

# XCLAD



- FIRECRUNCH X-CLAD IS 70% LESS CLADDING AND UP TO 70% LESS LABOUR
- HIGHER MARGINS FOR DEVELOPER / BUILDER
- 10 TIMES STRONGER THAN PLASTERBOARD
- 95% LOWER CARBON FOOTPRINT NO CORROSIVE MGCHL2
- CSIRO TESTED AS/1530.4-2005 FRL 90/90/90
- NON ASBESTOS NATA AUST LAB CERTIFIED/TESTED



**AUSTRALIA'S MOST SUSTAINABLE,  
DURABLE AND RELIABLE BUILDING BOARD**



**ONE BUILDING PRODUCT MULTIPLE APPLICATIONS**  
WALLS, FLOORS AND CEILINGS **INTERNAL AND EXTERNAL**



BUSHFIRE ATTACK LEVEL (BAL FZ)

- Walls
- Floors
- Ceilings
- Soffits
- Decks
- Fences
- Tile Backing
- Bathrooms
- Kitchens...



You name it !.....

FOR MULTIPLE APPLICATIONS



FOR THE ENVIRONMENT

Very low carbon footprint.  
100% recyclable.

- Does not warp or swell
- Does not degrade in moist areas
- Available in water resistant TG flooring and Decking



FOR WET AREAS



FOR TERMITE PROTECTION

- Acoustic Decibel Rating over 50Db.
- Sound insulation to Rw 62 plus Ctr =Net Rw 52.



AUST NATA LAB TESTED

FOR NOISY AREAS



FLOOD PROTECTION • WILL NOT DEGRADE IN WATER OR FLOODING ONE

- Totally non-toxic, chemical free
- Helps protect from mould and KILLS bacteria.



OR HEALTH SAFE AREAS



# FIRECRUNCH MBE FIRST MGO PRODUCT WITH NO CORROSIVE (MCHL2)



Magnesium oxide (MgO) is a waste by product of steel manufacturing. MgO is a recyclable mineral that is totally fire proof and when mixed with special high strength Fibre Glass composites and Magnesium sulfate compounds provides extra strength. FireCrunch MgO panels have the qualities of timber but with no combustibility or flame out at 1200°C making it the ideal choice for building in fire rated areas.

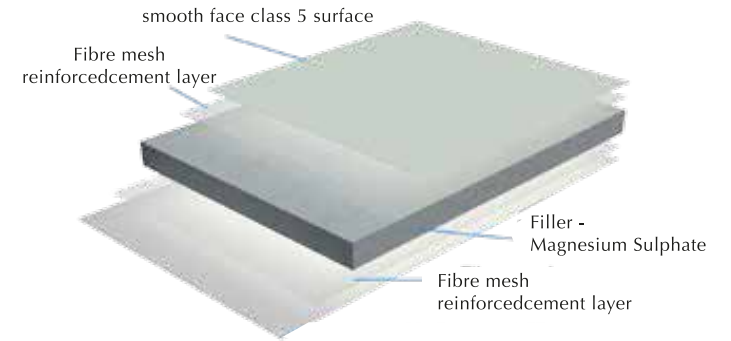
FireCrunch panels have one smooth side and one textured and grey in colour .

The top and bottom edges of the board are square with the long edges being square, tapered, chamfered or Tongue & Groove.

FIRECRUNCH MGO IS AUSTRALIAS ONLY MGO BUILDING BOARD, FIRE TESTED TO BCA WITH NO CORROSIVE (MchI2) MAGNESIUM CHLORIDE.

Now also suitable for permanent or temporary formwork in columns, floors and difficult cement load, non slump support sections.

## APPEARANCE OF FIRECRUNCH



Physical Properties ( ALL FireCrunch IS NON COMBUSTIBLE )

CHARACTERISTIC	UNIT	UNIT DESCRIPTION
Density	(Kg/ m3) 0.95 to 1.15	KG/m3
Tensile strength	>5.5 (MPa)	Mega pascal units
Compressive Strength	~20 (MPa)	Mega pascal units
Striking resistant strength	>6 (KJ/m2)	Kilojoules per square metre
Dimensional Change	0.5 (%)	Percentage of water absorption
Span Test (20mm) 450mm Centres	6.2kN (600mm = 5.3kN )	Kilo Newton
Flexibility	~20.1 (N/mm2)	Newton per square millimetre
Thermal conductivity	~1.52 (W/mK)	High Aust. Insulation Rating
Asbestos	0 %	Absent - AUST NATA LAB Certification
Freeze Thawing Test	No change after 25 cycles of freeze Thawing	





FireCrunch is a modern, extensively tested building board used in construction. It is made from a mixture of magnesium oxide (MgO), non organic minerals, bonders and fibre mesh composites. FireCrunch is completely free of toxins, including formaldehyde, silica, asbestos, heavy metals, and organic solvents.

