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HIMAS

CEILING - CLADDING

Introduction

Trigon Building Materials Limited commenced business in 1997 and is a wholly-owned subsidiary of Hanison Construction Holdings Limited, a company listed on The Stock Exchange of Hong Kong Limited (stock code: 896). We provide a variety of quality building materials including kitchen and bathroom cabinets, false ceiling, metal cladding and louvres, timber flooring, and environmental friendly products such as Polyboard. To add value to our clients, we also extend our service to include contracting, thereby offering an one-stop service to our client.

During the past years, our company has undertaken and successfully completed many projects, with a wide spectrum of project nature including residential properties for various developers, government buildings, office premises, shopping arcades, theme park and institutional complex.

Our company employs qualified professionals, experienced designers, contract managers and foremen to design, manage and supervise the project works to the full satisfaction of our clients. Our scope of work ranges from material supply, technical support, and design evolution and conceptualization to clients.

With full technical and financial support from its holding company and sister companies, Trigon Building Materials Limited has every confidence in meeting new challenges within this profession for the years to come.

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Model No.	Dimension
H-50	50x50mm
H-75	75x75mm
H-100	100x100mm
H-125	125x125mm
H-150	150x150mm
H-180	180x180mm
H-200	200x200mm

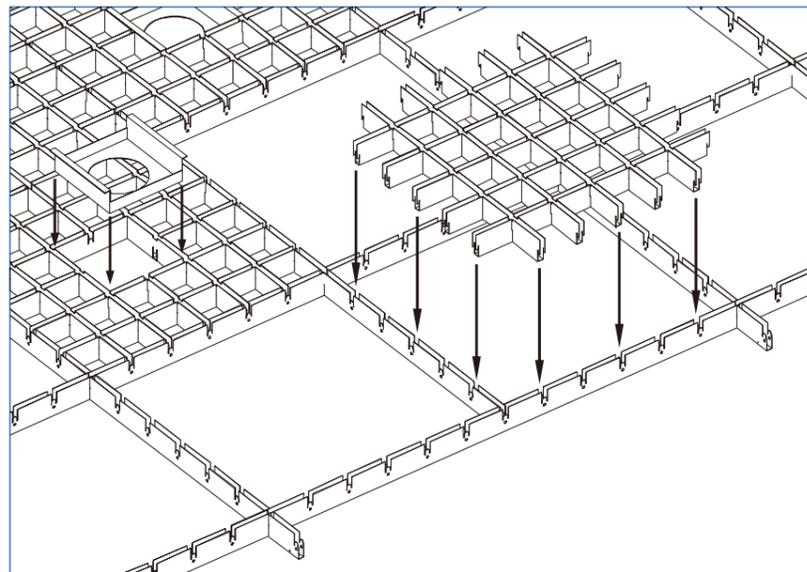
Special dimension can be ordered according to the enquiry of Designers, Architects and Consultants.

Introduction

Himas S1 Internal Cell Ceiling System is a kind of open style design. The entire suspended ceiling is constructed by cell element A & B, cross runner and main runner; Each unit combines with the 600/625mm length of aluminum alloy strip. And then, each small unit can be independent assembling and disassembling. It is convenient for maintenance service like fire prevention, air conditioning or electrical system, etc.

Suspension

The suspension of this system is mainly hanged by cell ceiling support in order to suspend each main runner in the ceiling (Fig.A). The runner connector is to join each runner together (Fig.B).



Suspension Drawing : Himas S1 Internal Cell Ceiling System

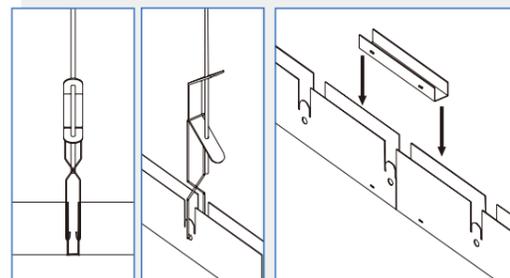
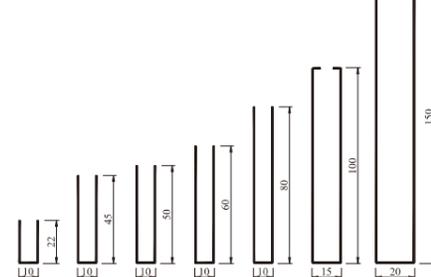


Fig.A

Fig.B

The height of the Cell element



Model No.	Dimension
H-50	50x50mm
H-75	75x75mm
H-100	100x100mm
H-125	125x125mm
H-150	150x150mm
H-180	180x180mm
H-200	200x200mm

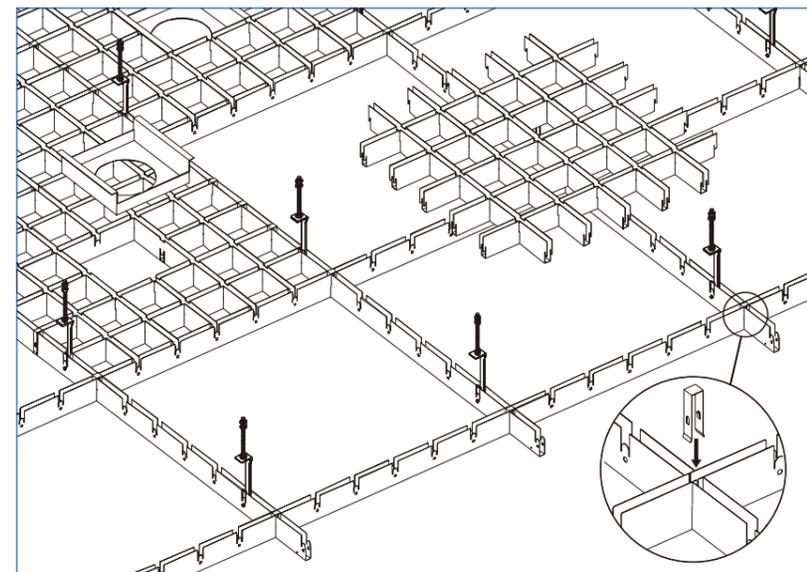
Special dimension can be ordered according to the enquiry of Designers, Architects and Consultants.

Introduction

Himas S2 External Cell Ceiling System applies an open plan ceiling design. It is composed of element A, B, cross runner and main runner. The whole ceiling is suspended by hanger bracket with L-angle frame. Distance between each main runner is 600mm. Each unit is composed of 600x600mm modules. In addition, the security clip is used to increase the strength of wind proofing of the ceiling.

Suspension

The suspension of this system is mainly hanged by cell ceiling support to suspend each main runner in the ceiling (Fig. A,B). The runner connector is used to connect all runners.



Suspension Drawing : Himas S2 External Cell Ceiling System

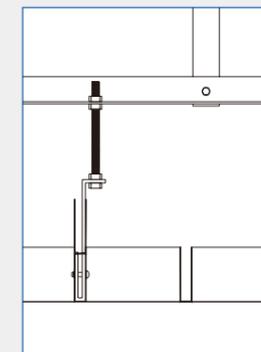


Fig.A

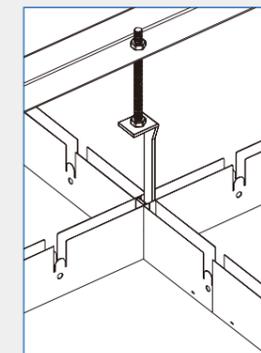


Fig.B



Model No.	Dimension
HS-300	300x300mm
HS-600	600x600mm
HS-3060	300x600mm
HS-30120	300x1200mm
HS-60120	600x1200mm

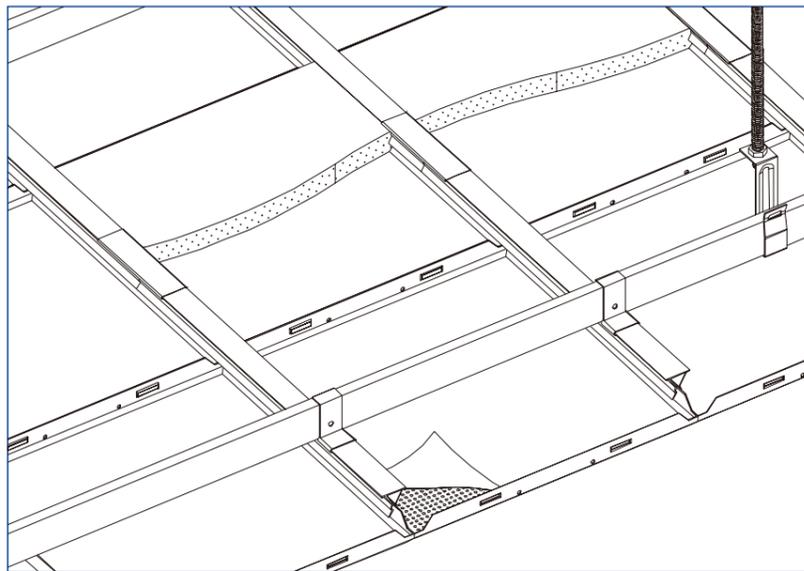
Special dimension can be ordered according to the enquiry of Designers, Architects and Consultants.

