Gelly Augostis

The builder and silica dust

Practical aspects to running a building site and mitigating the risks to workers and your business.

What can we do as a builder?

Reviewing plans looking at the way we are building our homes for contractors to

- Minimise the need for concrete cutting slab edges
- Reduce having to cut roof tiles, bricks, blocks and AAC
- Reduce the need to chase in flashings

Looking at more efficient ways for our contractors to cut on the ground rather then on scaffold or roofs

Working closely with suppliers who take this seriously – especially in the supply and install world

Much more!

High risk construction work

WHS Regulation s291 (l)

High risk construction work “is carried out in an area that may have a contaminated or flammable atmosphere”

The term “contaminated atmosphere” is not a defined term in the Work Health Safety Act 2011 (or regulation). WHSQ have confirmed that for the purposes of enforcement, this includes an atmosphere that may contain “respirable crystalline silica”

Safe Work Method Statement?

Yes, per above clarification. Any product that contains silica and is drilled, cut, polished or otherwise that may create respirable crystalline silica dust on site is required to be included in a SWMS.

Safe Work Method Statement

Contractor LOGO

Prepared for the following High Risk Construction Work:		*is carried out in an area that may have a contaminated atmosphere*	
Principal Contractor:		**Project:** New Housing Construction Work - refer s306A of the Qld 2011 WHS Reg.	
PCBU (Subcontractor) Name:		**Main Contact:**	
Business Address:		**ABN:**	
Suburb/Postcode		**QBCC:**	
EMAIL:		**PH:**	
Legislation Referenced:	Work Health Safety Act (Qld) 2011; Work Health Safety Regulation (Qld) 2011		
Codes of Practice Referenced:	Work Health and Safety Consultation, Co-operation and Co-ordination (Qld) 2011; Managing Risks of Plant in the Workplace (Qld) 2018; Managing the Work Environment and Facilities (Qld) 2011; Managing Risks of Hazardous Chemicals (Qld) 2013		
Work Activity: Carpentry	Exposure to Respirable Crystalline Silica Dust		
Responsible Person/s: Person in Charge of Subcontract Gang & the "Contractor" Supervisor	Implementation of Controls: *the "Person in Charge" of a subcontract gang shall ensure controls listed in the SWMS are implemented and be responsible for daily supervision of workers including conducting toolbox talks (as required). The PiC shall be identified on the sign off page.* Monitoring: *the "Contractor" Supervisor will conduct routine and random site inspections using the Site Safety Inspection Checklist to ensure work is being carried out in accordance with the SWMS and as required will conduct (recommended quarterly) tool box talks.* Review: *the "Contractor" Supervisor will consult with Principal Contractor, workers and other PCBU's to ensure activities and control measures remain effective and plan to conduct an annual review and will also review the SWMS if a notifiable incident occurs.*		
Workplace Health and Safety Representative (HSR) elected? YES or NO If yes, then name:_____-_____ A health and safety representative can be any worker who is elected by co-workers in their area of representation (work group), either on the initiative of the workers or the employer.			
Date Prepared:		Date Provided to the Principal Contractor	
Date Last Reviewed:		Future Review Date:	

NOTE: This is only a sample of the front page of a Safe Work Method Statement and is not to taken as being endorsed by WHSQ or HWB Group

Ensure workers have been trained in SWMS and signed to verify

Safe Work Method Statement

Contractor LOGO

Classification/Qualification required	Training Required to Complete the Works (all workers)
Carpenter/QBCC Nominee – Cert III Qualified/QBCC Licenced Carpenter – Subcontractor, Cert III Qualified and/or QBCC Carpenter (employee) – Cert III Qualified Carpenter (apprentice) – enrolled in Cert III in Carpentry Labourer – no qualification required Work Experience (school student or Vocational Educational Training Program)	General Construction Induction (White/Blue Card) THE PRINCIPAL CONTRACTOR Safety Induction Pass Training in SWMS (sign off below and/or evidenced with separate Training Record/Tool Box Talk) Training and/or existing knowledge/experience in General Safe Work Procedures including but not limited to: Noise, Hazardous Chemicals/Dangerous Goods, Heat, Ultra Violet Radiation (UVR), Hazardous Manual Tasks, Plant/Equipment (e.g. Nail Guns, Drop Saws, Grinders), PPE (selection and use of) and use of ladders and using single plank working platforms and other working platforms.

We the undersigned, acknowledge that we have been consulted and trained in the development of this SWMS, and confirm that our qualifications and training (as stated above) to undertake this activity are applicable and current. We are aware of where this SWMS is kept and agree to actively support the procedures outlined in this SWMS. We also agree to participate in any reviews/revision of the SWMS, acknowledge our duty to report any hazards or incidents as a priority and confirm that if a serious risk is identified then we will stop work as soon as reasonably practicable until a remedy is put into place.

Name	Classification/Qualification	General Safety Induction #	Issue Date	Signature	Date Signed
	Carpenter – "Person in Charge" of Subcontract Gang Phone number:				

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How to mitigate risk

- Builders should consider communicating safety requirements to trades regularly (quarterly meeting)
- Collect and assess Safe Work Method Statements
- Allow time to assess the SWMS
- Ensure subcontractors provide Hazardous Chemicals Register and Safety Data Sheets
- Adopt a system of routine or random workplace inspections
- Continue educating yourself and your building supervisors as things will change regularly in the building industry

What if you engage workers directly?