It's highly resistant to fire (**CSIRO TESTED**), doesn't retain water, termite proof, strong and increases the R value in any panel application (meets all 8 Australian climatic zones). FireCrunch has extensive applications in major construction for residential and commercial properties. It is also of particular interest to those renovating or repairing homes where either plasterboard gypsum style linings or other kinds of high maintenance products have been used. FireCrunch (General Application) Specifications  
FireCrunch is 8 to 10 times stronger than plasterboard reducing loss and breakage. It is also less expensive and lighter in weight than compressed fibre cement panels. Due to its material properties, FireCrunch does not break down or warp in water, therefore less

replacement requirement after flooding... simply clean, seal and repaint. Additionally, FireCrunch is resistant to mould and mildew, blocks noise with a high acoustic value of  $Rw62+Ctr 52$  net for the 10mm board, is imperviousness to termites and FireCrunch is virtually fire proof, FRL 90/90/90 and over(CSIRO)\*\*\*

This is why we say "FireCrunch Board - One Building Board, Multiple Applications".

#### APPLICATION OVERVIEW

**INTERNAL APPLICATIONS** - Internal walls, ceilings, floor sub base, tile backer, counter tops, kitchen furniture, built in wardrobes. Wet area applications: bathrooms, shower recess, kitchen - suitable for any wet areas or humidity prone areas.

FireCrunch will not degrade in water or flood conditions it remains inert and can simply be dried, re plaster set and repainted. Must be sealed before or at installation.

#### EXTERIOR APPLICATIONS -

Weatherboarding, lining or decking (meets AS/NZS 3959 BAL Regulation - Fire Zone areas). Must be sealed. Can be painted, papered, filed, rendered or veneered.

#### TOOL REQUIREMENTS OVERVIEW

No special tools are required to use FireCrunch. It can be sawn, drilled, (**DO NOT NAIL THIS PRODUCT**) screwed and planed, just like timber. Once in position FireCrunch will have an exceptional life span exceeding that of all homes constructed to date using conventional plasterboard, paper lined plaster, or timber lining methods.





NEW LOW CARBON  
FOOTPRINT 5%

### Board Size Dimensions

Thickness (mm)	Board Size (mm)	Approx. Weight (kg)	Edge	Use
3	2400 x 1200	9	Square	SIP Skins / Custom projects
6	2700 x 1200	19	Square	Internal Walls / Ceilings**
6	3000 x 1200	21	Square	Internal Walls / Ceilings**
8	3000 x 1200	28	Square / Taper	Internal Walls / Ceilings**
8	2700 x 1200	25	Square / Taper	Internal Walls / Ceilings**
10	2400 x 1200	28	Square / Taper	Fire Rated Walls / Ceilings / Soffits
10	2700 x 1200	32	Square / Taper	Fire Rated Walls / Ceilings / Soffits
10	3000 x 1200	35	Square / Taper	Fire Rated Walls / Ceilings / Soffits
10	2700 x 1200	27	Chamfer	Fire Rated Easy joint external walls
16	2700 x 600	22	T&G	Fire Rated Walls / Floors / Fences
20	2700 x 600	32	Square	Fire Rated Walls / Floors / Fences
20	2700 x 900	48	Square	Fire Rated Walls / Floors / Fences
20	2700 x 600	32	T&G	Fire Rated Floors / Decks / Fences
20	2700 x 900	48	T&G	Fire Rated Floors / Decks / Fences



### FireCrunch Fire Board and XClad Interior / Exterior Cladding

#### SQUARE EDGE FIRE BOARD

For an all-in-one board, the FireCrunch 10mm Square Edge (SE) board is perfect. Easy to use with a top class 5 finish on one side.



#### TAPERED (RECESSED) EDGE FIRE BOARD

The FireCrunch Tapered Edge (TE) board is designed for easy taping and clean joints. The board is recessed on the long sides by a depth of 1.5mm and a width of 30mm.



