



createx[®]

acoustic perforated
plasterboard for ceilings

Disclaimer

Products manufactured and systems designed by Etex Australia Pty Ltd and branded Siniat, are produced in accordance with the Building Code of Australia and relevant Australian Standards. Information in this document is to be used as a guide only and is subject to project approval as many aspects of construction are not comprehensively covered. It is also the responsibility of the project to determine if our products and systems are suitable for the intended application and they meet the relevant building code and project requirements. Etex Australia Pty Ltd will not be held responsible for any claims resulting from the installation of its products or other associated products not in accordance with the recommendations of the manufacturer's technical literature or relevant Australian Standards, or for situations not covered by our certification reports.

Siniat technical information is regularly updated. To ensure this document is current with the latest information, visit:

www.siniat.com.au

or contact Siniat's Customer Service Centre on

1300 724 505

Warranty

Siniat products are covered by a comprehensive warranty.

Visit

www.siniat.com.au/warranty

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about us

Siniat is one of the Etex Group's flagship commercial brands, and one of the leading global manufacturers of interior and exterior materials for drywall construction.

In Australia, Etex has Siniat manufacturing facilities located in Sydney, Melbourne, Bundaberg and Brisbane. Etex supplies Siniat branded plasterboard, compounds, cornice, steel profiles and associated products and systems to the Australian building industry through its national distribution network.

Siniat's comprehensive range of quality wall and ceiling lining products are developed with specific characteristics to enhance performance and provide fire, water, acoustic and decorative solutions to all construction projects.

The Siniat team is committed to providing excellent technical service and sales support to help with innovative solutions for your next project.

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introduction

We spend 90% of our time indoors, so we should focus on making it healthy and comfortable to be inside.

Siniat **createx** is a breath of fresh air. **createx** perforated plasterboard combines striking creative design and a seamless appearance to provide beautiful aesthetics and superior sound absorption.

createx is trusted by professionals worldwide to improve the wellbeing of occupants in hotels, hospitals, airports, gyms, schools, and residential developments.

Thanks to CAPT'AIR® clean air technology, **createx** also purifies the air, making it easier and healthier to breathe.

CAPT'AIR® clean air technology works quietly in the background to remove up to 80% of formaldehyde from the indoor air. Formaldehyde is a dangerous Volatile Organic Compound (VOC) that's often found in building materials and household products.

Include **createx** in your project to improve the acoustic comfort of any interior space, add a beautiful decorative touch and improve the indoor air quality.

introducing CAPT'AIR®



improved indoor air quality — healthier spaces

Introducing Siniat CAPT'AIR®.

CAPT'AIR® technology was developed after 4 years of intensive technical research by our research partners in Europe.

CAPT'AIR® technology has been added to our **createx** perforated board range and actively works to capture formaldehyde, improving the air quality within buildings.

Once installed, the CAPT'AIR® technology in **createx** boards actively works to decompose formaldehyde emissions found in the air.

A polymer inside the board reacts with harmful formaldehyde to create a safe compound that is absorbed back into the board, resulting in a safer environment in any interior space that it is installed.

what is formaldehyde?

Formaldehyde is a volatile organic compound (VOC) that is commonly found in work and living spaces. This pollutant is known to increase health risks and impact our general wellbeing.

Due to its presence in manufactured wood products, fabrics and household products such as glues, paints, cosmetics and detergents, formaldehyde is the most common volatile organic compound found in indoor spaces.

short-term health issues of VOCs:

- Headaches
- Nausea
- Eye irritation
- Coughing

long-term health issues of VOCs:

- Fatigue
- Respiratory issues
- Dizziness



createx®

createx provides excellent sound absorption properties for superior acoustic comfort.

Suitable for both wall and ceilings, the continuous perforations in createx create a seamless appearance.

The V-edge makes easy application possible. Together with Siniat Wide Face Furring Channel and matching clips, createx comes as a complete Siniat system.

Siniat mastatape-in is the approved jointing compound for the installation of createx.

The built-in air purifying CAPT'AIR® technology improves indoor air quality, resulting in a comfortable and healthy environment.

createx is available in five perforation patterns:

- round R8/18
- round R12/25
- cube C12/25
- dynamic D8-12
- space S8-15-20

When installed in accordance with the recommendations published in blueprint, the createx system qualifies for the Siniat Warranty that covers not only the individual products but the whole system.

For more information download the Technical Data Sheet from siniat.com.au

design	perforation pattern	perforation ratio (%)	absorption (α_w / NRC)	board dimensions		edge type
				width (mm)	length (mm)	V-edge on 4 sides
Standard perforation patterns						
round	R8/18	14.3	0.7 - 0.85	1200	1988	•
round	R12/25	18.2	0.7 - 0.85		2000	•
cube	C12/25	23.1	0.75 - 0.9		2000	•
dynamic	D8-12	13.1	0.35 - 0.8		2000	•
space	S8-15-20	10.2	0.5 - 0.65		1950	•



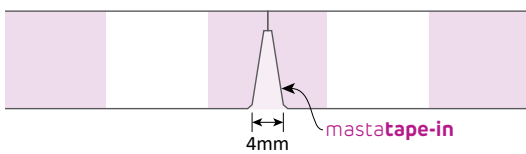
Edge Type

V-edge

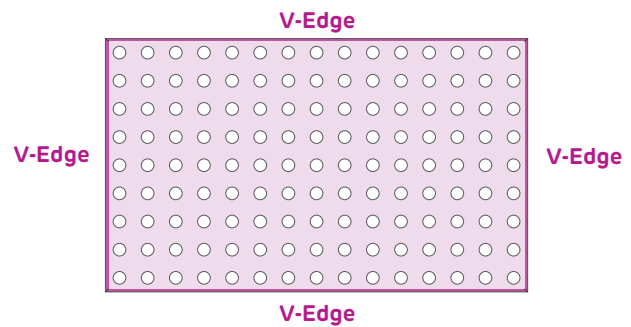
All **createx** perforation patterns come with a V-edge profile.

The V-edge profile easily facilitates precise alignment of the perforated boards, ensuring that the boards are straight and the continuous perforation patterns align perfectly.

The V-edge is used when a jointless appearance is required. Joints are tapeless and virtually invisible when filled with **mastatape-in** jointing compound followed by **mastalite**, **mastaglide**, or **mastaline** to finish the joint ready for painting.



V-edge section



V-edge plan

Createx Jointing Compound

Name	Size	Type	Application
			Createx Joints
mastatape-in	20kg bucket	Premix	✓

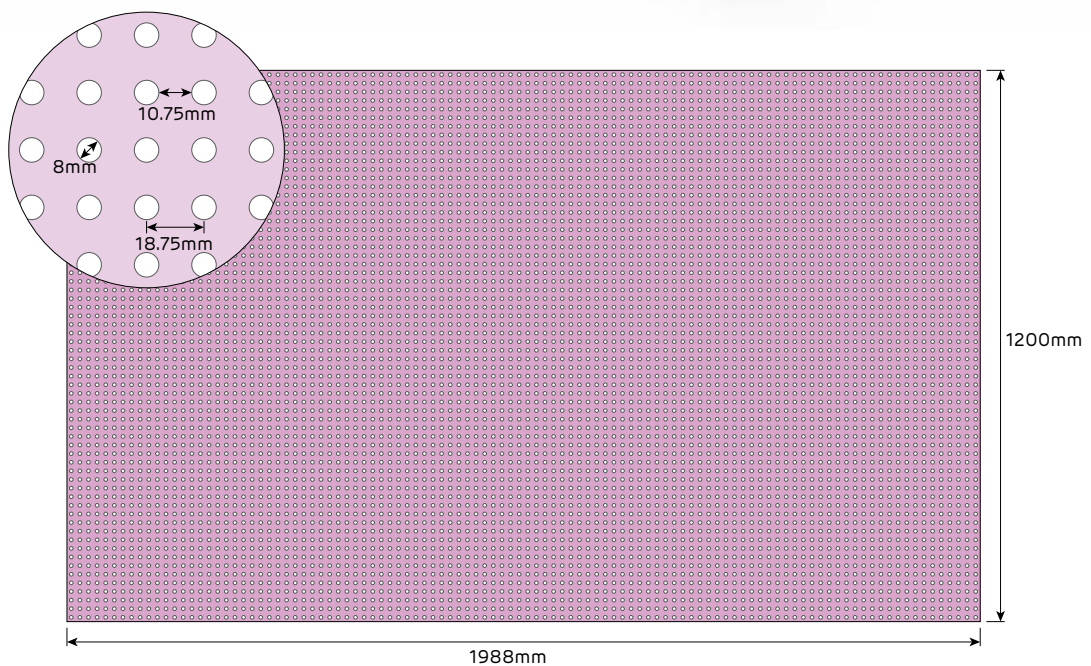
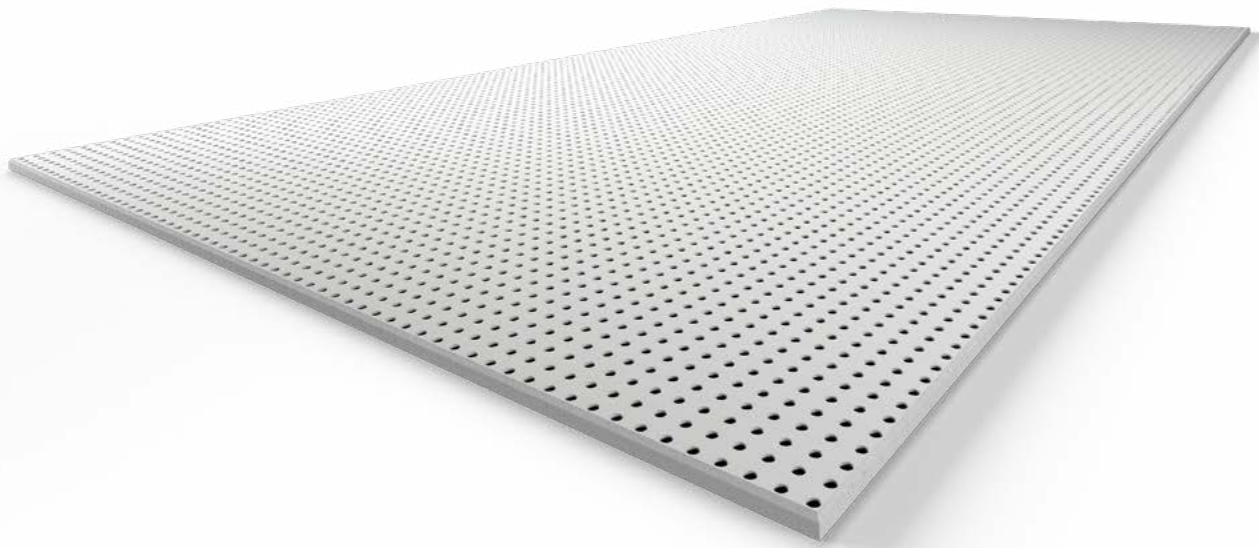
Usage is approximately 360 lineal metres of V-joint (~270m² of **createx**)



createx® round R8/18

8mm diameter circle perforations

- **Open Area:** 14.3 %
- **Furring Channel Centres:** 400mm maximum
- **Sheet Dimensions:** 1200 x 1988 x 12.5mm
- **Weight:** 10 kg/m³ (approximate)



