

SECURE, QUIET, FLEXIBLE.

OROK®

Multi-unit construction projects, such as apartments, call for well-tested technology that's simple to install. KOROK® Intertenancy wall offers the benefits of proven fire and acoustic performance, and the security of a solid wall design.

SECURE

KOROK[®] panels consist of a steel shell filled with aerated concrete. Having a solid wall provides peace of mind to occupants in the knowledge that they are physically separated from neighbouring dwellings.

QUIET

KOROK[®] panels offer superior mass over traditional timber and plasterboard or equivalent systems resulting in enhanced sound attenuation, particularly in the more invasive lower frequencies. This means that residents are comfortable in their own space without the intrusion of noise from other dwellings.

FLEXIBLE

Because KOROK[®] panels provide all the fire protection you need, you can run electrical and plumbing services on the intertenancy wall without the need for special penetration seals around each pipe or light switch. This allows you the flexibility of placing a TV and kitchen where you want, and the ability to hang fixtures on the wall without compromising the fire and acoustic resistance of the Intertenancy wall.

C-track or Angle sections are fixed to structural elements (steelwork) at 400mm centres with Hilti – X-ENP-19 L15 fasteners

Fix C-track or Angle sections to concrete at 400mm centres. See KOROK® Components -Summary (Page 12) for approved fixings

The C-track or Angle section must have a continuous bead of fire-rated sealant between the track and the structure to which it is fixed

Panels are fixed together with Wafer Tek 10g - 16 x 16mm screws. For centres see Step 12

Corner joints must be sealed with fire-rated sealant. See KOROK® Components Summary (Page 12) for approved sealants

- KOROK® panels are fixed to the C-track with Wafer Tek 10g - 16 x 16mm screws one side (400mm centres)

 KOROK[®] panels are fixed to the top and bottom C-track with Wafer Tek
10g - 16 x 16mm screws at 250mm centres one side



VERTICAL INSTALLATION

Vertical installation of the KOROK[®] panels requires the C-track to be fixed to the supporting structure, e.g. walls, columns, portals, soffits and slabs.

Plan your setout.

To ensure the C-track is sealed to the structure, a continuous bead of fire-rated sealant is run around the perimeter before the C-track or Angle sections are laid and fixed.

Or the sealant can be applied directly to the C-track before fixing in place.

Using a masonry drill bit, pre-drill the C-track at 400mm centres.

Then use the approved fixings to secure the C-track.











If the surrounding surface is uneven or if you're not sure you have a good seal, add a continuous bead of fire-rated sealant around the perimeter of the C-track where it contacts the surrounding surface.

6 KOROK[®] panels must be cut 20mm shorter than the structural opening measurement to allow for fitting.

Pull back a 300mm section of the strippable film on the ends of the panels before placing the panels into the C-track.

Ensure that the first panel is plumbed vertical after fitting into the C-track. Screw fix the panel into place to the C-track.

Subsequent panels are placed in a tilt and snap action.

2 Ensure the tongue and groove are fully locked to maintain the fire and acoustic performance. Remove strippable film at the end of each day's work.

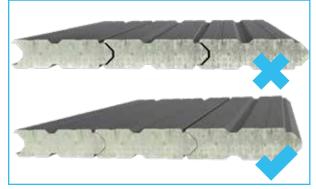
CUTTING OF KOROK® PANELS

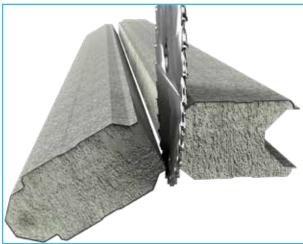
KOROK[®] panels can be cut to length and width with the use of a reciprocating saw or a radial saw with dust extraction. Diamond cutting discs are recommended for radial saws.

Where KOROK[®] panels are trimmed to width, the cut edge of the panel is fitted into the C-track and so is always the last panel abutting the wall or column. The panel is then sealed and fixed in position as usual.









LAST PANEL

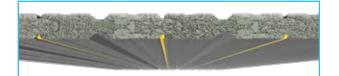
Stop short of the end vertical KOROK® C-track by approximately 1 metre and cut out a 600mm Angle section from the top and bottom C-track.

