



**Safety**

## Best practice guide

Working safely with fibre cement products

Silica can be an occupational hazard for the whole industry but can be managed by adopting best practices, which includes appropriate tooling.

# Why should I read this?

To work safely, you need to understand the hazards and know how to minimise the risks.

At James Hardie we believe that safety should be of paramount importance to everyone. We are committed to the safe use of our products.

This guide is a straightforward approach to job site safety through the use of best practices with James Hardie® products.

It's good to remember that 'Best Practice' is much more than simply a 'strong suggestion'. It is a work ethic that if followed has tangible benefits that will positively influence your quality of work and wellbeing, leading to greater efficiency, and importantly, improved work site safety.



## Best Practice – A three stage approach

Silica can be an occupational hazard for the whole industry but can be managed by adopting best practices, which includes appropriate tooling.

- 1 Silica Awareness
- 2 Best Practice
- 3 Tools



# 1 Silica Awareness

Silica is the second most common mineral on earth and is found in many common building products.

# What is silica?

Commonly known as sand or quartz, silica is the second most common mineral on earth and is found in many common building products.

Silica is commonly found in building products like concrete, bricks, grout, wallboard, ceramic tiles, glass, dirt and all fibre cement material such as James Hardie® building products. It would almost be impossible for people not to come into contact with silica every day.

## The hazard

### The capability to cause harm

Silica when it's intact is harmless. However when it is cut, drilled or otherwise abraded silica is released as fine particles that can be inhaled deep into the lungs.

Breathing excessive amounts of respirable silica can cause a potentially fatal lung disease called silicosis, and has been linked with other diseases. Some international authorities consider respirable silica to be a cause of cancer. Some studies suggest smoking may increase these risks.

## The risk

### The likelihood of the hazard causing harm

James Hardie Best Practice recommendations are designed to minimise the risk of harm from silica exposure. James Hardie® products meet or exceed all applicable government safety standards when used in accordance with best practice including recommended tooling guidelines.

## Risk Factors

- Exposure concentration
- Duration and frequency of exposure
- External health factors



## 2 Best Practice

James Hardie is committed to safe use of our products and safety of your work site.

# Job site best practice

James Hardie believes that safety is of paramount importance to everyone and is committed to safe use of our products and safety of your work site.

Best practice information on all James Hardie® products can be found in our installation instructions and technical specifications or at [www.jameshardie.co.uk](http://www.jameshardie.co.uk). If there is additional concern about silica exposure levels, you should always consult a qualified industrial hygienist.

## Cutting indoors

Cut using only score and snap, hand guillotine or fibreshears (manual, electric or pneumatic).

## Sanding, rebating, drilling or other machining

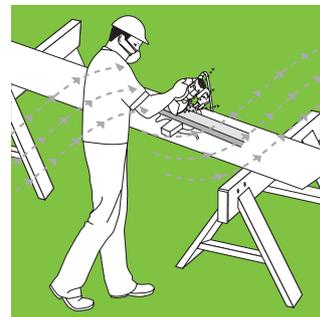
When sanding, rebating or drilling you should always wear a P1 or P2 respirator and warn others in the immediate area.

## Cutting outdoors

Position cutting station so that wind will blow dust away from user or others working in the area. Use one of the following methods based on the required cutting rate:

- Best**
- Score and snap
  - Hand guillotine
- Good**
- Dust-reducing circular saw equipped with HardieBlade® Saw Blade connected to a vacuum with HEPA filter

**Note** Cutting recommendations vary from product to product. Refer to our installation guides or technical specifications for product-specific best practice recommendations.



### Correct

Dust blown away from user breathing zone



### Wrong

Dust blown into user breathing zone

# Handling and storage of James Hardie® products

James Hardie® products are robust and durable once installed. It is important to keep the product dry in storage and during installation.

If product becomes saturated prior to installation the following can occur.

- Shrinkage at joints
- Staining: A deposit of soluble salts, usually white in colour
- Difficulty in handling due to the increased weight and added flexibility once saturated

(James Hardie is not responsible for damage due to improper storage and handling.)

## Storage

### Products should be:

- Stored in their original packaging in a covered area when possible
- Covered on a pallet and must not be stored directly on the ground (figure 1)
- Protected with a waterproof covering, if storage outside is unavoidable (figure 2)
- Stored flat and above ground (figure 1)

## Handling

A few simple techniques make handling of James Hardie materials a breeze.

### For planked products

- Do not lift planked products flat and in the middle (figure 3)
- Carry the products on edge (figure 4)
- If only one person is carrying the product, hold it in the middle and spread arms apart to better support the product (figure 5)
- If two people are carrying the plank, hold it near each end and on edge (figure 6)

### For panel products

- Carry with two people (figure 8)
- Do not hold near each end and on edge
- Exercise care when handling panel products to avoid damaging the corner

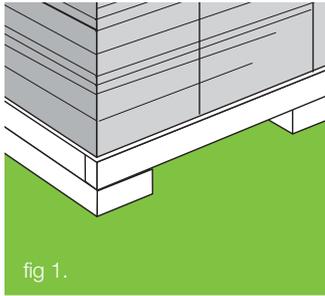


fig 1.

