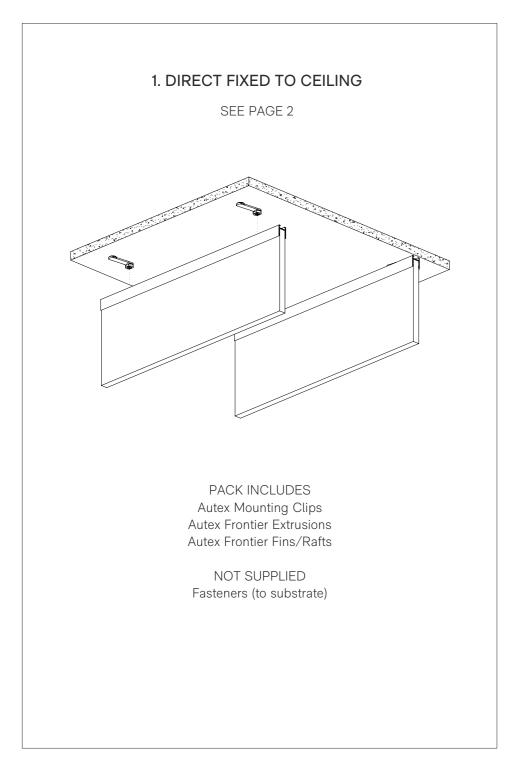
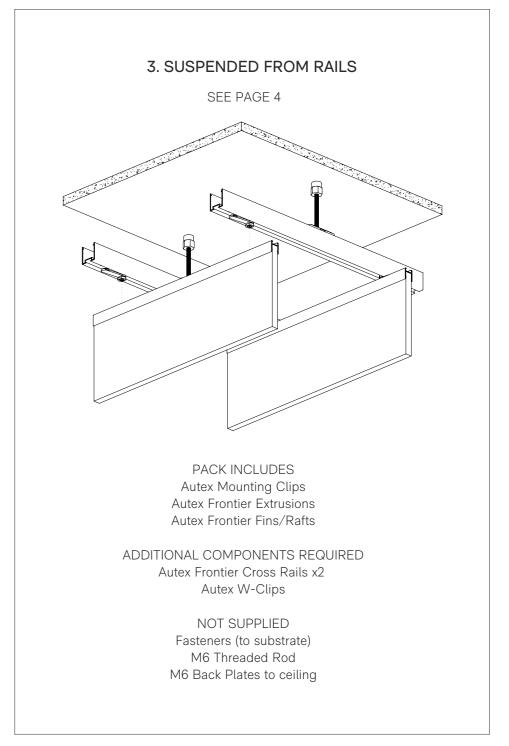


US Patent 10,113,312

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

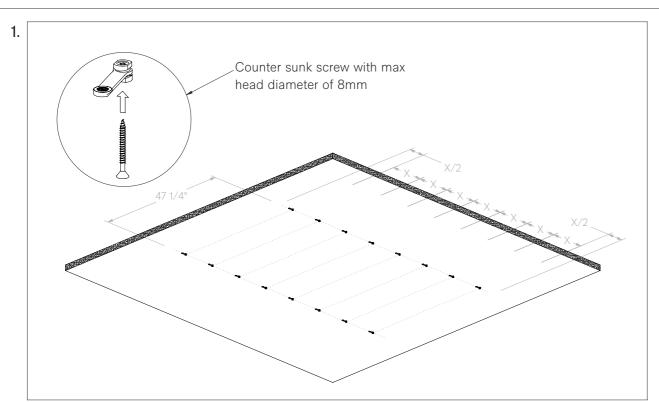




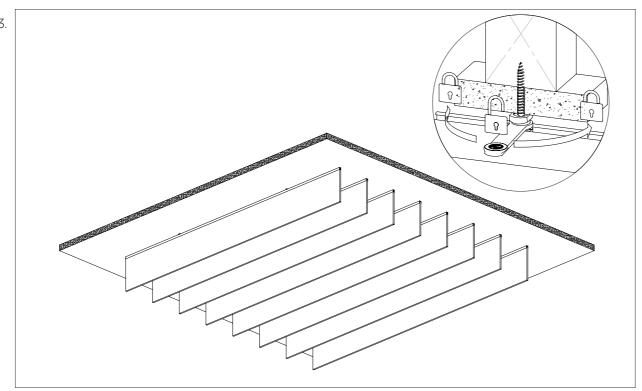


For suspended installations it is strongly recommended to consult a building engineer for seismic considerations. See Pages 23-29 for suggested details. For all installations in sprinklered buildings, consult a fire engineer to ensure the intended position of the Frontier Fins/Rafts meet sprinkler and alarm standards. Further detail on the fire standards can be found in the supplemental document "Fire Considerations for Autex Frontier Acoustic Fins".

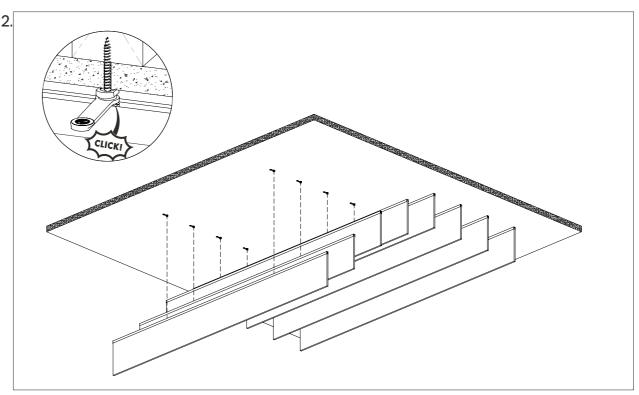
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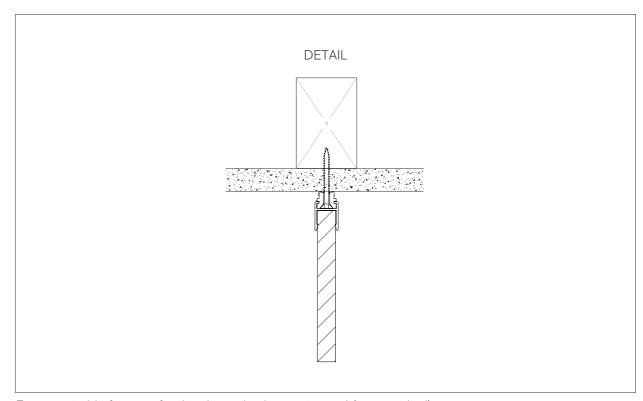
Mark out your ceiling at the recommended spacing for your chosen product (refer to table on page 5 for details). Screw the Autex Mounting Clips into the ceiling using screws suitable for the substrate (not supplied).



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

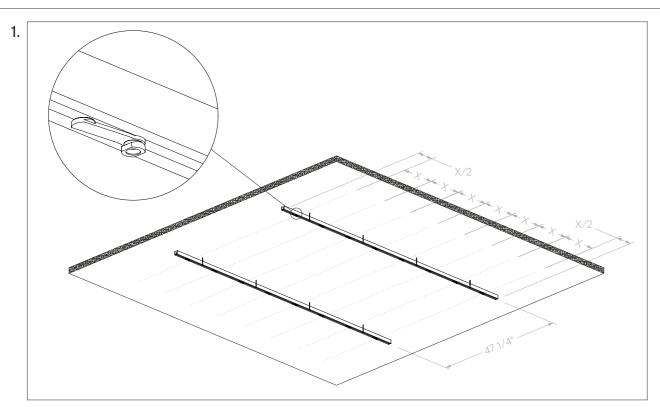


Lift the assembled Fins/Rafts into place and click them onto the Autex Mounting Clips. Turn the clips 45 Deg to temporarily hold the Fin/Raft in place while allowing adjustment along the length.

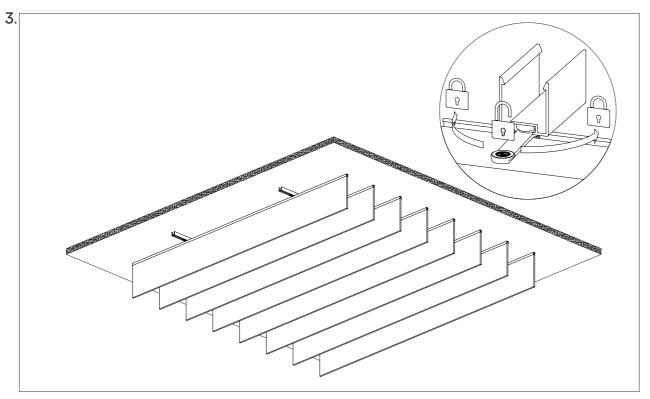


Ensure suitable fastener for the clip and substrate is used (not supplied).

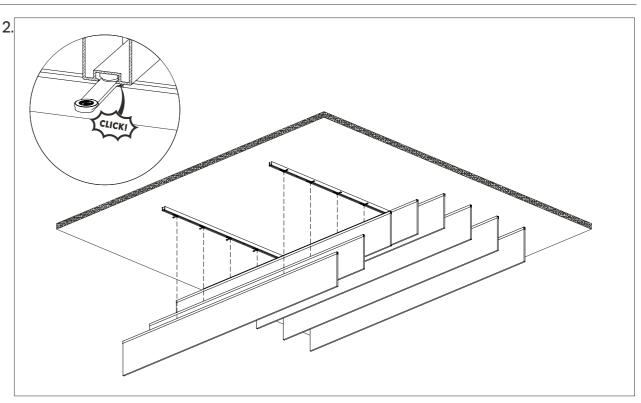
Page 2 of 29



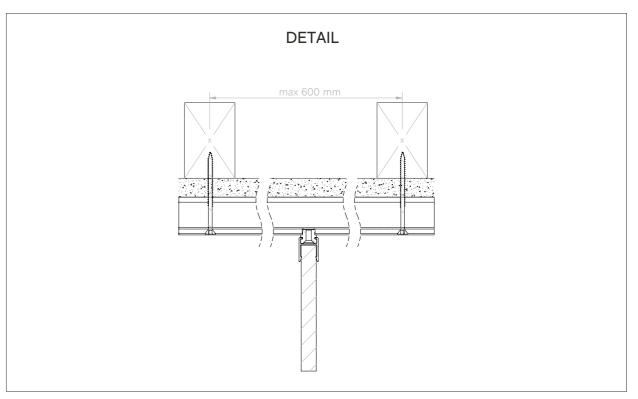
Mark out the ceiling and screw in 2x cross rails at 47 1/4" centres using screws suitable for the substrate (not supplied) at max centres of 24". Insert the Autex Mounting Clips at the desired fin spacing. Fin spacing can be marked on the cross rails prior to installation. (Refer to table on page 5 for details).



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



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

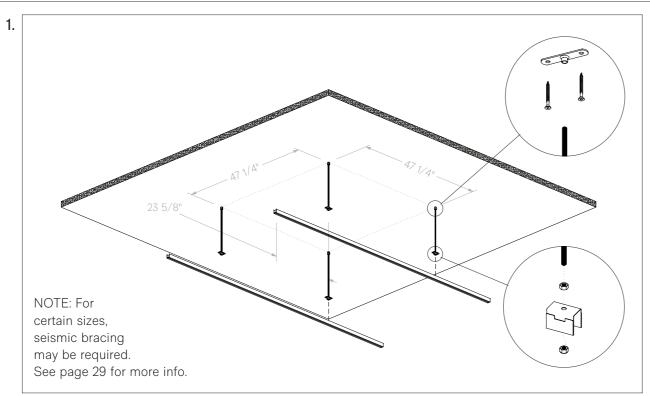


Ensure suitable fastener for the clip, rail and substrate is used. For additional security, the Autex Mounting Clips can be screwed into the cross rail.

