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6.7 Creason Perforated Plasterboard

creason is part of Siniat's range of acoustic perforated plasterboard. **creason** offers not only great acoustic performance with beautiful aesthetics, but now also offers air cleaning properties with inbuilt CAPT'AIR® technology.

It is ideal for use in a range of internal applications where controlling the sound reverberation time is required for large open areas such as offices, shopping centres, airports, schools, hospitals, conference halls, lecture theatres and libraries. **creason** can also be installed in residential ceilings to provide noise absorption in open plan living areas and home theatres. If **creason** is to be used on walls, we recommend installing above trafficable areas.

The acoustic performance of **creason** is achieved through a combination of sound diffusion, where reflected sound is dispersed and by sound absorption, whereby sound travels through the perforation holes and acoustic fleece backing. The result is a high quality sound experience with excellent speech intelligibility. Additional optional insulation improves the sound absorption.

The **creason** range is installed like regular plasterboard.



Round R12/25 No.8

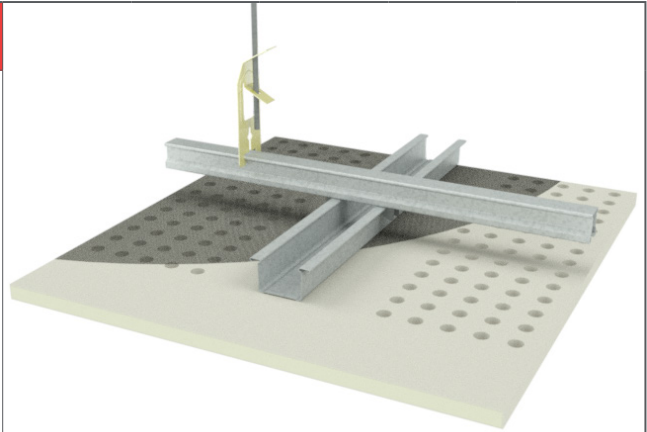
12mm diameter circles with dark backing fleece

Open Area: 10.2 %

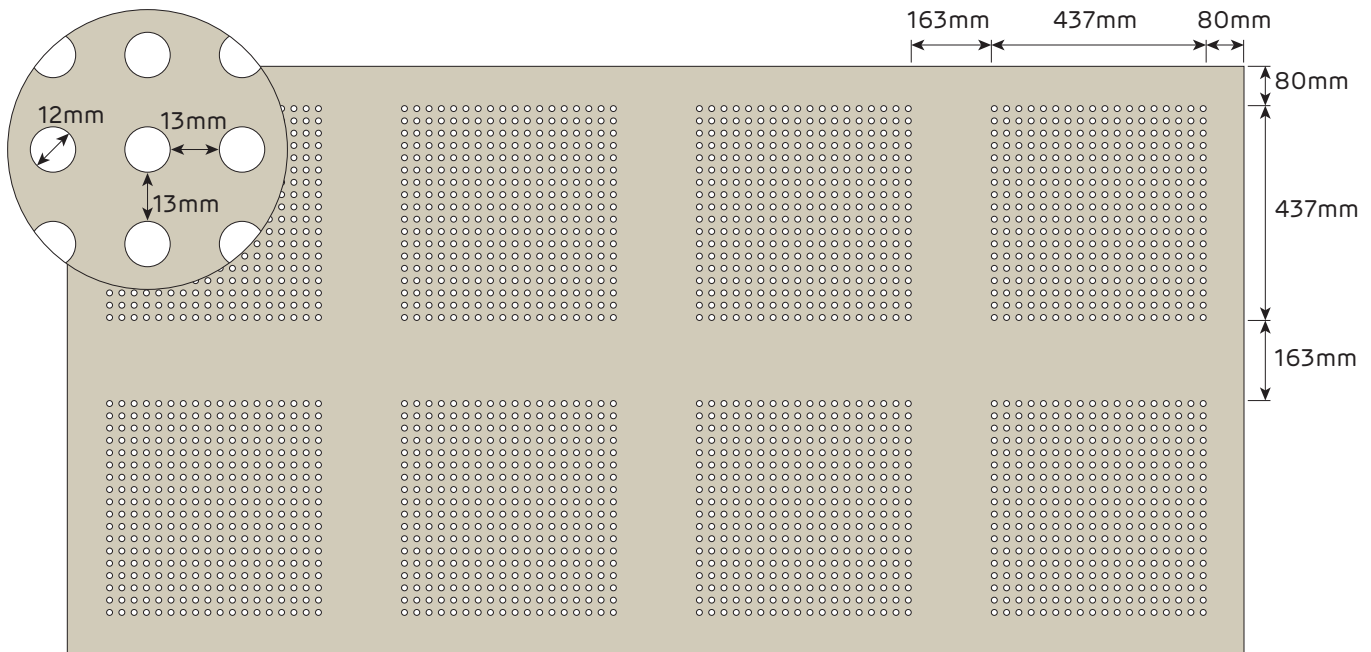
Nominal Sheet Dimensions: 12.5 x 1200 x 2400mm

Actual Sheet Dimensions: 12.5 x 1197 x 2397mm

Weight: 10 kg/m² (approximate)



	Ceiling Cavity (mm)	α_p - Frequency (Hz)						α_w	NRC
		125	250	500	1000	2000	4000		
No Insulation	187	0.4	0.7	0.65	0.55	0.45	0.4	0.5	0.6
Pink® Partition 75mm 14kg/m ³ R1.9	187	0.55	0.7	0.65	0.55	0.5	0.45	0.55	0.6





Cube C12/25 No.8

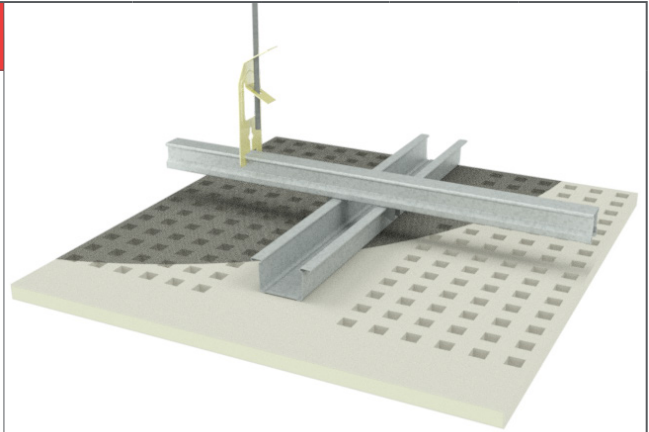
12 x 12mm squares with dark backing fleece

Open Area: 16.1 %

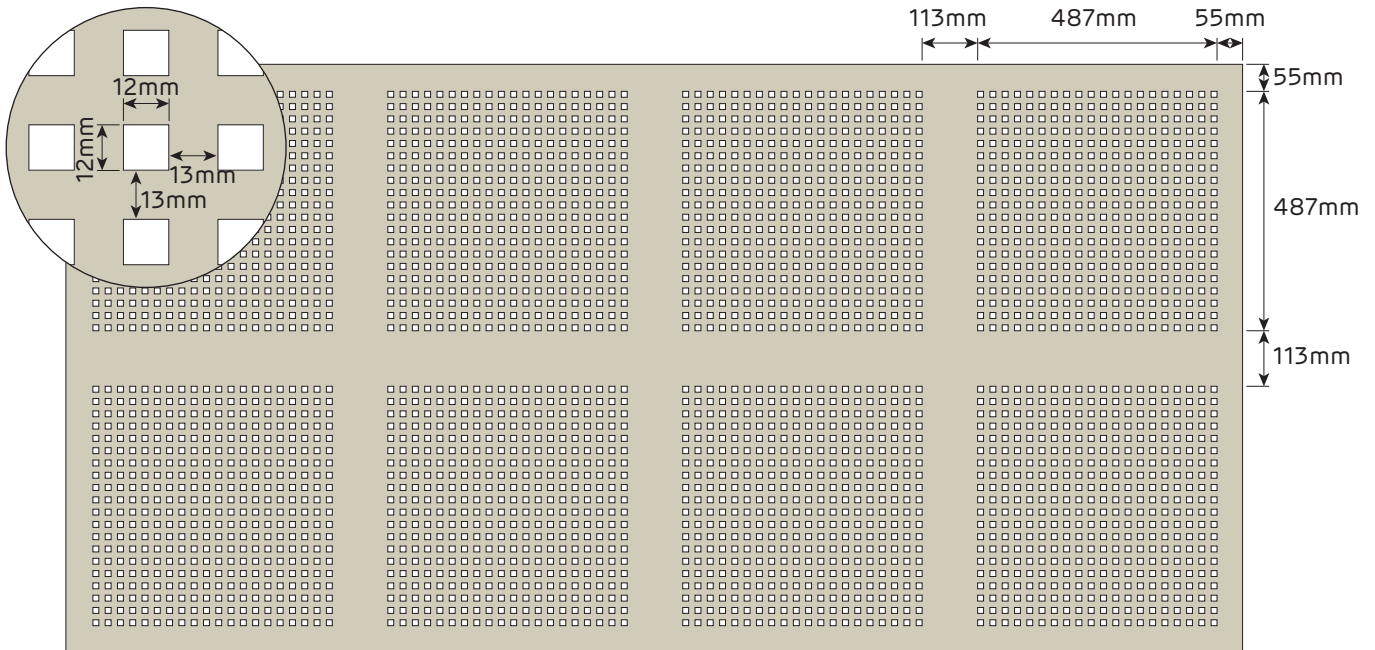
Nominal Sheet Dimensions: 12.5 x 1200 x 2400mm

Actual Sheet Dimensions: 12.5 x 1197 x 2397mm

Weight: 10 kg/m² (approximate)



	Ceiling Cavity (mm)	α_p - Frequency (Hz)						α_w	NRC
		125	250	500	1000	2000	4000		
No Insulation	47	0.15	0.45	0.75	0.8	0.6	0.45	0.6	0.65
	187	0.45	0.75	0.8	0.65	0.55	0.5	0.6	0.7
Pink [®] Partition 75mm 14kg/m ³ R1.9	47	0.4	0.75	0.9	0.8	0.65	0.55	0.7	0.8
	187	0.6	0.85	0.8	0.75	0.7	0.65	0.75	0.8
	587	0.7	0.75	0.8	0.7	0.6	0.6	0.7	0.7





General Requirements

Install control joints in plasterboard ceilings:

- > At 12m maximum intervals
- > At all control joints in the structure
- > At any change in the substrate
- > At the junction of a large room and passageway.



