

Data Centre

PeakForm Prelude 24 MAX Heavy Duty Grid

Armstrong[®]
CEILING SOLUTIONS

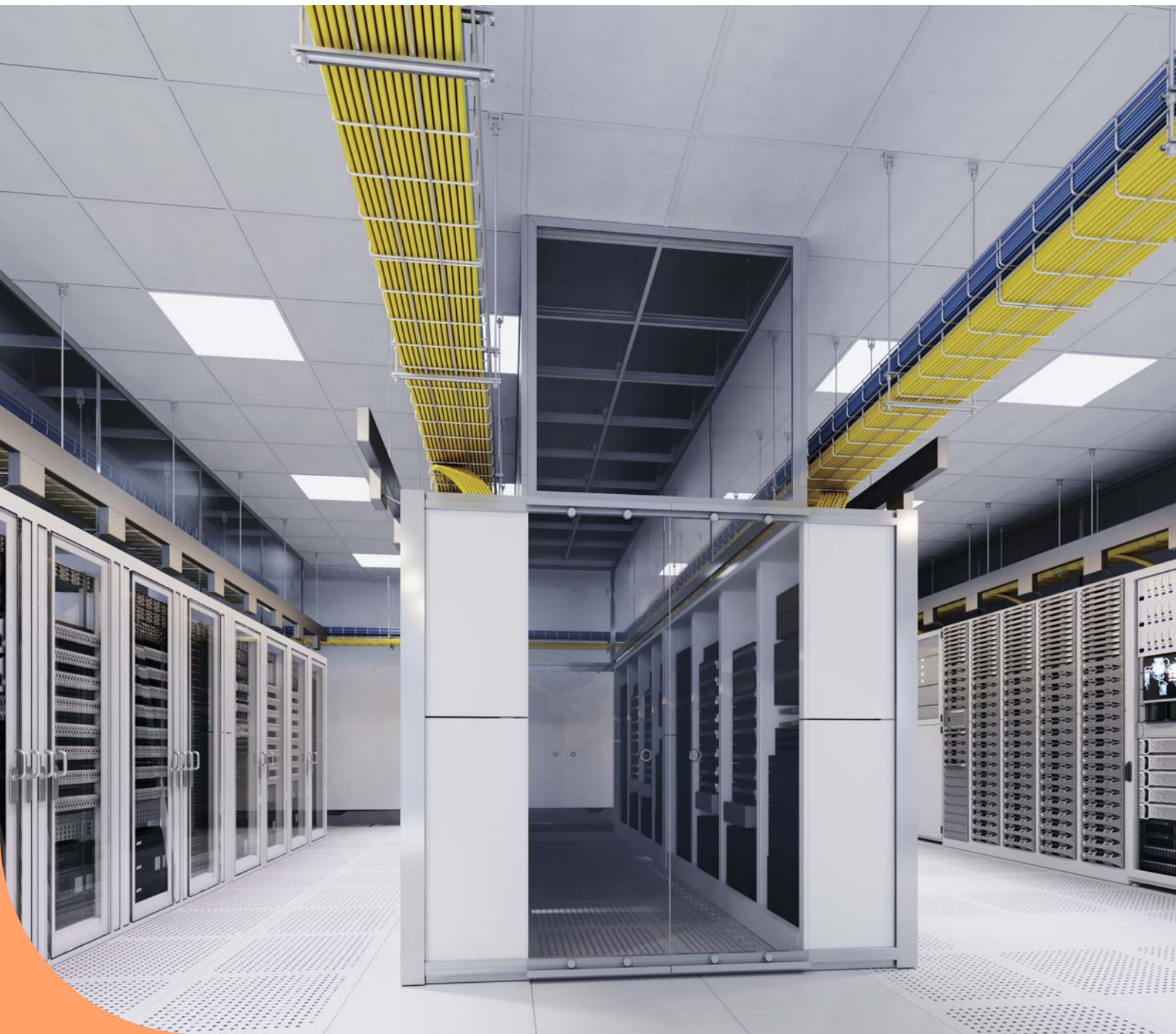


PEAKFORM PRELUDE

The Complete Data Centre Ceiling Solution

Armstrong PRELUDE 24 MAX™ Heavy Duty Suspension Grid combined with either MetalWorks or Bioguard Acoustic mineral fibre panels, forms an integrated ceiling system, designed to fit your data centre needs for high load carrying capacity, improved air flow management, clean room requirements and adaptability.

