



HEALTH HAZARD INFORMATION

The grit from the surface of Hebel blocks and panels is not respirable. When panel bundles have been installed, the grit left on the floor should be swept up to prevent it being ground into a dust by pedestrian or equipment traffic.

As with all cement-based products, such as concrete slabs, concrete blocks and concrete tiles, contact with Hebel blocks or panels may irritate the skin, resulting in itchiness and occasionally a red rash. Particles in the eye are irritating and corrosive, causing watering and redness, and may result in corneal inflammation and ulceration. The wearing of gloves and suitable clothing to reduce abrasion and irritation of the skin is recommended when handling Hebel and other cement based products, and eye protection is recommended where particles may enter the eye. As with all cement-based products, it is recommended that clothing be washed separately to prevent transfer of cement particles to other clothing.

The use of power tools for cutting, drilling, routing, chasing, sanding or breaking up of silica-based products may create dust, which contains respirable crystalline silica. Repeated and prolonged exposure to high levels of respirable crystalline silica dust may result in bronchitis, silicosis and an increased risk of lung cancer. Use dust extractors on powered cutting, routing or chasing tools and wear a P2 dust type mask when drilling, cutting, chasing, routing, sanding or breaking up all silica based products, such as Hebel blocks, Hebel panels, bricks, concrete blocks, fibre cement, concrete and terracotta tiles, sandstone, aggregates, and concrete slabs & columns. Person working around product should be a minimum 2m away to prevent exposure (unless PPE is worn) which is minimal unless frequent and continued exposure for long periods of time.

TRAINING

Personnel installing Hebel Wall systems should receive training in the safety & technical aspects of the installation work. This training should include the following safety information:

- The components of Hebel Wall Systems.
- Composition of Hebel Aerated Autoclaved Concrete (AAC), Thin bed Adhesive & Thick bed Mortar.
- Working safely with products containing crystalline silica.
- Safe mixing of Hebel Thin bed Adhesive & Thick bed Mortar.
- Safe cutting of Hebel Powerpanels.
- Manual handling of Hebel Powerpanels.
- Use & maintenance of PPE.

SUPPLY AND FIX – GENERAL SWMS

SAFE WORK METHODS

Every job a Contract Installer performs will have a number of hazards associated with it. Before commencing work the Contract Installer, in consultation with employees, shall conduct a risk assessment of the job, & develop safe work methods that address the identified hazards. The attached forms list some of the common hazards that will be present at most installation sites and some of the common risk control measures that may be used to control these hazards.

Hebel Current SWMS

- LWS-Hebel-WHSE-3.09-FM-01- Supply and Fix – General installation SWMS
- LWS-Hebel-WHSE-3.09-FM-10 - Supply and Fix - Winch SWMS
- LWS-Hebel-WHSE-3.09-FM-11 – Supply and Fix - Solid panels - non frame SWMS
- LWS-Hebel-WHSE-3.09-FM-12 – Supply and Fix - Flooring SWMS
- LWS-Hebel-WHSE-3.09-FM-13 - Supply and Fix – Panel Trolley SWMS
- LWS-Hebel-WHSE-3.09-FM-14 – Supply and Fix – Rendering SWMS
- LWS-Hebel-WHSE-3.09-FM-15 – Supply and Fix – Hoist SWMS
- LWS-Hebel-WHSE-3.09-FM-16 – Supply and Fix – Powerpanel SWMS

Because job and site conditions vary from project to project, it is essential that Contract Installers identify the particular hazards associated with every installation job they perform and take steps to control the risks associated with each identified hazard. In conducting the Job Safety Analysis, the Contract Installer shall be alert for and consider other hazards that may not be listed on the attached forms.

SUPERVISION

The Installation Contractor shall adequately supervise employees to ensure that they understand & follow the safe work methods that are developed.

