



Exposed,
seismic resistant

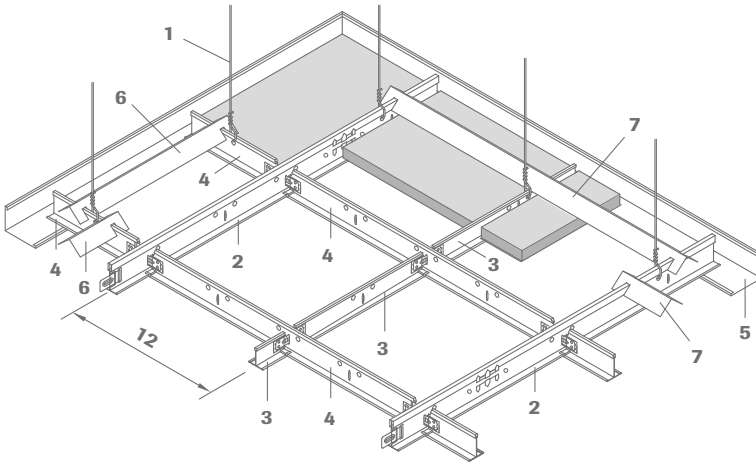
OWAlifetime collection

OWA

System S 3 cliq | Exposed, seismic resistant | ASTM E 580/E 580M-10a



The system fulfills the requirements according to ASTM E 580MN-10a, “Heavy Duty”, according to ASTM C 635 and all requirements according to EN 13964.

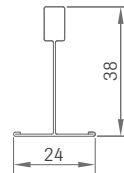


- 1 Stretched hanger wire, tied at least 3 times, thickness > 2.0 mm, by customer
- 2 Main tee cliq-24-MR, slotted
- 3 Cross tee cliq-24-CT, length 600 mm, 625 mm or 2'
- 4 Cross tee cliq-24-CT, length 1200 mm, 1250 mm or 4'
- 5 Wall angle, for example no. 51/1
- 6 Space bar no. 43, short
- 7 Space bar no. 43, long
- 8 Screw or pop by customer
- 9 Strut no. 6570 or 2 CD-Profiles 60/35 – 0.5 mm by customer
- 10 Seismic joint coupling no. sjc01 for cliq-24-MR
Seismic joint coupling no. sjc02 for cliq-24-CT short
- 11 Wall perimeter no. 51/25, 25/25 – 1 mm or similar
- 12 Modul distance

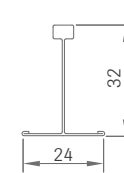
The grid system S 3 cliq fulfills the essential requirements according to ASTM E 580M-10a. The grid system is tested according to ASTM C 635-95 and EN 13964 by a notified body and ISO 17025 certified Lab MPA Braunschweig, Germany). The tests for the pull out force of the cross tees were carried out with 1.26 kN (approx. 126 kg) tension. This system achieved the highest load bearing classification according to ASTM C 635 as “Heavy Duty” with more than 16.0 lb/linear feet (23.8 kg/m) for the main tees. These are the essential requirements according to the seismic design categories D, E and F defined in ASTM E 580M-10a.

Section dimensions:

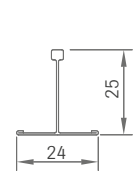
Main tee
cliq-24-MR



Cross tee
cliq-24-CT long



Cross tee
cliq-24-CT short



Technical data | mineral tiles

Dimensions

600 x 600 mm, 625 x 625 mm, 2' x 2', 1200 x 600 mm, 1250 x 625 mm, 4' x 2'

Edge details

3

Thickness

Approx. 15 mm and 20 mm (OWAcoustic premium)

Reaction to fire

A2-s1,d0 in accordance with EN 13501-1
Class A in accordance with ASTM E 1264 | class 1 in accordance with ASTM E 84

Metal suspensions

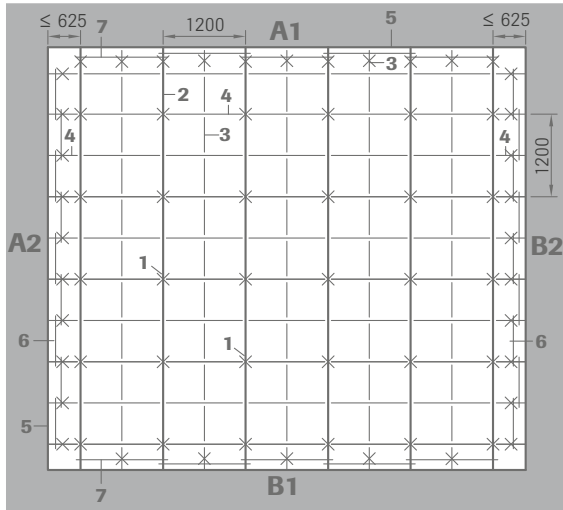
All profiles are zinc galvanized and exposed faces are white painted. For further details please consult our [OWAlifetime collection price list 9001 e.](#)

Suspension depth

75 - 100 mm (from underside of soffit). For ease of panel removal 120 mm is recommended.