New PRELUDE 24 MAX™ is a pre-engineered grid system produced from roll-formed galvanised steel with a 62mm high “double PEAKFORM” T-profile, producing a high load carrying capacity. Standard reconfigurable hanging clips simply fasten directly to the face of the grid, with M10 threaded rod support for cable tray and electrical distribution, making it the complete ceiling solution for your data centre project.



Prelude 24 MAX – Exposed Grid Solutions



The Prelude 24 MAX™ suspension system supports single point loads for cable trays, busways, hot aisle containment, and more.

PRELUDE 24 MAX Suspension System with integrated load connectors

Load connector clips attach to the face of the suspension system to eliminate unsightly threaded rod penetrations through the ceiling plane to minimise unwanted air infiltration while improving access, cable tray layout options, and aesthetics.

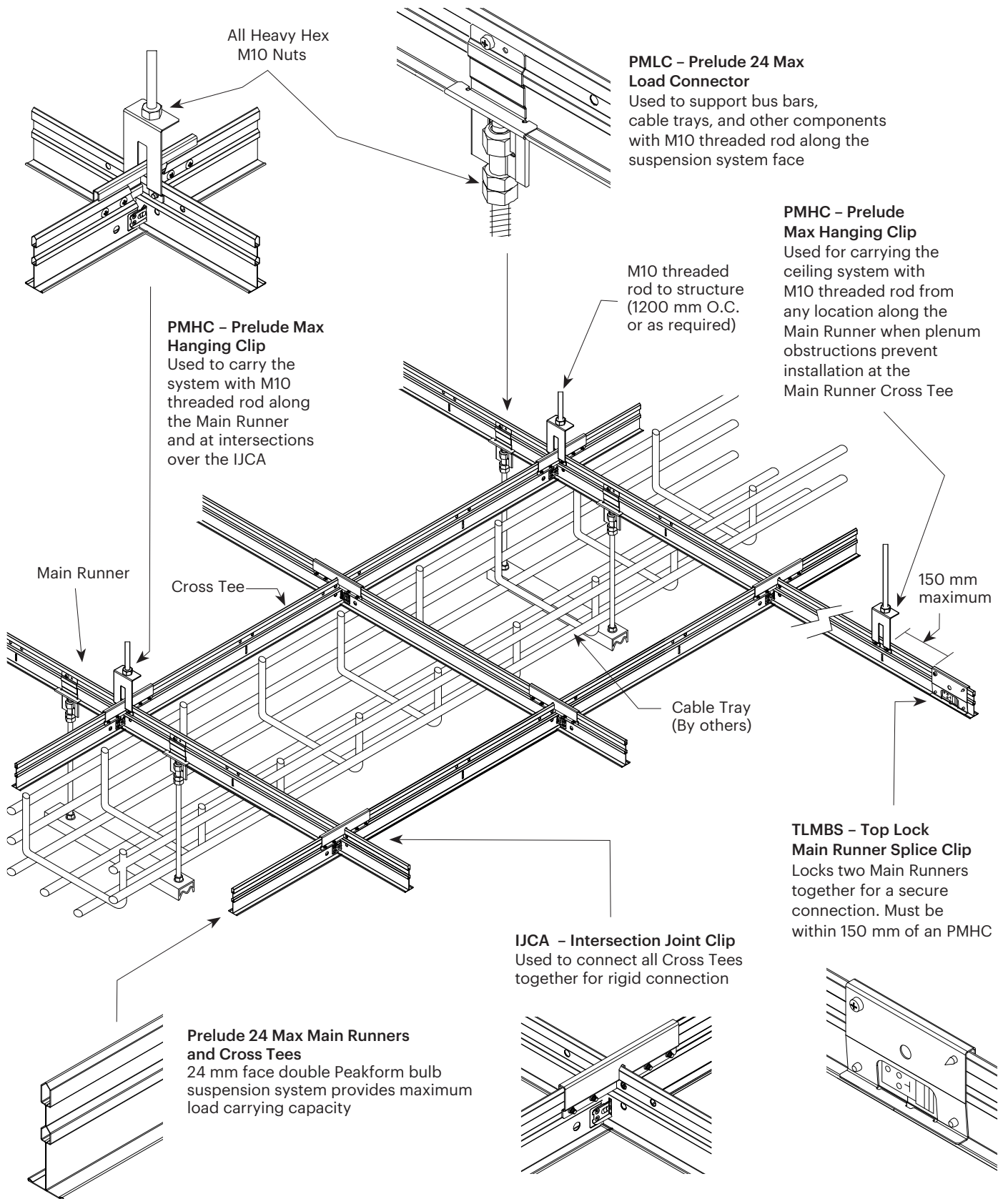


Integrated hanging clips allow connection to M10 threaded rod for flexible and reconfigurable overhead cable tray and electrical distribution without a separate strut channel system.



Choice of either METALWORKS or BIOGUARD ACOUSTIC mineral fibre ceiling panel options

Prelude 24 MAX – How it Works



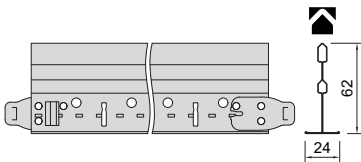
Prelude 24 MAX™ – Suspension System Components



Key Attributes

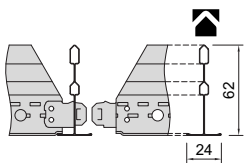
- Double Peakform, 62mm high profile for heavy duty requirements with point load capacity of up to 195kg* ((Based on Design Type 4/75 – see page 8)
- Suspension system supports load from the face of the suspension system using M10 threaded rod and integrated hanging clips:
 - Allows for flexible and reconfigurable overhead cable trays, electrical distribution, and hot aisle containment to meet client needs without a separate strut channel system