#### CHAMFERED EDGE EXTERNAL WALL BOARD

FireCrunch Chamfered Edge (CE) board is an innovative external wall board, with a 45° V chamfer cut down 5mm on the 10mm board long sides. Does not require any surface trowelling to join and eliminates stud joint cracking. Supplied in 1200mm nominal width.



#### TONGUE & GROOVE FLOOR BOARD

The Tongue & Groove board has a water resistant coating, stronger and denser board grooved down one long side with a matching tongue down the other. Interior / exterior use and totally Fire proof FRL90/90/90 and over. This board comes in a grey finish and is also perfect for decks and exterior applications. (16mm and 20mm thick 27/6 and 27/9) More information available online.





# Fire Protection

## FIRECRUNCH FIRE SEPERATION WALL SYSTEMS



### FireCrunch Fire Separation Wall Systems

The simplest fire wall is the single stud, double panel fire wall system. With just 10mm of FireCrunch on each side of a single stud and suitable insulation,

FireCrunch achieves a FRL 90/90/90 on steel frames and FRL 60/60/60 on timber frames.\*\*\*\*

The acoustic rating for this wall in double stud are separation system is Rw62 net ctr Rw 52 making it the perfect solution for most BCA residential area wall situations.

### BUSHFIRE ZONES

THIS FCA SINGLE WALL SYSTEM MEETS ALL RESIDENTIAL TO BAL FZ (FLAME ZONE) AND WELL ABOVE THE REQUIRED FRL .



### FireCrunch Double Stud Fire Common Wall (Party Wall) System

The FireCrunch shafterliner alternative. With just 1x 10mm thick FireCrunch each side of a double stud and suitable insulation, FireCrunch eliminates the need for an additional central shaftliner panel.

This system achieves a FRL 90/90/90 on steel frames and FRL 60/60/60 on timber frames. (Timber frames require minimum 75kg Rock wool batt)

The acoustic rating for this wall is 62 plus ctr net Rw 52 An ideal solution for most BCA HI Rise residential party wall projects. **eliminates multiple layers of "labour expensive" plasterboard.** The acoustic rating for this wall in double stud fire separation system is Rw62 net ctr Rw 52 making it the perfect solution for most BCA residential area wall situations.

\*\*\*\* DENOTES SPECIAL ATTENTION FOR TIMBER FRAMES, SEE FIRE MANUAL





THE MANUFACTURING OF FIRECRUNCH  
**PRODUCES 90% LESS CO<sub>2</sub> POLLUTANTS**  
 COMPARED TO PLASTERBOARD PRODUCTS



**STRENGTH**

FireCrunch is strong. It will last a lot longer than standard CFC building boards therefore replacement and maintenance do not become an issue. The less you have to replace, the less damage to the environment.

**FIRE**

FireCrunch - for 100% Fire Resistant floors, ceilings, walls, decking and external linings. Tested and approved for building in BAL FZ. FRL 30/30/30 to 90/90/90 tested SOLUTIONS TO FRL 90/90/90 and ABOVE. (ASK US) CALL 1300 933 102

**FLOOD**

FireCrunch does not degrade in water. It remains inert and can be unscrewed from timber frames to enable the timber to dry out before being rescrewed to the forming. The product simply requires a clean up and repaint and is re installed with normal power tools or screwdrivers. No messy plaster board degrade and no damage. T&G flooring and decking Board is also designed water resistant.



**THE ENVIRONMENTAL BUILDING BOARD ALTERNATIVE**

**TERMITES**

One of the biggest issues for Australian homes is Termites. FireCrunch is made from a uniquely formulated, **non-toxic** fibre composite mix so is impervious to termites and insects. Totally protects expensive timber framing.

**CARBON NEUTRAL**

Cement board and plasterboard manufacturing use kiln temperatures in excess of 1300°C. FireCrunch is produced at temperatures around 650°C therefore producing 50% less CO<sub>2</sub> and during the manufacturing process, in carbonation, **FireCrunch draws back 90% of the CO<sub>2</sub> created in production and makes it a virtually carbon neutral product. (5%) ( New Scientist USA) MgO Products**

**TREE FRIENDLY**

FireCrunch has a Green environmental policy and has been determined to reduce CO<sub>2</sub> output in manufacture. FireCrunch uses only 3% wood chip the manufacturing process, leaving the trees to draw back carbon dioxide from the atmosphere in natural form. FCA is 45% recycled waste product

