

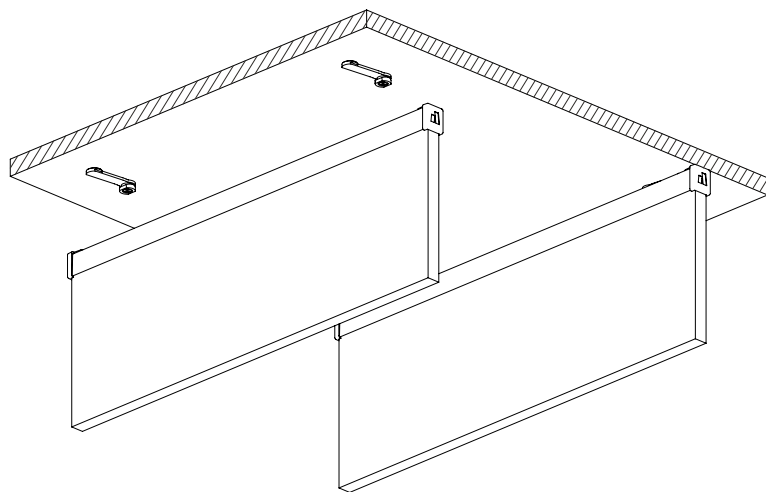
These installation instructions are designed to assist suitable experienced tradespeople to install Frontier to a high standard in common ceiling installations. For installation support, contact your Autex Acoustics® account manager before your start.

Manufacturer's documents	Autex Acoustics recommends that all persons engaged in the installation have full knowledge of the product and installation procedure as set out in the most recent edition of the manufacturer's instructions and related documents.	Manufacturer's documents relating to work in this section are: - Frontier™ Fins Data Sheet - Frontier™ Raft Data Sheet - Autex Acoustics Care and Maintenance Guide	Copies of the above documents are available on request or from the Autex Acoustics website autexglobal.com
Inspection	Before installing Frontier check that the materials have been supplied as ordered and are free from damage or faults. Check product labels to ensure product has been supplied correctly.	It is important to check that all boxes are supplied from one batch. Due to batch to batch variations, we do not recommend installing different batch lots as this could result in colour variation.	Any variations must be reported to Autex Acoustics prior to commencing the installation. No claims will be accepted where the job continues with obvious faults, and no consultation with Autex Acoustics has taken place.
Transportation, storage, and handling	Frontier must be transported, stored, and handled with care. Avoid delamination or distortion and protect edges from being crushed. Do not accept damaged fins. If product arrives damaged, note the condition on the freight documents and contact	Autex Acoustics immediately. Goods signed as received in 'good condition' will not be the responsibility of Autex Acoustics. Always transport and store Frontier on a flat, clean, dry surface. Do not lay the fins on their sides or crush as this will cause creases in the finish.	The use of Personal Protection Equipment is not required to handle Frontier, though care must be taken to keep the job clean, and the use of cotton gloves is recommended.
Site preparation	The site conditions at time of installation should be clear of dust, debris, and foreign particles. Installation should only commence once the building is fully clad, water-tight, dry, and all wet processes have been completed.		
Service	For more information contact your Autex Acoustics account manager or visit our website autexglobal.com		

THE FIRST CONSIDERATION TO MAKE WHEN SPECIFYING A FRONTIER SYSTEM IS THE INSTALLATION METHOD.

1. DIRECT FIXED TO CEILING

SEE PAGE 2

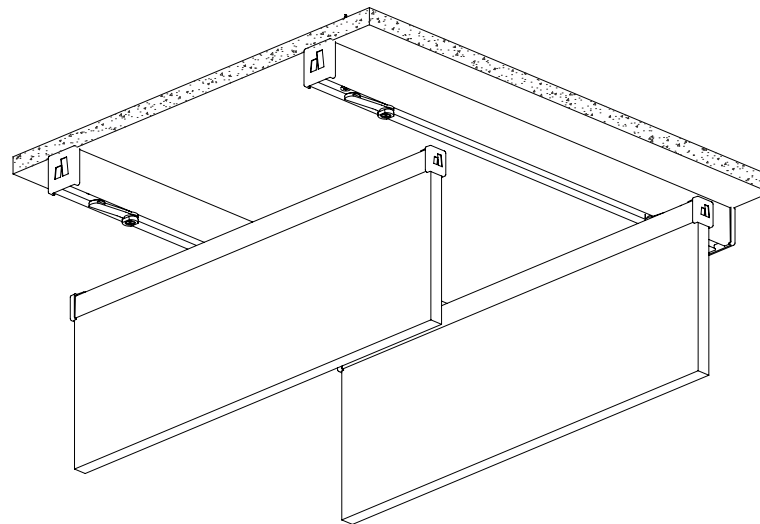


PACK INCLUDES
Autex Mounting Clips
Autex Frontier Extrusions
Autex Frontier Fins/Rafts

NOT SUPPLIED
Fasteners (to substrate)

2. DIRECT FIXED TO RAILS

SEE PAGE 3



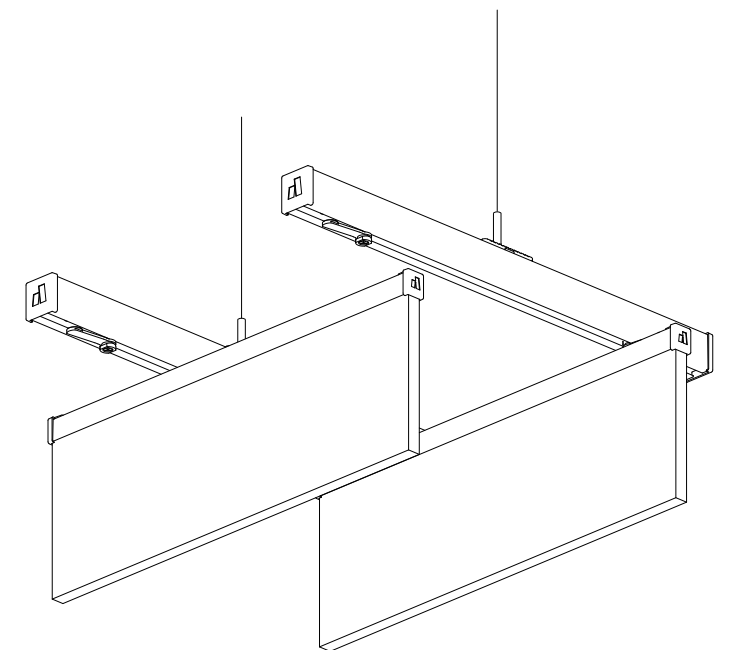
PACK INCLUDES
Autex Mounting Clips
Autex Frontier Extrusions
Autex Frontier Fins/Rafts

ADDITIONAL COMPONENTS REQUIRED
Autex Frontier Cross Rails x2

NOT SUPPLIED
Fasteners (to substrate)

3. SUSPENDED RAILS

SEE PAGE 4



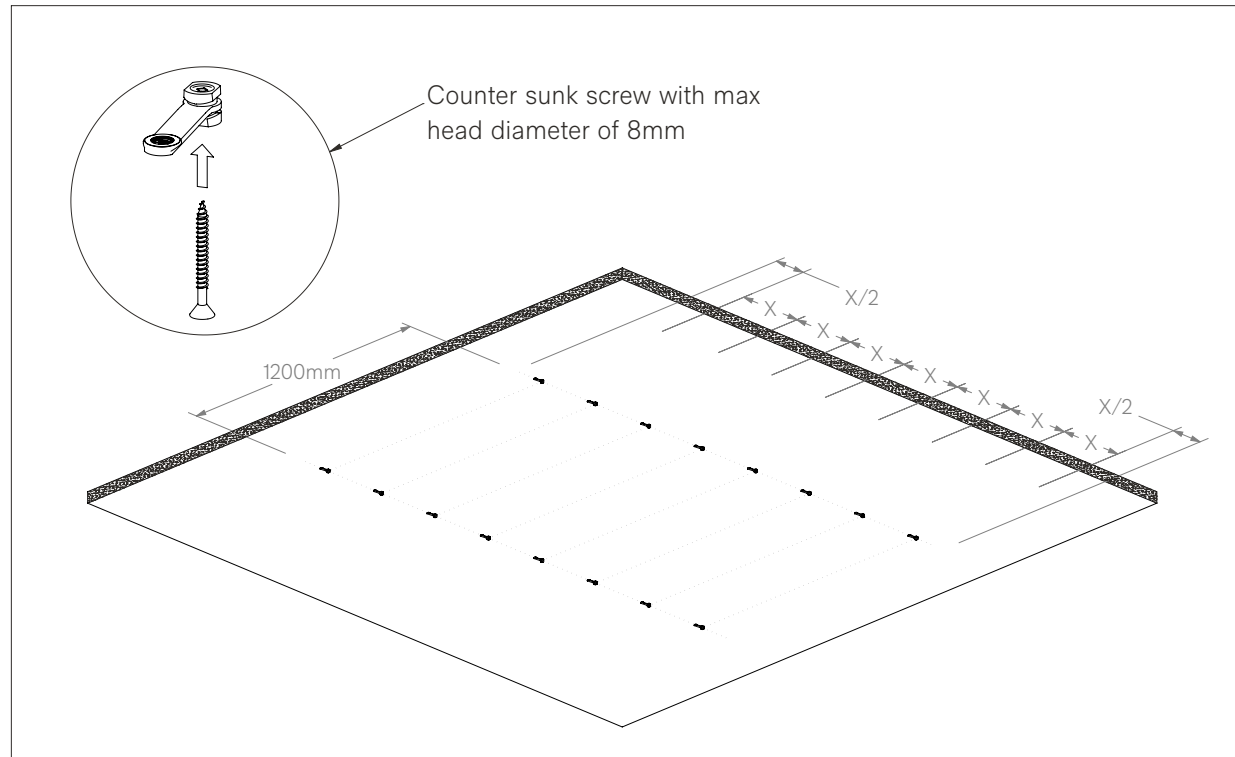
PACK INCLUDES
Autex Mounting Clips
Autex Frontier Extrusions
Autex Frontier Fins/Rafts

ADDITIONAL COMPONENTS REQUIRED
Autex Frontier Cross Rails x2
Autex W-Clips

NOT SUPPLIED
Fasteners (to substrate)
M6 Threaded Rod
M6 Back Plates to ceiling

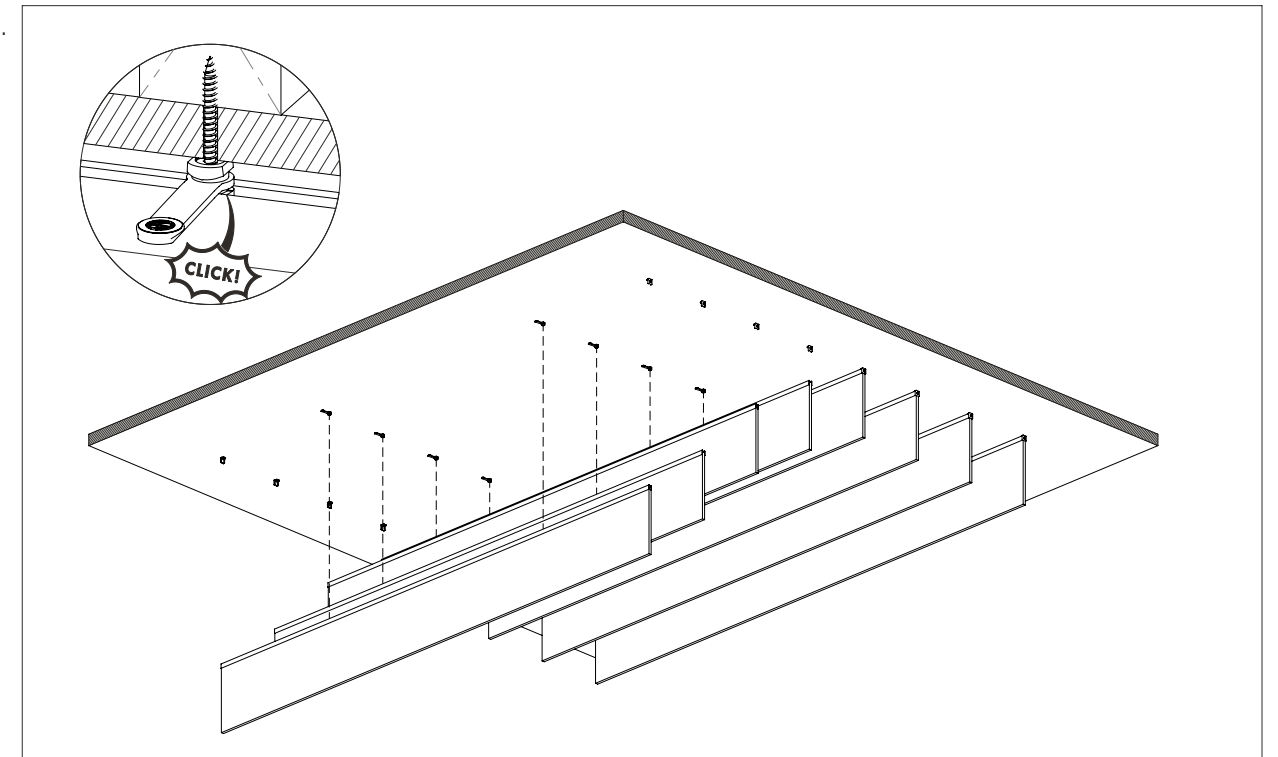
For suspended installations it is strongly recommended to consult a building engineer for seismic considerations. See **page 11** for suggested details.
For all installations in sprinklered buildings, consult a fire engineer to ensure the intended position of the Frontier Fins/Rafts meet sprinkler and alarm standards.
Further detail on the fire standards can be found in the supplemental document "Fire Considerations for Autex Frontier Acoustic Fins".

1.



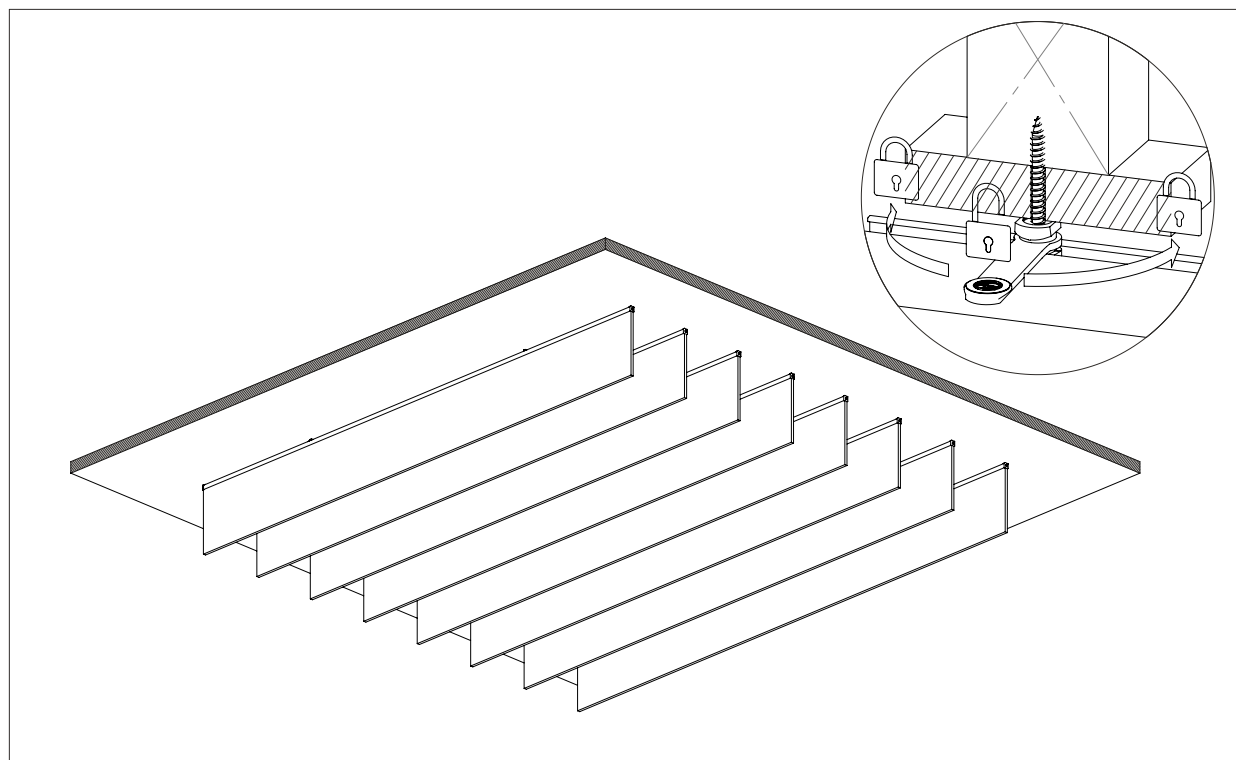
Mark out your ceiling at the recommended spacing for your chosen product (refer to table on page 29 for details). Screw the Autex Mounting Clips into the ceiling using screws suitable for the substrate (not supplied).

2.

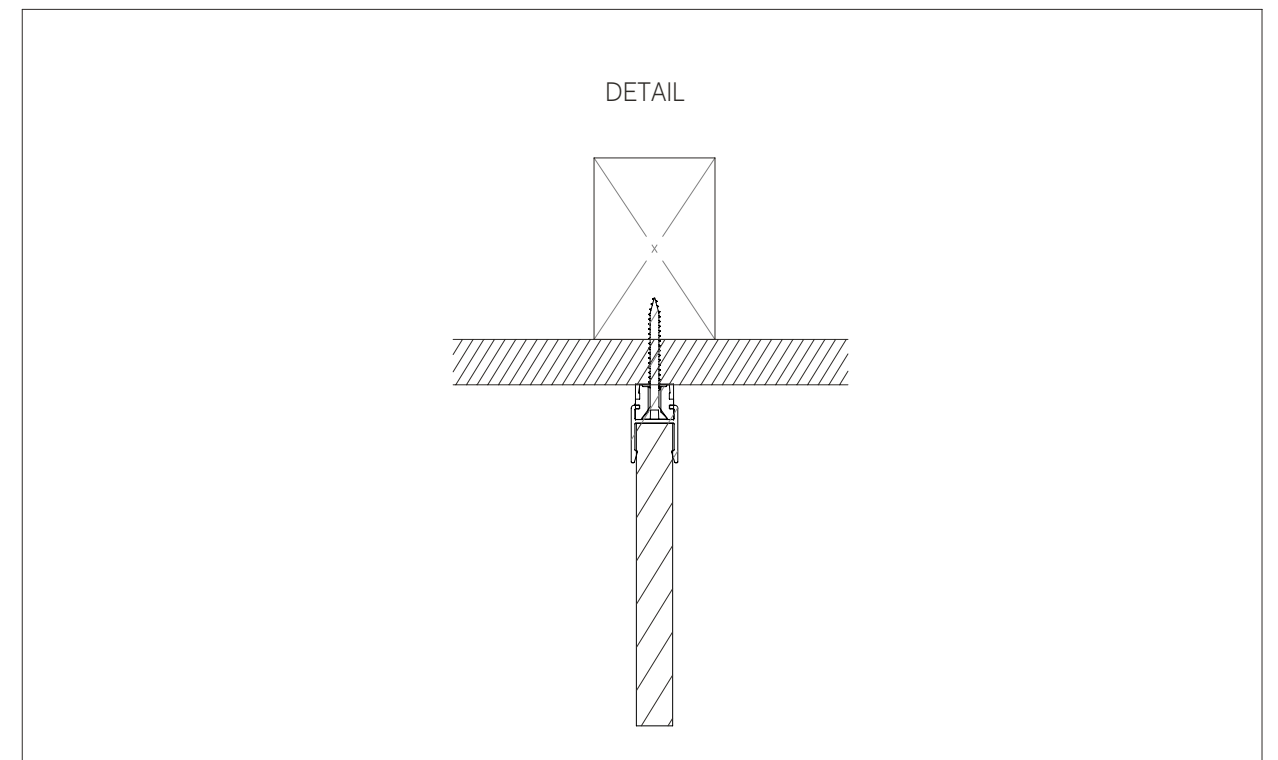


Lift the assembled Fins/Rafts into place and click them onto the Autex Mounting Clips. Turn the clips 45° to temporarily hold the Fin/Raft in place while allowing adjustment along the length.

3.

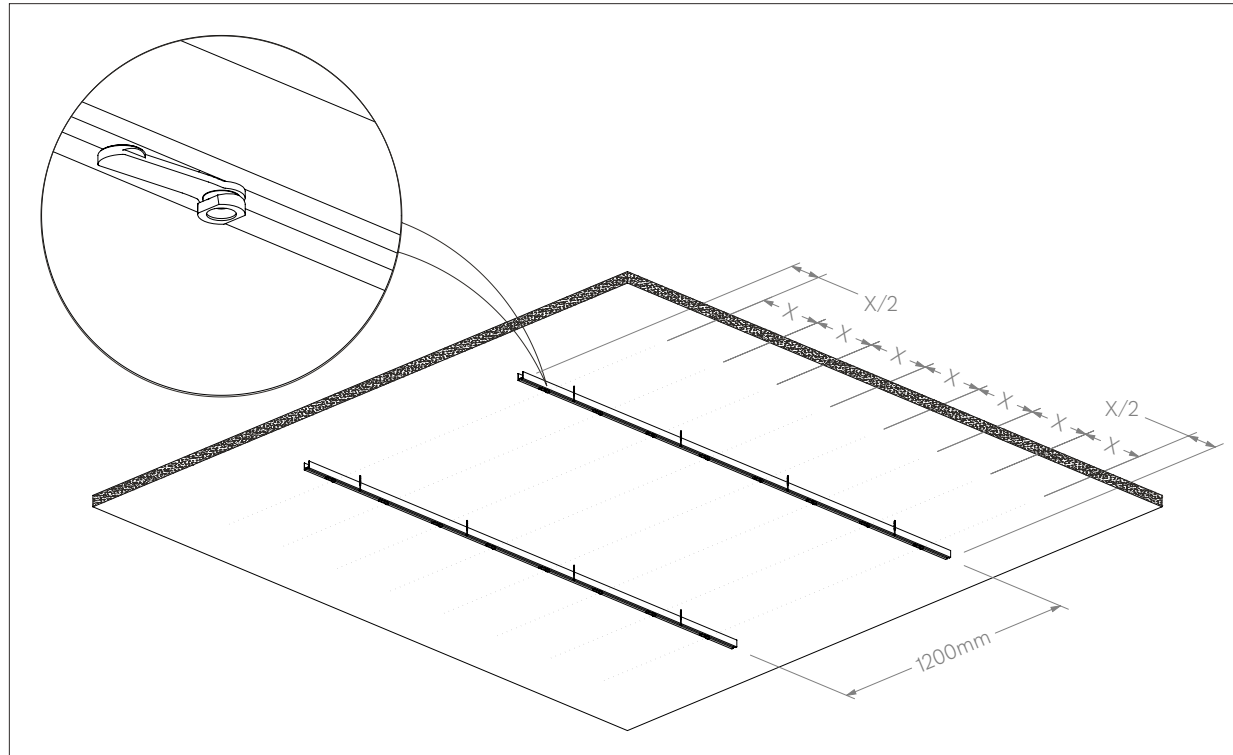


When you are satisfied with the alignment of the Fins/Rafts turn the clips 90° so they clip into the channel and lock in place.



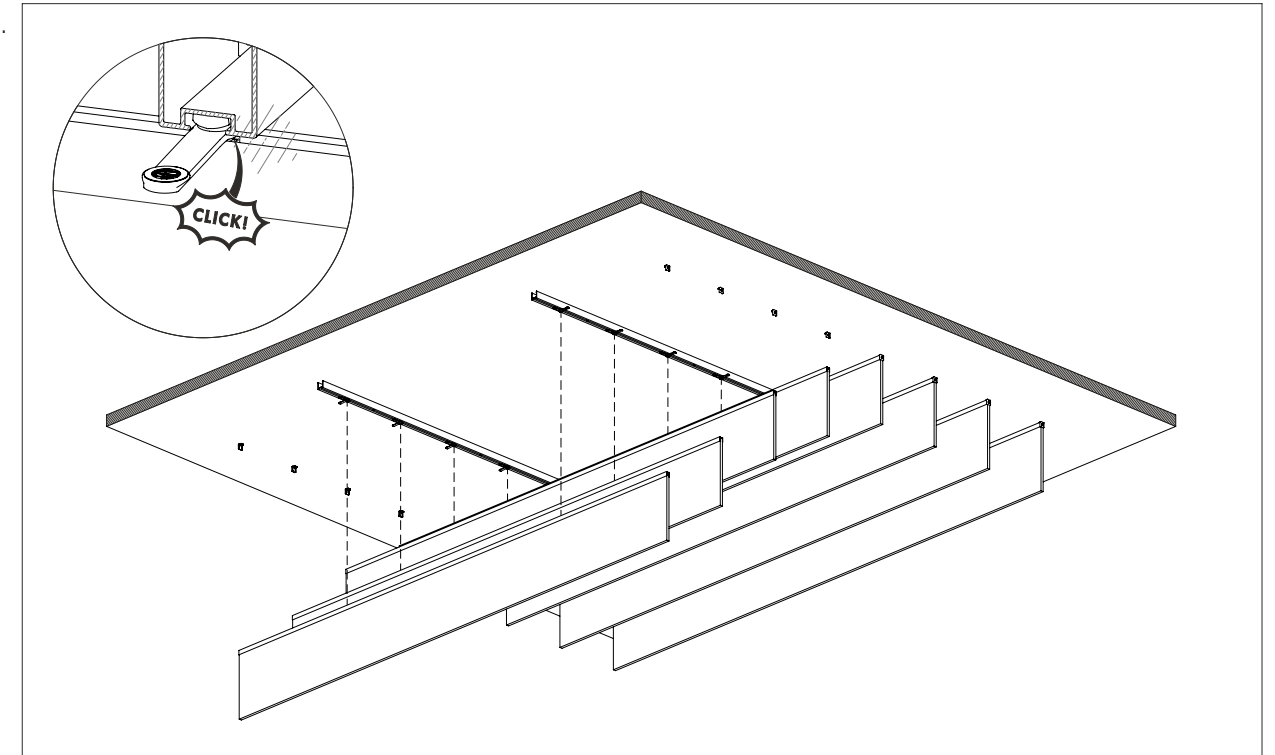
Ensure suitable fastener for the clip and substrate is used (not supplied).

1.



