






PARTY WALL **K-SOUND - FIRE 10mm**

(Rw50) net ctr ,ACOUSTIC SYSTEM SINGLE FRAME FRL 60- 90 AND 120 MINUTE FIRE AND ACOUSTIC WALL Rw50 LOAD AND NON LOAD BEARING

FRL 60/60/60 timber TO FRL 90/90/90 Steel frame
FRL 120/120/120 = 2 X10mm K CLAD each side of
COLD ROLL FORMED STEEL FRAME (1 .15 BMT)

NATA Labs Australia Fire Tested Systems AS1530.4 a/ 2014 and more

firecrunch.com.au

-  FIRE PROOF
-  FLOOD PROOF
-  IMPACT RESISTANT
-  TERMITE PROOF
-  MOULD & BACTERIA PROOF



FIRE TESTED BY NATA / CSIRO & OTHERS

NOTE: FCA ref, is FireCrunch Australia

FIXINGS PROCEDURES

STEEL FRAME

USE SELF C/S 30 mm to 40 mm NEEDLE POINT ,WING TIP PLATED CORROSION PROOF SCREWS

TIMBER FRAME

USE SELF C/S 30mm to 40mm needle point ribbed head bugle corrosion proof screws

Set screws at 200mm intervals on vertical set and 300 mm on horizontal VIA NOGS ETC . SET SCREWS 15MM IN FROM EDGES

LEAVE 6 mm fire sealant gap between vertical set EXTERIOR SE10 CLAD sheets, backed with vertical stud facings use min 45mm width studs for adequate screw fixing spacing.

USE AS 1530.4 SEALANT IN ALL GAPS

SEE MAIN FIRE MANUAL FOR FULL DETAILS

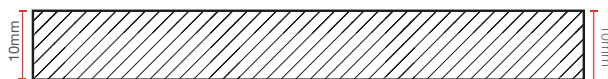
<https://firecrunch.com.au/wp-content/uploads/2023/11/M-01-FireCrunch-Fire-Manual.pdf>

INTERIOR =TE10 AND EXTERIOR = SE10 PLAIN SURFACE WALLS, EAVE S AND BOUNDARY WALL SYSTEMS

K-Clad SE square edge

ORDER CODE FCA-SE10-2400 x 1200 (2700) OR (3000)

WALLS-INTERIOR -EXTERIOR-BOUNDARY-FIRE SEPARATION, EAVES ETC, EXTERIOR AND INTERNAL USES



Sizes: 2400 x 1200mm
2700 x 1200mm
3000 x 1200mm

K-Clad Recessed Edge (TE)

ORDER CODE FCA-TE10-2400 x 1200 (2700) OR (3000)