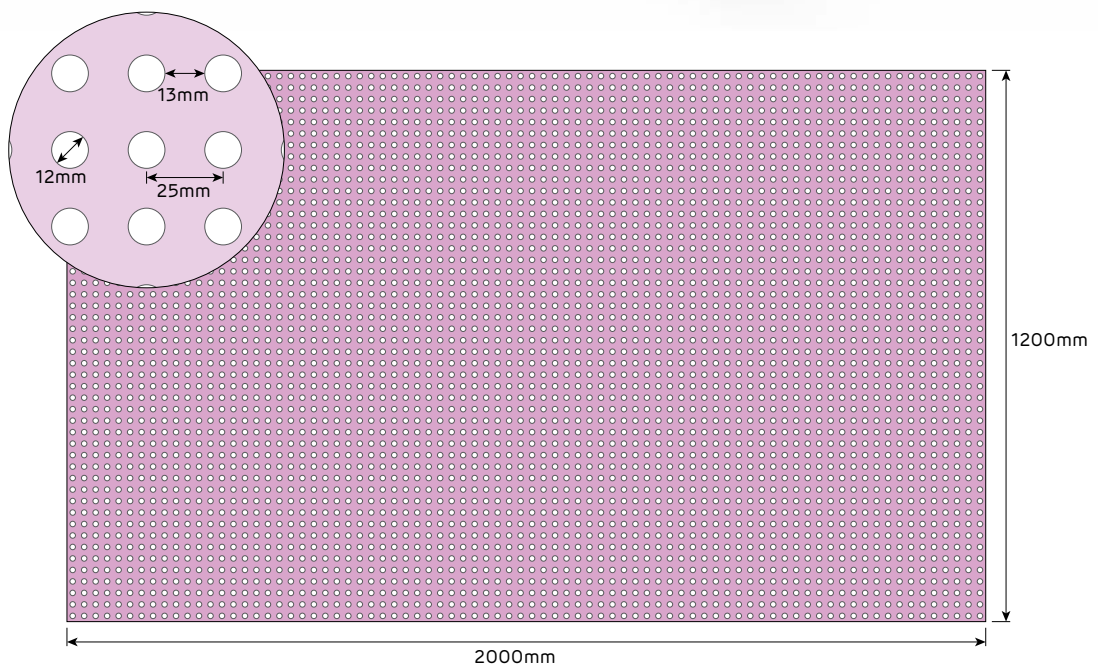
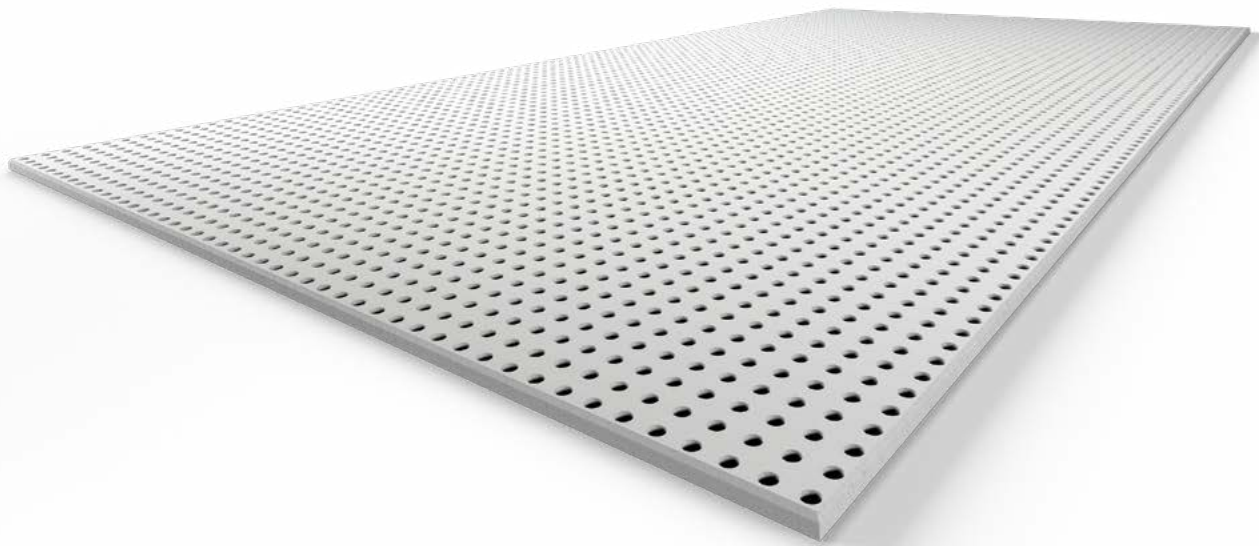


createx R8/18	ceiling cavity (mm)	α_p - Frequency (Hz)						α_w	NRC
		125	250	500	1000	2000	4000		
Pink® Partition 50mm 14kg/m ³ R1.3	37	0.35	0.85	1.0	0.9	0.65	0.6	0.7	0.85
	187	0.55	0.95	0.85	0.85	0.65	0.6	0.7	0.85
Pink® Partition 75mm 14kg/m ³ R1.3	187	0.55	0.8	0.8	0.75	0.7	0.65	0.7	0.75
No Insulation	187	0.45	0.7	0.8	0.7	0.65	0.6	0.7	0.7
Pink® Partition 75mm 14kg/m ³ R1.3	587	0.65	0.7	0.8	0.7	0.6	0.65	0.7	0.7

createx® round R12/25

12mm diameter circle perforations

- **Open Area:** 18.2 %
- **Furring Channel Centres:** 400mm maximum
- **Sheet Dimensions:** 1200 x 2000 x 12.5mm
- **Weight:** 10 kg/m³ (approximate)





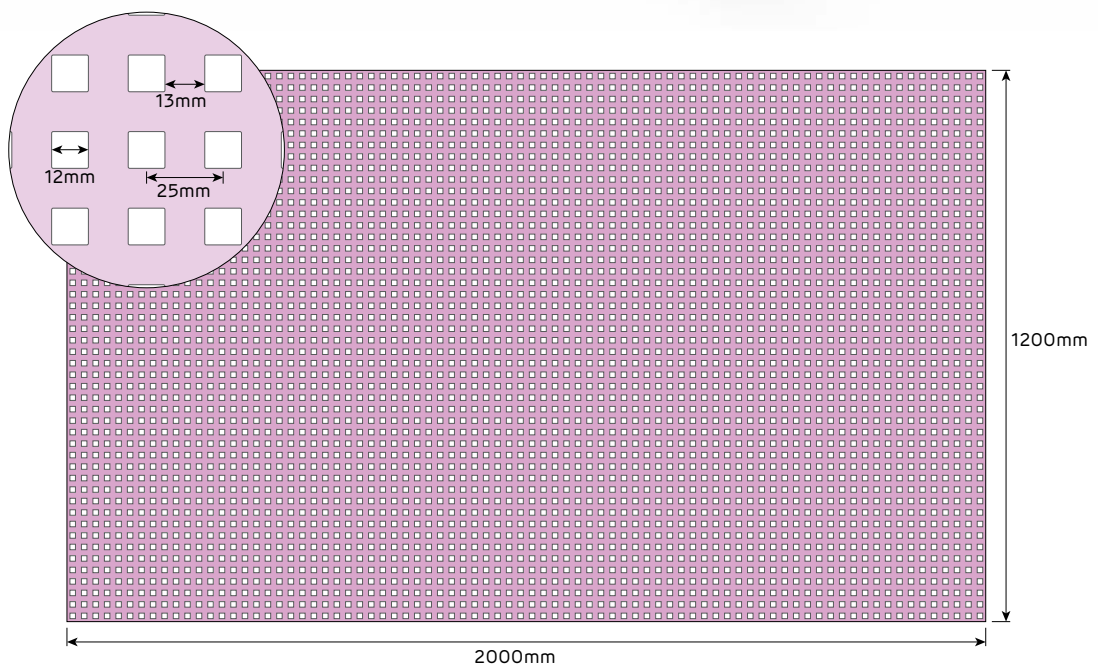
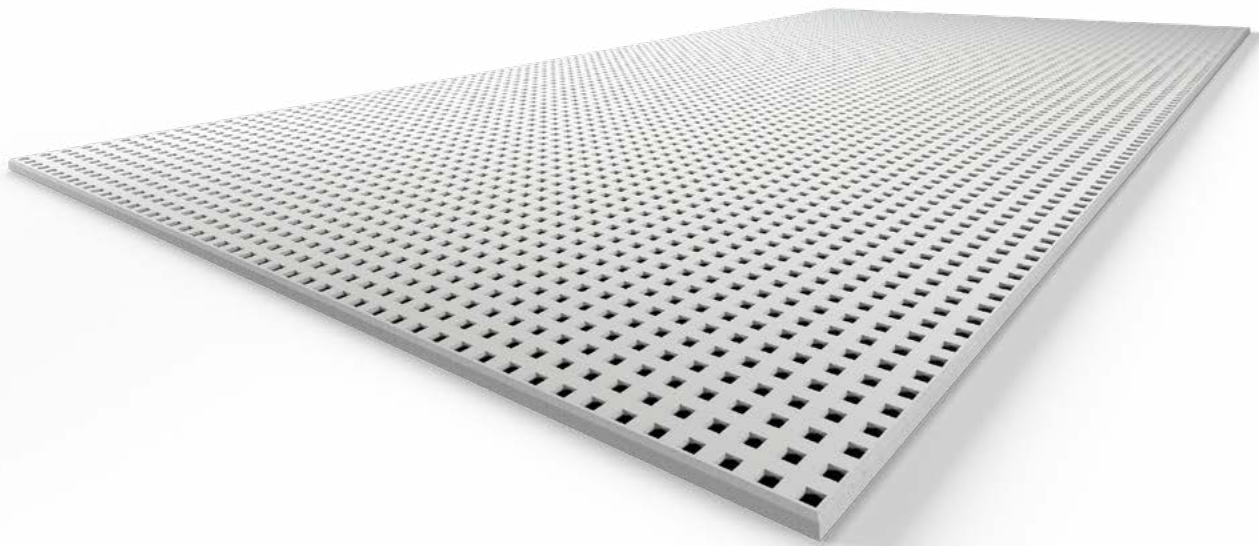
createx R12/25	ceiling cavity (mm)	α_p - Frequency (Hz)						α_w	NRC
		125	250	500	1000	2000	4000		
Pink® Partition 50mm 14kg/m ³ R1.3	37	0.35	0.75	0.95	0.9	0.75	0.65	0.8	0.85
Pink® Partition 75mm 14kg/m ³ R1.9	187	0.6	0.8	0.85	0.8	0.8	0.75	0.75	0.8
No Insulation	187	0.45	0.75	0.9	0.7	0.7	0.55	0.7	0.75



createx® cube C12/25

12mm square perforations

- **Open Area:** 23.1 %
- **Furring Channel Centres:** 400mm maximum
- **Sheet Dimensions:** 1200 x 2000 x 12.5mm
- **Weight:** 10 kg/m³ (approximate)





