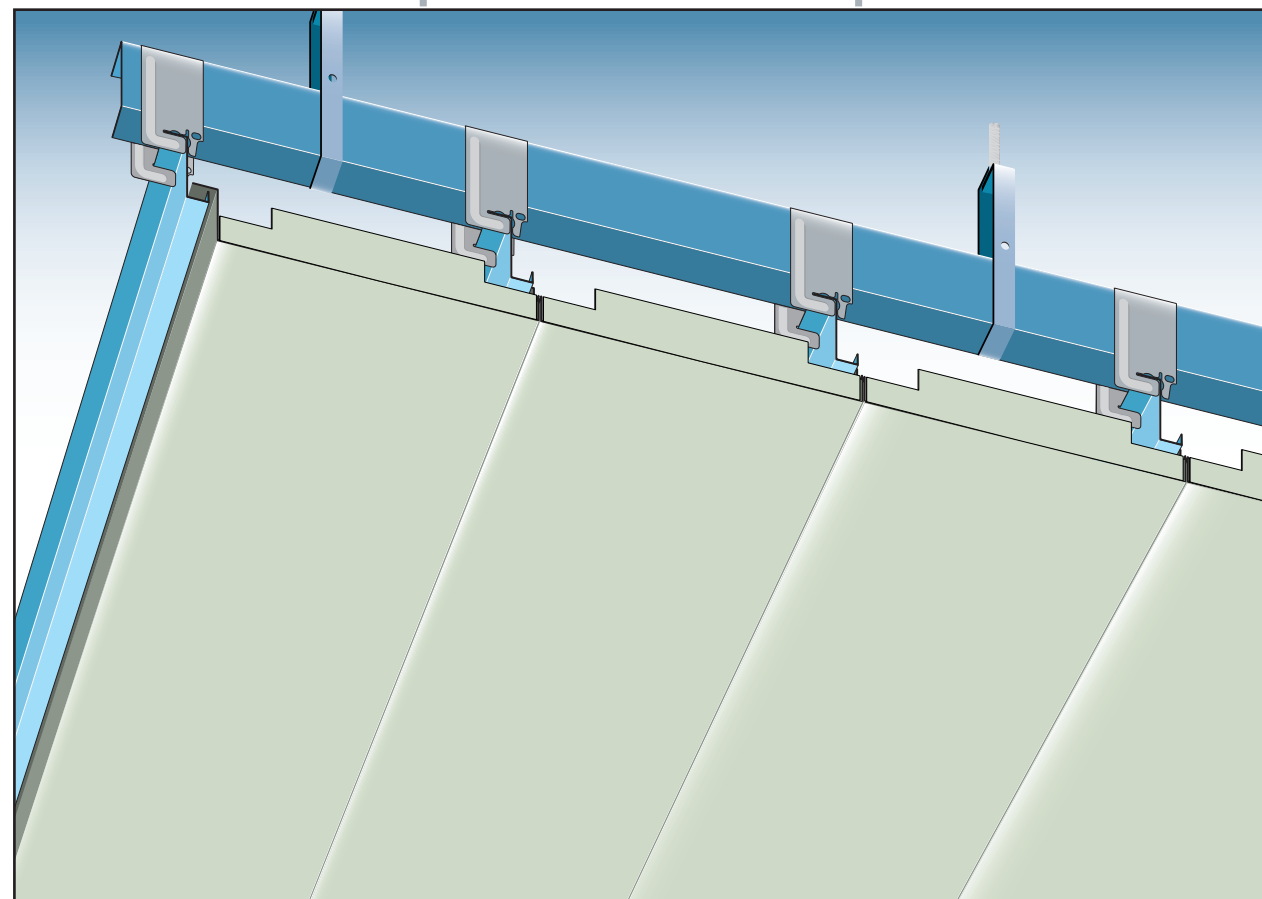




ShanghaiProfil

## Composite Panels

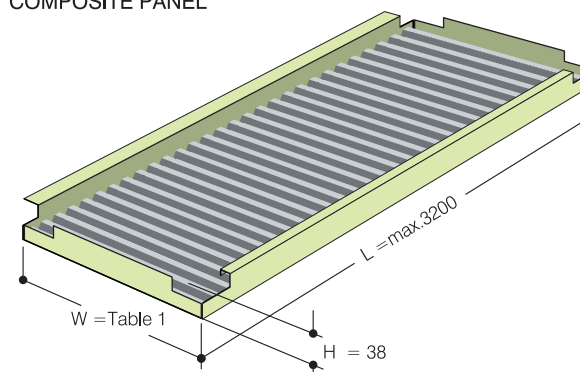
SPECIAL CEILINGS  
(Lay-in/Hang-on Systems)