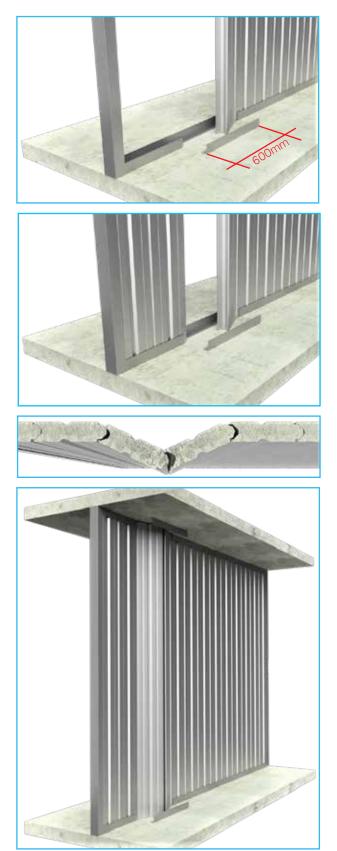
Plan ahead and make an allowance for a 50mm overlap onto the panels installed prior to the last remaining two panels.

10 Cut your end panel (the last panel) ensuring that a distance of 500mm remains between panels for the last two panels to be squeezed into position.

11 Once the final two panels are in position, simply replace the Angle and fix to panels. Screw the C-track and Angle sections to the panels in the normal fashion.

11C When using 51mm KOROK panels, seal the 3 closed-off panel joints with fire-rated sealant to one side.







12 Panels must be screwed together into every panel joint as per the vertical centres in Table 3 below.

TABLE 3 - FASTENINGS

Panel Thickness (mm)	Panel Orientation		Panel to Panel Max. Centres (mm)	Sides	Notes:
51	Vertical	5m	1000	one	Measured from floor level
78	Vertical	6m	1000	one	Measured from floor level

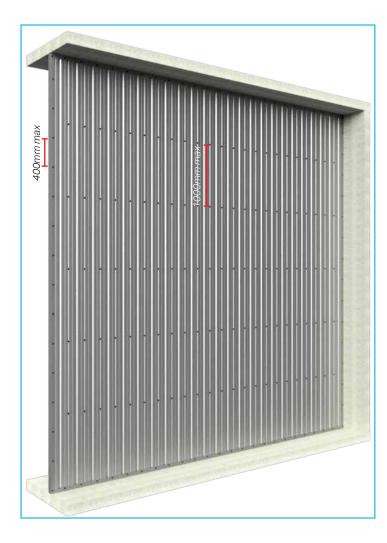
C-TRACK

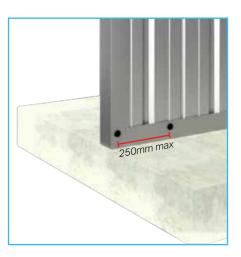
C-track is fixed to the KOROK® panels at 400mm centres one side on the vertical C-track and 250mm centres one side on the horizontal C-track.

At corners where two lengths of KOROK[®] C-track intersect, the two pieces must be fixed to each other with 1 Wafer Tek 10g - 16 x 16mm screw.

DEFLECTION C-TRACK DETAILS

Dead and live loads can cause significant deflection in some structures. KOROK® can provide deflection C-track details where deflection loadings are considered.







13 Remove any remaining plastic film and then apply a continuous bead of fire-rated sealant between the KOROK® C-track and the KOROK® panels as indicated by the yellow line.

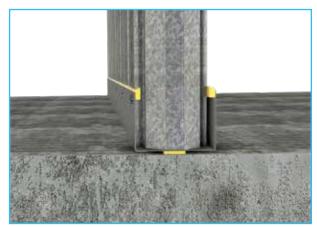


14 Fire-rated sealant details for top and sides.













Using Angle as an alternative to C-track.



FINAL CHECK

At the completion of the job and at the finish of each day's work, it is essential that the completed area be thoroughly cleaned of all swarf, rivet stems, nails, drillings and screws etc. normally associated with the installation of metal KOROK® panels. Remove any remaining strippable film; check all fixings are correctly installed; check all fire-rated and acoustic-rated sealant is applied correctly.



HEAD TRACK PROTECTION

GIB Fyreline® or equivalent PROTECTED HEAD TRACK

GIB Fyreline[®] or equivalent 13mm x 120mm strip with fire-rated sealant is fixed at 250mm centres top and bottom, using 32mm x 16G drywall screws.





METAL FLASHING PROTECTED HEAD TRACK

 ${\rm KOROK}^{\circledast}$ fire flashing is fixed to the panels at 250mm centres, using Wafer Tek 10 x 16mm screws.



DEFLECTION C-TRACK DETAILS

Dead and live loads can cause significant deflection in some structures.

KOROK[®] can provide deflection C-track details where deflection loadings are considered.