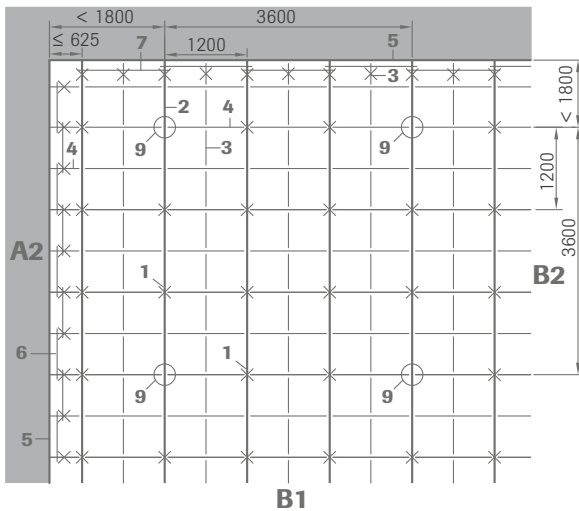
Installation examples in accordance with ASTM E 580/E 580M-10a (also for module 625 mm and 2’):

Areas $\leq 93 \text{ m}^2$



The hanger fixings must be installed according to ASTM E 580M-10a, paragraph 5.2.7.2 and 5.2.7.3.

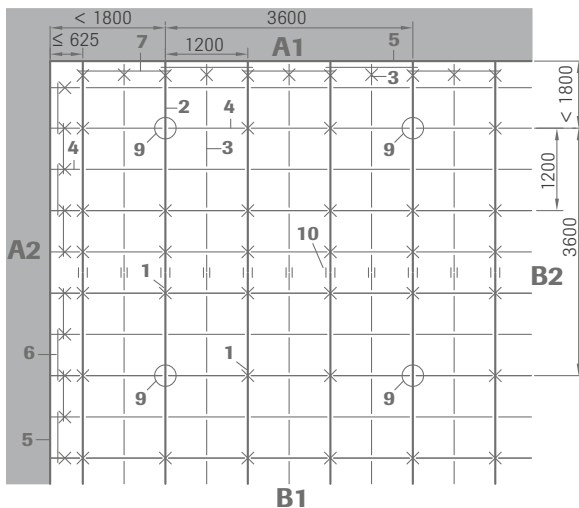
Areas $> 93 \text{ m}^2$ till $\leq 232 \text{ m}^2$



Additional tasks for areas $> 93 \text{ m}^2$

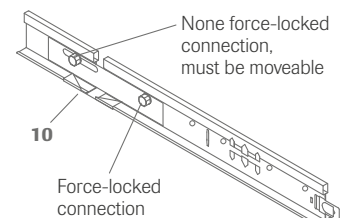
- Lateral force bracings are required for all ceiling **areas greater than 1000 ft²** (approx. 93 m²).
max. distance:
 - from the wall 1.8 m
 - centres of horizontal restraint points 3.6 m
- Four 12-gauge ($> 2.0 \text{ mm}$) wires in all 4 directions secured to the main runner. Angle should not exceed 45° from the plane of the ceiling. A strut must be installed in this area (for example section no. 6570, see page 8).

Areas $> 232 \text{ m}^2$



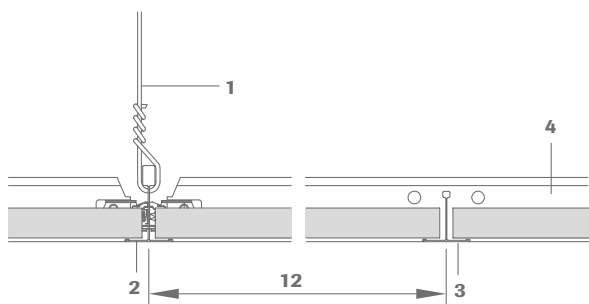
Additional tasks for areas $> 232 \text{ m}^2$

- expansion joints are necessary
- separate seismic joints for each type of tees (MT, CT)

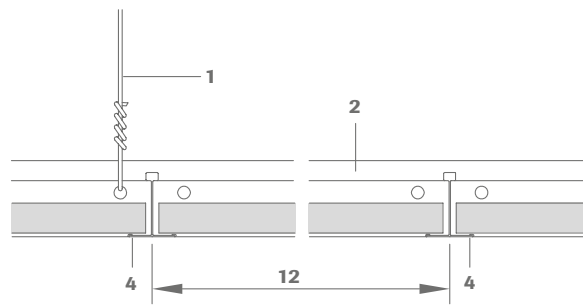


System S 3 cliq | Exposed, seismic resistant | ASTM E 580/E 580M-10a

Cross-section:



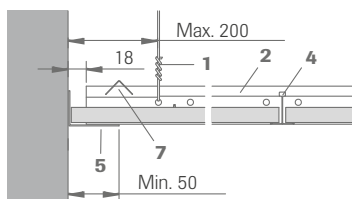
Section:



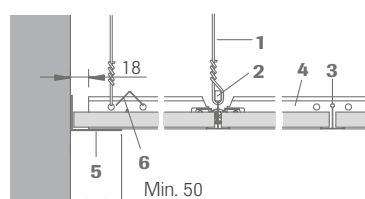
Wall perimeter:

For other examples of wall perimeters and installation see [OWA-Installation Guide 9801 e](#) and ASTM E 580/E 580M-10a.

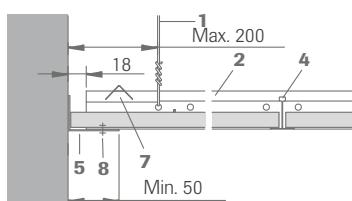
Wall perimeter A1



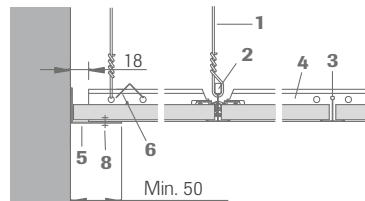
Wall perimeter A2



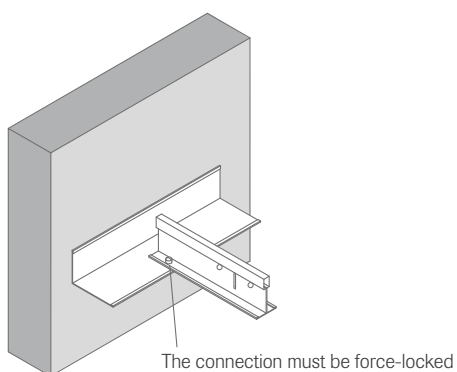
Wall perimeter B1



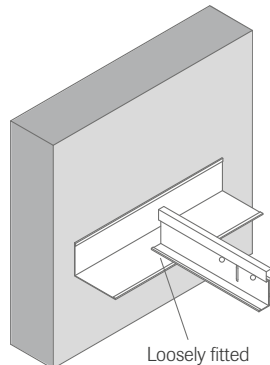
Wall perimeter B2



Installation after connecting B1/B2

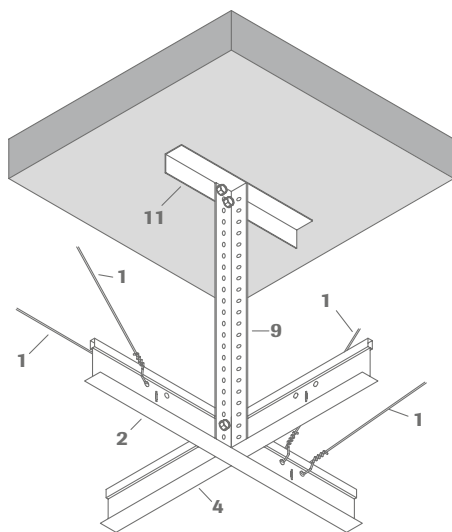


Installation after connecting A1/A2

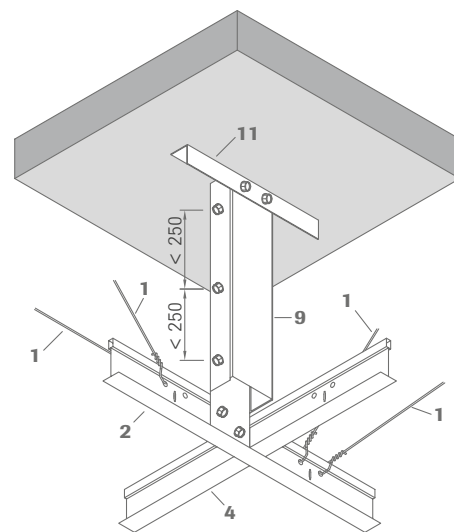


Lateral force bracing for horizontal restraint according to ASTM E 580/E 580M-10a:

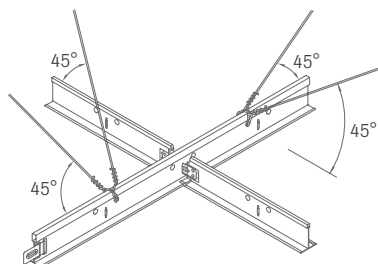
Type 1:



Type 2:

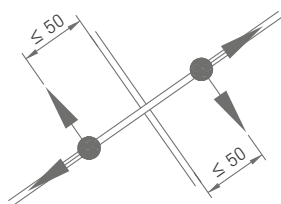


Lateral force bracing with stretched hanger wire according to ASTM E 580/E 580M-10a for Type 1 and 2:



The force-locked connection of the CD-Profiles must be < 250 mm. To connect the profiles with the grid-system the lower end has to be notched.