TE 10 INTERIOR PLASTER SET



Sizes: 2400 x 1200mm
2700 x 1200mm
3000 x 1200mm

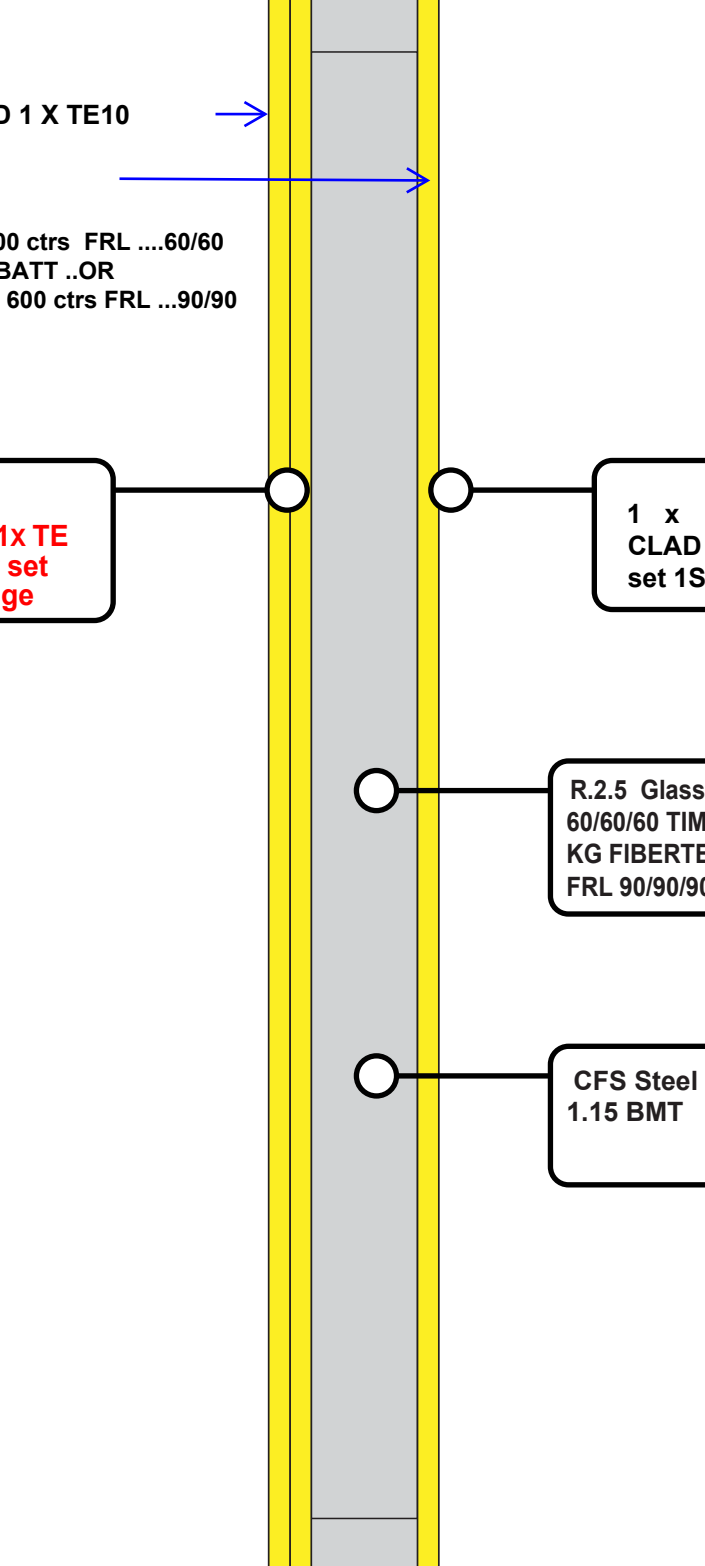
**PARTY WALL K-SOUND -FIRE 10 (Rw50)
ACOUSTIC SYSTEM SINGLE FRAME**

FRL...../60/60 = TIMBER frame FRL 90

-120 STEEL Frame

FRL 60/60/60 timber TO FRL 90/90/90 Steel frame

FRL /120/120 ADD 1 EXTRA 10mm sheet (2 EACH SIDE) to steel frame 1.15 BMT



WHAT YOU NEED

SIDE 1 = 1 X K CLAD SE 10 AND 1 X TE10

SIDE 2 = 1 X K CLAD TE10

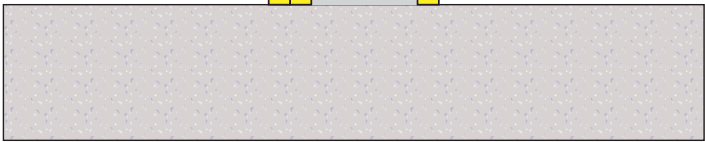
- 90mm X 45mm timber stud frame 600 ctrs FRL60/60
- R 2.5 90mm GLASSWOOL CAVITY BATT ..OR
- 92mm x 45mm steel frame 1.15BMT 600 ctrs FRL ...90/90
- 1x 90mm CSR FIBERTEX BATT