Separate **creason** ceilings from other building elements, such as walls and columns by creating control joints that allow for movement, e.g. utilising a shadow line profile or tear away bead.


All ceilings in this section are non-trafficable. Do not walk on plasterboard ceilings!

Limit dead loads on plasterboard ceilings to 2 kg/m² for plasterboard spanning 600mm framing centres.

Limit dead loads on plasterboard ceilings to 2.5 kg/m² for plasterboard spanning 450mm framing centres.

Attach ceiling fixtures to framing members only. Ensure the framing is designed to carry any additional load.

-  > **creason** must have an air cavity behind it for it to perform as a sound absorber.
-  > Plasterboard installations in close proximity to metal roofs (i.e. raked ceiling or with small ceiling cavities) require smaller control joint intervals or joints left unfilled as they are exposed to larger rates of thermal expansion and contraction of the roof and/or ceiling framing otherwise cracking of the ceiling and joint peaking is expected.
- > Excessive vibration of the ceiling (by the installation of ceiling services, etc) is known to cause jointing cracking and joint peaking.
- > Locate ceiling services so they do not cut through ceiling framing members, otherwise some degradation of the ceiling can be expected

 Use the Siniat Reverberation time calculator to assist in determining how much of the ceiling and or wall area should be covered. Alternatively involve an acoustic consultant, especially for very high ceilings and unusually shaped rooms such as those with domed or sloping ceilings.

Siniat Reverberation Time Calculator



Use Siniat's Reverberation Time Calculator by clicking on the link or by using your phone's camera on the QR code.

Framing

Framing members as per framing tables or structural design up to 600mm maximum. Also refer to Section 5.1 for more information on ceiling framing.

For a specific project, determine the relevant wind pressure load on an internal ceiling from Section 2.3, or the QR link below in the Span Tables section. Wind pressure loads must be considered for internal ceilings to comply with *AS/NZS 1170.2 Wind Actions* and *AS/NZS 2785 Suspended Ceilings - Design and Installation*.

Contact Siniat or a structural engineer to check ceiling for earthquake actions. Specific project information is required.

Stagger joins in adjacent Top Cross Rails and Furring Channels by 1200mm minimum.

Install additional framing members around openings.