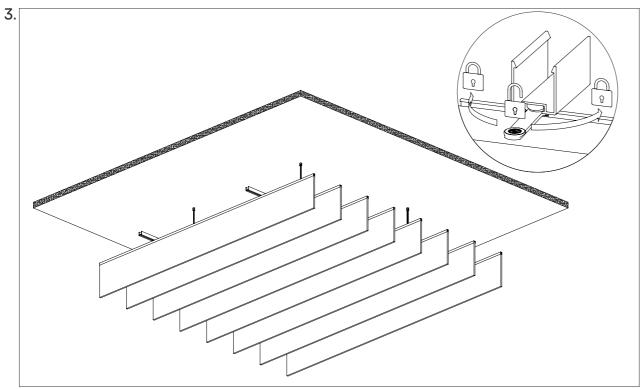
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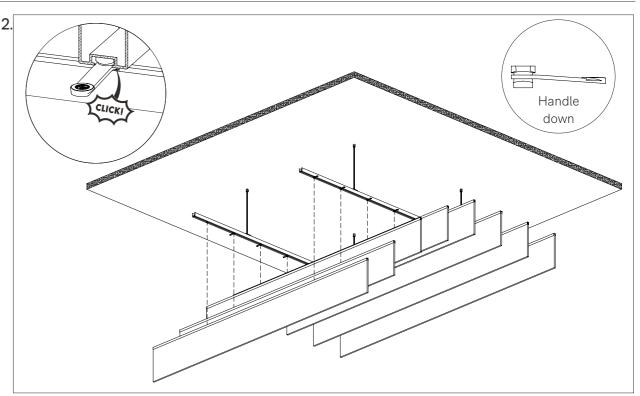




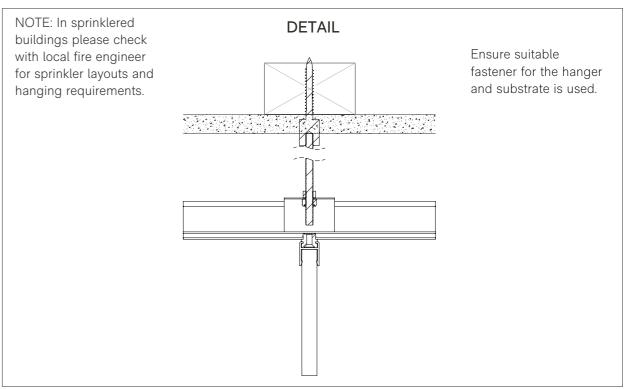
Mark out the ceiling and screw in 4x backing plates suitable for 1/4" threaded rod in a 47 1/4" x 47 1/4" square using screws suitable for the substrate (not supplied). Fin spacing can be marked on the cross rails prior to being clipped onto the Removable W-Clips. (Refer to table on page 5 for details).



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.



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 Deg to temporarily hold the Fin/Raft in place while allowing adjustment along the length.



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.

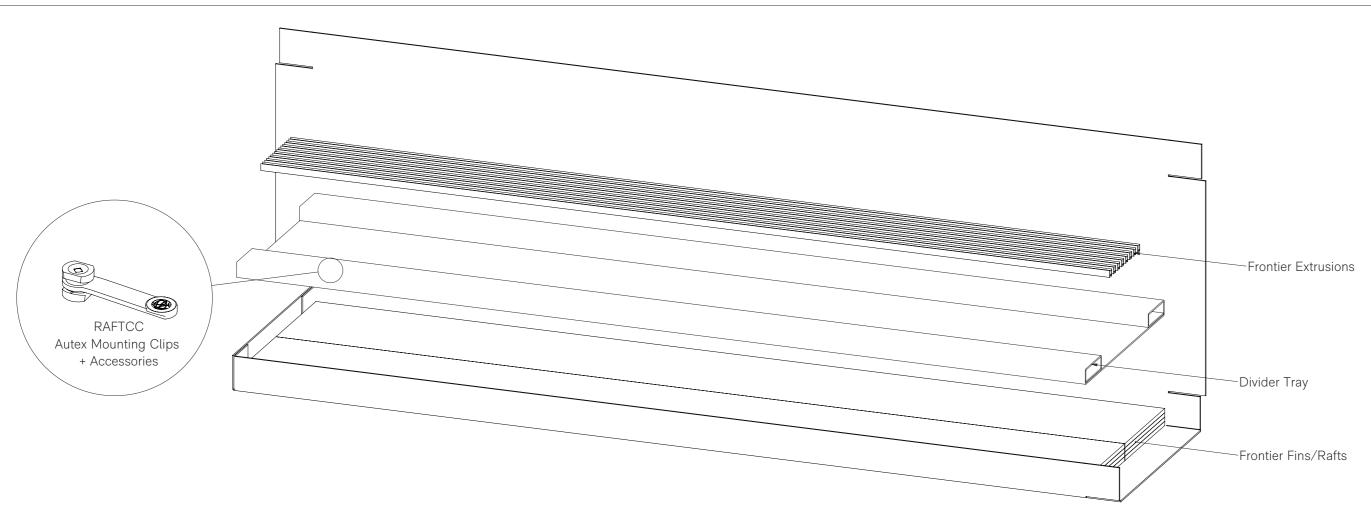
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31





FIN LENGTH (IN)	FIN THICKNESS (IN)	FIN DEPTH**(IN)	FIN SPACING (IN)	FINS PER PACK	CHANNELS PER PACK	MOUNTING CLIPS	CONNECTOR TABS	AREA PER PACK (SQFT)
94 1/2"	1/2"	4"	4"	24	24	48	24	62
94 1/2"	1/2"	6"	6"	16	16	32	16	62
94 1/2"	1/2"	8"	8"	12	12	24	12	62
94 1/2"	1/2"	12"	12"	8	8	16	8	62
94 1/2"	1"	4"	4"	12	12	24	12	31
94 1/2"	1"	6"	6"	8	8	16	8	31
94 1/2"	1"	8"	8"	6	6	12	6	31
94 1/2"	1"	12"	12"	4	4	8	4	31
			•				•	
94 1/2"	1/2"	12"*	12"	8	8	16	8	62
94 1/2"	1"	12"*	12"	4	4	8	4	31
94 1/2"	1/2"	6"	12"	16	8	16	N/A	62
		DAET DEDTILITATION	DAFT ODA OINIO (INI)	DAFTC DED DACK	CHANNELS PER PACK	MOUNTING CLIPS	CONNECTOR TABS	ADEA DED DAOK (COET)
RAFT LENGTH (IN)	RAFT WIDTH (IN)	RAFT DEPTH** (IN)	RAFT SPACING (IN)	RAFTS PER PACK	CHANNELS PER PACK	MOUNTING CLIPS	CONNECTOR TABS	AREA PER PACK (SQFT)
	94 1/2" 94 1/2" 94 1/2" 94 1/2" 94 1/2" 94 1/2" 94 1/2" 94 1/2" 94 1/2" 94 1/2" 94 1/2" 94 1/2"	94 1/2" 1/2" 94 1/2" 1/2" 94 1/2" 1/2" 94 1/2" 1/2" 94 1/2" 1" 94 1/2" 1" 94 1/2" 1" 94 1/2" 1" 94 1/2" 1" 94 1/2" 1" 94 1/2" 1" 94 1/2" 1" 94 1/2" 1/2" 94 1/2" 1/2"	94 1/2" 1/2" 4" 94 1/2" 1/2" 6" 94 1/2" 1/2" 8" 94 1/2" 1/2" 12" 94 1/2" 1" 4" 94 1/2" 1" 6" 94 1/2" 1" 8" 94 1/2" 1" 12" 94 1/2" 1" 12" 94 1/2" 1" 12"* 94 1/2" 1" 12"*	94 1/2" 1/2" 4" 4" 94 1/2" 1/2" 6" 6" 94 1/2" 1/2" 8" 8" 94 1/2" 1/2" 12" 12" 94 1/2" 1" 4" 4" 94 1/2" 1" 6" 6" 94 1/2" 1" 8" 8" 94 1/2" 1" 12" 12" 94 1/2" 1/2" 12" 12" 94 1/2" 1" 12" 12"	94 1/2" 1/2" 4" 4" 24 94 1/2" 1/2" 6" 6" 16 94 1/2" 1/2" 8" 8" 12 94 1/2" 1/2" 12" 12" 8 94 1/2" 1" 4" 4" 12 94 1/2" 1" 6" 6" 8 94 1/2" 1" 8" 8" 6 94 1/2" 1" 12" 12" 4	94 1/2" 1/2" 4" 4" 24 24 94 1/2" 1/2" 6" 6" 16 16 94 1/2" 1/2" 8" 8" 12 12 94 1/2" 1/2" 12" 8 8 94 1/2" 1" 4" 4" 12 12 94 1/2" 1" 6" 6" 8 8 94 1/2" 1" 8" 8" 6 6 94 1/2" 1" 12" 12" 4 4 94 1/2" 1/2" 12" 8 8 94 1/2" 1/2" 12" 8 8 94 1/2" 1/2" 12" 4 4	94 1/2" 1/2" 4" 4" 24 24 48 94 1/2" 1/2" 6" 6" 16 16 32 94 1/2" 1/2" 8" 8" 12 12 24 94 1/2" 1/2" 12" 12" 8 8 16 94 1/2" 1" 4" 4" 12 12 24 94 1/2" 1" 4" 4" 12 12 24 94 1/2" 1" 6" 6" 8 8 16 94 1/2" 1" 8" 8 16 16 12 94 1/2" 1" 8" 8" 6 6 12 12 94 1/2" 1" 12" 12" 4 4 8 94 1/2" 1" 12" 8 8 16 94 1/2" 1" 12" 4 4 8	94 1/2"

*The Fin Depth of DUNE/SIERRA/TALUS fins vary but average out to 12"

3 3/4"

4 3/4"

9"

9 1/2"

5 1/2"

94 1/2"

94 1/2"

94 1/2"

BEAM 250

BLADE

TRAPEZOID

12"

12"

12"

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4

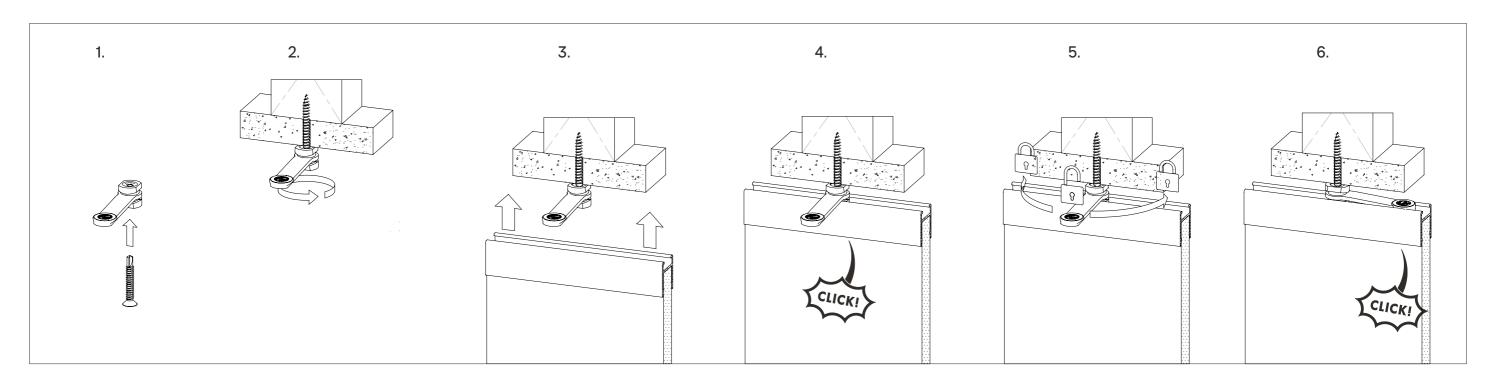
4

4

^{**}Fin Depth/Raft Depth is inclusive of extrusion

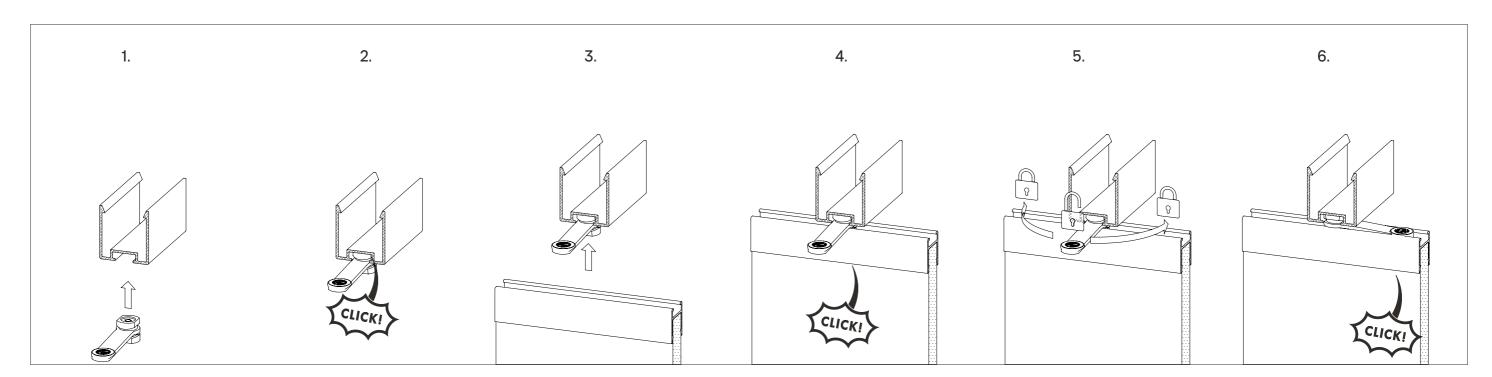


DIRECT FIX TO CEILING



1/2" Frontier Fin shown in example. Repeat the same process for Frontier 1" Fin and Frontier Raft