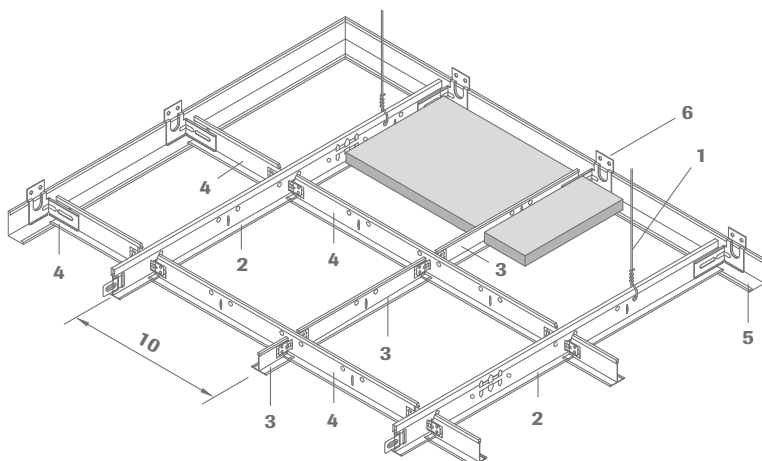
Top view



System S 3 cliq | Exposed, seismic resistant | CISCA recommendations



The system can be installed as per CISCA recommendations

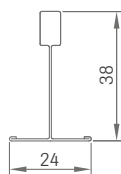


- 1 Stretched hanger wire, tied at least 3 times, thickness > 2.0 mm, by customer
- 2 Main tee cliq-24-MR, slotted
- 3 Cross tee cliq-24-CT, length 600 mm, 625 mm or 2'
- 4 Cross tee cliq-24-CT, length 1200 mm, 1250 mm or 4'
- 5 Wall angle, for example no. 51/25
- 6 Seismic perimeter clip no. spc02
- 7 Strut no. 6570 or 2 CD-Profiles 60/35 – 0.5 mm by customer
- 8 Seismic joint coupling no. sjc01 for cliq-24-MR and cliq-24-CT long
Seismic joint coupling no. sjc02 for cliq-24-CT short
- 9 Wall perimeter no. 51/25, 25/25 – 1 mm or similar
- 10 Modul distance

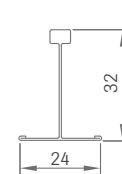
The grid system S 3 cliq fulfills the essential requirements according to ASTM E 580M-10a. The grid system is tested according to ASTM C 635-95 and EN 13964 by a notified body and ISO 17025 certified Lab (MPA Braunschweig, Germany). The tests for the pull out force of the cross tees were carried out with 1.26 kN (approx. 126 kg) tension. This system achieved the highest load bearing classification according to ASTM C 635 as "Heavy Duty" with more than 16.0 lb/linear feet (23.8 kg/m) for the main tees. These are the essential requirements according to the seismic design categories D, E and F defined in ASTM E 580M-10a.

Section dimensions:

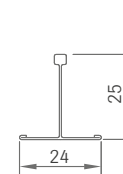
Main tee
cliq-24-MR



Cross tee
cliq-24-CT long



Cross tee
cliq-24-CT short



Technical data | mineral tiles

Dimensions

600 x 600 mm, 625 x 625 mm, 2' x 2', 1200 x 600 mm, 1250 x 625 mm, 4' x 2'

Edge details

3

Thickness

Approx. 15 mm and 20 mm (OWAcoustic premium)