 - Eliminates unsightly threaded rod penetrations through the ceiling plane for improved access and aesthetics
 - Reduced ceiling penetrations help minimise unwanted air infiltration
- Seismic solutions available
- C2C Silver certificated suspension system

PRELUDE 24 MAX – Double PeakForm Main Runner with Superlock Clip (bulb-to-bulb connection)



Item Number	Dimensions (mm)			Content / Carton		Weight / Carton kg
	length	height	slot centres	pcs	lm	
48 40 94	3600	62	300	10	36,00	23.60

PRELUDE 24 MAX – XL² Cross Tees (stab system, override)



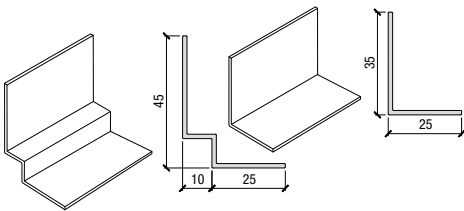
Cross Tees slotted

48 30 94	1200	62	300	30	36,00	23.60
----------	------	----	-----	----	-------	-------

Cross Tees unslotted

48 20 94	600	62	-	30	18,00	11.80
----------	-----	----	---	----	-------	-------

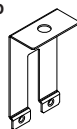
Perimeter Trims



Item No.	Description	Dimensions (mm)			Content / Cart'n pcs	Weight / Cart'n kg
		width	height	length		
ALSWA1	Heavy Duty Wall Angle	25	35	3600	20	17.5
ALSWA4	Heavy Duty Shadow Line Wall Angle	35	45	3600	20	23

Accessories

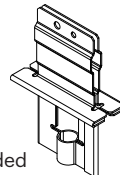
PMHC – Prelude Max Hanging Clip
Used to carry the ceiling system with M10 threaded rod from structure.



*Machine Screws, Heavy Hex Nut, and Locknut included

PMHCM10 – 150 pcs

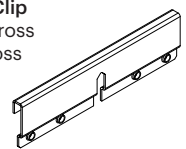
PMLC – Prelude 24 Max Load Connector – Used to support bus bars, cable trays, and other components with M10 threaded rod from the suspension system face.



* Heavy Hex Nut & Locknut included

PMLCM10 – 100 pcs

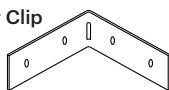
IJCA – Intersection Joint Clip
Used at all Cross Tee-to-Cross Tee or Main Runner-to-Cross Tee connections.