DIRECT FIX TO RAIL/SUSPENDED FROM RAIL



1/2" Frontier Fin shown in example. Repeat the same process for Frontier 1" Fin and Frontier Raft

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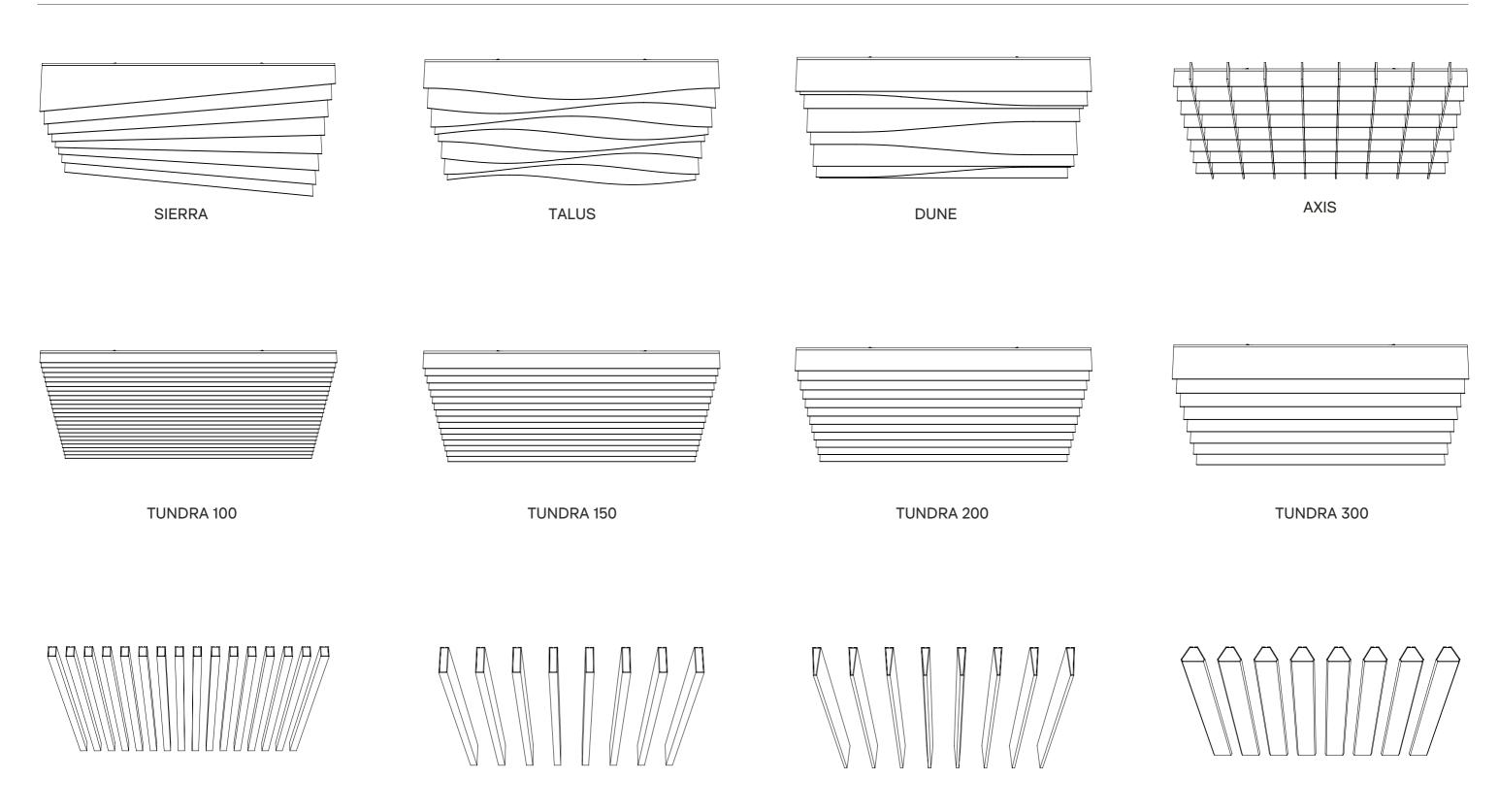
RAFT TRAPEZOID