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### 1 COMPOSITE PANEL



Prepainted aluminium in 1.0 mm thickness, maximum sizes shown in Table 1. Standard finish: stove enamel polyester paint in matt, semi-gloss and full gloss. Standard color: White similar RAL 9010.

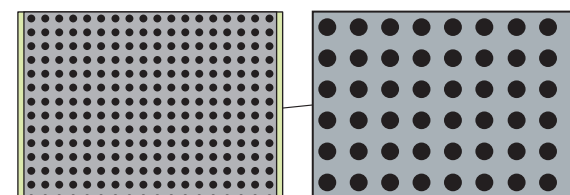
Corrugated aluminium inlay in 0.35 mm thickness, plain or with 2.5 mm standard perforation. Subject to requirements, perforated profiles may have black acoustic fleece bonded to the internal surface between main sheet and corrugated inlay.  
Max. width: 1200 mm  
Max. length: 3200 mm

Table 1 Composite Panel sizes and metal thicknesses.

Legend:

W = panel width mm  
L = panel length mm  
H = panel height mm  
Al = aluminium thickness mm

Ref	W	L	H	Al
Plain	≤ 1200	≤ 3200	38	1.0
Perforated (ø1.5)	≤ 1000	≤ 3200	38	1.0
Perforated (ø2.5)	≤ 750	≤ 3200	38	1.0

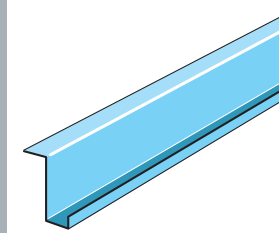


STANDARD PERFORATION  
2.5 mm in line.  
Open area 19.6%

MICROPERFORATION  
1.5 mm zonal on diagonal grid  
Open area 11.7%

Other perforation patterns  
subject to minimum order  
quantity.

### 2



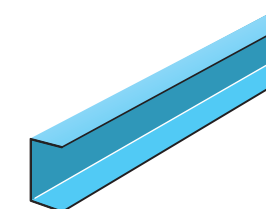
**Z-Carrier** in cold roll formed 1.0 thick galvanized mild steel.  
Overall size: 46 mm high x 34 mm wide.  
Finish: Special finishes subject to order quantity.  
Standard length: 4000 mm.

### 3



**ZU-50 Bracket** in 1.2 mm thick galvanized mild steel.

### 4



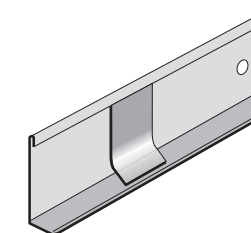
Standard light steel **C-carrier** in 1.2 mm thick galvanized steel. 50 mm high.