Builders who engage their own workers directly, whether they be employees or labour only subcontractors, should implement additional systems that include:

- Developing their own safety procedures
- Consulting with their own workers to develop a Safe Work Method Statement
- Identifying products that contain silica
- Ensuring the SWMS and Safety Data Sheets are readily available
- Considering RPE fit-testing and fit-checking (if necessary), maintenance and storage of RPE training
- Carrying out your own internal inspections

Control the risks

Eliminating exposure the Respirable Crystalline Silica Dust is the most effective control measure for managing the risk of work related illness.

Where exposure cannot be eliminated, any exposure to RCS must be **minimised** so far as is reasonably practicable.

Reducing the airborne concentration of RCS is more effective than simply relying on Respiratory Protective Equipment (RPE).

Look carefully at the **control measures** that can be used - some are more cost effective and practical for each situation than others.

Examples to control RSC risks

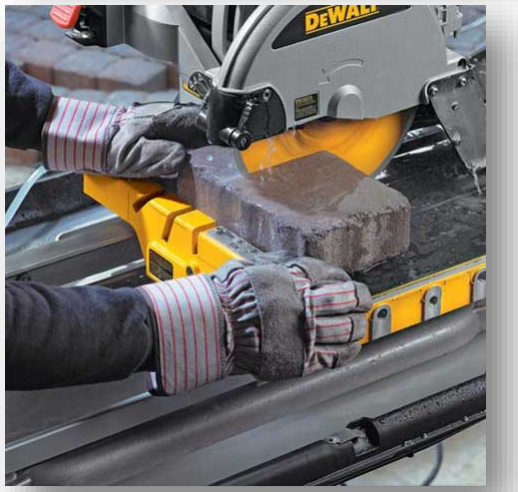
Cutting outdoors
Position cutting station so that wind will blow away from user or others working in the area

Stopping or reducing the dust
Replace high energy electric saws/grinders with other methods like hand guillotines, fibre shears, or score/snap

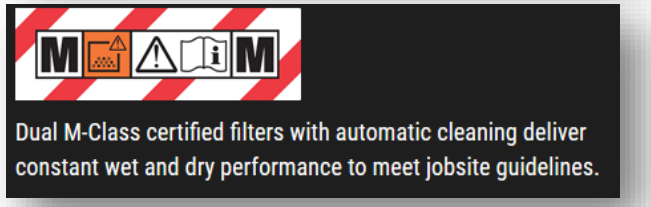
Controlling the dust
E.g. water suppression or vacuum extraction

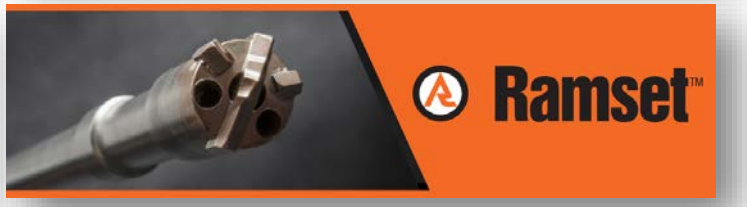
Personal Protective Equipment - Respirators
Workers should wear a P1 or P2 respirator and warn others in the immediate area

Water suppression



M Class Vacuum Extractor & Options





Other options

James Hardie® has been actively working with tool and blade manufacturers to develop tools specifically to minimise dust exposure.

HARDIEBLADE™ SAW BLADE

The only blade recommended by James Hardie.

NEVER USE A CARBIDE FRAMING BLADE OR CONTINUOUS RIM DIAMOND BLADE.

HardieBlade Saw Blade generates larger dust particles and reduces the risk of respirable silica.

The 185mm diamond tip HardieBlade Saw Blade fits a dust reducing 185mm circular saw and the Makita LS0714 190mm dual slide compound mitre saw. Always use circular saws outdoors and in a well ventilated area.

MAKITA 5057KB 185MM CIRCULAR SAW

- Easily attaches to tool start vacuum with HEPA filter to further reduce dust exposure
- Remote guard lever allows for plunge cutting
- Fully enclosed upper guard
- Rigid aluminium base provides greater stability and accuracy
- 60mm cutting depth capacity
- 90º to 45º base adjustment
- Easy emptying dust collector

HITACHI C7YA 185MM CIRCULAR SAW

- Easily attaches to tool start vacuum with HEPA filter to further reduce dust exposure
- Dust reducing operation for user comfort and safety
- Powerful industrial 1,400 watt motor
- Lightweight and well balanced
- Specifically built for cutting fibre cement sheet
- Dust deflector directs dust away from operator

MAKITA LSO714 190MM DUAL SLIDE COMPOUND MITRE SAW

- Easily attaches to tool start vacuum with HEPA filter to further reduce dust exposure
- Double slide action
- Huge 300mm width of cut
- Geared drive system
- Depth stop adjustments for trenching
- Removable lock off button for safety and security
- Large stable base

Respiratory Protective Equipment

Remember that while the duty is placed on employers (including builders who engage their own workers or subcontractors) to make sure that workers are using the correct protective equipment and have been trained accordingly, in the end it’s the builder who has the obligation to ensure workers are complying with the SWMS.

Training and education

Continuous education with your trades on using the equipment so it is effective is key.

For example, set blade depth to minimise dust so vacuum can do its job.

Where to from here?

Continuous challenge managing trades

Working as one in the industry

- Eliminating bad behaviour

Wet cutting will not be the silver bullet

- Some products do not allow wet cutting and cause problems with EPA laws

Thank you

Any questions?