2X PACKS SHOWN



RAFT BEAM 100

2X PACKS SHOWN



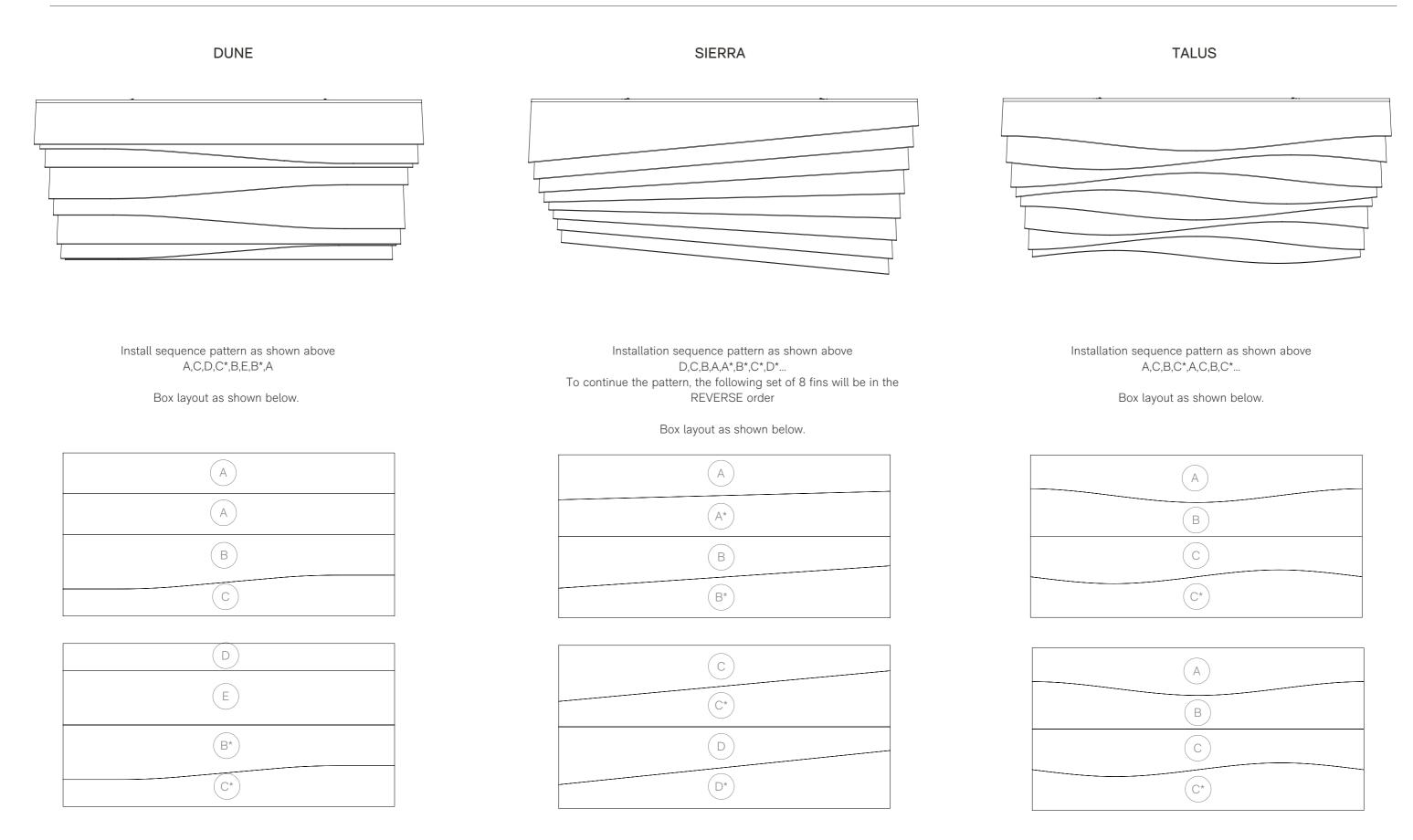
RAFT BLADE

2X PACKS SHOWN

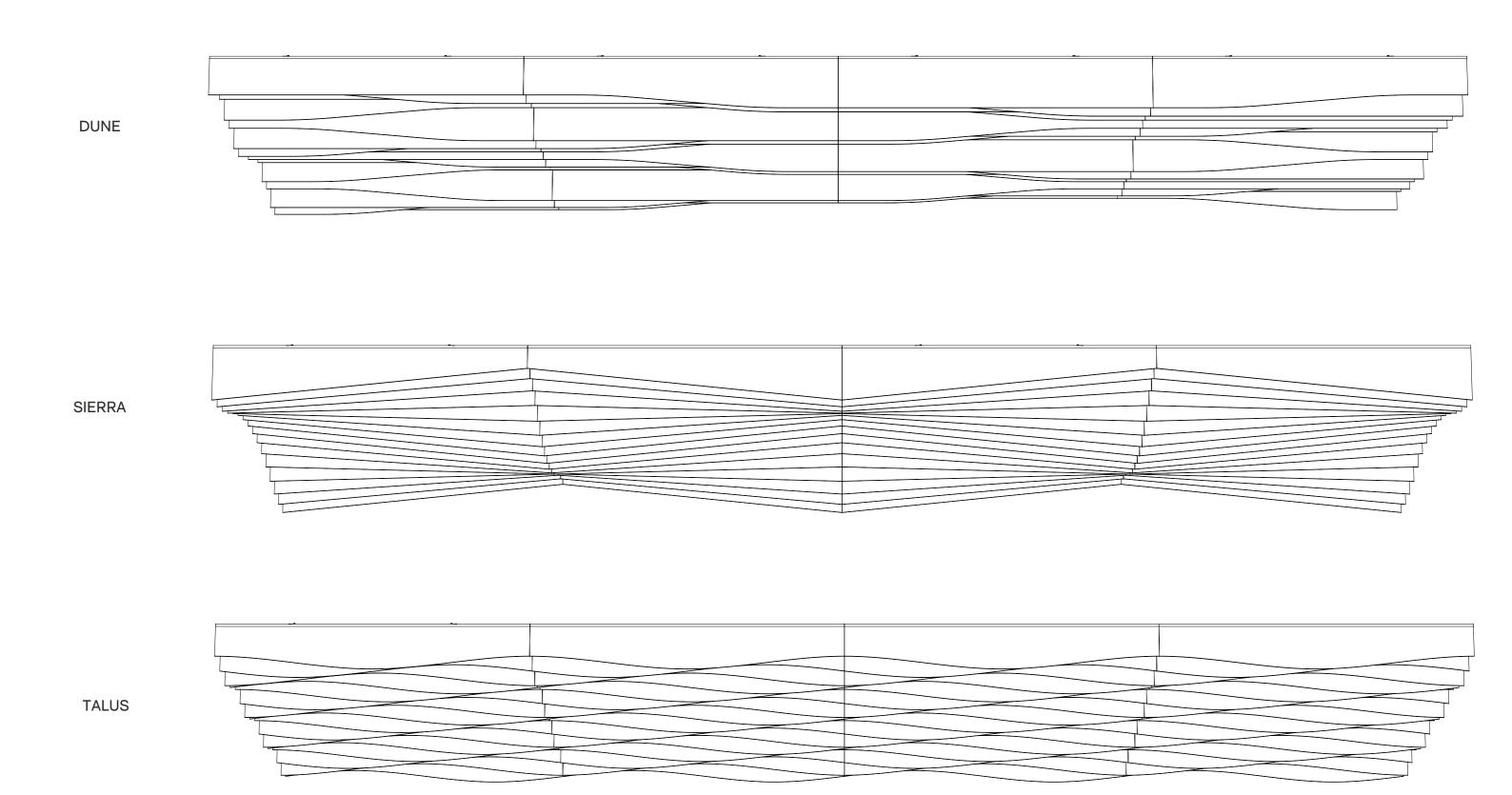
RAFT BEAM 250

2X PACKS SHOWN



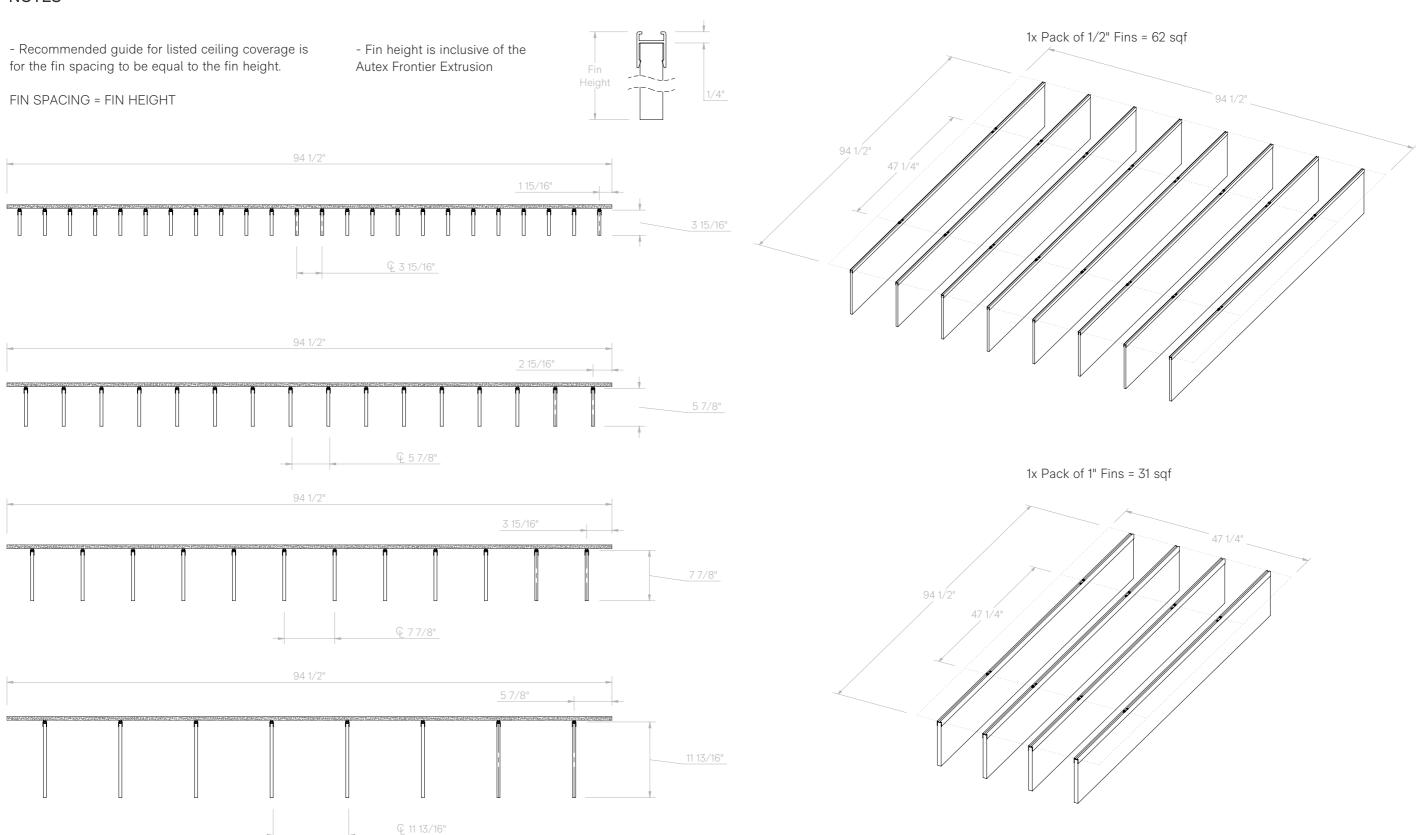








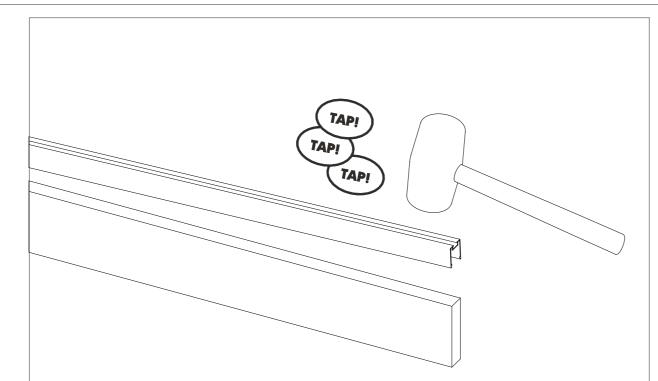
NOTES



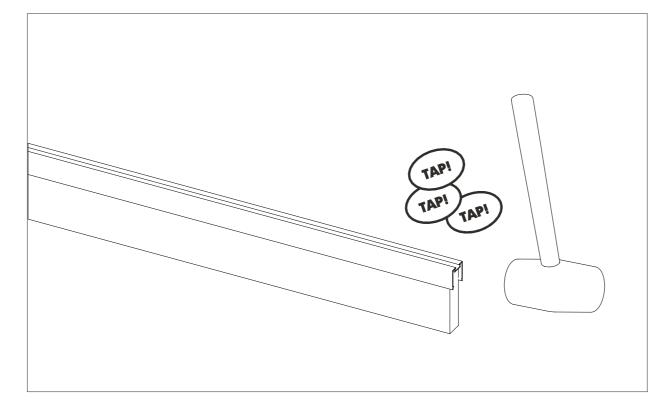
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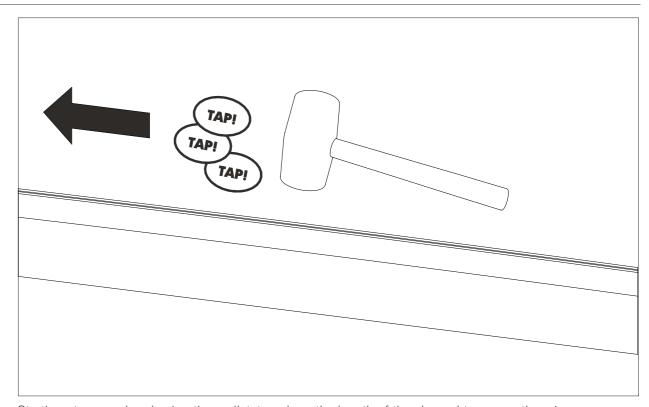
3.



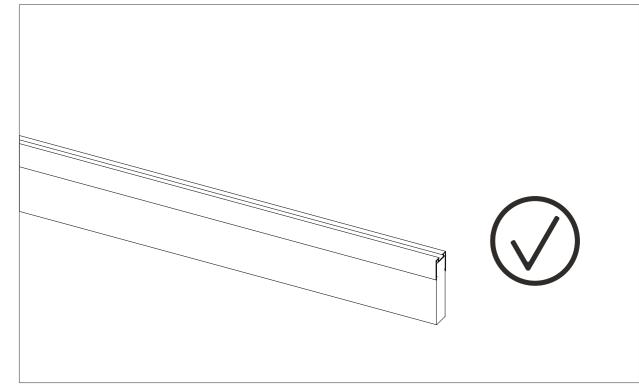
Using a rubber mallet, seat the channel onto the fin.



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



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.

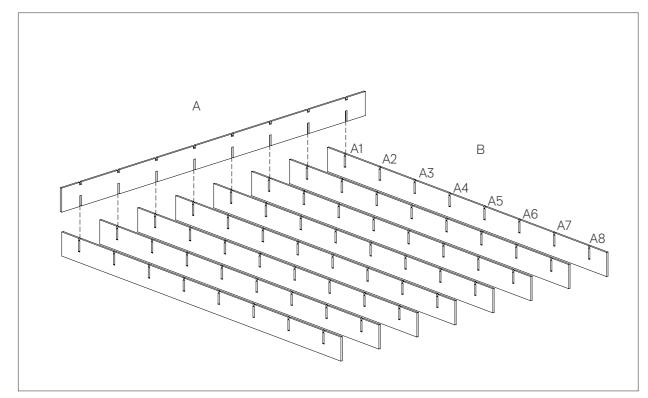


The Frontier Fin is now ready for installation to the ceiling.

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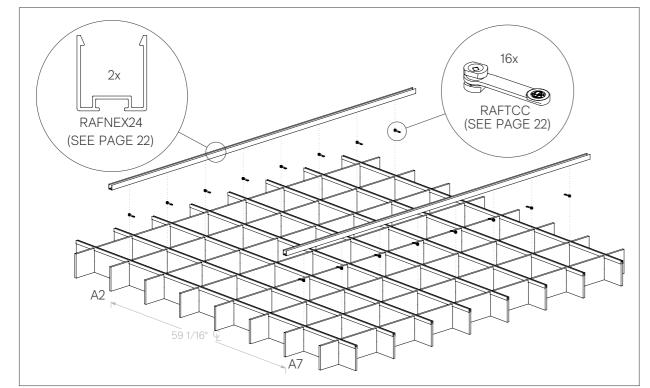
2.

1.



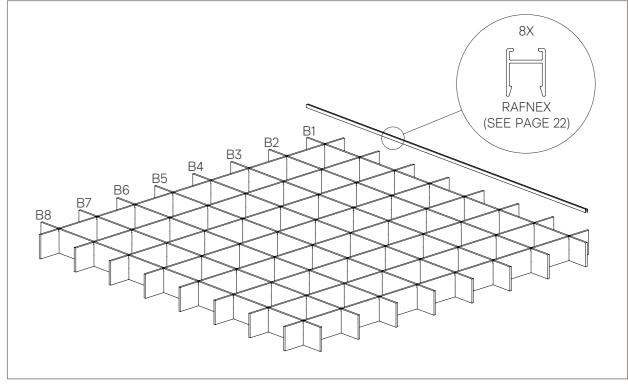
In the Frontier Axis pack there are two types of Fin (A & B). Part A has two notches and the small notch should be facing up when inserted into Part B.





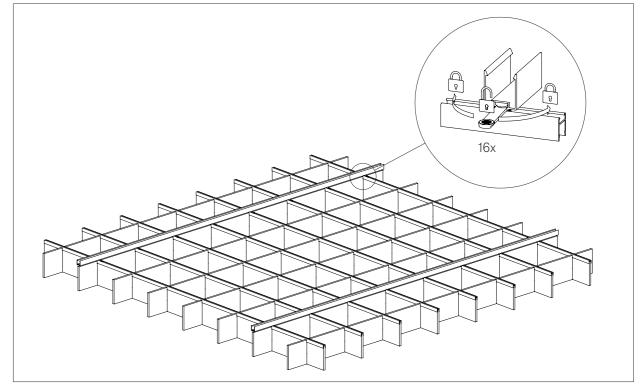
To attach the included 2x RAFNEX24 cross rails, first clip the 16x Autex Mounting Clips at the intersection points along the A2 & A7 Rails. Press the Crossrail onto the clips so they click into place.