Introduction

Himas S3 Clip-in Ceiling System is a closed space design. Each panel is clipped into the spring tee runner tightly to hide the suspension parts at the back of the ceiling.

Suspension

The ceiling is suspended by spring tee runner which is fixed at the bottom of the C-channel connected by runner clamp with distance 600 mm centre to centre. All of the suspension units made from galvanized steel (Fig.A, B).



Suspension Drawing : Himas S3 Clip-in Ceiling System

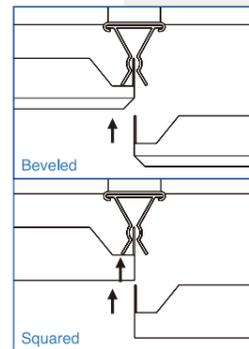


Fig. A

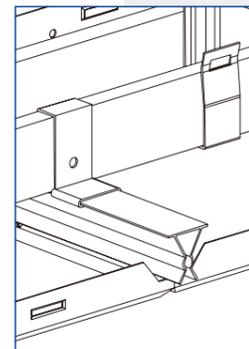


Fig. B



Model No.	Dimension
HP-575	575x575mm
HP-585	585x585mm
HP-595	595x595mm
HP-605	605x605mm

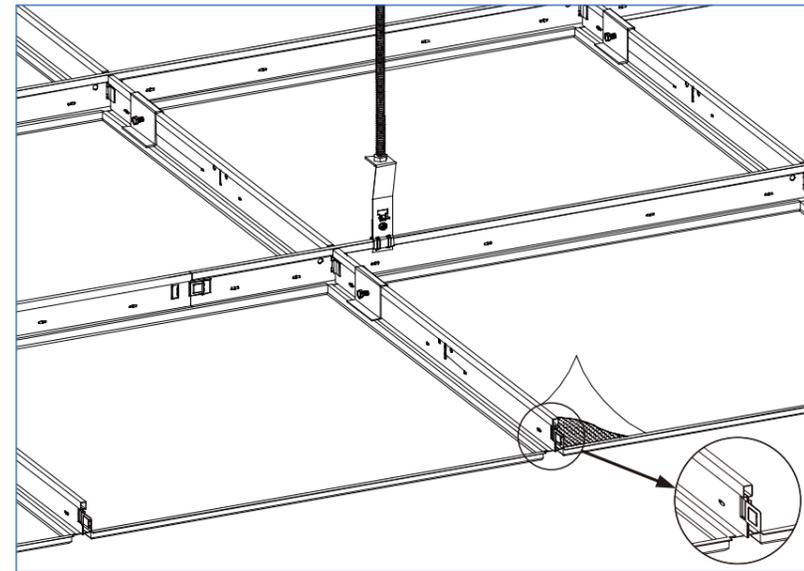
Special dimension can be ordered according to the enquiry of Designers, Architects and Consultants.

Introduction

Himas S4 Lay-in Ceiling System is a kind of untied type design which is essential placed on the T-shape runner. Each piece of panel can be independent assembled and disassembled. Moreover, we are able to supply different height of the panel including 10mm, 15mm, 20mm or 30mm (Fig.C). The different visual effect can be achieved.

Suspension

The combination of T-shape main and cross runners are built by the suspension frame which is hanged by T-runner bracket (Fig.A, B).



Suspension Drawing : Himas S4 Lay-in Ceiling System

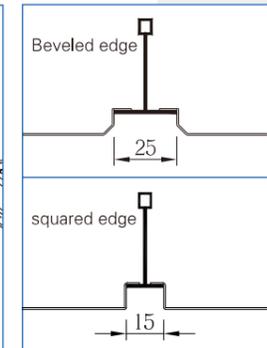


Fig. A

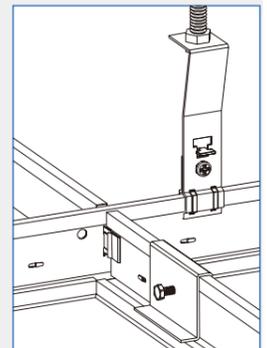
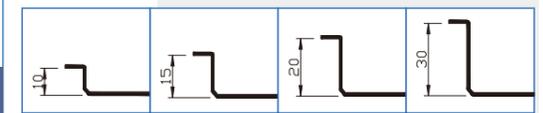


Fig. B



Height of the panel

Fig. C



Model No.	Dimension
HP-595	595x595mm
HP-605	605x605mm

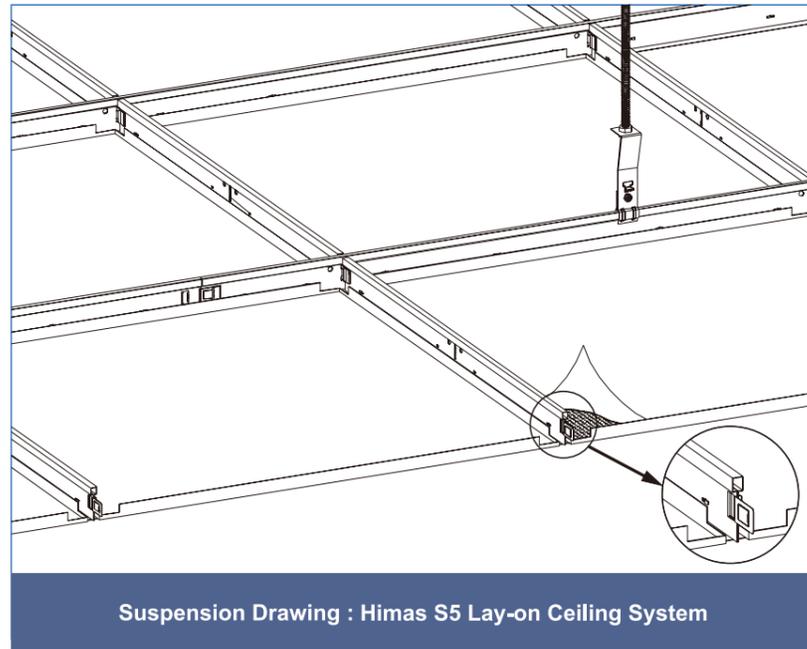
Special dimension can be ordered according to the enquiry of Designers, Architects and Consultants.

Introduction

Himas S5 Lay-on Ceiling System is a kind of united style design. Each panel is laid on the back of T-shape runner. This system is convenient to the panel assembling and disassembling. There are two different width of T-shape runner including 15 and 25mm (Fig.A).

Suspension

The combination of T-shape main and cross runners are built by the suspension frame which is hanged by T-runner bracket (Fig.B).



Suspension Drawing : Himas S5 Lay-on Ceiling System

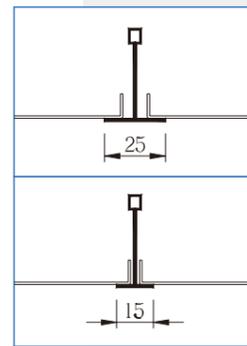


Fig.A

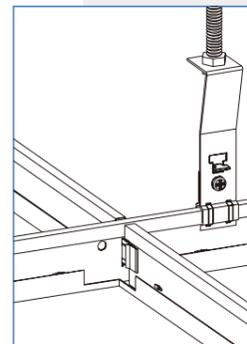


Fig.B



Model No.	Dimension
HP1-585	585x585mm
HP1-5851185	585x1185mm

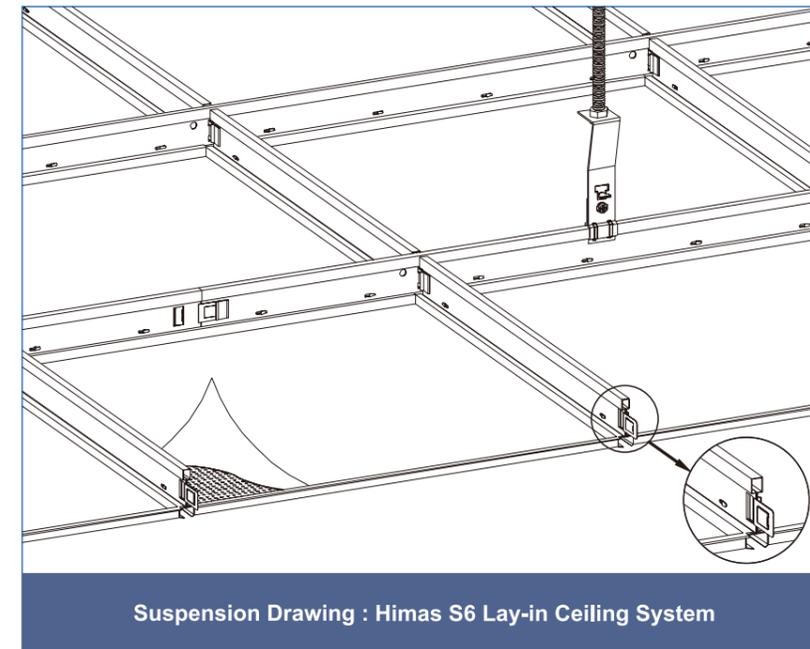
Special dimension can be ordered according to the enquiry of Designers, Architects and Consultants.