Non-Fire Rated
Internal Direct Fix Ceiling Frames

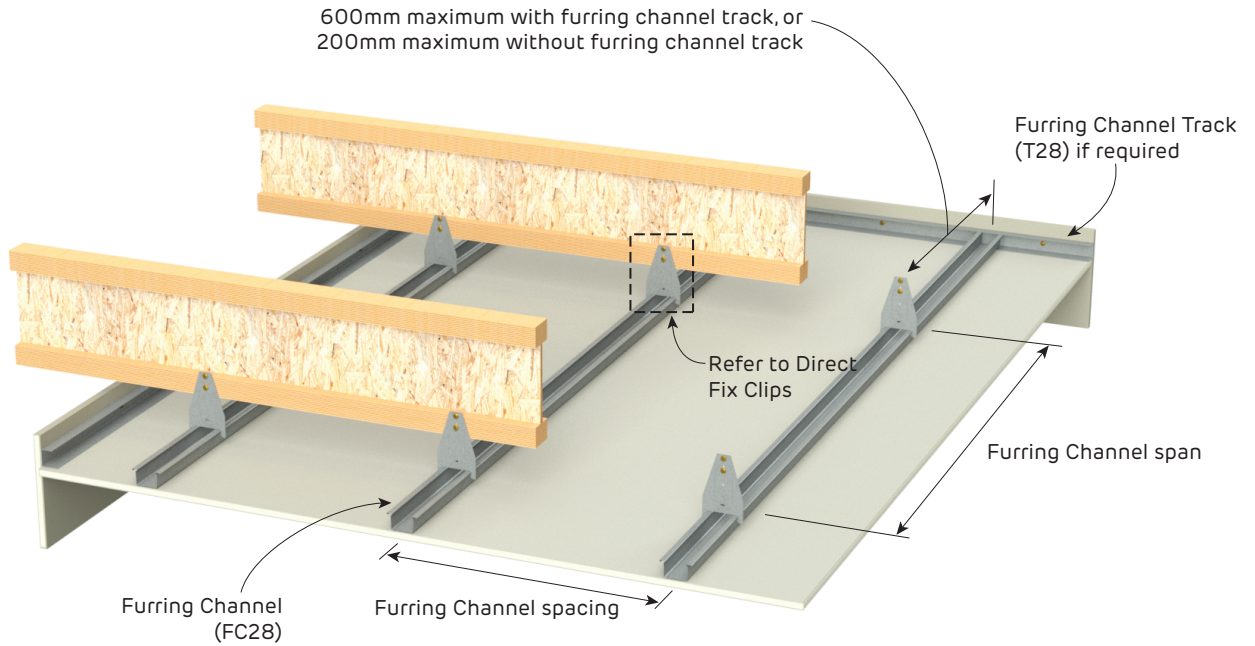


FIGURE 1 Direct Fix Furring Channel Ceiling Frame
Perspective

Non-Fire Rated
Details for Single Span, Double Span or 3-or-More Span Ceilings

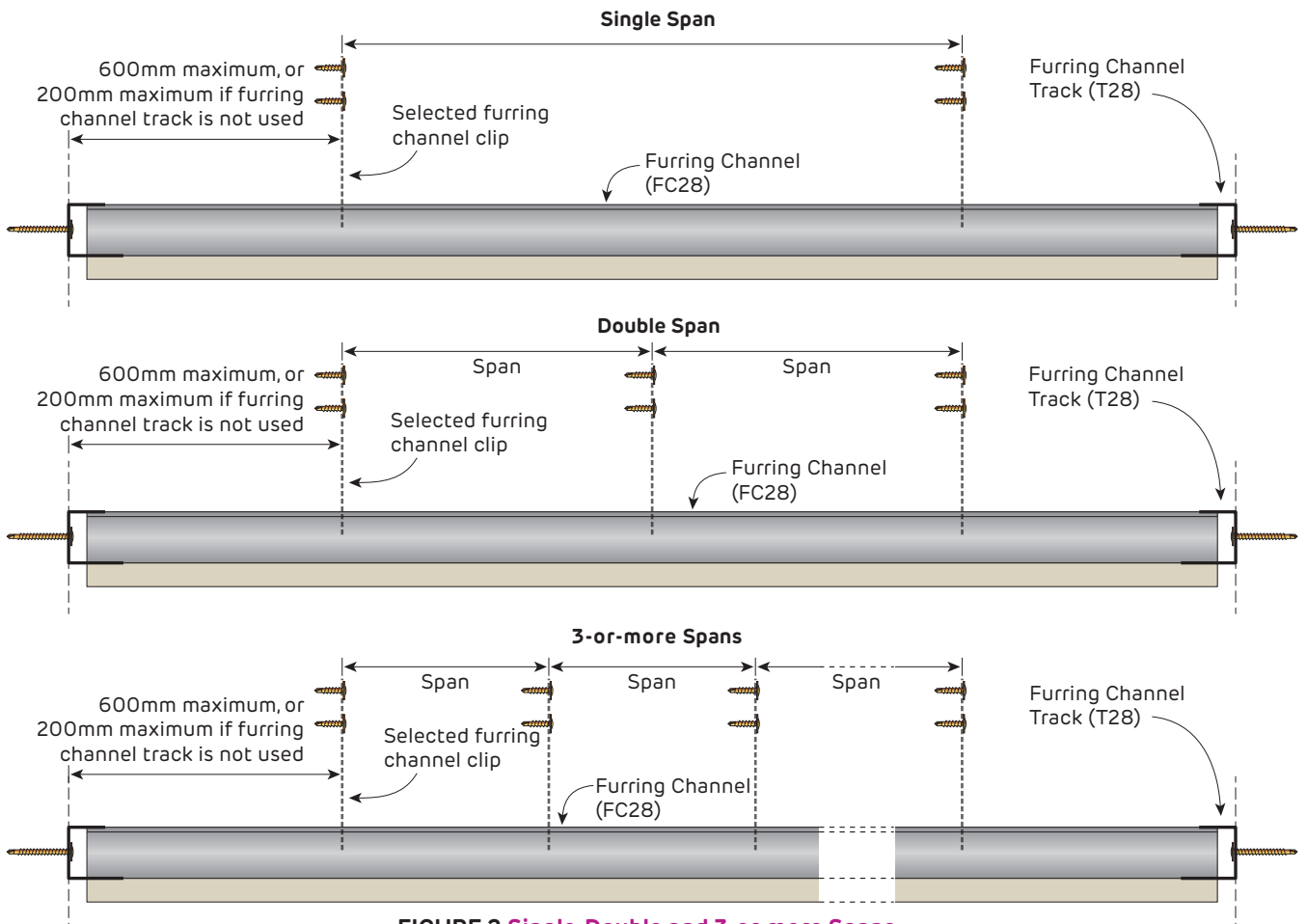


FIGURE 2 Single, Double and 3-or-more Spans
Section



Non-Fire Rated Typical Direct Fix Clips

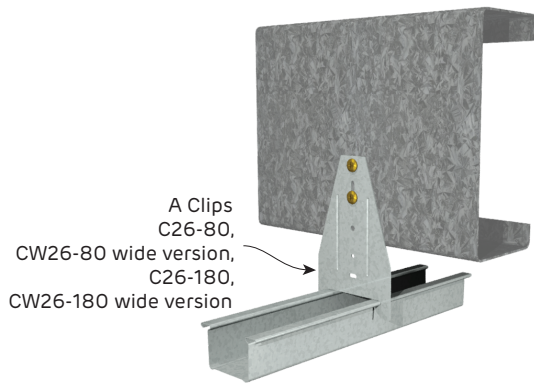


FIGURE 3 A Clip and Furring Channel
Perspective

Furring Channel Anchor Clip
C37-7H,
CW37-7H wide version,
C37-9H,
CW37-9H wide version

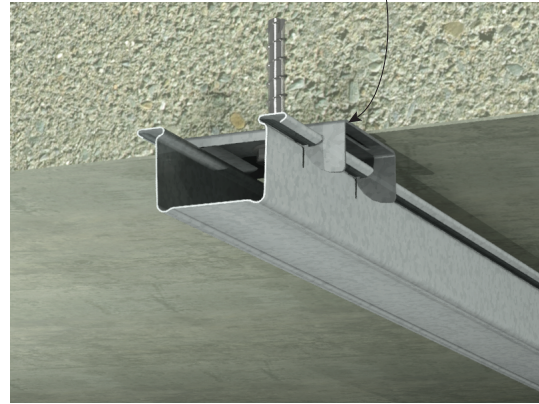


FIGURE 4 Anchor Clip and Furring Channel
Perspective



Direct fixing clips may generate noise when fixed to materials subject to daily thermal expansion and contraction

**Table 1 28mm Furring Channel Ceiling Span Table - REGION A**

Refer to Section 2.3 for assistance determining the relevant wind pressures for a specific project.

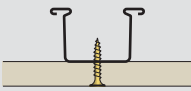
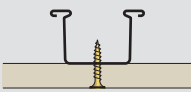
28mm Furring Channel (AFC28) Ceiling Span Table				Up to BCA Building Importance Level 3		Ultimate pressure W_U (kPa)		0.39	
						Serviceability pressure W_S (kPa)		0.25	
Ceiling Lining	Furring Channel Spacing (mm)	Single Span		Double Span		3-or-more Spans			
		Span (mm)	Connection Demand (kN)	Spans (mm)	Connection Demand (kN)	Spans (mm)	Connection Demand (kN)		
1 layer of 12.5mm Creason	600	1180	0.21	1580	0.72	1460	0.60		
	400	1350	0.16	1810	0.55	1670	0.46		
	300	1480	0.13	1990	0.45	1840	0.38		

Table 2 28mm Furring Channel Ceiling Span Table - REGION A

Refer to Section 2.3 for assistance determining the relevant wind pressures for a specific project.

28mm Furring Channel (AFC28) Ceiling Span Table				Up to BCA Building Importance Level 3		Ultimate pressure W_U (kPa)		0.46	
						Serviceability pressure W_S (kPa)		0.3	
Ceiling Lining	Furring Channel Spacing (mm)	Single Span		Double Span		3-or-more Spans			
		Span (mm)	Connection Demand (kN)	Spans (mm)	Connection Demand (kN)	Spans (mm)	Connection Demand (kN)		
1 layer of 12.5mm Creason	600	1110	0.22	1490	0.75	1370	0.63		
	400	1270	0.17	1700	0.57	1570	0.48		
	300	1400	0.14	1870	0.47	1730	0.40		

1. Table based upon downward (suction) and upward (uplift) pressures, intended for internal use only.
2. Table includes self weight and 1 kg/m² insulation weight with an additional 3 kg/m² service load. No further allowance for additional point loads or live loads.
3. Contact Siniat or a structural engineer to check ceiling for earthquake actions. Specific project information is required.
4. Table refers to Siniat Furring Channel of Base Metal Thickness (BMT) 0.42mm of grade G550 steel with Zinalume™ AM150 corrosion protection. Maximum production lengths available are 6.0m
5. Designed in accordance with AS/NZS 4600:2018 *Cold Formed Steel Structures* and AS/NZS 2785:2020 *Suspended Ceilings - Design and Installation*.
6. Wind pressures determined in accordance with AS/NZS 1170.2 *Wind Actions*.
7. Connections to clips must be checked with the *Clip Capacity Table*.
8. Ultimate Limit State Load Case 1: 1.2G + W_u (Suction) + $Q_{0.03kPa}$ Service Load
Ultimate Limit State Load Case 2: 0.9G + W_u (Uplift).
9. Serviceability Limit State Load Case 1: G, with deflection limited to Span/500.
Serviceability Limit State Load Case 2: W_s , with deflection limited to Span/360.
10. Perimeter anchors at 600mm maximum centres and 100mm maximum from track ends with minimum 0.7 kN shear capacity.
11. The nominated lateral pressures and deflection limits must be checked for suitability for a specific project.
12. For BCA Building Importance Level 4, please contact Siniat.

Siniat Internal Wind Load Calculator



Refer to Section 2.3 for assistance determining the relevant internal wind pressures for a specific project. Or use the Siniat Internal Wind Load Calculator by clicking on the link or by using your phone's camera on the QR code.


Table 3 28mm Furring Channel Ceiling Span Table - REGION B

Refer to Section 2.3 for assistance determining the relevant wind pressures for a specific project.

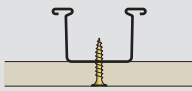
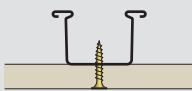
28mm Furring Channel (AFC28) Ceiling Span Table				Up to BCA Building Importance Level 3		Ultimate pressure W_U (kPa)	0.59
						Serviceability pressure W_S (kPa)	0.25
Ceiling Lining	Furring Channel Spacing (mm)	Single Span		Double Span		3-or-more Spans	
		Span (mm)	Connection Demand (kN)	Spans (mm)	Connection Demand (kN)	Spans (mm)	Connection Demand (kN)
1 layer of 12.5mm Creason	600	1130	0.27	1410	0.85	1410	0.78
	400	1350	0.22	1730	0.70	1670	0.61
	300	1480	0.18	1990	0.60	1840	0.51

Table 4 28mm Furring Channel Ceiling Span Table - REGION B

Refer to Section 2.3 for assistance determining the relevant wind pressures for a specific project.

28mm Furring Channel (AFC28) Ceiling Span Table				Up to BCA Building Importance Level 3		Ultimate pressure W_U (kPa)	0.71
						Serviceability pressure W_S (kPa)	0.3
Ceiling Lining	Furring Channel Spacing (mm)	Single Span		Double Span		3-or-more Spans	
		Span (mm)	Connection Demand (kN)	Spans (mm)	Connection Demand (kN)	Spans (mm)	Connection Demand (kN)
1 layer of 12.5mm Creason	600	1050	0.29	1310	0.91	1310	0.83
	400	1270	0.23	1610	0.74	1570	0.66
	300	1400	0.19	1860	0.64	1730	0.55

- Table based upon downward (suction) and upward (uplift) pressures, intended for internal use only.
- Table includes self weight and 1 kg/m² insulation weight with an additional 3 kg/m² service load. No further allowance for additional point loads or live loads.
- Contact Siniat or a structural engineer to check ceiling for earthquake actions. Specific project information is required.
- Table refers to Siniat Furring Channel of Base Metal Thickness (BMT) 0.42mm of grade G550 steel with Zincolume™ AM150 corrosion protection. Maximum production lengths available are 6.0m
- Designed in accordance with AS/NZS 4600:2018 *Cold Formed Steel Structures* and AS/NZS 2785:2020 *Suspended Ceilings - Design and Installation*.
- Wind pressures determined in accordance with AS/NZS 1170.2 *Wind Actions*.
- Connections to clips must be checked with the *Clip Capacity Table*.
- Ultimate Limit State Load Case 1: 1.2G + W_u (Suction) + $Q_{0.03kPa}$ Service Load
Ultimate Limit State Load Case 2: 0.9G + W_u (Uplift).
- Serviceability Limit State Load Case 1: G, with deflection limited to Span/500.
Serviceability Limit State Load Case 2: W_s , with deflection limited to Span/360.
- Perimeter anchors at 600mm maximum centres and 100mm maximum from track ends with minimum 0.7 kN shear capacity.
- The nominated lateral pressures and deflection limits must be checked for suitability for a specific project.
- For BCA Building Importance Level 4, please contact Siniat.