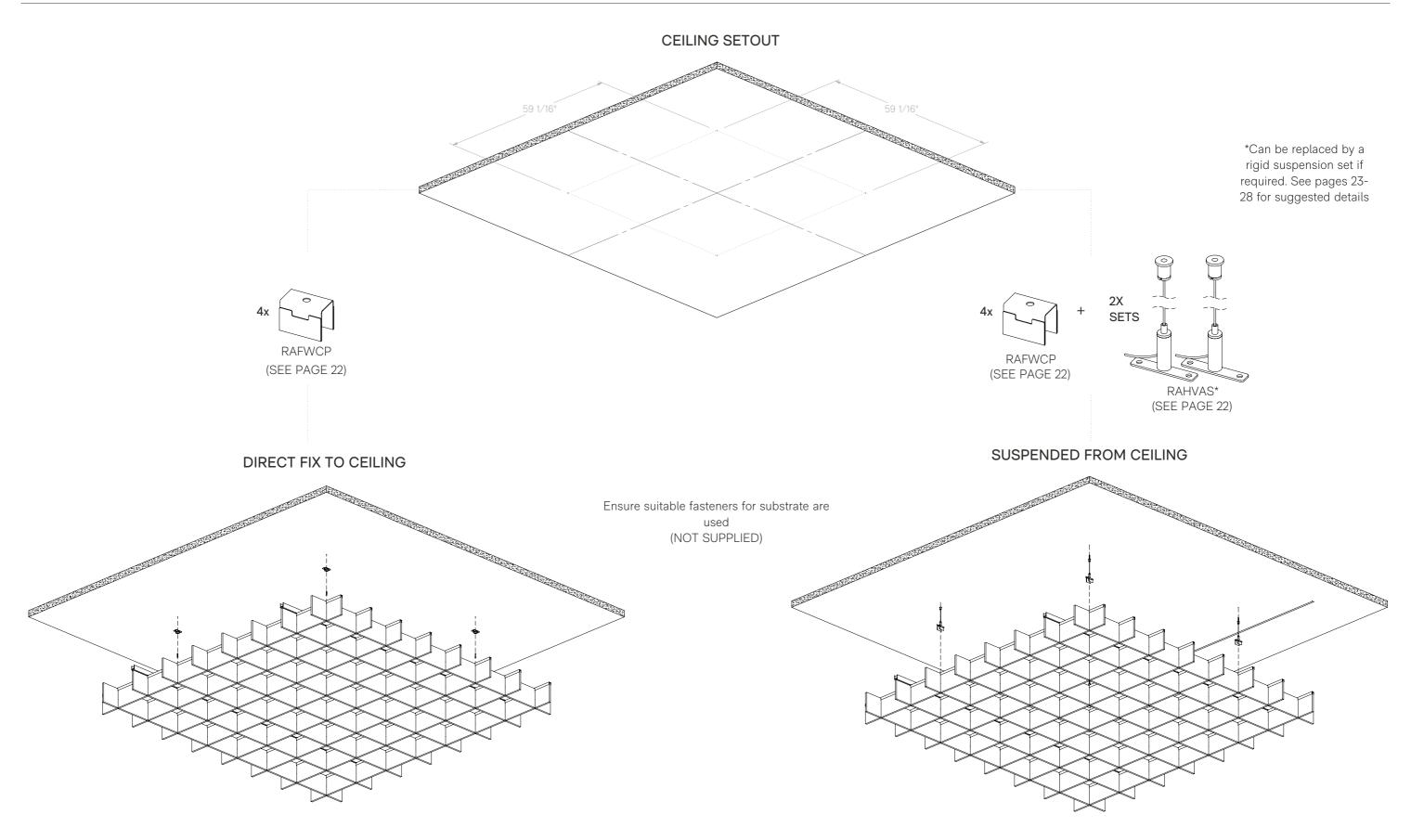
Using a rubber mallet, attach the 8x Rafnex channels along the lengths of the 'B' fins to lock the Axis Fins together in a grid.

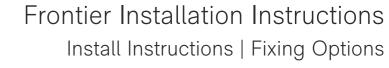
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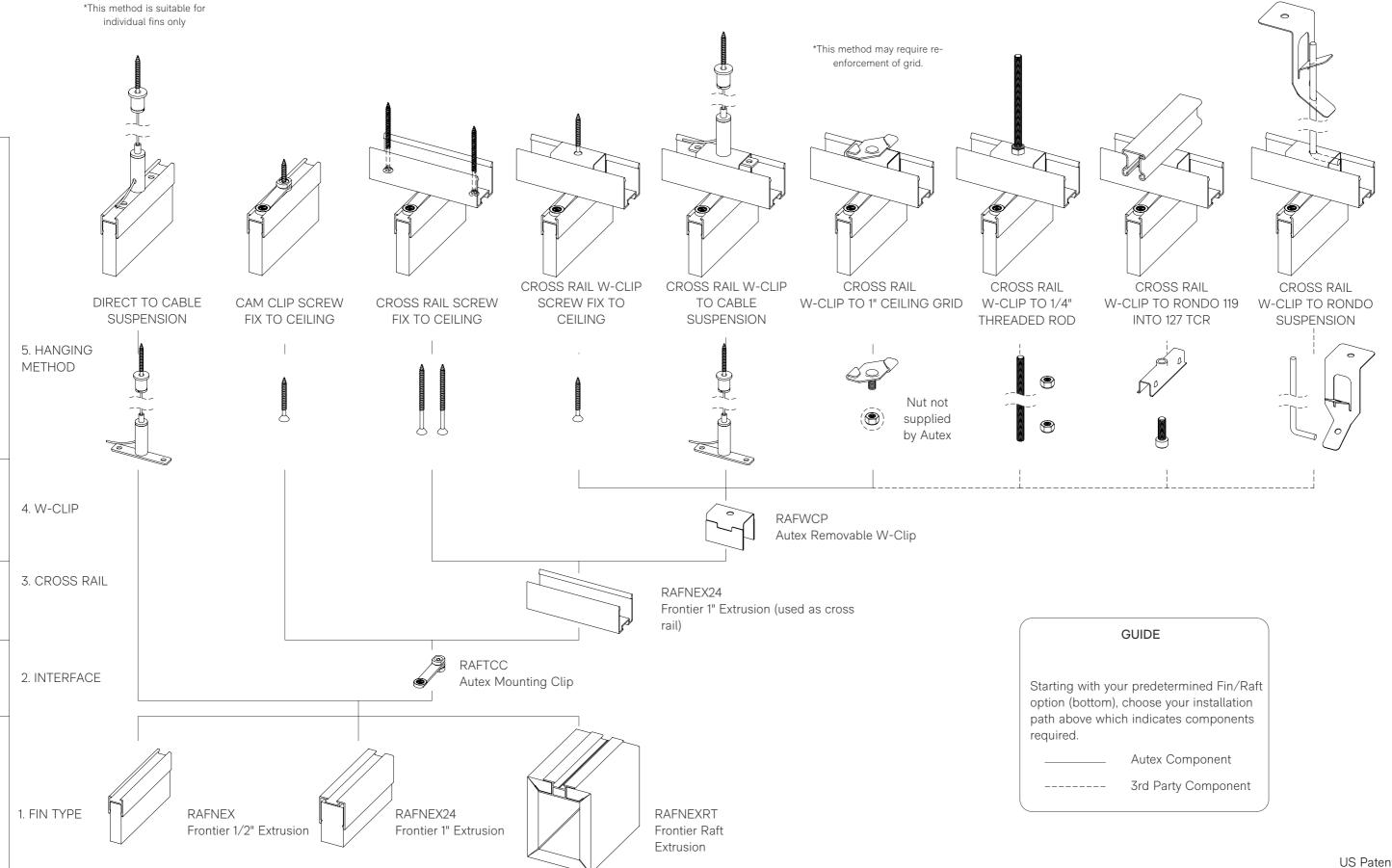
Twist the Autex Mounting Clips 90deg to lock them off. The Frontier Axis Grid is now ready for installation to the ceiling.







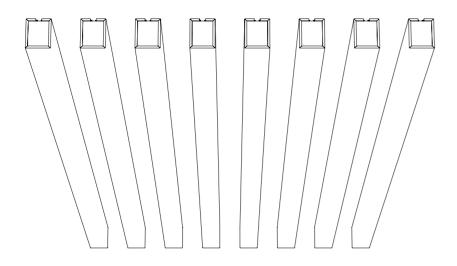




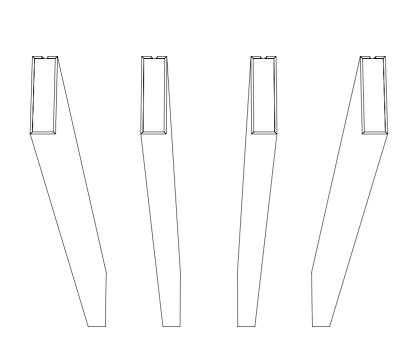
US Patent 10,113,312

Page 14 of 29 Frontier Installation Instructions Install Instructions | US | R1-1.100000 | Autex Industries Ltd © February 2021

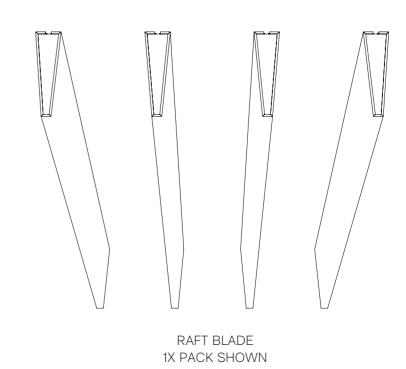


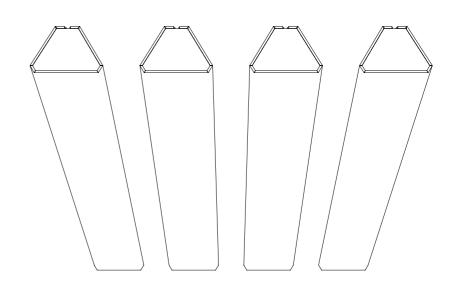


RAFT BEAM 100 1X PACK SHOWN



RAFT BEAM 250 1X PACK SHOWN

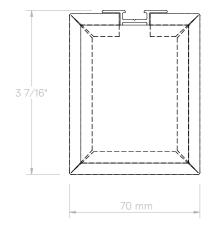


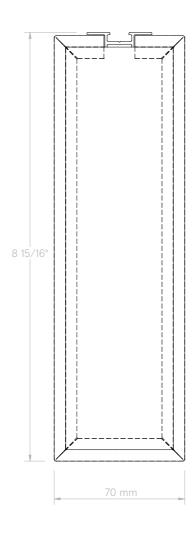


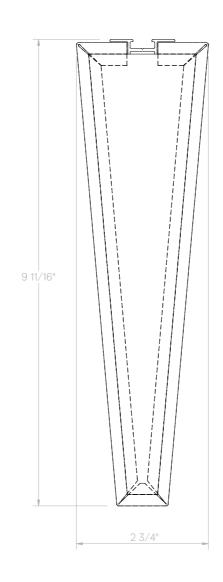
RAFT TRAPEZOID 1X PACK SHOWN

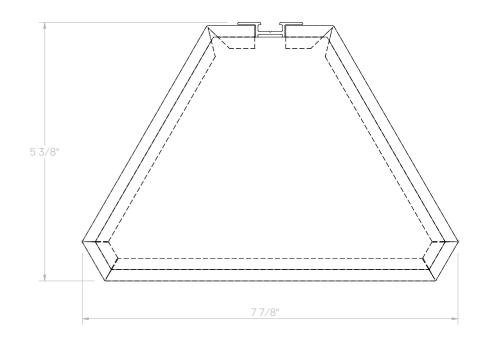


BEAM 100 BEAM 250 BLADE TRAPEZOID





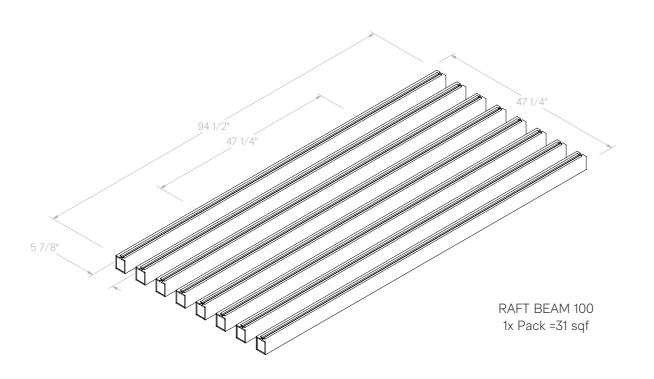


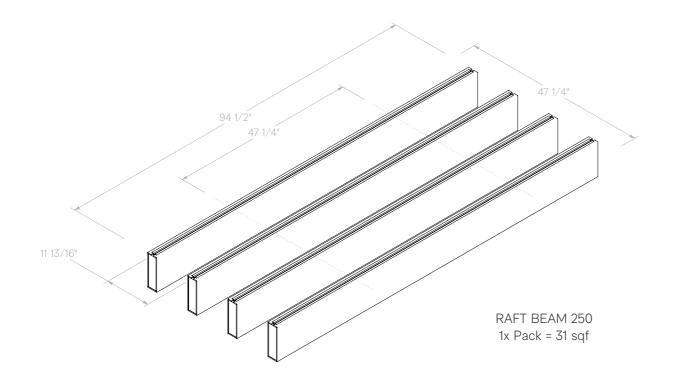


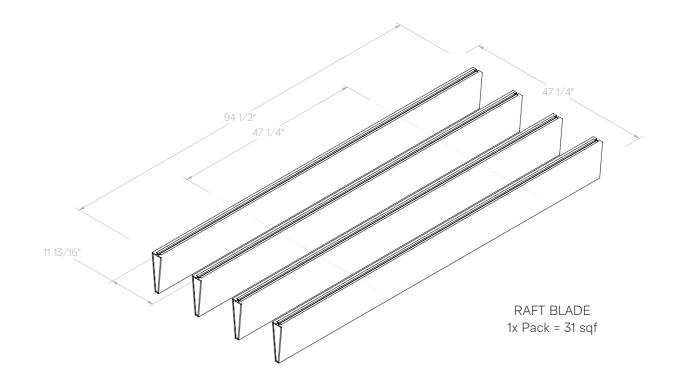
NOTES

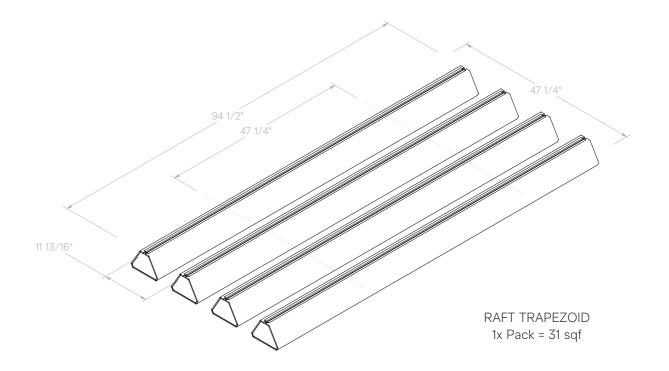
- Raft height is inclusive of the Autex frontier Raft Extrusion
- Refer to page 19 for recommended Raft spacing (X).