* Machine screws included

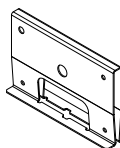
IJCA – 250 pcs

XTAC – Cross Tee Adapter Clip
Securely attaches Cross Tees or Main Runners to the Structural Wall Angle around the perimeter of the ceiling installation.



XTACAG – 100 pcs

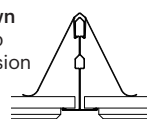
TLMBS – Top Lock Main Runner Splice Clip – Locks two Main Runner together for a secure connection.



10 pcs (included with item 730145 Main Runner)

TLMBS – 10 pcs

PMHDC – Maximum Hold Down Clip – Attaches to the top bulb of the Prelude 24 Max suspension system to hold ceiling panels in place; helps to prevent ceiling panel movement.

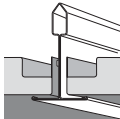
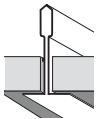


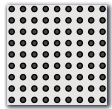
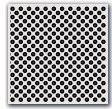










































PMHDC – 100 pcs

SYSTEM LOAD INFORMATION

*NOTE: See page 8 for details on System: Serviceability, Cable Tray and Point Loading.

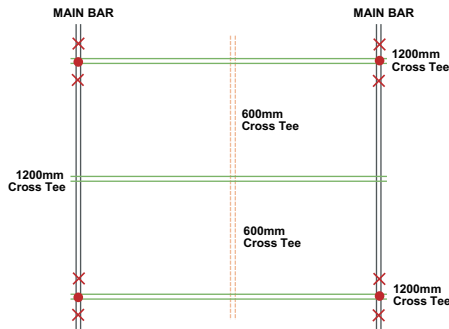
Recommended Ceiling Panels

	MetalWorks Lay In	Bioguard Acoustic																																																
	<p>Armstrong METALWORKS Lay In panels are an economical, durable metal ceiling solution with a range of perforation and acoustical options. Available in plain (non-perforated) for maximum clean room performance.</p> <ul style="list-style-type: none"> Contemporary appearance Simple accessibility to plenum space Available in Trioguard™ dust repellent coating, protecting from colour fading and maintaining its original look for longer TOTAL ACOUSTICS™ Performance Options (NRC + CAC) with B15 Acoustical Infill panels <ul style="list-style-type: none"> High sound absorption for reduced reverberation and quieter spaces High sound attenuation, improving room to room privacy Humiguard Plus RH99% Humidity/Sag Resistant High light reflective finish for a brighter space Sustainable – Green Star™ and WELL™ contribution ISO 5 Clean Room performance (Plain – Non-perforated) 	<p>BIOGUARD ACOUSTIC mineral fibre ceiling panels features a smooth, water repellent, washable surface with excellent anti-microbial and ISO clean room performance, making it an ideal solution for clean room and computer environments.</p> <p>Benefits:</p> <ul style="list-style-type: none"> Anti-microbial performance provides protection against bio-contamination Sealed edges producing ISO 5 Clean Room performance TOTAL ACOUSTICS™ Performance (NRC+CAC) <ul style="list-style-type: none"> High sound absorption for reduced reverberation and quieter spaces High sound attenuation, improving room to room privacy Humiguard Plus RH99% Humidity/Sag Resistant Reinforced, scratch resistant face for longer life High light reflective finish for a brighter space Sustainable – Green Star™ and WELL™ contribution 																																																
Edge Detail	<p>Square Lay-in</p> 	<p>Square Lay-in</p> 																																																
Item / Dimensions	<p>Item: LOSC060605M_WHA: 600 X 600mm Item LOSC120605M_WHA: 1200 X 600mm</p>	<p>Item: 5186: 600 X 600 X 19mm Item 5187: 1200 X 600 X 19mm</p>																																																
