

METAL LEAFLET CLIP-IN

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F-CLIP ACCESS SYSTEM

Corridor ceilings

F-CLIP ACCESS SYSTEM

CORRIDOR CEILINGS

SPECIFICATION

System	Armstrong ceiling system F-Clip Access, Clip-In solution with concealed grid, suspension height min. 90mm Up to 90 mm shadow gap between wall and panel
Panel material	galvanised steel sheet panel width up to 400 mm 0.6 mm panel width from 401 mm 0.7 mm (aluminium or further materials on request)
Coating	RAL 9010 pure white post-coated powder painted visible surface, other RAL or NCS colours on request
Execution*	rectangular panel square edged long sides CA / DA (40 mm) short sides E6 / F6 (38 mm)
Gap solution	0 mm gap on long side, without gasket
Acoustic inlay	Black non-woven acoustic fleece as standard. Other options available on request.
Configurable dimensions	panel length (A) 600 - 2500 mm panel width (B) 275 - 600 mm
Grid system	half DP12 A-Bar fixed by wall bracket to the wall
Service integration	standard round or rectangular cut-outs plus customised options on request

* For further information about the edge detail execution of metal tiles, please see the Metal Edge Detail Execution datasheet



BENEFITS

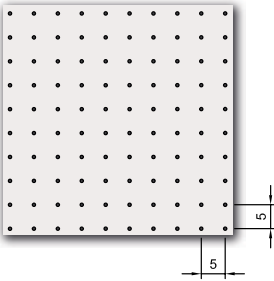
- Free-span solution
- Rectangular panel, adapted to corridor or circulation area width
- Various perimeter trim solutions for a clean aesthetic finish
- Meets visual and individual project requirements

APPLICATION AREA

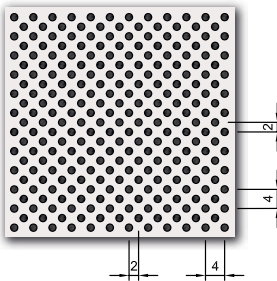
- Easy, quick access to ceiling void due to the swing-down Access function
- Downwardly demountable with the use of an extraction tool for access to the ceiling void
- Corridors where the panels simply span between walls.

PROJECT: Laboratorios EPAL (SP) ARCHITECT: Gonalo Byrne, Arquitectos Lda

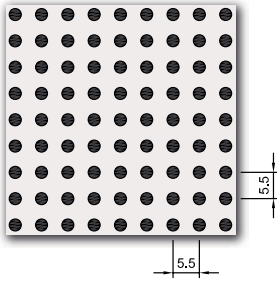
STANDARD PERFORATION PATTERNS



Extra Microperforation Rg 0701
Hole diameter: 0.7 mm
Open area: 1.5 %



Microperforation Rd 1522
Hole diameter: 1.5 mm
Open area: 22%



Standard Perforation Rg 2516
Hole diameter: 2.5 mm
Open area: 16%

Other perforation patterns available on request.

ACOUSTIC PERFORMANCE

Metal ceiling systems have been tested for their acoustic performance in terms of sound absorption, sound attenuation and sound reduction. These performance values will depend upon the perforation and the acoustic infill. Please contact us for more information on the available factory fitted acoustic options.

THERMAL CONDUCTIVITY

(λ) W/mK
50.0 : Steel
0.04 : Acoustic fleece

HUMIDITY EXPOSURE

Up to 95% RH (for short term exposure).

SERVICES INTEGRATION

Metal panels can be supplied with factory produced cut outs and apertures for the integration of building services equipment.

CLEANING

Dust should be removed from the painted surface by wiping with a clean soft cloth. More stubborn marks should be removed with a mild household detergent in warm water. Excessive use of water should be avoided. The use of abrasive cleaners of the painted surface is not recommended.

COLOUR

Standard colours

RAL 9010	20% gloss
Global White	12% gloss
RAL 9006	30% gloss
RAL 9007	30% gloss



Special colours

Other RAL and NCS colours available on request

QUALITY STANDARD

Armstrong is a certified **EN ISO 9001:2008** Quality Assumed Manufacturer. All Armstrong ceiling and grid systems are manufactured to the relevant tolerances and quality standards appropriate to material. Where differences exist between this and any expressed or implied architectural specifications or requirements then Armstrong's manufacturing standards will prevail unless stated otherwise.