Non-Fire Rated
Internal Suspended Ceiling Frames

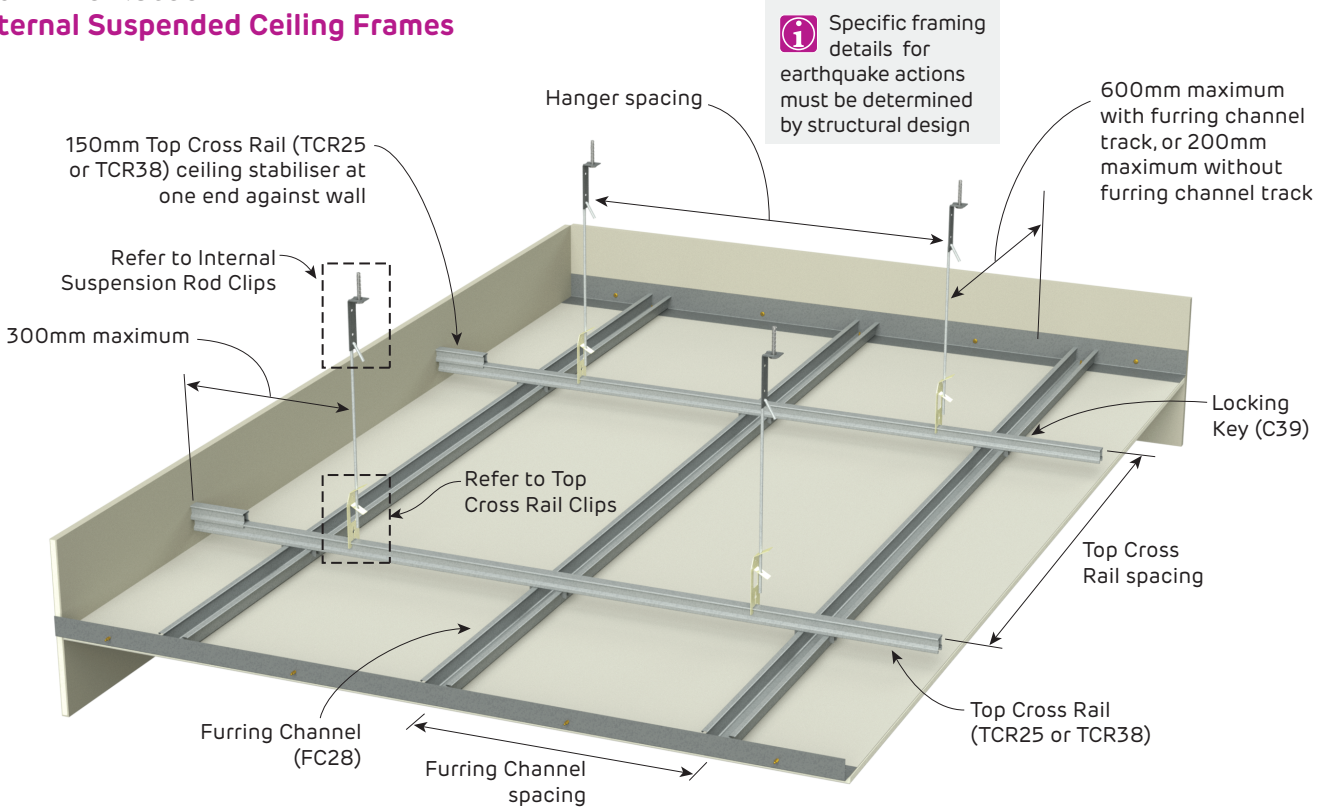


FIGURE 5 Suspended Ceiling Frame
Perspective

Non-Fire Rated
Details for Single Span, Double Span or 3-or-More Span Ceilings

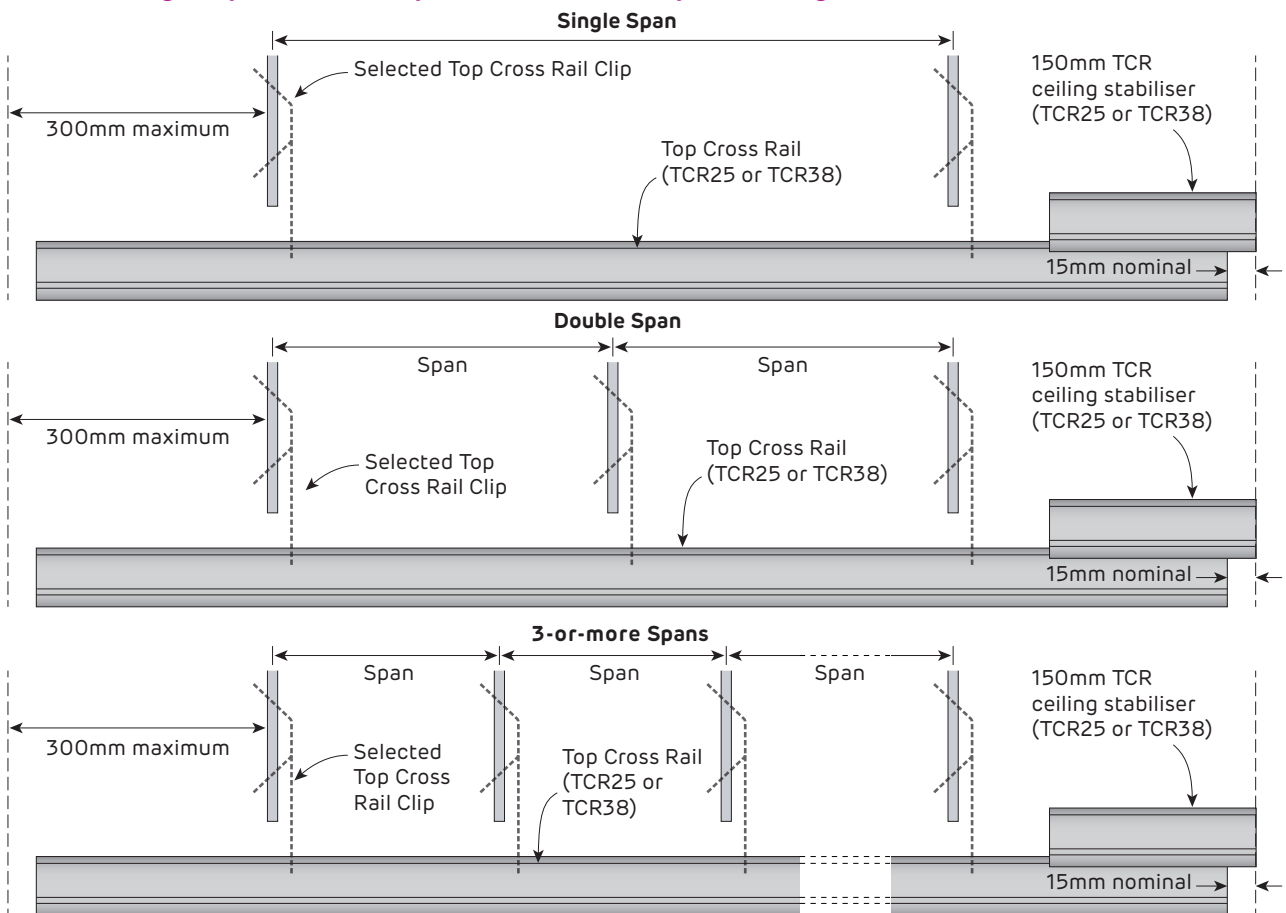


FIGURE 6 Top Cross Rail - Single, Double and 3-or-more Spans
Section

**Non-Fire Rated
Typical Suspension Rod Clips**

Spring Adjustable Anchor to Suspension Rod Clip (C60LDF)

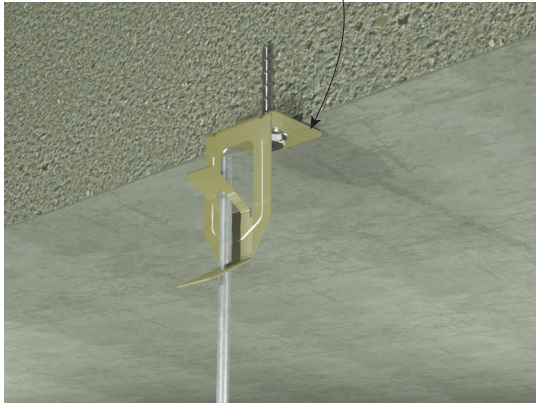


FIGURE 7 Spring Adjustable Direct Fix Clip to Concrete
Perspective

Spring Adjustable Purlin to Suspension Rod Clip (C60DF)

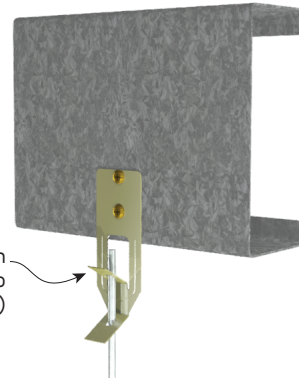


FIGURE 8 Spring Adjustable Direct Fix Clip to Purlin
Perspective

Typical Top Cross Rail Clips

Spring Adjustable Suspension Rod to Top Cross Rail Clip (C60)