Colours / Pattern	<p>Global White</p>  <p>Plain Non Perforated (M1)</p>  <p>Standard Perforated (M10)</p>  <p>Micro Perforated (M2)</p> 	<p>Global White</p> 																																																
Sustainability	   <p>Recycled Content</p>  <p>Fully Recyclable</p>  <p>Low Emission</p> <table border="1" data-bbox="295 1485 874 1641"> <thead> <tr> <th colspan="6">Green Star™: Potential contribution Interiors v1.1 / Design & As Built v1.2</th> </tr> <tr> <th colspan="3">Indoor Environmental Quality</th> <th colspan="3">Materials</th> </tr> </thead> <tbody> <tr> <td>Credit 9/10 ACOUSTIC COMFORT</td> <td>Credit 10.2A/11.2A LIGHTING COMFORT SURFACE ILLUMINANCE</td> <td>Credit 11.1B/12.1B VISUAL COMFORT: DAYLIGHT</td> <td>Credit 12/13 INDOOR POLLUTANTS</td> <td>Credit 21D/21D SUSTAINABLE PRODUCTS – “Level A” Third Party Certification</td> <td>Credit 22/22 CONSTRUCTION AND DEMOLITION WASTE</td> </tr> <tr> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> </tr> </tbody> </table>	Green Star™: Potential contribution Interiors v1.1 / Design & As Built v1.2						Indoor Environmental Quality			Materials			Credit 9/10 ACOUSTIC COMFORT	Credit 10.2A/11.2A LIGHTING COMFORT SURFACE ILLUMINANCE	Credit 11.1B/12.1B VISUAL COMFORT: DAYLIGHT	Credit 12/13 INDOOR POLLUTANTS	Credit 21D/21D SUSTAINABLE PRODUCTS – “Level A” Third Party Certification	Credit 22/22 CONSTRUCTION AND DEMOLITION WASTE	✓	✓	✓	✓	✓	✓	  <p>Recycled Content</p>  <p>Fully Recyclable</p>  <p>Low Emission</p> <table border="1" data-bbox="906 1485 1485 1641"> <thead> <tr> <th colspan="6">Green Star™: Potential contribution Interiors v1.1 / Design & As Built v1.2</th> </tr> <tr> <th colspan="3">Indoor Environmental Quality</th> <th colspan="3">Materials</th> </tr> </thead> <tbody> <tr> <td>Credit 9/10 ACOUSTIC COMFORT</td> <td>Credit 10.2A/11.2A LIGHTING COMFORT SURFACE ILLUMINANCE</td> <td>Credit 11.1B/12.1B VISUAL COMFORT: DAYLIGHT</td> <td>Credit 12/13 INDOOR POLLUTANTS</td> <td>Credit 21D/21D SUSTAINABLE PRODUCTS – “Level A” Third Party Certification</td> <td>Credit 22/22 CONSTRUCTION AND DEMOLITION WASTE</td> </tr> <tr> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> </tr> </tbody> </table>	Green Star™: Potential contribution Interiors v1.1 / Design & As Built v1.2						Indoor Environmental Quality			Materials			Credit 9/10 ACOUSTIC COMFORT	Credit 10.2A/11.2A LIGHTING COMFORT SURFACE ILLUMINANCE	Credit 11.1B/12.1B VISUAL COMFORT: DAYLIGHT	Credit 12/13 INDOOR POLLUTANTS	Credit 21D/21D SUSTAINABLE PRODUCTS – “Level A” Third Party Certification	Credit 22/22 CONSTRUCTION AND DEMOLITION WASTE	✓	✓	✓	✓	✓	✓
Green Star™: Potential contribution Interiors v1.1 / Design & As Built v1.2																																																		
Indoor Environmental Quality			Materials																																															
Credit 9/10 ACOUSTIC COMFORT	Credit 10.2A/11.2A LIGHTING COMFORT SURFACE ILLUMINANCE	Credit 11.1B/12.1B VISUAL COMFORT: DAYLIGHT	Credit 12/13 INDOOR POLLUTANTS	Credit 21D/21D SUSTAINABLE PRODUCTS – “Level A” Third Party Certification	Credit 22/22 CONSTRUCTION AND DEMOLITION WASTE																																													
✓	✓	✓	✓	✓	✓																																													