**EARTH FRIENDLY**

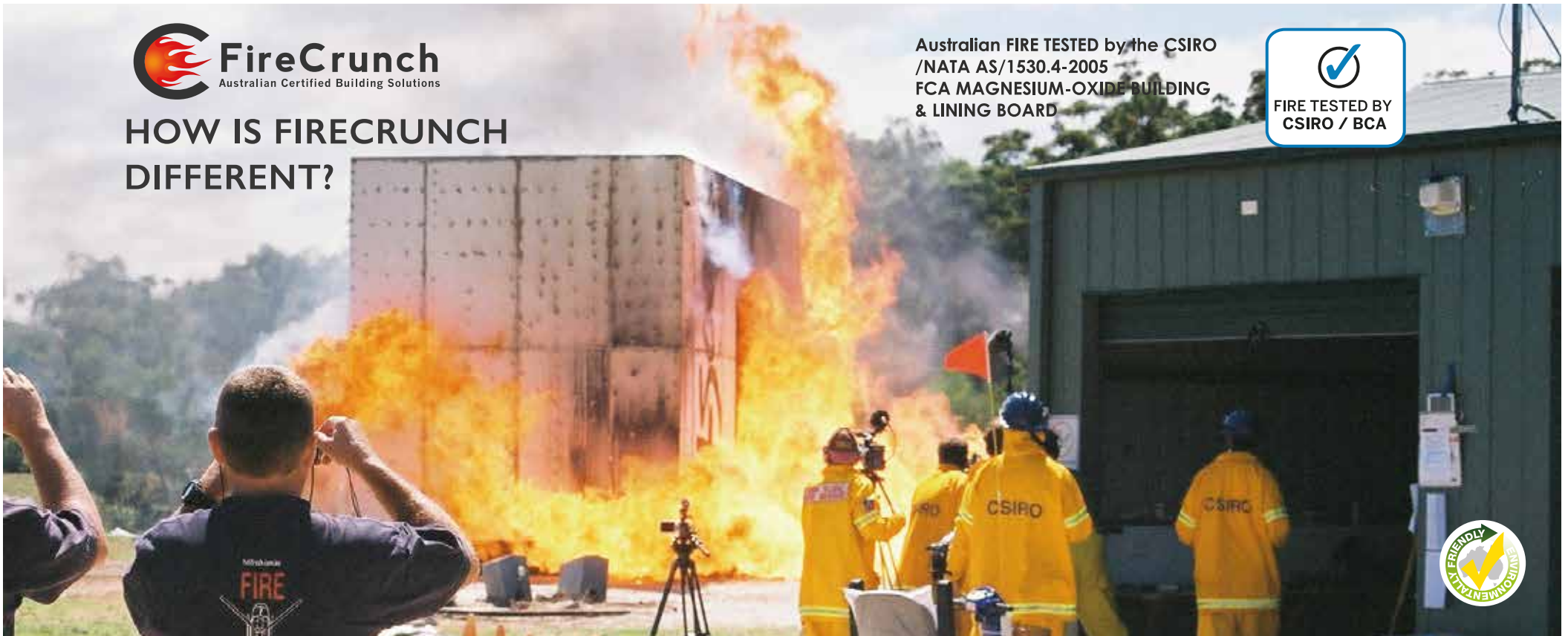
Due to the makeup of the board, FireCrunch will last for periods much longer than standard building boards, therefore requires less repair. Even where the board has been damaged, it can be recut and used again, unlike plaster board.





## HOW IS FIRECRUNCH DIFFERENT?

Australian FIRE TESTED by the CSIRO /NATA AS/1530.4-2005  
FCA MAGNESIUM-OXIDE BUILDING & LINING BOARD



- ✓ FireCrunch will not burn and has been tested to 1200°C with no combustion or flame out.

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- ✓ FireCrunch does not hold water and so superheated steam will not “blow out” the product as it may do with standard building bricks in fire conditions.

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- ✓ FireCrunch will not burn in a fire storm. FireCrunch is applicable in BAL 12.5 to 40 and FZ flame zone regulation areas when used to protect exposed timber framing eaves joists etc(AS3959). Tested by the CSIRO to worst case scenario fire storm conditions. Meets AS/NZS 1530.8.1 & 8.2, and AS/NZS 3837 .**CSIRO, NATA Tested AS/1530.4-2005.**  
**(NON ASBESTOS TESTED NATA CLEARSAFE NSW (AS/4964-2004) .**

- ✓ FireCrunch insulation properties help protect internal furnishing from internal combustion and flash burning from high external temperatures.