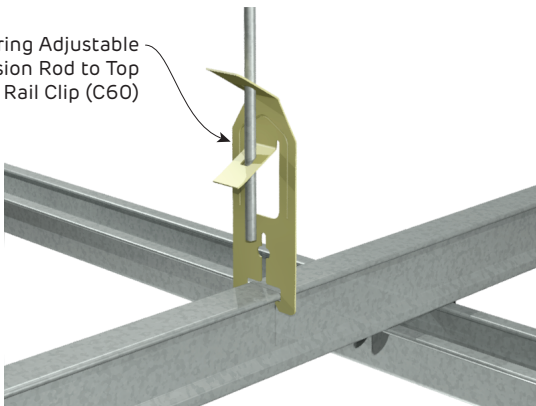


FIGURE 9 Spring Adjustable Suspension Rod to TCR Clip
Perspective and Sections

Top Cross Rail to Purlin Clip (C66)

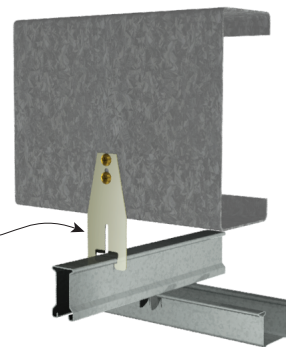


FIGURE 10 Top Cross Rail Direct Fix Clip to Purlin
Perspective and Sections

Locking Key

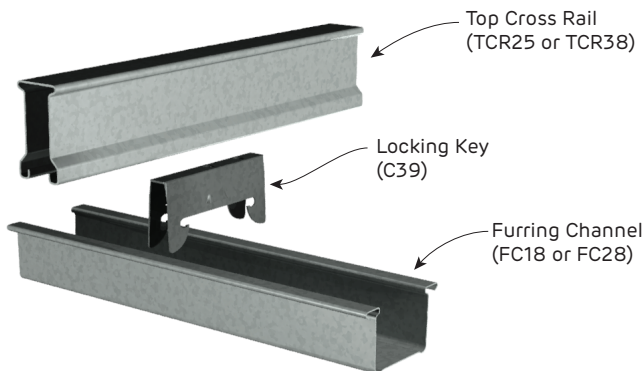


FIGURE 11 Locking Key
Perspective



Table 5 25mm Top Cross Rail Ceiling Span Table - REGION A

Refer to Section 2.3 for assistance determining the relevant wind pressures for a specific project.

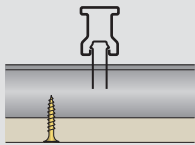
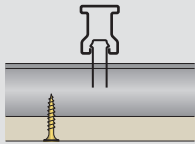
25mm Top Cross Rail Span Suspended Ceiling Table					Up to BCA Building Importance Level 3		Ultimate pressure W_U (kPa)		0.39
							Serviceability pressure W_S (kPa)		0.25
Ceiling Lining	28mm Furring Channel Spacing (mm)	Top Cross Rail Spacing (mm)	Single Span		Double Span		3-or-more Spans		
			Hanger Spacing (mm)	Hanger Demand (kN)	Hanger Spacing (mm)	Hanger Demand (kN)	Hanger Spacing (mm)	Hanger Demand (kN)	
1 layer of 12.5mm Creason	600	900	1040	0.42	970	0.99	1050	0.98	
		1050	990	0.47	900	1.07	970	1.05	
		1200	950	0.52	840	1.14	910	1.13	
	400	900	1040	0.42	1040	1.06	1120	1.04	
		1050	990	0.47	960	1.14	1040	1.13	
		1200	900	0.52	900	1.22	970	1.20	

Table 6 25mm Top Cross Rail Ceiling Span Table - REGION B

Refer to Section 2.3 for assistance determining the relevant wind pressures for a specific project.

25mm Top Cross Rail Span Suspended Ceiling Table					Up to BCA Building Importance Level 3		Ultimate pressure W_U (kPa)		0.59
							Serviceability pressure W_S (kPa)		0.25
Ceiling Lining	28mm Furring Channel Spacing (mm)	Top Cross Rail Spacing (mm)	Single Span		Double Span		3-or-more Spans		
			Hanger Spacing (mm)	Hanger Demand (kN)	Hanger Spacing (mm)	Hanger Demand (kN)	Hanger Spacing (mm)	Hanger Demand (kN)	
1 layer of 12.5mm Creason	600	750	1110	0.50	920	1.04	1000	1.03	
		900	1040	0.56	840	1.14	910	1.13	
		1050	960	0.61	780	1.23	840	1.22	
	400	900	1040	0.56	900	1.22	970	1.20	
		1050	960	0.61	830	1.31	900	1.30	
		1200	900	0.65	780	1.41	840	1.39	

Anchor Table

Concrete Grade	Anchor
20 - 25 MPa	SSA6x60
≥32MPa	SSA6x45

1. No edge / spacing effects.
1. Table based upon downward (suction) and upward (uplift) pressures, intended for internal use only. Down-struts are required for uplift.
2. Table includes self weight and 1 kg/m² insulation weight with an additional 3 kg/m² service load. No further allowance for additional point loads or live loads.
3. Contact Siniat or a structural engineer to check ceiling for earthquake actions. Specific project information is required.
4. Table refers to Siniat Furring Channels of 0.42mm Base Metal Thickness (BMT) of grade G550 steel and Siniat Top Cross Rails of 0.75mm BMT of grade G300, both with Zinalume™ AM150 corrosion protection. Maximum production lengths available are 6.0m
5. Furring Channels checked for 2-or-more spans only. If required, contact Siniat for Single Span furring channel check.
6. Designed in accordance with AS/NZS 4600:2018 Cold Formed Steel Structures and AS/NZS 2785:2020 Suspended Ceilings - Design and Installation.
7. Wind pressures determined in accordance with AS/NZS 1170.2 Wind Actions.
8. Connections to clips must be checked with the Clip Capacity Table.
9. Ultimate Limit State Load Case 1: 1.2G + W_U (Suction) + $Q_{0.03kPa}$ Service Load
Ultimate Limit State Load Case 2: 0.9G + W_U (Uplift).
10. Serviceability Limit State Load Case 1: G, with deflection limited to Span/500.
Serviceability Limit State Load Case 2: G + W_s , with deflection limited to Span/200.
11. Perimeter anchors at 600mm maximum centres and 100mm maximum from track ends with minimum 0.7 kN shear capacity.
12. The nominated lateral pressures and deflection limits must be checked for suitability for a specific project.
13. For BCA Building Importance Level 4, please contact Siniat.


Table 7 38mm Top Cross Rail Ceiling Span Table - REGION A

Refer to Section 2.3 for assistance determining the relevant wind pressures for a specific project.

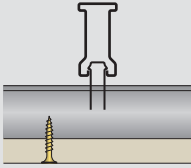
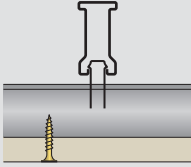
38mm Top Cross Rail Span Suspended Ceiling Table				Up to BCA Building Importance Level 3		Ultimate pressure W_U (kPa)		0.39	
						Serviceability pressure W_S (kPa)		0.25	
Ceiling Lining	28mm Furring Channel Spacing (mm)	Top Cross Rail Spacing (mm)	Single Span		Double Span		3-or-more Spans		
			Hanger Spacing (mm)	Hanger Demand (kN)	Hanger Spacing (mm)	Hanger Demand (kN)	Hanger Spacing (mm)	Hanger Demand (kN)	Hanger Demand (kN)
1 layer of 12.5mm Creason	600	1050	1410	0.67	107	1.27	115	1.25	
		1200	1350	0.73	100	1.36	108	1.34	
		1350	1300	0.79	940	1.44	102	1.43	
	400	1050	1410	0.67	1150	1.37	1240	1.35	
		1200	1350	0.73	1080	1.47	1160	1.44	
		1350	1300	0.79	1010	1.54	1100	1.54	

Table 8 38mm Top Cross Rail Ceiling Span Table - REGION A

Refer to Section 2.3 for assistance determining the relevant wind pressures for a specific project.

38mm Top Cross Rail Span Suspended Ceiling Table				Up to BCA Building Importance Level 3		Ultimate pressure W_U (kPa)		0.46	
						Serviceability pressure W_S (kPa)		0.3	
Ceiling Lining	28mm Furring Channel Spacing (mm)	Top Cross Rail Spacing (mm)	Single Span		Double Span		3-or-more Spans		
			Hanger Spacing (mm)	Hanger Demand (kN)	Hanger Spacing (mm)	Hanger Demand (kN)	Hanger Spacing (mm)	Hanger Demand (kN)	Hanger Demand (kN)
1 layer of 12.5mm Creason	600	900	1360	0.72	1010	1.34	1090	1.32	
		1050	1300	0.79	940	1.42	1020	1.41	
		1200	1250	0.85	890	1.52	960	1.50	
	400	1050	1360	0.72	1090	1.45	1180	1.43	
		1200	1300	0.79	1020	1.55	1100	1.52	
		1350	1250	0.85	960	1.64	1040	1.62	

Anchor Table

Concrete Grade	Anchor
20 - 25 MPa	SSA6x60
≥32MPa	SSA6x45

1. No edge / spacing effects.

- Table based upon downward (suction) and upward (uplift) pressures, intended for internal use only. Downstruts are required for uplift.
- Table includes self weight and 2 kg/m² insulation weight with an additional 3 kg/m² service load. No further allowance for additional point loads or live loads.
- Contact Siniat or a structural engineer to check ceiling for earthquake actions. Specific project information is required.
- Table refers to Siniat Furring Channels of 0.42mm Base Metal Thickness (BMT) of grade G550 steel and Siniat Top Cross Rails of 0.75mm BMT of grade G300, both with Zinalume™ AM150 corrosion protection. Maximum production lengths available are 6.0m
- Furring Channels checked for 2-or-more spans only. If required, contact Siniat for Single Span furring channel check.
- Designed in accordance with AS/NZS 4600:2018 *Cold Formed Steel Structures* and AS/NZS 2785:2020 *Suspended Ceilings - Design and Installation*.
- Wind pressures determined in accordance with AS/NZS 1170.2 *Wind Actions*.
- Connections to clips must be checked with the *Clip Capacity Table* in Section 5.1.
- Ultimate Limit State Load Case 1: 1.2G + W_U (Suction) + $Q_{0.03kPa}$ Service Load
Ultimate Limit State Load Case 2: 0.9G + W_U (Uplift).
- Serviceability Limit State Load Case 1: G, with deflection limited to Span/500.
Serviceability Limit State Load Case 2: G + W_S , with deflection limited to Span/200.
- Perimeter anchors at 600mm maximum centres and 100mm maximum from track ends with minimum 0.7 kN shear capacity.
- The nominated lateral pressures and deflection limits must be checked for suitability for a specific project.
- For BCA Building Importance Level 4, please contact Siniat.



