ladder		1. Maintain three points of contact when working on a ladder at all times by: <ol style="list-style-type: none"> Re-holstering the drill to insert screws. Have the assistant pass setups to the installer when on the ladder, or hook setups on the ladder or house frame if they can be hooked securely. 	3L	
	System Failure	1H	2. Ensure the system meets Buildsafe installation requirements. Refer to the <i>Fallguard Installation Manual</i> for step by step install procedure as well as legislative and engineering install requirements, tolerances and fixings.	3L	Buildsafe: <ul style="list-style-type: none"> • Installer • Assistant
Installing Ground Up Components	Ground up slipping and falling, striking others	1H	1. Install ground up with a minimum of 2 people per set up, ensuring the set-up is stable until securely installed.	3L	Buildsafe: <ul style="list-style-type: none"> • Installer • Assistant
Installing Sheet Roof	Falling from ladder, ladder slipping	1H	1. Use Ladder Toppers when installing Sheet Roof Brackets: <ol style="list-style-type: none"> Work within the Ladder Toppers Maintain three points of contact Re holster the drill to insert screws into the drill tip Ensure the Assistant foots the ladder Use a Ladder Mate. 	3L	Buildsafe: <ul style="list-style-type: none"> • Installer • Assistant
Installing Rail	Falls from heights from unprotected edges and in between joists/beams	1H	1. Before gaining access to structure/roof to install rail to posts ensure: <ol style="list-style-type: none"> Rafter/trusses are fitted and secured in place That the rafter/trusses maximum spacing is 600 mm apart If greater than 600 mm apart then another method of installing rail is to be used (eg off a ladder). Identify work zones where the structural integrity is confirmed. Do not work from 	3L	Buildsafe: <ul style="list-style-type: none"> • Installer • Assistant

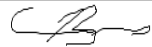
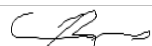
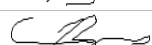
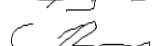
TASK	HAZARD	RB	CONTROL MEASURE	RA	PERSON RESPONSIBLE
			<p style="text-align: center;">inadequately fixed framing members.</p> <p>Refer to <i>Safe Operating Guidelines – Inspecting House Frames</i></p> <ol style="list-style-type: none"> 2. Rail is installed systematically: <ol style="list-style-type: none"> a. All initial Rail Bays out from corners and at the Access point must be installed from a ladder prior to accessing the work area. b. Then the installer can stand behind previously installed rail to complete the remaining rail bays. 3. An alternative to installing Initial Bays is Installing Rail Around a Corner, as follows: <ol style="list-style-type: none"> a. Standing 1.5m back from the edge place one end of the top Rail into the Rail Support b. Walk the other end of the Rail down and install it to the next Supa Post c. Make sure one hand is kept in contact with the Rail next to you at all times d. The Rail you are installing must lap over the previously installed Rail where possible e. Complete for all Rails and lock Cams <p>Refer to the <i>Fallguard Installation Manual</i> for further specifics.</p> <ol style="list-style-type: none"> 4. Access the work area via a ladder next to the Access Point initial bay placed either: <ol style="list-style-type: none"> a. directly beside the initial bay or, b. inside the house frame through the trusses directly behind the initial bay 5. Do not expose yourself to a live edge (an unprotected edge), remain behind rail at all times. 6. The installer must have a hand in contact with the top rail while moving into the next position to install a bay of rail. 7. When there is a step in the Rail ensure that you work in the direction installing the upper bay from the lower bay. 		

TASK	HAZARD	RB	CONTROL MEASURE	RA	PERSON RESPONSIBLE
Installing Rail to Unsupported Returning Corners	Falls from Height	1H	<ol style="list-style-type: none"> 1. Unsupported Returning Corners are returning corners that are not supported by Supa Posts 2. Unsupported Returning Corners must be installed from scaffold or a ladder, DO NOT install from the roof as you cannot work from behind previously install Rail. 	3L	Buildsafe: <ul style="list-style-type: none"> • Installer • Assistant
Installing Unsupported Short Returns of Rail	Falls from Height	1H	<ol style="list-style-type: none"> 1. Unsupported Short Returns of Rail (less than 1m) can be installed from a ladder, scaffold or using the Thor Hammer 	3L	Buildsafe: <ul style="list-style-type: none"> • Installer • Assistant
Installing High Set Rafter	Falling from Height	1H	<ol style="list-style-type: none"> 1. High Set Rafter is any second storey installation. 2. Installation of Fallguard components can be completed from a ladder up to a bracket height of 4m only. 3. High Set Fallguard can be installed from: <ol style="list-style-type: none"> a. Scaffold or, b. Hang On Platform or, c. Internally from a ladder on the first floor through the trusses. Make sure your hips are below the top plate. 4. Access to the roof to be present. 	3L	Buildsafe: <ul style="list-style-type: none"> • Installer • Assistant
Installing Rafter to Lower Roofs	Falling from Height	1H	<ol style="list-style-type: none"> 1. Installing to a lower roof must be identified in the JSA. 2. Confirm that lower roof rafter tails are structural to install a bracket to and take the load of a person installing from above. 3. Do not install rafter brackets or work from lower roof if structural integrity of rafter tails has not been confirmed. 	3L	Buildsafe: <ul style="list-style-type: none"> • Installer • Assistant
Installing Walkway Boards to lower roofs	Falling from Height	1H	<ol style="list-style-type: none"> 1. Walkway Boards can only be installed from behind previously installed edge protection. Do not access the roof unless edge protection is installed. 2. Ensure you access upper levels of the building through designated access points. 	3L	Buildsafe: <ul style="list-style-type: none"> • Installer • Assistant
Dismantling Rafter	All hazards outlined above	1H	<ol style="list-style-type: none"> 1. Dismantle system in reverse order to installation procedures using all control measures above. 	3L	Buildsafe: <ul style="list-style-type: none"> • Installer • Assistant

TASK	HAZARD	RB	CONTROL MEASURE	RA	PERSON RESPONSIBLE
			2. Remove Rail systematically positioned behind a Rail component at all times by moving backwards towards the next bay. 3. Do not remove Rail from initial bays from the roof.		

References:

- Work Health and Safety Act (Qld) 2011
- Work Health and Safety Regulation (Qld) 2011
- Work Health and Safety Act (NSW) 2011
- Work Health and Safety Regulation (NSW) 2017
- Occupational Health and Safety Act (Vic) 2004
- Occupational Health and Safety Regulations (Vic) 2017
- AS/NZS 4994
- Buildsafe SWMS 0001 General Site Activities
- Buildsafe Fallguard Installation Manual
- Buildsafe Fallguard Maintenance Manual
- Buildsafe Safe Operating Guidelines for Use of Ladders
- Buildsafe Safe Operating Guidelines - Use of Ladders
- Buildsafe Safe Operating Guidelines - Manual Handling
- Buildsafe Safe Operating Guidelines – Inspecting House Frames

8	Bo Ceprnja		1/02/2018
9	Bo Ceprnja		28/02/2019
10	Bo Ceprnja		29/02/2020
11	Bo Ceprnja		27/05/2020