SUPPLY AND FIX – GENERAL SWMS

REFERENCES:

Legislation, Standards and Codes of Practice (These apply to all Hebel Supply & Fix SWMS)

Australia

- Work, Health and Safety Act 2011 & Victorian OHS Act 2004
- Work, Health and Safety Regulation 2011 & Victorian OHS Regulations 2007
- Hazardous Manual tasks Code of Practice – December 2011
- How to Manage Work, Health and Safety Risks Code of Practice – December 2011
- Managing the Risk of Falls at Workplaces Code of Practice – December 2011
- National Standard for Manual Tasks Aug 2007
- NOHSC: 2013 (1994) National Code of Practice for the Prevention of Occupational Overuse Syndrome

NEW ZEALAND

- Health and Safety in Employment Act 1992 (NZ)
- Managing hazards to prevent major industrial accidents - Approved Code of Practice (ACOP)
- Best practice guidelines for working at height in New Zealand
- Code of practice for Manual handling

HEBEL MSDS (AVAILABLE AT CSR.COM.AU/ HEBEL.COM.AU OR HEBEL.CO.NZ)

- Hebel - Autoclaved Aerated Concrete
- Hebel - Adhesive
- Hebel - Anti-Corrosive Protection Paint
- Hebel – High Build Render
- Hebel – Mortar
- Hebel – Patch
- Hebel – Skim Coat Render
- Hebel – Base Sealer
- Mixa - Fugitive Magenta Dye
- CSR - Fireseal

SUPPLY AND FIX – GENERAL SWMS

GENERAL INSTALLTION AND DELIVERY SWMS

Main Activity	SUB TASKS	POTENTIAL HAZARDS	Risk Controls	Risk Score	Responsibility
Delivery of Hebel to site	Before commencing work	Person/s and other plant/ vehicles operating in close proximity may cause collision/ falling objects	<ul style="list-style-type: none"> Pre-site risk assessment to be completed before commencing work 2 metre exclusion zone from truck when unloading Hi-Visibility clothing for persons working around mobile plant Cones in place to assist with advising of loading/ unloading Traffic control where required and spotter from side of the road Through barricades may be required as agreed with site manager Check that environmental barriers are in place or replaced if required to be removed when unloading otherwise notify the customer 	8-Moderate	Driver/ Install contractor/ Employees
	Unloading near power lines	Contact with power lines could cause electrocution	<ul style="list-style-type: none"> When unloading in the proximity of low voltage overhead power lines must not operate within 3 metres horizontally or vertically of the power lines. When unloading will in the proximity of high voltage overhead power lines must not operate within 6 metres horizontally or vertically of the power lines. Traffic cones to be used when unloading near power lines 	15-Moderate	Crane Truck operator
	Unloading Hebel by forklift.	Load exceeds lift capacity of fork lift Persons in contact with unloading forklift may cause striking/ crush to people	<ul style="list-style-type: none"> Ensure fork lift driver is trained & licensed (high risk work) Ensure fork lift has sufficient load capacity Fork not to be left operating at any time without and operator at the controls 2 metre exclusion zone from forklift or its load 	10-Moderate	Employer/ Crane truck operator

SUPPLY AND FIX – GENERAL SWMS

Main Activity	SUB TASKS	POTENTIAL HAZARDS	Risk Controls	Risk Score	Responsibility
		Property damage to plant and equipment	<ul style="list-style-type: none"> Establish a clear plan with the persons on site of movement for loading/ unloading (includes other trades) Spotter to be used if vision is obstructed Hi-Visibility clothing for persons working around mobile plant Persons to remain in line of site Where possible barricade areas where collision risk exist or use a spotter Ensure forklift operator is aware of scaffold location to prevent hitting causing collapse of structure Place panels in a safe area as designated by the site manager/ builder Flashing light must be installed on the rear of the forklift and reversing beeper fitted 		
		Fork lift may tip or drop Hebel panels, block bundles causing striking / crush	<ul style="list-style-type: none"> Check for pot holes & uneven ground and risk assessment completed Unload on level surfaces Drive loaded forklifts backwards down ramps & sloping surfaces Drive at appropriate speed 	15-Moderate	Forklift driver
	Unloading Hebel products by crane Truck.	Hebel may be damaged by wire slings	<ul style="list-style-type: none"> Use webbing slings of suitable lifting capacity. Do not use a sling if the capacity tag is missing. Inspect slings for damage before use against the criteria specified by the sling manufacturer. 2 metre exclusion zone from the crane and its load 	6-Low	Crane Truck operator
		Load may tilt or swing during unloading	<ul style="list-style-type: none"> Ensure placement of slings conforms with safe lifting practices and centred Ensure lifting point is centred over panel, block bundle before lifting. 	6-Low	Employer Crane Truck operator