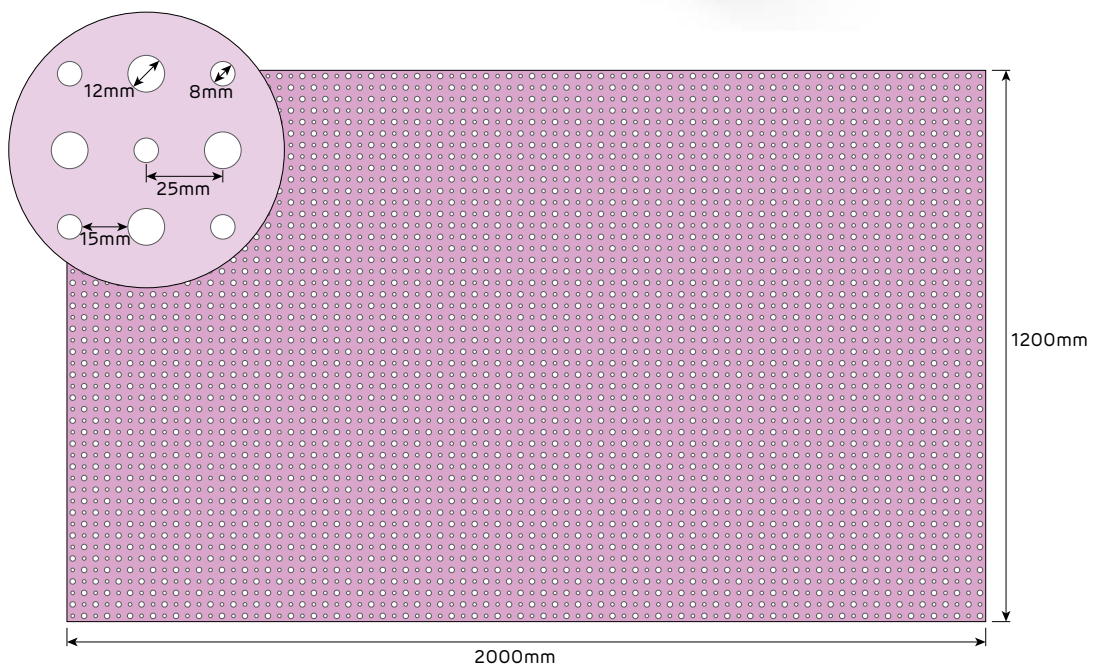
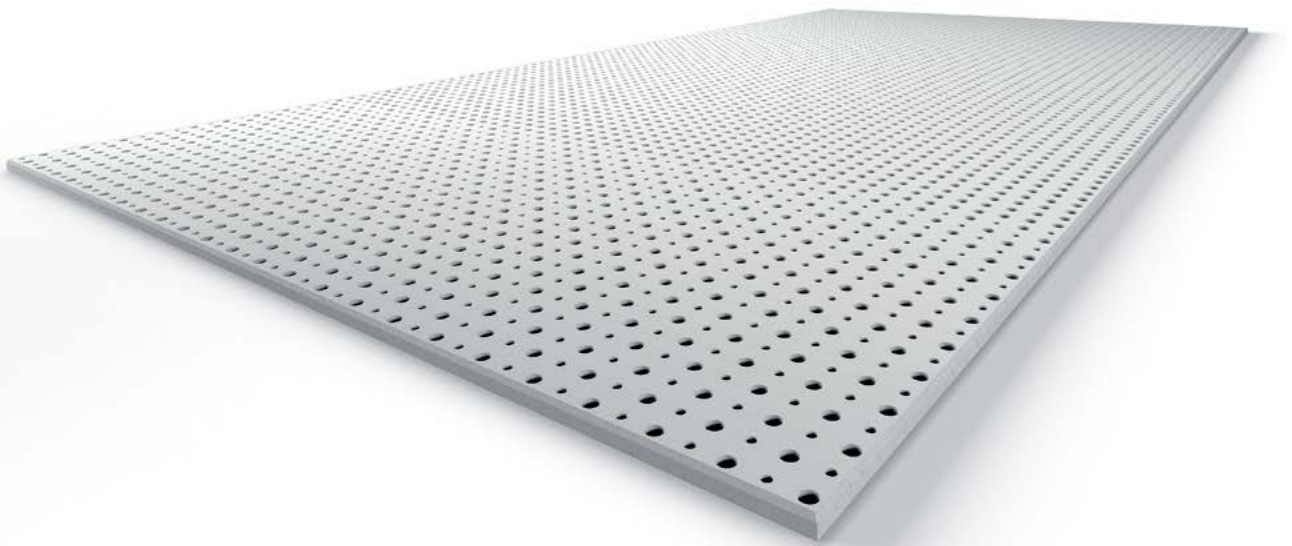
createx C12/25	ceiling cavity (mm)	α_p - Frequency (Hz)						α_w	NRC
		125	250	500	1000	2000	4000		
Pink® Partition 50mm 14kg/m³ R1.3	37	0.25	0.7	0.85	0.85	0.75	0.75	0.85	0.8
No Insulation	187	0.45	0.8	0.9	0.75	0.7	0.65	0.75	0.8
Pink® Partition 75mm 14kg/m³ R1.9	187	0.6	0.9	0.95	0.9	0.85	0.8	0.9	0.9
Pink® Partition 75mm 14kg/m³ R1.9	587	0.75	0.8	0.9	0.85	0.75	0.8	0.85	0.85



createx® dynamic D8/12

8mm and 12mm diameter circle perforations

- **Open Area:** 13.1 %
- **Furring Channel Centres:** 400mm maximum
- **Sheet Dimensions:** 1200 x 2000 x 12.5mm
- **Weight:** 10 kg/m³ (approximate)





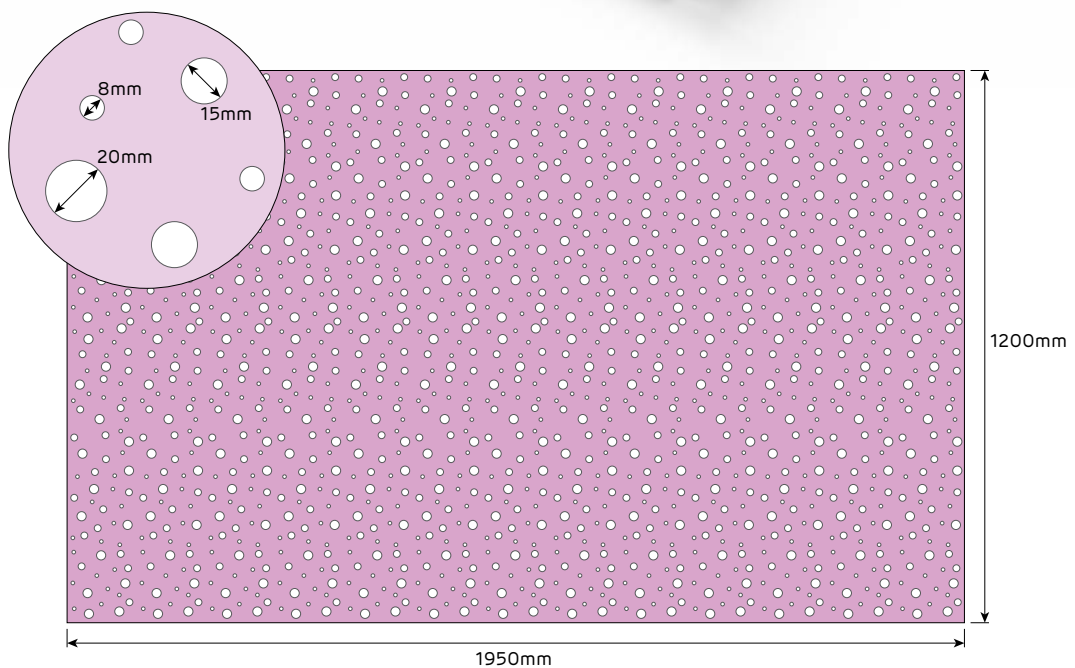
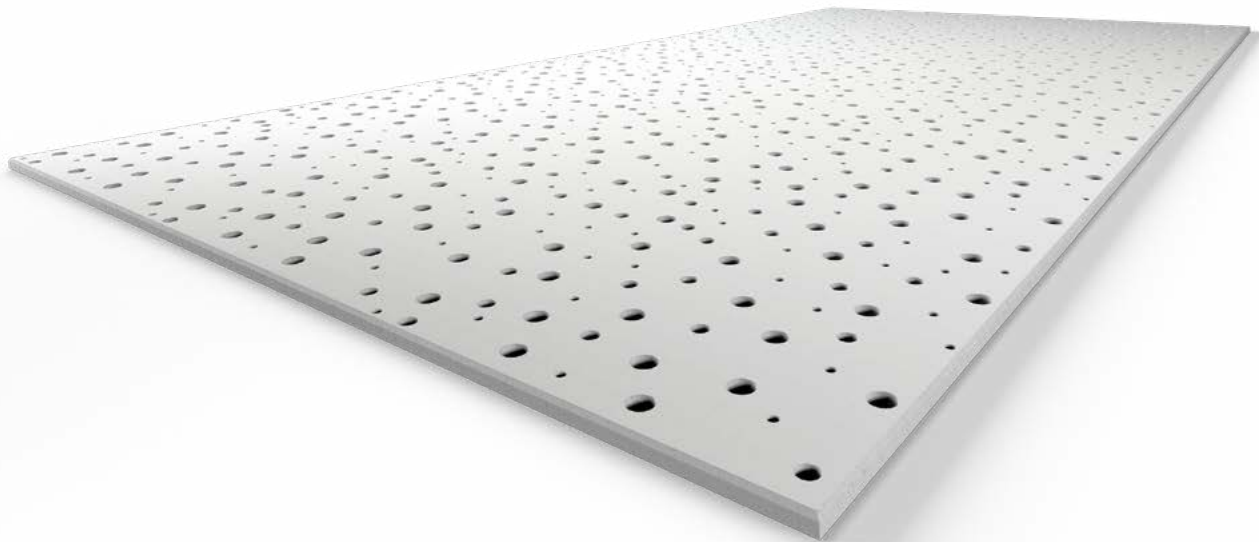
createx D8/12	ceiling cavity (mm)	α_p - Frequency (Hz)						α_w	NRC
		125	250	500	1000	2000	4000		
No Insulation	187	0.25	0.65	0.6	0.35	0.3	0.35	0.35	0.5
Pink® Partition 75mm 14kg/m ³ R1.9	187	0.55	1.0	0.9	0.7	0.5	0.45	0.55	0.8
Pink® Partition 75mm 14kg/m ³ R1.9	587	0.6	0.7	0.75	0.7	0.6	0.6	0.7	0.7



createx® space S8-15-20

8mm, 15mm and 20mm diameter circle perforations

- **Open Area:** 10.2 %
- **Furring Channel Centres:** 400mm maximum
- **Sheet Dimensions:** 1200 x 1950 x 12.5mm
- **Weight:** 10 kg/m³ (approximate)





createx S8-15-20	ceiling cavity (mm)	α_p - Frequency (Hz)						α_w	NRC
		125	250	500	1000	2000	4000		
Pink® Partition 50mm 14kg/m ³ R1.3	37	0.4	0.7	0.65	0.65	0.5	0.5	0.6	0.65
No Insulation	187	0.45	0.65	0.7	0.6	0.45	0.4	0.5	0.6
Pink® Partition 50mm 14kg/m ³ R1.3	187	0.45	0.6	0.65	0.65	0.5	0.5	0.6	0.6
Pink® Partition 75mm 14kg/m ³ R1.9	187	0.5	0.65	0.65	0.65	0.5	0.5	0.6	0.6
Pink® Partition 75mm 14kg/m ³ R1.9	587	0.6	0.6	0.7	0.65	0.45	0.45	0.55	0.6



General Requirements

<p>Install control joints in plasterboard ceilings:</p> <ul style="list-style-type: none"> › At 10m maximum intervals › At all control joints in the structure › At any change in the substrate › At the junction of a larger room and passageway. <p>Separate createx 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.</p>
<p>Do not rigidly fix createx to the perimeter.</p>
<p>All ceilings in this section are non-trafficable. Do not walk on plasterboard ceilings!</p>
<p>Limit dead loads on createx ceilings to 2 kg/m².</p>
<p>Attach ceiling fixtures to framing members only. Ensure the framing is designed to carry any additional load.</p>
<p>Cut all openings for services before jointing with mastatape-in.</p>
<p>Locate ceiling services between framing to avoid cutting of top cross rails or furring channels. If furring channels are cut then provide additional support with top cross rails and hangers. Refer to Figures 15 and 16.</p>

- i** › **createx** must have an air cavity behind it for it to perform as a sound absorber.
- i** › **createx** 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 installing 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.

i 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 focusing your phone's camera on the QR code.



Framing

Framing members as per framing tables or structural design up to 400mm 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. 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.

Downstruts must be installed for Top Cross Rail suspended ceilings in all buildings except air-conditioned hospitals, offices and shopping centres that are effectively sealed where the external walls have non-opening windows. Refer to Downstrut Framing Tables.



Do not fix **createx** directly to timber joists

Siniat Internal Wind Load Calculator



Refer to Siniat Blueprint, 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 focusing your phone's camera on the QR code.



