



DataStruct® Heavy Duty Ceilings For Data Centres

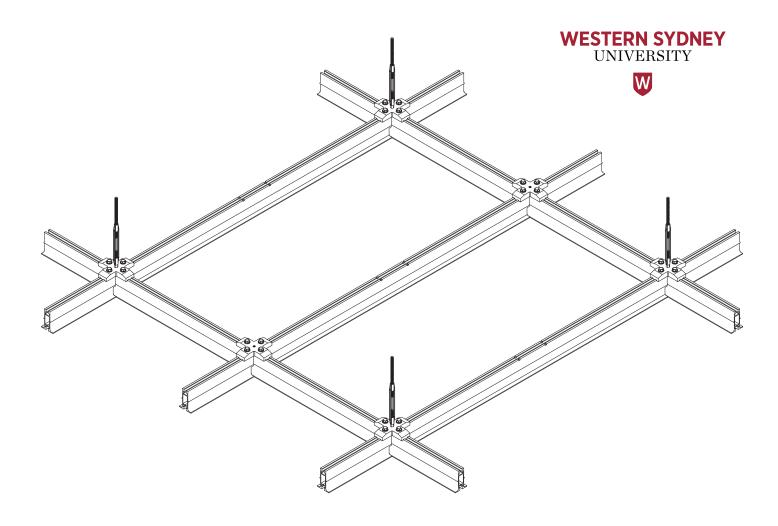
Introduction



DataWorks[™] DataStruct[™] is a heavy-duty ceiling system designed in Australia to meet the most stringent standards and requirements of modern data centre ceilings.

The DataStruct[™] difference

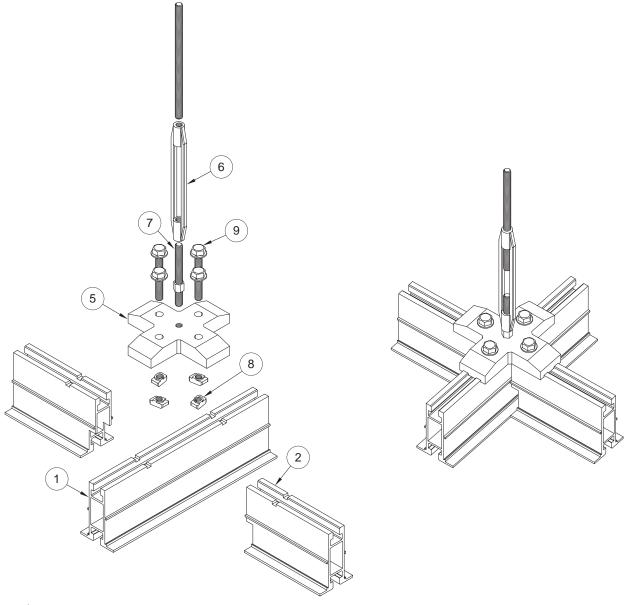
- · Point loads up to 599kg.
- · Time efficient T-Slot installation.
- Full compatibility with auxiliary components, including lighting, cable tray, containment units, cooling systems, etc.
- · Designed in Australia.
- · Independently tested by Western Sydney University.
- Available through Armstrong Ceilings Solutions' distribution network.
- · Compatible with Armstrong® brand DataStruct ceiling tiles.
- Up to 15-year system warranty.



Components



Item	Product	Code Description			
1	DWDS75MR3600GW	Dataworks Datastruct Heavy Duty 75mm Main Runner 3600 Global White			
2	DWDS75CR1200GW	Dataworks Datastruct Heavy Duty 75mm Cross Runner 1200 Global White			
3	DWDS75CR600GW	Dataworks Datastruct Heavy Duty 75mm Cross Runner 600 Global White			
4	ALSWA2GW	Seismic Heavy Duty Aluminium Wall Angle Global White			
5	DWDSHDGC	Dataworks Datastruct Heavy Duty Grid Connector Mill Finish			
6	FSTBM8100SS	TBM8100SS Turnbuckle M8 x100 304 Stainless Steel			
7	FSDEBM82050SS	M82050SS Double Ended Bolt M8 x RH20 x LH50 304 Stainless Steel			
8	FSTSRNM8SS	FSTSRNM8SS T-Slot Rhombic Nut M8 304 Stainless Steel			
9	FSSFHHBM830SS	Serrated-Flange Hex Head Bolt M8x30 304 Stainless Steel			
10	DWDSHDC	Panel Hold Down Clip			
11	UNI200	Slotted Angle Bracket			
12	ALMRJL	Aluminium Main-Runner Joiner Large			