Introduction

Himas S6 Lay-in Ceiling System is a kind of united style design. Each panel is laid on the back of Recessed T-shape runner. This system is convenient to the panel assembling and disassembling. The width of this runner is 14mm (Fig. A).

Suspension

The combination of T-shape main and cross runners are built by the suspension frame which is hanged by T-runner bracket (Fig.B, C).



Suspension Drawing : Himas S6 Lay-in Ceiling System

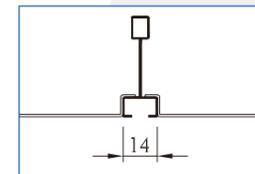


Fig.A

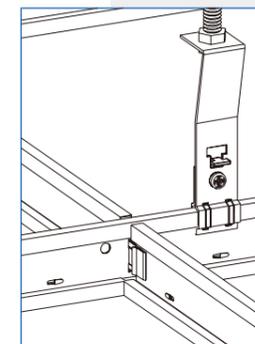


Fig.B

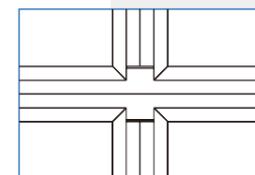


Fig.C



Model No.	Dimension
HP5-585	585x585mm
HP5-5851185	585x1185mm

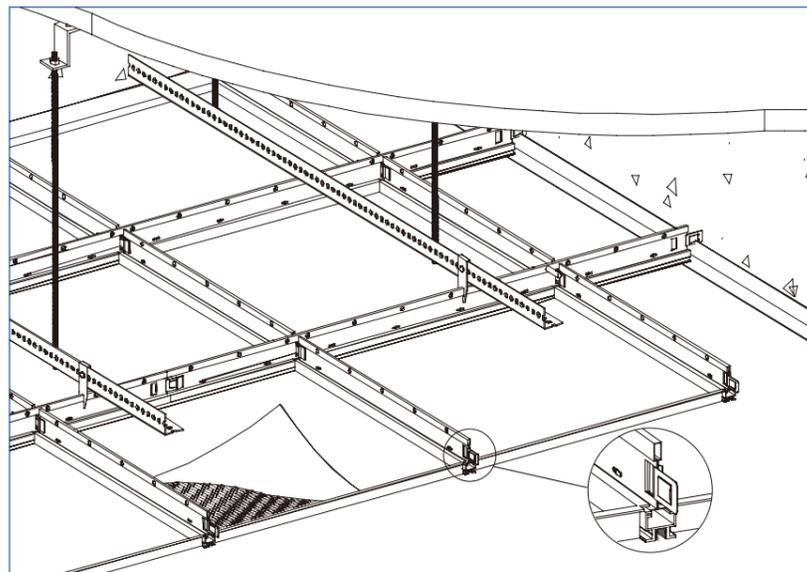
Special dimension can be ordered according to the enquiry of Designers, Architects and Consultants.

Introduction

Himas S7 Lay-in Ceiling System is a kind of movable ceiling design. Each ceiling panel can be easily installed and demounted. The widths of the runner are 15mm and composed by aluminum and galvanized steel. Each runner depressed above the ceiling level.

Suspension

The combination of T-shape main and cross runners are built by the suspension frame (Fig.B), which is cross runner fixed on main runner and connected with perforated L-shape runner and hanged by screw directly (Fig. A,C).



Suspension Drawing : Himas S7 Lay-in Ceiling System

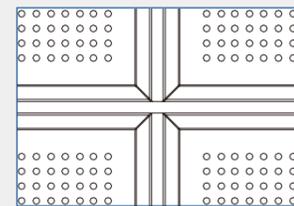


Fig.B

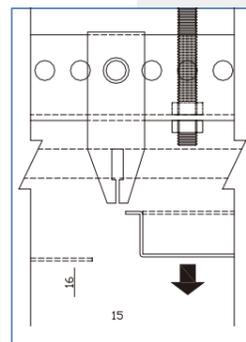


Fig.A

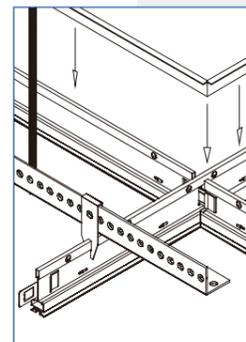


Fig.C



Model No.	Dimension
HCS-2020	20x20x20mm
HCS-2525	25x25x25mm
HCS-3030	30x30x30mm

(WxLxHmm)

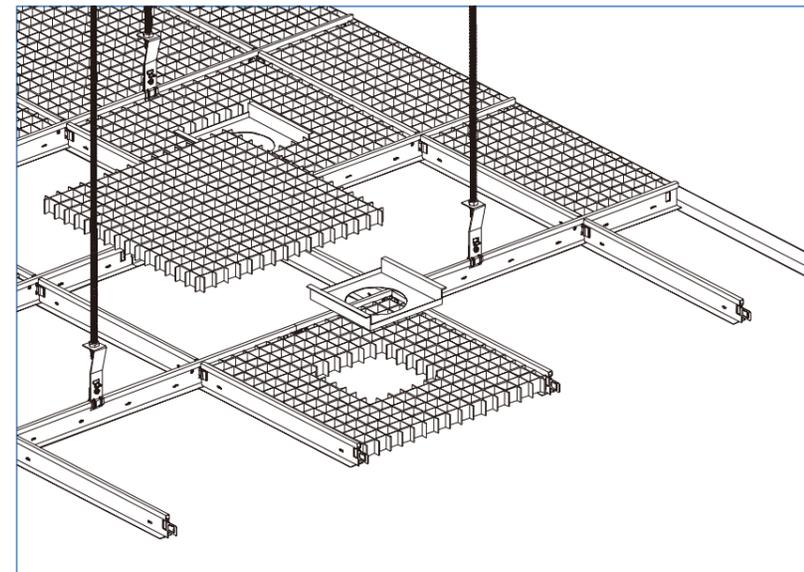
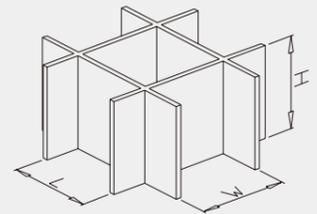
Special dimension can be ordered according to the enquiry of Designers, Architects and Consultants.

Introduction

Himas S8 Open Grid Ceiling System is an open space design. Each panel is laid on the visible T-shape main and cross runner individually (Fig.A). The different type of runner can be used to form the square-shaped compartment such as U-shape runner, omega-shape runner and light trough in order to make the ceiling design more widespread and multiplex. The height of the panel is divided by 20mm, 25mm and 30mm offered.

Suspension

The combination of T-shape main and cross runners are built by the suspension frame which is hanged by T-runner bracket (Fig.B).



Suspension Drawing : Himas S8 Open Grid Ceiling System

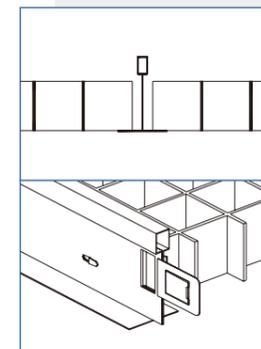


Fig.A

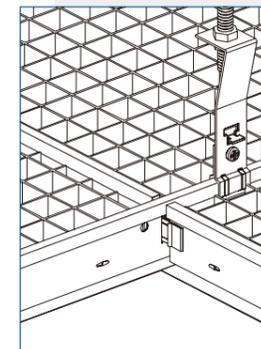


Fig.B



Model No.	Dimension
HHO-300	300x300mm
HHO-3060	300x600mm
HHO-30120	300x1200mm
HHO-600	600x600mm
HHO-60120	600x1200mm