SUPPLY AND FIX – GENERAL SWMS

Main Activity	SUB TASKS	POTENTIAL HAZARDS	Risk Controls	Risk Score	Responsibility
	Stacking Hebel	Crush from Hebel panels, blocks incorrectly stacked	<ul style="list-style-type: none"> • Panels can be stacked two packs high providing they are still strapped with the blocks in place. • For Solid panels (Hebel solid) in full lengths or shrink wrapped once cut to size singular stacks only • Panels that are required to be opened and split must be de-stacked. When de-stacked all panels must be braced using either strapping or mechanical clamps or stacked flat • Timber bracing can be used with 100mm screws to secure • Normal blocks also to be singular stack • No panels to be placed on council strips/ footpaths or public areas 	10-Moderate	Crane Truck operator Install. Contractor
Transferring Hebel bundles to work areas	Lifting bundles or blocks by crane	Panels may be damaged by wire slings	<ul style="list-style-type: none"> • Use webbing slings of suitable lifting capacity. Do not use a sling if the capacity tag is missing. • Inspect slings for damage before use against the criteria Specified by the sling manufacturer. • 2 metre exclusion zone from the crane and its load • Only one bundle to be lifted at a time 	10-Moderate	Crane Truck operator
		Load may tilt or swing during unloading	<ul style="list-style-type: none"> • Ensure placement of slings conforms with safe lifting practices • Ensure lifting point is centred over panel bundle before lifting. • Guide load to prevent it swinging. 	10-Moderate	Crane Truck operator
		Load may exceed capacity of loading deck or floor	<ul style="list-style-type: none"> • Check with builder that loading deck & floor will support weight of bundles before placement 	15-Moderate	Install. Contractor
	Moving bundles across floor	Manual handling injuries	<ul style="list-style-type: none"> • Use skates, panel trolleys and pallet jacks to move panel bundles • Use two man lift as required 	9-Moderate	Install. Contractor

SUPPLY AND FIX – GENERAL SWMS

Main Activity	SUB TASKS	POTENTIAL HAZARDS	Risk Controls	Risk Score	Responsibility
		Falls through openings & trip hazards	<ul style="list-style-type: none"> Inspect route for moving panels for trip hazards Ensure all penetrations and gaps are safely covered Minimise openings between the building and scaffold not more than 250mm 	9-Moderate	Install. Contractor
Use of Power Tools		Faulty equipment may cause injury.	<ul style="list-style-type: none"> Ensure all tools & equipment are in safe working condition & are adequately guarded and tagged. Ensure that tools and equipment are adequately maintained and used in accordance with the manufacturer's instructions. Generators used on site. Fuel to be stored in vehicle. Leads run to equipment must not cause a trip hazard. SDS available for fuel 	5-Low	Install. Contractor
		Worker could be electrocuted	<ul style="list-style-type: none"> All electrical equipment to be tested and tagged in accordance with the relevant standards. 	10-Moderate	Install. Contractor
			<ul style="list-style-type: none"> Use Earth Leakage current protection (RCD's). 	10-Moderate	Install. Contractor
			<ul style="list-style-type: none"> Temporary power boards to be correctly set up. 	10-Moderate	Install. Contractor
			<ul style="list-style-type: none"> Multi-plug electrical devices comply with AS-3105. 	10-Moderate	Install. Contractor
			<ul style="list-style-type: none"> Keep extension leads clear of ground and water. 	10-Moderate	Install. Contractor
			<ul style="list-style-type: none"> Use double insulated electrical tools. 	10-Moderate	Install. Contractor
Installing the Top hat Batten	Storage of Top hat Batten	May present a trip hazard	<ul style="list-style-type: none"> Ensure top hat battens are stored in a safe location away from general thoroughfares. 	5-Low	Install. Contractor
	Cutting Top hat Batten	Sharp edges on cut surfaces	<ul style="list-style-type: none"> Wear gloves complying with AS-2161.3 for mechanical protection. Ensure tin snips are used. 	5-Low	Install. Contractor
		Particles from cutting with cut off saw or angle grinder may damage eyes	<ul style="list-style-type: none"> Wear safety glasses or goggles complying with AS1337 for medium (Class I) or high (Class V) impact. Follow manufacturers' instructions for safe use of tools. 	5-Low	Install. Contractor

