



KOROK®

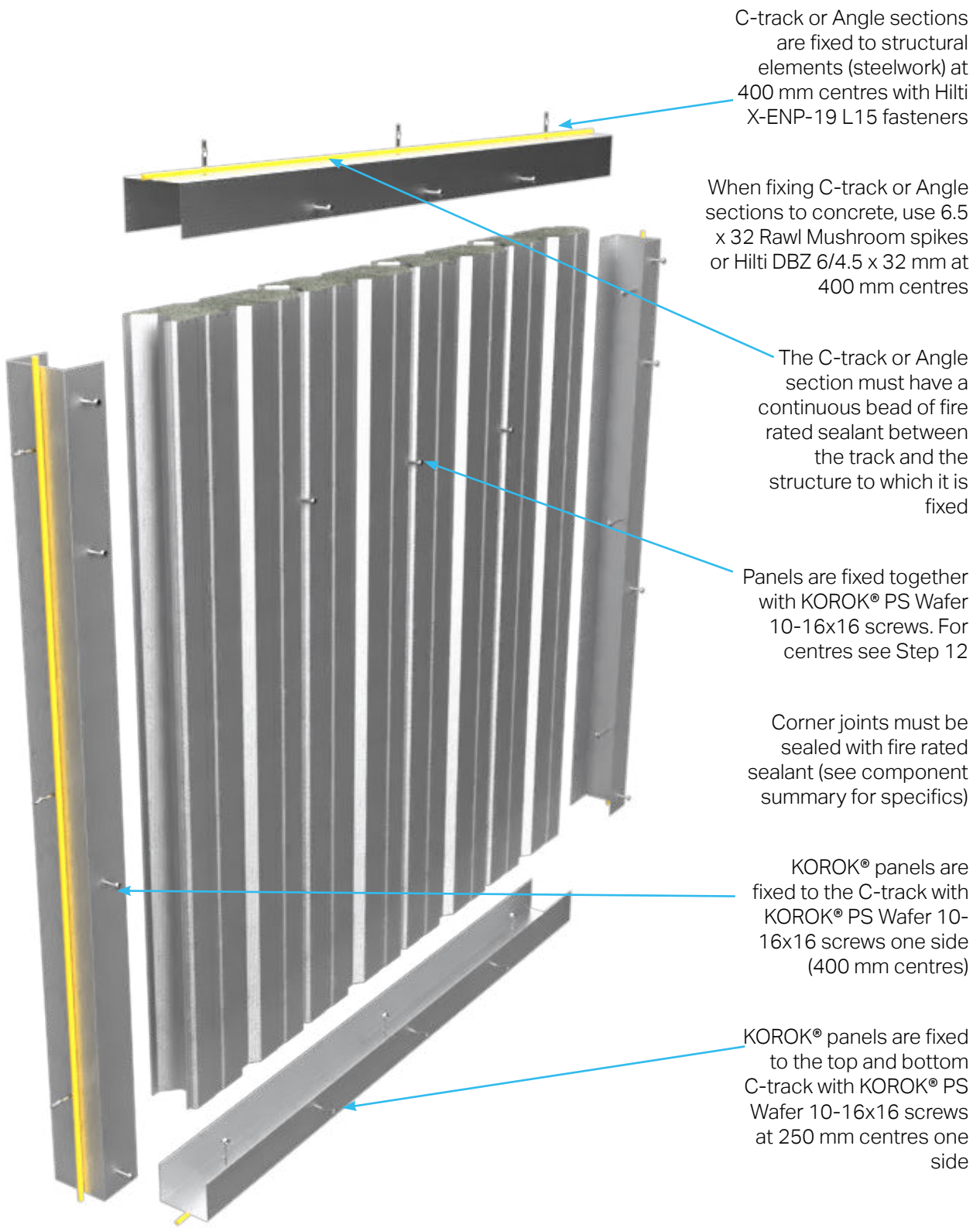
WAREHOUSE AND RETAILS SYSTEMS INSTALLATION GUIDE



**APRIL 2025
Version 36**

KOROK® 

VERTICAL INSTALLATION



VERTICAL INSTALLATION

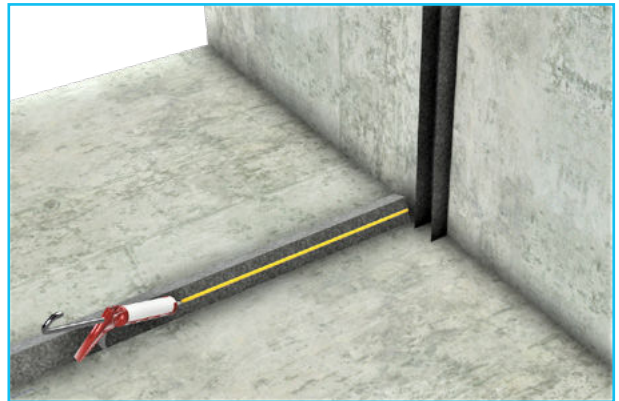
1 Vertical installation of the KOROK® panels requires the C-track to be fixed to the supporting structure, e.g. walls, columns, portals, soffits and slabs.

Plan your setout.

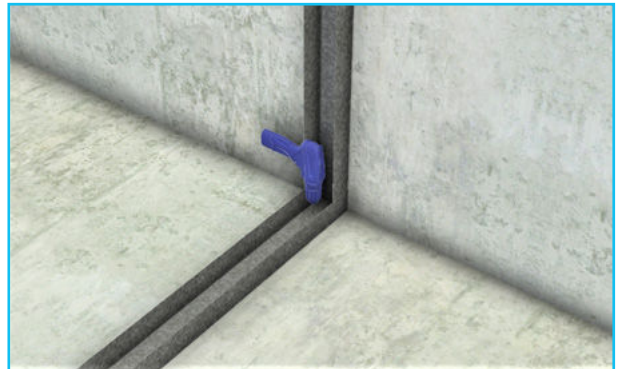


2 To ensure the C-track is sealed to the structure, a continuous bead of fire rated sealant is run around the perimeter before the C-track or Angle sections are laid and fixed.

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



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



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



VERTICAL INSTALLATION

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

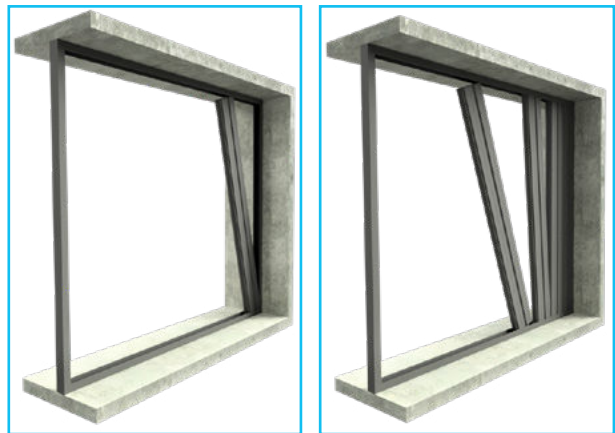


6 KOROK® panels must be cut 20 mm shorter than the structural opening measurement to allow for fitting.

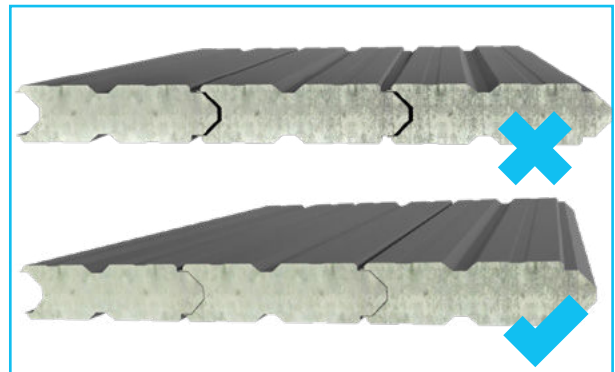
Where panels are supplied with protective film, pull back 300mm of the film at each end of the panels before placing the panels in the C-track.