### 5



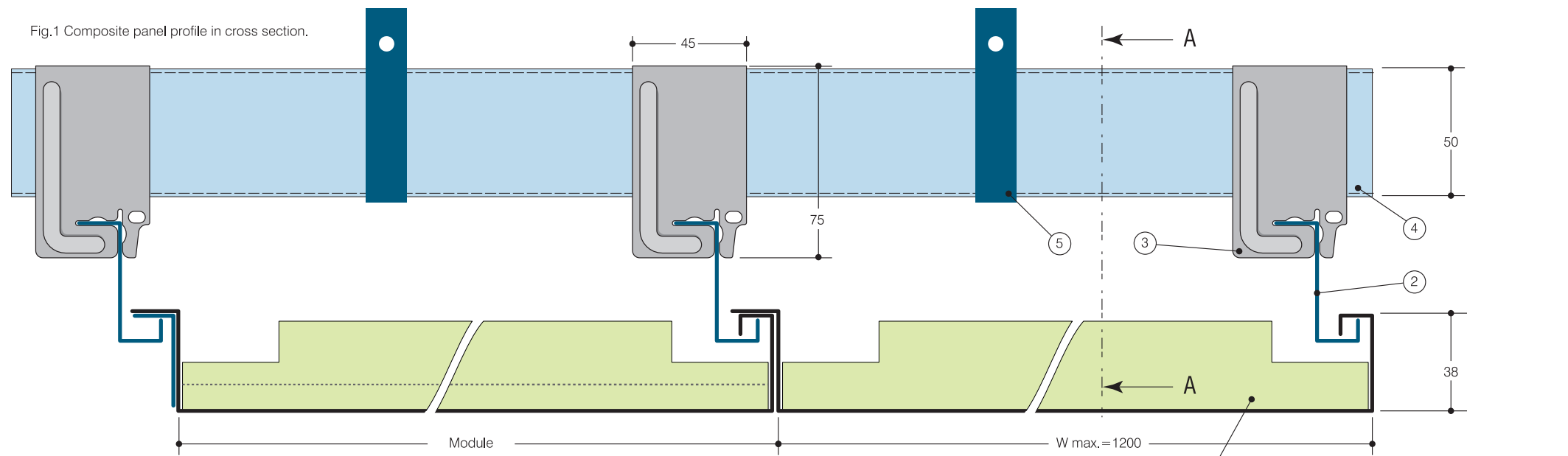
**Suspension hanger** in 2.0 mm thick galvanized steel with 8.0 mm dia. rod.  
Standard lengths: various between 125 mm min. and 1000 mm max. ceiling void depths.

### 6



**Perimeter angle trim** in cold roll formed 0.7 mm thick galvanized mild steel.  
Hold down clip to be used for cut panels.  
Standard finish: white or black semi gloss stove enamel polyester paint.  
Standard length: 4000 mm.  
Overall size: 40 mm deep x 20 mm wide.

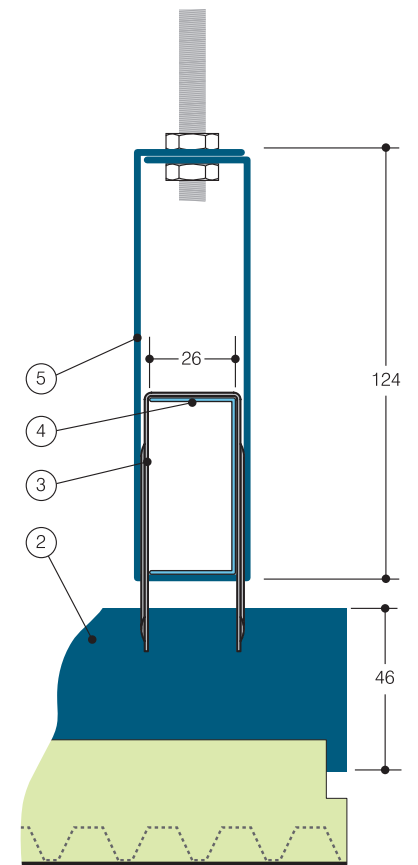
Fig.1 Composite panel profile in cross section.



Suspended from the structural soffit by adjustable hangers (5) (see rear page), standard light steel C-carriers (4) [Fig.3] are connected to the main Z-shaped (2) carriers through brackets (3), forming a double-layered frame.

The long sides of the Composite Panels are hung into the Z-shaped carriers, thus creating an overlapping structure that is stable and easy to assemble.

Fig.2 Composite panel profile in cross section A-A.



Perimeter angles can be used to cloak edges of Composite Panels, or to replace the suspension structure in corridors, where the Composite Panels can be directly laid on perimeter angles installed on both sides of the wall.

The Composite Panel system consists of 1.0 mm thick aluminum panels in maximum sizes of 1200 x 3200 mm with corrugated inlay. This double-layered design ensures the evenness of the ceiling panels in spite of the use of light material. Composite Panels can be applied as highly efficient sound absorbing membranes, reaching an NRC of 0,9 (according ISO354:2003). Composite Panels are therefore perfectly suited for large public spaces and offices where acoustic insulation is needed.

Composite Panels are supplied in plain (non-perforated) metal or in either of two perforated forms shown on the rear page. They are available in standard color stove enamel finish, special finishes being subject to minimum order quantity. Perforated panels with acoustic fleece bonded to their internal surface in between main panel and perforated inlay act as sound absorbing membranes.