Contact your KOROK® representative on 0800 773 777 for a solution specific to your project.

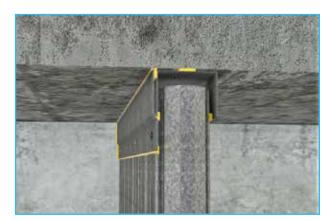


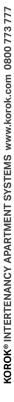


TABLE 4 - KOROK® FASTENERS SPACINGS

Notes:	Measured from floor level	10-16 Measured from
Tek Screw	10-16	10-16
Sides of C-track	One	One
Panel Face or Joint	Face	Face
C-track Perpendicular to Panel (mm)	250	250
Tek Screw	10-16	10-16
Sides	one	one
Panel to Panel Maximum centres (mm)	1000	1000
Maximum Wall Maximum Wall Span/ Height (m) Width (m)	NIA	MA
Maximum Wall Height (m)	5 T	бт
Panel Orientation	Vertical	Vertical
Panel Thickness (mm)	51	78
Use	Intertenancy - Apartments	Intertenancy - Apartments

NOTES

- 1. For C-track running parallel to the panels, 10-16 Tek screw fixings at 400mm centres are used one side.
- 78mm Panel Properties These span tables are based on ambient conditions. When used as part of a fire-rated system, the maximum unsupported vertical span of the KOROK® panels is 6.0 metres and the maximum unsupported horizontal span is 5.0 metres. Greater spans are subject to specific engineering design and/or fire engineering assessment. с.
 - 51 mm Panel Properties These span tables are based on ambient conditions. When used as part of a fire-rated system, the maximum unsupported span of the KOROK panels is 5.0 metres vertical or 4.0 metres horizontal. Greater unsupported spans will require specific FRR design. ю.
- Deflection C-track details Dead and live loads can cause significant deflection in some structures. KOROK[®] can provide deflection C-track details where deflection loadings are considered. 4.





KOROK® COMPONENTS SUMMARY

Product Image	Item Description
	PN1159 KOROK® C-track 60 x 51 x 60mm 1.15B.M.T.
1	PN1140 KOROK® C-track 60 x 80 x 60mm 1.15B.M.T.
	PN1122 KOROK® panel 51mm wide 250mm cover 600kg/m ³ density
	PN1130 KOROK® panel 78mm wide 250mm cover 400 kg/m³ density (Colour)
	PN1318 KOROK® GEN 2 panel 78mm wide 250mm cover 400 kg/m ³ density (Galvanised)
	PN1310 Hilti HUS3-P 6 Concrete screw anchor
O-MARKET	PN1343 Hilti HUS3-H 6 Concrete screw anchor
	PN1185 Hilti DBZ 6/4.5 x 32mm
	PN1190 6.5 x 32 Rawl Mushroom spikes

Product Image	Item Description
	PN1170 KPS Wafer Tek 10g - 16 x 16mm Class 3
Continue (C)	PN1171 KPS Wafer Tek 10g - 16 x 30mm Class 3
	PN1165
	Sikaflex-400 Fire Rated Sealant
11	PN1160
	Hilti CP606
	PN1198
Communities	Hex Head Type 17 14g x 35mm screws
	PNAB10
	Aluminium Bracket 75x50x3mm
	PN1226 KOROK® fire flashing
	PN1150 KOROK® Angle



NOTES



NOTES

SUSTAINABILITY

KOROK[®] is a high performance product with minimal impact on the planet

KOROK® is made to order, ensuring minimal onsite waste

KOROK[®] is fully re-usable

KOROK® is fully recyclable

KOROK® is manufactured in NZ



KOROK panel KOROK Building Systems NZ Ltd

Final Assembly: Hamilton, New Zealand Life Expectancy: 50 Year(s) End of Life Options: Salvageable/Reusable in its Entirety, Recyclable (100%)

Ingredients:

Portland Cement; Low Carbon Steel: Water; Fly Ash; Washed Fine Sand; Anionic Detergent Blend (0.01%)¹; Antimony; Nonionic Surfactant; Polypropylene Filaments; Zinc

¹LBC Temp Exception RL-004b - Proprietary Ingredients in Declare

Living Building Challenge Criteria: Compliant

I-13 Red List:

LBC Red List Free % Disclosed: 99.99% at 100ppm
LBC Red List Approved VOC Content: Not Applicable
Declared

I-10 Interior Performance: Not Applicable I-14 Responsible Sourcing: Not Applicable

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