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.



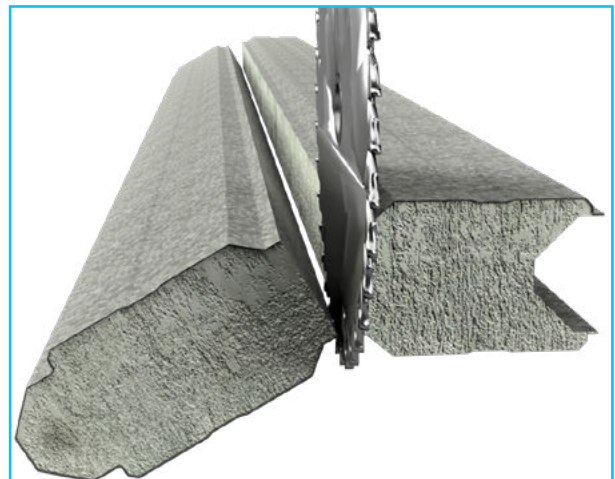
7 Ensure the tongue and groove are fully locked to maintain the fire and acoustic performance. Remove strippable film at the end of each day's work.



CUTTING PANELS

8 KOROK® panels can be cut to length and width using 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 floor or soffit. The panel is then sealed and fixed in position as usual.



VERTICAL INSTALLATION

LAST PANEL

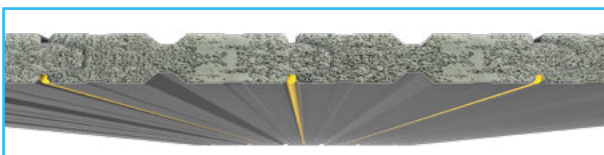
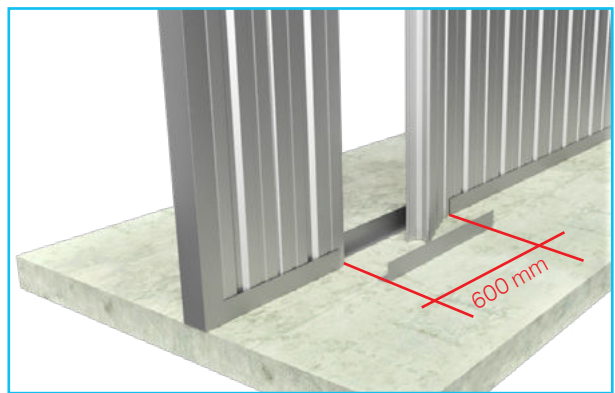
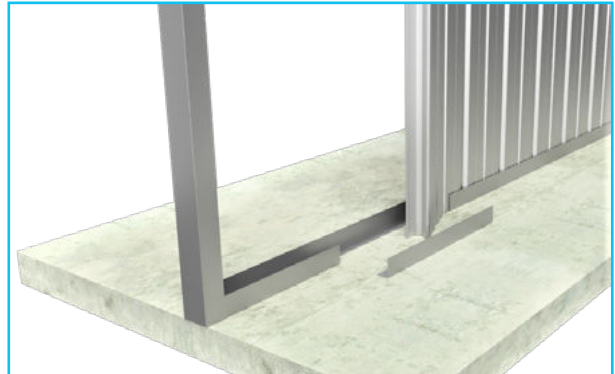
9 Stop short of the end vertical KOROK® C-track by approximately 1 metre and cut out a 600mm Angle section from the top and bottom C-track.

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 500 mm 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.

11A When using 51mm KOROK® panels seal the 3 close-off panel joints with fire rated sealant to one side.



VERTICAL INSTALLATION

SCREW PLACEMENT

12 Panels must be screwed together into every panel joint as per the vertical centres in Table 2.

TABLE 2 - SCREW PLACEMENT VERTICAL INSTALLATION

PANEL THICKNESS	WALL HEIGHT	MAXIMUM CENTRES	SIDES	PLACEMENTS/NOTES
78 mm	0 to 9.0 m	1000 mm	One	

When used as part of a fire rated system refer to KOROK® panel properties in KOROK Warehouse and Retail Systems Manual v36 for maximum unsupported spans.

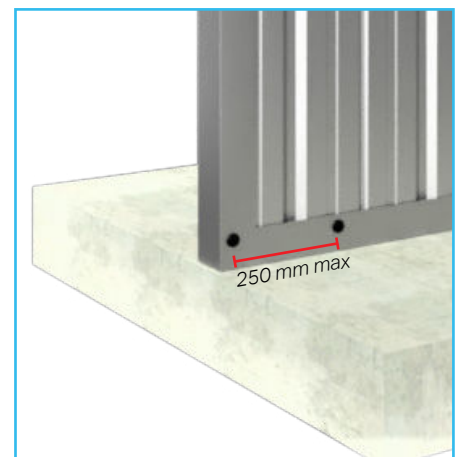
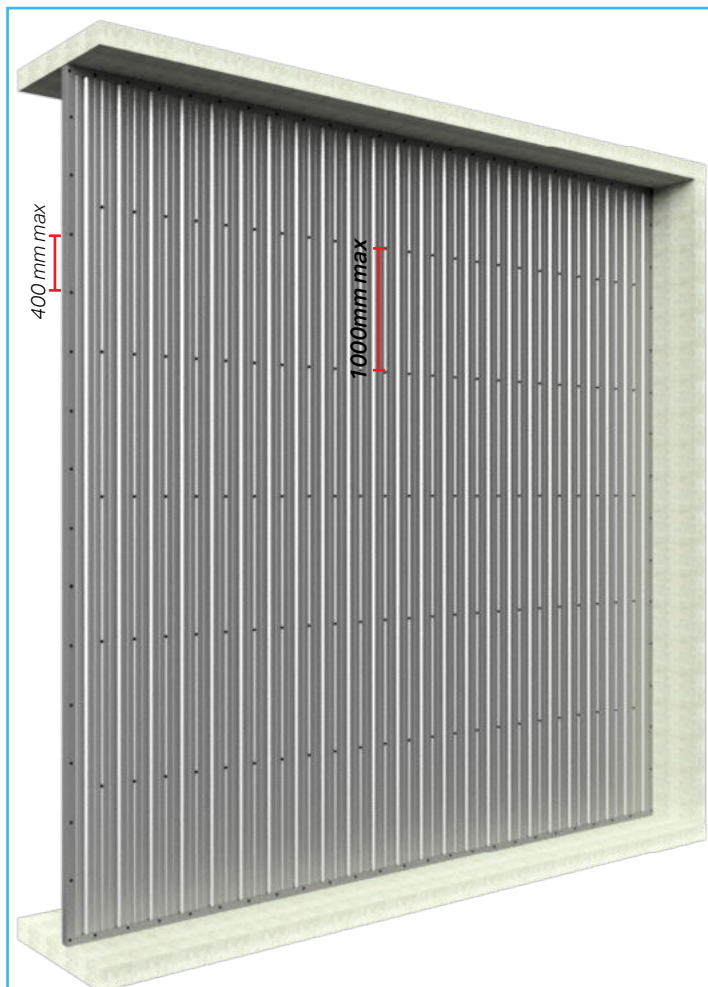
C-TRACK

C-track is fixed to the KOROK® panels at 400 mm centres one side on the vertical C-track, and 250 mm 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 KOROK® PS Wafer 10-16x16 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.