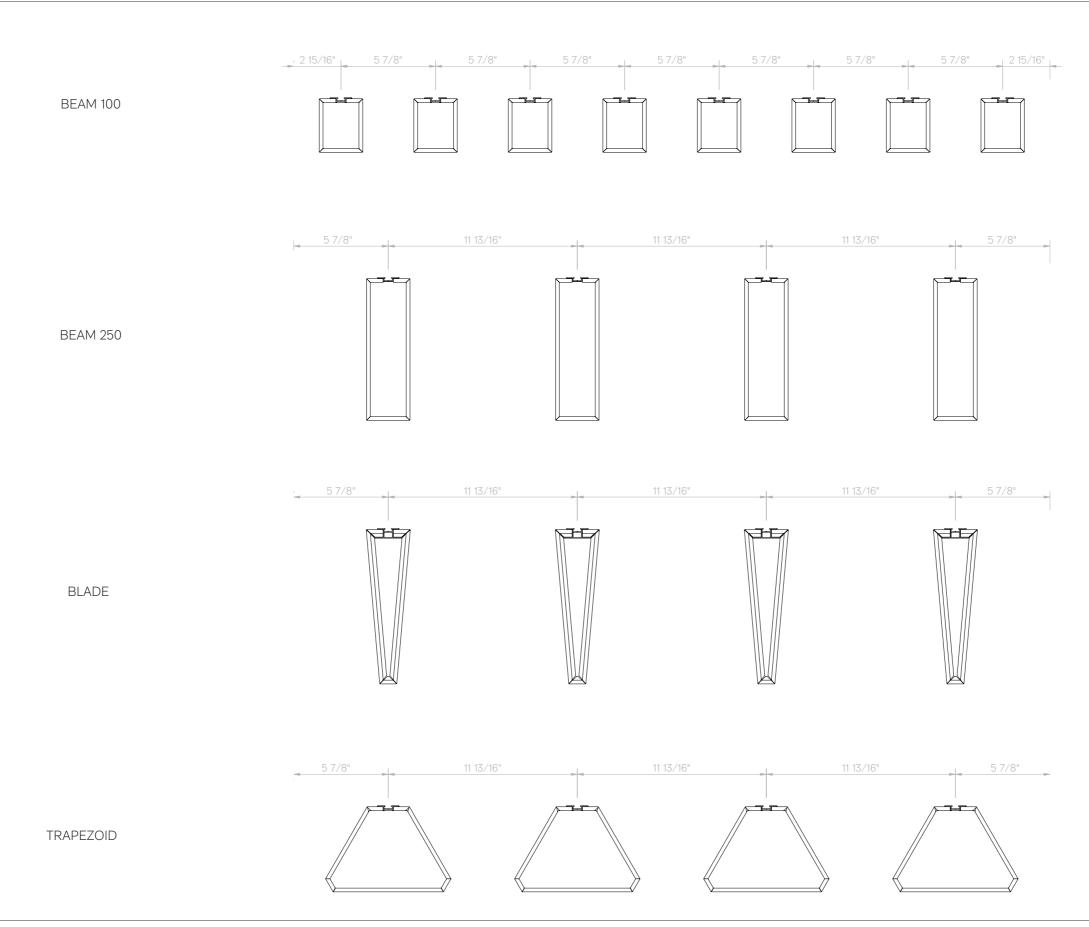




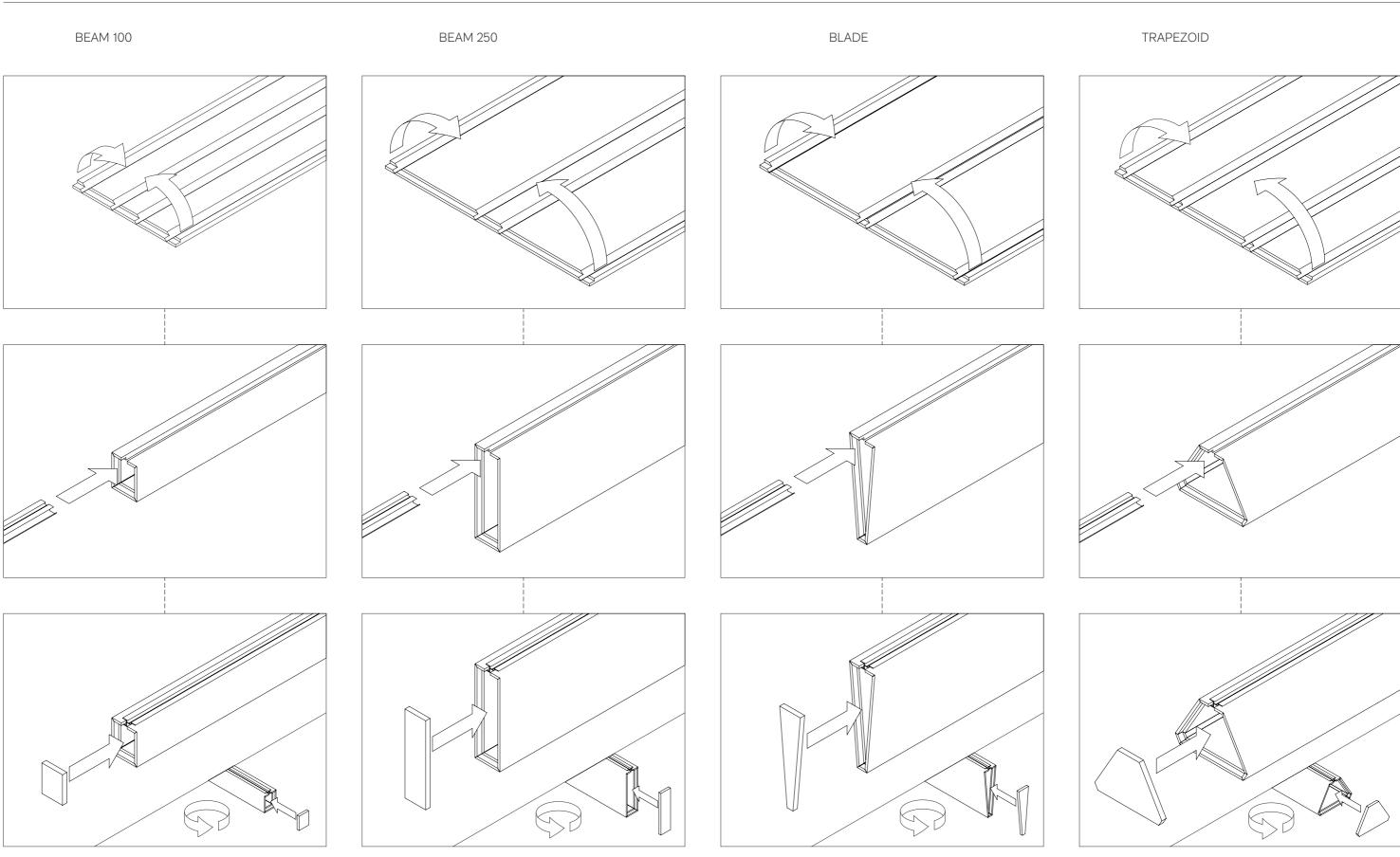








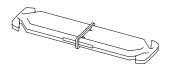




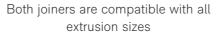
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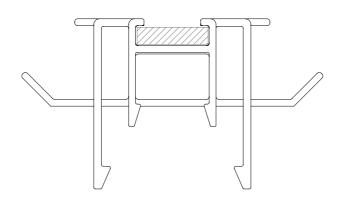


RAFCCT

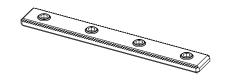


Light duty plastic connector used to join direct fixed rails.

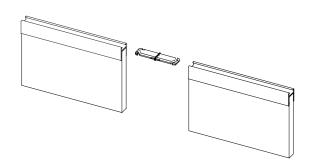


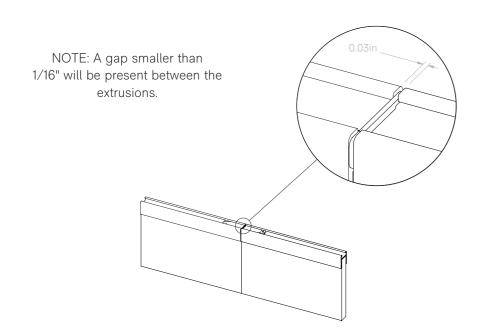


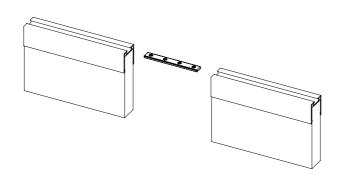
RAFHDCC

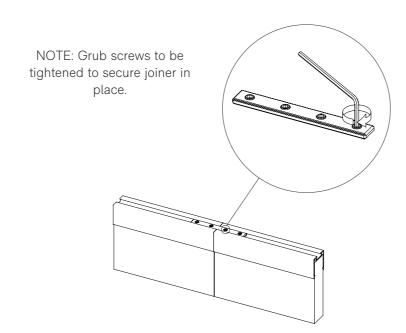


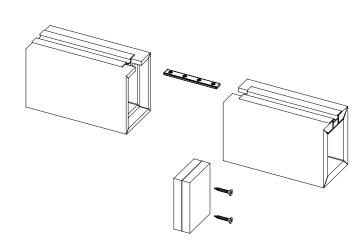
Heavy duty diecast connector with 4x grub screws used to join cross rails and/or suspended rails.



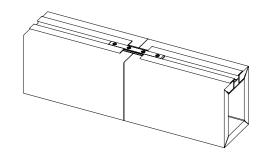




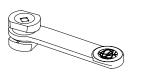




NOTE: In addition to joiner, screw the end caps together to create a cleaner join



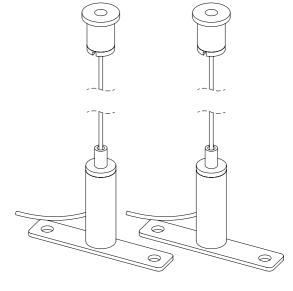




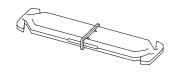
RAFTCC Autex Mounting Clip



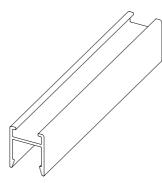
RAFHDCC Autex Heavy Duty Frontier Channel Connector with 4x M5 Grub Screws



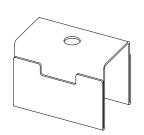
RAHVAS Autex Adjustable Suspension Set 40" cable -Channel Connection



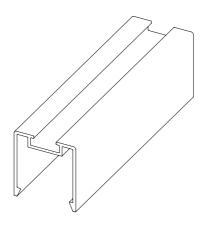
RAFCCT Autex Frontier Channel Connector



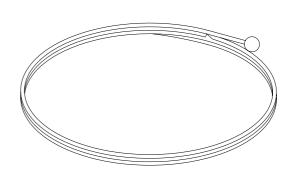
RAFNEX Frontier 1/2" Extrusion



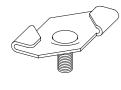
RAFWCP Autex Removable W-Clip



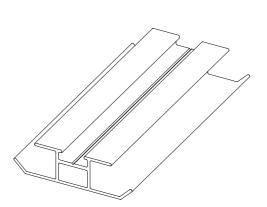
RAFNEX24 Frontier 1" Extrusion



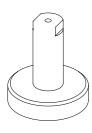
RAH3MBE 118" Steel Cable with Ball End



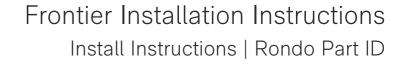
RAFM6GC 24mm Ceiling Grid Connector with M6 Thread



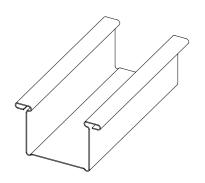
RAFNEXRT Frontier Raft Extrusion



RAFM6MP Magnet Pot with M6 Thread and Cable Adaptor



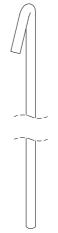




RONDO 129 28mm Furring Channel



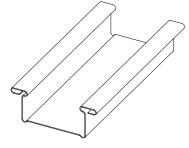
RONDO 2534 Top Cross Rail Suspension Clip



RONDO 121 5mm Soft Galvanised Suspension Rod



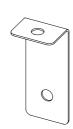
RONDO 719 Adjustable Suspension Clip



RONDO 308 16mm Furring Channel



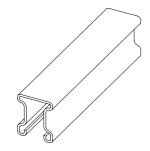
RONDO 547 Adjustable Suspension Hanger (Concrete)



RONDO 247 121 to Concrete



RONDO 274 121 to Timber /Steel Joist



RONDO TCR 127 25mm Top Cross Rail



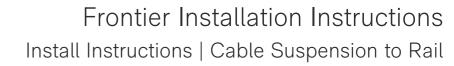
RONDO 534 Adjustable Suspension Hanger (Purlins) NOTE

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.