SUPPLY AND FIX – GENERAL SWMS

Main Activity	SUB TASKS	POTENTIAL HAZARDS	Risk Controls	Risk Score	Responsibility
	Screwing top hats to frame around services	Coming into contact with services: Electric shock Gas pipes leak Water pipes leak	<ul style="list-style-type: none"> Identify services and mark out where possible the location of these, this helps identify the services when doing an install to prevent any contact with them Ensure when screwing top hats battens to the frame, that there is at least 150mm clearance from any services where the screw is to be placed Where a screw needs to be placed close to these services (and vision is obstructed), a spotter is to be used to ensure no contact is made with the services 	10 - Moderate	Install. Contractor
		Off cuts left on floor	<ul style="list-style-type: none"> Place off cuts in bin or safe storage area. Ensure fire risk is controlled where sparks are created to minimise outbreak of fire 	6-Low	Install. Contractor
		Fall from height	<ul style="list-style-type: none"> Use scaffold or small platform ladders in accordance with manufacturers' instructions & Australian Standards AS-2359.1 	10-Moderate	Install. Contractor
Cutting of Hebel	Removing panels from the bundle	Metal packaging corners left on floor	<ul style="list-style-type: none"> Place metal corners in bin or safe storage area. 	5-Low	Install. Contractor
		Manual handling injuries	<ul style="list-style-type: none"> Use either <ul style="list-style-type: none"> Hebel Powerpanel trolley C channel trolley E-Lifters and 2 person lifts 	9-Moderate	Install. Contractor
		Other panels may fall over	<ul style="list-style-type: none"> If necessary, provide temporary bracing of panels. A length of angle can be nailed across the top of the bundle as a simple brace. 	9-Moderate	Install. Contractor
	Sawing panels	Blade may shatter on impact with steel reinforcing	<ul style="list-style-type: none"> Use segmented diamond tipped cutting blade with the correct bonding matrix. Wear safety glasses or goggles complying with AS-1337 for medium (Class I) or high (Class V) impact. 	10-Moderate	Install. Contractor

SUPPLY AND FIX – GENERAL SWMS

Main Activity	SUB TASKS	POTENTIAL HAZARDS	Risk Controls	Risk Score	Responsibility
			<ul style="list-style-type: none"> Follow manufacturers' instructions for safe use of tools 		
		Particles from cutting may damage eyes	<ul style="list-style-type: none"> Wear safety glasses or goggles complying with AS-1337 for medium (Class I) or high (Class V) impact. Follow manufacturers' instructions for safe use of tools 	5-Low	Install. Contractor
		Inhalation of silica dust	<ul style="list-style-type: none"> Person operating the power saw must wear a P2 half face respirator during cutting Dust extraction must be fitted to power saws Clean out the dust cowl on the saw at least daily to eliminate blockages & maintain good dust extraction. Adjust dust cowlings on power saws to provide maximum enclosure for dust collection. Check dust extractors regularly to ensure seals are in good condition & they are providing good suction Empty dust bags regularly. Ensure that disposable bags are tied off to prevent the dust falling out of the bag. If reusable bags are used, then the contents should be emptied into a plastic bag that is tied off before disposal. For dust extractors fitted with secondary filters, clean the secondary filter daily using another dust extractor. Set the depth of cut to 2mm less than the thickness of the panel on power saws to prevent blow through of dust during cutting 	6-Low	Install. Contractor Install. Contractor
		Dust may cause skin irritation	<ul style="list-style-type: none"> Wear gloves complying with AS-2161.3 for mechanical protection when handling the product to prevent skin irritation & abrasion. Consider the use of long sleeved shirts & long trousers if irritation occurs. Launder clothing regularly & separately. 	1-Low	Install. Contractor