Table 9 38mm Top Cross Rail Ceiling Span Table - REGION B

Refer to Section 2.3 for assistance determining the relevant wind pressures for a specific project.

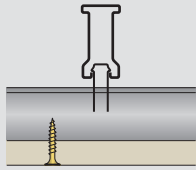
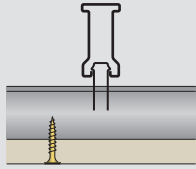
38mm Top Cross Rail Span Suspended Ceiling Table					Up to BCA Building Importance Level 3		Ultimate pressure W_U (kPa)		0.59
							Serviceability pressure W_S (kPa)		0.25
Ceiling Lining	28mm Furring Channel Spacing (mm)	Top Cross Rail Spacing (mm)	Single Span		Double Span		3-or-more Spans		
			Hanger Spacing (mm)	Hanger Demand (kN)	Hanger Spacing (mm)	Hanger Demand (kN)	Hanger Spacing (mm)	Hanger Demand (kN)	
1 layer of 12.5mm Creason	600	900	1380	0.75	1000	1.36	1080	1.34	
		1050	1290	0.82	920	1.46	1000	1.45	
		1200	1220	0.88	860	1.55	930	1.54	
	400	900	1380	0.75	1080	1.46	1160	1.44	
		1050	1290	0.82	1000	1.58	1080	1.56	
		1200	1220	0.88	930	1.68	1010	1.67	

Table 10 38mm Top Cross Rail Ceiling Span Table - REGION B

Refer to Section 2.3 for assistance determining the relevant wind pressures for a specific project.

38mm Top Cross Rail Span Suspended Ceiling Table					Up to BCA Building Importance Level 3		Ultimate pressure W_U (kPa)		0.71
							Serviceability pressure W_S (kPa)		0.3
Ceiling Lining	28mm Furring Channel Spacing (mm)	Top Cross Rail Spacing (mm)	Single Span		Double Span		3-or-more Spans		
			Hanger Spacing (mm)	Hanger Demand (kN)	Hanger Spacing (mm)	Hanger Demand (kN)	Hanger Spacing (mm)	Hanger Demand (kN)	
1 layer of 12.5mm Creason	600	900	1300	0.81	930	1.45	1000	1.43	
		1050	1220	0.89	860	1.56	930	1.55	
		1200	1150	0.96	800	1.66	870	1.65	
	400	900	1300	0.81	1000	1.56	1090	1.55	
		1050	1220	0.89	930	1.69	1000	1.66	
		1200	1150	0.96	840	1.75	920	1.75	

Anchor Table

Concrete Grade	Anchor
20 - 25 MPa	SSA6x60
≥32MPa	SSA6x45

1. No edge / spacing effects.

- Table based upon downward (suction) and upward (uplift) pressures, intended for internal use only. Downstruts are required for uplift.
- Table includes self weight and 2 kg/m² insulation weight with an additional 3 kg/m² service load. No further allowance for additional point loads or live loads.
- Contact Siniat or a structural engineer to check ceiling for earthquake actions. Specific project information is required.
- Table refers to Siniat Furring Channels of 0.42mm Base Metal Thickness (BMT) of grade G550 steel and Siniat Top Cross Rails of 0.75mm BMT of grade G300, both with Zinalume™ AM150 corrosion protection. Maximum production lengths available are 6.0m
- Furring Channels checked for 2-or-more spans only. If required, contact Siniat for Single Span furring channel check.
- Designed in accordance with AS/NZS 4600:2018 *Cold Formed Steel Structures* and AS/NZS 2785:2020 *Suspended Ceilings - Design and Installation*.
- Wind pressures determined in accordance with AS/NZS 1170.2 *Wind Actions*.
- Connections to clips must be checked with the *Clip Capacity Table* in Section 5.1.
- Ultimate Limit State Load Case 1: 1.2G + W_u (Suction) + $Q_{0.03kPa}$ Service Load
Ultimate Limit State Load Case 2: 0.9G + W_u (Uplift).
- Serviceability Limit State Load Case 1: G, with deflection limited to Span/500.
Serviceability Limit State Load Case 2: G + W_s , with deflection limited to Span/200.
- Perimeter anchors at 600mm maximum centres and 100mm maximum from track ends with minimum 0.7 kN shear capacity.
- The nominated lateral pressures and deflection limits must be checked for suitability for a specific project.
- For BCA Building Importance Level 4, please contact Siniat.



Layout

Plan the ceiling layout to suit the creason sheet size in order to minimise the number of joints and create symmetrical patterns.
Start sheeting from the centre of the room.
Install creason ceilings perpendicular to framing members.
Chamfer butt joints and cut edges in preparation for jointing.
Fix butt joints on Wide-face Furring Channel (FC60/28).
Install one entire row in each direction before proceeding. Refer to Figure 12.