Reaction to fire

A2-s1,d0 in accordance with EN 13501-1
Class A in accordance with ASTM E 1264

Metal suspensions

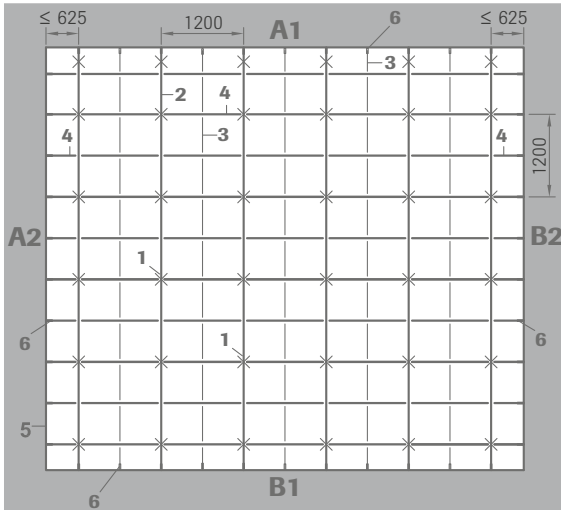
All profiles are zinc galvanized and exposed faces are white painted. For further details please consult our [OWAlifetime collection price list 9001 e.](#)

Suspension depth

75 - 100 mm (from underside of soffit). For ease of panel removal 120 mm is recommended.

Installation examples in accordance with CISCA recommendations:

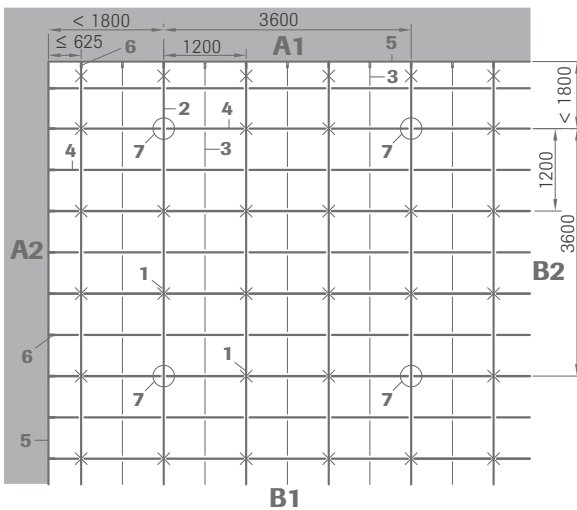
Areas $\leq 93 \text{ m}^2$



The hanger fixings must be installed as per CISCA recommendations.

All main tees and cross tees must be fixed with wall clip no. spc02.

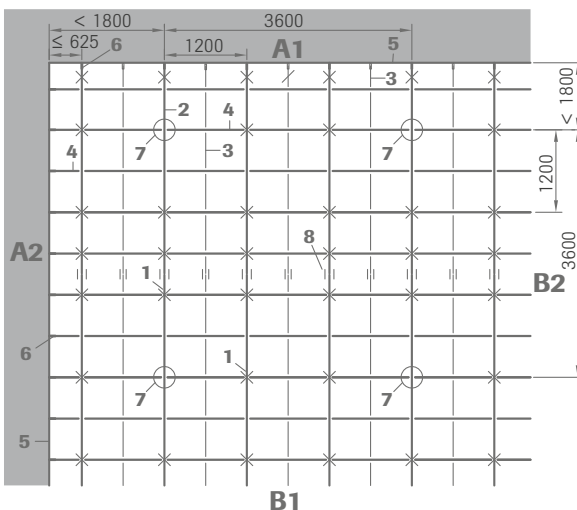
Areas $> 93 \text{ m}^2$ till $\leq 232 \text{ m}^2$



Additional tasks for areas $> 93 \text{ m}^2$

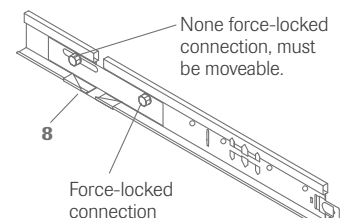
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max. distance:
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Areas $> 232 \text{ m}^2$



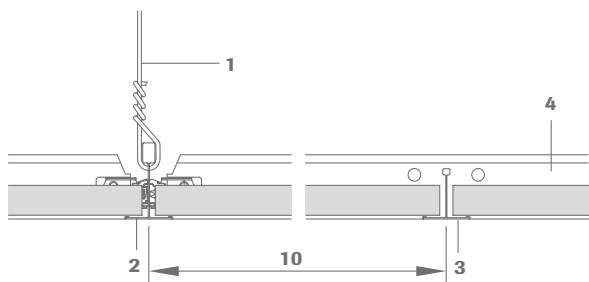
Additional tasks for areas $> 232 \text{ m}^2$

- expansion joints are necessary.
- separate seismic joints for each type of tees (MT, CT)

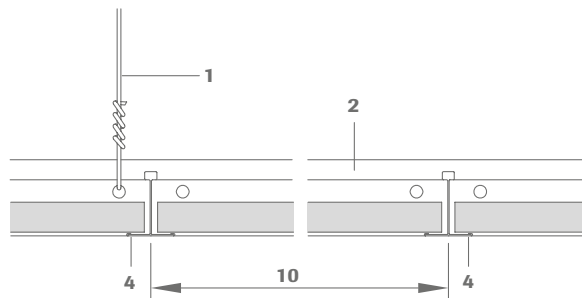


System S 3 cliq | Exposed, seismic resistant | CISCA

Cross-section:



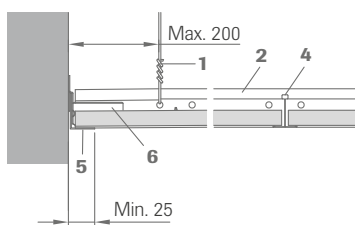
Section:



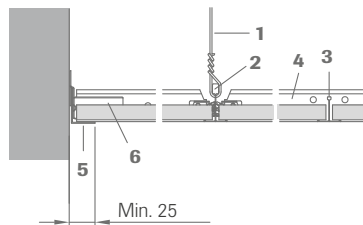
Wall perimeter:

For other examples of wall perimeters and installation see [OWA-Installation Guide 9801 e](#) and CISCA recommendation

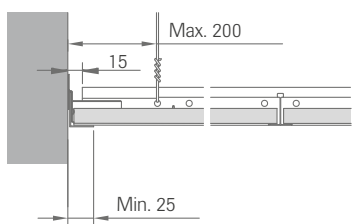
Wall perimeter A1



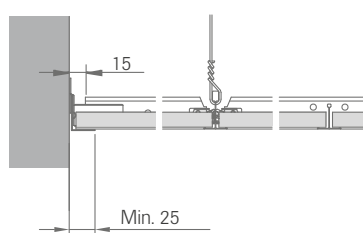
Wall perimeter A2



Wall perimeter B1 movable screw connection

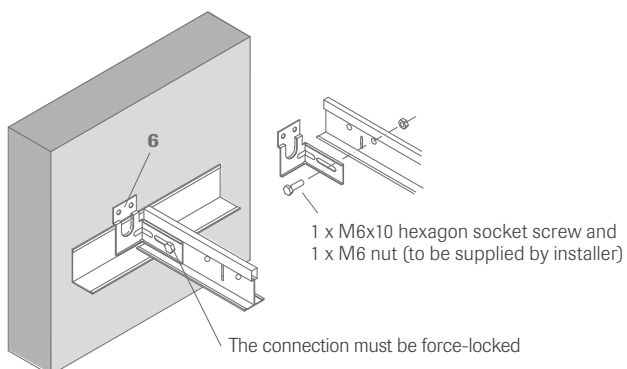


Wall perimeter B2 movable screw connection

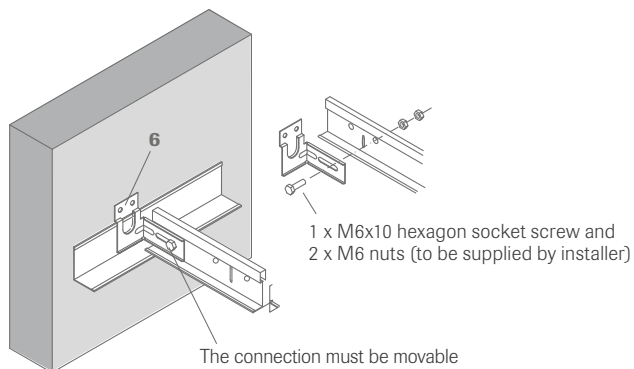


Installation of the seismic perimeter clip no. spc02:

Connection A1/2

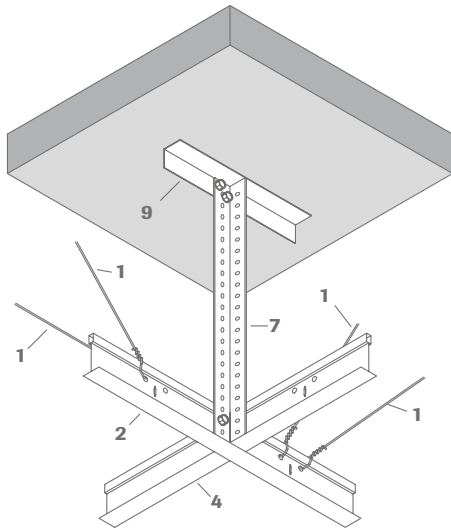


Connection B1/2

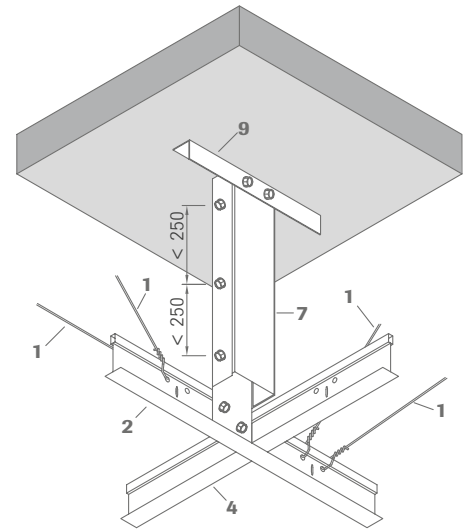


Lateral force bracing for horizontal restraint according to ASTM E 580/E 580M-10a:

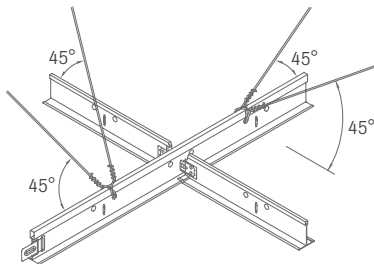
Type 1:



Type 2:



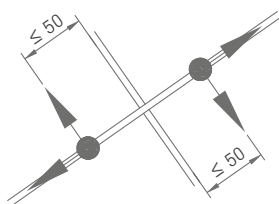
Lateral force bracing with stretched hanger wire according to ASTM E 580/E 580M-10a for Type 1 and 2:



The force-locked connection of the CD-Profiles must be < 250 mm. To connect the profiles with the grid-system the lower end has to be notched.

- 1 Stretched hanger wire, tied at least 3 times, thickness > 2.0 mm, by customer
- 2 Main tee cliq-24-MR, slotted
- 3 Cross tee cliq-24-CT, length 600 mm, 625 mm or 2'
- 4 Cross tee cliq-24-CT, length 1200 mm, 1250 mm or 4'
- 5 Wall angle, for example no. 51/25
- 6 Seismic perimeter clip no. spc02
- 7 Strut no. 6570 or 2 CD-Profiles 60/35 – 0.5 mm by customer
- 8 Seismic joint coupling no. sjc01 for cliq-24-MR and cliq-24-CT long
Seismic joint coupling no. sjc02 for cliq-24-CT short
- 9 Wall perimeter no. 51/25, 25/25 – 1 mm or similar
- 10 Modul distance

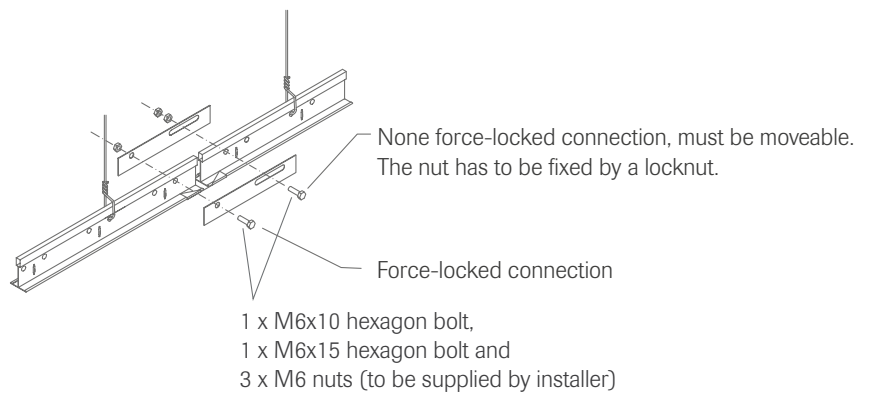
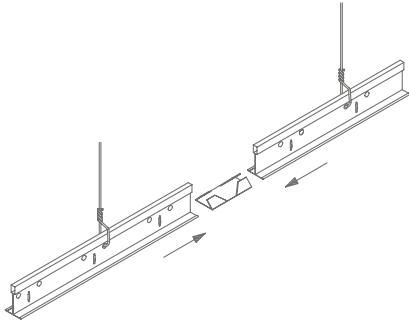
Top view



System S 3 cliq | Exposed, seismic resistant

System-related accessories:

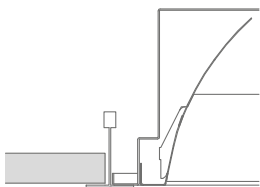
- 8 Seismic joint coupling no. sjc01 and sjc02 (consisting of 2 retaining plates and 1 capping clip). This butt joint has to be suspended on both sides.



- 6 Seismic perimeter clip no. spc02, for locking of the main runner and cross tee in the wall area

Light fixtures:

OWA can supply compatible light fixtures for this system.



For details of performance, installation and fire resistance please see [OWA-brochure 9630 e](#) and [OWA-Installation Guide 9801 e](#)

Installation:

All integrated services should be secured separately. Installation should be carried out in accordance with the information contained in [OWA-Installation Guide 9801 e](#) and ASTM E 580M-10a.