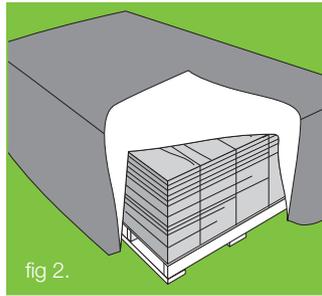


fig 2.

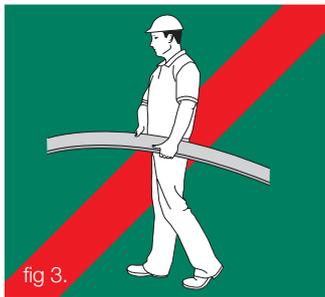


fig 3.

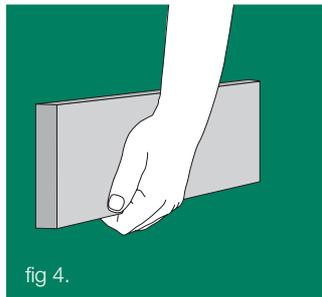


fig 4.

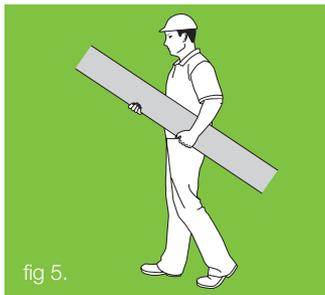


fig 5.

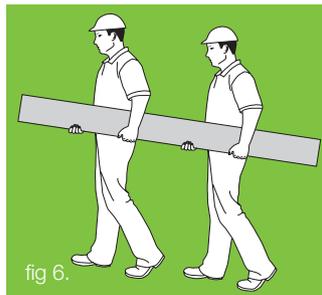


fig 6.

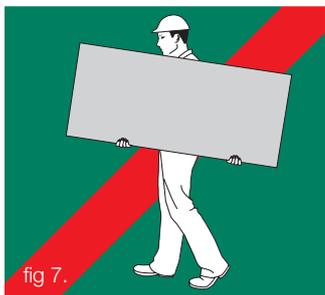


fig 7.

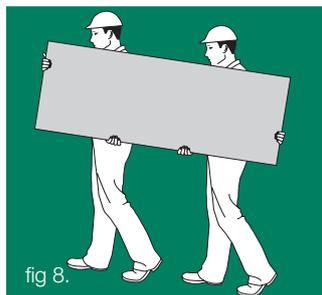


fig 8.

## Important Notes

- For maximum protection (lowest respirable dust exposure), James Hardie recommends always using “Best” level cutting methods where feasible
- NEVER use a power saw indoors
- NEVER use a circular saw blade that does not carry the HardieBlade® logo
- NEVER dry sweep — use wet suppression or HEPA vacuum
- NEVER use grinders without appropriate respiratory protection (e.g. minimum P1 or P2 respirator)
- ALWAYS follow tool manufacturer’s safety recommendations
- P1 and P2 respirators can be used in conjunction with cutting practices to further reduce dust exposure



# 3 Tools

HardieBlade<sup>®</sup> saw blade is designed specifically for fibre cement and produces less respirable dust than traditional masonry blades.

# Tools

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

## HARDIEBLADE® SAW BLADE

The only blade recommended by James Hardie.

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

Specially designed to produce only a very low amount of dust, this circular blade is perfect for straight-cutting James Hardie® cladding products. Using continuous disk or wood blades causes excessive levels of dust and very fast blade wear. Using HardieBlade® circular saw keeps blade costs and dust levels down. As HardieBlade® generates larger dust particles it reduces the risk of respirable silica. Available in 160mm, 190mm, 254mm, and 305mm Always use circular saws outdoors and in a well ventilated area.

## HARDIEGUILLOTINE™ MANUAL TOOL

Custom-designed manual tool that cuts HardiePlank® cladding fast and accurately every time, with no breaking, chipping or sawing dust. The cutting movement is stiffly controlled to enable safe, precise cutting of even the smallest slivers of material.

## HARDIEBACKER® SCORE-AND-SNAP-KNIFE

Designed with contractors and home owners in mind this simple yet effective hand tool is perfect for accurate straight cuts on all James Hardie® cement boards up to 12mm thick. It's thick, sturdy handle, and a long-lasting blade with tungsten carbide tips produces a V-cut so that upward pressure on the board allows you to easily snap it along the cut.



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