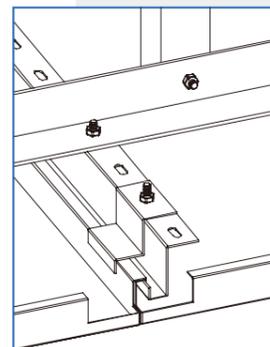
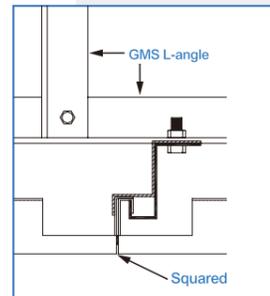
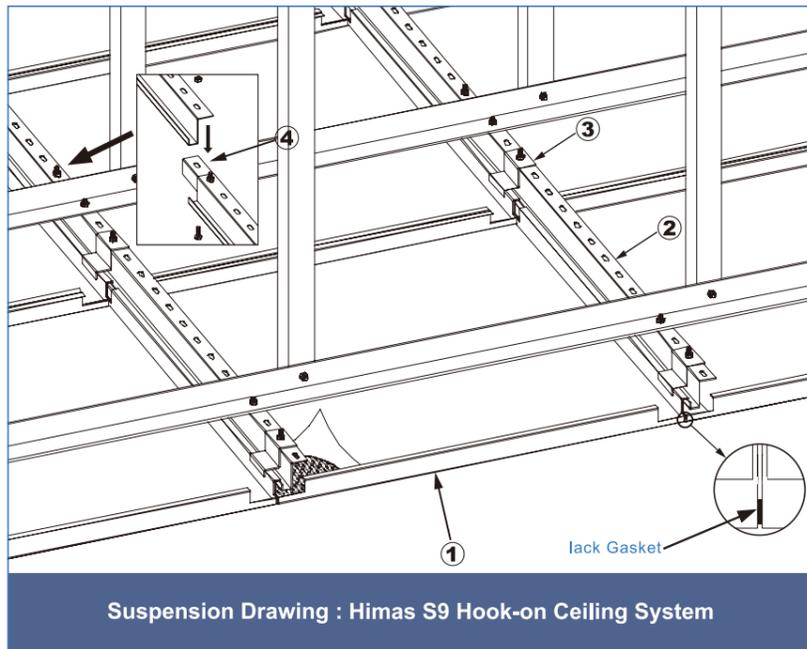
Special dimension can be ordered according to the enquiry of Designers, Architects and Consultants.

Introduction

Himas S9 Hook-on Ceiling System is a closed space design system. The panel is hooked on the Z-shape runner tightly to hide the suspension parts at the back of the ceiling. Installing security clip can increase the windproof ability of the system. Installing ceiling hatches can provide access for inspection and maintenance of air-conditioning, electrical and fire prevention system.

Suspension

The ceiling is suspended by Z-shape runner which is fixed at the bottom of the C-channel or GMS angle by using Z-profile clamp (Fig.A, B).



Model No.	Dimension
HBO-150	W150xLmm
HBO-200	W200xLmm
HBO-300	W300xLmm

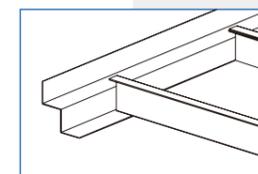
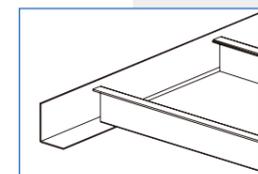
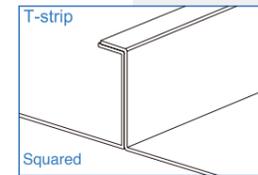
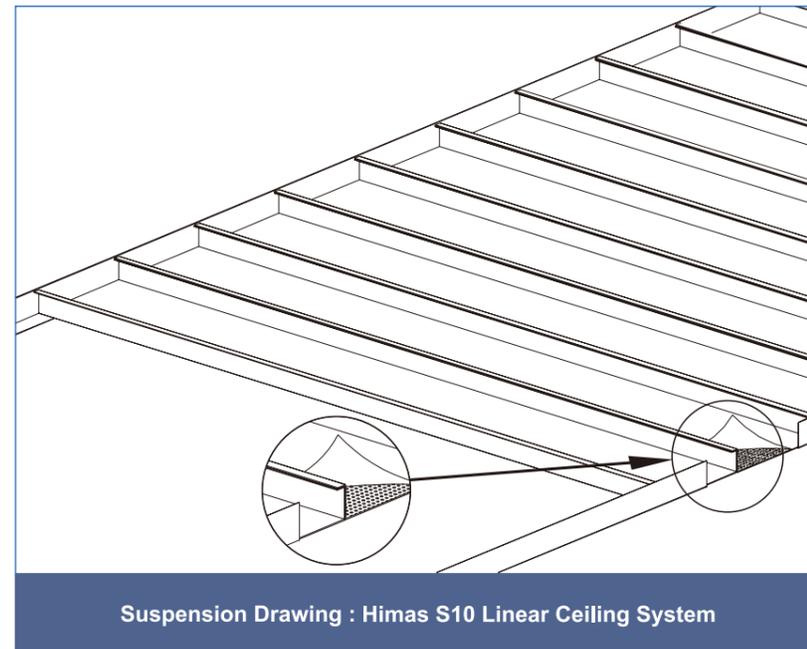
Special dimension can be ordered according to the enquiry of Designers, Architects and Consultants.

Introduction

Himas S10 Linear Ceiling System is a closed space design (Fig.A). It is suitable for the narrow space. The panel is laid on the side wall angle (Fig.B, C). The installation and disassembling is extremely simple.

Suspension

There are two kinds of suspension system (without or with runner). Without runner type, L-angle, W-angle and others profile wall angle is used to suspend the entire ceiling. With runner type, the U-shape runner is assembled at the back of the ceiling to increase the flatness of the ceiling.





Model No.	Dimension
HG-300	W300xLmm
HG-400	W400xLmm
HG-500	W500xLmm
HG-600	W600xLmm

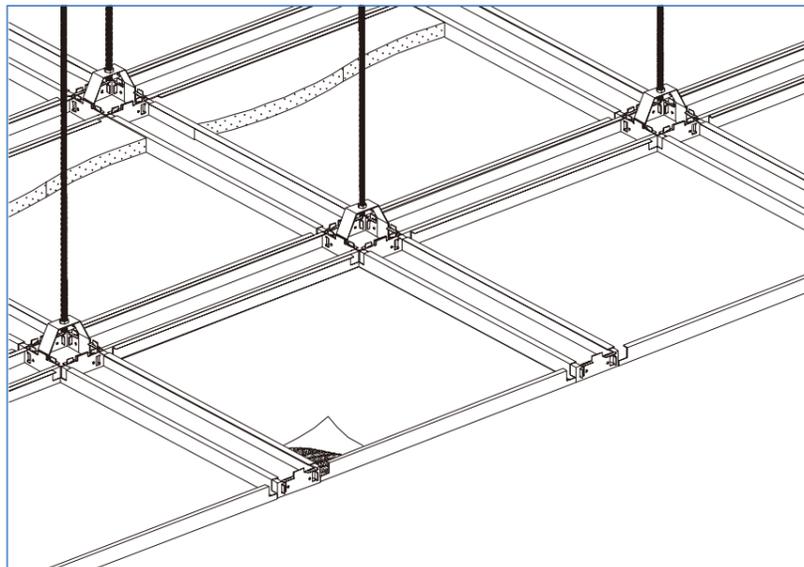
Special dimension can be ordered according to the enquiry of Designers, Architects and Consultants.

Introduction

Himas S11 Tartan Grid Ceiling System is a closed space design. Each panel is laid on the visible-runner frame which simplifies the process of ceiling assembly and disassembly. The various combination of different width of runner, size of box and panel make the outlook of the ceiling more perfect.

Suspension

In Fig. B, the panel is placed in the battle array building up by the combination of TG runner and Crossing box. In Fig.A, each crossing box is hanged by the screw rod individually. The Hanger bracket is added to suspend longer runner to reformatify the ceiling structure.



Suspension Drawing : Himas S11 Tartan Grid Ceiling System

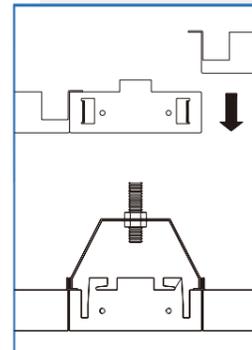


Fig. A

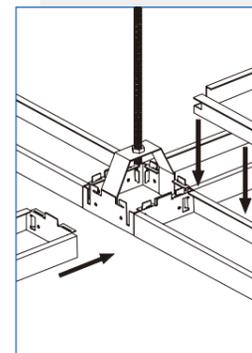


Fig. B



Model No.	Dimension
HWG-300	W300xLmm
HWG-400	W400xLmm
HWG-500	W500xLmm
HWG-600	W600xLmm

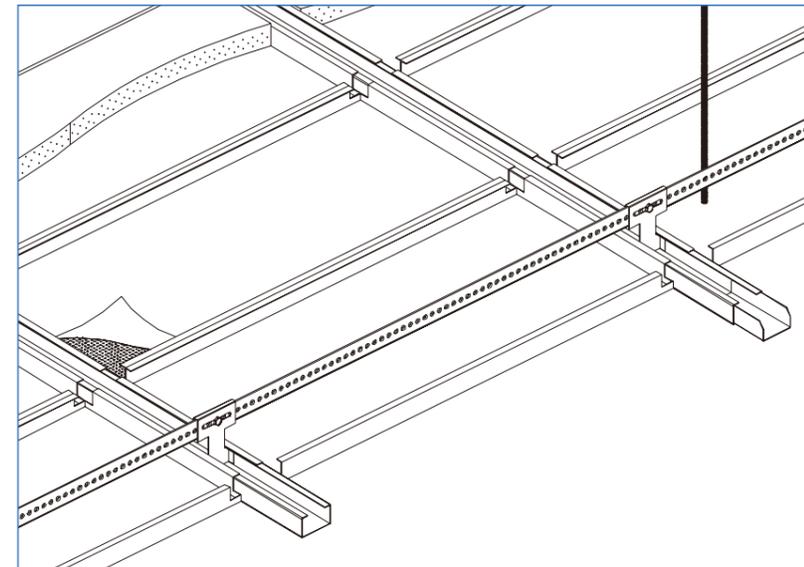
Special dimension can be ordered according to the enquiry of Designers, Architects and Consultants.