The test report of MPA Braunschweig shows the tests of the loadbearing capacity and the seismic requirements according to ASTM E 580M-10a



Institute for Building Materials,
Concrete Construction
and Fire Protection

Braunschweig Civil
Engineering Materials
Testing Institute

Testreport

-Translation-

Document No.: (1101/066/17) – Hir of 2017-08-29

Customer: Odenwald Faserplattenwerk GmbH
Dr.-Freundt-Straße 3
63916 Amorbach

Factory: Odenwald Faserplattenwerk GmbH
Gewerbepark Hüttenwerk
Unterer Hammer 3-5
64720 Michelstadt
Lini 2

Order Date: 2017-08-28

Order Ref.: Mr Overbeck

Order received: 2017-08-28

Subject: Suspended Ceilings – static tests on connections

Test basis: ASTM E 580/E 580M-09

Samples received: 2017-08-09

Sampling: By client

Sample identification: **OWAconstruct Nr. cliq-24-MR;**
OWAconstruct Nr. cliq-24-CT

Test date: 2017-08-25

This Testreport covers 4 pages, incl. cover sheet, and 3 annexes.



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für das Bauwesen
Beethovenstraße 52
D-38106 Braunschweig

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Fax +49 (0)531-391-5900
info@mpa.tu-bs.de
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Norddeutsche LB Hannover
IBAN: DE58 2505 0000 0106 0200 50
BIC: NOLADE2H
VAT ID No.: DE183500654
Tax Reg. No.: 14/201/22859

Notified body (0761-CPR) -
Approved as a civil engineering testing,
inspection and certifying body as well as
notified as a civil engineering testing and
certifying body.

Material requirements per m² (approximations):
dimensions in mm

No.	Description	ASTM E 580/E 580M-10a	CISCA recommendations
		600 x 600*	600 x 600*
cliq-24-MR	Main tee	0,83 m	0,83 m
cliq-24-CT	Cross tee short	0,83 m	0,83 m
cliq-24-CT	Cross tee long	1,66 m	1,66 m
	Stretched hanger wire (vertical suspension)	0,7 pce	0,7 pce
6570	Strut or CD profile	0,08 pce	0,08 pce
51/1	Wall angle	Depending on room size and shape	–
51/25	Wall angle	–	Depending on room size and shape
43	Space bar	Depending on room size and shape	–
spc02	Perimeter clip	–	Depending on room size and shape
sjc01	Seismic joint coupling	Depending on room size and shape	Depending on room size and shape
sjc02	Seismic joint coupling	Depending on room size and shape	Depending on room size and shape

* Other dimensions see brochure S 3 cliq

Weight per m ² :	600 x 600
Suspension system approx.	1.25 kg/m ²
Tiles 15 mm, approx.	4.5 kg/m ²

System description: System S 3 cliq – seismic resistant

Quality requirements for mineral tiles:

OWAacoustic mineral tiles firmly bound with a primer coat on both sides. The tile is free from asbestos. No formaldehyde is added in the manufacturing process of the mineral tiles. The mineral wool used for the manufacture of the tile is bio-soluble. The criteria for non-classification as a carcinogenic substance in accordance with the Chemicals Prohibition Ordinance (Section 1 Appendix, Paragraph 23 biopersistent fibres) are met and guaranteed by the 'RAL seal of approval for mineral wool'. Verification of fitness for use according to EU CPR: CE marking and Declaration of Performance (DoP).

Mineral tiles accordance with EN 13964 and DIN 18177: Air permeability class PM 1 | Formaldehyde class FH 1 | Emission of VOC TVOC 1

Installation should be carried out in accordance with the information contained in system leaflet S 3 cliq seismic resistant and [OWA-Installation Guide 9801 e](#). All components are CE labelled.

Component list ASTM E 580/E 580M-10a:

OWAconstruct cliq-24-MR main tee
OWAconstruct cliq-24-CT cross tee short
OWAconstruct cliq-24-CT cross tee long
OWAconstruct wall angle no. 51/1
OWAconstruct space bar no. 43
OWAconstruct strut no. 6570 or CD profile
OWAconstruct seismic joint coupling no. sjc01 or no. sjc02

Component list CISCA-recommendations:

OWAconstruct cliq-24-MR main tee
OWAconstruct cliq-24-CT cross tee short
OWAconstruct cliq-24-CT cross tee long
OWAconstruct wall angle no. 51/25
OWAconstruct strut no. 6570 or CD profile
OWAconstruct wall clip no. spc02
OWAconstruct seismic joint coupling no. sjc01 or no. sjc02



Certified Management Systems

Product warranties

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