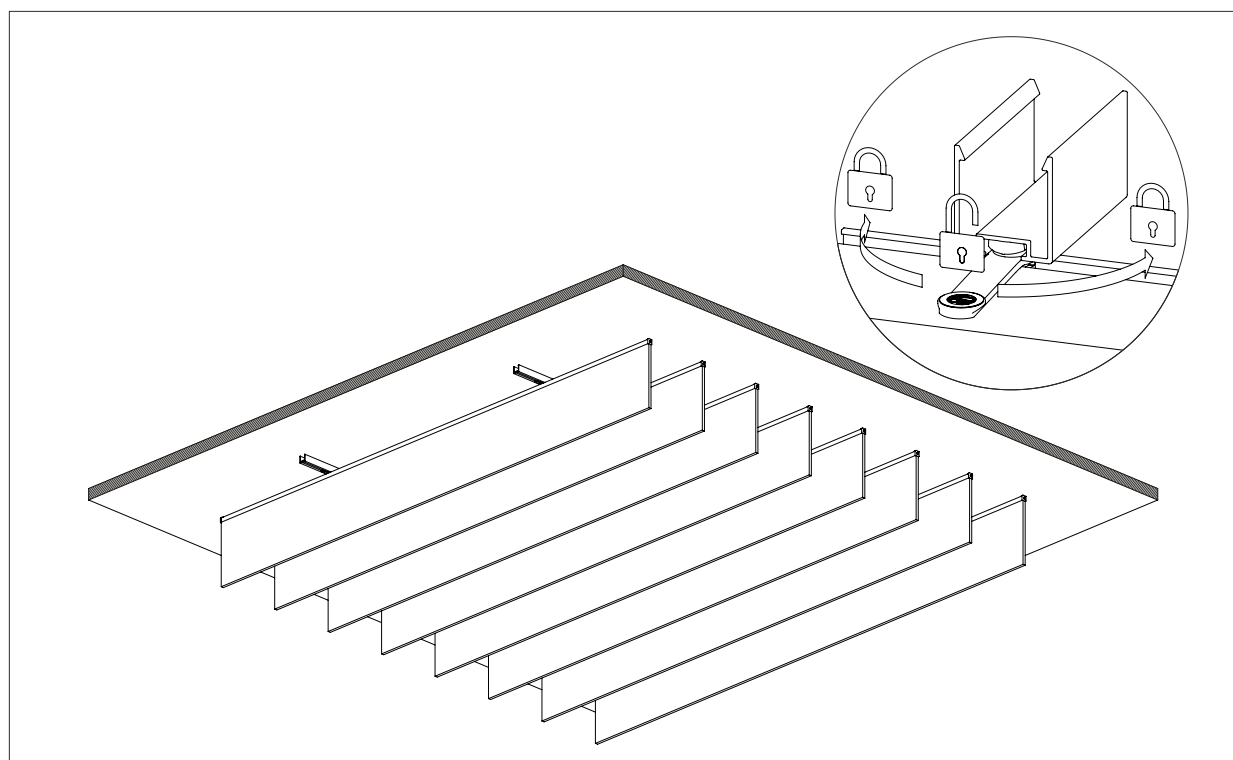
Mark out the ceiling and screw in 2x cross rails at 1200mm centres using screws suitable for the substrate (not supplied) at max centres of 600mm. Insert the Autex Mounting Clips at the desired fin spacing. Fin spacing can be marked on the cross rails prior to installation. (Refer to table on page 29 for details).

2.

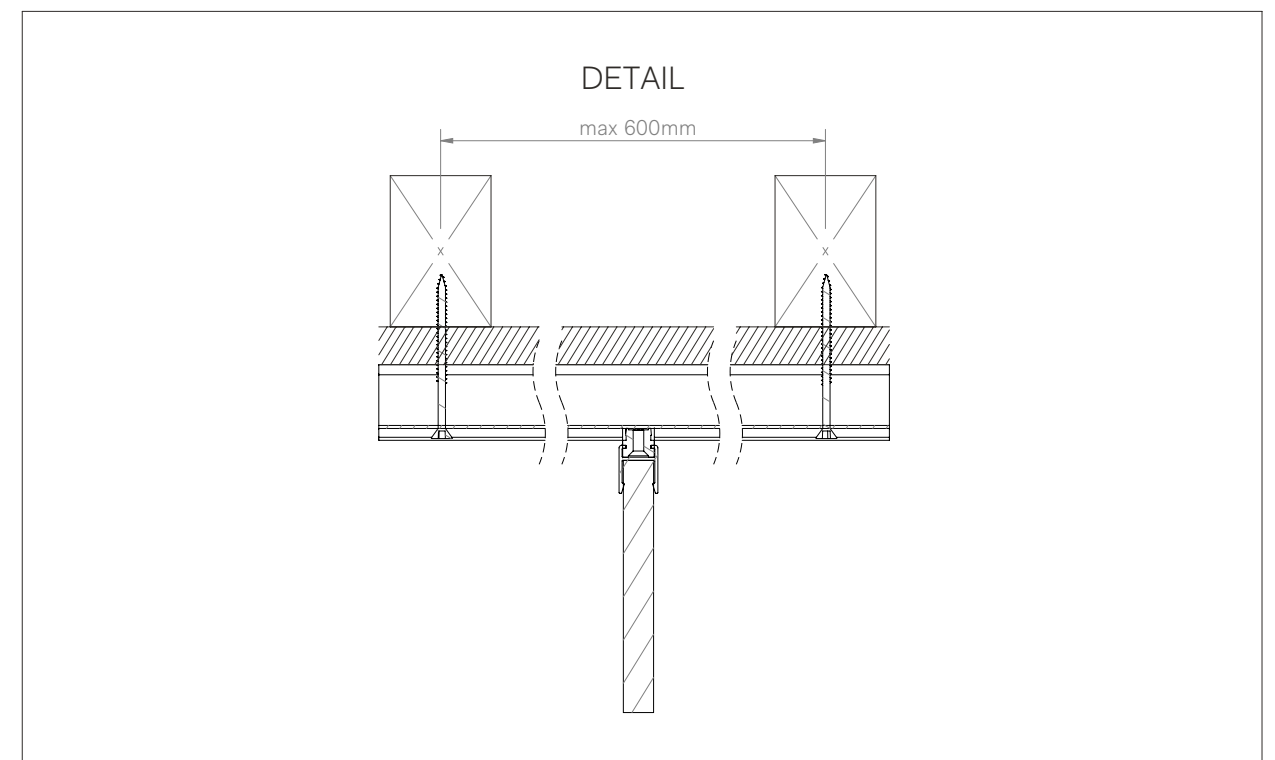


Lift the assembled Fins/Rafts into place and click them onto the Autex Mounting Clips. Turn the clips 45° to temporarily hold the Fin/Raft in place while allowing adjustment along the length.

3.

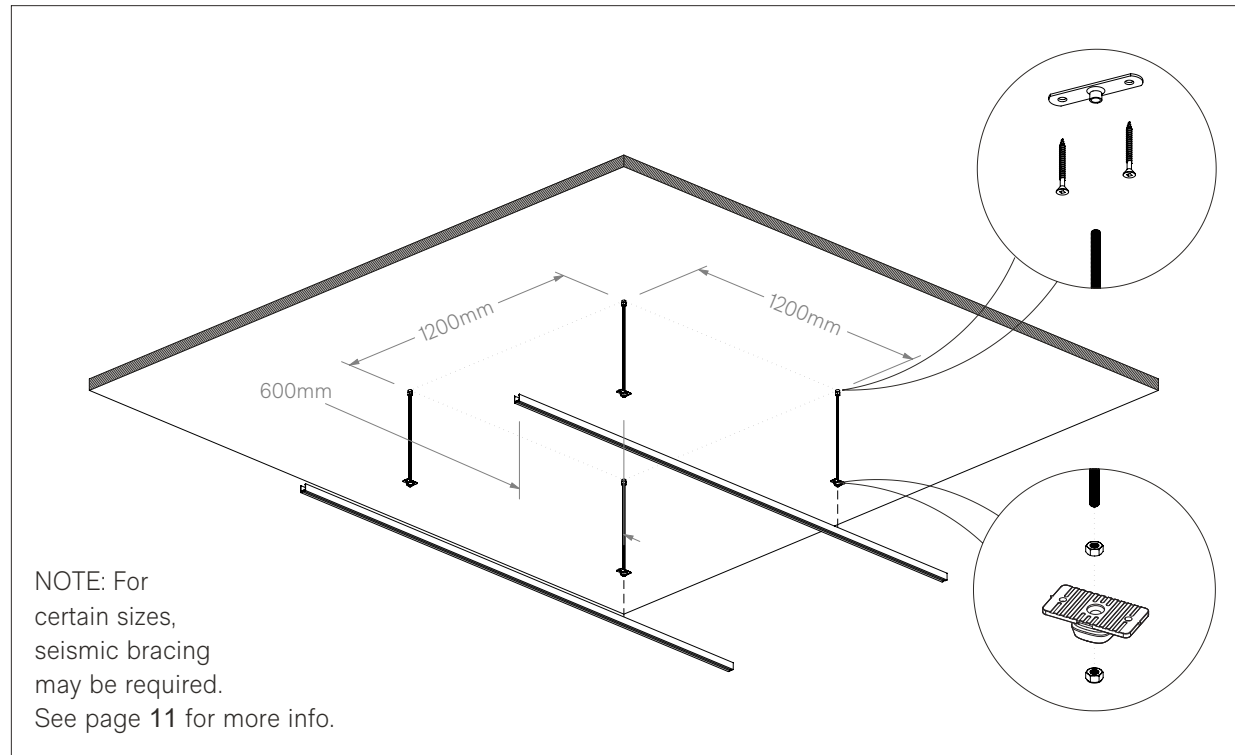


When you are satisfied with the alignment of the Fins/Rafts turn the clips 90° so they clip into the channel and lock in place.



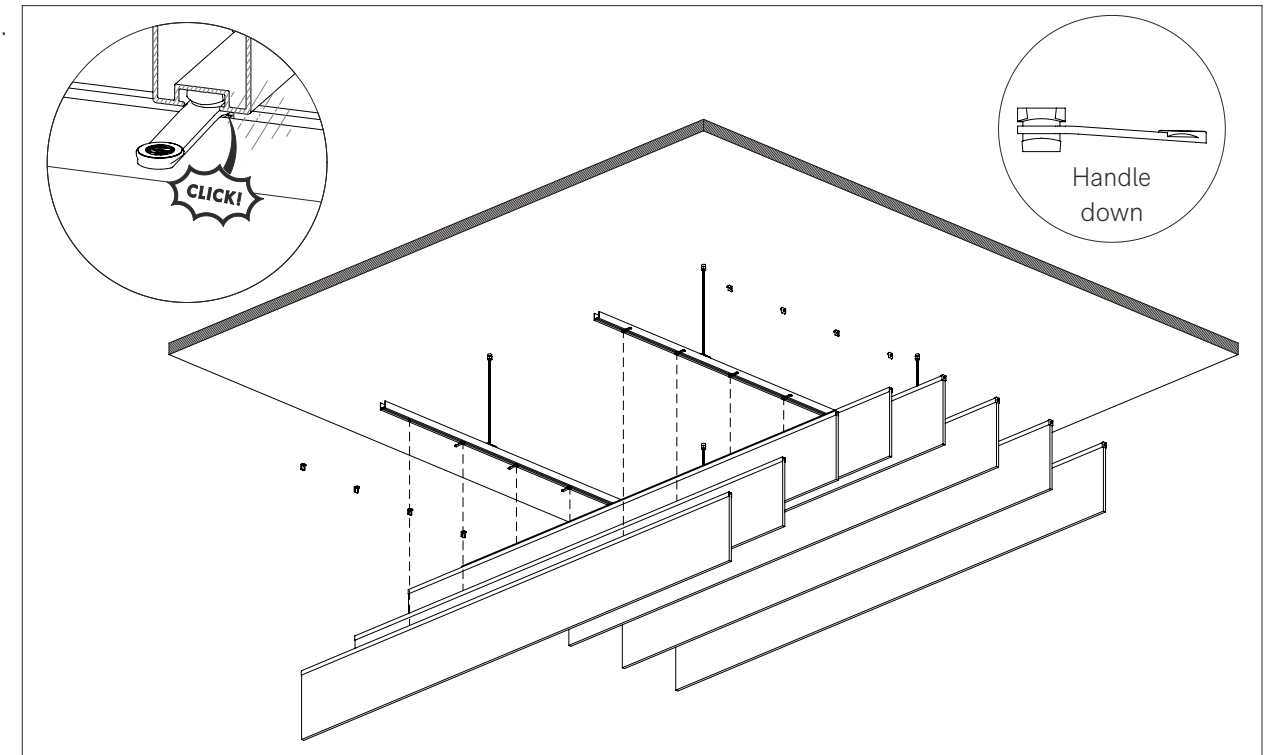
Ensure suitable fastener for the clip, rail and substrate is used. For additional security, the Autex Mounting Clips can be screwed into the cross rail.

1.



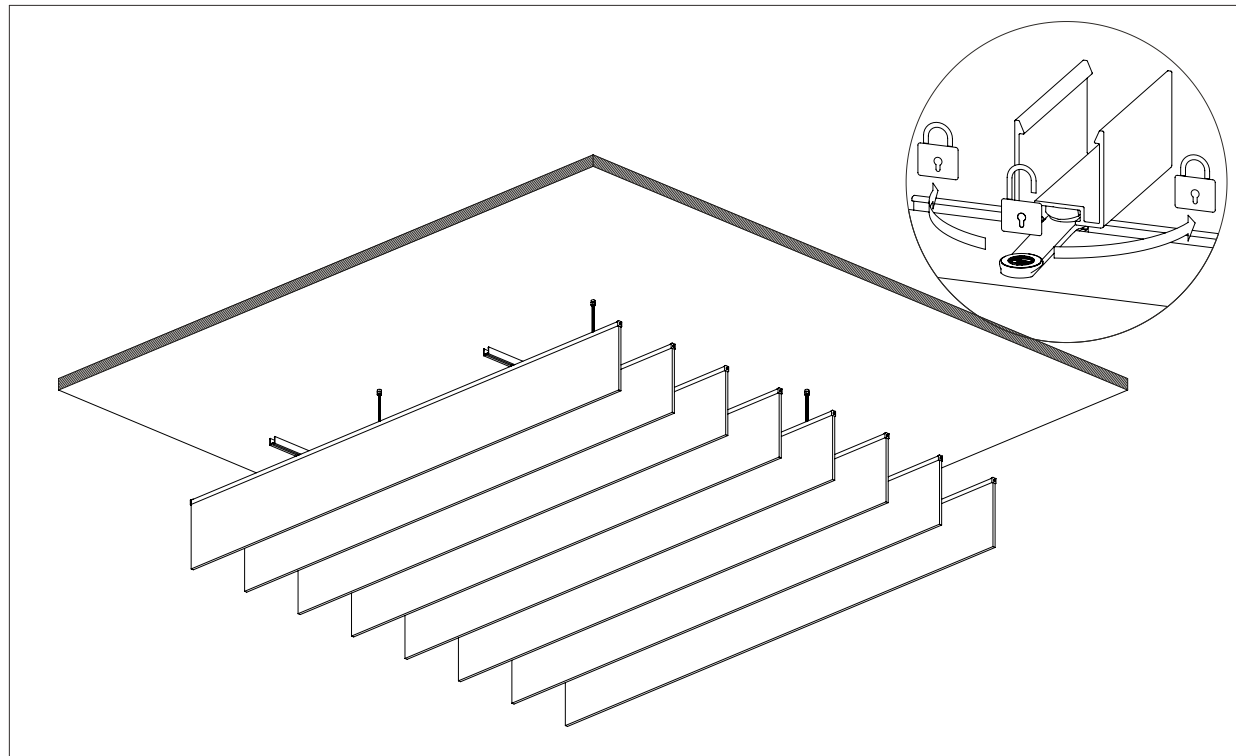
Mark out the ceiling and screw in 4x backing plates suitable for M6 threaded rod in a 1200mm x 1200mm square using screws suitable for the substrate (not supplied). Fin spacing can be marked on the cross rails prior to being clipped onto the Floating Panel Connector. (Refer to table on page 29 for details).

2.

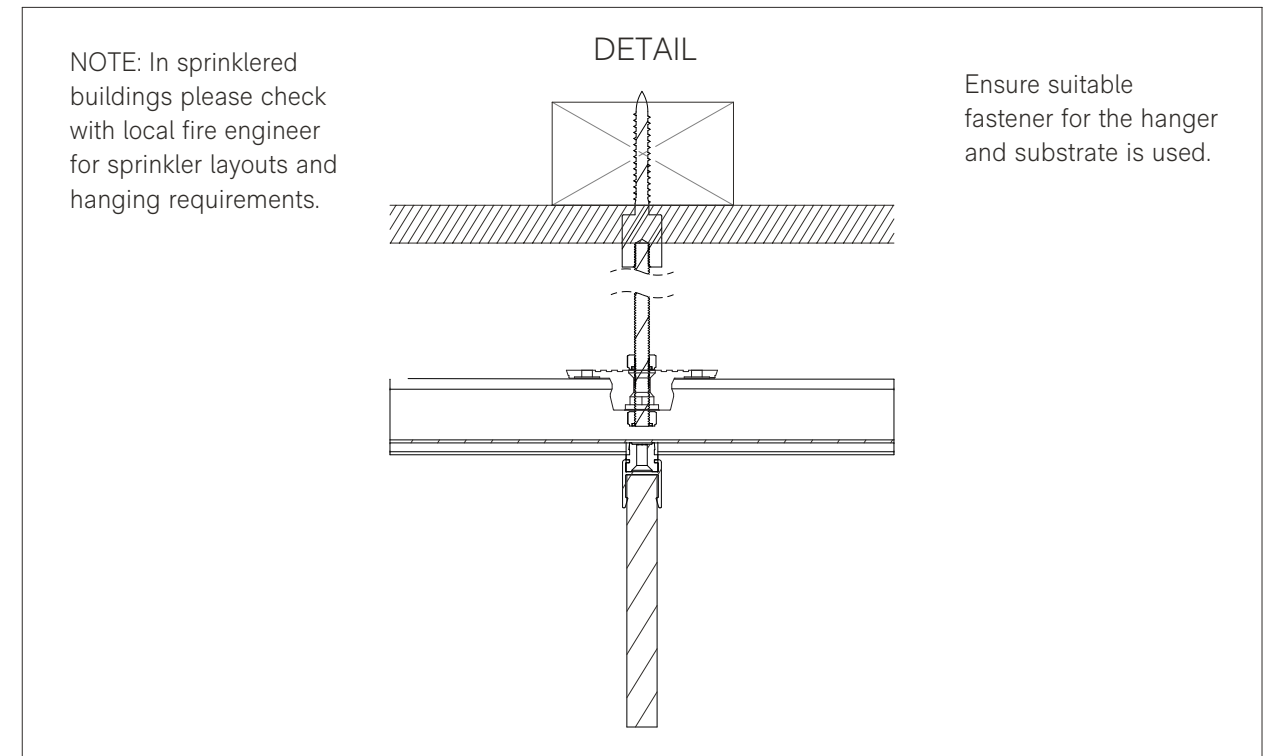


Insert the Autex Mounting Clips at the desired fin spacing on the cross rails with the handle tilted towards the floor. Lift the assembled Fins/Rafts into place and click them onto the Autex Mounting Clips. Turn the clips 45° to temporarily hold the Fin/Raft in place while allowing adjustment along the length.

3.

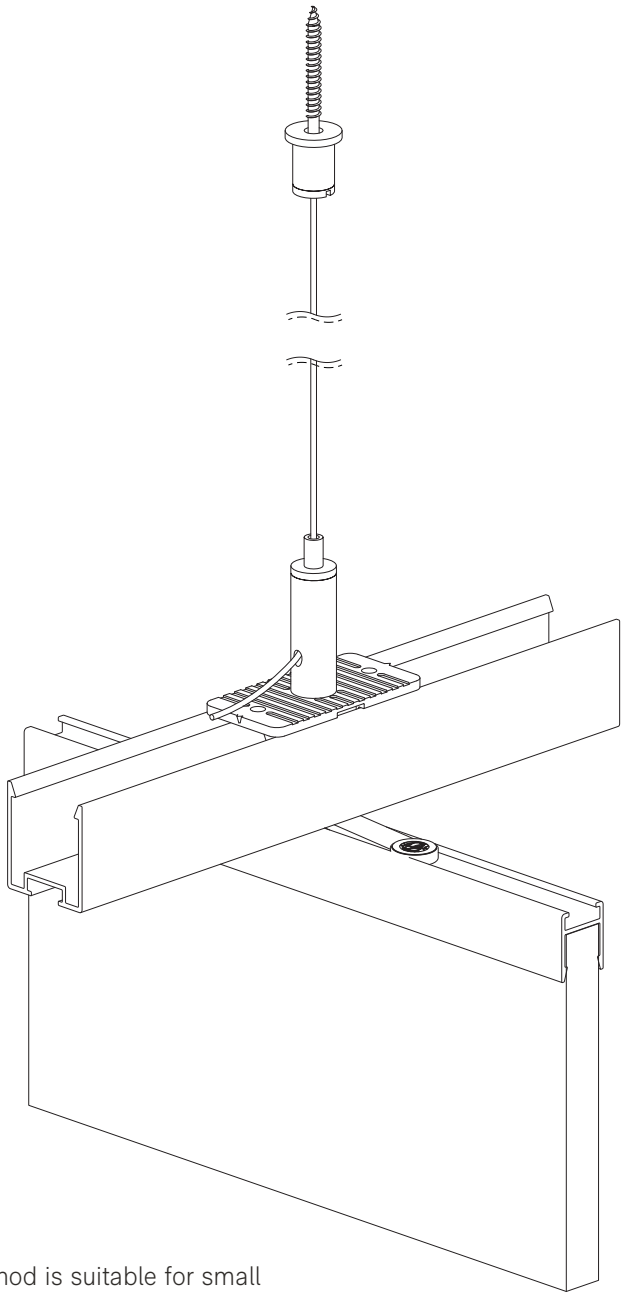


When you are satisfied with the alignment of the Fins/Rafts turn the clips 90° so they clip into the channel and lock in place.



PLEASE NOTE, the threaded rod and backing plate suspension method is the default option for large installations. As these parts are supplied by a third party, please see your account manager for preferred supplier in your territory. For smaller installations, adjustable cable hangers are available from Autex.

Suggested Ceiling Fixing Detail		
Substrate	Fixing	Minimum Embedment
Concrete	Hilti-HUS3-HR6	40mm
Steel	Stainless Steel 8G Tek Screw	0.55mm
Timber	Stainless Steel 8G Wood Screw	30mm



NOTE: This suspension method is suitable for small installations only.
For larger installations refer to pages 7-11.

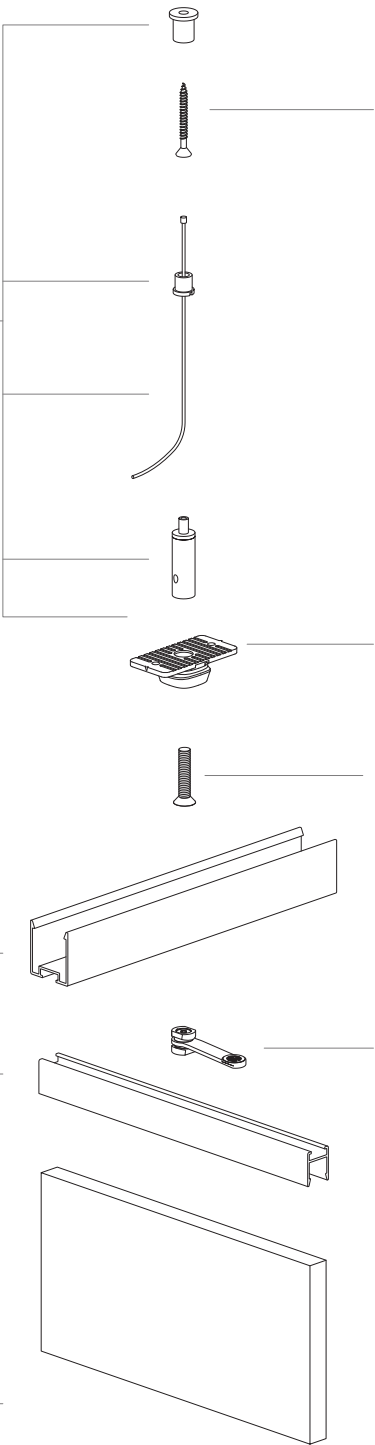
RAHVAS
Autex Adjustable
Suspension Set - Channel

RAFEX24
Autex Frontier 24mm
Extrusion

RAFEX
Autex Frontier 12mm Extrusion + Fin
- or -

RAFEX24
Autex Frontier 24mm Extrusion + Fin
- or -

RAFEXRT
Autex Frontier Raft Extrusion + Raft



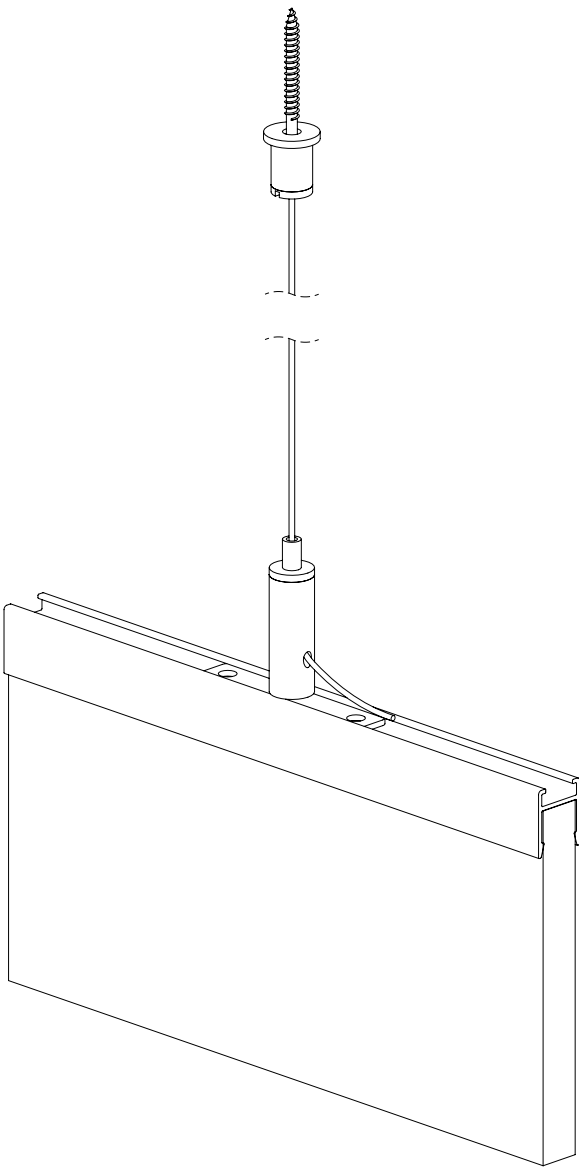
SCREW FIXING
Suitable for Substrate
(NOT SUPPLIED)