**Non-Fire Rated
Internal Direct Fix Ceiling Frames**

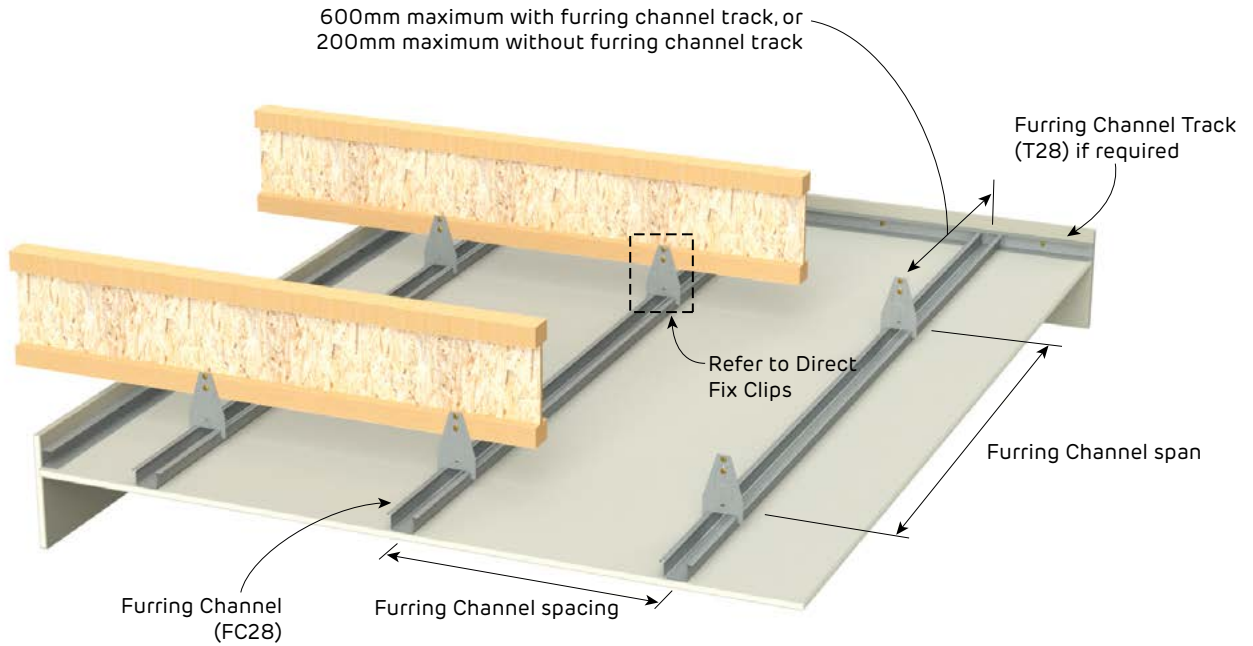


FIGURE 1 Direct Fix Furring Channel Ceiling Frame
Perspective

Details for Single Span, Double Span or 3-or-More Span Ceilings

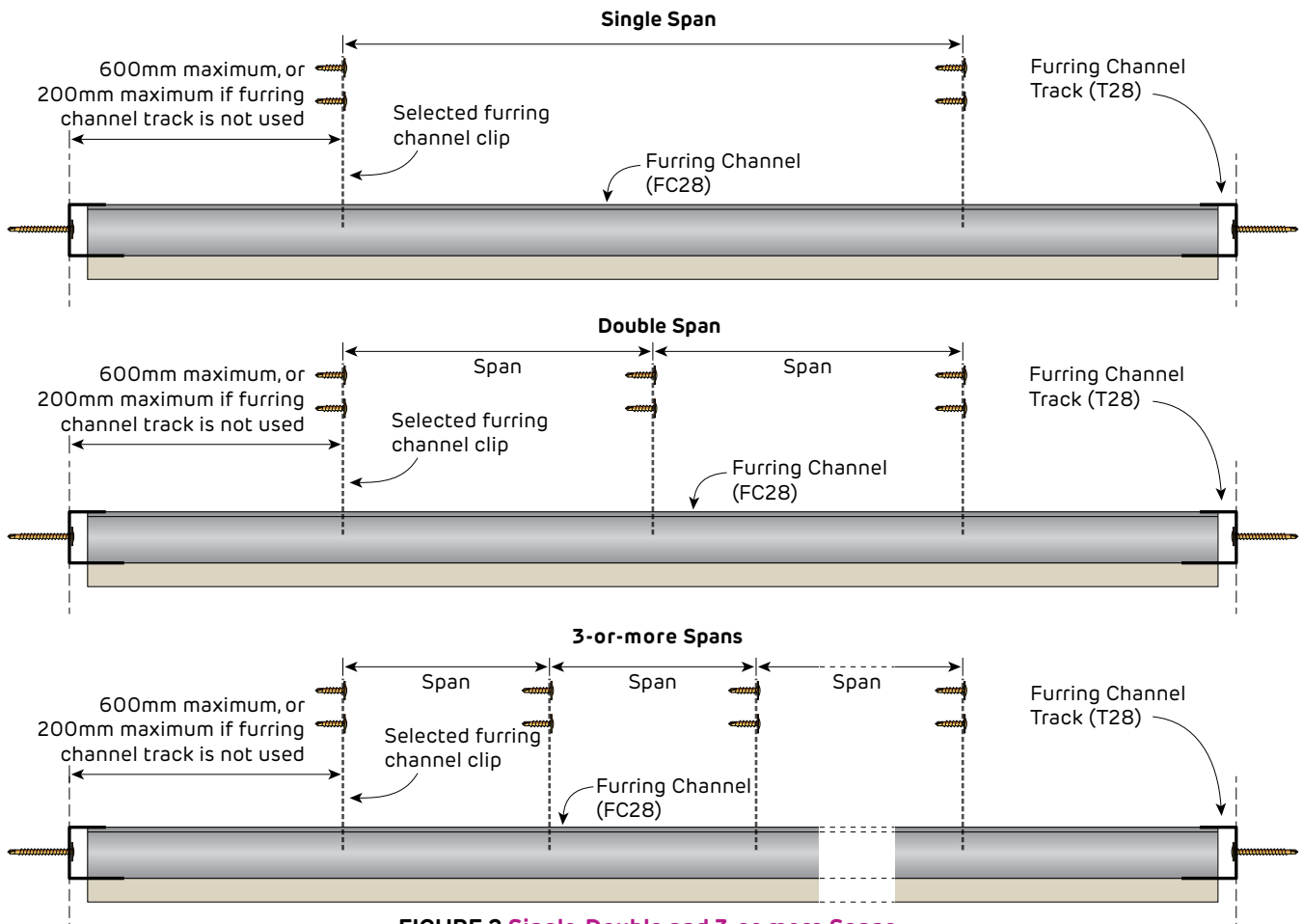
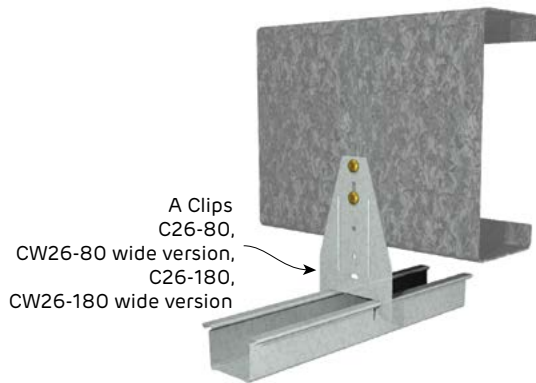


FIGURE 2 Single, Double and 3-or-more Spans
Section



Non-Fire Rated Typical Direct Fix Clips



A Clips
C26-80,
CW26-80 wide version,
C26-180,
CW26-180 wide version

FIGURE 3 A Clip and Furring Channel
Perspective

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

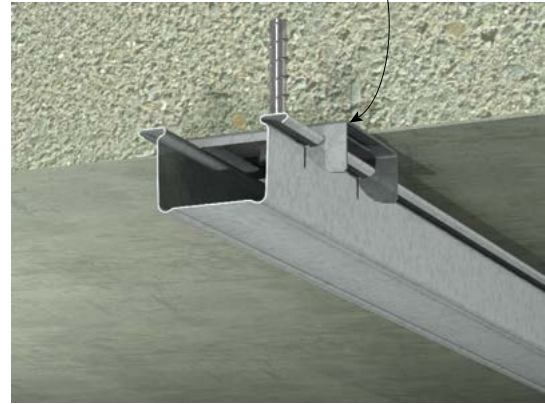


FIGURE 4 Anchor Clip and Furring Channel
Perspective



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

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

28mm Furring Channel (AFC28) Ceiling Span Table Furring channels at 400mm maximum spacing						
Wind Region	Ultimate Wind Pressure W_u (kPa)	Serviceability Wind Pressure W_s (kPa)	Single Span		2 or more Spans	
			Maximum Span (mm)	Connection Demand (kN)	Maximum Span (mm)	Connection Demand (kN)
REGION A	0.39	0.25	1350	0.15	1670	0.47
	0.47	0.3	1270	0.16	1570	0.50
	0.54	0.35	1200	0.17	1490	0.53
REGION B	0.59	0.25	1350	0.20	1670	0.63
	0.71	0.3	1270	0.22	1570	0.69
	0.83	0.35	1200	0.24	1490	0.74

1. Table based upon downward (suction) and upward (uplift) pressures, intended for internal use only.
2. 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.
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 Zincolume™ 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 2785:2000 *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* in Section 5.1.
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.