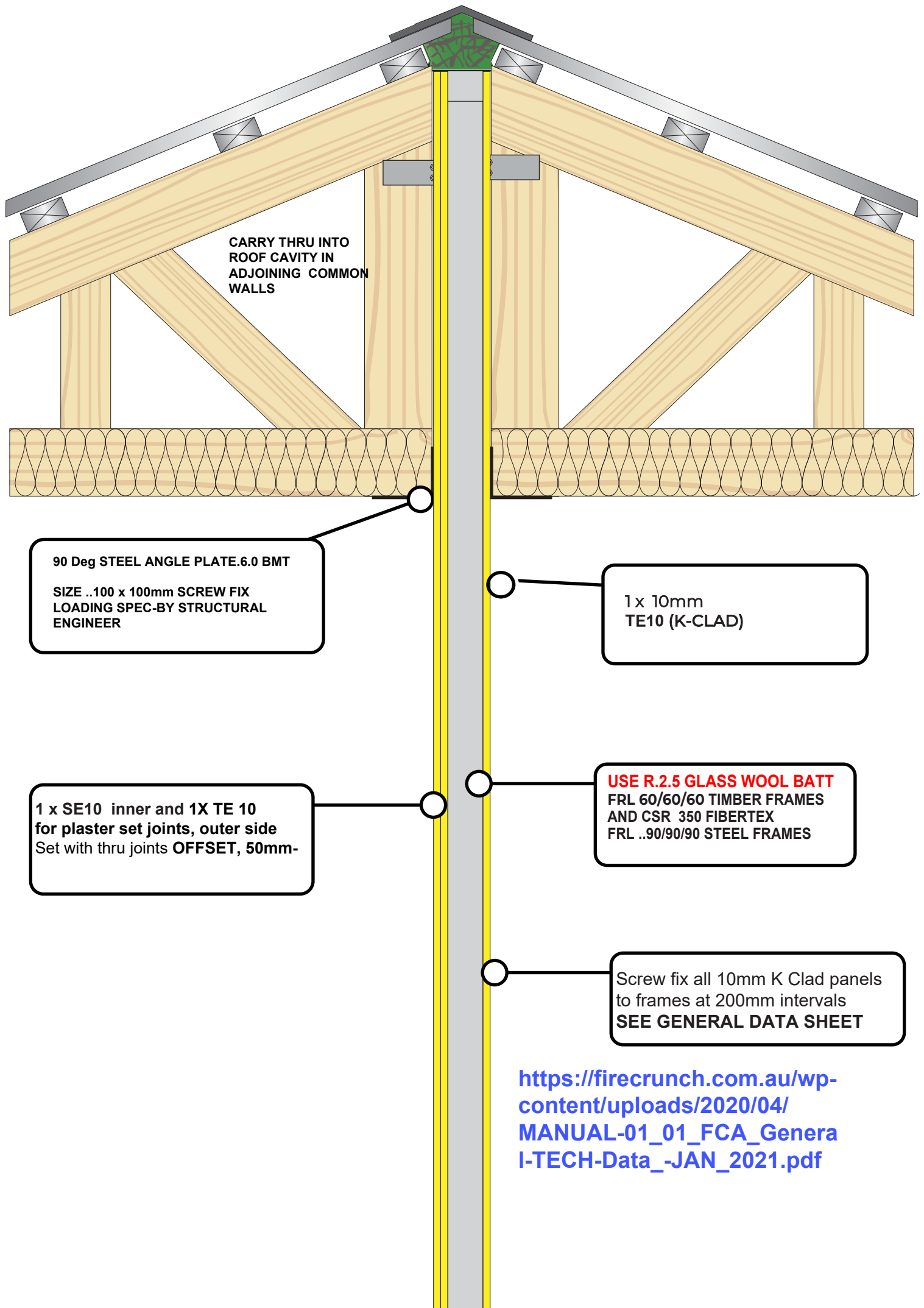
2 x 10mm sheets
1 x SE10 inner and 1x TE 10 outer, for plaster set joints --recessed edge

1 x 10mm sheet K CLAD TE 10 for plaster set 1ST interior side

R.2.5 Glasswool BATT FRL 60/60/60 TIMBER 90mm AND 64 KG FIBERTEX 90mm FRL 90/90/90 STEEL 1.15 BMT

CFS Steel frame 90mm x 45mm 1.15 BMT





CERTIFICATION AND TEST REPORTS

<https://firecrunch.com.au/certifications/>

STEEL

**NATA CSIRO FRL 60/60/60 AND 90/90/90
ASSESSMENT OF TEST REPORT ,SINGLE STEEL
STUD FRAME 90 X 45mm 1.15 BMT 64 KG 90mm
GLASSWOOL BATT AS 1530.4 FIRE SEALANT**

STEEL

**NATA LABS RESOLUTE QLD FRL ---/120/120
TEST REPORT SINGLE STEEL STUD FRAME
1.15 BMT 90mm X 45mm. R 2.5 90mm
GLASSWOOL BATT. AS 1530.4 FIRE SEALANT**