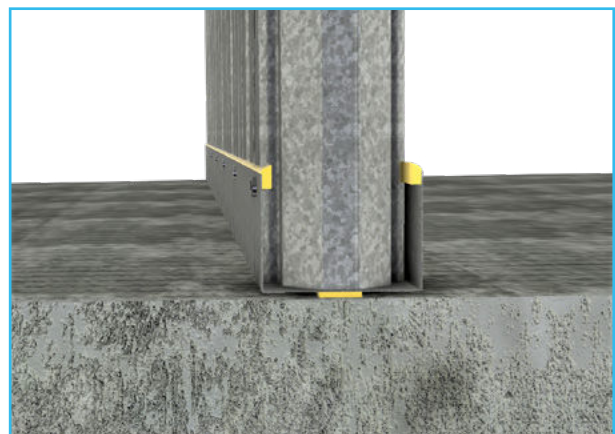
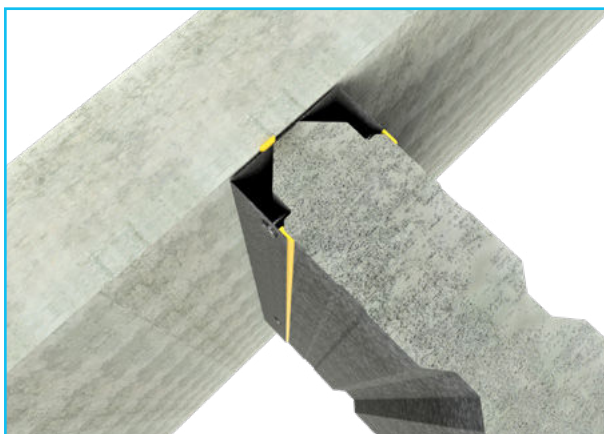
VERTICAL INSTALLATION

SEALANT PLACEMENT

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.

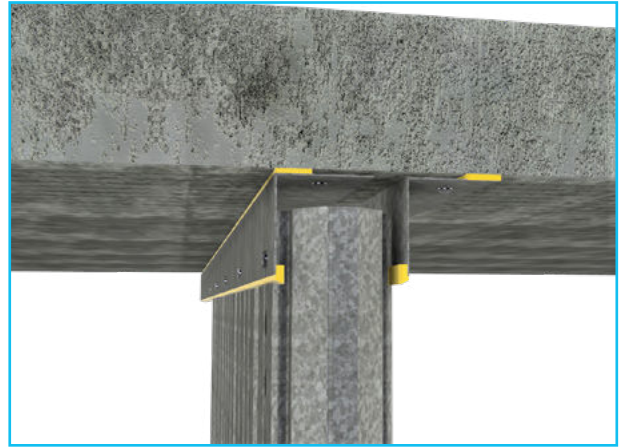


14 Fire rated sealant details for top and sides.



VERTICAL INSTALLATION

15 Using Angle as an alternative to C-track.



FINAL CHECK

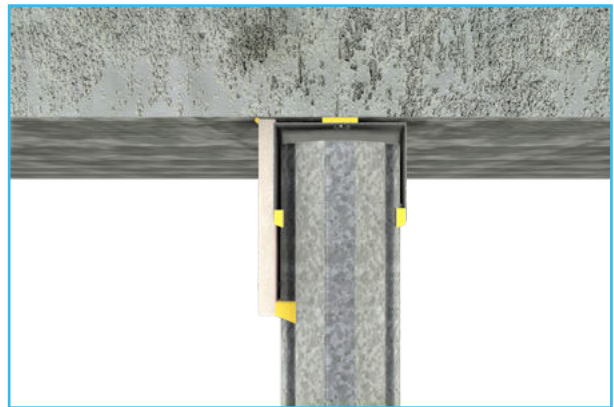
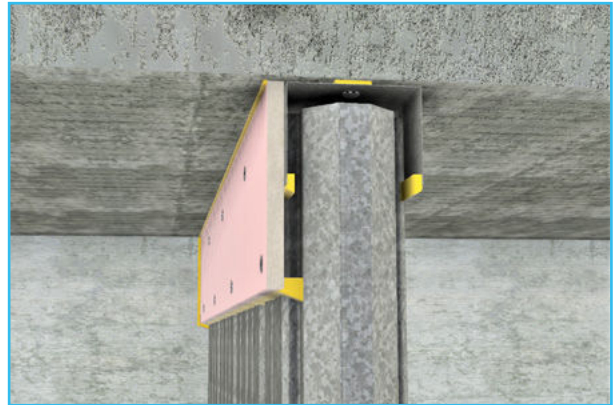
At the completion of the job and at the finish of each day's work, it is essential that the completed area be thoroughly cleaned of all swarf, rivet stems, nails, drillings and screws etc. normally associated with the installation of metal KOROK® panels. Remove any remaining strippable film, check all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

VERTICAL INSTALLATION

HEAD TRACK PROTECTION

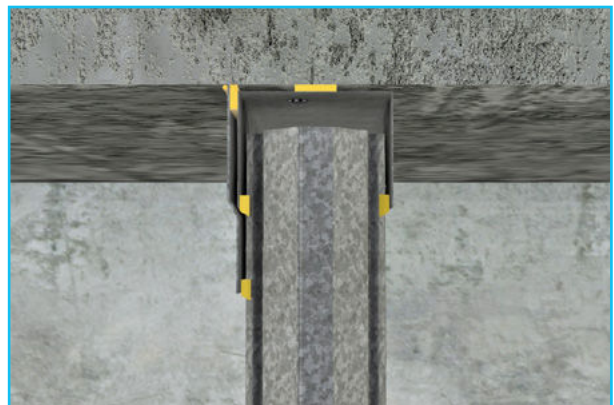
13 mm GIB Fyreline® PROTECTED HEAD TRACK

13 mm GIB Fyreline® or x 120 mm strip with sealant is fixed at 250 mm centres top and bottom, using 6g x 32 mm drywall screws.



METAL FLASHING PROTECTED HEAD TRACK

KOROK® fire flashing is fixed to the panels at 250 mm centres, using KOROK® PS Wafer 10-16x16 screws.