Non-Fire Rated Internal Suspended Ceiling Frames

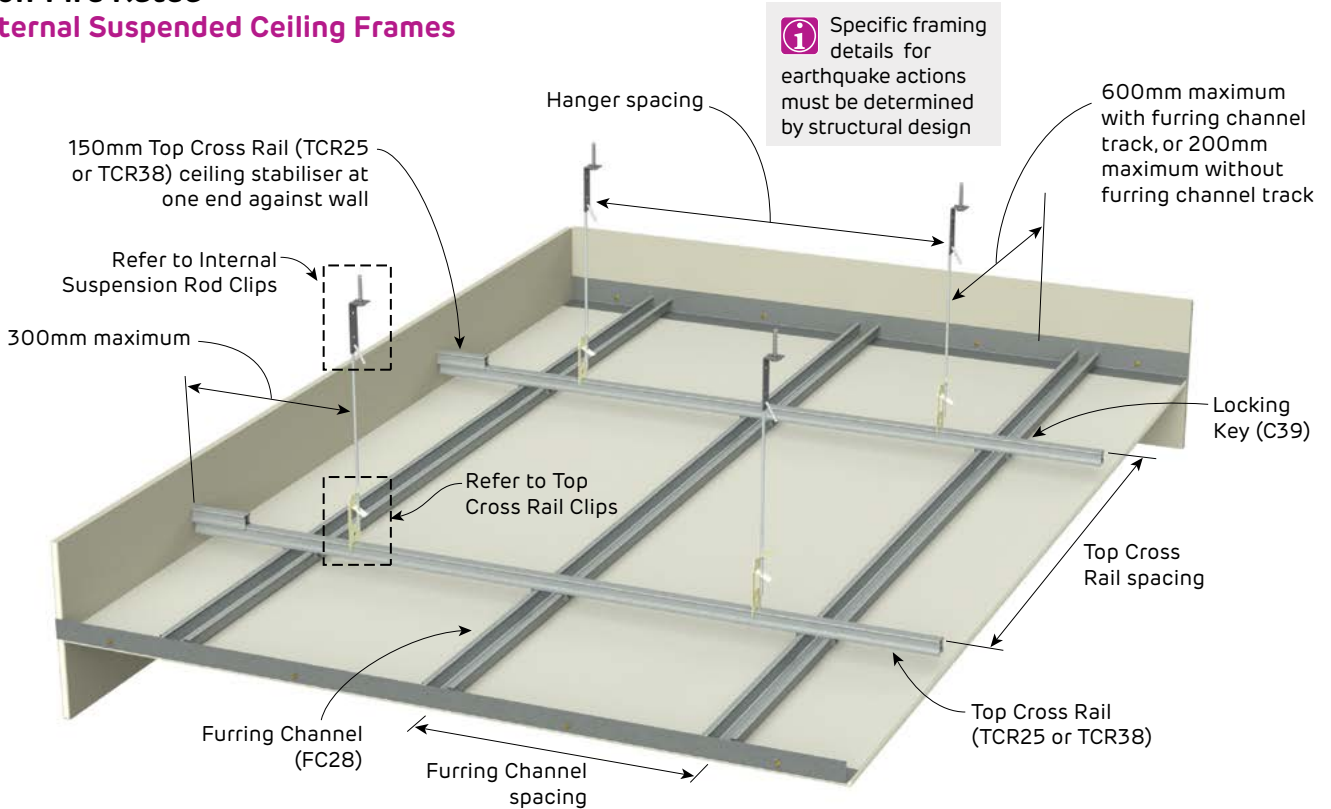


FIGURE 5 Suspended Ceiling Frame
Perspective

Details for Single Span, Double Span or 3-or-More Span Ceilings

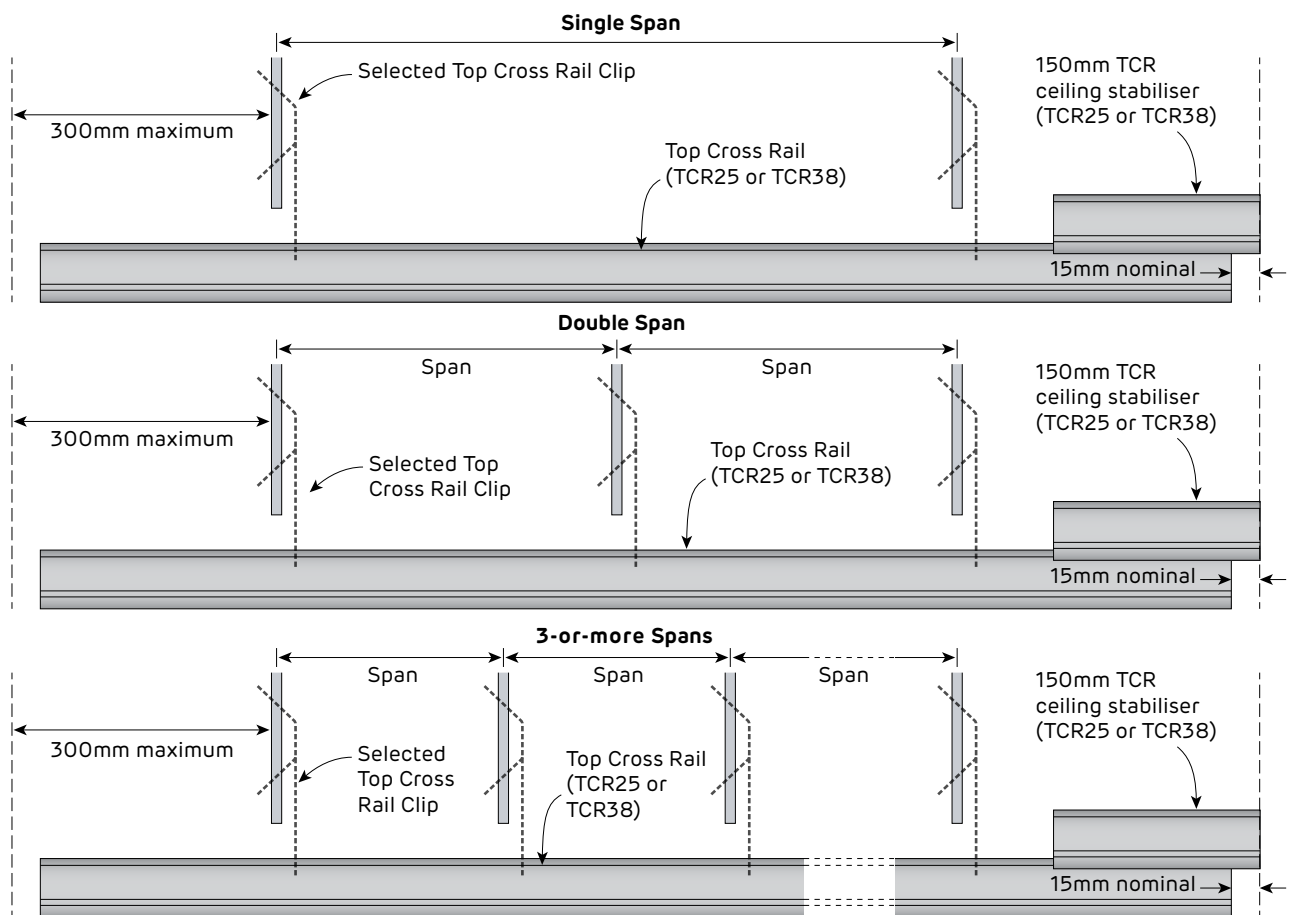


FIGURE 6 Top Cross Rail - Single, Double and 3-or-more Spans
Section



**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)

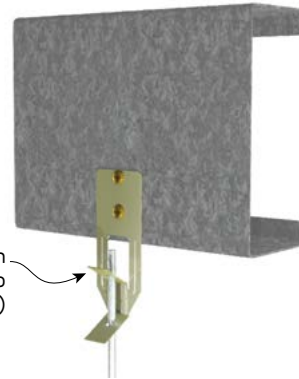


FIGURE 8 Spring Adjustable Direct Fix Clip to Purlin
Perspective

Typical Top Cross Rail Clips

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

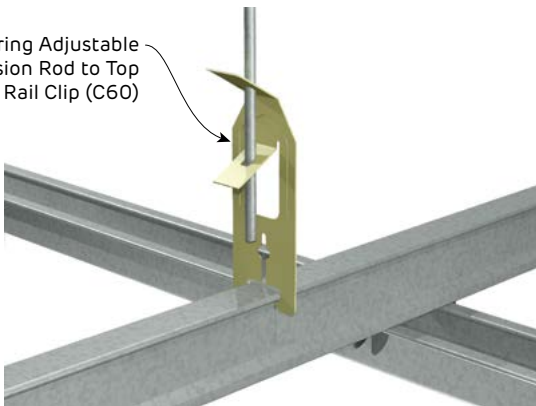


FIGURE 9 Spring Adjustable Suspension Rod to TCR Clip
Perspective and Sections

Top Cross Rail to
Purlin Clip (C66)

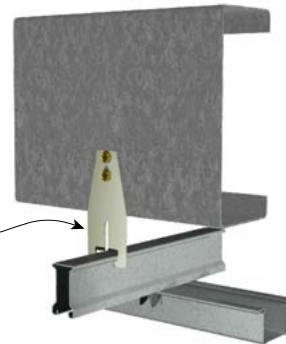


FIGURE 10 Top Cross Rail Direct Fix Clip to Purlin
Perspective and Sections

Locking Key

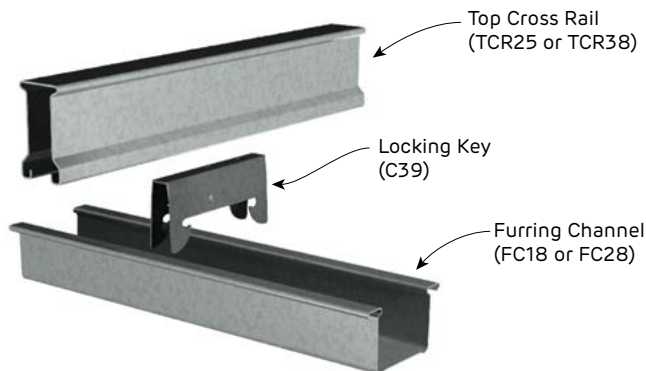
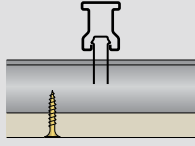


FIGURE 11 Locking Key
Perspective

Table 2 Top Cross Rail Ceiling Span Table - REGION A

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

Top Cross Rail Span Table Suspended ceiling lined with Createx and 28mm Furring channels (AFC28) at 400mm maximum spacing						Up to BCA Building Importance Level 3	
Ultimate Wind Pressure W_u (kPa)	Serviceability Wind Pressure W_s (kPa)	Top Cross Rail	Top Cross Rail Spacing (mm)	Double Span		3 or more Spans	
				Hanger Spacing (mm)	Hanger Demand (kN)	Hanger Spacing (mm)	Hanger Demand (kN)
0.39	0.25	TCR25	900	1060	1.04	1150	1.03
			1050	980	1.12	1060	1.11
			1200	920	1.20	990	1.18
		TCR38	900	1270	1.24	1370	1.23
			1050	1170	1.34	1270	1.33
			1200	1100	1.43	1200	1.42
0.47	0.3	TCR25	900	1000	1.11	1080	1.10
			1050	920	1.19	1000	1.19
			1200	860	1.28	930	1.26
		TCR38	900	1190	1.32	1290	1.31
			1050	1100	1.43	1190	1.41
			1200	1030	1.53	1110	1.51
0.54	0.35	TCR25	900	950	1.17	1020	1.15
			1050	880	1.26	950	1.25
			1200	820	1.35	890	1.34
		TCR38	900	1130	1.39	1220	1.37
			1050	1050	1.51	1130	1.48
			1200	980	1.61	1060	1.59

- Table based upon downward (suction) and upward (uplift) pressures, intended for internal use only. Down-struts are required for uplift.
- 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.
- Downstruts must be installed for TCR suspended ceilings in all buildings except air-conditioned hospitals, offices and shopping centres that are effectively sealed where the external walls have non-opening windows.
- 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 2785:2000 *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 + Wu (Suction) + Q_{0.03kPa Service Load}
Ultimate Limit State Load Case 2: 0.9G + Wu (Uplift).
- Serviceability Limit State Load Case 1: G, with deflection limited to Span/500.
- Serviceability Limit State Load Case 2: G + Ws, 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 3 Top Cross Rail Ceiling Span Table - REGION B

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

Top Cross Rail Span Table Suspended ceiling lined with Createx and 28mm Furring channels (AFC28) at 400mm maximum spacing						Up to BCA Building Importance Level 3	
Ultimate Wind Pressure W_u (kPa)	Serviceability Wind Pressure W_s (kPa)	Top Cross Rail	Top Cross Rail Spacing (mm)	Double Span		3 or more Spans	
				Hanger Spacing (mm)	Hanger Demand (kN)	Hanger Spacing (mm)	Hanger Demand (kN)
0.59	0.25	TCR25	900	910	1.20	990	1.19
			1050	850	1.30	920	1.29
			1200	790	1.39	860	1.38
		TCR38	900	1090	1.43	1180	1.42
			1050	1010	1.55	1090	1.53
			1200	950	1.67	1020	1.64
0.71	0.3	TCR25	900	850	1.29	920	1.28
			1050	790	1.40	850	1.38
			1200	740	1.50	800	1.48
		TCR38	900	1020	1.55	1100	1.53
			1050	940	1.66	1020	1.65
			1200	860	1.74	950	1.76
0.83	0.35	TCR25	900	800	1.38	860	1.35
			1050	740	1.49	800	1.47
			1200	690	1.58	750	1.57
		TCR38	900	960	1.65	1030	1.62
			1050	870	1.75	950	1.74
			1200	760	1.74	830	1.74

- Table based upon downward (suction) and upward (uplift) pressures, intended for internal use only. Down-struts are required for uplift.
- 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.
- Downstruts must be installed for TCR suspended ceilings in all buildings except air-conditioned hospitals, offices and shopping centres that are effectively sealed where the external walls have non-opening windows.
- 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 2785:2000 *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.