Introduction

Himas S12 Wide Grid Ceiling System is a closed space design. Each panel is laid on the visible-runner frame. It may simplify the procedure of ceiling assembly and disassembly. The various combinations of different width of runner and size of panel make outward appearance and design multiplex.

Suspension

Each panel is placed on the middle of two runners which is hanged by Hanger bracket locating on the perforated L-angle by fitting screw rod (Fig.A,B).



Suspension Drawing : Himas S12 Wide Grid Ceiling System

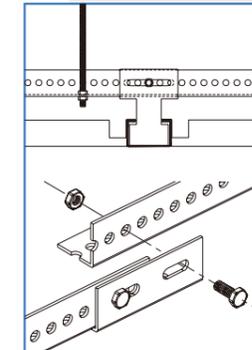


Fig. A

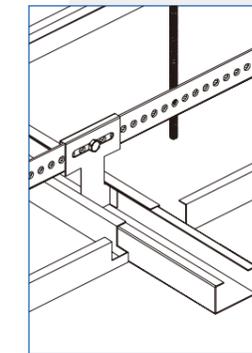


Fig. B



Model No.	Dimension
HUL-2550	W25xH50mm
HUL-2575	W25xH75mm
HUL-25100	W25xH100mm
HUL-25150	W25xH150mm
HUL-1550	W15xH50mm
HUL-1575	W15xH75mm
HUL-15100	W15xH100mm
HUL-15150	W15xH150mm

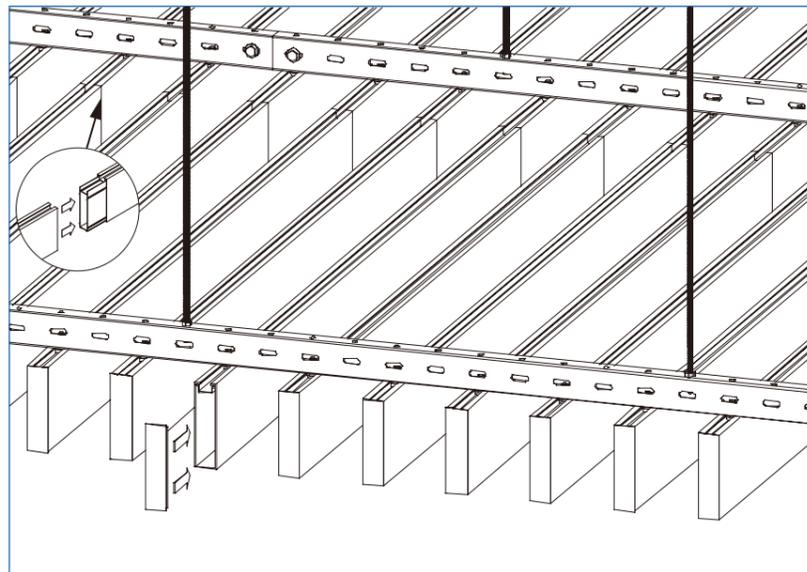
Special dimension can be ordered according to the enquiry of Designers, Architects and Consultants.

Introduction

Himas S13 Baffle Ceiling System is an open space design. The entire ceiling is suspended by the special-made unit. In order to cooperate with the varies design, the length and spacing of each panel can be made according to customer's ordering. The ceiling installing on the vertical or curved surface is available (Fig.A).

Suspension

In Fig.B, the baffle is suspended by the positioned carrier. Bracket is locking each baffle under the carrier. The distance between each runner is 1200mm centre to centre. Installing the runner Bracket with screw rod is to hang each carrier individually(Fig.B).



Suspension Drawing : Himas S13 Baffle Ceiling System

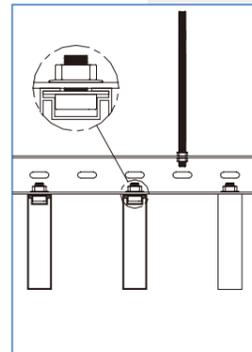


Fig. A

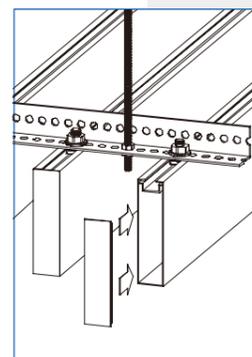


Fig. B



Model No.	Dimension
HUV-100	H100xLmm
HUV-150	H150xLmm

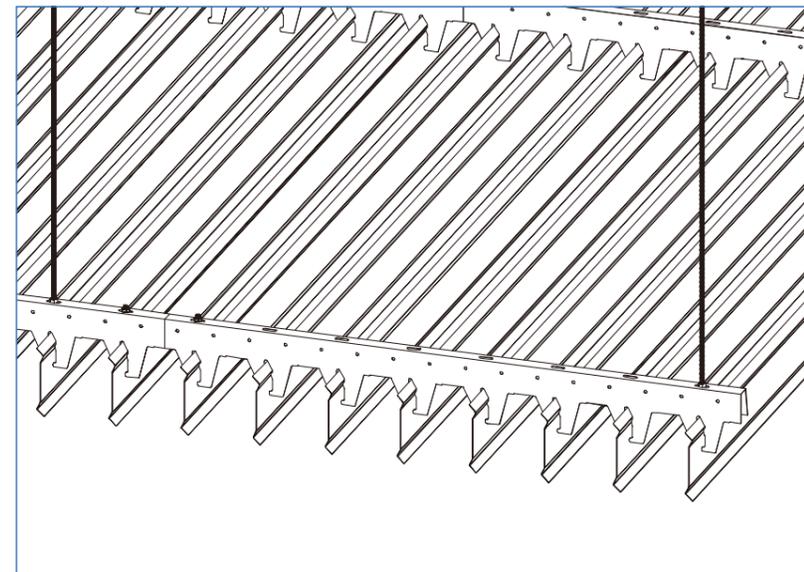
Special dimension can be ordered according to the enquiry of Designers, Architects and Consultants.

Introduction

Himas S14 Screening Ceiling System is an open space design. The entire ceiling is suspended by the special-made runner (Fig.A, B) . In order to cooperate with varies design, the length and spacing of each panel can be made according to customer's ordering.

Suspension

The ceiling is suspended by runner with screw rod. The distance between each runner is about 1200mm centre to centre. Runner connector is used to extend the length of runner (Fig.C).



Suspension Drawing : Himas S14 Screening Ceiling System

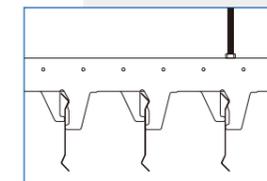


Fig. A

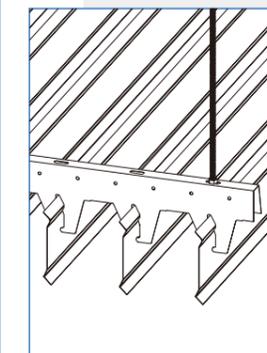


Fig. B

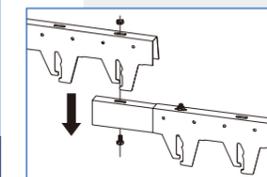


Fig. C



Model No.	Dimension
HUT-30	DIA 30 x Lmm
HUT-40	DIA 40 x Lmm
HUT-50	DIA 50 x Lmm
HUT-60	DIA 60 x Lmm

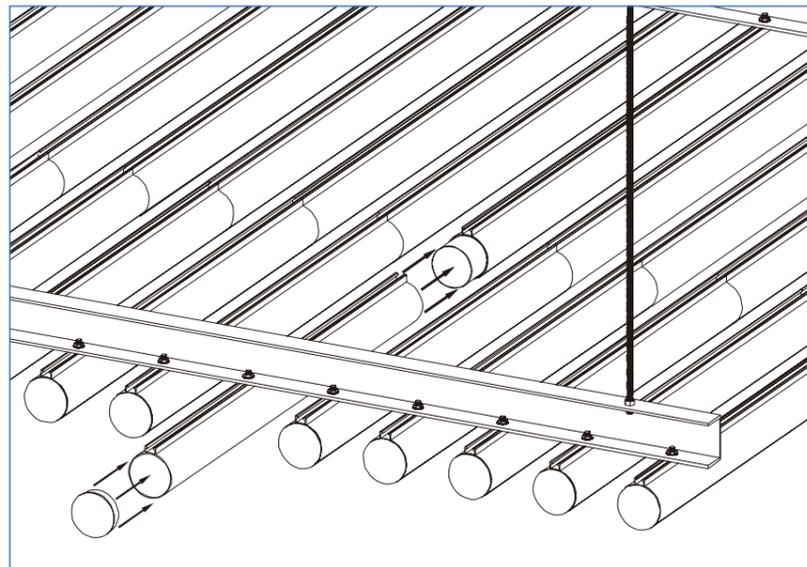
Special dimension can be ordered according to the enquiry of Designers, Architects and Consultants.