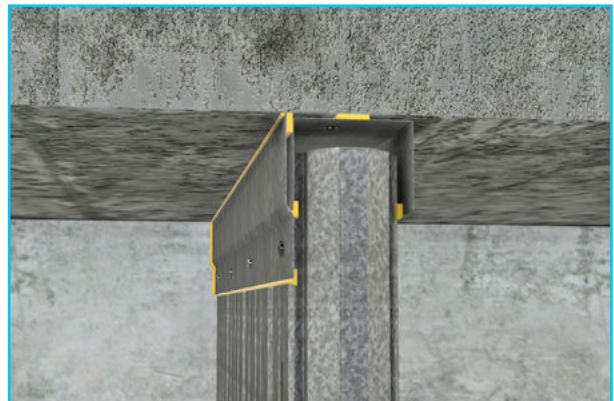


DEFLECTION C-TRACK DETAILS

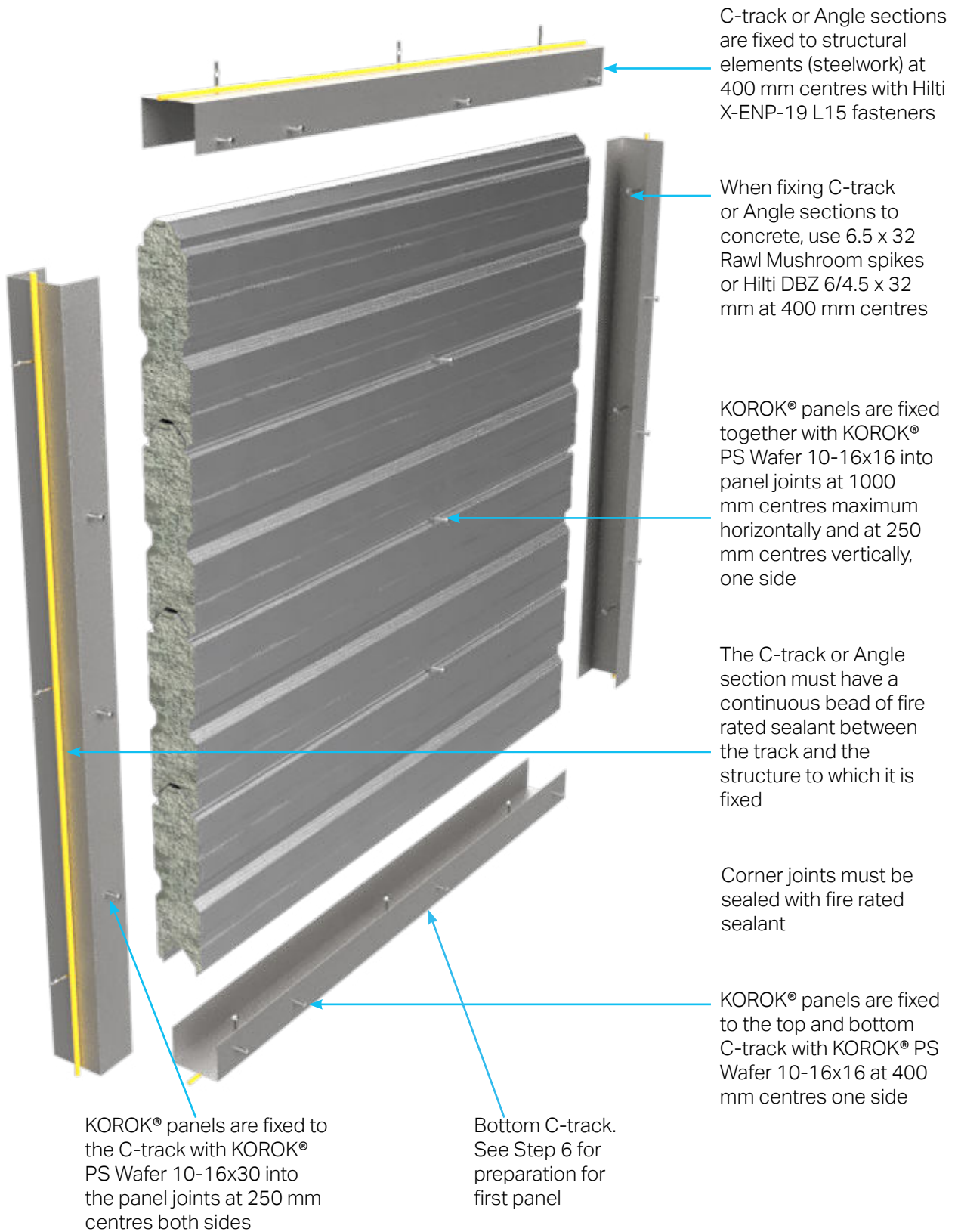
Dead and live loads can cause significant deflection in some structures.

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.



HORIZONTAL INSTALLATION



HORIZONTAL INSTALLATION

1 Horizontal Installation of the KOROK® panels requires the C-track to be fixed to the supporting structure, e.g. walls, columns, portals etc.

Plan your setout.

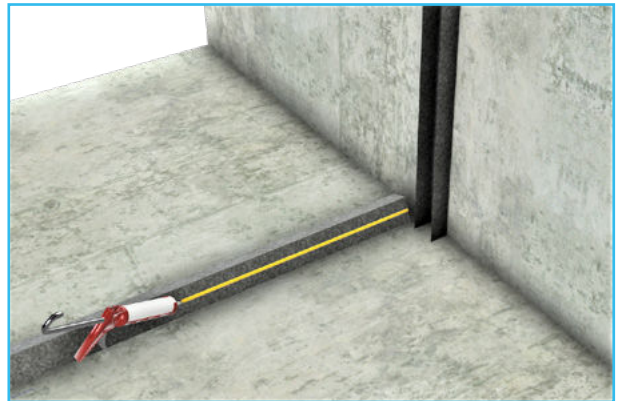
The top of the last vertical C-track must be cropped as per Step 10 prior to installation, to allow the top and last horizontal panel to be installed.



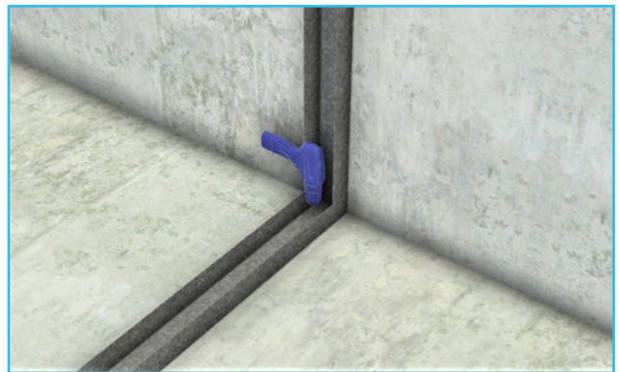
2 To ensure the C-track is sealed to the structure, a continuous bead of fire rated sealant is run around the perimeter before the C-track or Angle sections are laid and fixed.

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

The soffit track will generally be two Angles. See Last Panel details starting at Step 10.



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



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



HORIZONTAL INSTALLATION

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



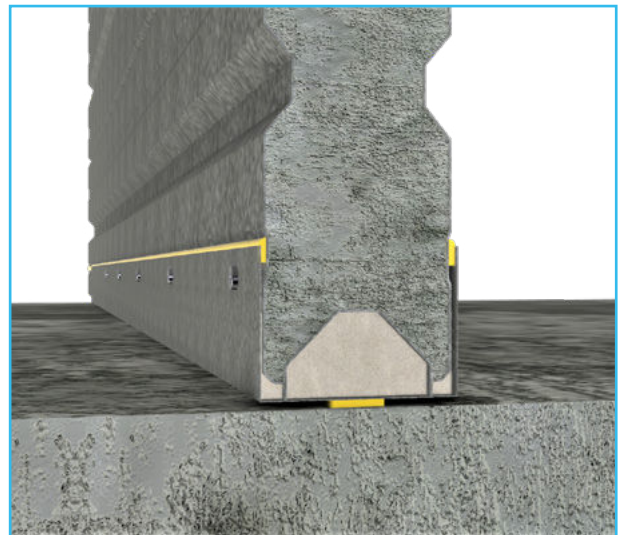
6 For horizontal installs where the wall width is greater than 5.0m OR where the load is transferred to the ground (e.g. 4-sided plant room), grout or a panel nose must be used in the bottom C-track.

6.1 Grout is poured into the bottom C-track just prior to the installation of the KOROK® panels. This forms a bearing surface for the female end of the panel.

The cementitious grout must be non-shrink high performance (SikaGrout®-212 or equivalent).

Fill the C-track to a depth of 25-30 mm. Any overflow when the panel is placed in the C-track must be wiped off immediately.

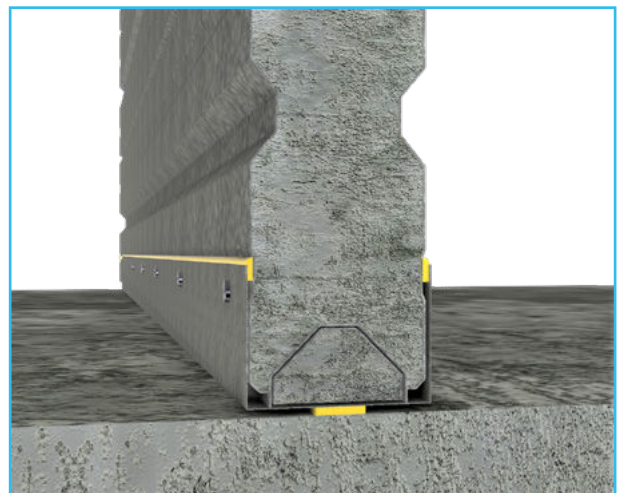
ENSURE THE FIRST PANEL IS LEVEL AFTER FITTING INTO THE TRACK AND GROUT AND FIX OFF.