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- ✓ FireCrunch will not ignite from ember attacks. Bushfire ember attack is the largest single national contributor to home loss.

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- ✓ FireCrunch is 8 to 10 times stronger than normal plaster board products and insulates from intense heat and cold.

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- ✓ FireCrunch will not degrade or break down in water and resists mould and mildew so is ideal for flood prone areas.

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- ✓ FireCrunch is of no interest to termites and KILLS bacteria.







# BAL FZ FlameZone Compliant

## GENERAL FEATURES

- Fireproof to extremely high temperatures (1200 c)FRL90/90/90.
- Meets BAL 12.5 to 40 and FZ ( Flame Zone) to maximum irradiance 50kW/m2 - consult the rural fire authorities in your area to confirm to the Local Asset Protection Zones (APZ) requirements.
- Non Combustible, AS/1530,4-2005, AS/3837 BCA STD
- All weather product (interior/exterior when sealed).
- Resistant to flooding and prolonged water emersion.
- Resistant to mould,mildew and kills bacteria
- Totally resistant to termites, protects timber framing.
- Low thermal conductivity ~1.92 (W/ mk).
- High Australian insulation Batt combination R values.
- Acoustic Rating Rw 62 +Ctr 52 / 10mm.
- Strike resistant, durable and 10 x stronger than plasterboard.
- Non polluting, non toxic. low CO<sub>2</sub>
- Prevents bacterial growth.
- Green Product - very low CO<sub>2</sub> emission in manufacturing making, FireCrunch virtually carbon neutral.
- Can be cut, drilled, sawn or planed like timber. Use timber tools
- No special trades tools required. no pre drilling like CFC
- Can be textured, rendered, painted, tiled etc.
- 100% recyclable material. Green labelled.





FireCrunch meets the structural integrity requirements of the Australian Building Codes Board (A BCB) when the board is screwed to the steel framing as used in normal frames assembly. FireCrunch provides extensive protection and additional integrity to timber forming when clad with FireCrunch in fire and flood conditions.



### Complies with the Building Code of Australia: FIRECRUNCH FIRE TESTED TO BCA BY THE CSIRO

- BCA Volume One 2014: C1.8 Lightweight Construction, C1.10 Fire hazard properties and C1.12 noncombustible components, including state variations for NSW.
- BCA Volume Two 2014: Part 3.5.3.3, Fibre Cement Planks and Weatherboard Cladding.
- BCA Volume Two 2014: Part 3.5.3.4, Fibre Cements Sheet Wall Cladding.
- BCA Volume Two 2014: Part 3.5.3.5, Eaves and Sof fit Linings.
- BCA Volume Two 2014: Part 3.7.1, Fire separation for FRL, including state variations for SA.
- BCA Volume Two 2014: Part 3.7.4, Bushfire areas to Part 3.7.4.0 and 3.7.4.1, including state variations NSW, QLD, SA and T AS.
- BCA Volume Two 2014: Part 3.8.6, Sound Insulation, including State and Territory for NT.