SUPPLY AND FIX – GENERAL SWMS

Main Activity	SUB TASKS	POTENTIAL HAZARDS	Risk Controls	Risk Score	Responsibility
		Noise may damage hearing being 88.5dba	<ul style="list-style-type: none"> Wear earplugs or earmuffs during cutting in line with AS-1259.1 equipment Person must be at least 2m away when cutting otherwise protection must be worn 	10-Moderate	Install. Contractor
		Off cuts of panels may be a trip hazard	<ul style="list-style-type: none"> Place panel off cuts in bin or safe storage area. 	5-Low	Install. Contractor
Mixing Hebel Thin Adhesive & Thick Bed Mortar	Handling 20 kg bags	Back injury	<ul style="list-style-type: none"> Use trolleys, wheelbarrows & other aids to assist with moving bags. Maintain clearance around & above stored bags to avoid lifting with awkward postures. When lifting from low heights bend the knees to a semi-squat position with feet about shoulder width apart, lean over from the hips, and keeping the back straight with the tail pushed out. Carry loads close to the body. Avoid twisting. Turn by using small steps. 	9-Moderate	Install. Contractor
	Mixing the adhesive or mortar.	Inhalation of silica dust	<ul style="list-style-type: none"> Add water to mixing containers before adding adhesive or mortar to reduce dust. Wear class P2 respirator when tipping contents of bag into container & when mixing. 	6-Low	Install. Contractor
		Eye irritation from contact with dust or wet adhesive/mortar.	<ul style="list-style-type: none"> Wear safety glasses or goggles complying with AS-1337 while handling open bags & when mixing. Do not use excessive speed when stirring. A variable speed drill is preferable. Ensure the stirrer has completely stopped rotating before removing from the mix to avoid splashing of the wet 	5-Low	Install. Contractor

SUPPLY AND FIX – GENERAL SWMS

Main Activity	SUB TASKS	POTENTIAL HAZARDS	Risk Controls	Risk Score	Responsibility
			adhesive or mortar.		
		Contact with the skin may cause irritation, burning of the skin or dermatitis.	<ul style="list-style-type: none"> Avoid repeated contact by wearing gloves complying with AS-2161.3 for mechanical protection when handling the dry & wet adhesive & mortar. Do not use excessive speed when stirring. A variable speed drill is preferable. Ensure the stirrer has completely stopped rotating before removing from the mix to avoid splashing of the wet adhesive or mortar. Consider the use of long sleeved shirts & long trousers if irritation occurs. 	3-Low	Install. Contractor
		Electric drill may burn out.	<ul style="list-style-type: none"> Ensure the drill has sufficient power to operate the stirrer. 	3-Low	Install. Contractor
		Half empty bags may present a trip hazard	<ul style="list-style-type: none"> Place empty bags in bin or safe storage area. Ensure partly used bags are safely stored. 	5-Low	Install. Contractor
Housekeeping Summary	Storage of Tophat Battens	May present a trip hazard	<ul style="list-style-type: none"> Ensure Tophats are stored in a safe location away from general thoroughfares. 	5-Low	Install. Contractor
	Sawing panels/ blocks	Inhalation of silica dust	<ul style="list-style-type: none"> Clean the work areas regularly by scraping, vacuuming or sweeping as appropriate. Lightly dampen the area before sweeping. Sweepings that contain dusty material should be placed in disposable bags & tied off before placement in waste containers. Large particles & off cuts do not need bagging. Ensure P2 masks is worn when cutting panels 	6-Low	Install. Contractor
	General	bags of adhesive empty pallets, off cuts of panels, Tophats & corner angles may	<ul style="list-style-type: none"> Place empty bags, off cuts, packaging materials & corner angles in bin or safe storage area. Ensure partly used bags are safely stored. 	5-Low	Install. Contractor