Introduction

Himas S15 Tube Line Ceiling System is an open space design. However, the suspension system is so simple that it is advantage of the installation of huge-area ceiling. In order to cooperate with the requirement of multiplication design, style and spacing of each panel can be provided custom ordering. It can be installed on the horizontal and vertical plane. The irregular ceiling design can be achieved like curved ceiling in order to promote a visual effect.

Suspension

In Fig. A&B, the ceiling is suspended by perforated carrier which is hanged by the screw rod. The distance between each runner is about 1200mm centre to centre. Bolts, Nuts and Rings are inserted to the long groove and directly fixing the tube at the back of the perforated carrier(Fig.A, B).



Suspension Drawing : Himas S15 Tube Line Ceiling System

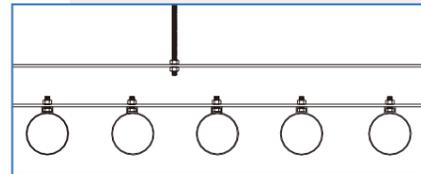


Fig. A

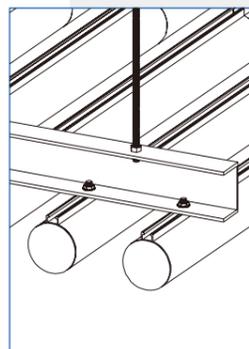


Fig. B



Introduction

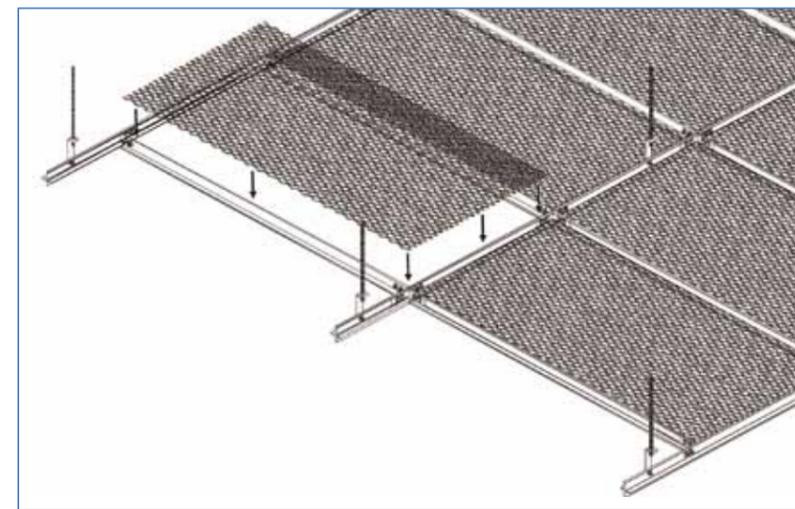
Himas S16 Wire Mesh Ceiling System is an open space design. Each panel is laid on the visible T-shape main and cross runner individually (Fig. A). The different type of runner can be used to form the square-shaped compartment such as U-shape runner, omega-shape runner and light trough in order to make the ceiling design more widespread and multiplex. Coordinates special light fittings and air-diffusers can make the best performance in ceiling outwards.

Suspension

It is established by the assembly of T-shape main and cross runner with same level in order to form the different size of the square-shaped compartment. The entire ceiling is suspended by the Steel rod clamp (P-104). All of the runners and suspension parts also made from galvanized steel (Fig.B).

Model No.:	Dimension:
CN-600	600x600mm
CN-6012	600x1200mm

Special dimension can be ordered according to the enquiry of Designers, Architects and Consultants.



Section Ceiling Detail

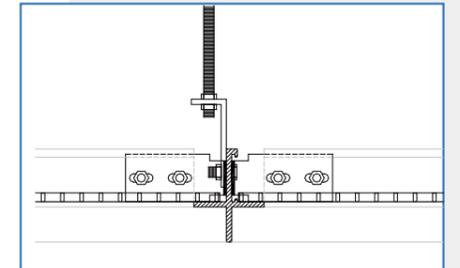


Fig. A

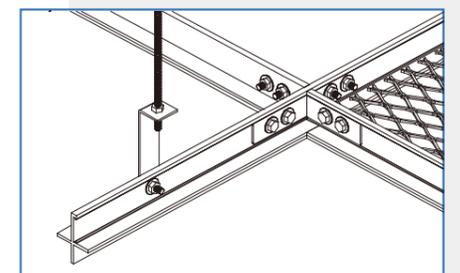


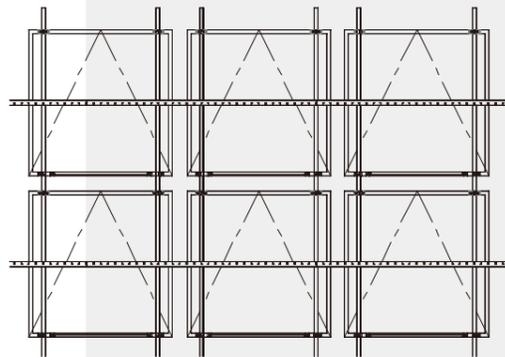
Fig. B



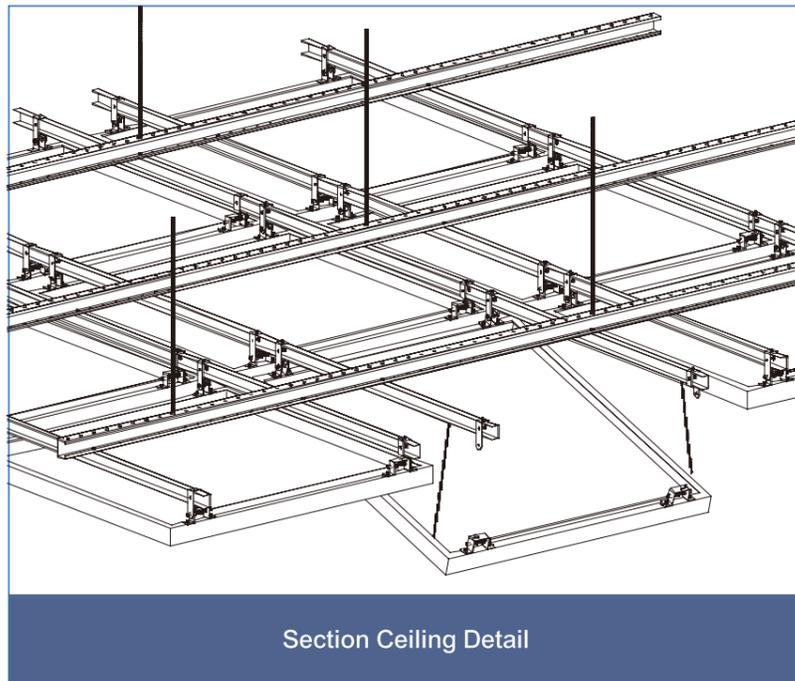
Introduction

Himas S17 Hingedown Panel Ceiling System is composed of individual ceiling units of which every units can be pulled off from the tracks separately with fixed pulling angle. It is suitable for ceilings which need frequent maintenance of facilities. It is also especially useful for mass transport system.