OR

6.2 Alternatively the male nose of the top panel can be cut off and placed in the female end of the bottom panel to provide the same support.

ENSURE THE FIRST PANEL IS LEVEL AFTER FITTING INTO THE TRACK AND FIX OFF.



HORIZONTAL INSTALLATION

7 KOROK® panels must be cut 30 mm shorter than the structural opening measurement to allow for fitting.

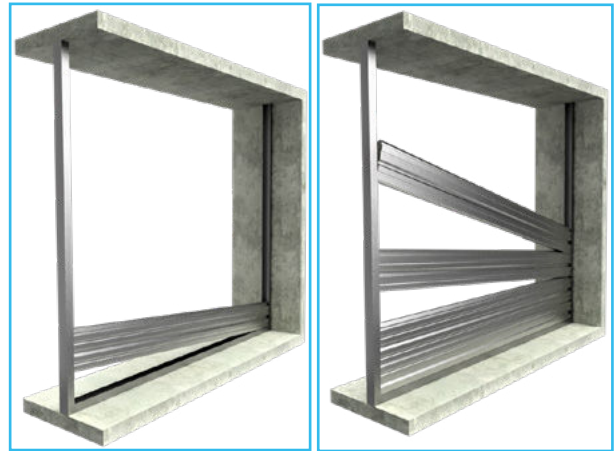
Where panels are supplied with protective film, pull back 300mm of the film at each end of the panels before placing the panels in the C-track.

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

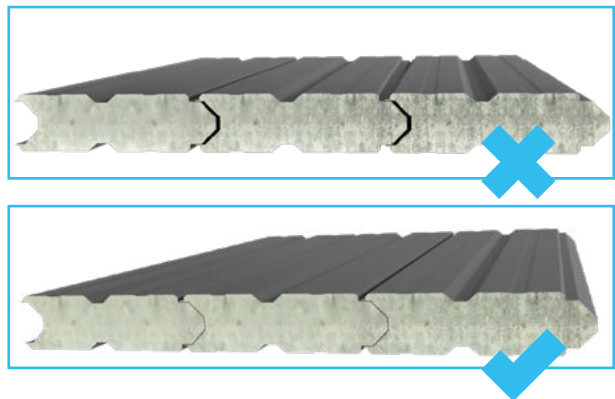
Before fitting the next panel, each horizontal KOROK® panel is to be fixed to the vertical C-track with KOROK® PS Wafer 10-16x30 screws at 250mm centres at the panel joints on both sides.

This is to avoid loading of the panel below.

Panels are placed in a tilt and snap action.



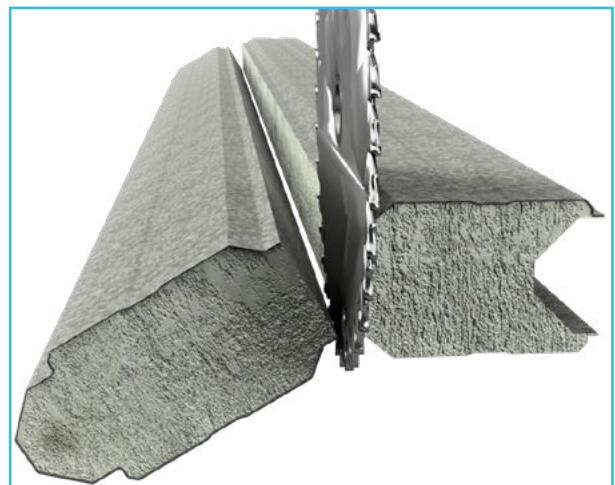
8 Ensure the panels are clicked together correctly to maintain the fire and acoustic performance. Remove strippable film at the end of each day's work.



CUTTING PANELS

9 KOROK® panels can be cut to length and width using a radial saw with dust extraction. Diamond cutting discs are recommended for radial saws.

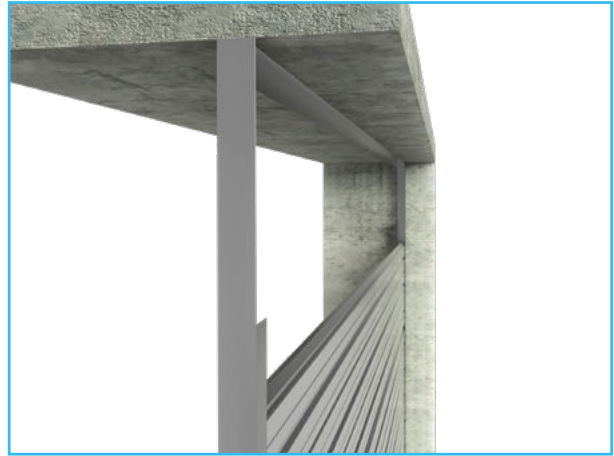
Where KOROK® panels are trimmed to width, the cut edge of the panel is fitted into the C-track and so is always the last panel abutting the floor or soffit. The panel is then sealed and fixed in position as usual.



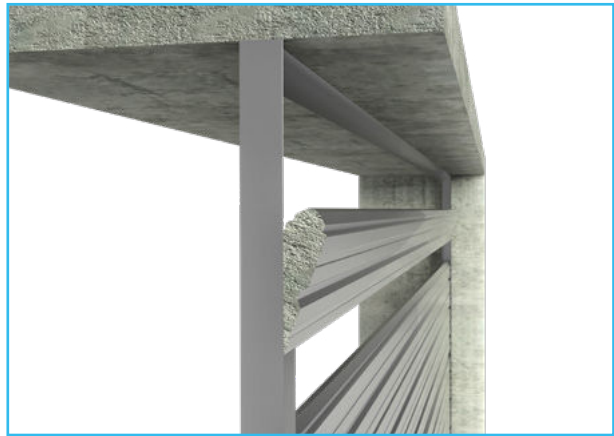
HORIZONTAL INSTALLATION

LAST PANEL

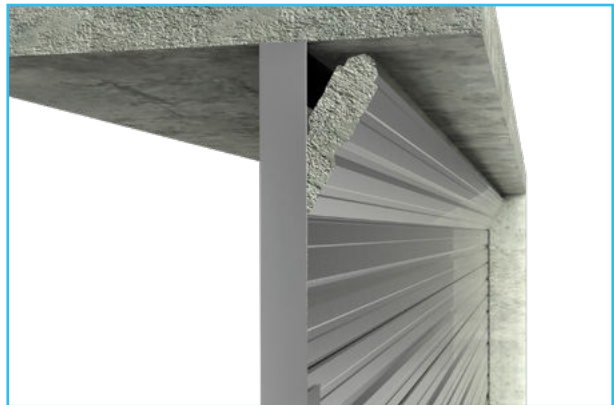
10 To get the last horizontal panel in, cut out a 300 mm angle section from each of the side C-tracks. Keep these two 300 mm angle sections for use in Step 12.



11 Keep placing the panels and fixing them to the panel below.

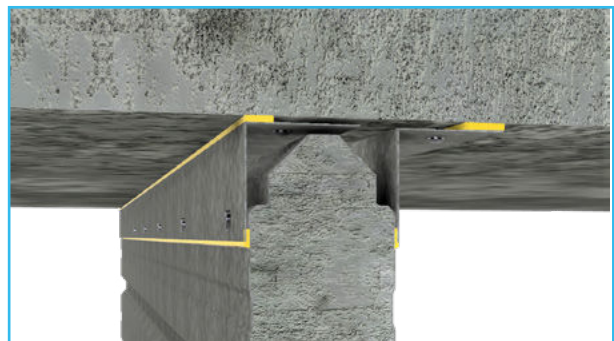


12 Once the last panel is in position, fix the pieces of C-track that were removed in Step 10, back in place. Fire-rated sealant is then applied.