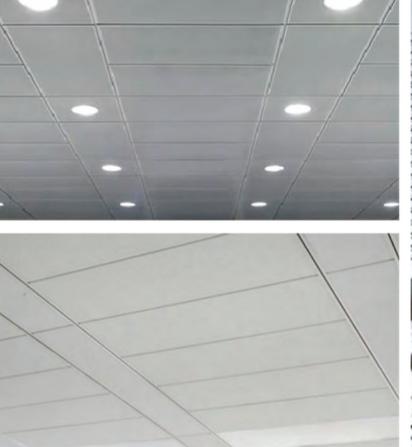
Ceiling Tiles

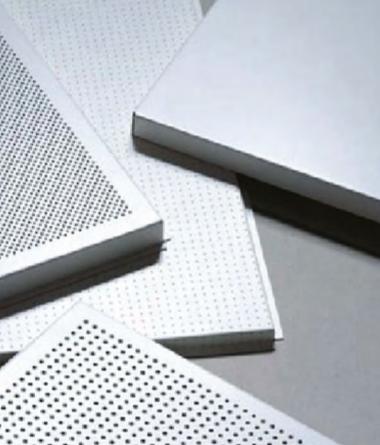


Benefits of DataStruct Ceiling Tiles:

- · Complete 15-year system warranty supported by Armstrong Ceiling Solutions Australia.
- · Acoustic mineral fibre or powder coated metal ceiling tiles.
- · Fully customisable metal options available.
- · Designed specifically to fit the DataWorks DataStruct grid system.
- · Surfaces can be wiped, washed or scrubbed.
- Dimensionally stable and warrantied for conditions up to RH99% at 0°C 49°C.

Item Number	Description	Dimensions (mm)	Material	Acoustic Absorption (NRC)
D\$5187	Bioguard DataStruct	1200 x 600	Mineral Fibre	0.70
DS120607M1WHA	Metalworks DataStruct Flat	1200 x 600	Galvanised Steel	N/A
DS120607M10WHA	Metalworks DataStruct 16%	1200 x 600	Galvanised Steel	0.75
DS120607M2WHA	Metalworks DataStruct 19%	1200 x 600	Galvanised Steel	0.75





Typical Details



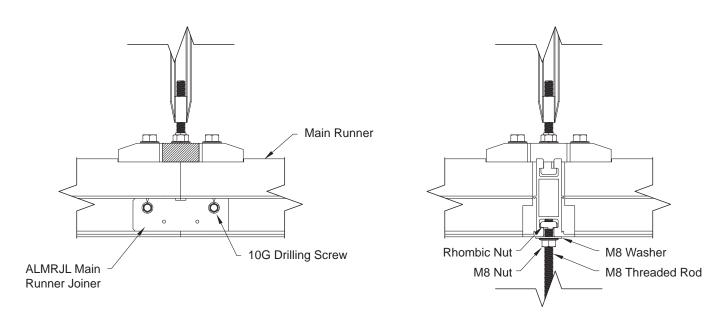


Figure 1: Main Runner Alignment.

Figure 2: Connecting Threaded Rods for services.

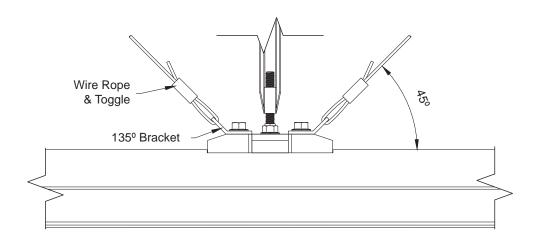


Figure 3: Seismic bracing option.

N.B. SEISMIC BRACING TO BE INSTALLED IN ACCORDANCE WITH PROJECT-SPECIFIC DESIGN PER AS1170.4

Typical Details



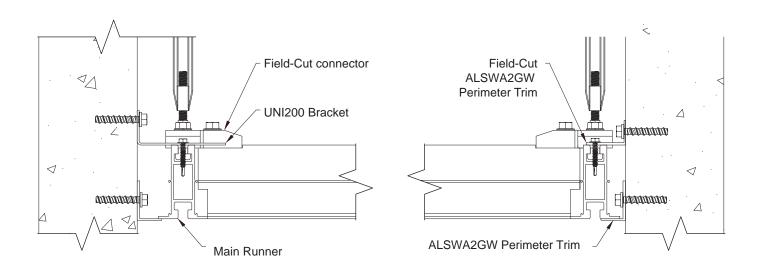


Figure 4: Floating Perimeter Option 1.

Figure 5: Fixed Perimeter Option 1.

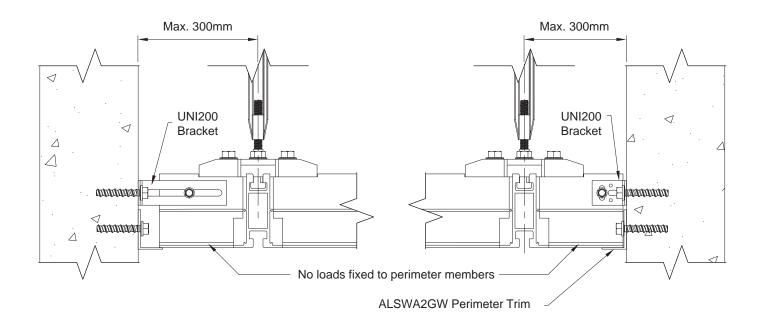


Figure 6: Floating Perimeter Option 2.

Figure 7: Fixed Perimeter Option 2.