Downstrut

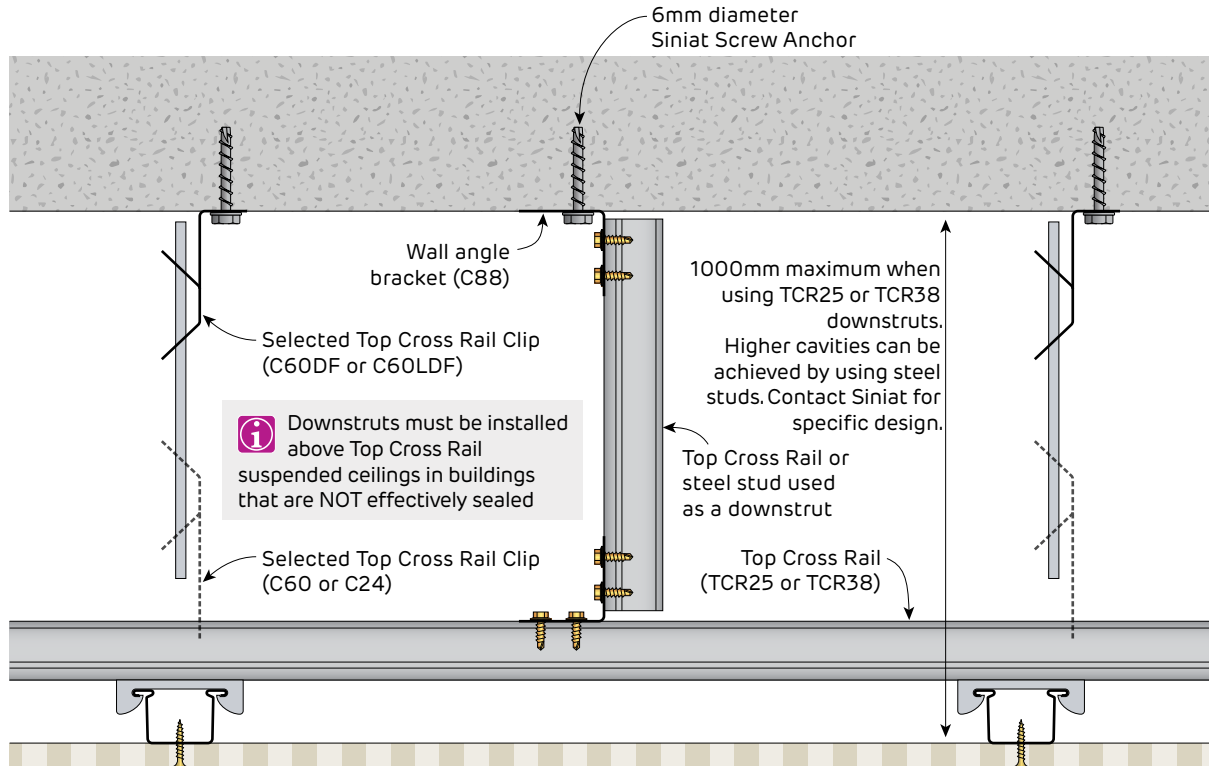
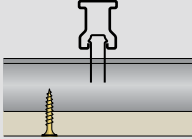


FIGURE 12 Downstrut
Section

Table 4 Downstrut Table - REGION A

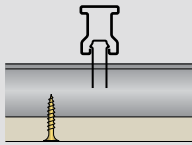
Refer to Section 2.3 for assistance determining the relevant wind pressures for a specific project.

Downstrut Interval Table (along Top Cross Rail) Suspended ceiling lined with Createx and 28mm Furring channels (AFC28) at 400mm maximum spacing					Up to BCA Building Importance Level 3
Ultimate Wind Pressure W_U (kPa)	Serviceability Wind Pressure W_S (kPa)	Top Cross Rail	Top Cross Rail Spacing (mm)	Double Span	3 or more Spans
				Maximum Downstrut Intervals (mm)	Maximum Downstrut Intervals (mm)
0.39	0.25	TCR25	900	1570	1670
			1050	1470	1570
			1200	1400	1490
		TCR38	900	1960	2070
			1050	1860	1960
			1200	1780	1870
0.47	0.3	TCR25	900	1430	1530
			1050	1340	1430
			1200	1260	1350
		TCR38	900	1820	1920
			1050	1720	1780
			1200	1630	1670
0.54	0.35	TCR25	900	1330	1430
			1050	1250	1330
			1200	1180	1260
		TCR38	900	1330	1770
			1050	1250	1640
			1200	1180	1540

- Downstruts must be installed for TCR suspended ceilings in all buildings except air-conditioned hospitals, offices and shopping centres that are effectively sealed where the external walls have non-opening windows.


Table 5 Downstrut Table - REGION B

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

Downstrut Interval Table (along Top Cross Rail) Suspended ceiling lined with Createx and 28mm Furring channels (AFC28) at 400mm maximum spacing					Up to BCA Building Importance Level 3
Ultimate Wind Pressure W_u (kPa)	Serviceability Wind Pressure W_s (kPa)	Top Cross Rail	Top Cross Rail Spacing (mm)	Double Span	3 or more Spans
				Maximum Downstrut Intervals (mm)	Maximum Downstrut Intervals (mm)
0.59	0.25	TCR25	900	1280	1360
			1050	1190	1280
			1200	1120	1200
		TCR38	900	1650	1690
			1050	1550	1560
			1200	1470	1460
0.71	0.3	TCR25	900	1160	1100
			1050	1090	1160
			1200	1020	1100
		TCR38	900	1520	1520
			1050	1410	1400
			1200	1230	1310
0.83	0.35	TCR25	900	1080	1150
			1050	1000	1080
			1200	930	1010
		TCR38	900	1380	1390
			1050	1180	1290
			1200	1030	1130

- Downstruts must be installed for TCR suspended ceilings in all buildings except air-conditioned hospitals, offices and shopping centres that are effectively sealed where the external walls have non-opening windows.

Access Panel



FIGURE 15 Createx Access Panel Framing
Perspective



FIGURE 16 Createx Access Panel Framing
Perspective



Layout

Start sheeting from the centre of the room.
Install createx ceilings perpendicular to framing members.
Fix short edges on a Wide-face Furring Channel (F60/28).
Install one entire row in each direction before proceeding. Refer to Figure 17.

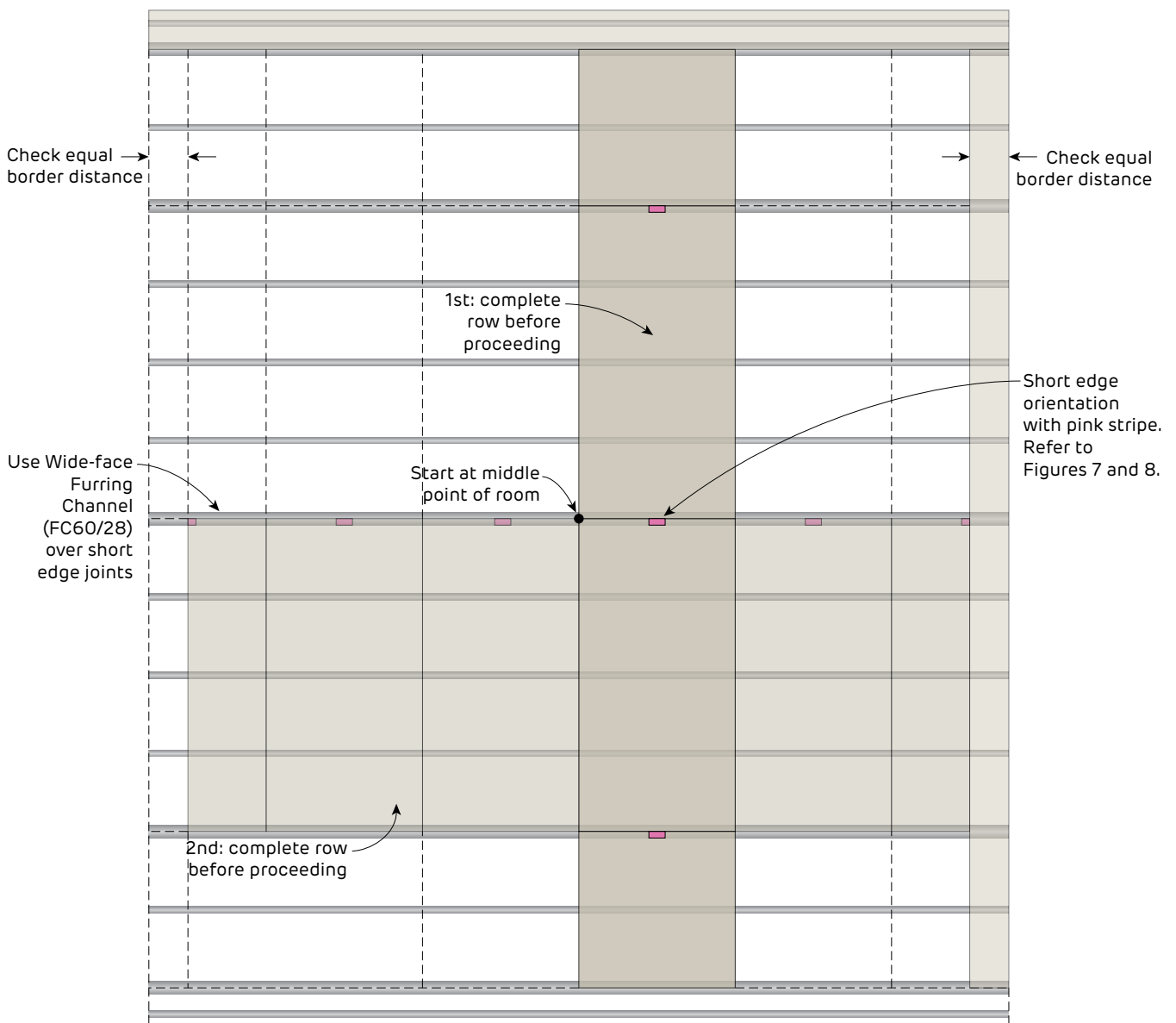


FIGURE 17 Ceiling Layout Plan

Sheet Orientation Along Short Edges

Align the short edges of createx sheets so that the pink paint stripe does not coincide with each other. Refer to Figure 18 for the correct orientation.