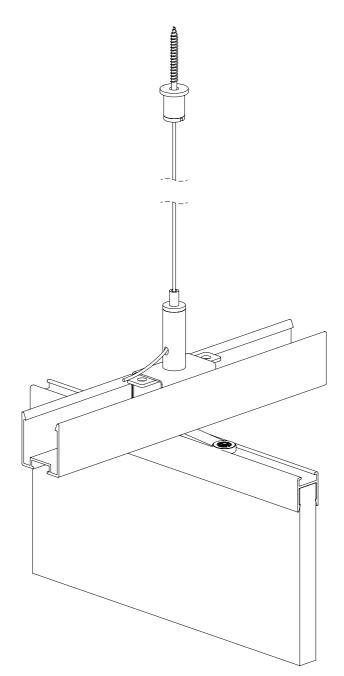


RONDO 119 U Clip

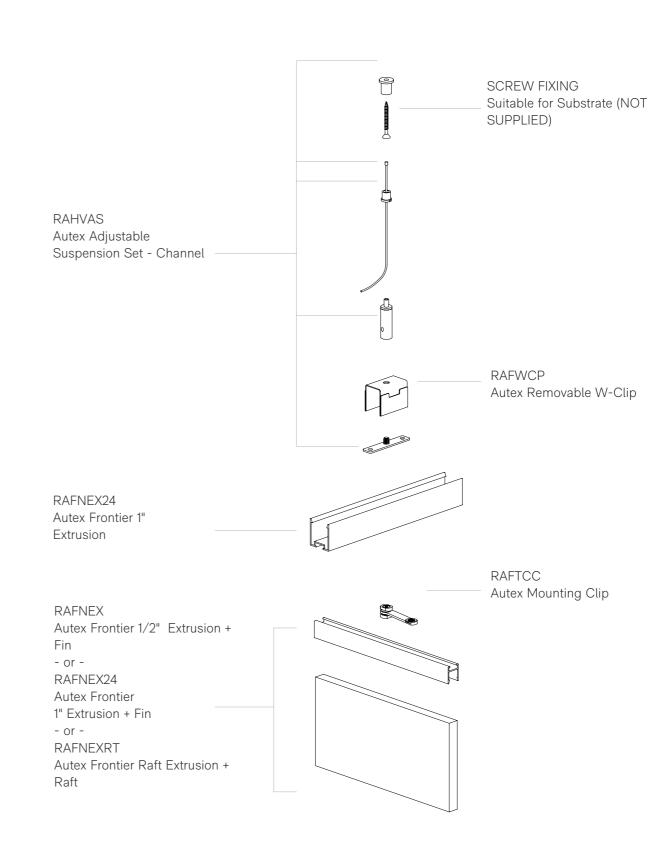




Suggested Ceiling Fixing Detail				
Substrate	Fixing	Minimum Embedment		
Concrete	Hilti-HUS3-HR6	1 1/2"		
Steel	Stainless Steel 8G Tek Screw	2 3/16"		
Timber	Stainless Steel 8G Wood Screw	1 3/16"		

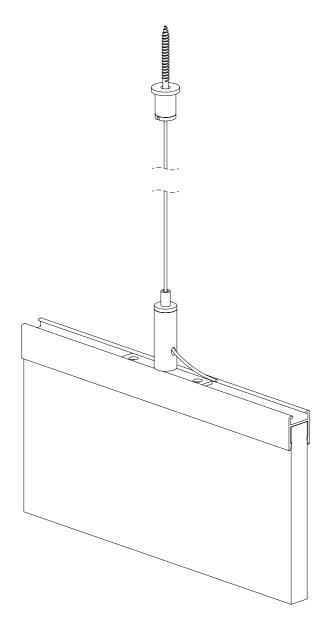


NOTE: This suspension method is suitable for small installations only.
For larger installations refer to pages 25-29

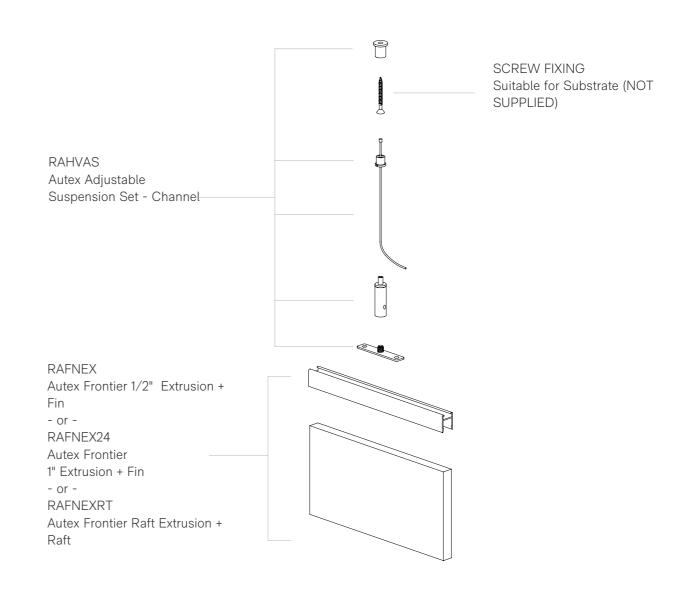


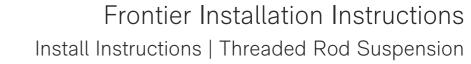


Suggested Ceiling Fixing Detail				
Substrate	Fixing	Minimum Embedment		
Concrete	Hilti-HUS3-HR6	1 1/2"		
Steel	Stainless Steel 8G Tek Screw	2 3/16"		
Timber	Stainless Steel 8G Wood Screw	1 3/16"		



NOTE: This suspension method is suitable for individual fins only. Requires 1x RAHVAS set per fin. For larger installations refer to pages 25-29

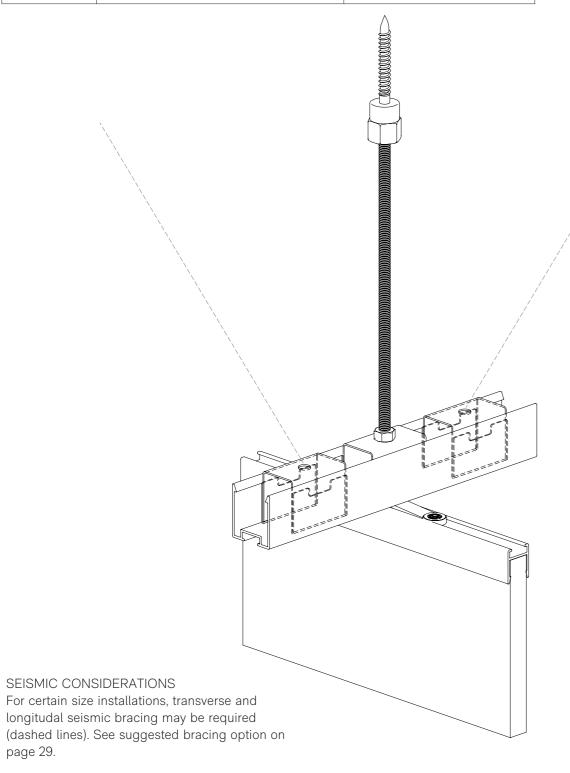


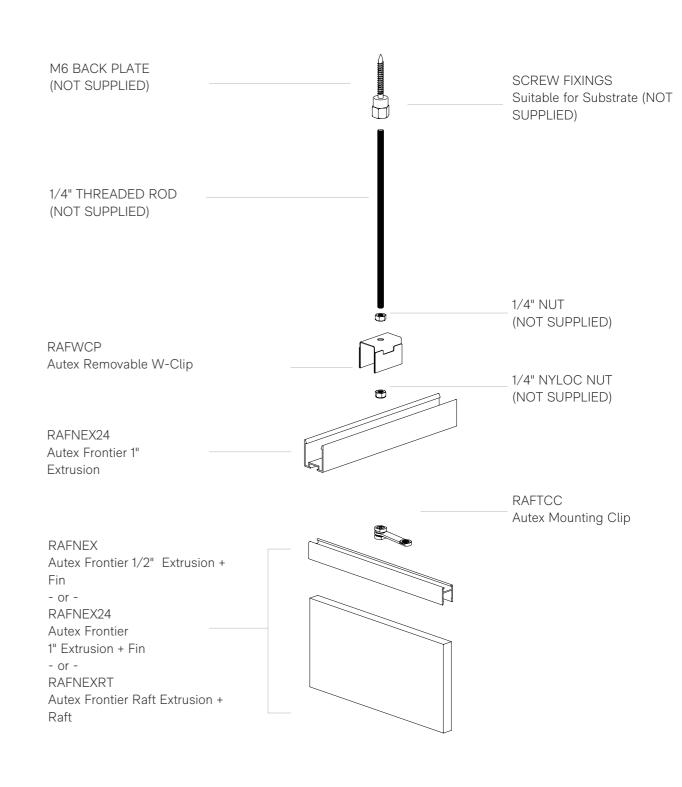




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Suggested Ceiling Fixing Detail				
Substrate	Fixing	Minimum Embedment		
Concrete	Hilti-HUS3-HR6	1 1/2"		
Steel	Stainless Steel 8G Tek Screw	2 3/16"		
Timber	Stainless Steel 8G Wood Screw	1 3/16"		



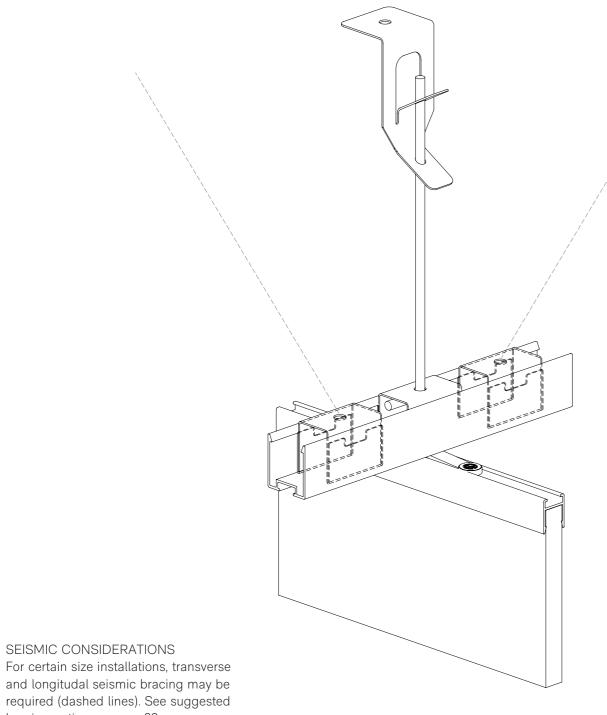


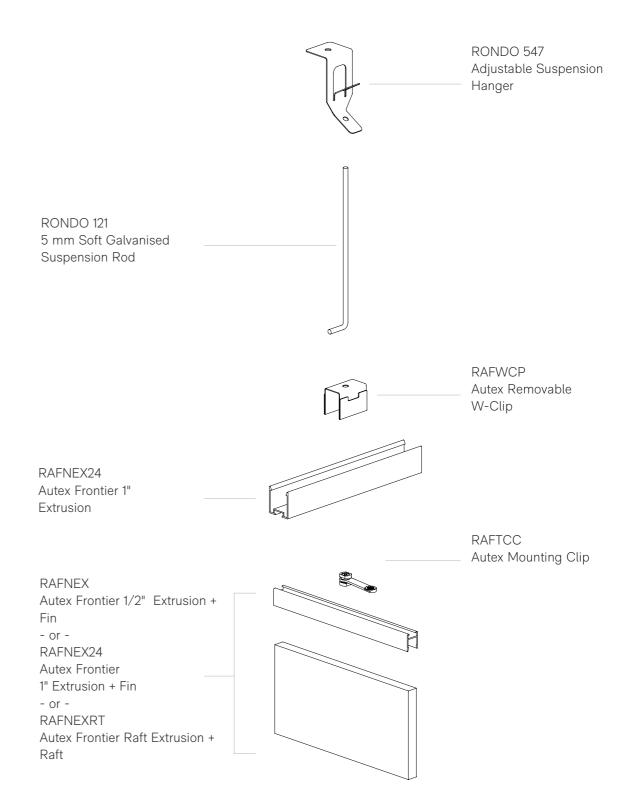
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Suggested Ceiling Fixing Detail				
Substrate	Fixing	Minimum Embedment		
Concrete	Hilti-HUS3-HR6	1 1/2"		
Steel	Stainless Steel 8G Tek Screw	2 3/16"		
Timber	Stainless Steel 8G Wood Screw	1 3/16"		