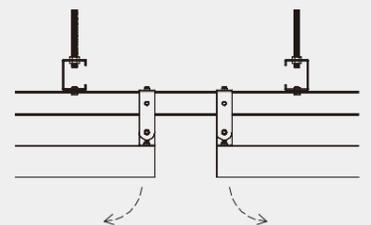
Section Ceiling Detail



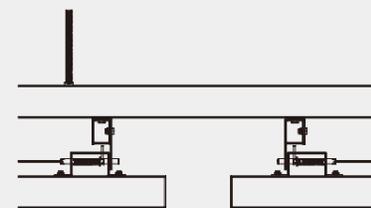
Suspension Drawing:Himas S17 Hingedown Panel Ceiling System



Section Ceiling Detail



Section Ceiling Detail (1)



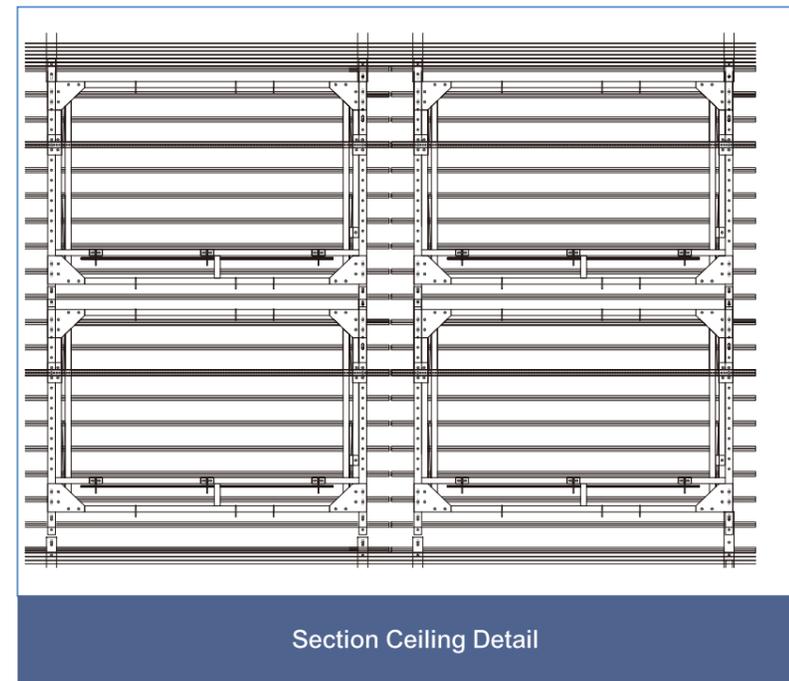
Section Ceiling Detail (2)



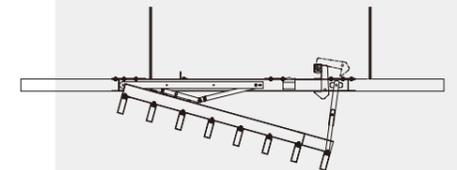
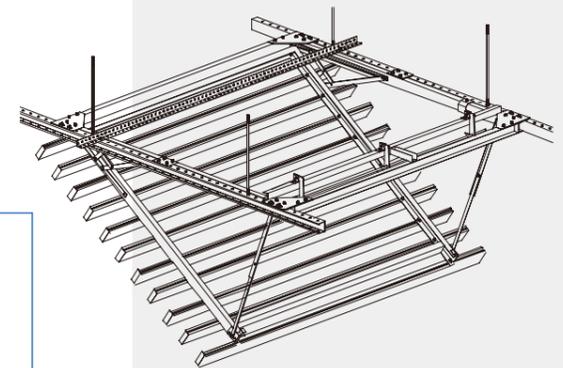
Introduction

Himas S18 Hingedown Panel Ceiling System is composed of individual ceiling units of which every units can be pulled off from the tracks separately with fixed pulling angle. It is suitable for ceilings which need frequent maintenance of facilities. It is also especially useful for mass transport system.

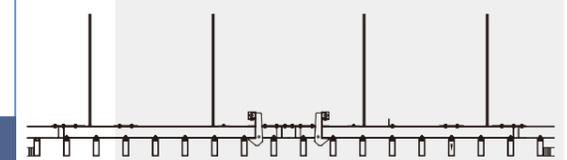
Suspension Drawing:Himas S18 Hingedown Panel Ceiling System



Section Ceiling Detail



Section Ceiling Detail (1)

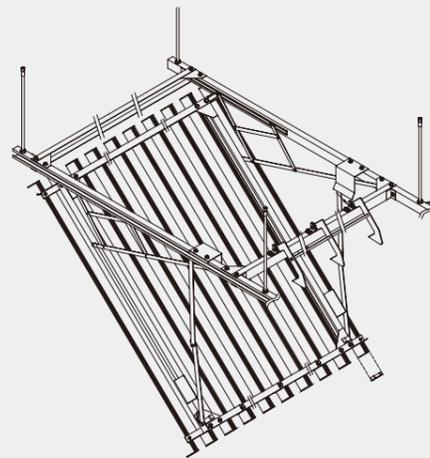


Section Ceiling Detail (2)

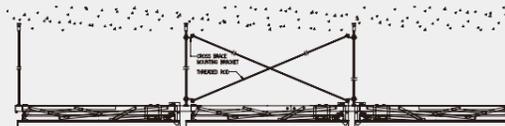
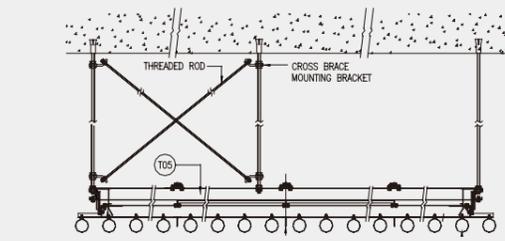
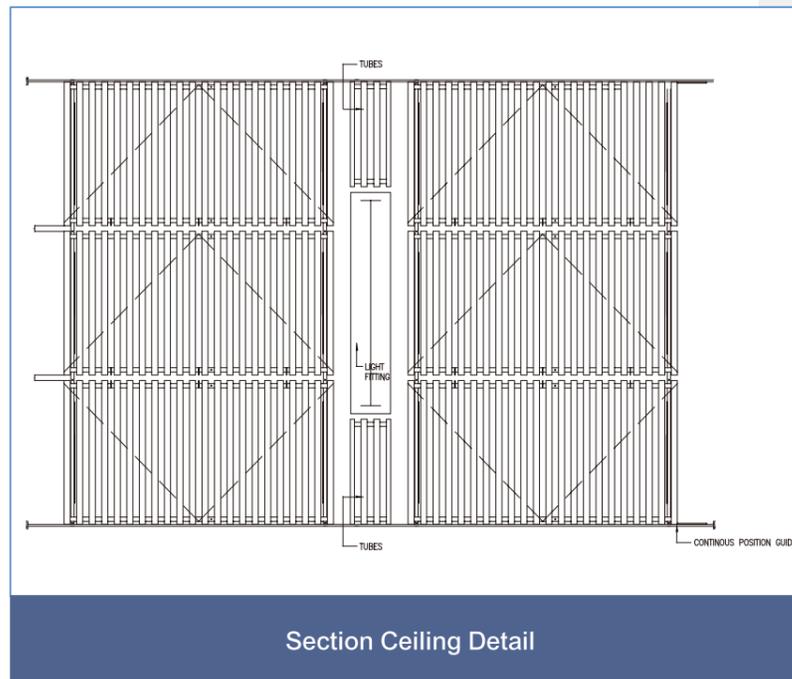


Introduction

Himas S19 Hingedown Panel Ceiling System is composed of individual ceiling units of which every units can be pulled off from the tracks separately with fixed pulling angle. It is suitable for ceilings which need frequent maintenance of facilities. It is also especially useful for mass transport system.

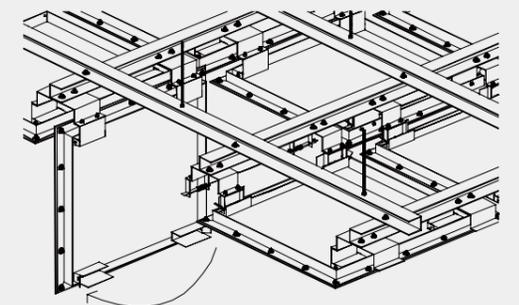


Suspension Drawing:Himas S19 Hingedown Panel Ceiling System

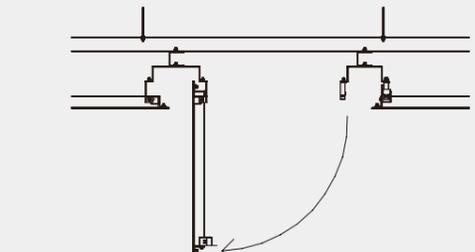
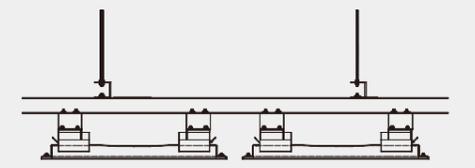
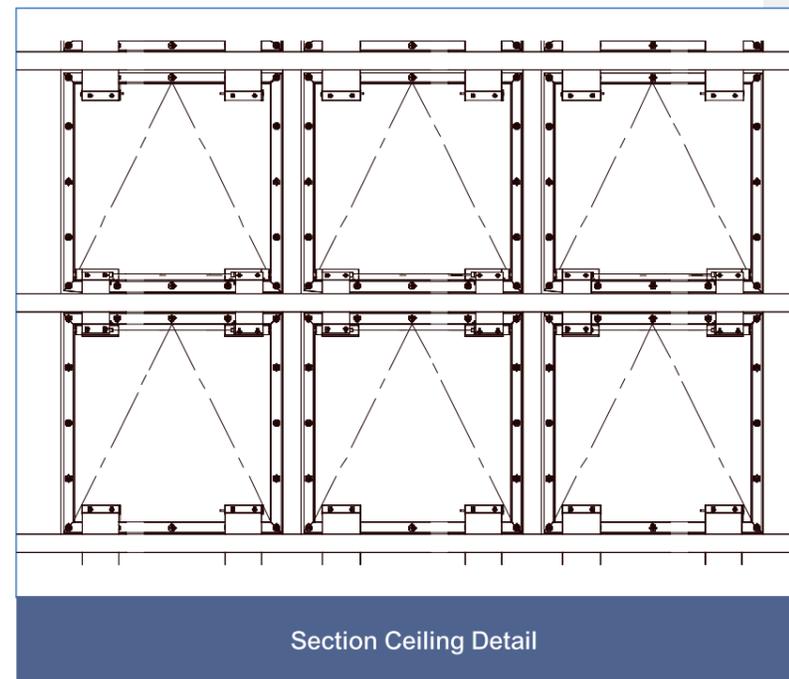