N.B. SEISMIC BRACING TO BE INSTALLED IN ACCORDANCE WITH PROJECT-SPECIFIC DESIGN PER AS1170.4

System Performance



Double Span Load Table Summary								
Deflection Limit	Support Spacing (mm)	Midspan Point Load (kg)	Uniform Load (kg/m)	Pressure Load (kg/m2)				
L/360	600	599	1099	916				
L/360	1200	470	549	458				
L/360	1800	209	224	186				
L/360	2400	118	94	79				

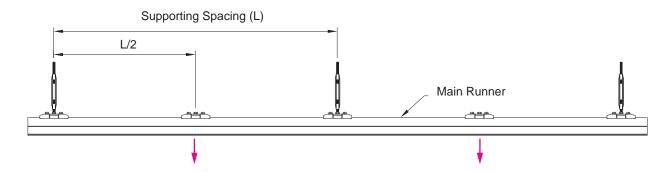


Figure 8: Midspan Point Load.

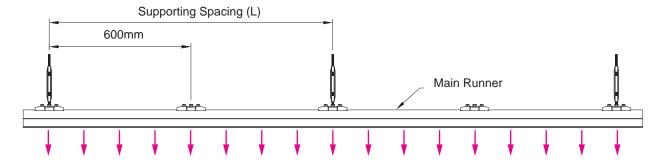
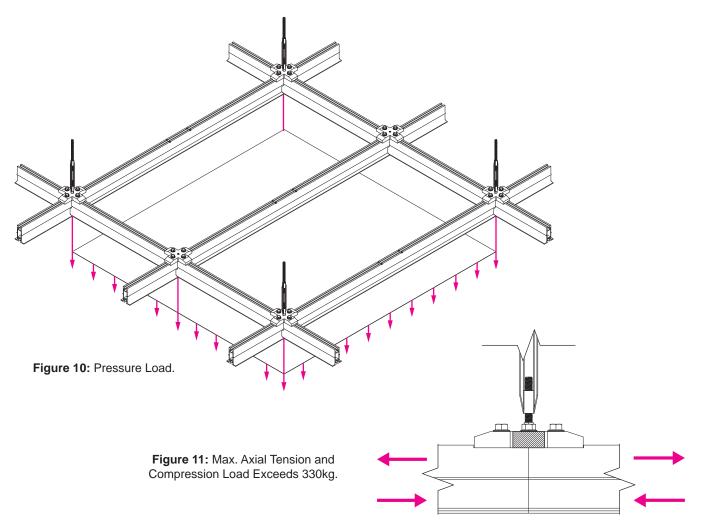


Figure 9: Uniform Load.

System Performance





Engineering, Compliance & Testing

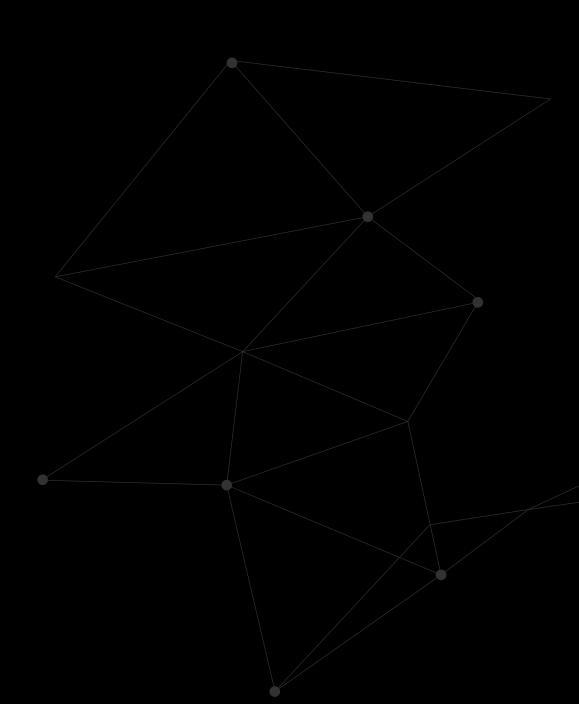
- Conforms with NCC Spec. C1.10 as tested to AS 5637.1:2015 Group 1, and ISO 5660 Group 1–S
- Designed in accordance with AS/NZS 1664.1:1997
- Designed in accordance with AS/NZS 1170.0
- Tested in accordance with AS/NZS 2785:2020
- · Tested in accordance with ASTM E3090/3090M
- Heavy Duty Classification in accordance with ASTMC635

Short Specification

Short Architectural Specification

Suspension ceiling system shall be DataWorks DataStruct heavy-duty suspension system with a mid-span point load of 470kg and uniform load of 549kg/m, 1200x600mm layout suspended at 1200mm centres, with Armstrong MetalWorks/Bioguard Acoustic ceiling tiles.





CONTACT US

NSW / ACT (02) 9748 1588

VIC / TAS (03) 8706 4000

QLD / NT (07) 3809 5565

 $in fo @\, arm strong ceilings.com. au\\$

DISTRIBUTED BY