13 Angle is then fixed to the soffit at 400 mm centres, then fixed to the panel at 400 mm centres.

Fire rated sealant is applied.



HORIZONTAL INSTALLATION

SCREW PLACEMENT

14 Panels are screwed together into every panel joint at the horizontal centres shown in Table 3 below.

TABLE 3 - SCREW PLACEMENT HORIZONTAL INSTALLATION

PANEL THICKNESS	FRR	WALL HEIGHT	PANEL SPAN	MAXIMUM CENTRES	SIDES
51 mm	-/60/60	0 to unlimited	0 to 4.0 m	1000 mm	One
78 mm	-/60/60	0 to unlimited	0 to 5.5 m	1000 mm	One
78 mm	-/120/120	0 to unlimited	0 to 5.0 m	1000 mm	One

C-TRACK

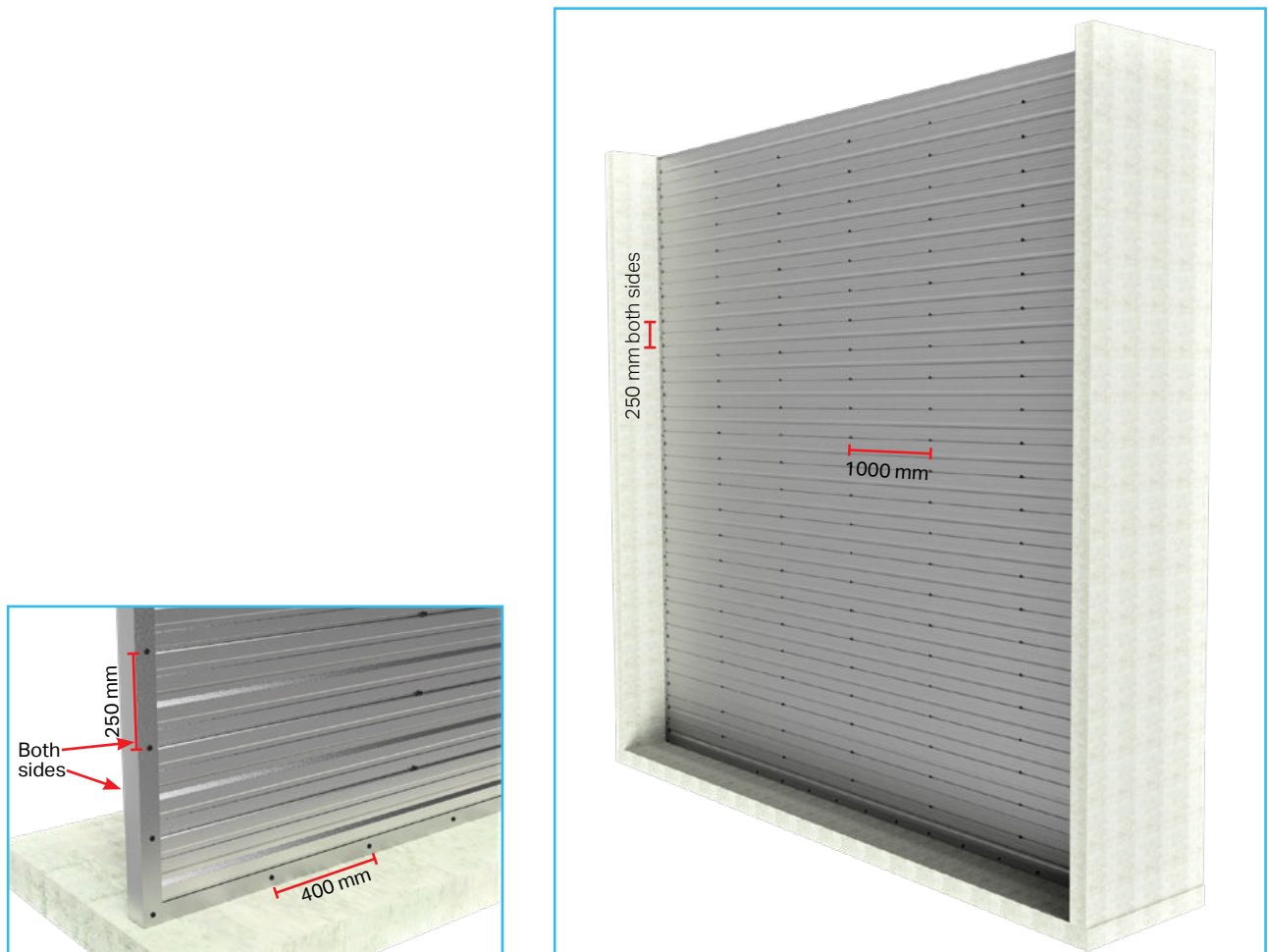
C-track is fixed to the KOROK® panels with KOROK® PS Wafer 10-16x30 screws at 250 mm centres into the panel joints on both sides of the vertical C-track, and with KOROK® PS Wafer 10-16x16 screws at 400 mm centres one side on the horizontal C-track.

At corners where two lengths of KOROK® C-track intersect, the two pieces must be fixed to each other with at least 1 KOROK® PS Wafer 10-16x16 screw.

DEFLECTION C-TRACK DETAILS

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

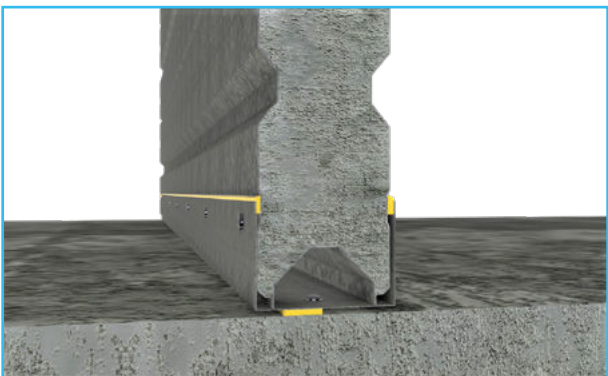
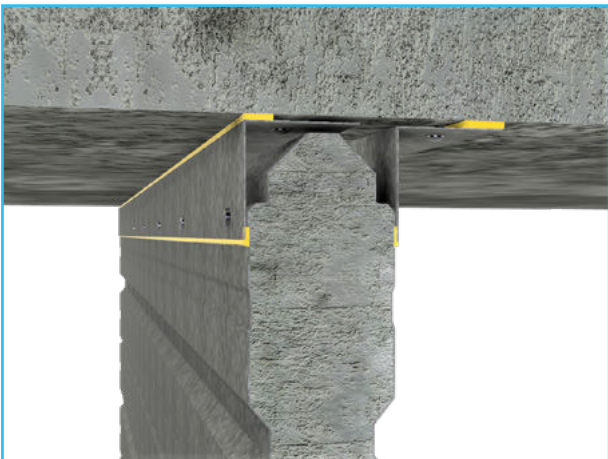
KOROK® can provide deflection C-track details where deflection loadings are considered.



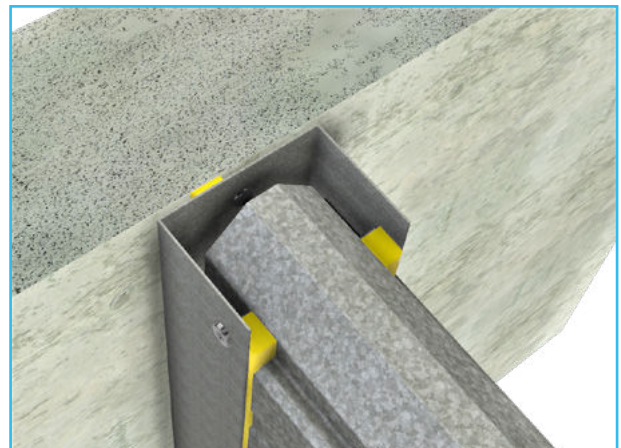
HORIZONTAL INSTALLATION

SEALANT PLACEMENT

15 Remove any plastic film and then apply a continuous bead of fire rated sealant between the KOROK® C-track and the KOROK® panels.