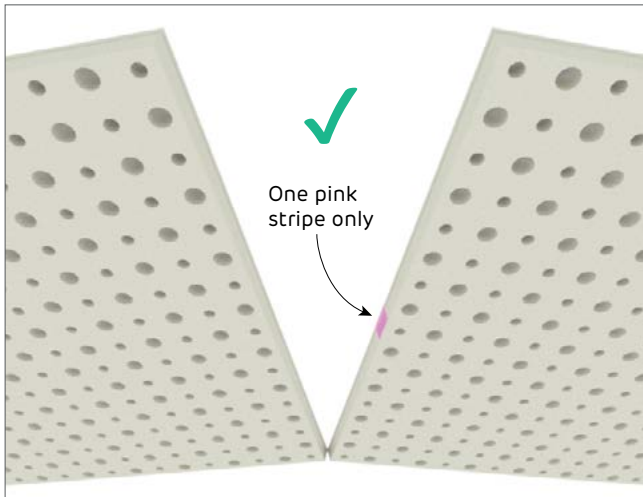


FIGURE 18 Correct Short Edge Orientation
Perspective

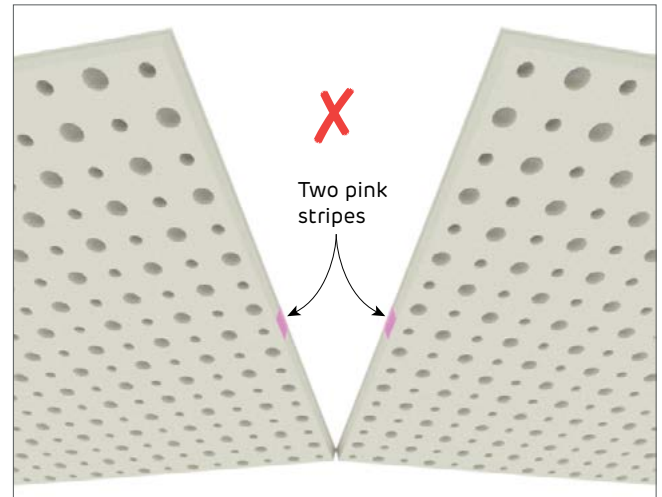


FIGURE 19 Incorrect Short Edge Orientation
Perspective

Perforation Alignment

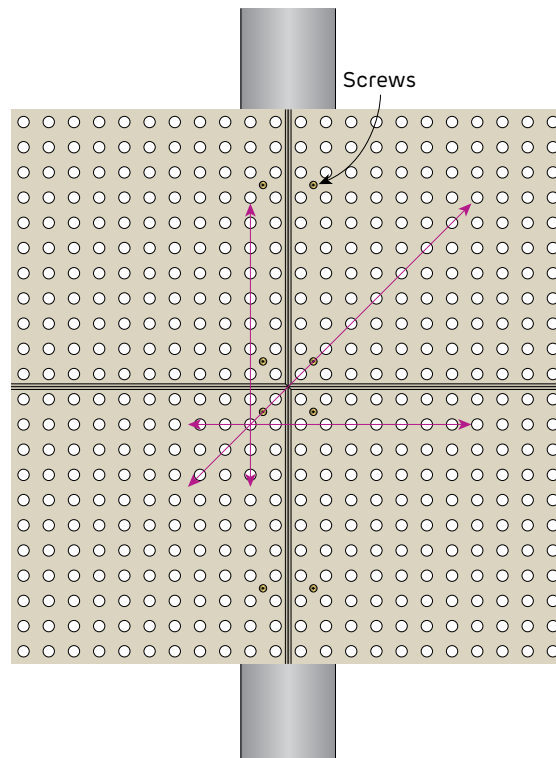


FIGURE 20 Perforation Alignment
Plan



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.
Press createx firmly on to the grid when screwing.
Start fastening from the corner, where the plasterboard meets previously attached boards.
Fasten long edge first and then short edges.
Use a straight edge across adjoining sheets to check both sheets are level across the joints. If necessary, adjust the level of the sheets by unscrewing perimeter screws slightly, so both sheets are level across joints.

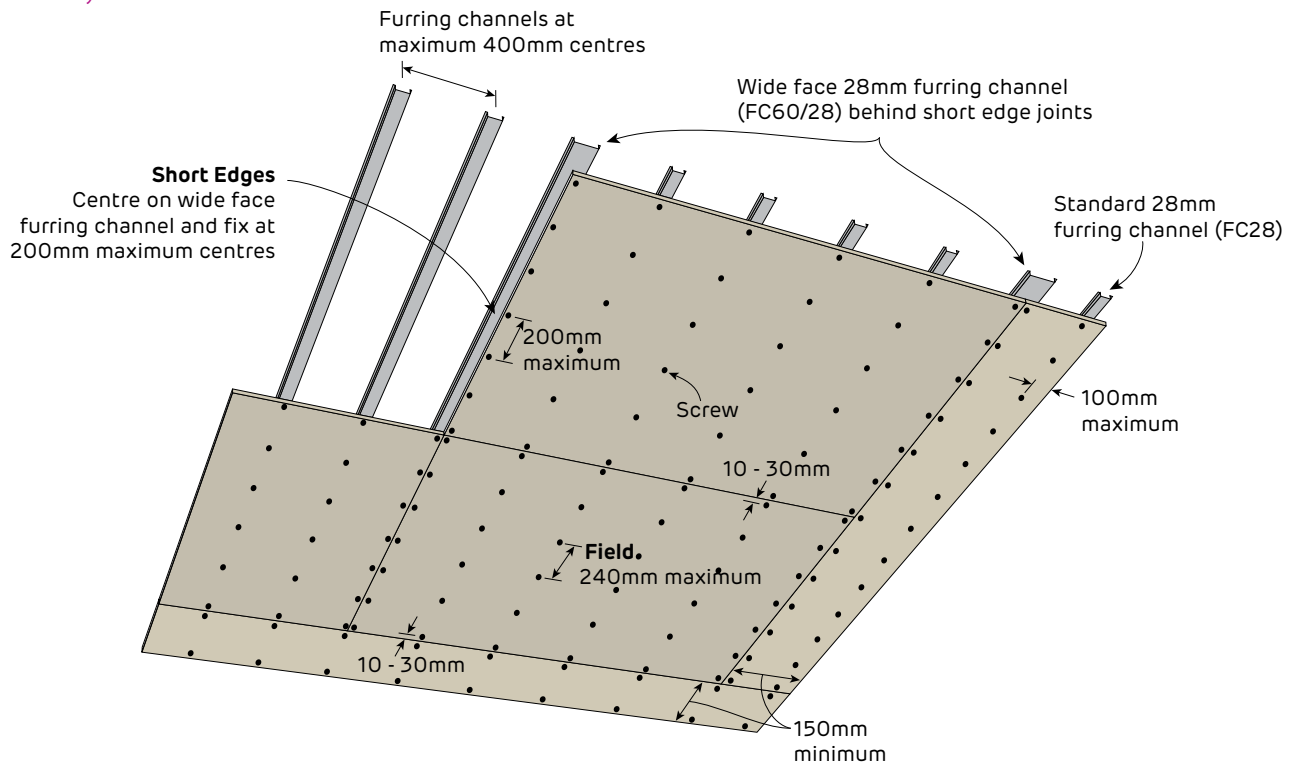
Screw Type and Minimum Size for the Installation of Plasterboard to Steel

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.

FIGURE 21 Createx 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	
	400mm	300mm
12.5mm	1.50	2.05

- 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.



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.
Use a wet brush to clean dust from joints after fixing the boards.
Prime site cut edges with a PVA based primer (ie: one part Bondcrete to four parts water).
Slightly overfill joints with mastatape-in jointing compound and allow to dry. It is recommended to use a sausage caulking gun. After allowing to dry, scrape off excess jointing compound to level the joint. Refer to Figure 22.
Use mastalite , mastaglide , or mastaline for finishing joints and screw heads. For more information refer to Siniat Blueprint, Section 7.3.
Do not obstruct perforations during jointing.

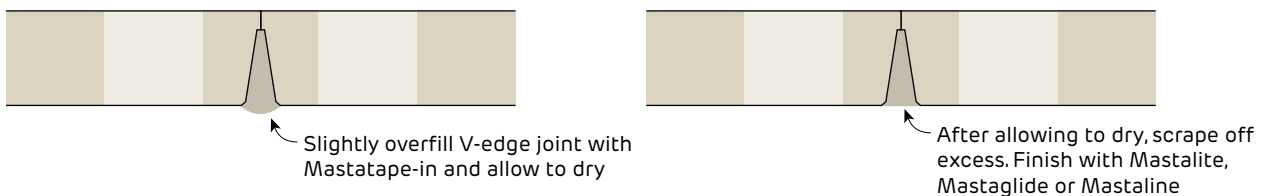


FIGURE 22 V-edge Jointing
Section

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 180 to 220 grit sandpaper or sanding mesh. Care must be taken to not scuff the paper linerboard especially around perforations while sanding.

Painting

A three coat paint system must be applied in accordance with Australian Standard AS/NZS 2311, <i>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 createx 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 Createx Joints

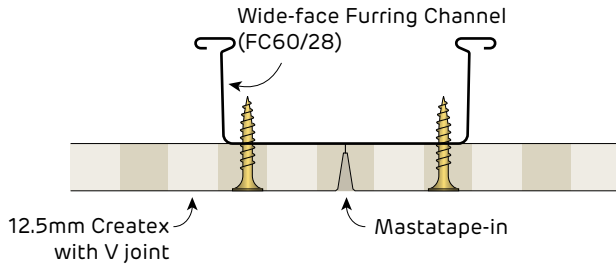


FIGURE 23 Createx with V Joint
Using Wide-face Furring Channel Section

i If necessary, use packers to ensure easy jointing of 12.5mm Createx with 13mm Mastashield

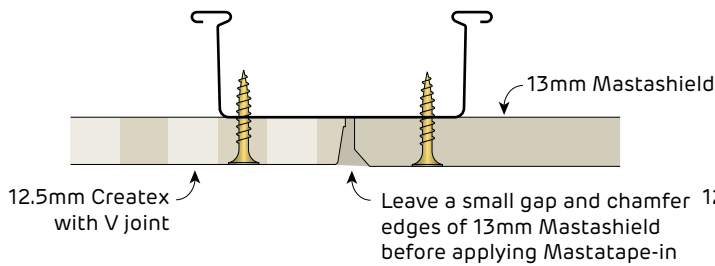


FIGURE 25 Createx to ceiling border
Using Wide-face Furring Channel Section

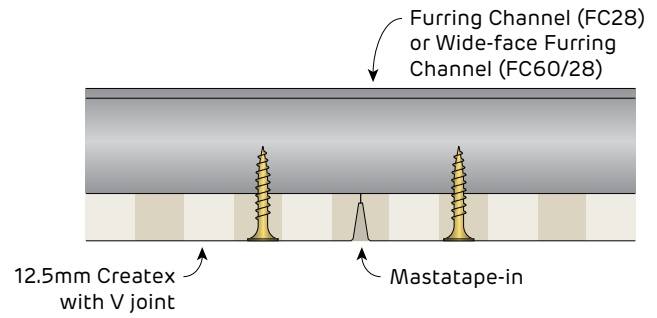


FIGURE 24 Createx with V Joint
Elevation

i Prime any cut edges of Createx and plasterboard with PVA based primer when Mastatape-in is used for jointing

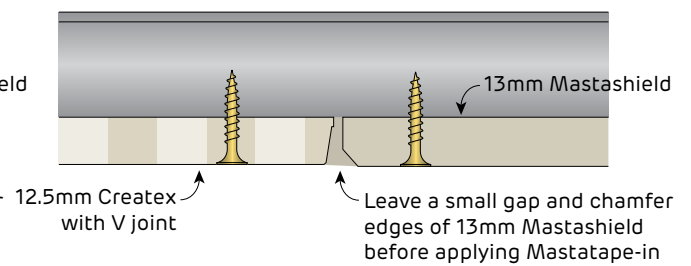


FIGURE 26 Createx to ceiling border
Elevation

Control Joints

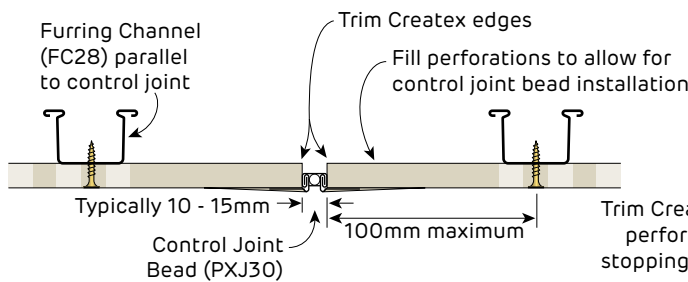


FIGURE 27 Control Joint - Control Joint Bead
Parallel to furring channel Section

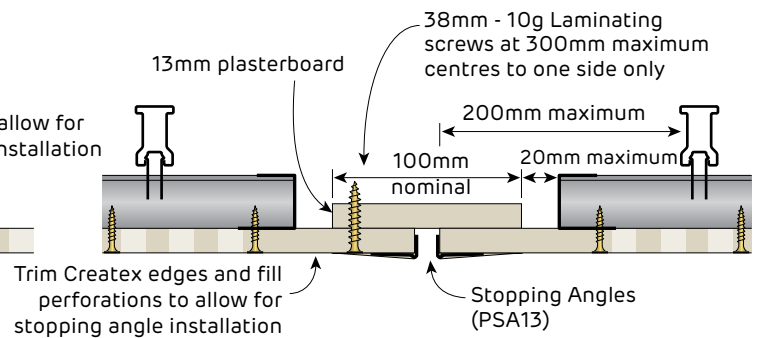


FIGURE 28 Control Joint - Stopping Angles
Perpendicular to furring channel Section