TIMBER

**NATA RESOLUTE LABS QLD TEST REPORT
SINGLE TIMBER STUD FRAME RADIATA PINE
90x 45mm
*PLUS REGISTERED FE ASSESSMENT YGL FIRE
ENGINEERS, SYDNEY. FRL 60/60/60***

AS 1530.4 FIRE SEALANT-TRADES COUNTERS

**FireCrunch Australasia Pty Ltd 37 620 875 041
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Date 2 June, 2023
Reference PKA100FCA R01v1
Project FireCrunch Acoustic Opinion
Contact Ian Ritchie
Email Ian.Ritchie@firecrunch.com.au
Company FireCrunch Australia
File *PKA100FCA R01v1 FireCrunch Corridor Wall Acoustic Opinion.docm*



Dear Ian,

Re: FireCrunch Corridor Wall Acoustic Opinion

The purpose of this letter is to provide an acoustic opinion for the FireCrunch corridor wall system, and compare to the airborne sound insulation requirements of the National Construction Code (NCC), Building Code of Australia (BCA), separating sole-occupancy units with corridors.

FireCrunch Board

The primary product for assessment is the 10mm FireCrunch (9.5kg/m², 950kg/m³) board which is a magnesium oxide lining.

The FireCrunch Board was tested at the Kilargo Acoustic Laboratory (now Resolute Acoustic Laboratory) in Banyo, QLD [Ref: AC-011-15/CT dated March 2015].

Kilargo Acoustic Laboratory Test	Wall Description	Airborne R _w (C _{tr})
AC739WA7/2015	10mm FireCrunch board (9.5kg/m ²) one side of 90mm Rondo steel studs 0.55BMT (cc 600mm)	29 (-2)
AC738WA7/2015	10mm FireCrunch board (9.5kg/m ²) 90mm Rondo steel studs 0.55BMT (cc 600mm) 90mm Fletcher Pink Partition batts (25kg/m ³) 10mm FireCrunch board (9.5kg/m ²)	49 (-6)

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Sound Insulation Requirements

The National Construction Code (NCC), previously the Building Code of Australia (BCA), in Volume 1 Section F7 “Sound Transmission and Insulation” states that walls separating places of occupancy in Class 2 and 3 buildings must “safeguard occupants from illness or loss of amenity as a result of undue sound being transmitted”.

The following summarises the BCA sound insulation requirements, brevity necessitates detail in the BCA taking precedence over the tables below.

Wall Description	Airborne	BCA 2022	BCA 2019
Separating SOUs with corridor, stairway, lobby or different classification	$R_w \geq 50$	F7D6(1)(b)	F5.5(a)(ii)
Separating SOU habitable area with services from another SOU	$R_w + C_{tr} \geq 40$	F7D7(1)(a)	F5.6(a)(i)

Acoustic Assessment

This acoustic assessment is based on PKA's extensive experience calculating the acoustic properties of lightweight and masonry floor systems,

The acoustic predictions contained in this assessment are the expected values when tested in an acoustic laboratory and results are calculated in according with the relevant Australian Standards as per the National Construction Code (NCC):

- Airborne R_w and C_{tr} in accordance with AS/NZS ISO 717.1-2004 Acoustics - Rating of sound insulation in buildings and of building elements - Airborne sound insulation

These acoustic predictions result in tolerances within $R_w \pm 2$ when validated against acoustic laboratory test results and other supporting information, which have their own inherent variability.

Reference	Wall Description	Airborne R_w (C_{tr})
Kilargo Acoustic Laboratory AC738WA7/2015	10mm FireCrunch board (9.5kg/m ²) 90mm Rondo steel studs 0.55BMT (cc 600mm) 90mm Fletcher Pink Partition batts (25kg/m ³) 10mm FireCrunch board (9.5kg/m ²)	49 (-6)
Acoustic Opinion PKA100FCA R01	2x10mm FireCrunch board (9.5kg/m ²) min. 90mm Rondo steel studs 0.55BMT (cc 600mm) min. 90mm glasswool insulation (20kg/m ³) 10mm FireCrunch board (9.5kg/m ²)	52 (-7)

Yours faithfully,



Joel Parry-Jones, Principal

PKA Acoustic Consulting