16 Fire rated sealant details for top, bottom and sides.



FINAL CHECK

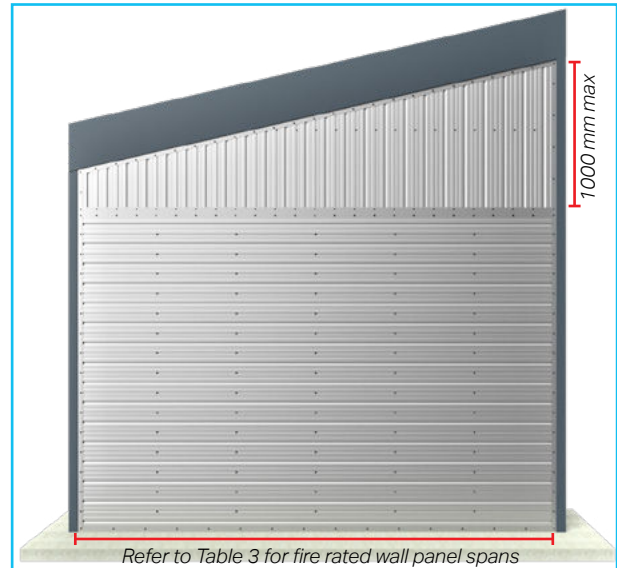
At the completion of the job and at the finish of each day's work, it is essential that the completed area be thoroughly cleaned of all swarf, rivet stems, nails, drillings and screws etc. normally associated with the installation of metal KOROK® panels. Remove any remaining strippable film, check all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

CHANGING PANEL ORIENTATION

MIX OF HORIZONTAL AND VERTICAL PANELS

In this application, vertical panels are supported by the structural support beam above and by the horizontal panels. When the maximum vertical panel height exceeds 1000 mm, contact your engineer for specific details or contact us at KOROK® on 0800 773 777 or info@korok.com.

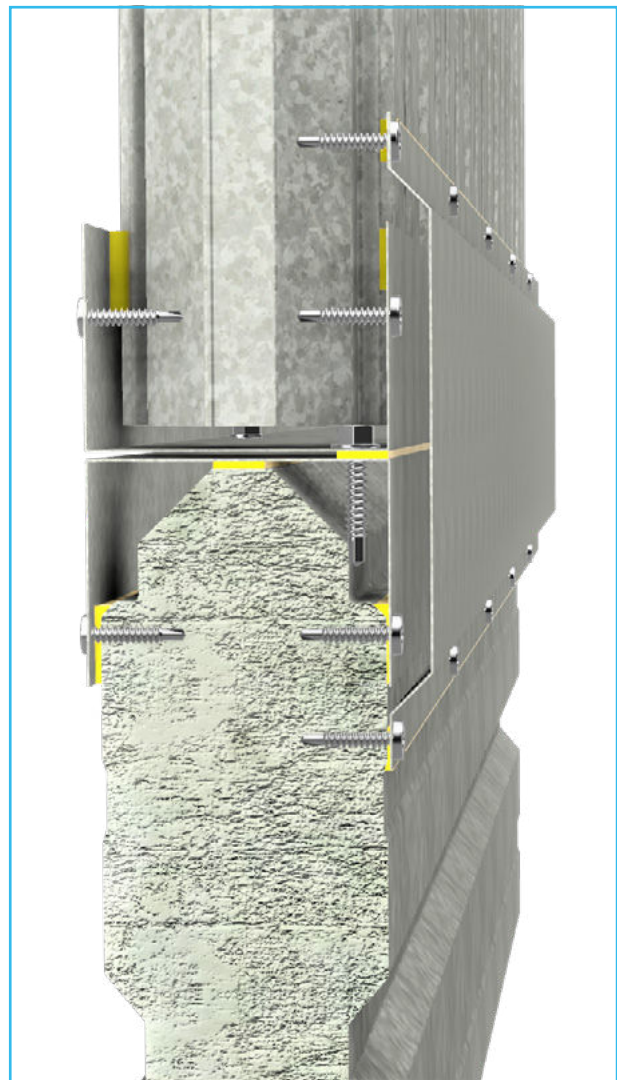
When used as a fire rated system refer to Table 3 for maximum horizontal spans.



CHANGING PANEL DIRECTION

Where transition occurs within the wall and a back to back C-track occurs. The C-track is fixed together at staggered 250 mm centres with a bead of sealant between channels. A flashing or 13 mm fire rated plasterboard must be fixed at 250 mm centres top and bottom over the joint on one side of the wall.

For example, KWR2 FRR -/120/120 system.



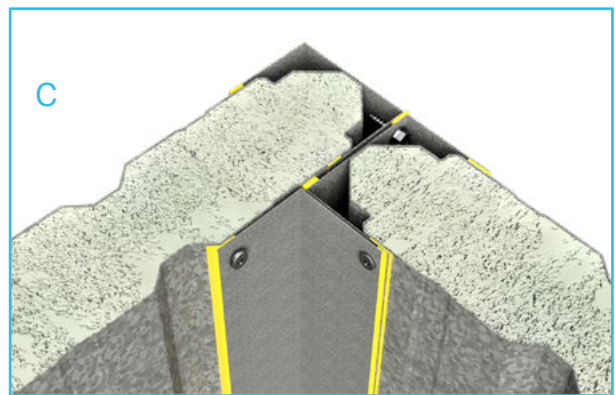
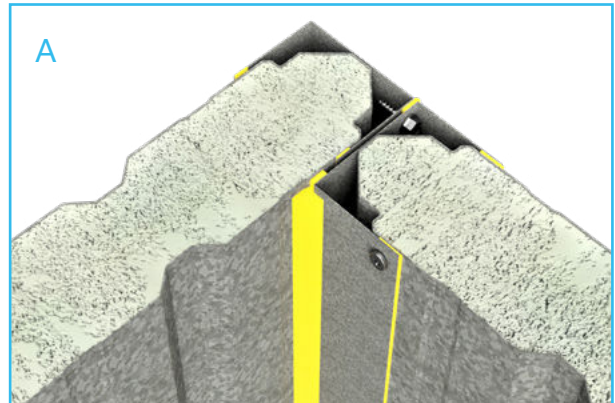
GENERAL CORNERS AND JUNCTIONS

VERTICAL WALL 90° CORNER DETAIL

Where internal or external corners are required, panels must be finished by fixing C-track to the vertical face. C-track must also be fixed to the side of the finished wall channel. Fire rated sealant must be used between the C-track. Fixings C-track to C-track must be at 250 mm staggered centres.

In addition to a standard connection, apply:

- A. an extra bead of fire rated sealant down each join edge (top picture)
OR
- B. a 1.15 B.M.T. flashing on the outside corner (no picture)
OR
- C. KOROK® Angle on the inside corner, fixed at 400 mm centres with fire rated sealant.