RAFFPC
Autex Floating Panel Connector

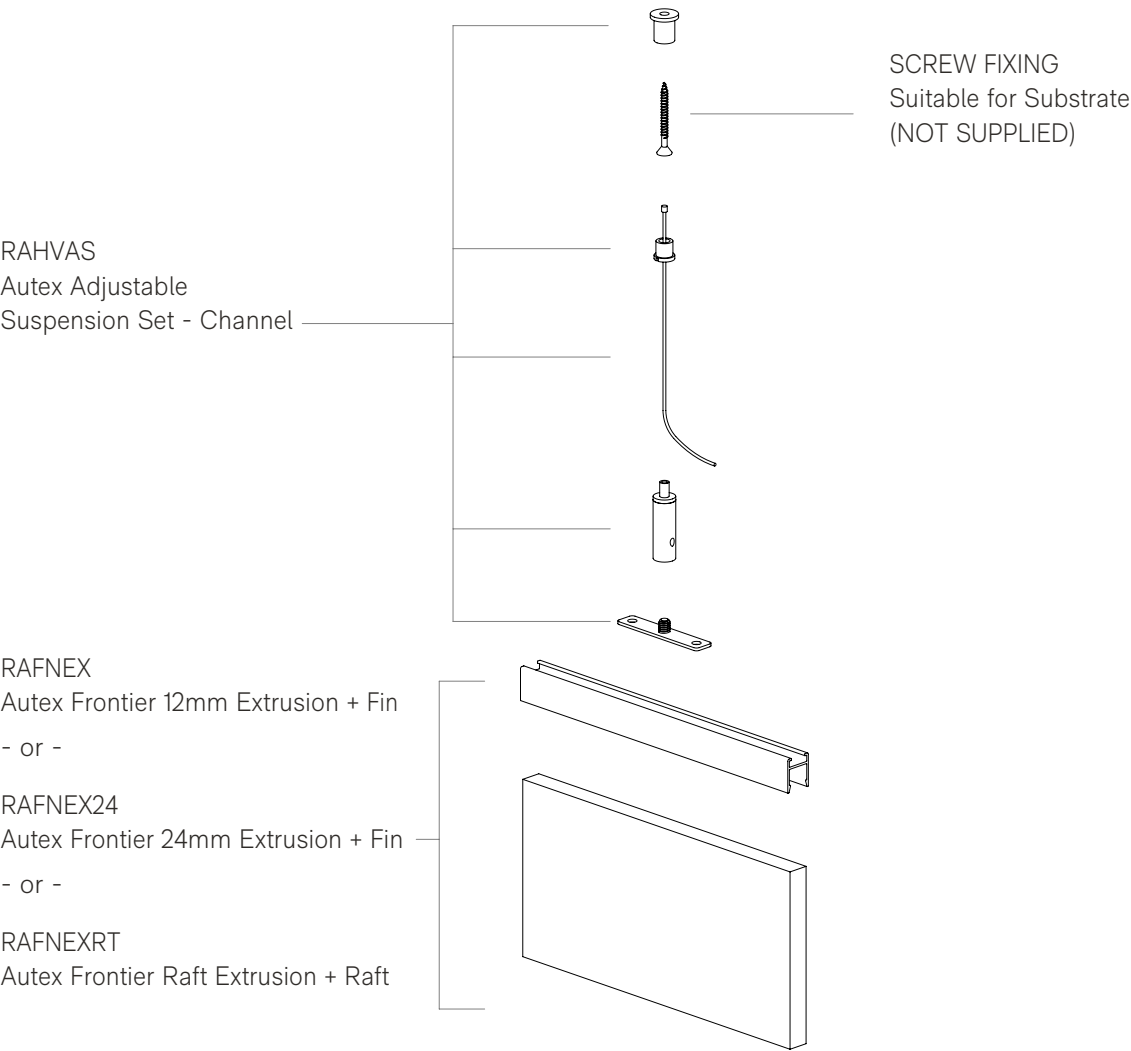
M6 X 20 SOCKET HEAD
CAP SCREW
(NOT SUPPLIED)

RAFTCC
Autex Mounting Clip

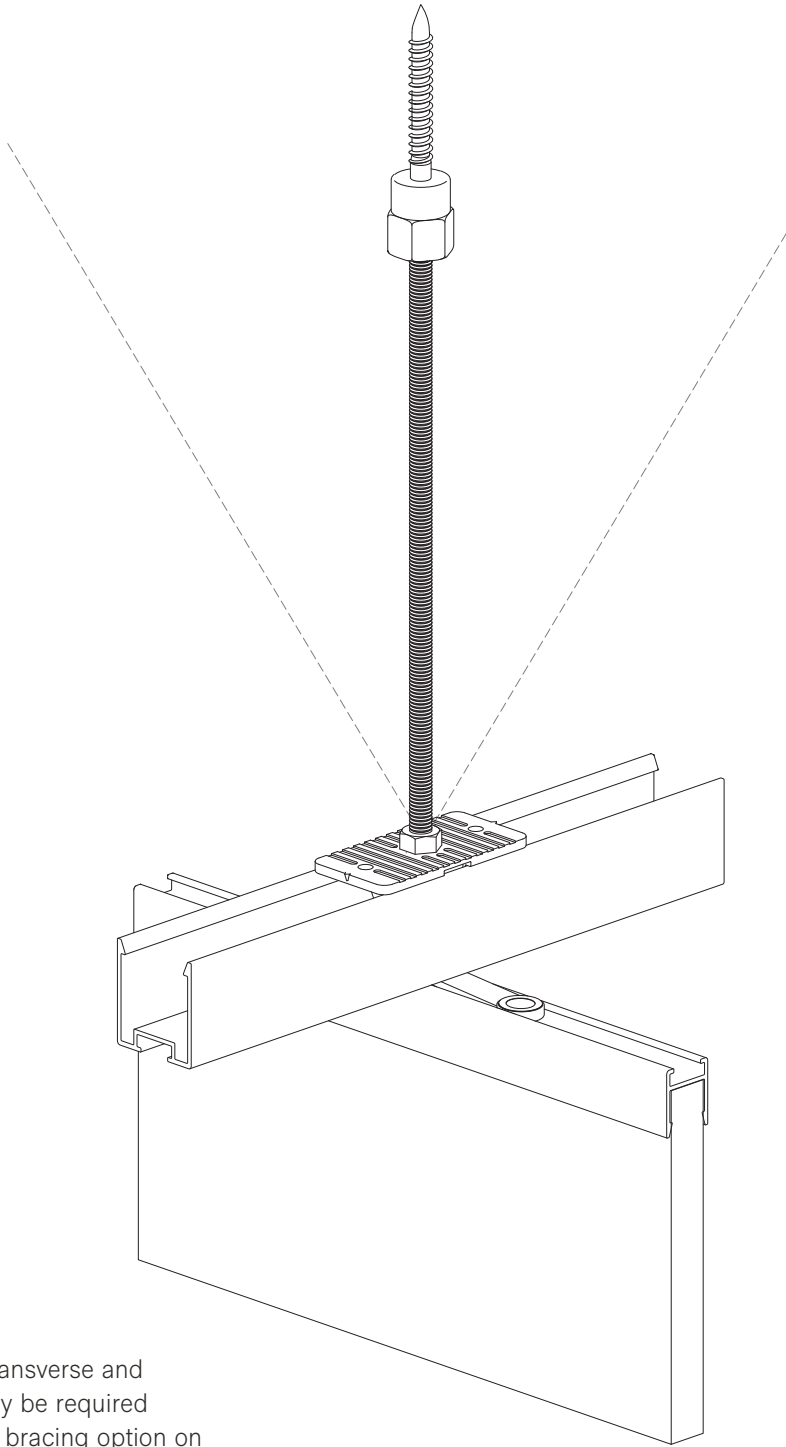
Suggested Ceiling Fixing Detail		
Substrate	Fixing	Minimum Embedment
Concrete	Hilti-HUS3-HR6	40mm
Steel	Stainless Steel 8G Tek Screw	0.55mm
Timber	Stainless Steel 8G Wood Screw	30mm



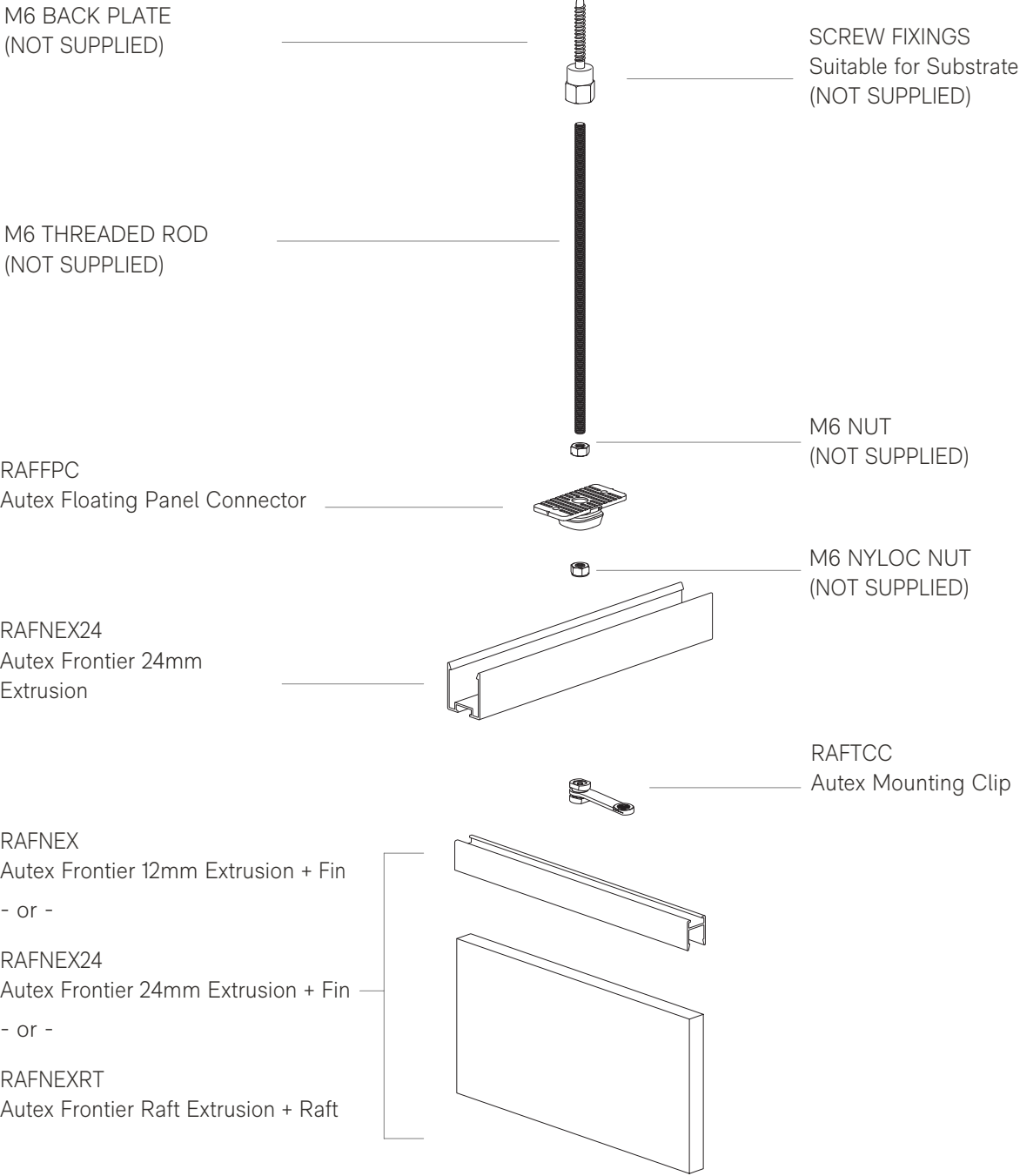
NOTE: This suspension method is suitable for individual fins only.
Requires 1x RAHVAS set per fin.
For larger installations refer to pages 7-11.



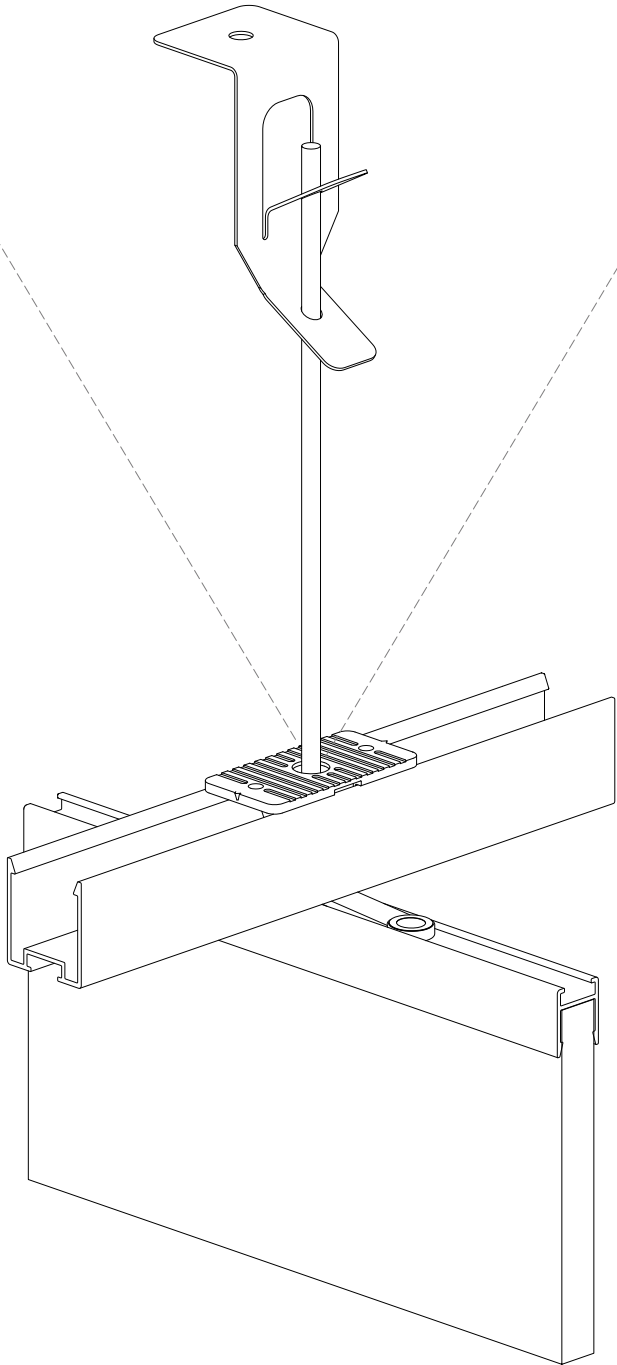
Suggested Ceiling Fixing Detail		
Substrate	Fixing	Minimum Embedment
Concrete	Hilti-HUS3-HR6	40mm
Steel	Stainless Steel 8G Tek Screw	0.55mm
Timber	Stainless Steel 8G Wood Screw	30mm



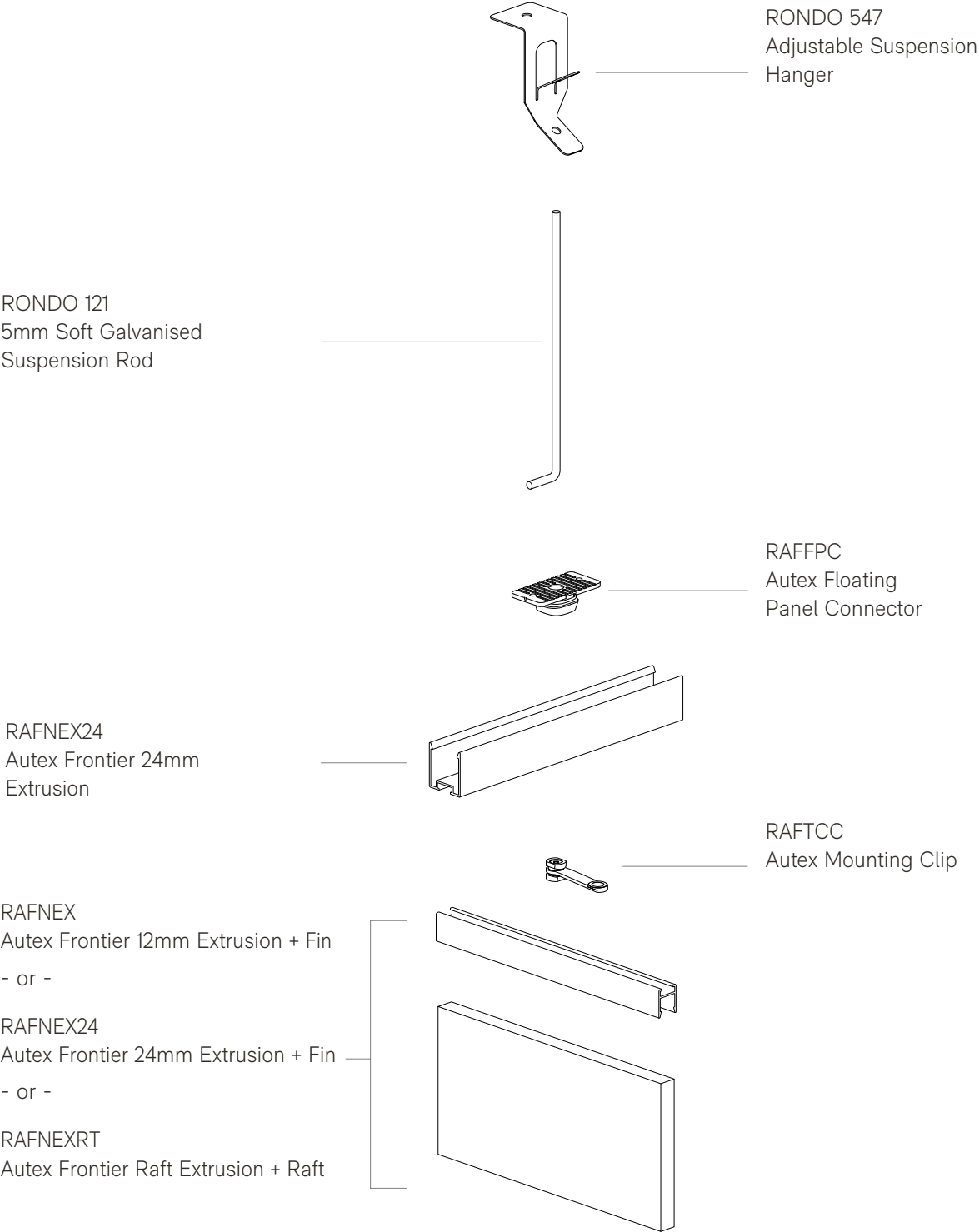
SEISMIC CONSIDERATIONS
For certain size installations, transverse and longitudinal seismic bracing may be required (dashed lines). See suggested bracing option on page 11.



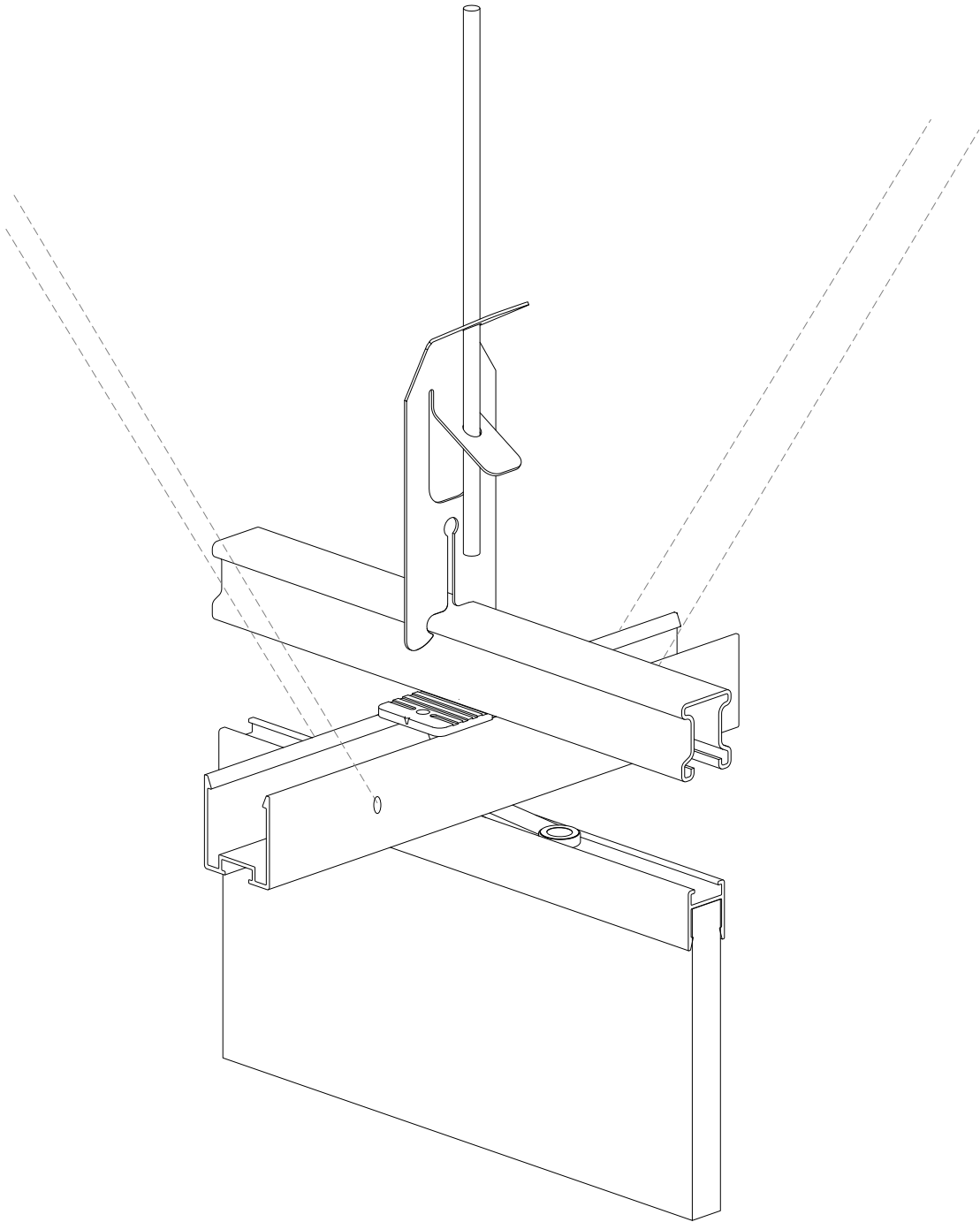
Suggested Ceiling Fixing Detail		
Substrate	Fixing	Minimum Embedment
Concrete	Hilti-HUS3-HR6	40mm
Steel	Stainless Steel 8G Tek Screw	0.55mm
Timber	Stainless Steel 8G Wood Screw	30mm



SEISMIC CONSIDERATIONS
For certain size installations, transverse and longitudinal seismic bracing may be required (dashed lines). See suggested bracing option on page 11.



Suggested Ceiling Fixing Detail		
Substrate	Fixing	Minimum Embedment
Concrete	Hilti-HUS3-HR6	40mm
Steel	Stainless Steel 8G Tek Screw	0.55mm
Timber	Stainless Steel 8G Wood Screw	30mm



RONDO 121
5mm Soft Galvanised
Suspension Rod

RONDO TCR 127
25mm Top Cross Rail

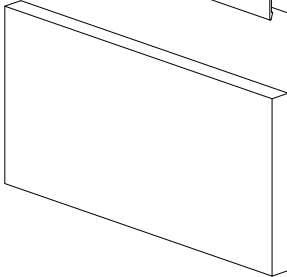
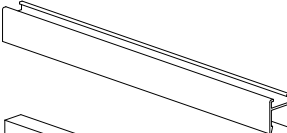
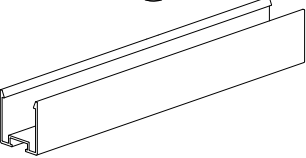
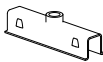
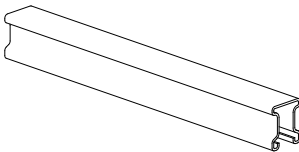
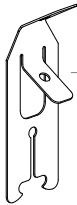
RAFFPC
Autex Floating
Panel Connector

RAFEX24
Autex Frontier 24mm
Extrusion

RAFEX
Autex Frontier 12mm Extrusion + Fin
- or -

RAFEX24
Autex Frontier 24mm Extrusion + Fin
- or -

RAFEXRT
Autex Frontier Raft Extrusion + Raft



RONDO 2534
Top Cross Rail Suspension
Clip

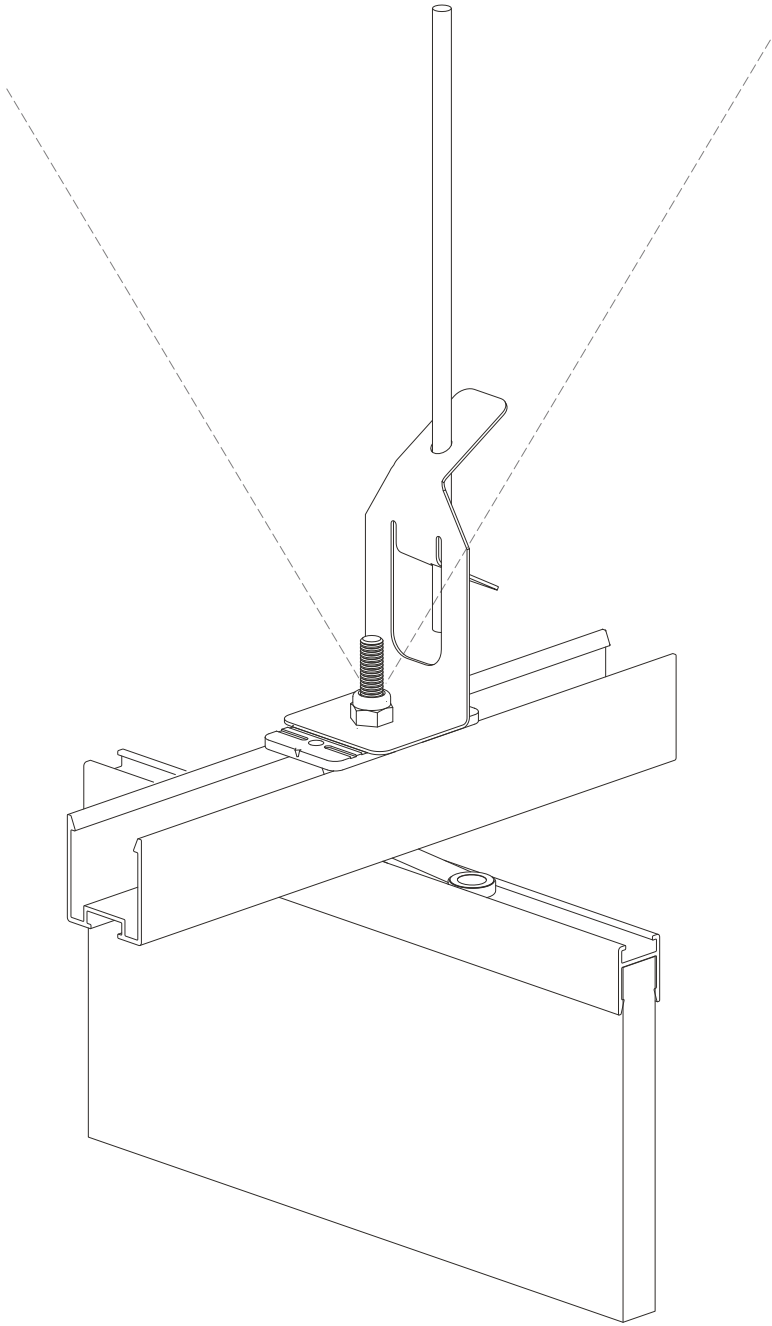
RONDO 119
U Clip

M6 X 20 SOCKET HEAD
CAP SCREW
(NOT SUPPLIED)

RAFTCC
Autex Mounting Clip

SEISMIC CONSIDERATIONS
For certain size installations, transverse and longitudinal seismic bracing may be required (dashed lines). See suggested bracing option on page 11.

Suggested Ceiling Fixing Detail		
Substrate	Fixing	Minimum Embedment
Concrete	Hilti-HUS3-HR6	40mm
Steel	Stainless Steel 8G Tek Screw	0.55mm
Timber	Stainless Steel 8G Wood Screw	30mm



SEISMIC CONSIDERATIONS
For certain size installations, transverse and longitudinal seismic bracing may be required (dashed lines). See suggested bracing option on page 11.