Green Star™: Potential contribution Interiors v1.1 / Design & As Built v1.2																																																		
Indoor Environmental Quality			Materials																																															
Credit 9/10 ACOUSTIC COMFORT	Credit 10.2A/11.2A LIGHTING COMFORT SURFACE ILLUMINANCE	Credit 11.1B/12.1B VISUAL COMFORT: DAYLIGHT	Credit 12/13 INDOOR POLLUTANTS	Credit 21D/21D SUSTAINABLE PRODUCTS – “Level A” Third Party Certification	Credit 22/22 CONSTRUCTION AND DEMOLITION WASTE																																													
✓	✓	✓	✓	✓	✓																																													
Total Acoustics	 <p>EN ISO 10948-2 & EN ISO 717-1</p> <p>EN ISO 354 & EN ISO 11654</p> <table border="1" data-bbox="295 1749 703 1805"> <thead> <tr> <th rowspan="2">CAC</th> <th rowspan="2">NRC</th> <th colspan="6">Hz α_p</th> </tr> <tr> <th>125</th> <th>250</th> <th>500</th> <th>1000</th> <th>2000</th> <th>4000</th> </tr> </thead> <tbody> <tr> <td>38</td> <td>0.60</td> <td>0.50</td> <td>0.35</td> <td>0.50</td> <td>0.75</td> <td>0.85</td> <td>0.90</td> </tr> </tbody> </table> 	CAC	NRC	Hz α _p						125	250	500	1000	2000	4000	38	0.60	0.50	0.35	0.50	0.75	0.85	0.90	 <p>EN ISO 10948-2 & EN ISO 717-1</p> <p>EN ISO 354 & EN ISO 11654</p> <table border="1" data-bbox="914 1749 1323 1805"> <thead> <tr> <th rowspan="2">CAC</th> <th rowspan="2">NRC</th> <th colspan="6">Hz α_p</th> </tr> <tr> <th>125</th> <th>250</th> <th>500</th> <th>1000</th> <th>2000</th> <th>4000</th> </tr> </thead> <tbody> <tr> <td>41</td> <td>0.70</td> <td>0.30</td> <td>0.35</td> <td>0.65</td> <td>0.95</td> <td>0.95</td> <td>0.95</td> </tr> </tbody> </table> 	CAC	NRC	Hz α _p						125	250	500	1000	2000	4000	41	0.70	0.30	0.35	0.65	0.95	0.95	0.95				
CAC	NRC			Hz α _p																																														
		125	250	500	1000	2000	4000																																											
38	0.60	0.50	0.35	0.50	0.75	0.85	0.90																																											
CAC	NRC	Hz α _p																																																
		125	250	500	1000	2000	4000																																											
41	0.70	0.30	0.35	0.65	0.95	0.95	0.95																																											
Fire Resistance	 <p>Conforms with NCC Spec. C1.10 as tested to AS 5637.1:2015 – Group 1, and ISO 5660 – Group 1 – S</p>	 <p>Conforms with NCC Spec. C1.10 as tested to AS 5637.1:2015 – Group 1, and ISO 5660 – Group 1 – S</p>																																																
Other Performances & Features	 <p>Light Reflectance 83%</p>  <p>RH99 Humidity Resistant</p>  <p>4.6 kg/m²</p>  <p>ISO 5 Clean Room (Non-perforated)</p>  <p>Scratch Resistant</p>  <p>Impact Resistant</p>  <p>Product Handling Durability</p>  <p>Washable</p>  <p>Wipeable with Wet Cloth</p>  <p>Dust Repellent</p>  <p>Colour Stability</p>  <p>Hygiene / Anti-microbial</p>	 <p>Light Reflectance 87%</p>  <p>Thermal Insulation (R-Value) 0.40 m²/K/W</p>  <p>RH99 Humidity Resistant</p>  <p>5.28 kg/m²</p>  <p>ISO 5 Clean Room ISO 14644-1</p>  <p>Scratch Resistant</p>  <p>Product Handling Durability</p>  <p>Washable</p>  <p>Wipeable with Wet Cloth</p>  <p>Hygiene / Anti-microbial</p>  <p>Water Repellent</p>  <p>Resistance to Disinfectants</p>																																																