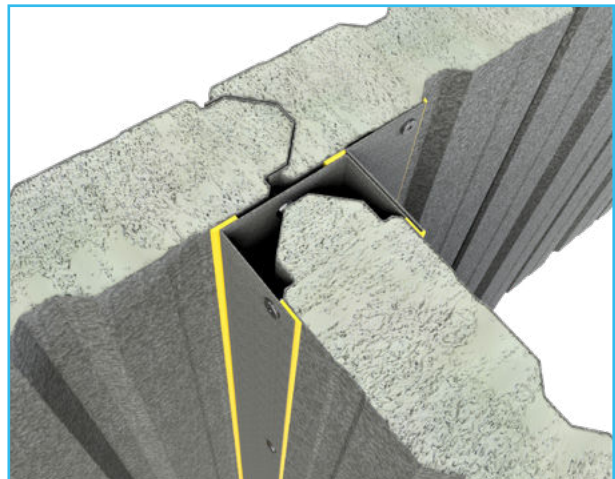
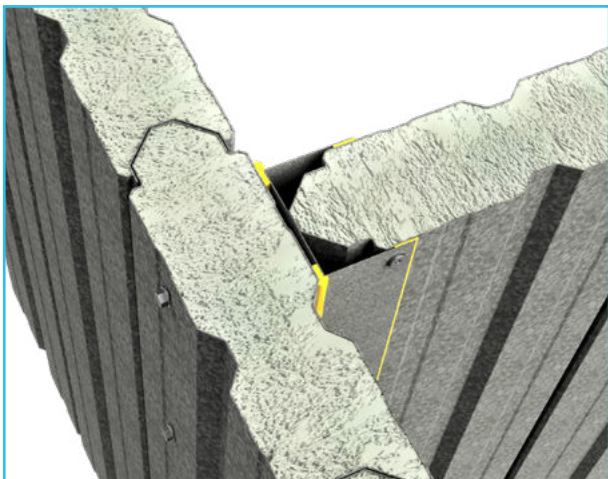


T-JUNCTIONS

C-track must be fixed to the panel joint at 250 mm centres.

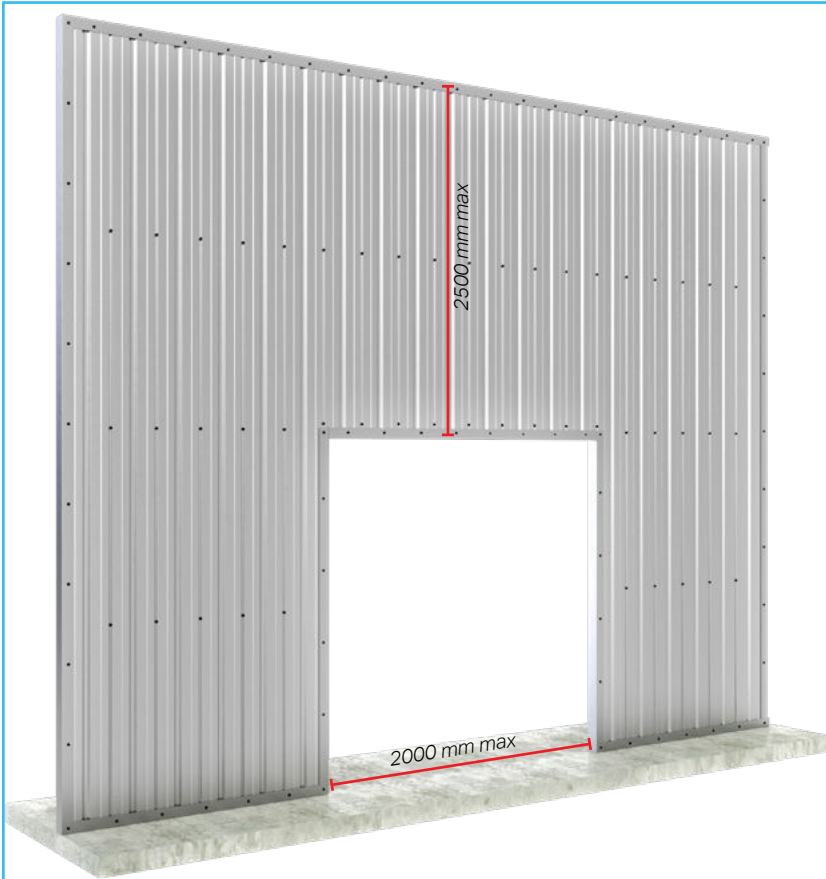
If the T-junction is off the panel joint, the C-track must be attached by screwing through the opposite side of the panel with a Hex Head SDS 14g x 115mm screw at 250 mm centres.

- An additional bead of fire rated sealant is applied to the inside corners (left picture)
- OR
- KOROK® Angle on the inside corner, fixed at 400 mm centres (right picture).



UNSUPPORTED DOOR OPENINGS (MAX. WIDTH 2M)

Greater spans and wall heights and/or where additional load capacity is required are subject to specific design. Please contact us at KOROK® on 0800 773 777 or info@korok.com.



DOORS IN KOROK® SYSTEMS

Additional fixings are used around doors. An additional row of fixings is required 50 mm above the top of the door C-track, at 250 mm centres into the panel joints.

For earlier fixing patterns please see previous technical and systems manuals.



The vertical C-track is cut away at the top. The horizontal C-track is cut so that a flap can be folded down and screwed to the vertical C-track.

Alternatively, the C-track can be cut away at the corners so that the two pieces can be notched together. Then add a piece of KOROK® Angle to the inside of the corner.

TABLE 4 - KOROK® FASTENERS SPACINGS

PUBLICATION	KOROK® WALL SYSTEM OR SIMILAR	PANEL THICKNESS (MM)	PANEL ORIENTATION	MAXIMUM WALL HEIGHT (M)	MAXIMUM WALL SPAN/WIDTH (M)	PANEL TO PANEL			PANEL TO PERPENDICULAR C-TRACK				NOTES:
						MAXIMUM CENTRES (MM)	SIDES	KOROK® PS WAFER	MAXIMUM CENTRES (MM)	PANEL FACE OR JOINT	SIDES OF C-TRACK	KOROK® PS WAFER	
Warehouse, Retail, Factory	KWR systems	78	Vertical	9m		1000	one	10-16	250	Face	One	10-16	See note 2.
Warehouse, Retail, Factory	KWR systems	78	Horizontal	unlimited	5.0m or less between structural supports	1000	one	10-16	250	Joint	Two	10-30	
Warehouse, Retail, Factory	KWR systems	78	Horizontal	14m	Over 5.0m between structural supports	1000	one	10-16	250	Joint	Two	10-30	

NOTES

- For C-track running parallel to the panels, KOROK® PS Wafer 10-16x16 screw fixings at 400 mm centres are used one side.
- 78 mm 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.
- 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.

KOROK® COMPONENTS SUMMARY

PRODUCT IMAGE	ITEM DESCRIPTION
	PN1140 KOROK® C-track 60 x 80 x 60 mm 1.15B.M.T.
	PN1130 (Colour) KOROK® panel 78 mm wide 400 kg/m³ density
	PN1318 (Galv) KOROK® GEN 2 panel 78 mm wide 400 kg/m³ density
	PN1185 Hilti DBZ 6/4.5 x 32 mm
	PN1190 6.5 x 32 Rawl Mushroom spikes
	PN1170 KOROK® PS Wafer 10-16x16 Class 3
	PN1171 KOROK® PS Wafer 10-16x30 Class 3
	PN1157 KOROK MS Fire Seal
	PN1161 KOROK Acrylic Fire Seal
	PN1165 Sikaflex-400 Fire Rated Sealant
	PN1160 Hilti CP606

PRODUCT IMAGE	ITEM DESCRIPTION
	PN1198 Hex Head Type 17 14g x 35mm
	PN1174 Hex Head SDS 14g x 22mm
	PN1178 Hex Head SDS 14g x 115mm
	PN1187 Hilti X-ENP-19 L15 fasteners (strip of 10)
	PN1186 Hilti DX76 fasteners (as below)
	PN1186 Hilti DX76 yellow charges
	PN1235 KOROK® KIT flashing
	PN1226, PN1227, PN1228 KOROK® fire flashing
	PN1150, PN1151, PN1152 KOROK® Angle



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