M6 NYLOCK NUT
(NOT SUPPLIED)

RAFFPC
Floating Panel Connector

RAFNEX24
Autex Frontier 24mm
Extrusion

RAFNEX
Autex Frontier 12mm Extrusion + Fin
- or -

RAFNEX24
Autex Frontier 24mm Extrusion + Fin
- or -

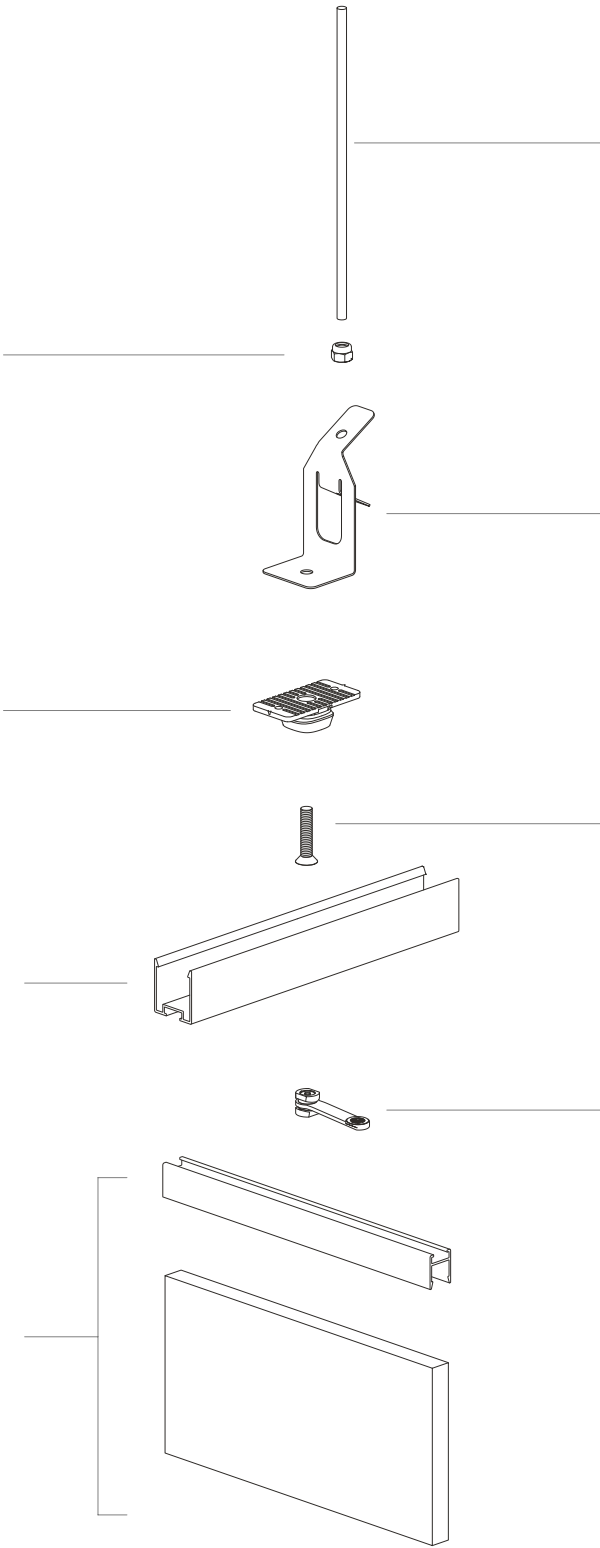
RAFNEXRT
Autex Frontier Raft Extrusion + Raft

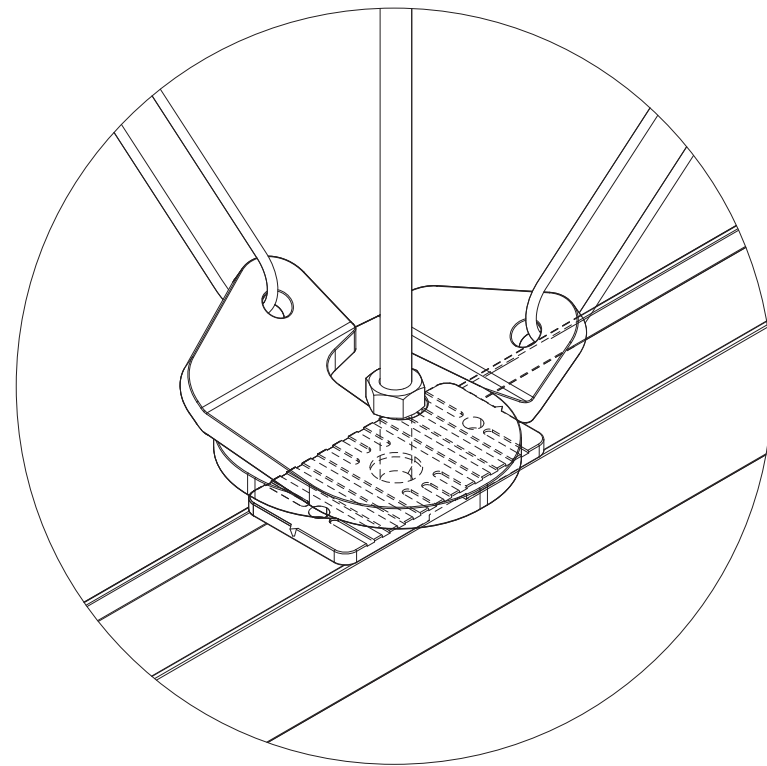
RONDO 121
5mm Soft Galvanised
Suspension Rod

RONDO 547
Adjustable Suspension
Hanger

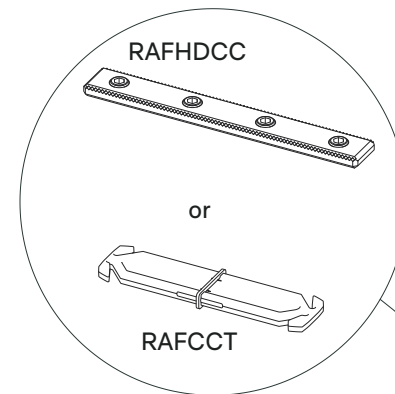
M6 X 20 SOCKET HEAD CAP
SCREW
(NOT SUPPLIED)

RAFTCC
Autex Mounting Clip

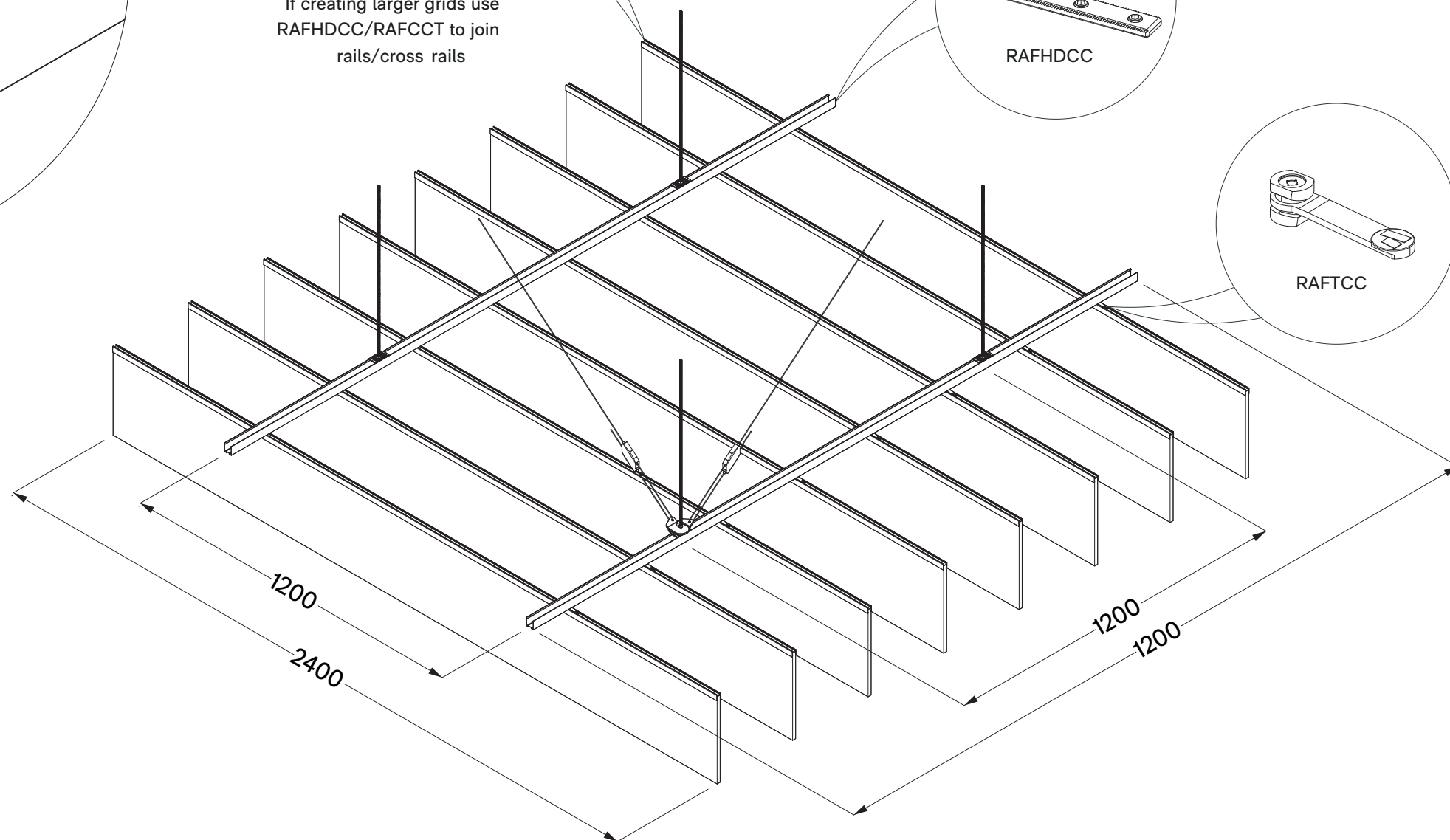




Autex Floating Panel Connector
with seismic bracing & hooks
(NOT SUPPLIED BY AUTEX)

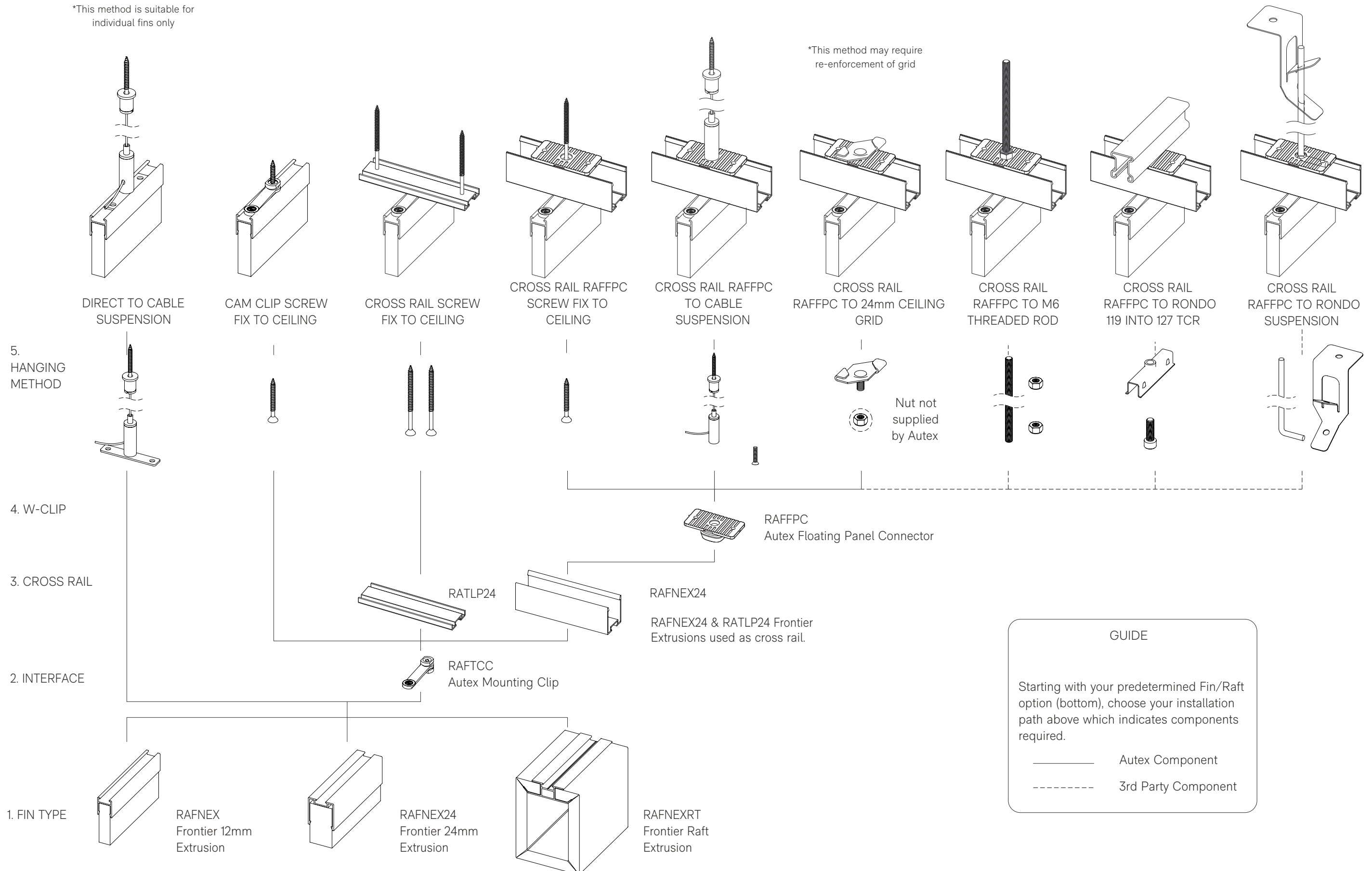


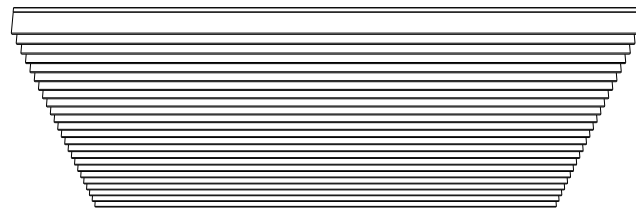
If creating larger grids use
RAFHDCC/RAFCCT to join
rails/cross rails



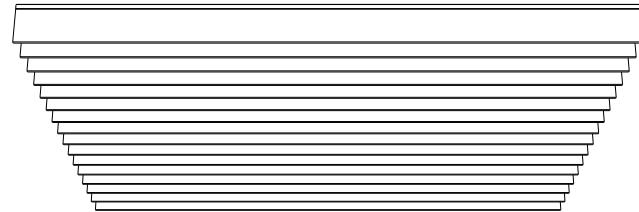
*This method is suitable for individual fins only

*This method may require re-enforcement of grid

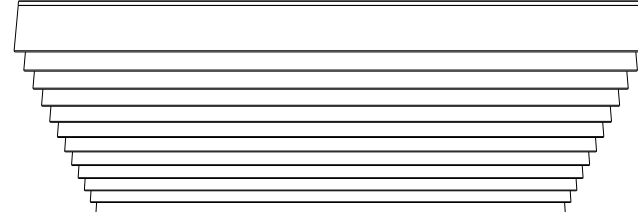




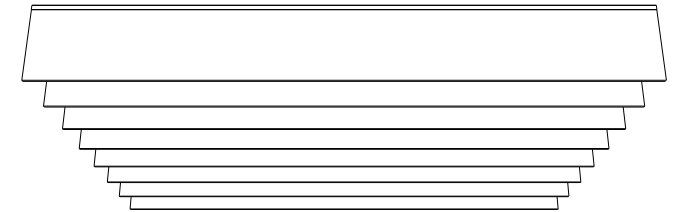
TUNDRA 100



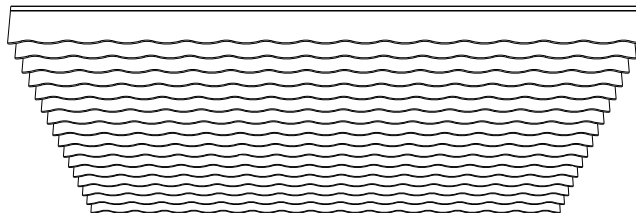
TUNDRA 150



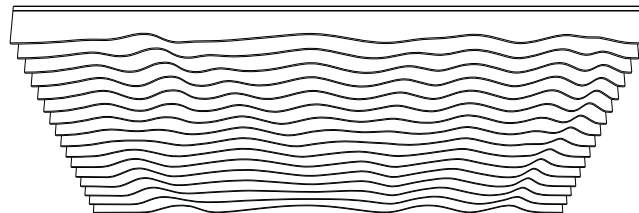
TUNDRA 200



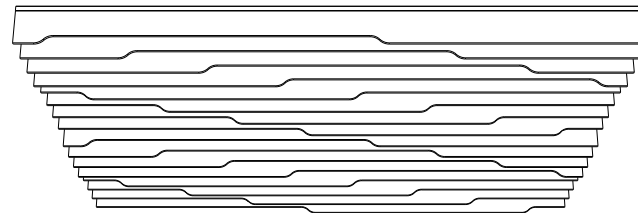
TUNDRA 300



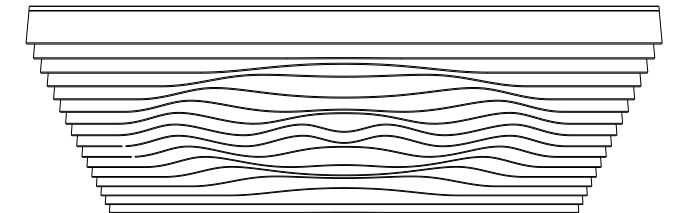
WAVE



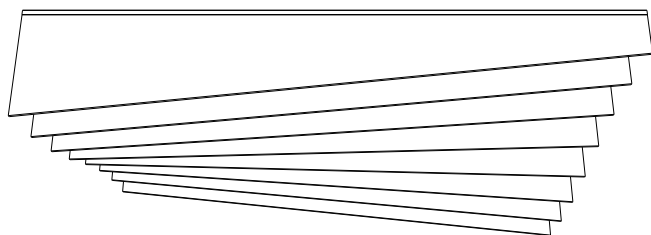
DRAPE



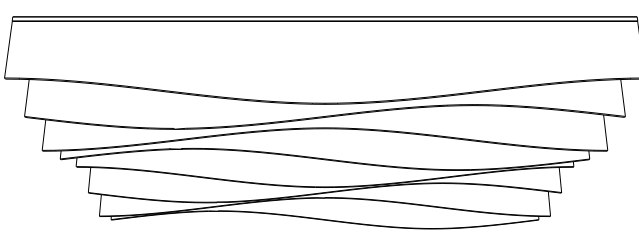
GLIDE



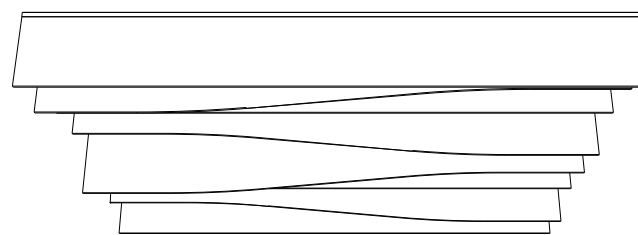
RIPPLE



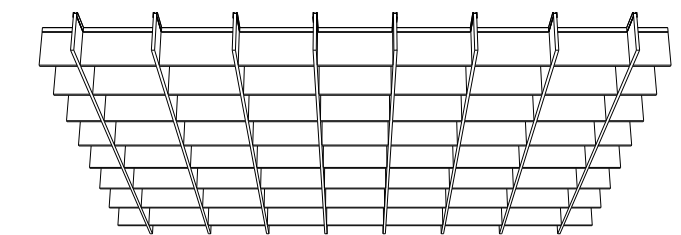
SIERRA



TALUS



DUNE

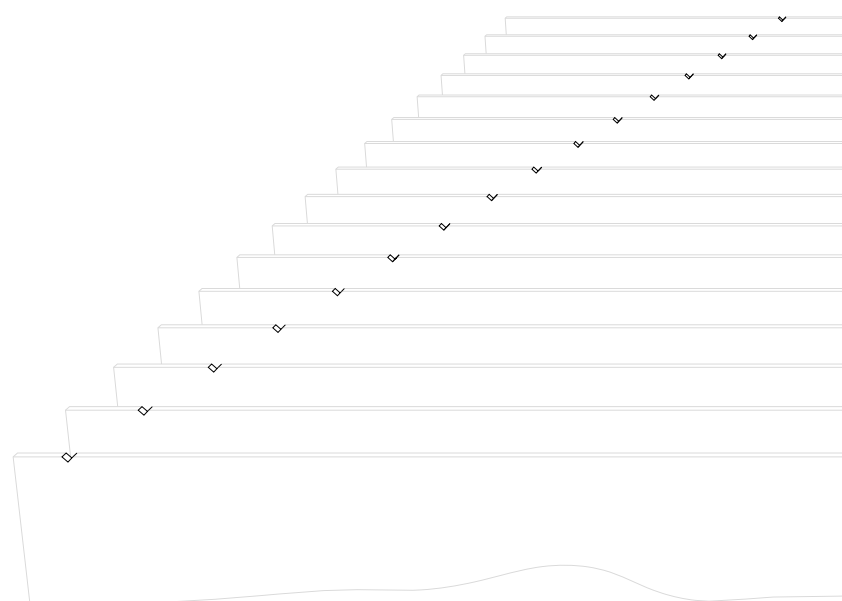
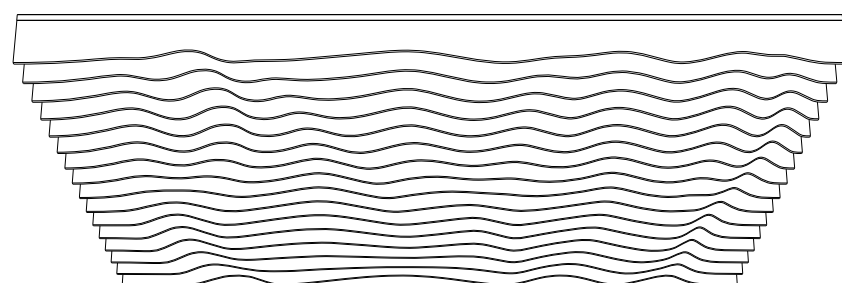


AXIS

Certain styles of Frontier fins (noted below) use a notch detail to signify correct sequence and orientation prior to install.
This detail is located in the top edge of the fin, and is covered by the RAFNEX channel when installed.

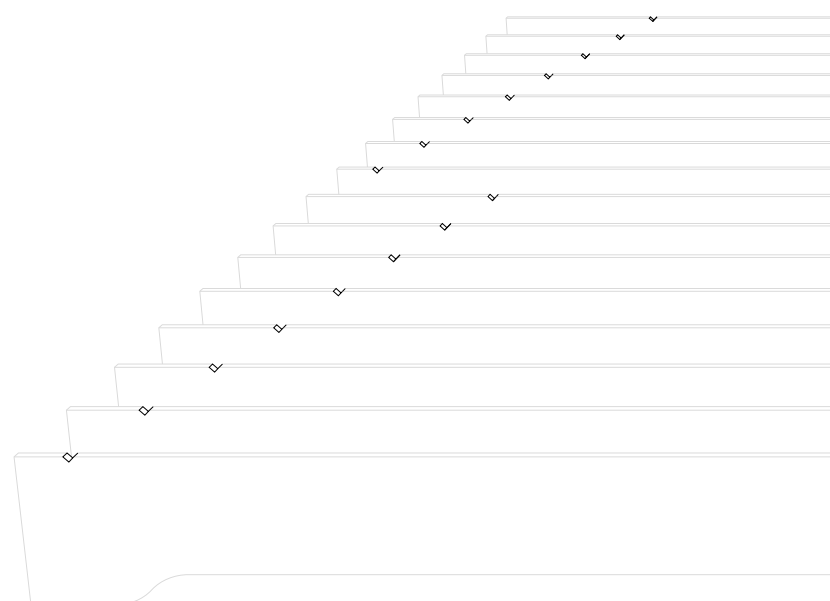
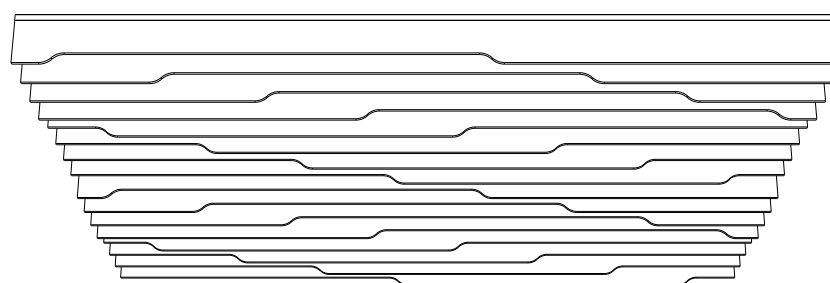
If you are using a style noted below, check how these notches should be sequenced for correct install order.

DRAPE



Drape fins are all unique, so the sequence continues throughout the pack.

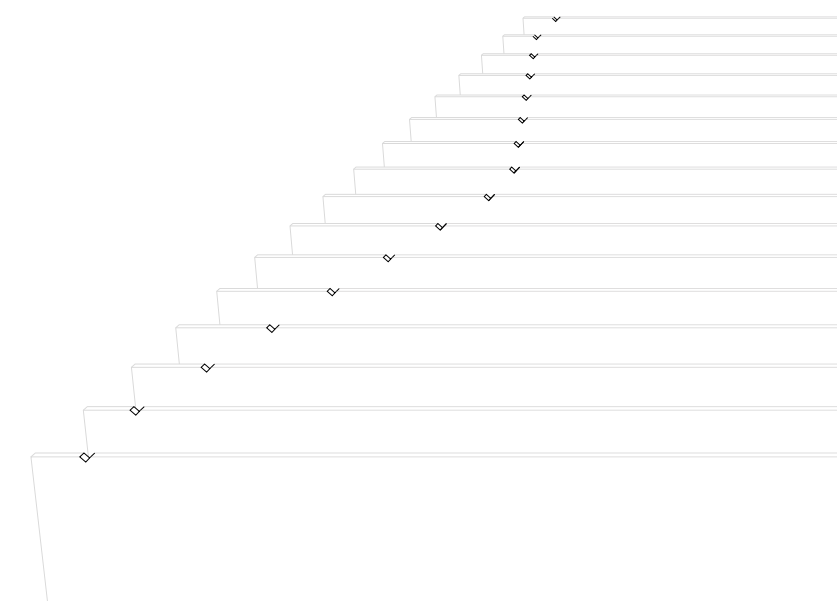
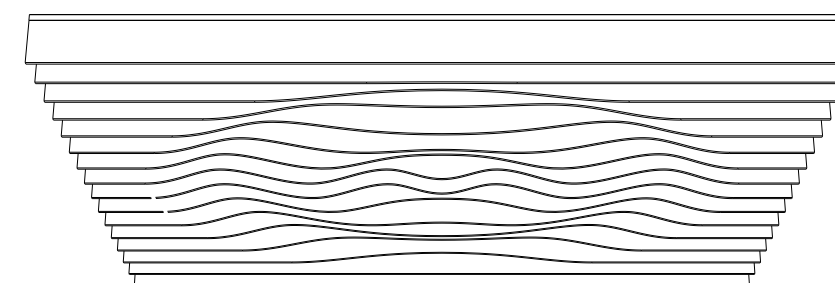
GLIDE



The Glide pattern repeats once within a pack, so the notches should stagger as shown.