Introduction

Himas S20 Hingedown Panel Ceiling System is composed of individual ceiling units of which every units can be pulled off from the tracks separately with fixed pulling angle. It is suitable for ceilings which need frequent maintenance of facilities. It is also especially useful for mass transport system.



Suspension Drawing:Himas S20 Hingedown Panel Ceiling System



Acoustic Performance



Introduction

Acoustic ceilings are artificial functional acoustic solutions. It can effectively absorb surrounding sound noise while has a decorative value. The characteristics of the metal panel can be adjusted so as to achieve different acoustic ability. It can be achieved by means of very thin absorbers presenting appropriate sound impedance (Fig.A).

Sound Absorption Performance

Acoustic non-woven can also be used for room to room sound attenuation purposes (standard - noise level difference) in combination with a suspended ceiling design. According to DIN EN 20140-9 or (Fig.B), our ceiling products achieved an excellent result. A test was carried out with a suspended ceiling with a (1) Hole diameter of 2.5mm, (2) 16% open area and (3) a ceiling cavity of 50, 200 and 400mm.

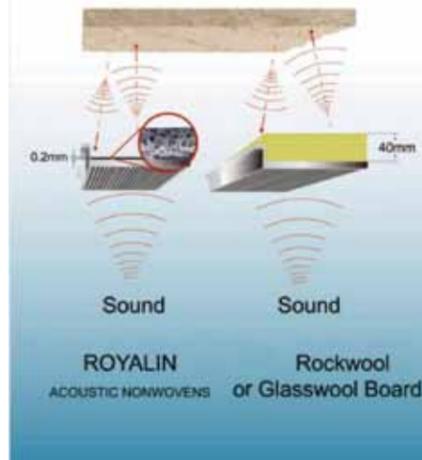


Fig.A : The relationship between the thickness of acoustic fleece and the volume of sound absorption

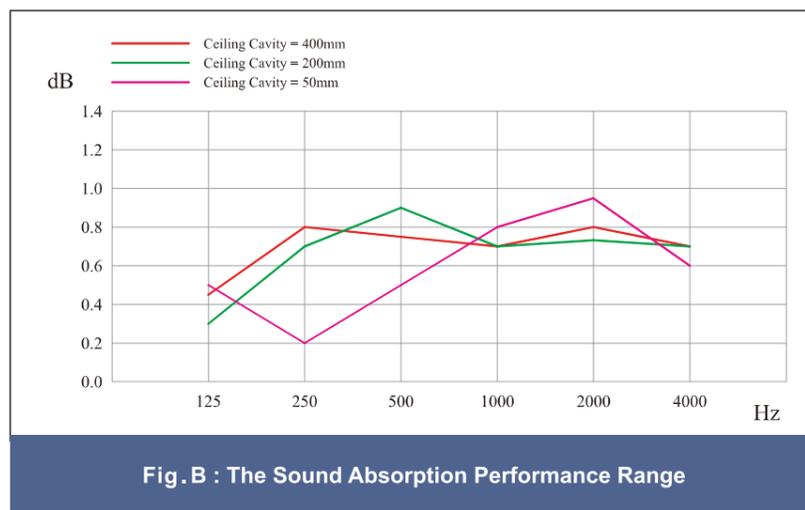


Fig. B : The Sound Absorption Performance Range

Perforation Pattern

HP-01: Hole size: Dia. 0.8mm, Pitch: 5.0mm, Open Area: 2.0%

HP-02: Hole size: Dia. 0.8mm, Pitch: 3.5mm, Open Area: 4.0%

HP-03: Hole size: Dia. 1.5mm, Pitch: 4.0mm, Open Area: 11.0%

HP-04: Hole size: Dia. 2.2mm, Pitch: 5.0mm, Open Area: 15.0%

HP-05: Hole size: Dia. 2.5mm, Pitch: 5.5mm, Open Area: 16.0%

HP-06: Hole size: Dia. 3.5mm, Pitch: 7.0mm, Open Area: 20.0%

HP-07: Hole size: Dia. 3.5mm, Pitch: 9.0mm, Open Area: 12.0%

HP-08: Hole size: Dia. 6.0mm, Pitch: 12.0mm, Open Area: 20.0%

HP-09: Hole size: Dia. 19.0mm, Pitch: 25.5mm, Open Area: 44.0%

HP-10: Hole size: Dia. 30.0mm, Pitch: 47.0mm, Open Area: 32.0%

HP-11: Hole size: Dia. 3.5mm, Pitch: 8.2mm, Open Area: 14.0%

HP-12: Hole size: Dia. 6.0mm, Pitch: 10.63mm, Open Area: 25.0%

HP-13: Hole size: Dia. 1.5mm, Pitch: 4.0mm, Open Area: 22.0%

HP-14: Hole size: Dia. 1.8mm, Pitch: 5.0mm, Open Area: 20.0%

HP-15: Hole size: Dia. 2.5mm, Pitch: 5.5mm, Open Area: 32.0%

HP-16: Hole size: Dia. 6.0mm, Pitch: 12.0mm, Open Area: 39.0%

HP-17: Hole size: Dia. 1.5mm, Pitch: 3.1mm, Open Area: 21.0%

HP-18: Hole size: Dia. 4.5mm, Pitch: 6.17mm, Open Area: 48.0%

HP-19: Hole size: Dia. 3.5mm, Pitch: 7.0mm, Open Area: 23.0%

HP-20: Hole size: Dia. 12.0mm, Pitch: 20.0mm, Open Area: 33.0%

HP-21: Hole size: Dia. 5.0mm, Pitch: 8.0mm, Open Area: 35.0%

HP-22: Hole size: Dia. 5.0mm, Pitch: 7.0mm, Open Area: 46.0%

HP-23: Hole size: Q.S. 4.0x4.0mm, Pitch: 7.0x7.0mm, Open Area: 33.0%

HP-24: Hole size: Q.S. 4.0x4.0mm, Pitch: 6.0x6.0mm, Open Area: 44.0%

HP-25: Hole size: Q.S. 6.0x6.0mm, Pitch: 10.0x10.0mm, Open Area: 36.0%

HP-26: Hole size: Q.S. 45.0x45.0mm, Pitch: 70.0x70.0mm, Open Area: 41.0%

HP-27: Hole size: Q.S. 5.0x5.0mm, Pitch: 15.0x15.0mm, Open Area: 22.0%

HP-28: Hole size: Q.S. 5.6x5.6mm, Pitch: 9.3x9.3mm, Open Area: 36.0%

HP-29: Hole size: Q.S. 7.94x7.94mm, Pitch: 11.43x11.43mm, Open Area: 48.0%

HP-30: Hole size: Clong. 2.0x14.0mm, Pitch: 6.5x18.5mm, Open Area: 23.0%

HP-31: Hole size: Clong. 6.0x25.0mm, Pitch: 11.0x30.0mm, Open Area: 45.0%

HP-32: Hole size: Dia. 2.5mm, Pitch: 10.0mm, Open Area: 5.0%

Perforation Pattern is widely used in metal ceiling design to reduce the surrounding sound noise. Apart from noise abatement value, its decorative value appeals to many customers. Different perforation pattern options are available on request to meet individual needs. The below diagram are shown a different kinds of perforation patterns and details. Any patterns available upon request.



1. One Central, Macau
2. Lam Tin North Municipal Services Building
3. Kerry Centre
4. 33 Cameron Road, Tsim Sha Tsui
5. Harbour Place, Tsim Sha Tsui
6. Science Park Building 20
7. MTRC Kowloon Tong Station
8. Cyberport R5
9. Ma Kam Chan Memorial Building - CUHK
10. Hampton Place, Tai Kok Tsui
11. Grand Lisboa, Macau
12. MTRC Austin Station