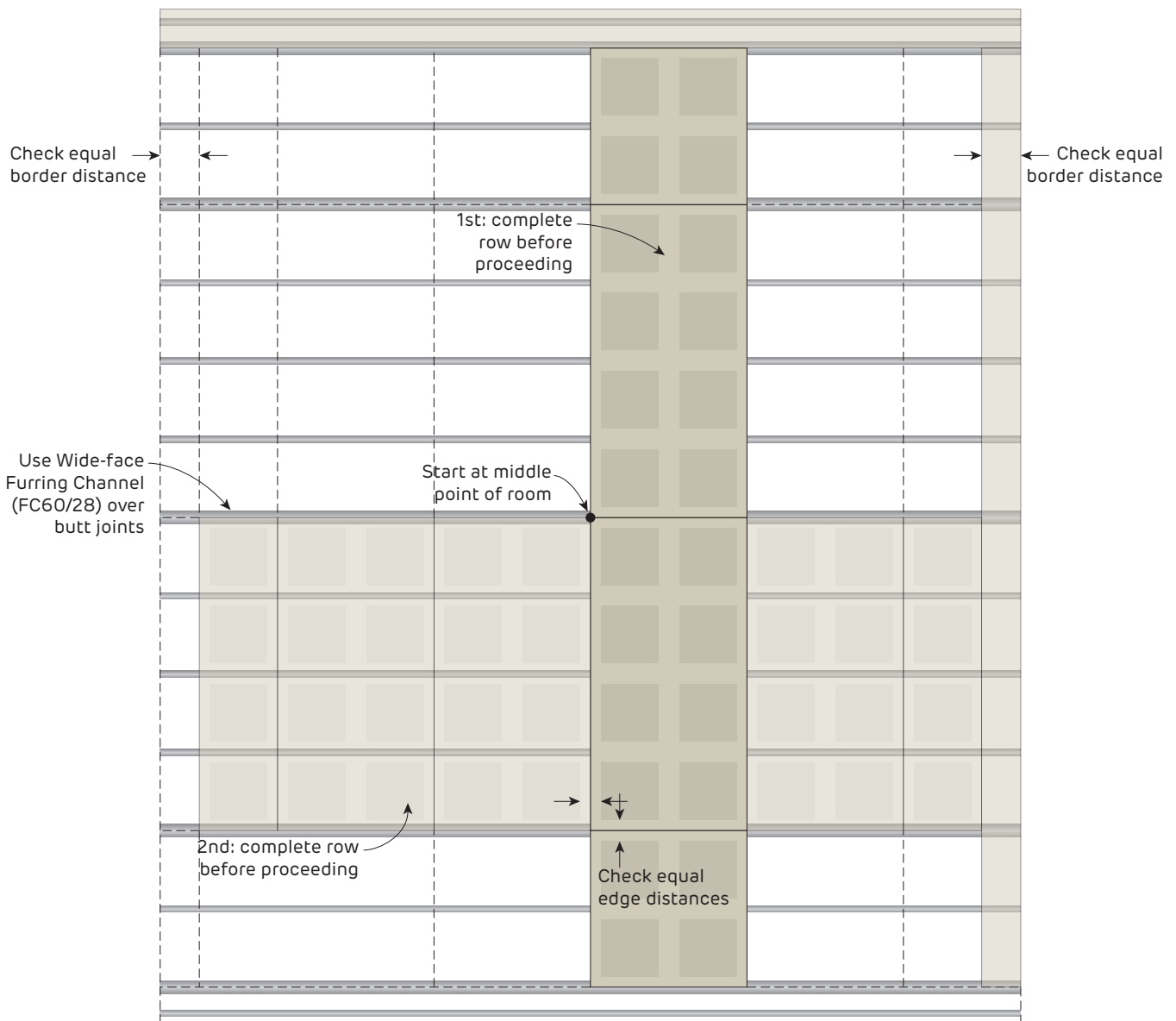


FIGURE 12 Ceiling Layout Plan

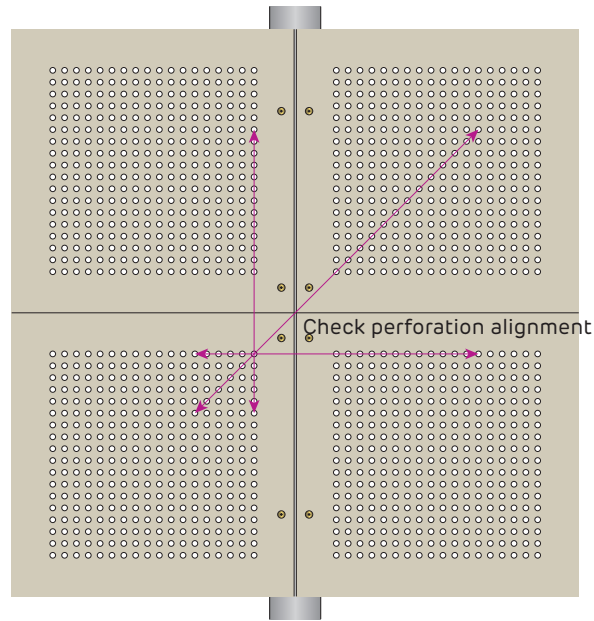


FIGURE 13 Perforation Alignment
Plan



Fixing

Use the 'Screw Only Method'. Adhesive is not permitted.

Drive screws to just below the sheet surface, taking care not to break the paper linerboard. For over-driven screws, install another screw 20mm away. Leave or remove the over-driven screw and patch.

Screw Type and Minimum Size for the Installation of Plasterboard to Steel

Plasterboard Thickness	1st Layer
12.5mm	6g x 25mm screw

For steel ≤ 0.75 mm BMT, use fine thread needle point screws.

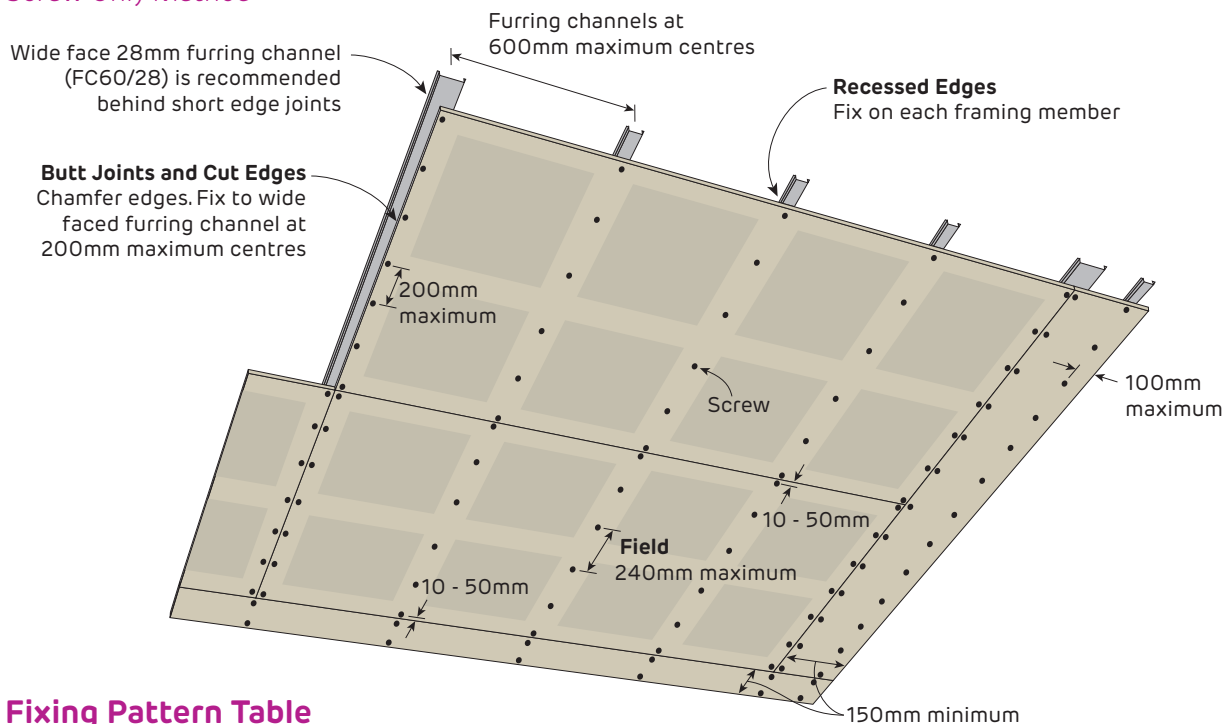
For steel ≥ 0.75 mm BMT, use fine thread drill point screws.

Fastener Type and Minimum Size for the Installation of Plasterboard to Softwood Timber

Plasterboard Thickness	1st Layer
12.5mm	6g x 32mm screw

FIGURE 14 Creason Internal Ceiling - 1 Layer

Screw Only Method



Fixing Pattern Table

Sheet Width	Location	Screw Fixing Pattern
1200mm	Field	S S S S S S (6)
	Short edges (butt joints)	S S S S S S S (7)

S = One screw

Maximum Ultimate Limit State Wind Load Table (kPa)

Plasterboard Thickness	Maximum Ceiling Frame Spacing		
	600mm	400mm	300mm
12.5mm	1.00	1.55	2.10

- Calculations do not include the framing which must be independently designed to suit the desired load.
- Calculations include a ceiling insulation with maximum weight of 1.05 kg/m² (equivalent to Pink® Partition 75mm 14kg/m³ R1.9 Batts).
- If higher internal wind pressures are expected, please contact Siniat for specific design.

Curving

Apply water on the front face with a roller and leave for 30 minutes.
Lay the sheet over a template. Secure the panel on one side of the template.
Press the sheet against the template using a batten, moving it every 100mm. Secure the panel on the other side of the template. Drying time approximately 2 hours.

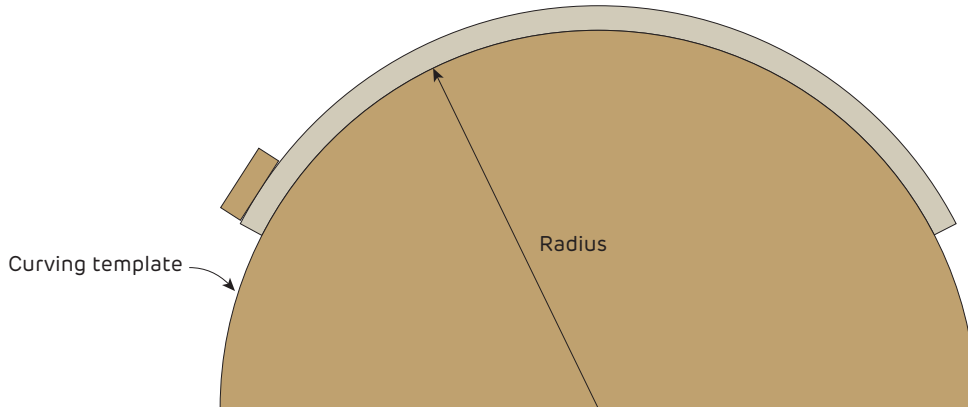


FIGURE 15 Curving Template
Section

Table 11 Maximum Frame Spacing and Minimum Curve Radius for Creason

Creason	Curve Radius (mm)		
	2000	2500	3000
	Maximum Framing Centres (mm)		
Concave - curved along length	300	300	400
Convex - curved along length	300	300	400
Concave - curved along width	-	300	400
Convex - curved along width	-	-	400



Finishing

Jointing


Jointing must not be conducted until all ceiling services and access panels are installed in the ceiling, otherwise the excessive vibration may cause joint cracking or peaking.
Dampen chamfered edges with water to remove any loose gypsum before applying jointing compounds.
Use paper tape and 2 coats of mastabase , mastalongset or mastatape-in and a finish coat of mastaglide , mastaline or mastalite . For more information refer to Section 7.3.
Do not obstruct perforations during jointing.

Sanding

Sanding is a critical part of achieving a high quality finish. Care should be taken when sanding joints to achieve a smooth surface.
Lightly sand to a smooth even surface using 150 to 220 grit sandpaper or sanding mesh. Do not expose or scuff the paper linerboard while sanding.

Painting

A three coat paint system must be applied in accordance with Australian Standard <i>AS/NZS 2311, Guide to the painting of buildings</i> . Both the quality of the paint and how it is applied have a large effect on the finished appearance of the creason plasterboard.
Apply the paint with a short napped roller and avoid the application of excess paint at any time.

-  > Only use a roller application for painting. Roller application applies a uniform texture over the entire surface and ensures the paint does not fill the perforations or contact the acoustic felt on the back of the plasterboard.
- > Spray painting is not permitted.
- > For more information on finishing plasterboard refer to Section 7.