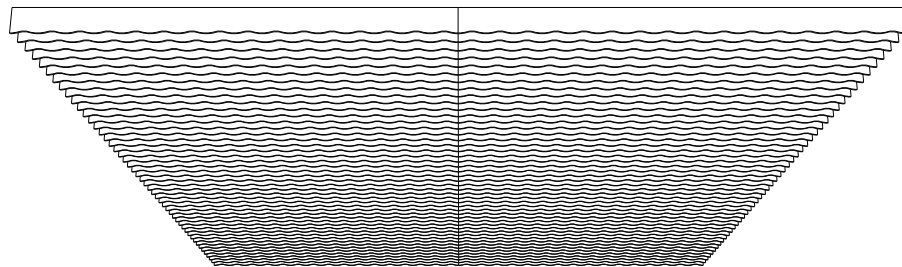
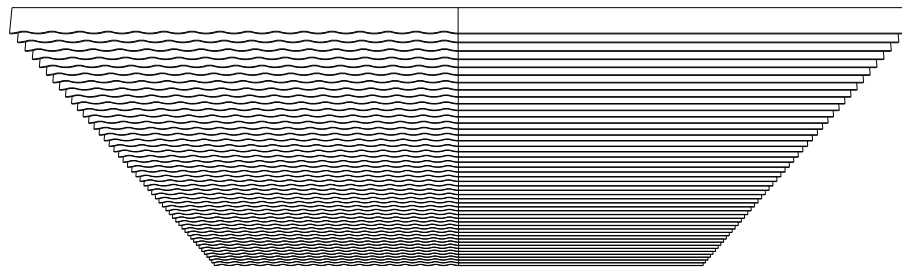
This pattern looks continuous from beneath when installed correctly.

RIPPLE

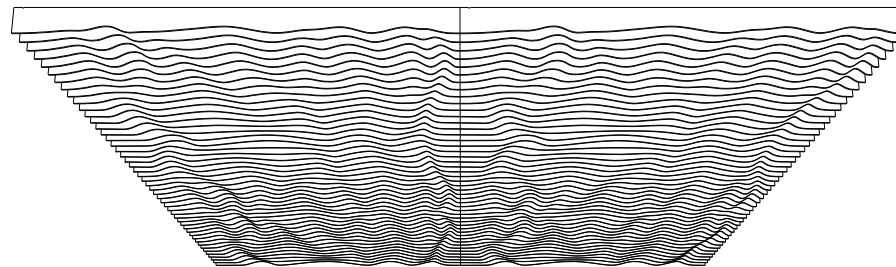
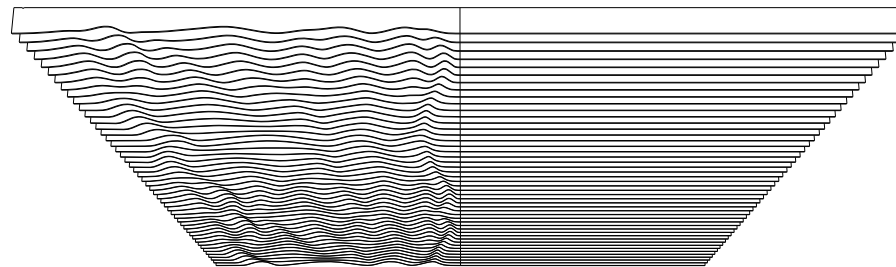


Ripple has a symmetrical pattern, so the notches should reverse direction at half-way like shown.

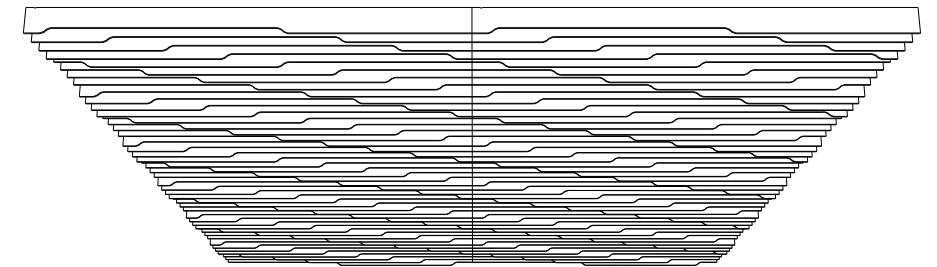
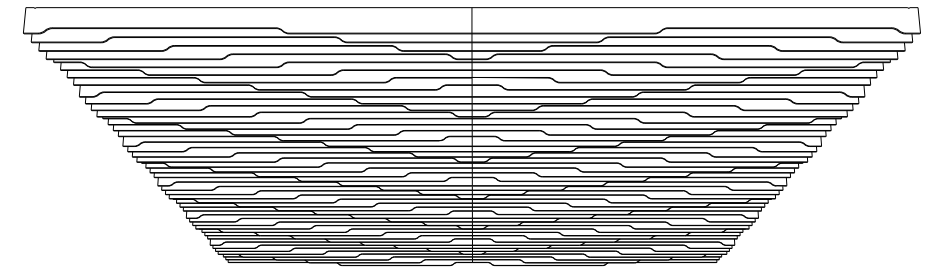
WAVE



DRAPE

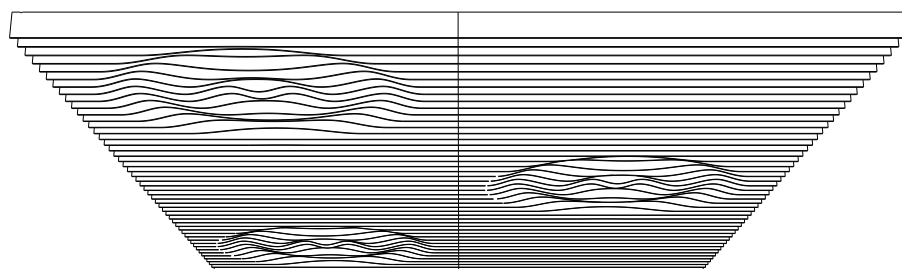


GLIDE



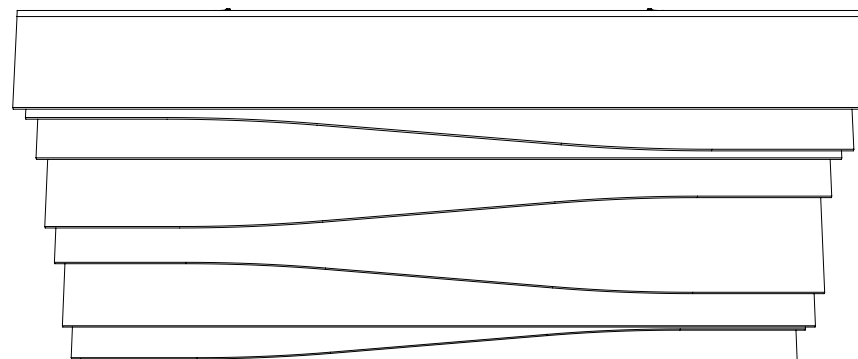
Tip: For a more irregular pattern, fin sequence can be mirrored between packs. Fins should stay the same orientation end-to-end though.

RIPPLE



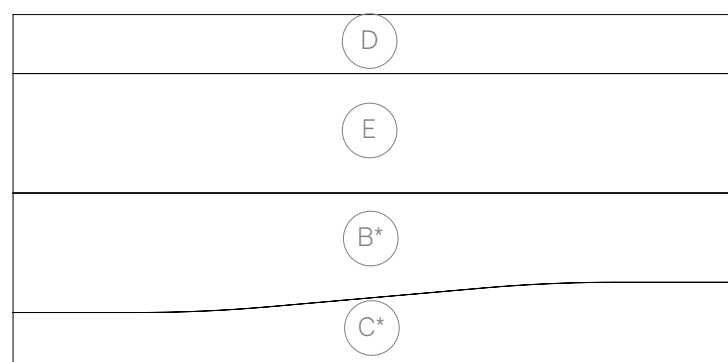
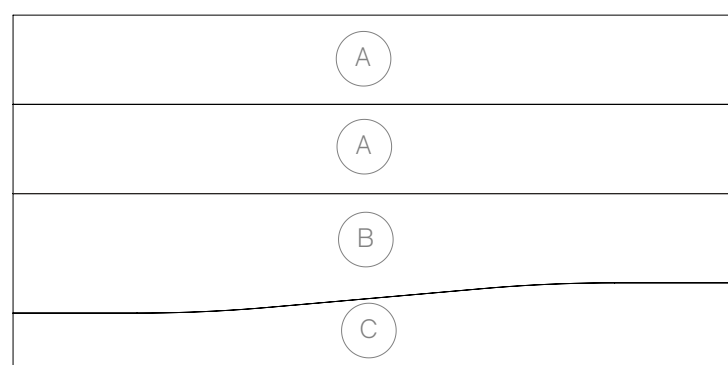
Note:
6x packs are shown arrayed in each example (2 wide x 3 long).
All styles are designed to pair with Tundra 150 if desired.

DUNE

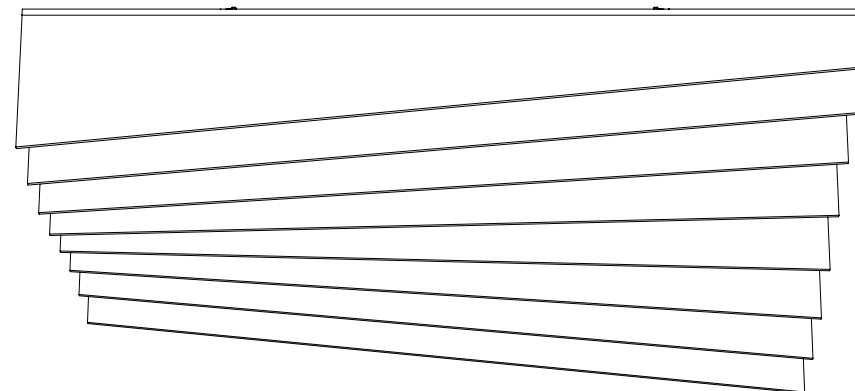


Install sequence pattern as shown above
A, C, D, C*, B, E, B*, A

Box layout as shown below.

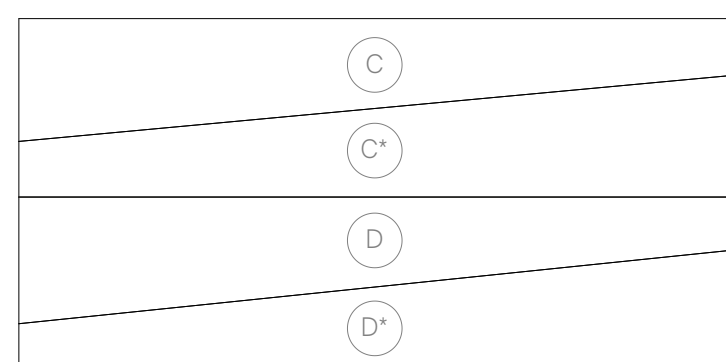
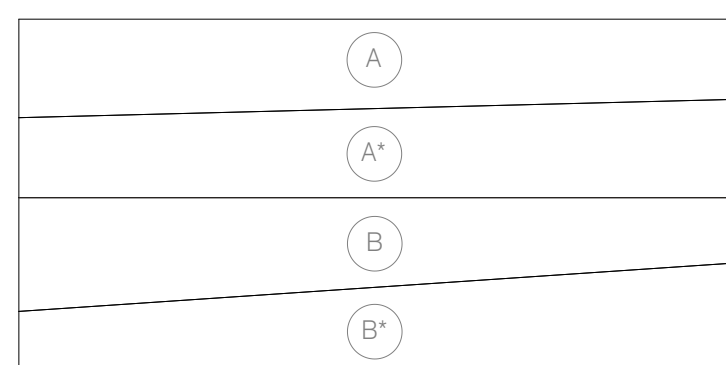


SIERRA

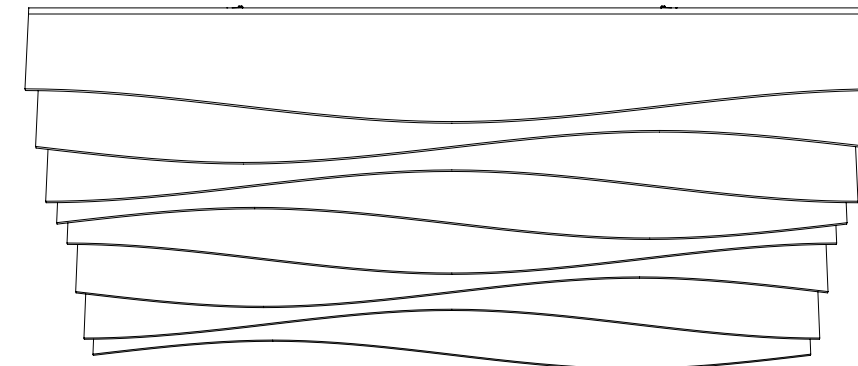


Installation sequence pattern as shown above
D, C, B, A, A*, B*, C*, D*...
To continue the pattern, the following set of 8 fins will be in the
REVERSE order

Box layout as shown below.

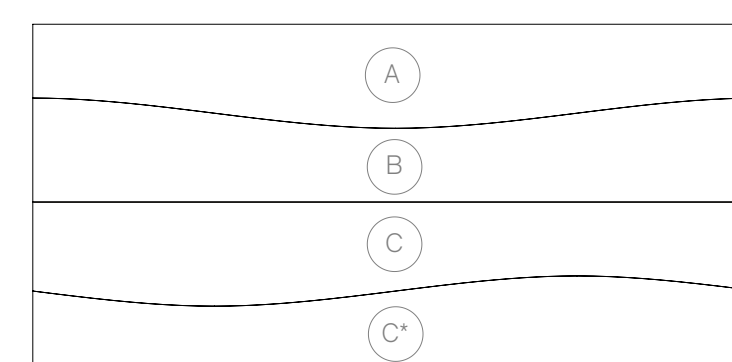
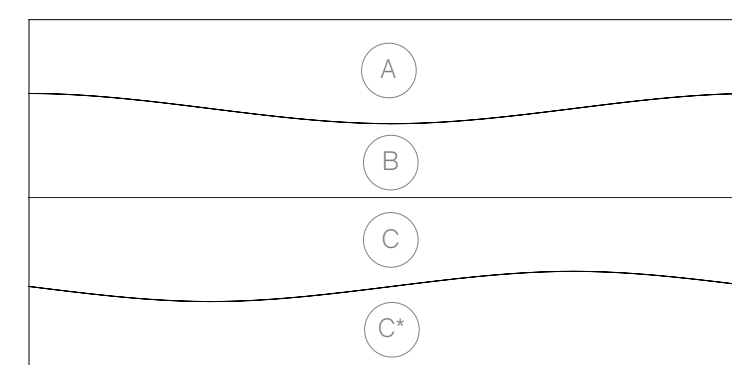


TALUS

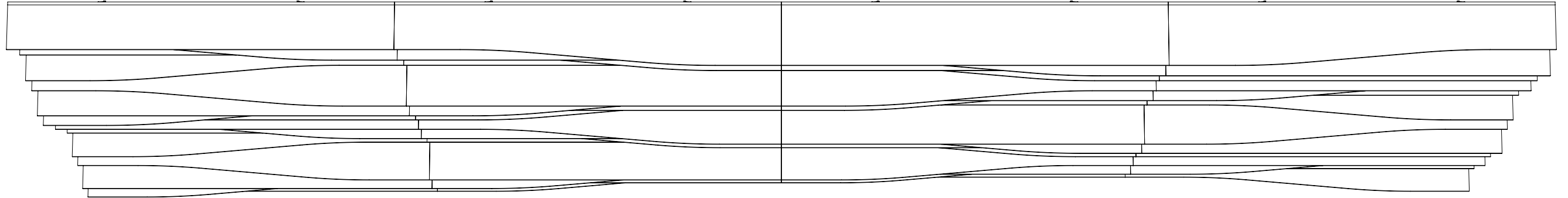


Installation sequence pattern as shown above
A, C, B, C*, A, C, B, C*...

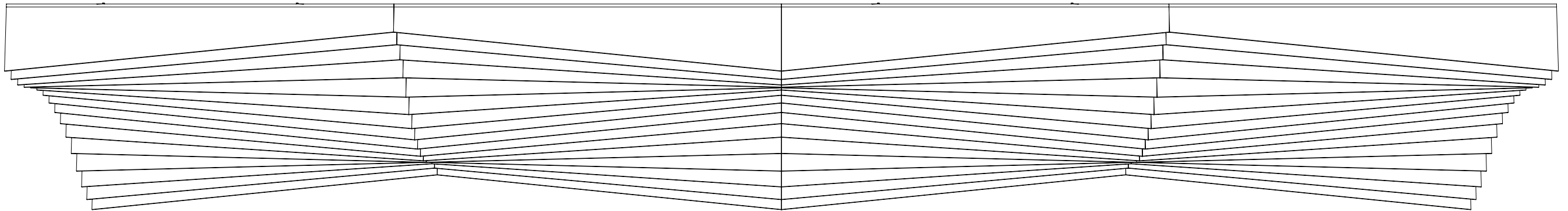
Box layout as shown below.



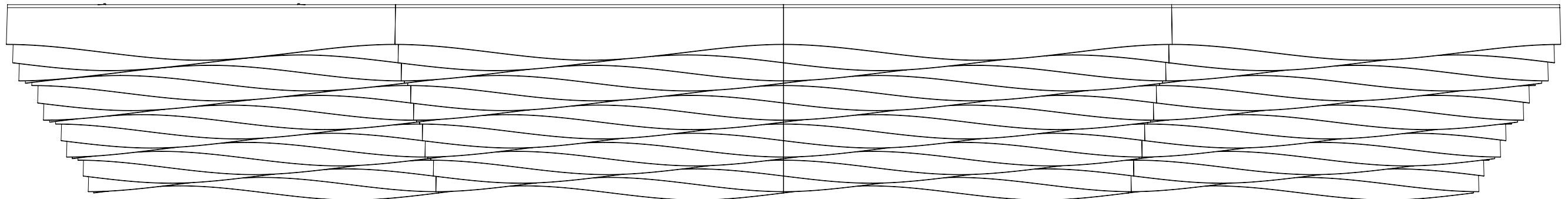
DUNE



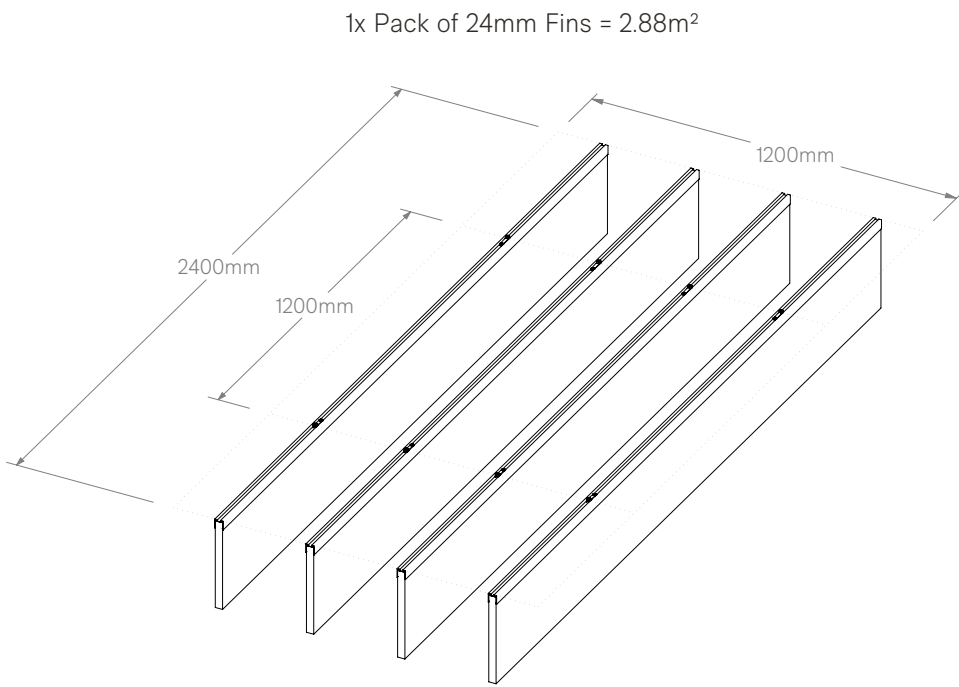
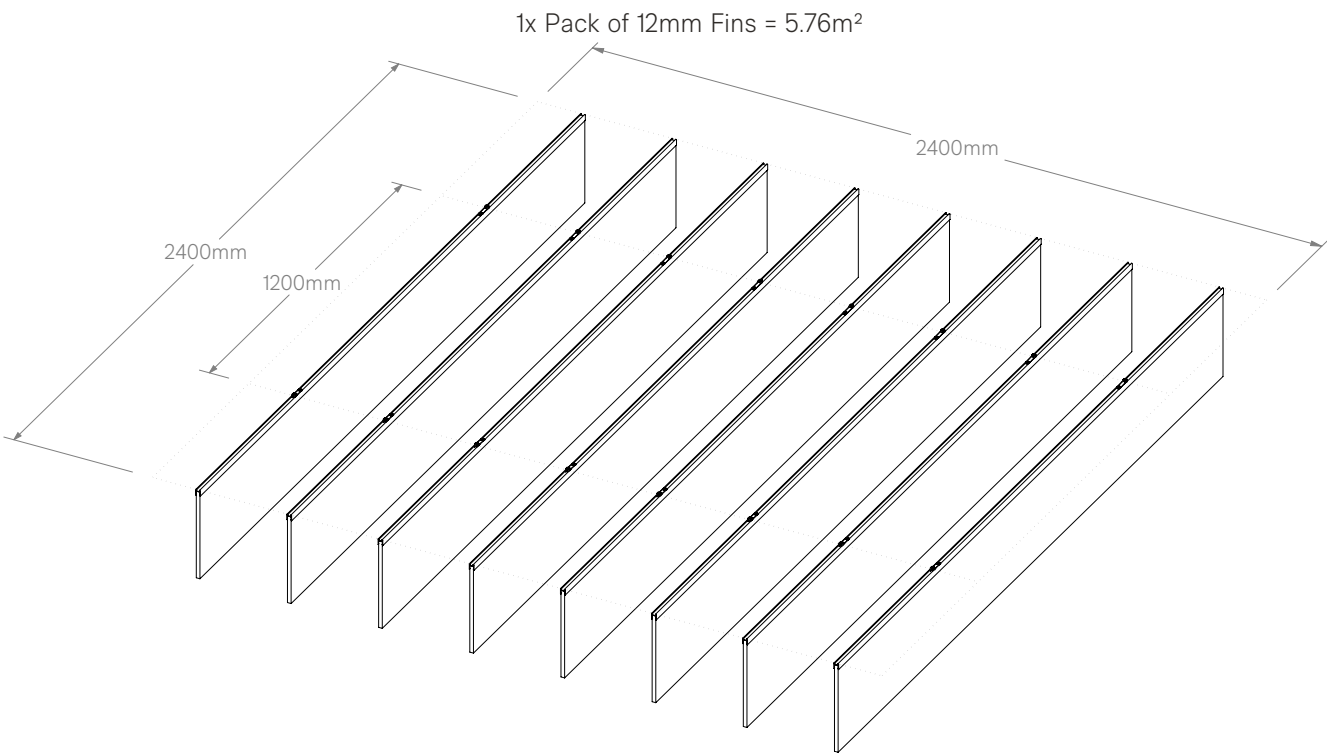
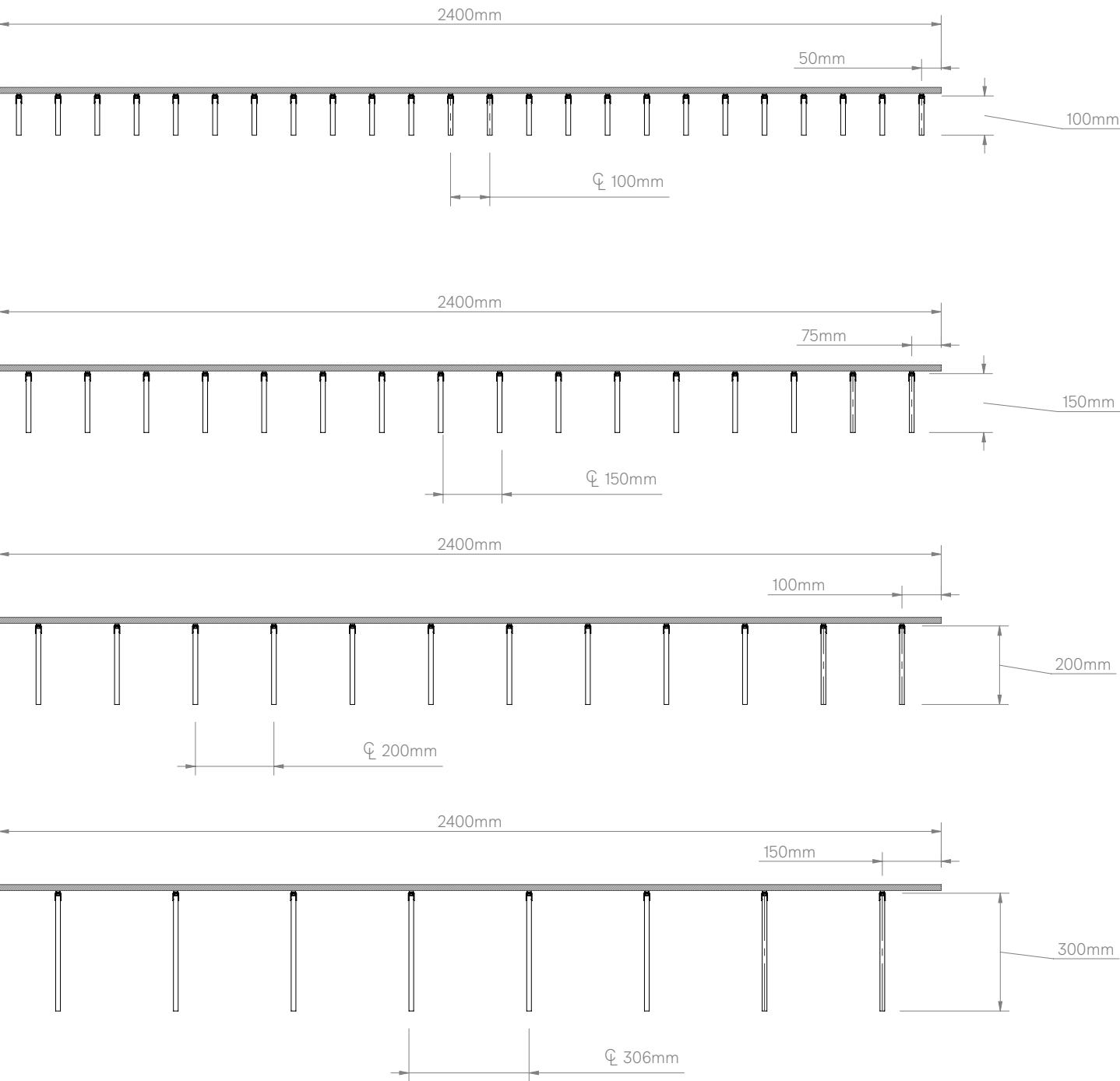
SIERRA