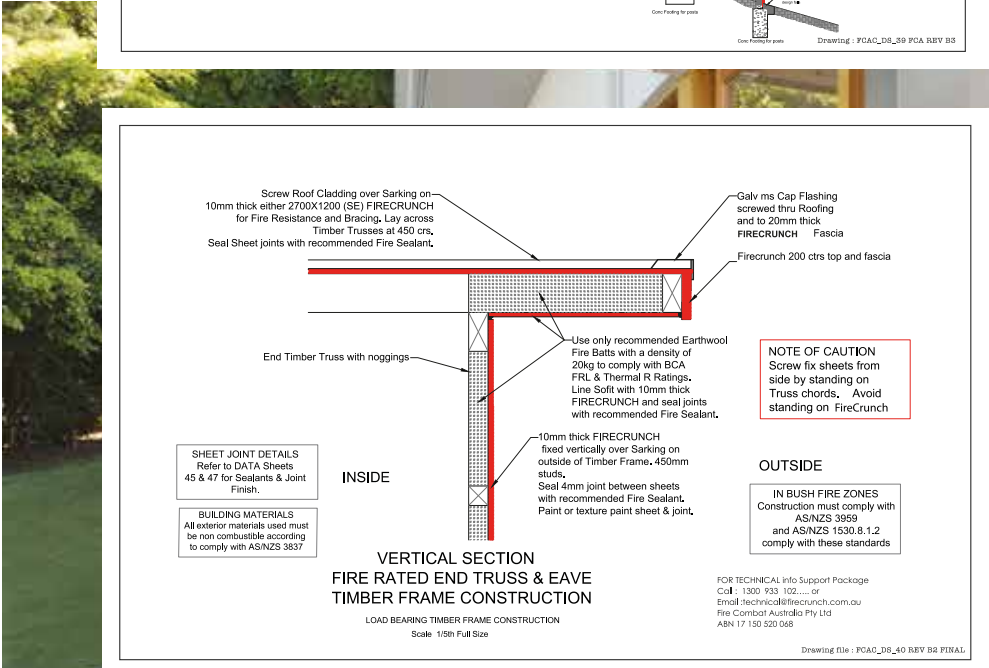
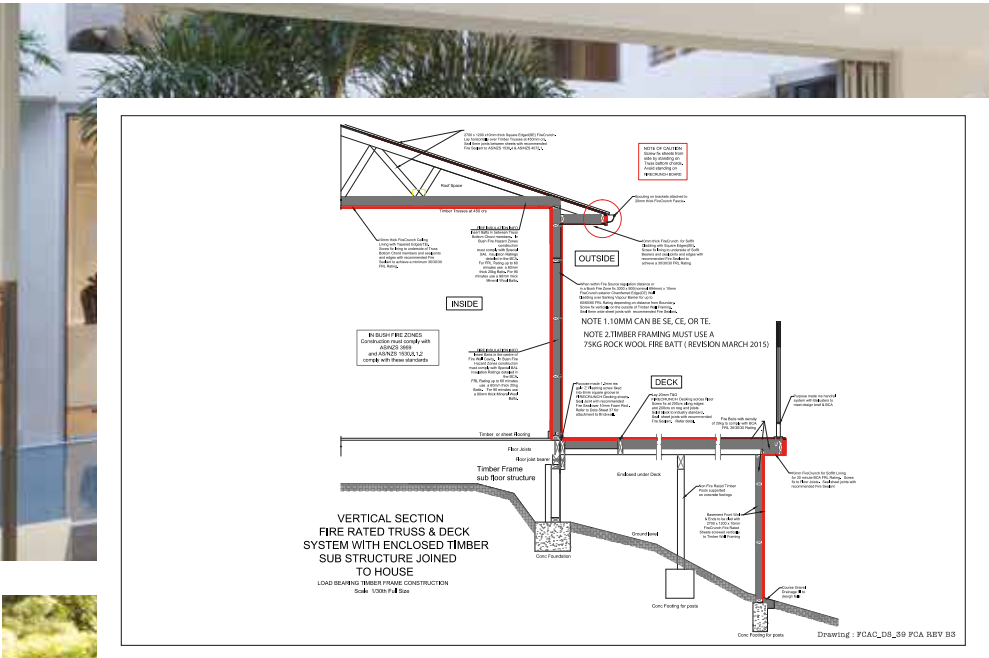
### FireCrunch - Group 1 Fire Rating has been FIRE TESTED by the CSIRO

The FireCrunch building lining product :FireCrunch FIRE TESTED to BCA by the CSIRO to the Certificate level standards of AS/1530.4-2005 AND AS/NZS 3837 Non combustible materials test (BCA) being the highest fire tested (Group 1) product.

PLUS AS/NZS 1530.4/2014 FRL 30/30/30 To 90/90/90 LOAD BEARING and Higher 120/120/120 with 2 LAYERS OF 10MM. LOAD BEARING.(DTS-NCC contact FireCrunch for further information).

**1300 933 102    [technical@firecrunch.com.au](mailto:technical@firecrunch.com.au)**





**Architects, 70 DWG files available**



ONE BUILDING PRODUCT MULTIPLE APPLICATIONS WALLS, FLOORS AND CEILINGS INTERNAL AND EXTERNAL

FIRECRUNCH.COM.AU



Go to our website [firecrunch.com.au](http://firecrunch.com.au)  
to download All **CSIRO Certificates**



call today **1300 933 102** [technical@firecrunch.com.au](mailto:technical@firecrunch.com.au)



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