SYSTEM: Serviceability and Load Capacities

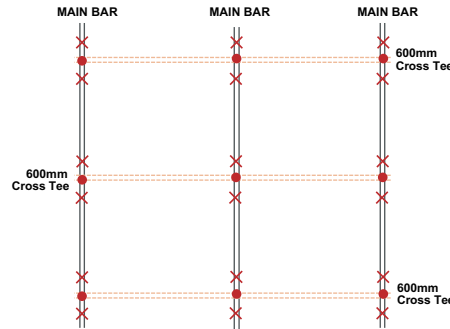
SYSTEM 1

Main Bar Spacing 1200mm centres
 Suspension Points 1200mm centres along Main Bar
 Point Loads X See table below



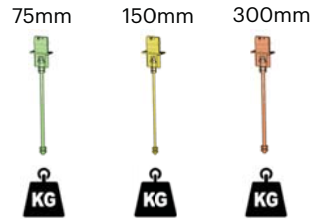
SYSTEM 4

Main Bar Spacing 600mm centres
 Suspension Points 600mm centres along Main Bar
 Point Loads X See table below



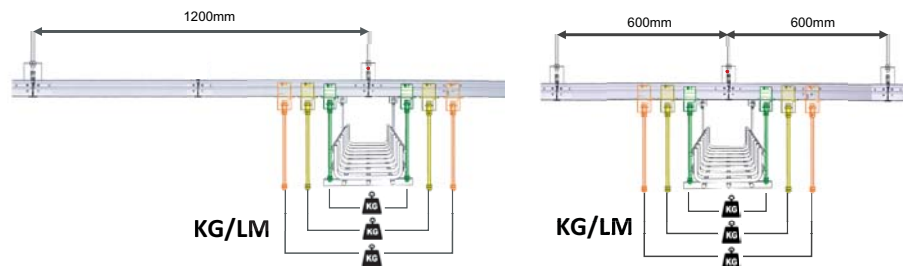
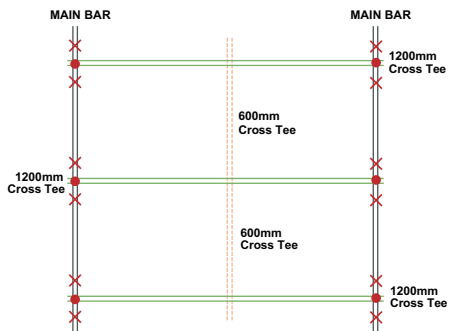
Cable Tray Load: KG/LM

Max. Distance from Hanger



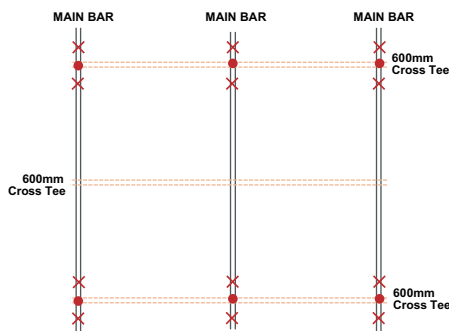
SYSTEM 2

Main Bar Spacing 1200mm centres
 Suspension Points 600mm centres along Main Bar
 Point Loads X See table below



SYSTEM 3

Main Bar Spacing 600mm centres
 Suspension Points 1200mm centres along Main Bar
 Point Loads X See table below



Grid System Load Capacities

System Type	Main Bar Centres (mm)	Suspension Point Centres (mm)	Distance of Load Hanger From Suspension Points (mm)	Cable Tray Load (kg/lm)	Point Load (Kg)
1/75	1200	1200	75	148	178
	1200	1200	150	67	80
	1200	1200	300	35	42
2/75	1200	600	75	148	178
	1200	600	150	67	80
2/300	1200	600	300	35	42
	600	1200	75	325	195
3/150	600	1200	150	240	144
	600	1200	300	198	119
4/75	600	600	75	325	195
	600	600	150	240	144
	600	600	300	198	119

Note: This Design also includes an allowance for a ceiling panel of (max) 5kg/m²

Allowable Deflection at L/360: AS/NZS 2785:2020

Contact us

Armstrong Ceiling Solutions (Australia) Pty. Ltd.

NSW / ACT
(02) 9748 1588

VIC / TAS
(03) 8706 4000

QLD / NT
(07) 3809 5565

Armstrong
CEILING SOLUTIONS