Non-Fire Rated
Createx Perimeter Details

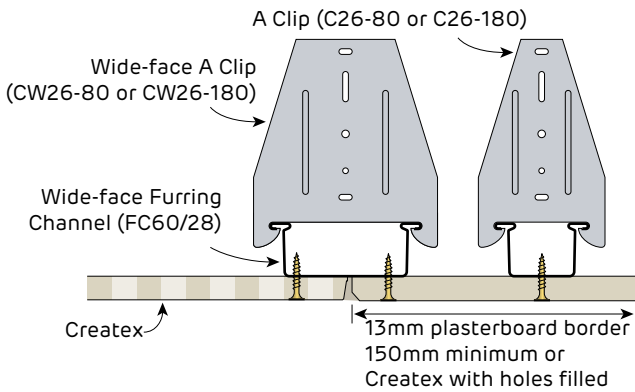


FIGURE 29 Perimeter Detail - Border
Createx Direct Fix Ceiling Frame Section

i The recommended ceiling border detail is to continue the Createx to the wall and fill holes with MastaTape-in and then MastaLite as a finishing coat

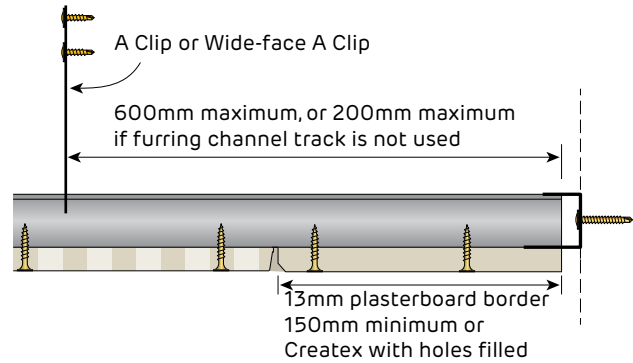


FIGURE 30 Perimeter Detail - Border
Createx Direct Fix Ceiling Frame Section

i If necessary, use packers to ensure easy jointing of 12.5mm Createx with 13mm Mastashield

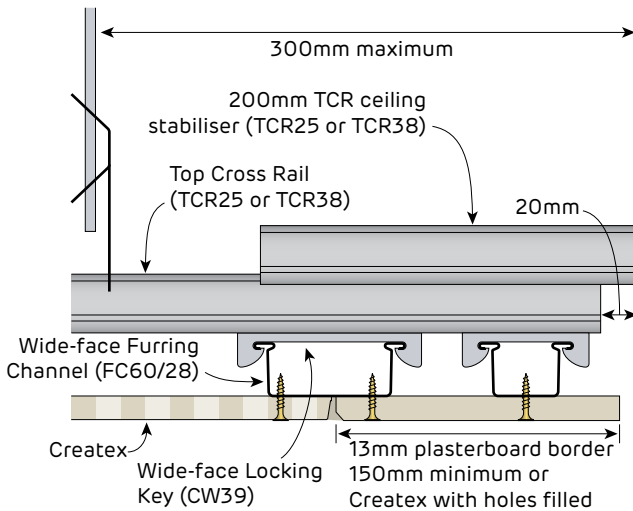


FIGURE 31 Perimeter Detail - Border
Createx Suspended Ceiling Frame Section

i Prime any cut edges of Createx and plasterboard with PVA based primer when MastaTape-in is used for jointing

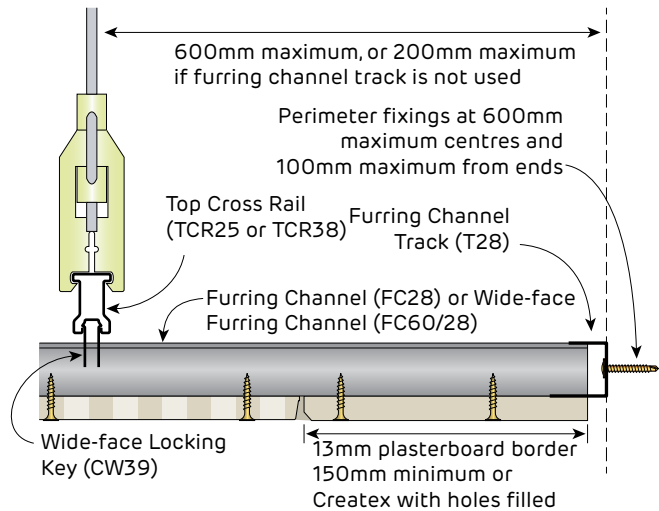


FIGURE 32 Perimeter Detail - Border
Createx Suspended Ceiling Frame Section

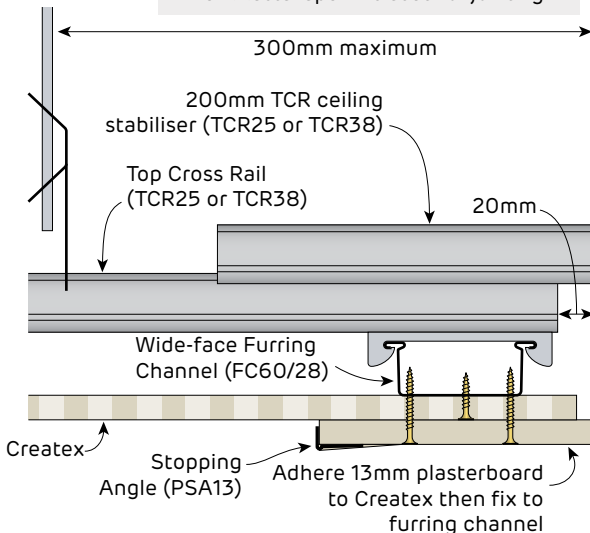


FIGURE 33 Perimeter Detail - Proud Border
Createx Suspended Ceiling Frame Section

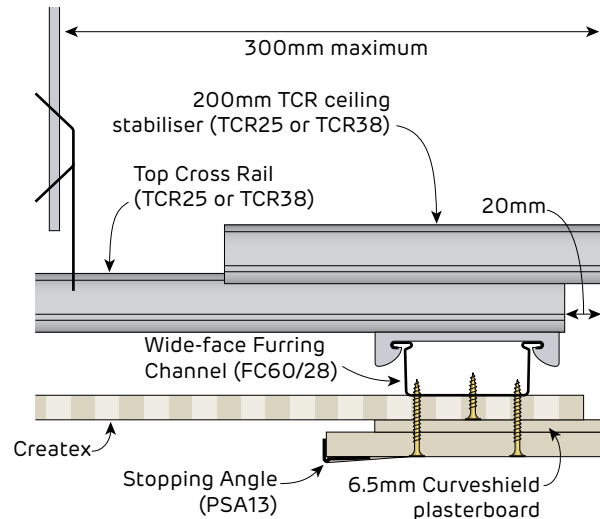


FIGURE 34 Perimeter Detail - Proud Shadow Border
Createx Suspended Ceiling Frame Section



Non-Fire Rated

Ceiling Perimeter Finishing Details

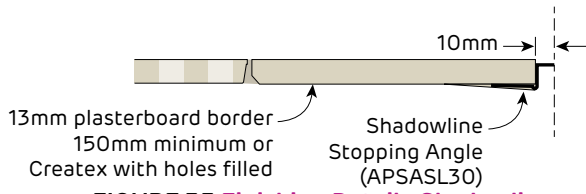


FIGURE 35 Finishing Detail - Shadowline
Section

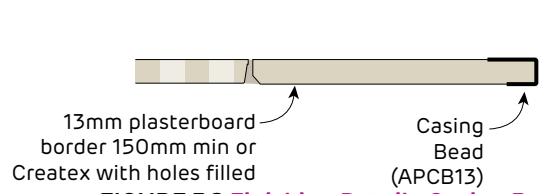


FIGURE 36 Finishing Detail - Casing Bead
Section

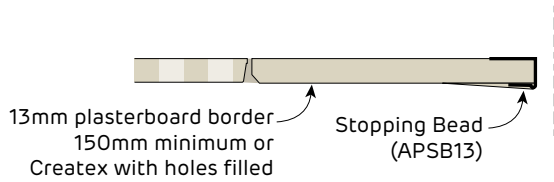


FIGURE 37 Finishing Detail - Stopping Bead
Section

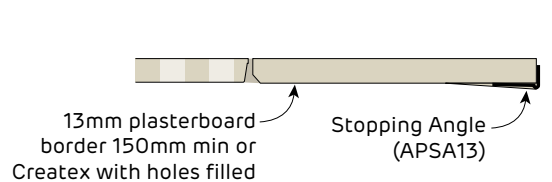


FIGURE 38 Finishing Detail - Stopping Angle
Section

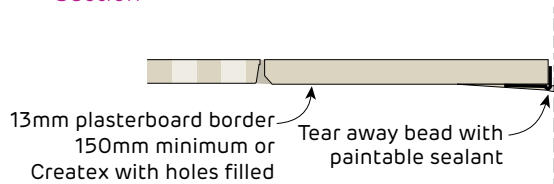


FIGURE 39 Finishing Detail - Tear Away Bead
Section

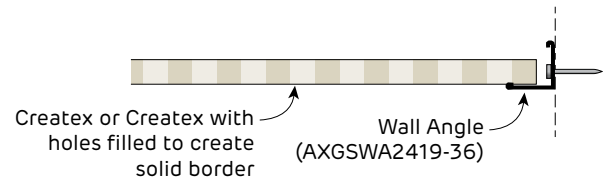



FIGURE 40 Finishing Detail - Wall Angle
Section

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

six reasons to love Siniat **SELECT**

Siniat SELECT (formerly known as K-SPEC) has been developed in-house by our team of technical specialists, making it easy for you to specify our wall and ceiling systems for your next project. As an architect, specifier or builder you cannot afford to miss out on the benefits of this service brought to you by Siniat.

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2. It makes specification easy

Siniat SELECT helps you to specify the right wall and ceiling systems that meet your project specific needs. Siniat's Blueprint Technical Manual is a comprehensive source of information on all our products and systems, their performances when it comes to fire ratings, acoustic ratings, etc., but finding the right system to suit your project can be time consuming. Siniat SELECT does the hard work for you. Simply enter the project requirements and the program will guide you through choosing the most cost effective solution from our wide range of systems. You can add all the required wall and ceiling types under your specific project and export your Siniat SELECT Project Proposal with a click of a button. You can attach associated product data sheets and test reports automatically.

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In addition to System Selector, Siniat SELECT includes a System Maker to create and edit your own system. This means that you can put together your own specific wall and ceiling components out of a large range of products if there is not an existing Siniat system that ticks all the boxes.

4. It is project specific

System Selector not only will help you to find the right Siniat System to match your individual project specific architectural requirements, but you can also find and specify a suitable framing system from the range of Siniat non-load bearing lightweight steel frame options for the selected system. Siniat SELECT takes that one step further because it's been designed for the complete wall and ceiling systems. This means that Siniat SELECT will help you to create a proposal document for your entire project with everything saved together under one unique project ID.

5. It is linked to BIM

If you are a Revit user, you can add your Siniat SELECT Project Proposal in to your BIM project using Siniat's Revit Add-In, with just the click of a button. If you are an Archicad user, you can download Archicad files of any system in Siniat SELECT directly and import them as Archicad Composites in to your BIM project, without needing an Add-In.

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You can load one of the pre-defined Siniat SELECT Project Proposal templates from a drop-down list and have your complete Siniat SELECT Project Proposal ready instantly. New templates have recently been added. Pre-defined Siniat SELECT Project Proposal templates include Siniat's recommended system solutions to meet or exceed the Building Code of Australia's deemed-to-satisfy or acceptable construction requirements for that specific type of building. You can access your Siniat SELECT Project Proposals from any device and anywhere, you just need a modern browser and internet.

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