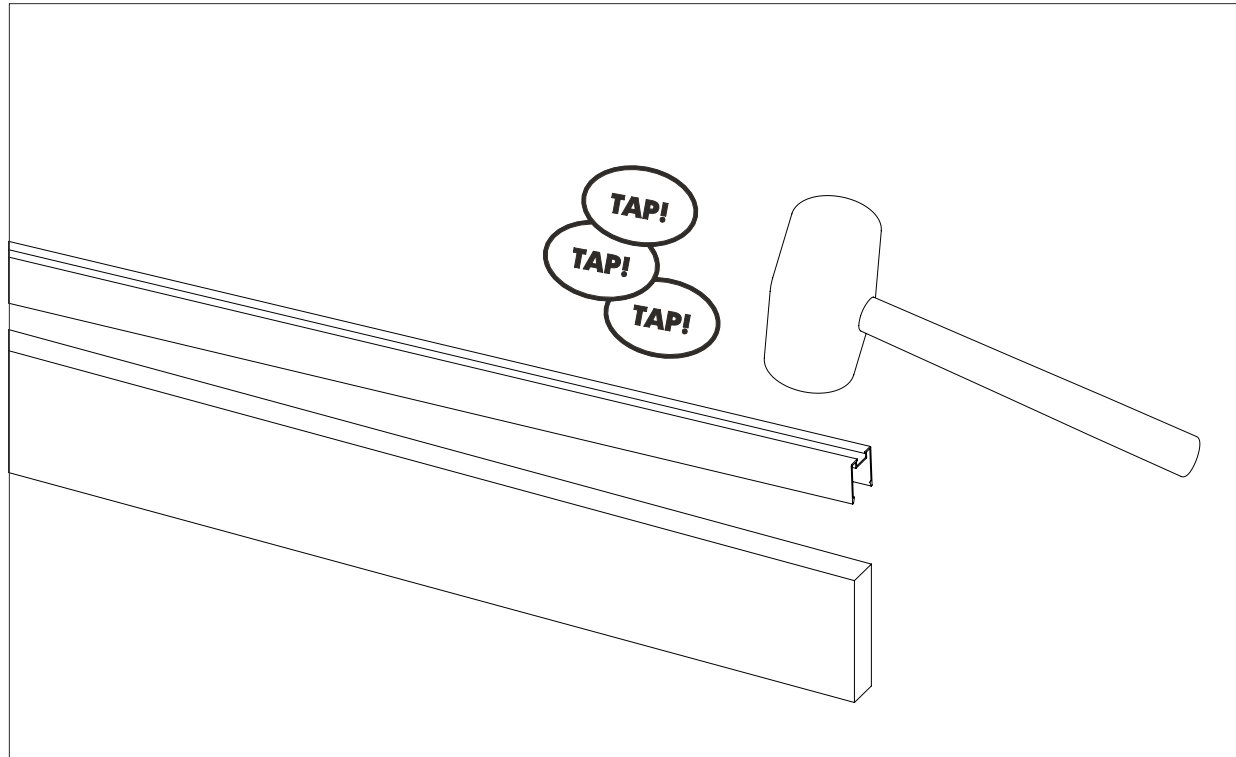
TALUS



- Recommended guide for listed ceiling coverage is for the fin spacing to be equal to the fin height.
- Fin height is inclusive of the Autex Frontier Extrusion

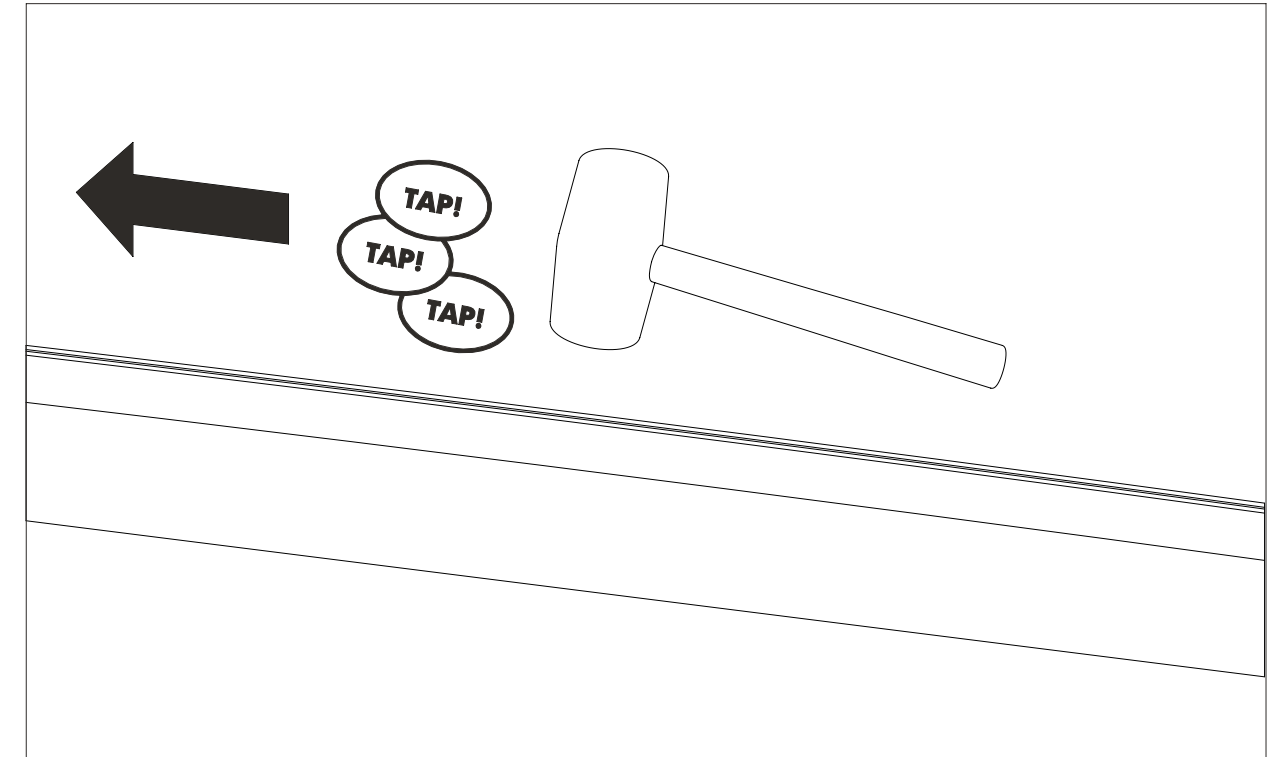


1.



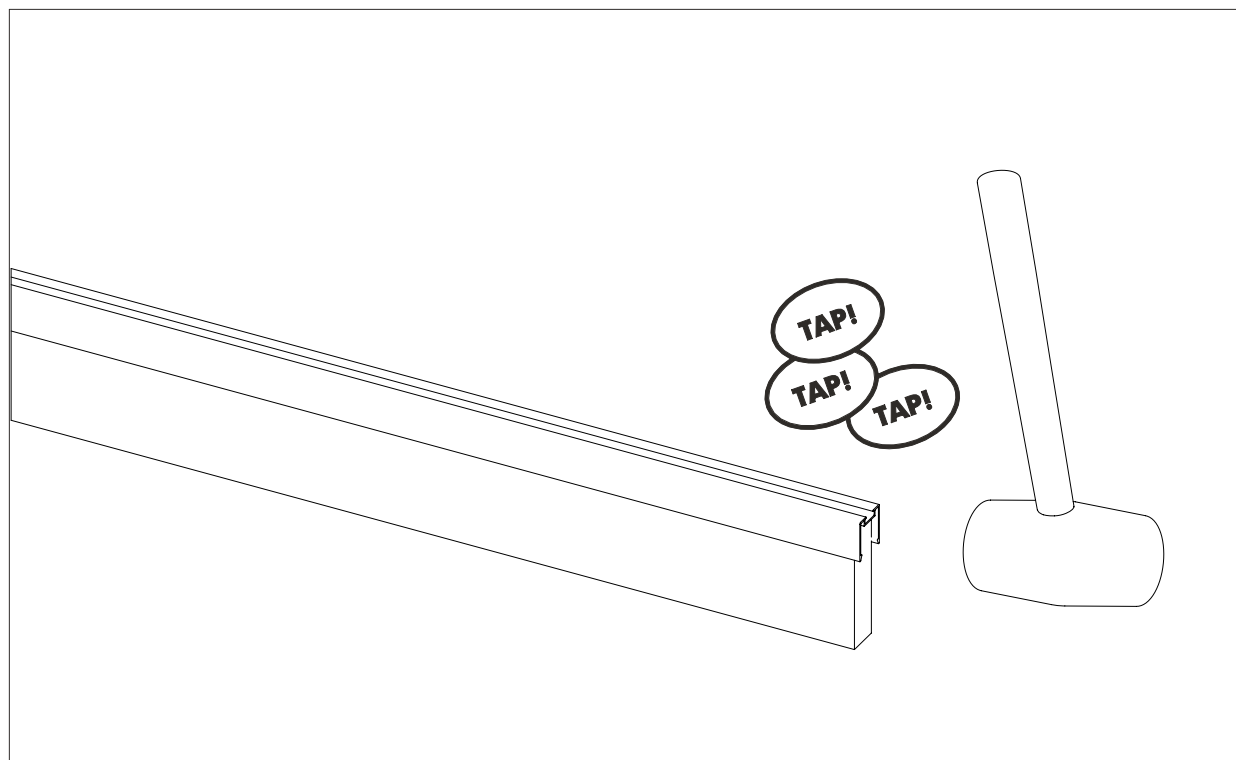
Using a rubber mallet, seat the channel onto the fin.

2.



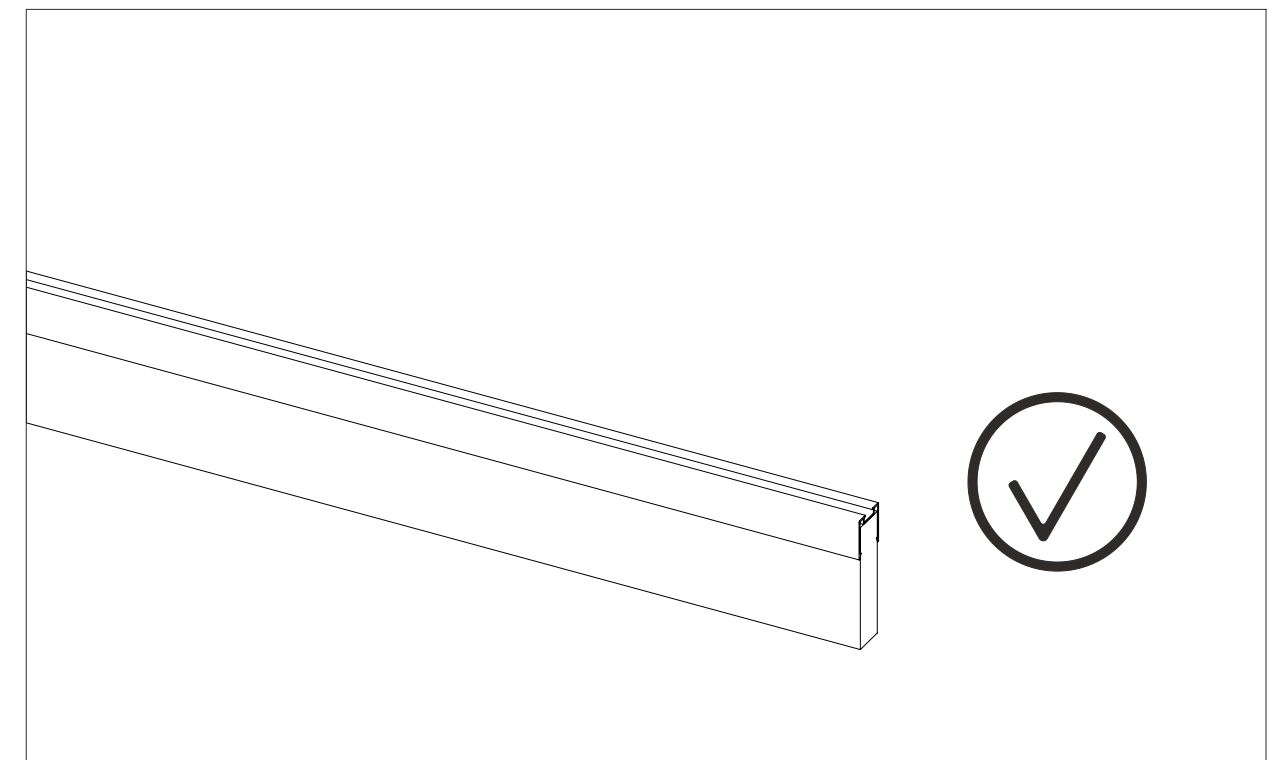
Starting at one end and using the mallet, tap along the length of the channel to ensure there is no bowing in the centre and the channel is seated correctly.

3.



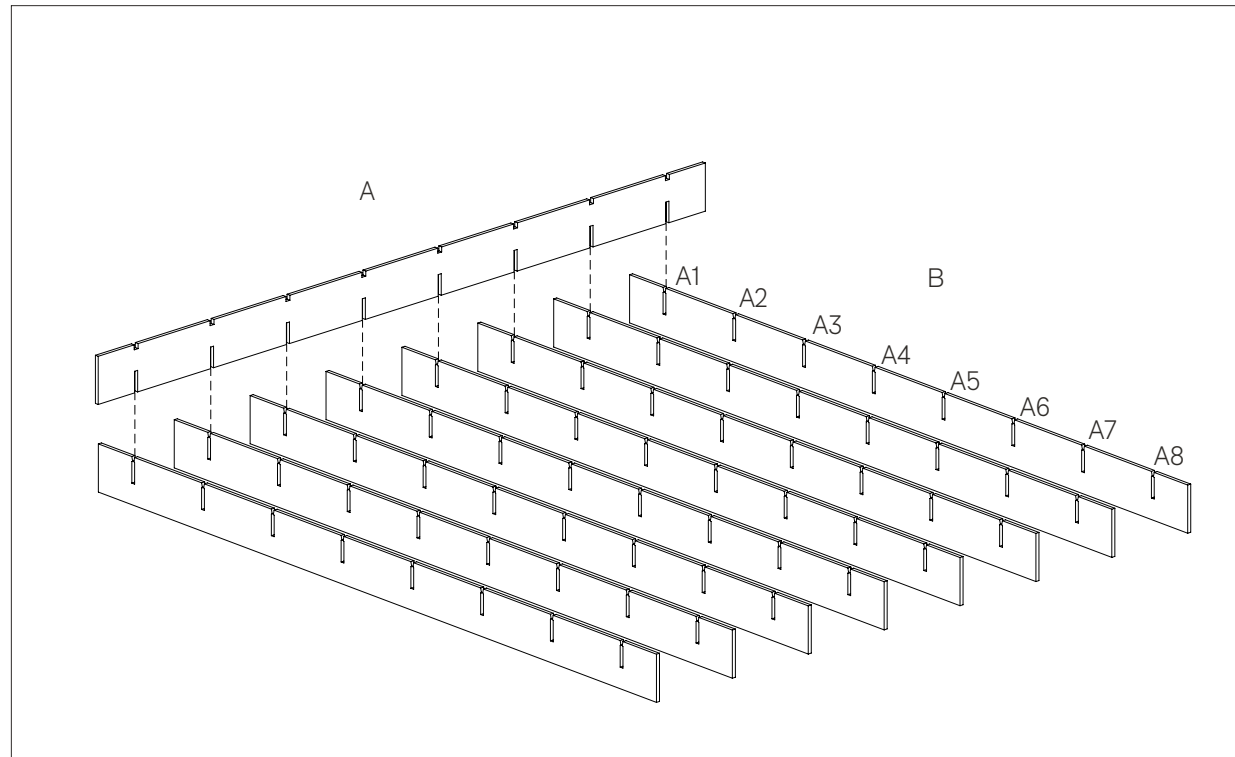
Ensure the end of the channel is aligned with the Frontier Fin by tapping the overhanging end of the extrusion.

4.



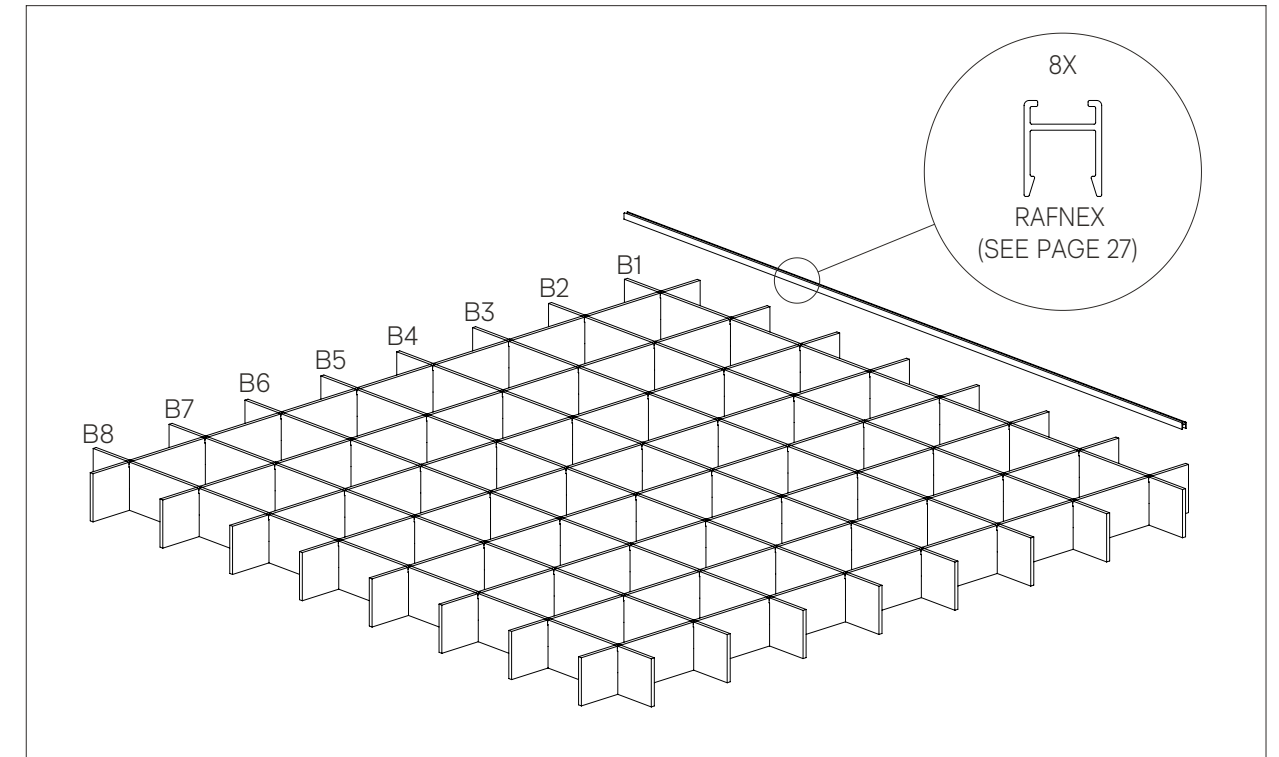
The Frontier Fin is now ready for installation to the ceiling.

1.



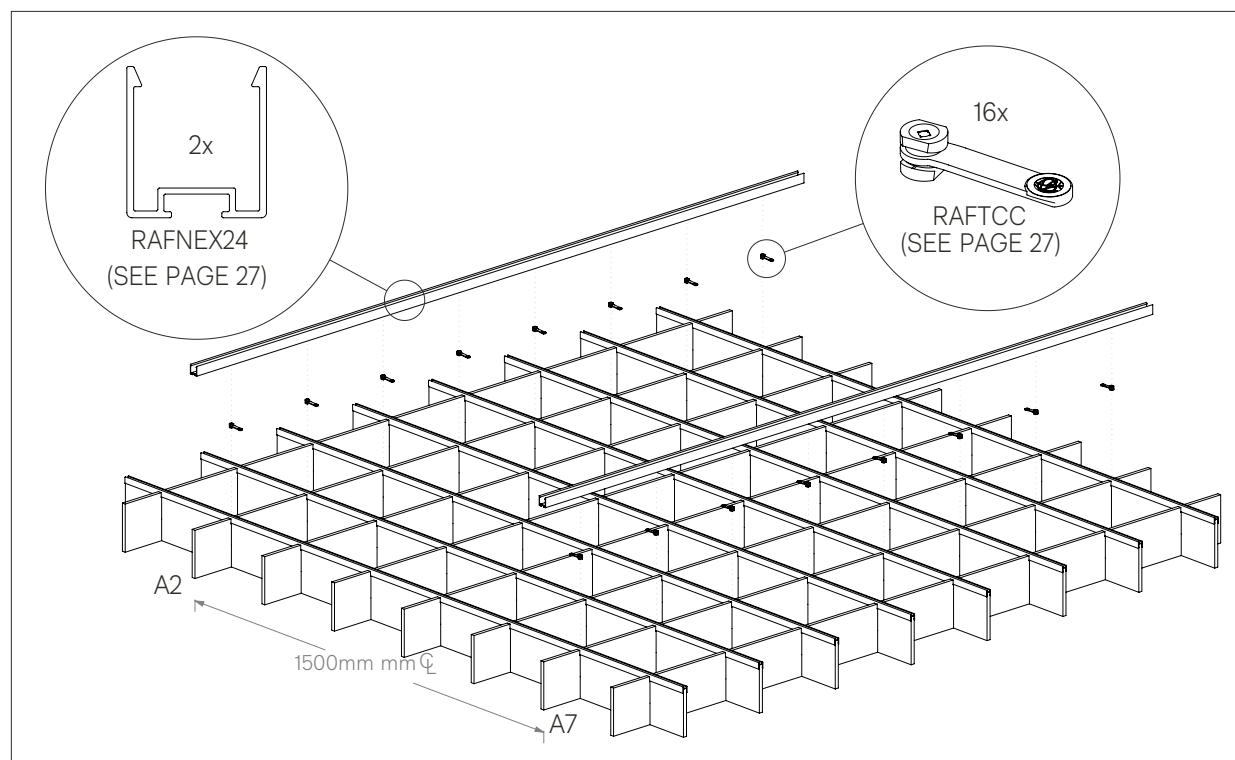
In the Frontier Axis pack there are two types of Fin (A and B). Part A has two notches and the small notch should be facing up when inserted into Part B.

2.



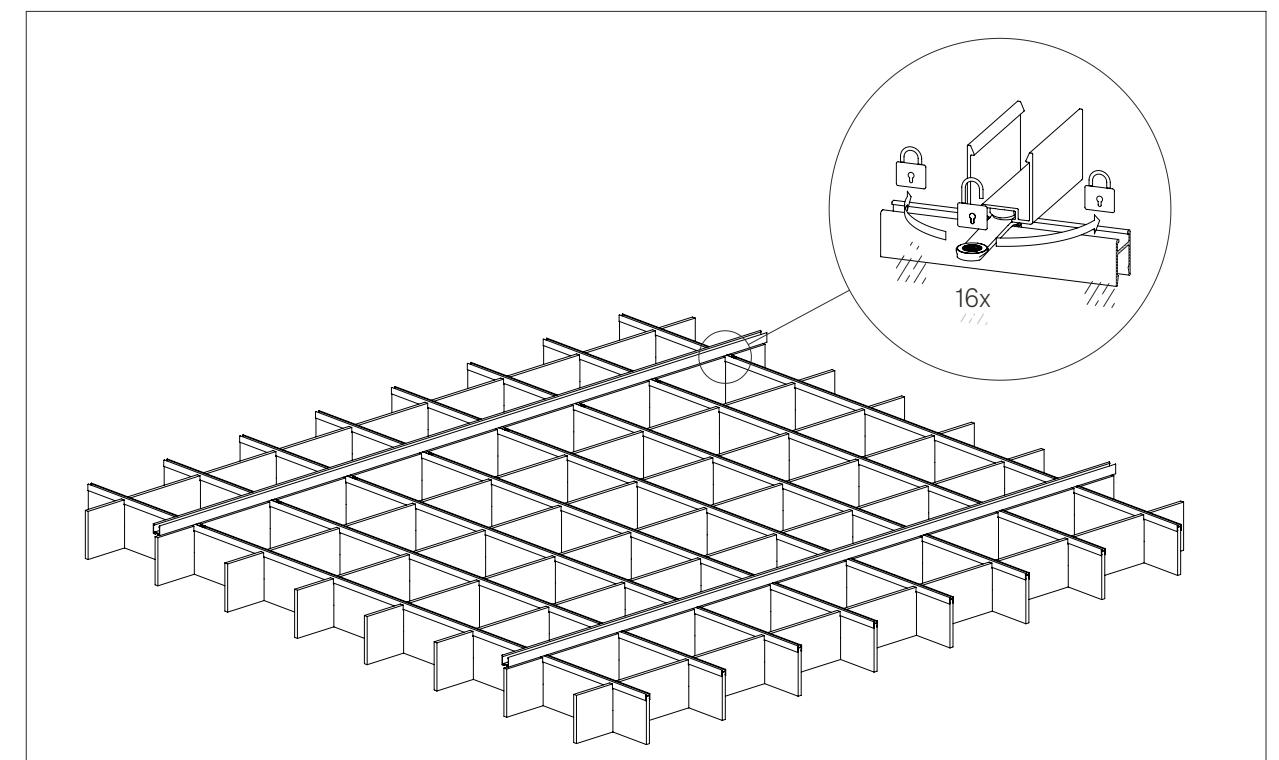
Using a rubber mallet, attach the 8x Rafnex channels along the lengths of the 'B' fins to lock the Axis Fins together in a grid.

3.