SUPPLY AND FIX – GENERAL SWMS

Main Activity	SUB TASKS	POTENTIAL HAZARDS	Risk Controls	Risk Score	Responsibility
		present a trip hazard			
	General	Tools & power leads may be a trip hazard	<ul style="list-style-type: none"> Ensure that tools & power leads are not left lying in areas where people may trip over them. 	3-Low	Install. Contractor
	Cutting the Tophat	Sharp edges on cut surfaces	<ul style="list-style-type: none"> Wear gloves complying with AS 2161.3 for mechanical protection as required 	3-Low	Install. Contractor
PPE Summary		Particles from cutting with cut off saw or angle grinder may damage eyes	<ul style="list-style-type: none"> Wear safety glasses or goggles complying with AS1337 for medium (Class I) or high (Class V) impact. 	3-Low	Install. Contractor
	Sawing panels	Blade may shatter on impact with steel reinforcing	<ul style="list-style-type: none"> Wear safety glasses or goggles complying with AS1337 for medium (Class I) or high (Class V) impact. 	9-Moderate	Install. Contractor
		Particles from cutting may damage eyes	<ul style="list-style-type: none"> Wear safety glasses or goggles complying with AS1337 for medium (Class I) or high (Class V) impact. 	3-Low	Install. Contractor
		Inhalation of silica dust	<ul style="list-style-type: none"> Person operating the power saw must wear a P2 dust mask during cutting 	6-Low	Install. Contractor
		Dust may cause skin irritation	<ul style="list-style-type: none"> Wear gloves complying with AS 2161.3 for mechanical protection when handling the product to prevent skin irritation & abrasion. Consider the use of long sleeved shirts & long trousers if irritation occurs. 	3-Low	Install. Contractor
		Noise may damage hearing	<ul style="list-style-type: none"> Wear earplugs or earmuffs during cutting. 	10-Moderate	Install. Contractor
	Mixing the adhesive or mortar.	Inhalation of silica dust	Wear class P2 dust mask when tipping contents of bag into container & when mixing.	6-Low	Install. Contractor

SUPPLY AND FIX – GENERAL SWMS

Main Activity	SUB TASKS	POTENTIAL HAZARDS	Risk Controls	Risk Score	Responsibility
		Eye irritation from contact with dust or wet adhesive/mortar.	<ul style="list-style-type: none"> Wear safety glasses or goggles complying with AS1337 while handling open bags & when mixing. 	3-Low	Install. Contractor
		Contact with the skin may cause irritation, burning of the skin or dermatitis.	<ul style="list-style-type: none"> Avoid repeated contact by wearing gloves complying with AS 2161.3 for mechanical protection when handling the dry & wet adhesive & mortar. Consider the use of long sleeved shirts & long trousers if irritation occurs 	3-Low	Install. Contractor
	Applying thin bed adhesive	Eye irritation from contact wet adhesive or mortar.	<ul style="list-style-type: none"> Wear safety glasses or goggles complying with AS1337. 	9-Moderate	Install. Contractor
		Contact with the skin may cause irritation, burning of the skin or dermatitis.	<ul style="list-style-type: none"> Avoid repeated contact by wearing gloves complying with AS 2161.3 for mechanical protection when handling the wet adhesive & mortar. Consider the use of long sleeved shirts & long trousers if irritation occurs. 	3-Low	Install. Contractor
	Lifting panels into position	Crush & abrasion injuries to hands or arms	<ul style="list-style-type: none"> Wear gloves complying with AS 2161.3 for mechanical protection to avoid abrasion to the hands. 	3-Low	Install. Contractor
	Grouting joints	Eye irritation from contact wet adhesive or mortar.	<ul style="list-style-type: none"> Wear safety glasses or goggles complying with AS1337. 	3-Low	Install. Contractor
		Contact with the skin may cause irritation, burning of the skin or dermatitis.	<ul style="list-style-type: none"> Avoid repeated contact by wearing gloves complying with AS 2161.3 for mechanical protection when handling the wet adhesive & mortar. Consider the use of long sleeved shirts & long trousers if irritation occurs. 	3-Low	Install. Contractor
	Handling / fixing board	Sprain/ strain from handling sheets	<ul style="list-style-type: none"> Cut sheets at the stack to reduce weight of load Ensure that if sheets are above 3 meters in length that this is a two person lift Ensure that correct manual handling techniques are used 	9-Moderate	Install. Contractor

SUPPLY AND FIX – GENERAL SWMS

Main Activity	SUB TASKS	POTENTIAL HAZARDS	Risk Controls	Risk Score	Responsibility
			<ul style="list-style-type: none"> Beware of wind 		
Cemintel Installation	Cutting	Inhalation of silica dust	<ul style="list-style-type: none"> Person operating the power saw must wear a P2 dust mask during cutting or scoring Use a fibre cement sheet cutter or scoring tool 	10-Moderate	Install. Contractor

TRAINING SIGN-OFF

Having regard to the hazards and risks associated with this SWMS, CSR Hebel have trained the contractors. The contractors will be trained by their manager/ supervisor and records and sent back to CSR Hebel as proof of this training being undertaken

Employee Name	Employee Signature	Date of Course	Trainer/ Supervisor Name	Trainer/ Supervisor Signature	Date of Course

SUPPLY AND FIX – GENERAL SWMS