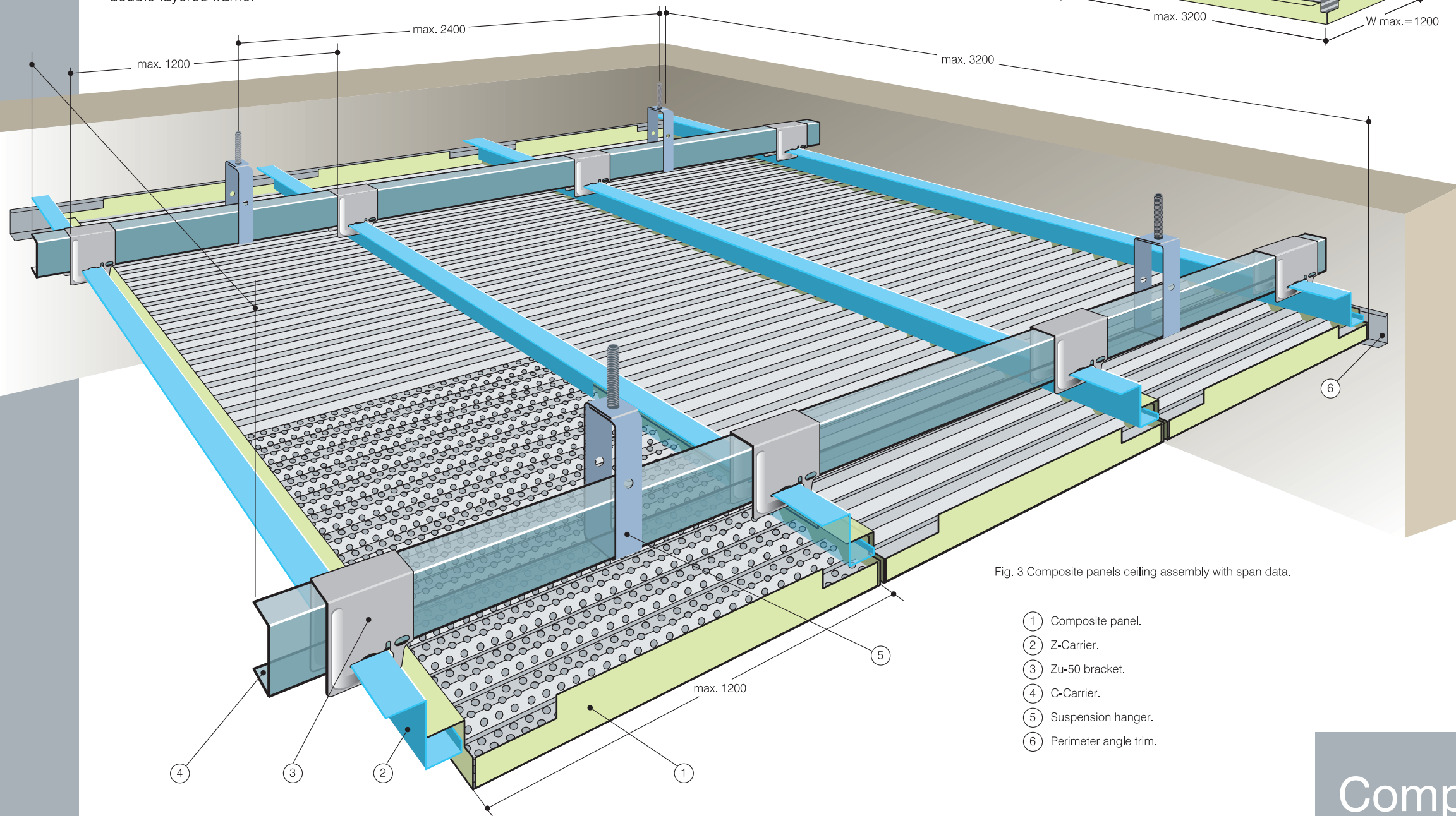


Fig. 3 Composite panels ceiling assembly with span data.

- ① Composite panel.
- ② Z-Carrier.
- ③ Zu-50 bracket.
- ④ C-Carrier.
- ⑤ Suspension hanger.
- ⑥ Perimeter angle trim.

# Composite Panels