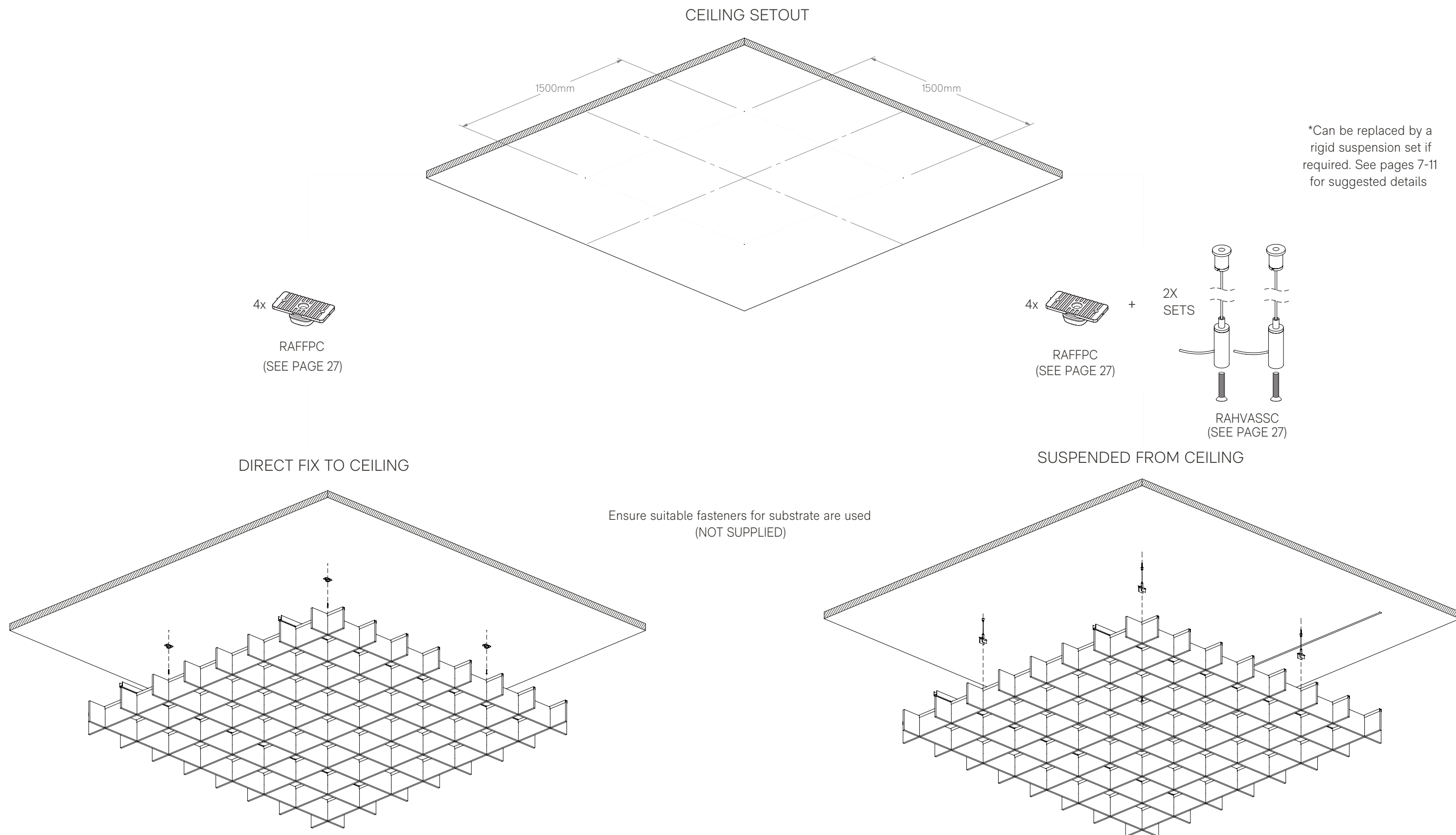


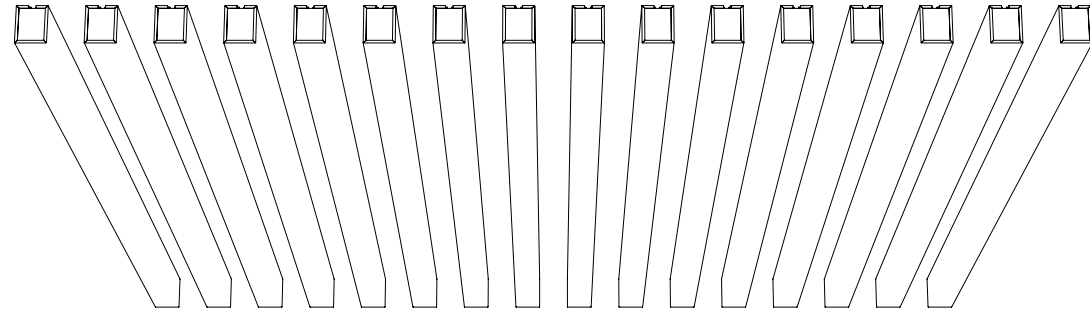
To attach the included 2x RAFNEX24 cross rails, first clip the 16x Autex Mounting Clips at the intersection points along the A2 and A7 Rails. Press the Crossrail onto the clips so they click into place.

4.

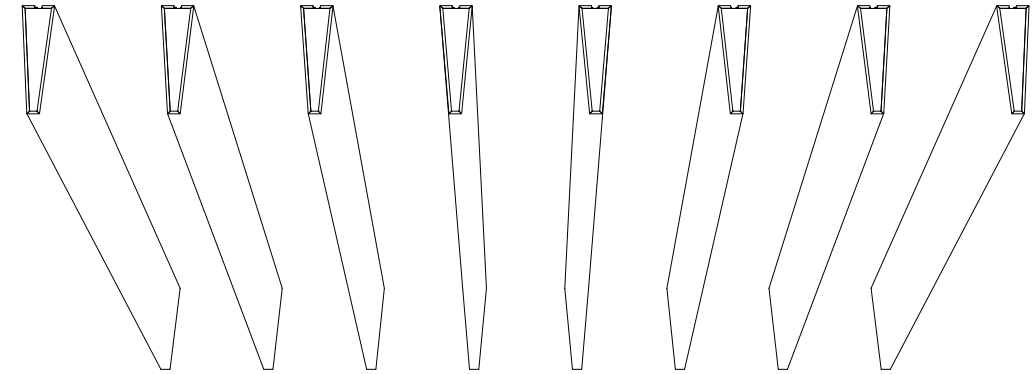


Twist the Autex Mounting Clips 90° to lock them off. The Frontier Axis Grid is now ready for installation to the ceiling.

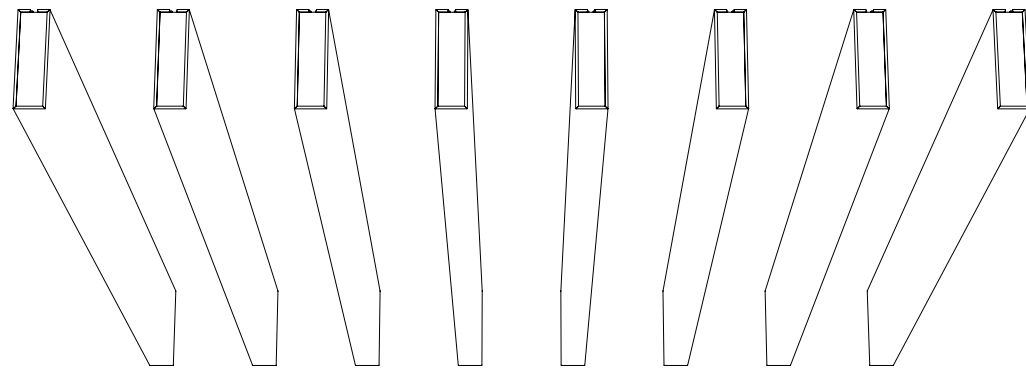




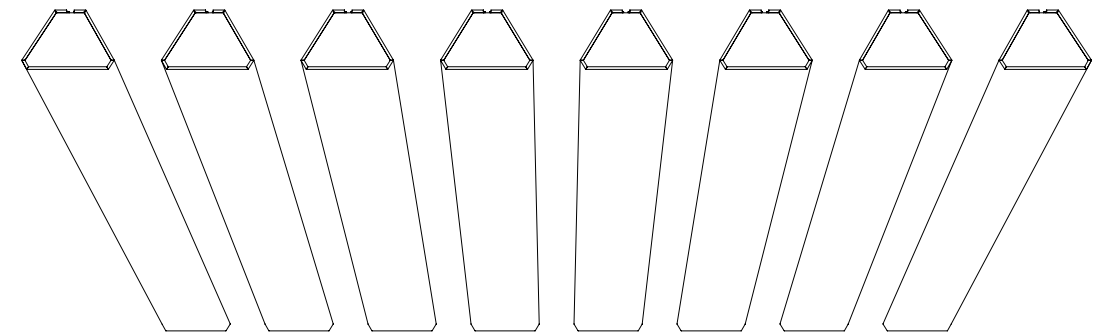
RAFT BEAM 100
2X PACKS SHOWN



RAFT BLADE
2X PACKS SHOWN

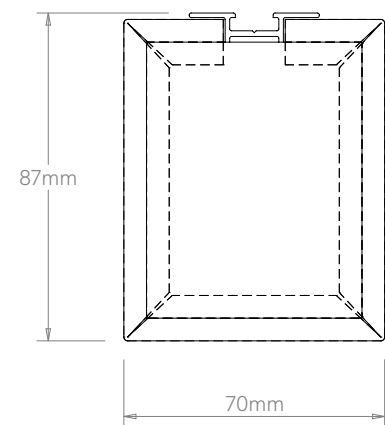


RAFT BEAM 250
2X PACKS SHOWN

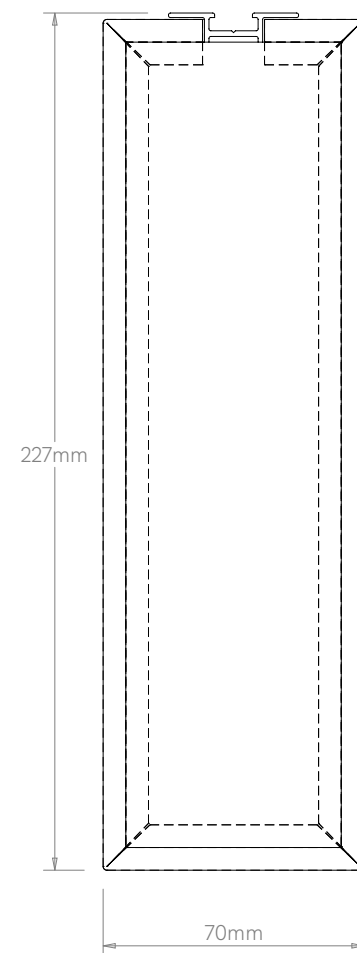


RAFT TRAPEZOID
2X PACKS SHOWN

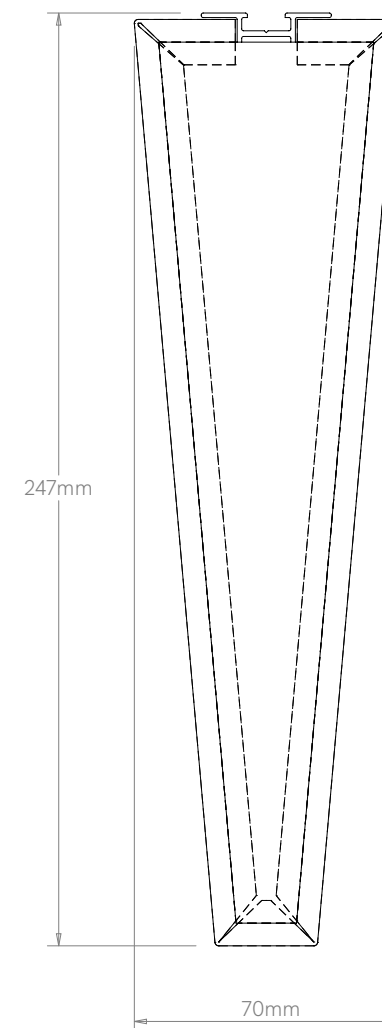
BEAM 100



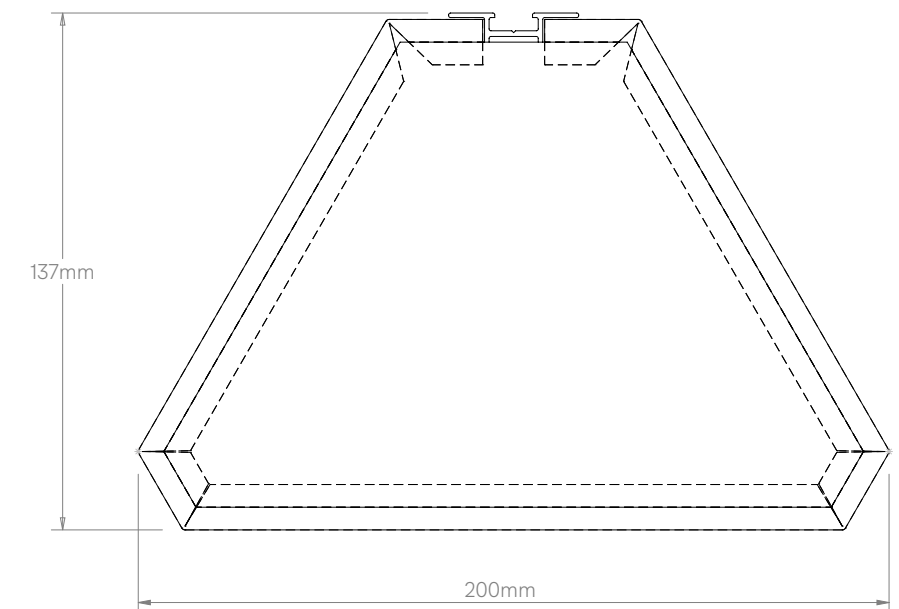
BEAM 250



BLADE

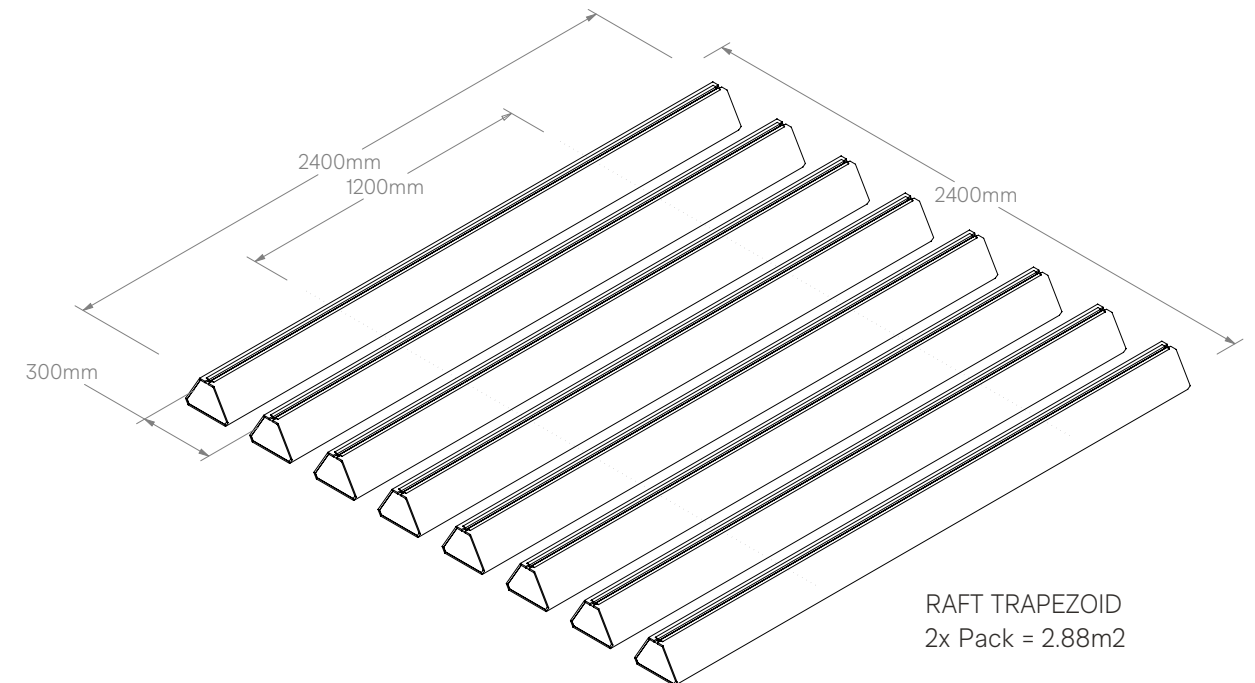
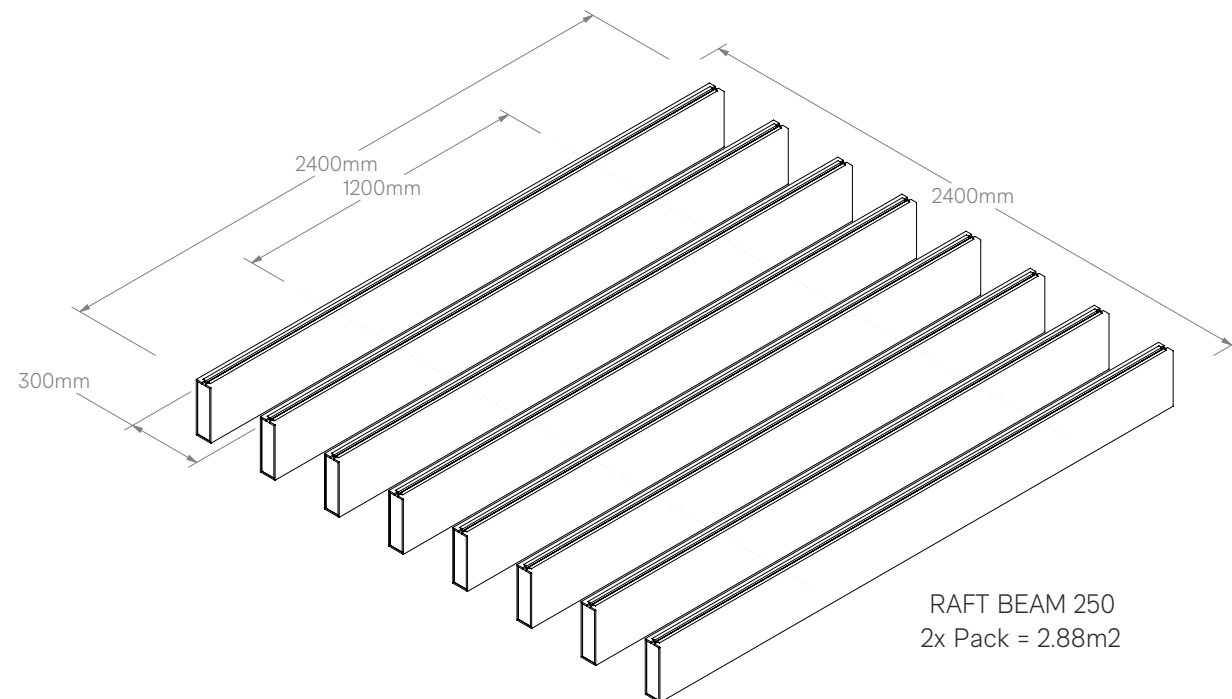
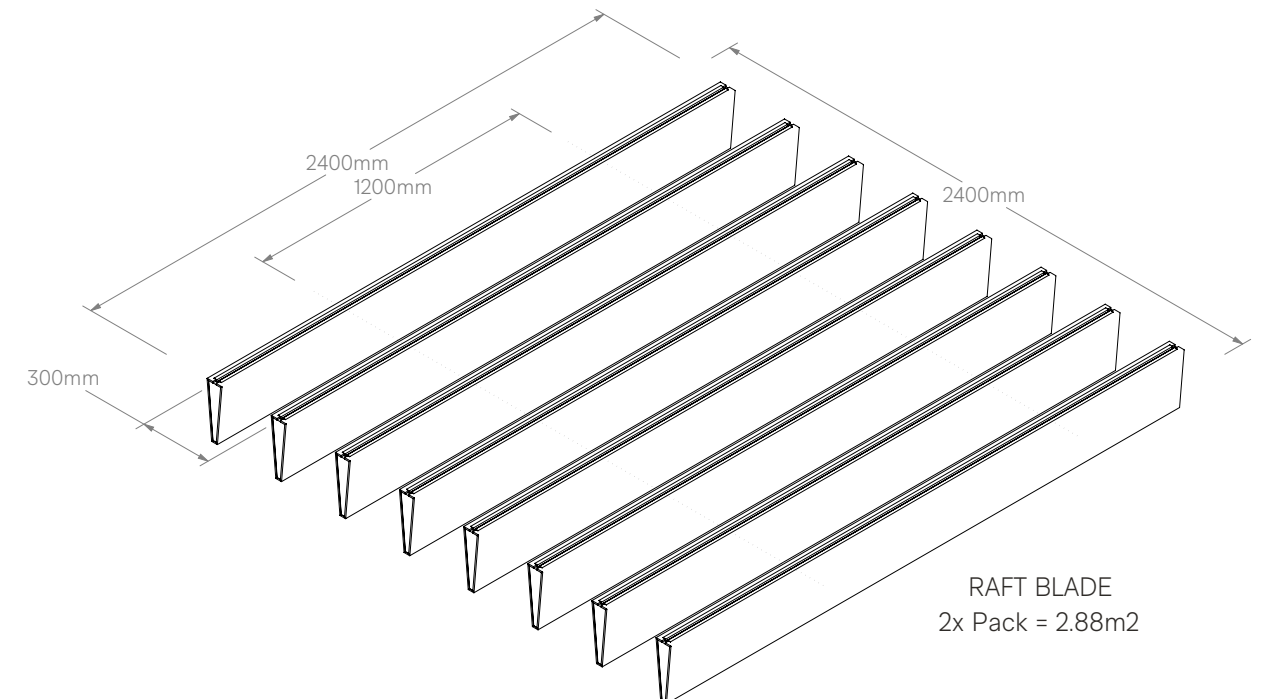
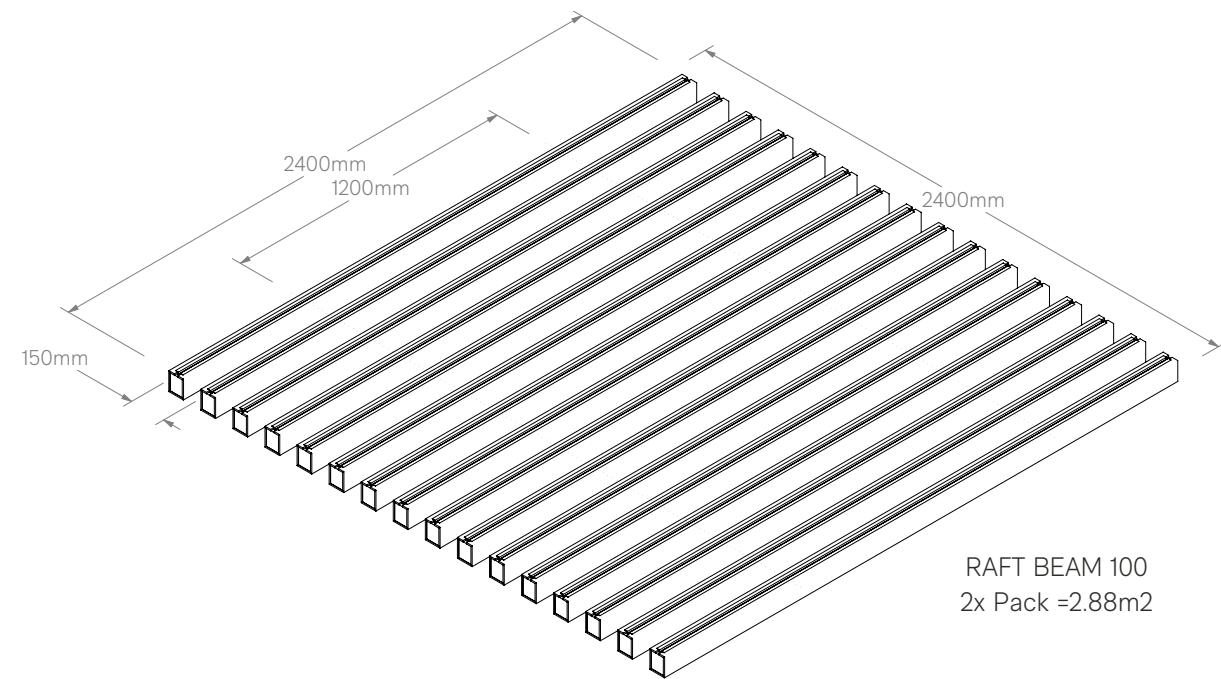


TRAPEZOID



NOTES

- Raft height is inclusive of the Autex frontier Raft Extrusion
- Refer to page 24 for recommended Raft spacing