**Non-Fire Rated
Creason Details**

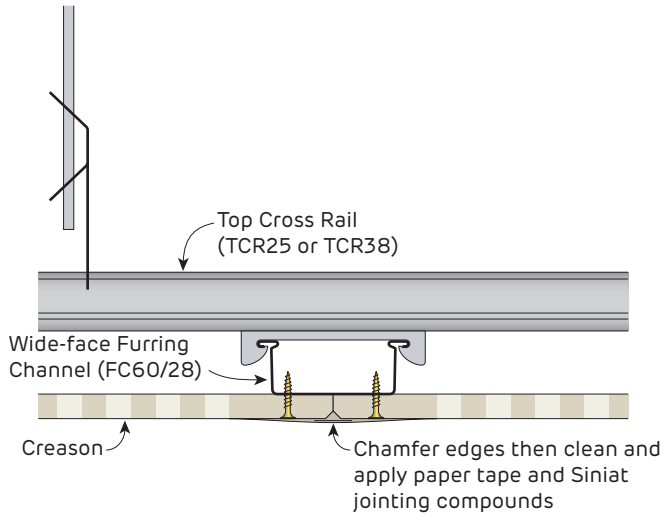


FIGURE 16 Butt Joints
Section

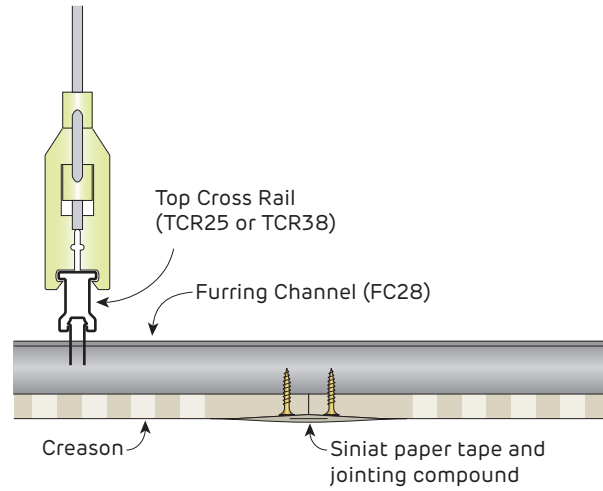


FIGURE 17 Recessed Joints
Section

Control Joints

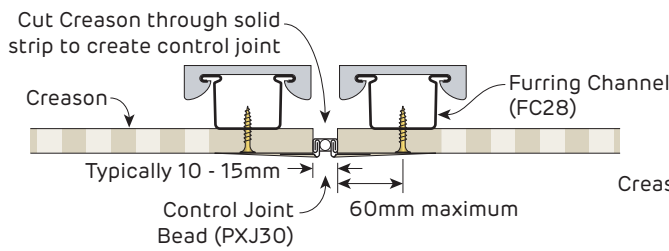


FIGURE 18 Control Joint
Parallel to furring channel
Section

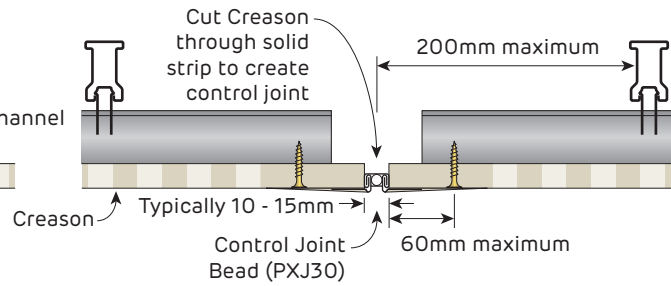


FIGURE 19 Control Joint
Perpendicular to furring channel
Section



Non-Fire Rated
Ceiling Perimeter Finishing Details

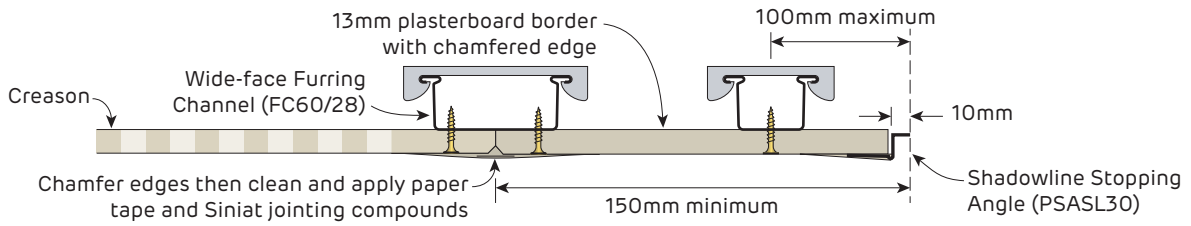


FIGURE 20 Finishing Detail - Shadowline
Section

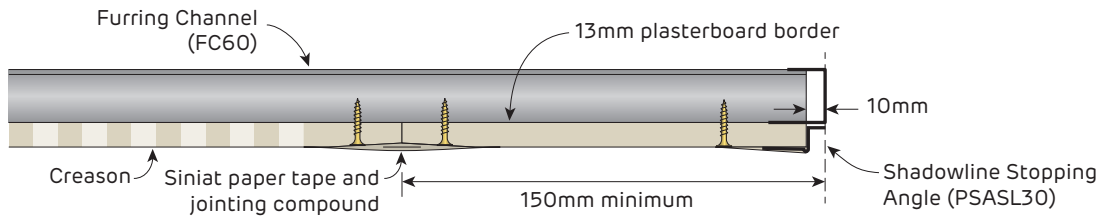


FIGURE 21 Finishing Detail - Shadowline
Section

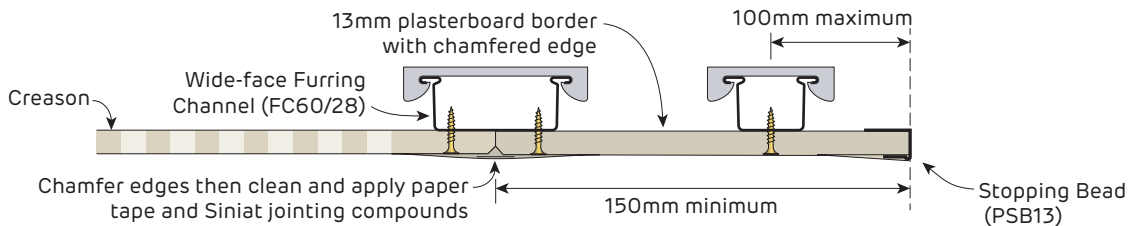


FIGURE 22 Finishing Detail - Stopping Bead
Section

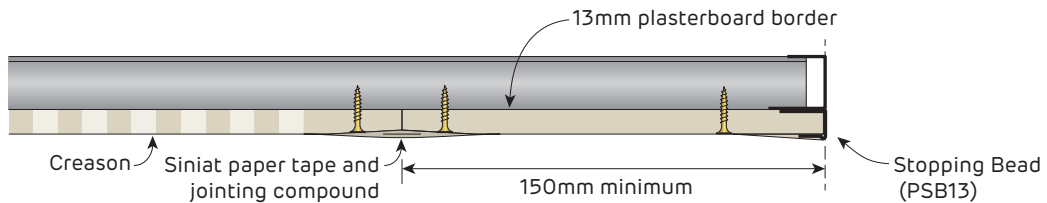


FIGURE 23 Finishing Detail - Stopping Bead
Section

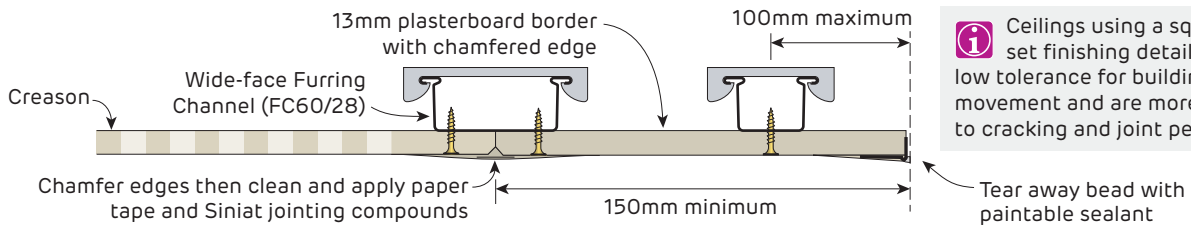


FIGURE 24 Finishing Detail - Tear Away Bead
Section

i Ceilings using a square set finishing detail have low tolerance for building movement and are more prone to cracking and joint peaking

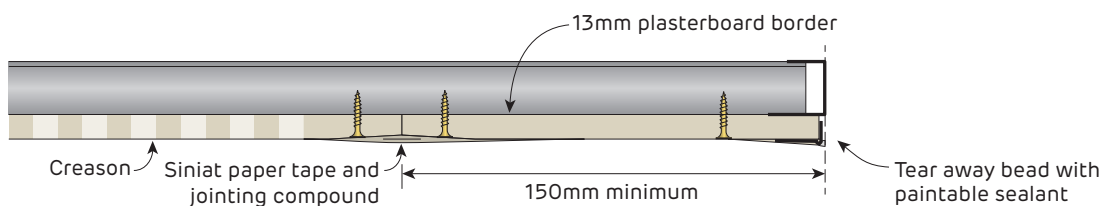


FIGURE 25 Finishing Detail - Tear Away Bead
Section