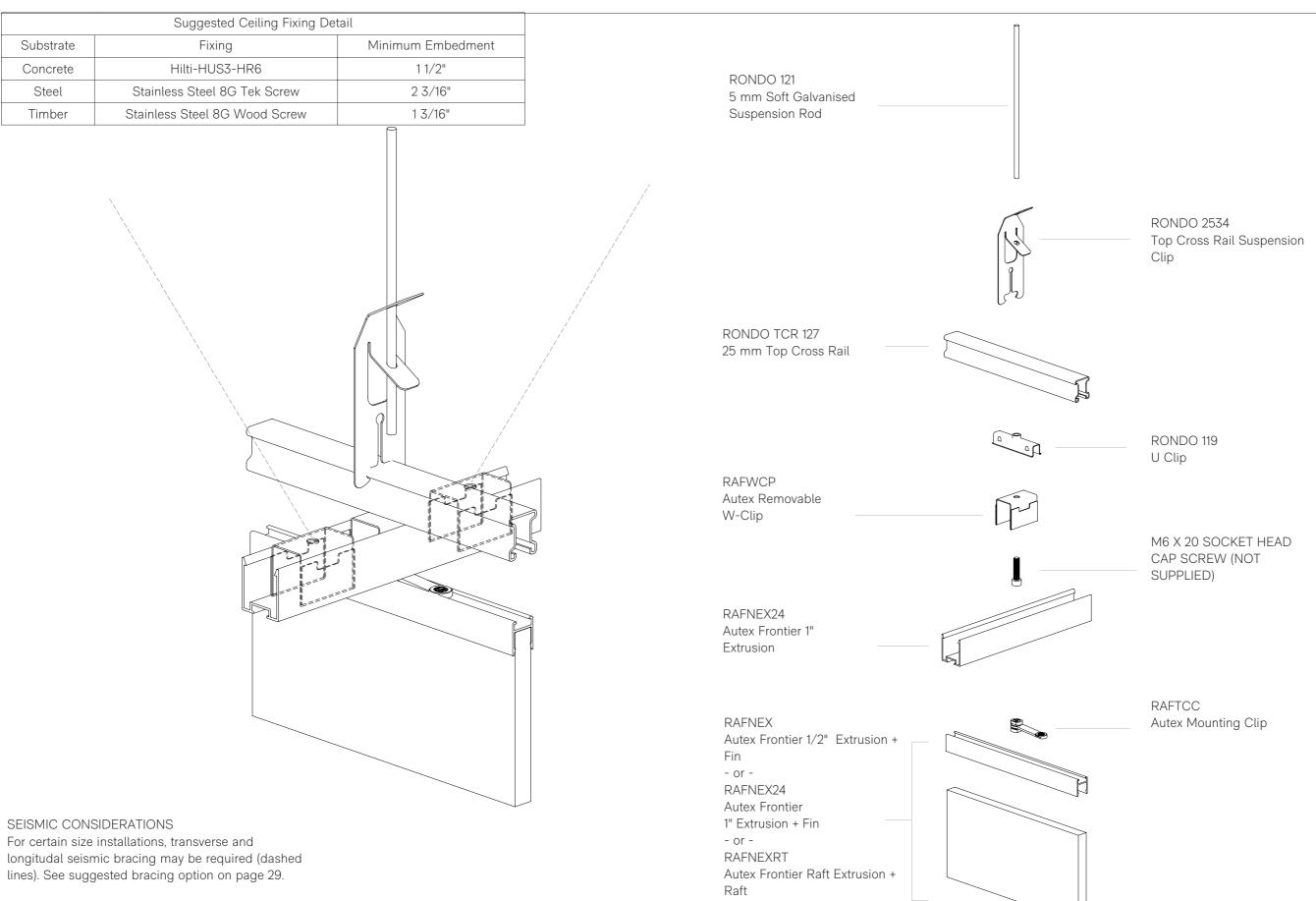


For certain size installations, transverse and longitudal seismic bracing may be required (dashed lines). See suggested bracing option on page 29.

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Frontier Installation Instructions Install Instructions | Rondo Suspension 2

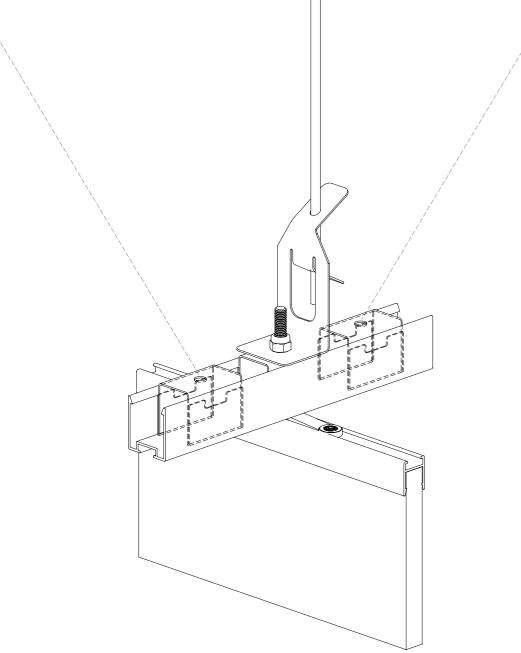


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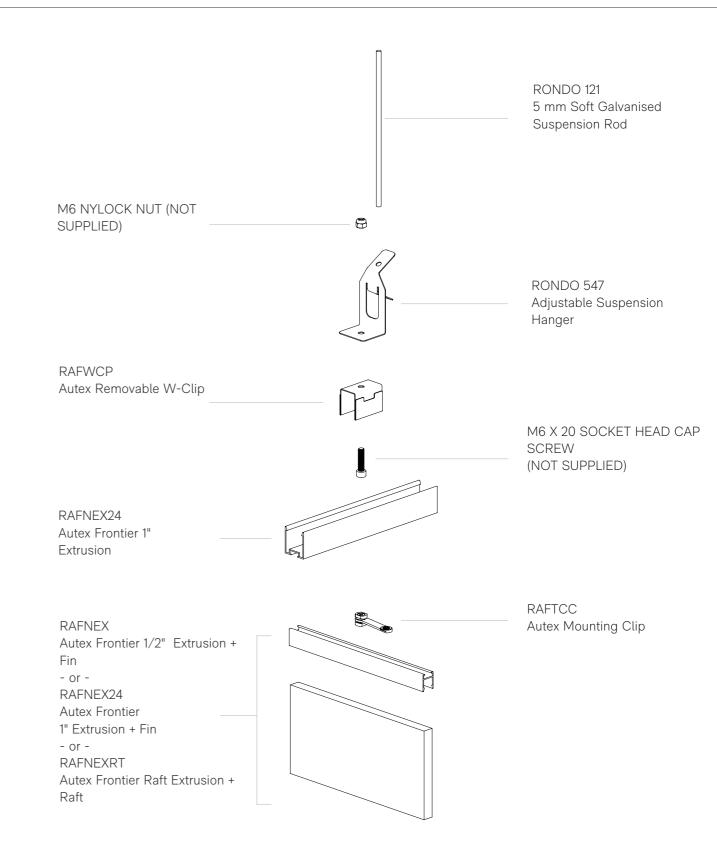


Suggested Ceiling Fixing Detail				
Substrate	Fixing	Minimum Embedment		
Concrete	Hilti-HUS3-HR6	1 1/2"		
Steel	Stainless Steel 8G Tek Screw	2 3/16"		
Timber	Stainless Steel 8G Wood Screw	1 3/16"		

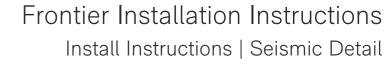


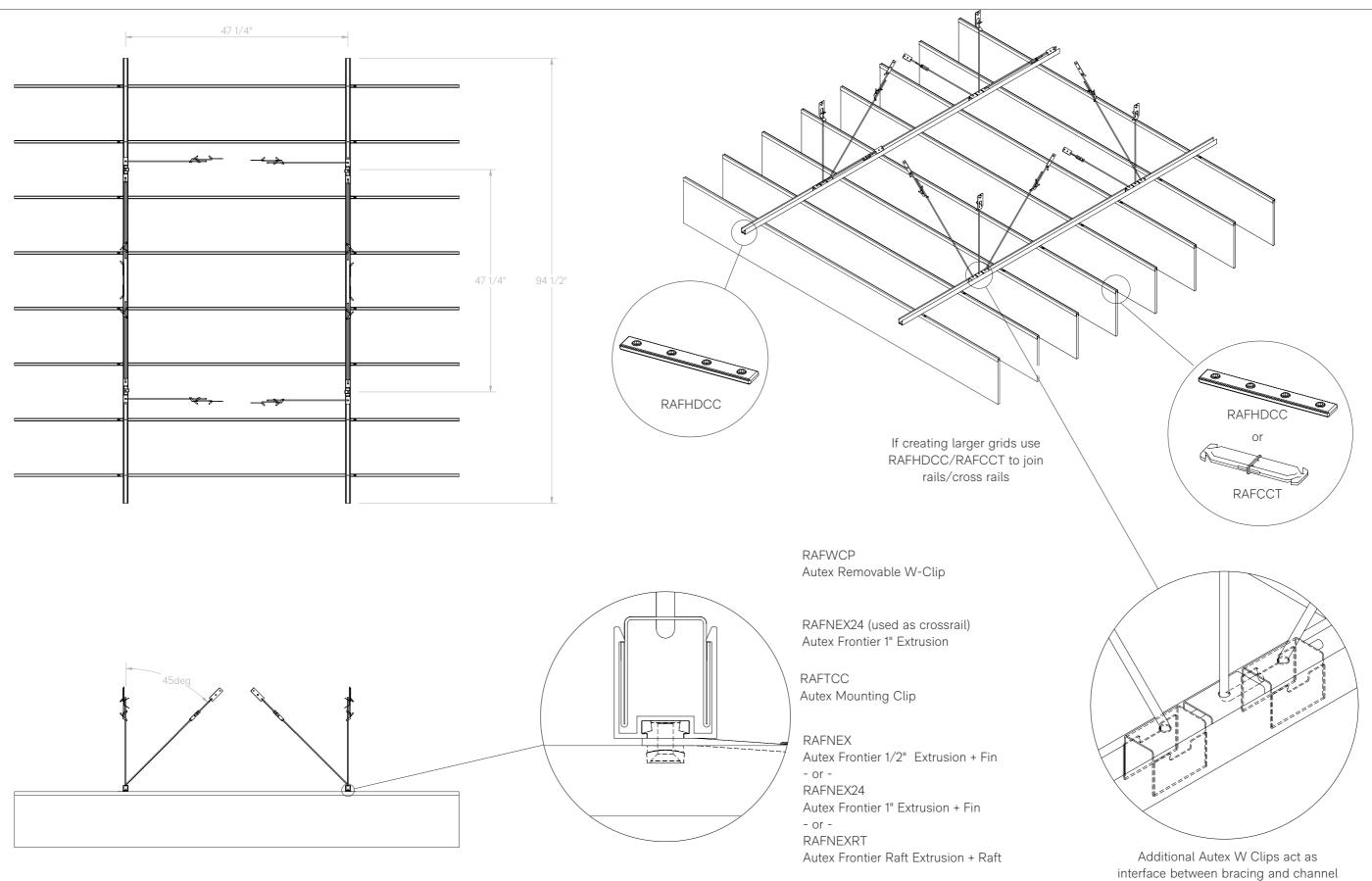
SEISMIC CONSIDERATIONS

For certain size installations, transverse and longitudal seismic bracing may be required (dashed lines). See suggested bracing option on page 29.



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