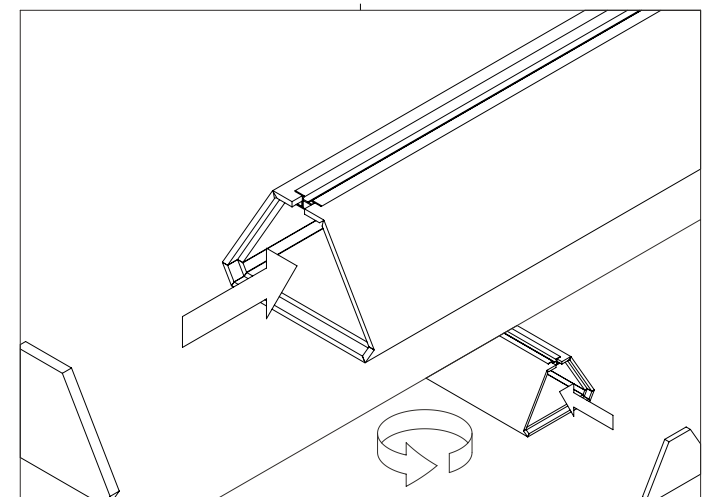
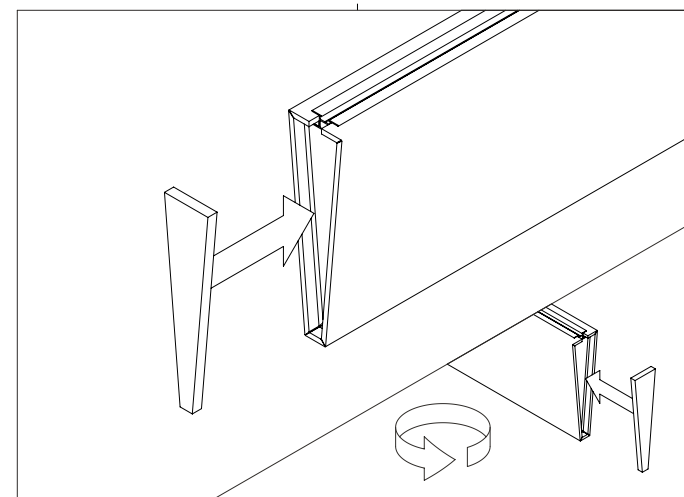
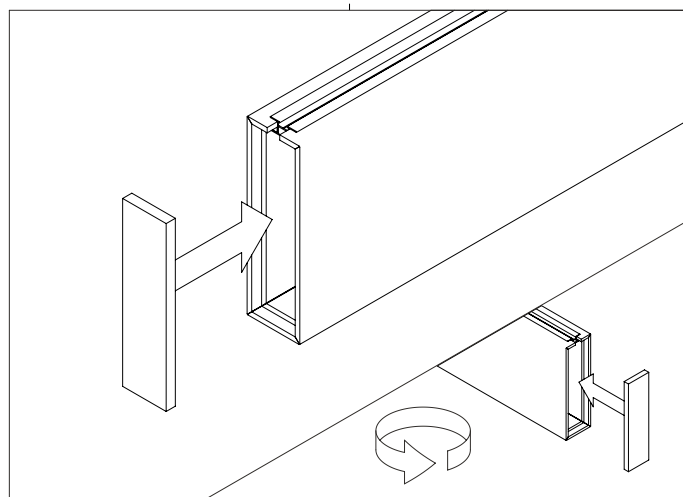
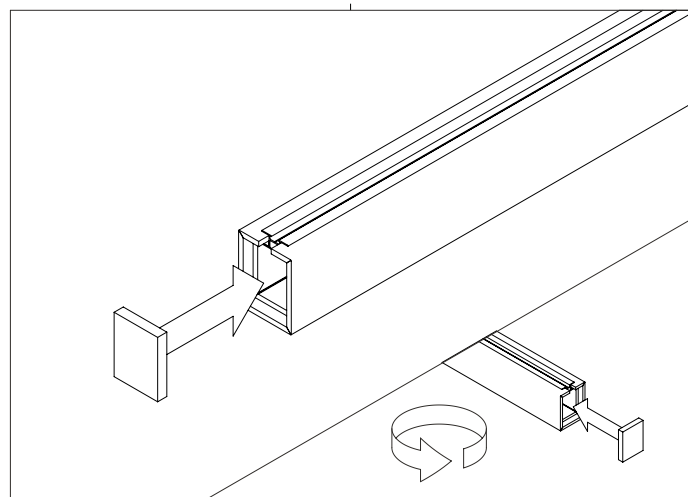
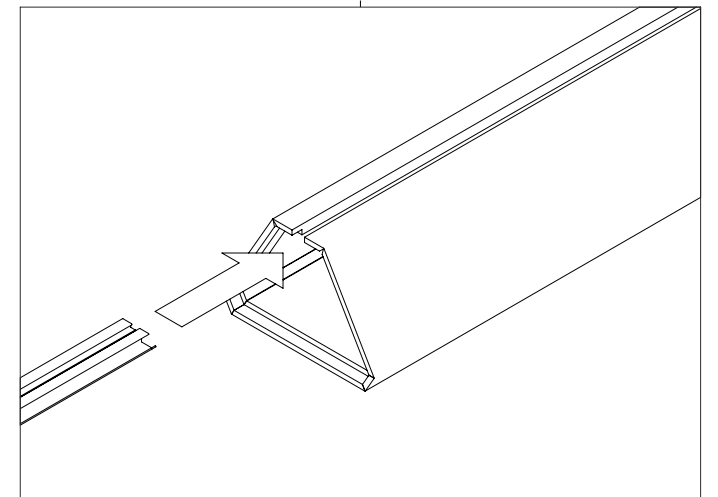
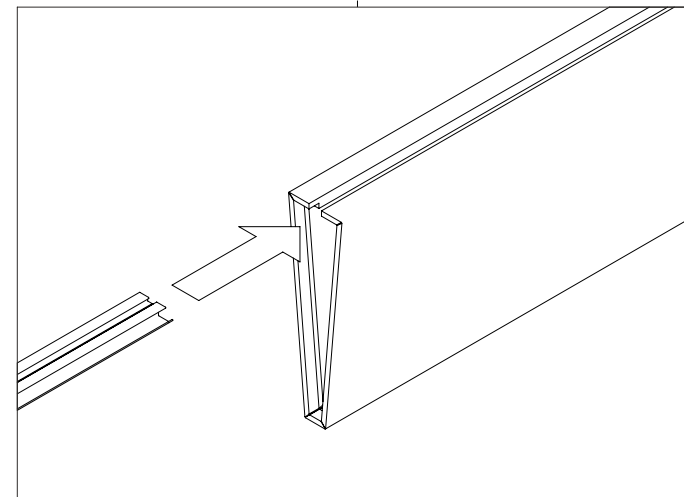
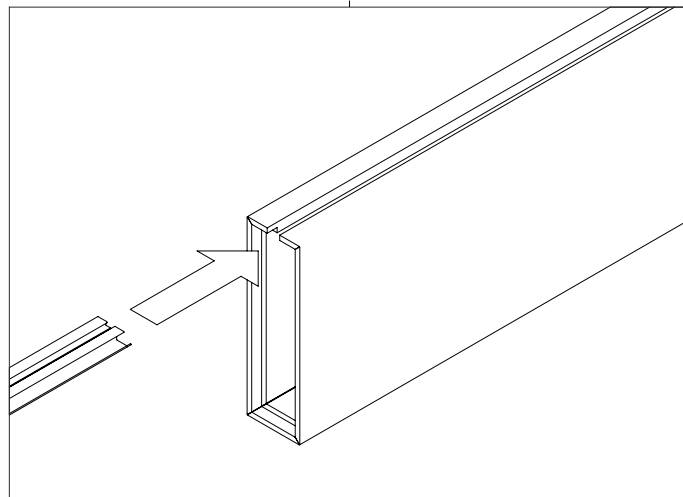
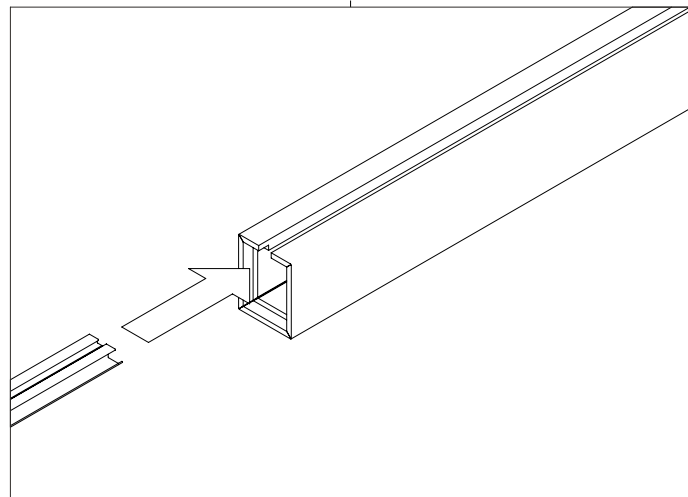
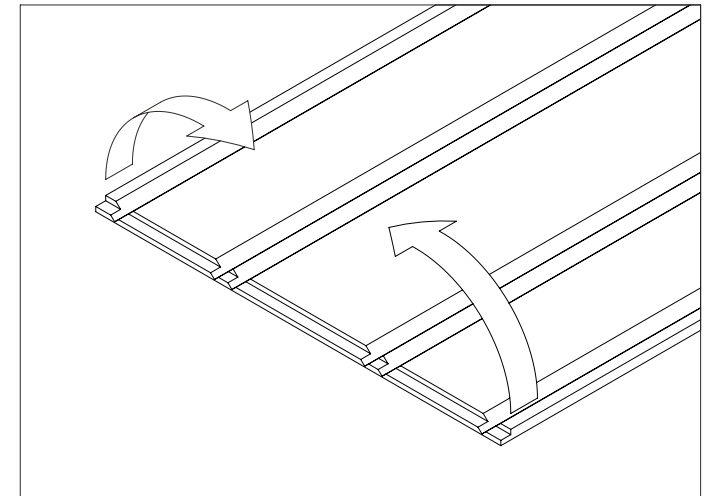
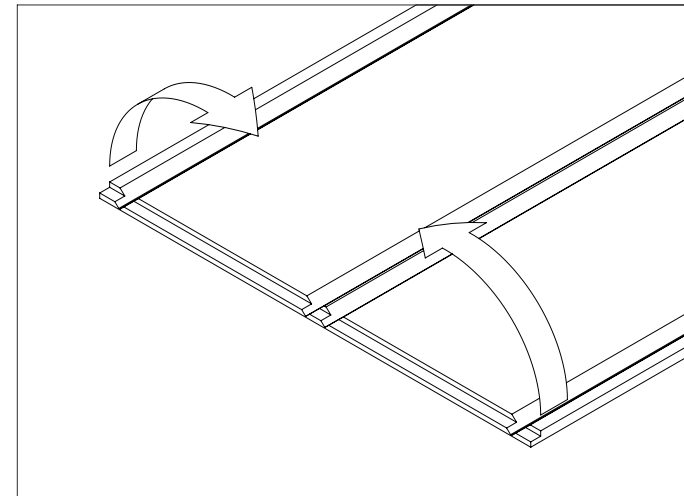
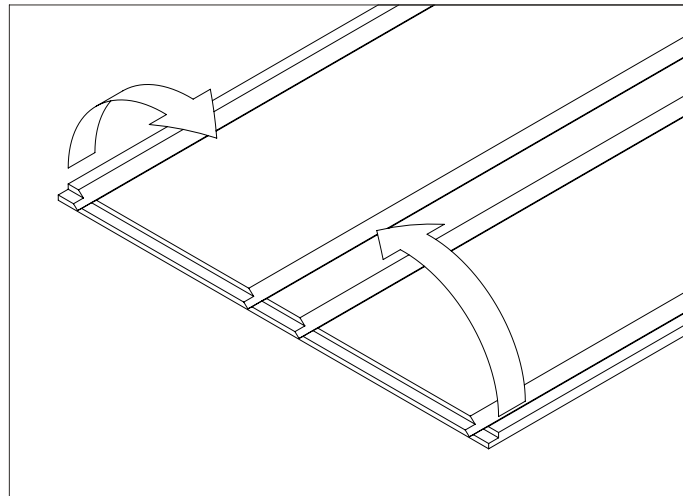
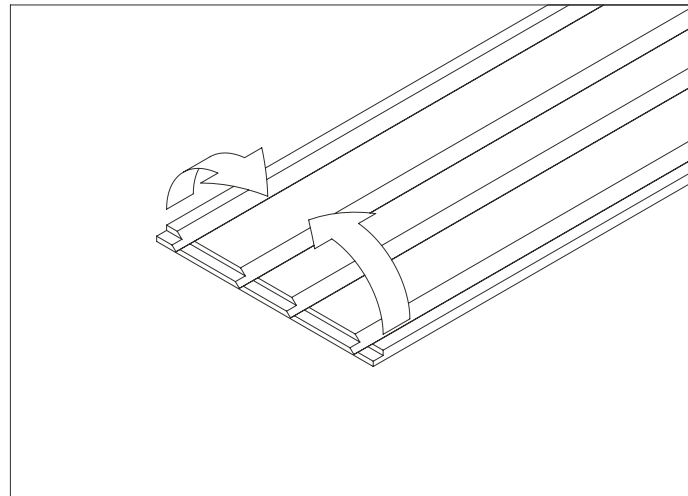


BEAM 100

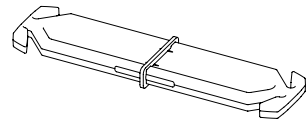
BEAM 250

BLADE

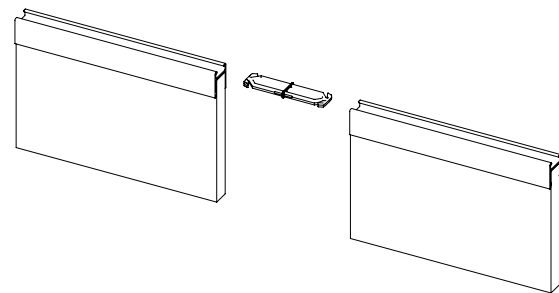
TRAPEZOID



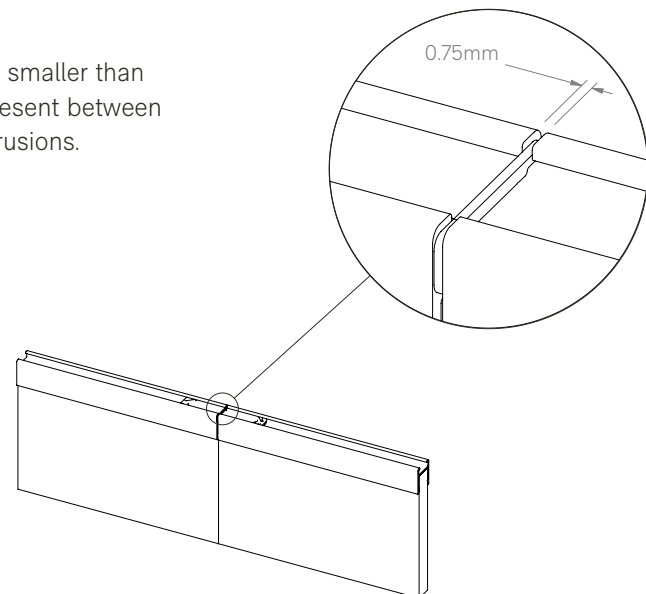
RAFCCT



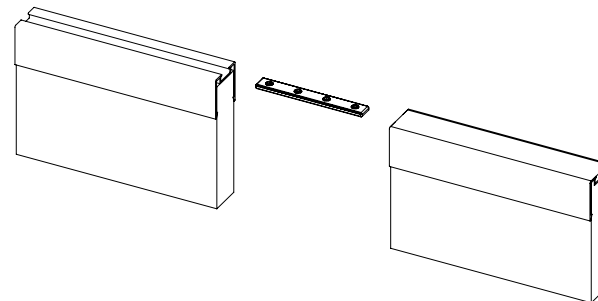
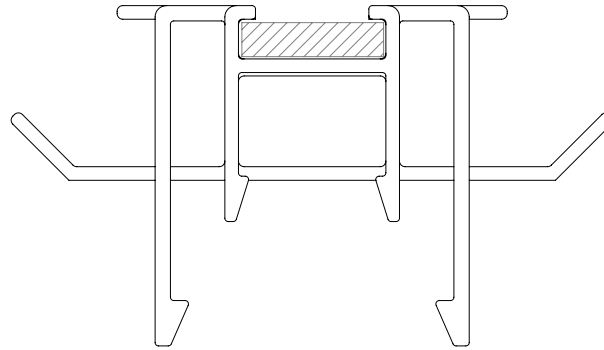
Light duty plastic connector used to join direct fixed rails.



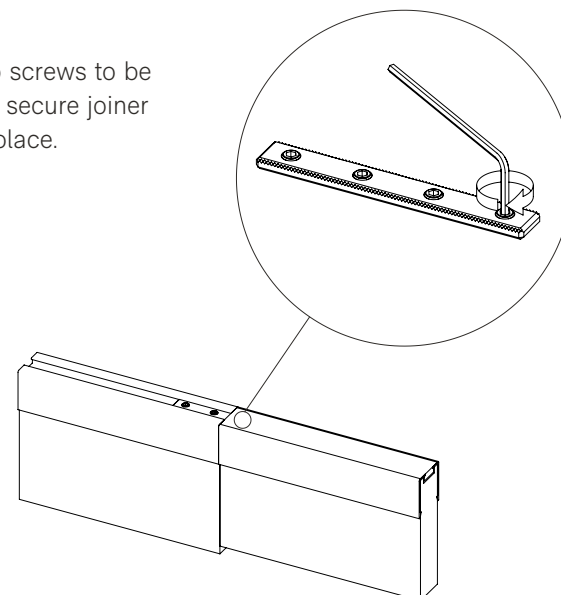
NOTE: A gap smaller than 1mm will be present between the extrusions.



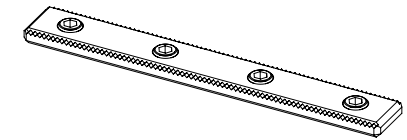
Both joiners are compatible with all extrusion sizes.



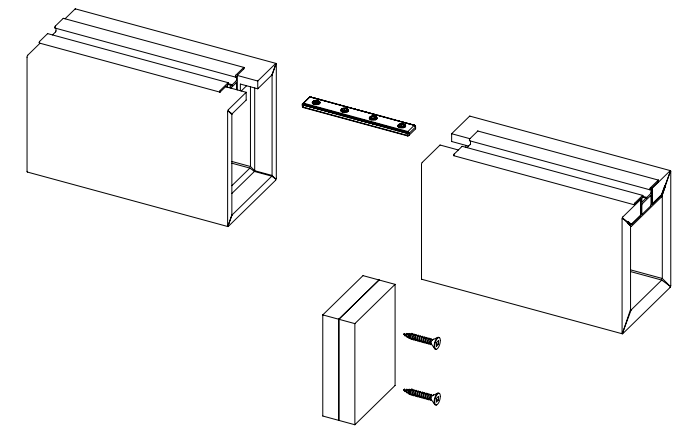
NOTE: Grub screws to be tightened to secure joiner in place.



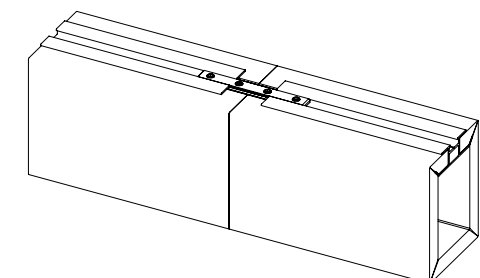
RAFHDCC

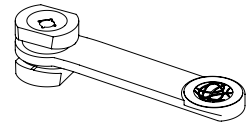


Heavy duty diecast connector with 4x grub screws used to join cross rails and/or suspended rails.

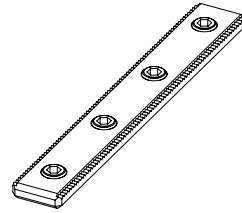


NOTE: In addition to joiner, screw the end caps together to create a cleaner join.

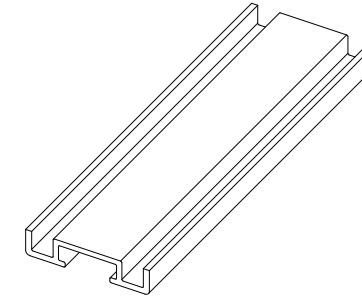




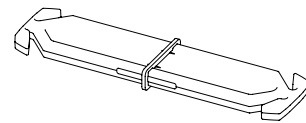
RAFTCC
Autex Mounting Clip



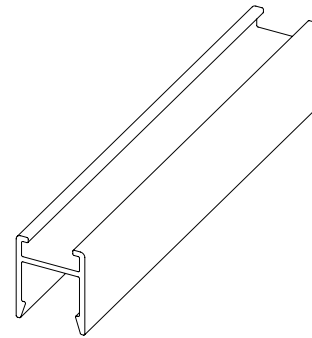
RAFHDCC
Autex Heavy Duty Frontier
Channel Connector with
4x M5 Grub Screws



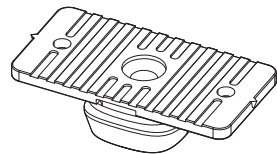
RATLP24
Frontier Low Profile Extrusion



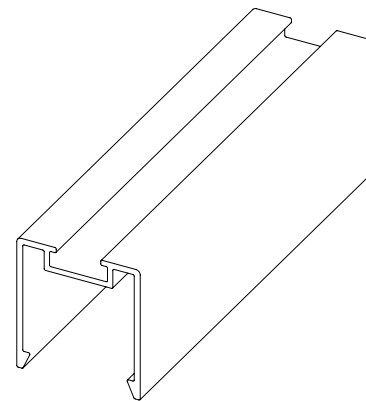
RAFCCT
Autex Frontier Channel Connector



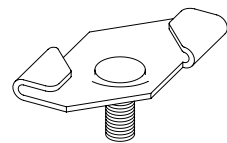
RAFEX
Frontier 12mm Extrusion



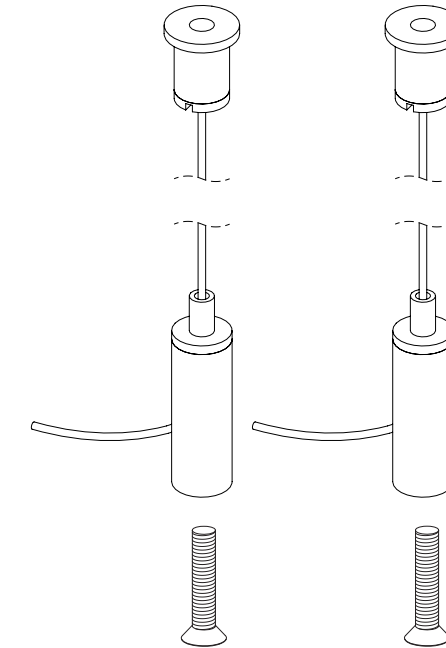
RAFFPC
Autex Floating Panel Connector



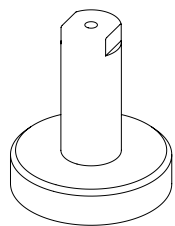
RAFEX24
Frontier 24mm Extrusion



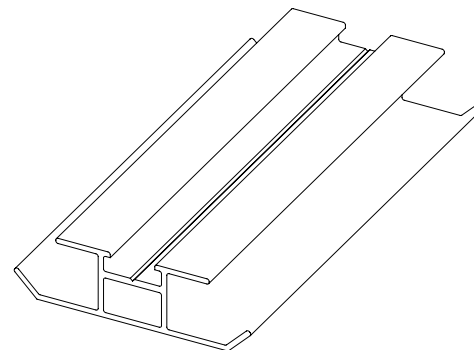
RAFM6GC
24mm Ceiling Grid Connector with
M6 Thread



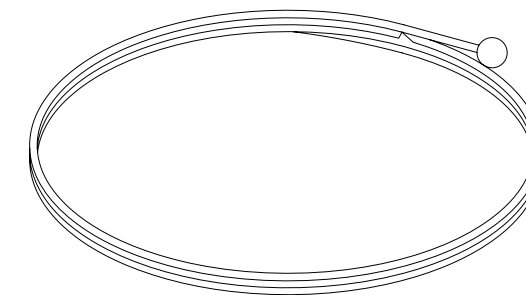
RAHVASSC
Autex Adjustable
Suspension Set 1m
cable - Channel Connection



RAFM6MP
Magnet Pot with M6 Thread and
Cable Adaptor

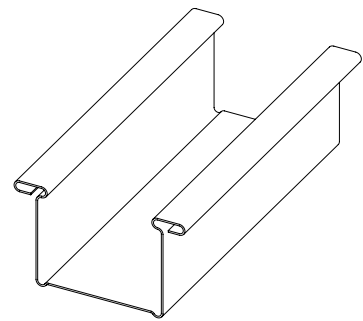


RAFEXRT
Frontier Raft Extrusion

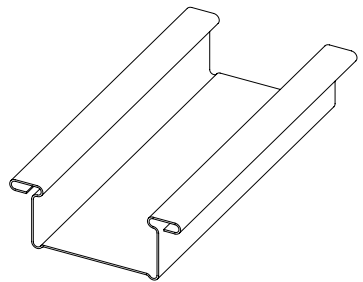


3m Steel Cable with Ball
End

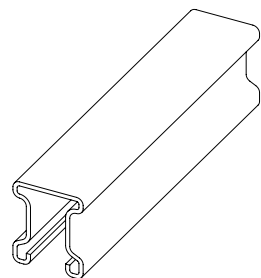
*Not supplied by
Autex, speak to Autex
Account Manager for
supplier options.



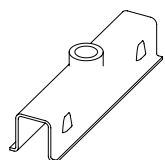
RONDO 129
28mm Furring Channel



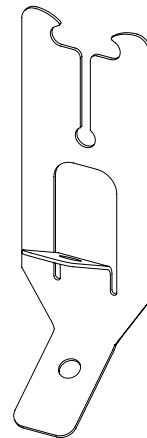
RONDO 308
16mm Furring Channel



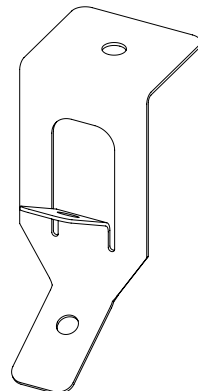
RONDO TCR 127
25mm Top Cross Rail



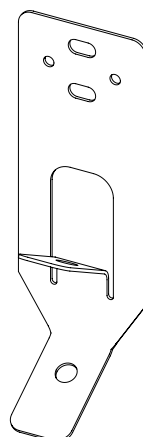
RONDO 119
U Clip



RONDO 2534
Top Cross Rail
Suspension Clip



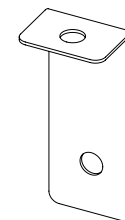
RONDO 547
Adjustable Suspension Hanger
(Concrete)



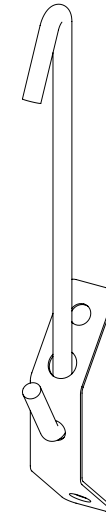
RONDO 534
Adjustable Suspension Hanger
(Purlins)



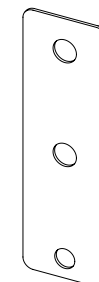
RONDO 121
5mm Soft Galvanised Suspension
Rod



RONDO 247
121 to Concrete



RONDO 719
Adjustable
Suspension Clip

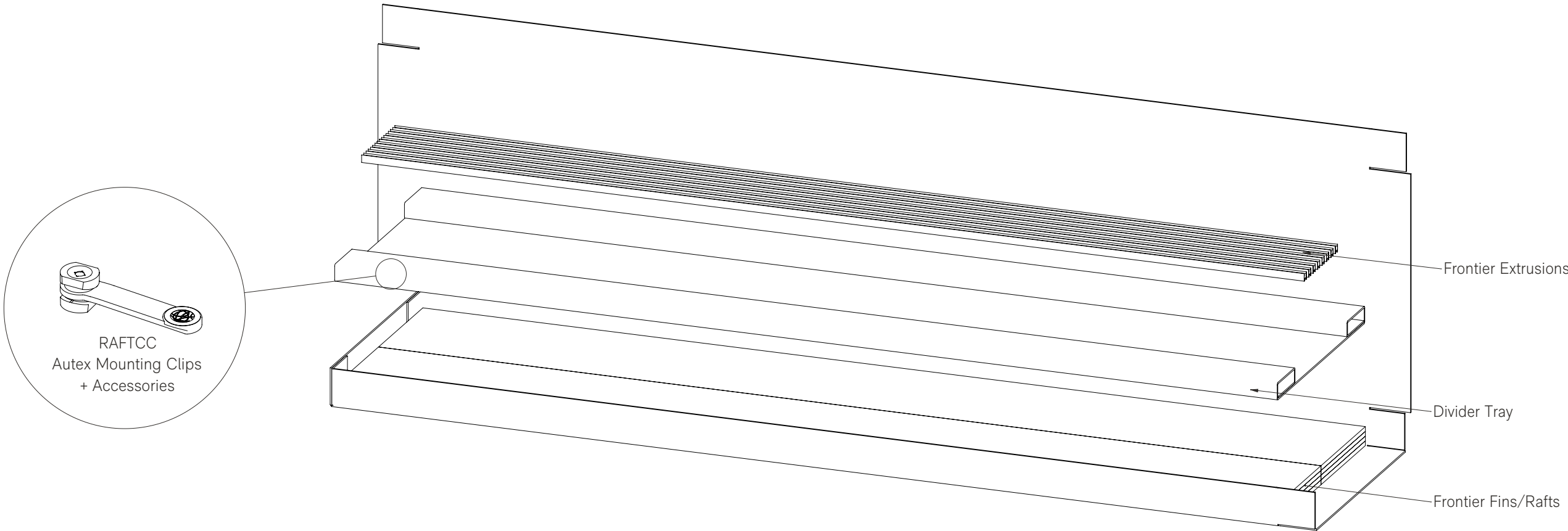


RONDO 274
121 to Timber
/Steel Joist

NOTE

Rondo components are supplied by a 3rd party and may not be available in all territories.

Other brands may have comparable components. Check with your account manager.



STYLE	FIN LENGTH (mm)	FIN THICKNESS (mm)	FIN DEPTH** (mm)	FIN SPACING (mm)	FINS PER PACK	MOUNTING CLIPS	AREA PER PACK (m²)
TUNDRA	2400	12	100	100	24	48	5.76
	2400	12	150	150	16	32	5.76
	2400	12	200	200	12	24	5.76
	2400	12	300	300	8	16	5.76
	2400	24***	100	100	12	24	2.88
	2400	24***	150	150	8	16	2.88
	2400	24***	200	200	6	12	2.88
	2400	24***	300	300	4	8	2.88
WAVE/DRAPE/ RIPPLE/GLIDE	2400	12	150	150	16	32	5.76
	2400	24***	150	150	8	16	2.88
DUNE/SIERRA/TALUS	2400	12	300*	300	8	16	5.76
	2400	24***	300*	300	4	8	2.88
AXIS	2400	12	150	300	16	16	5.76
RAFT STYLE	RAFT LENGTH (mm)	RAFT WIDTH (mm)	RAFT DEPTH** (mm)	RAFT SPACING (mm)	RAFTS PER PACK	MOUNTING CLIPS	AREA PER PACK (m²)
BEAM 100	2400	70	87	150	8	16	2.88
BEAM 250	2400	70	227	300	4	8	2.88
BLADE	2400	70	247	300	4	8	2.88
TRAPEZOID	2400	200	137	300	4	8	2.88

*The Fin Depth of DUNE/SIERRA/TALUS fins vary but average out to 300mm

**Fin/Raft Depth is inclusive of extrusion

***24mm packs cover half a 2.4m x 2.4m ceiling. Two packs are needed for a full assembly.