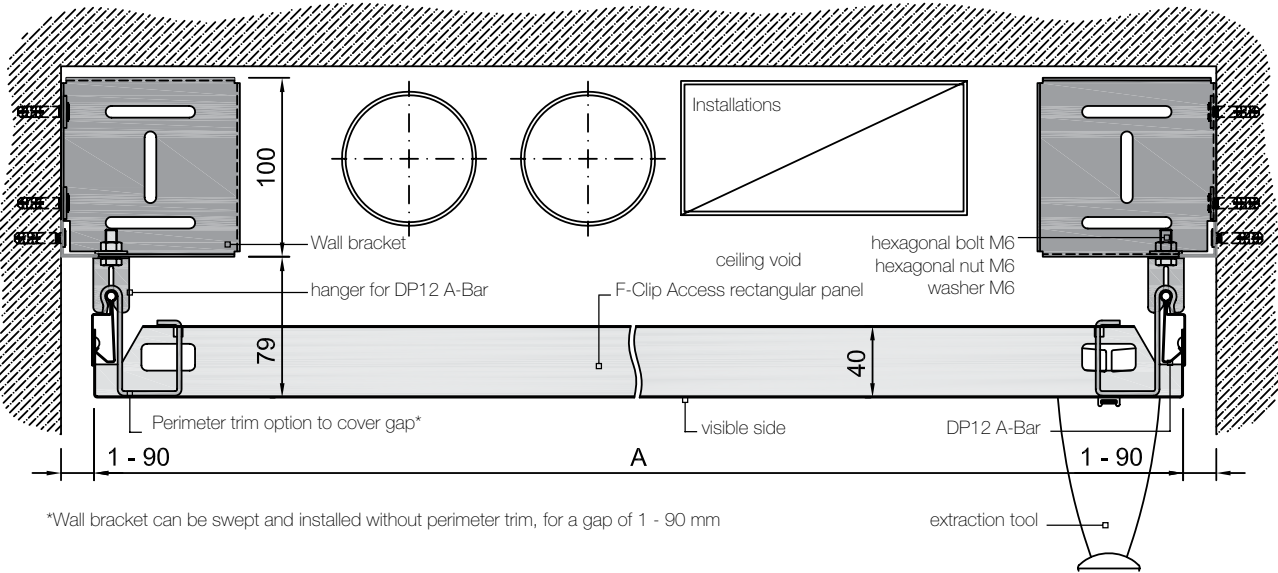
ENVIRONMENTAL

Our metal panels have an average of up to 30% recycling content. Our European manufacturing plants are certified to: **ISO 14001:2004 + Cor. 1:2009**
Armstrong is a member of TAIM (Technical Association of Industrial Metal Ceilings).

Sustainability			Acoustics					Safe & Healthy				
Recycled content (%)	Light reflectance (%)	α _w up to	Sound absorption class	NRC up to	Dncw / Dnfw (dB) up to	Rw (dB) up to	Fire reaction	Humidity Resistance (%) up to	Cleanability	Bioguard paint option	Scratch resistance	
Extra Microperforation Rg 0701 (2)	up to 30	80	0.55(L)	D	0.65	21	10	A2-s2, d0	95	wipeable moist cloth (3)	✓	✓
Microperforation Rd 1522 (2)	up to 30	65	0.70	C	0.70	16	6	A2-s2, d0	95	wipeable moist cloth (3)		✓
Standard Perforation Rg 2516 (2)	up to 30	70	0.75(L)	C	0.80	18	8	A2-s2, d0	95	wipeable moist cloth (3)		✓
Plain / Unperforated (1)	up to 30	85	0.10(L)	Not Classified	0.10	44	19	A1	95	scrubbable	✓	✓
Premium OP19	up to 30	depends on perforation	1.00	A	0.90	31	15	A2-s2, d0	95	wipeable moist cloth		✓

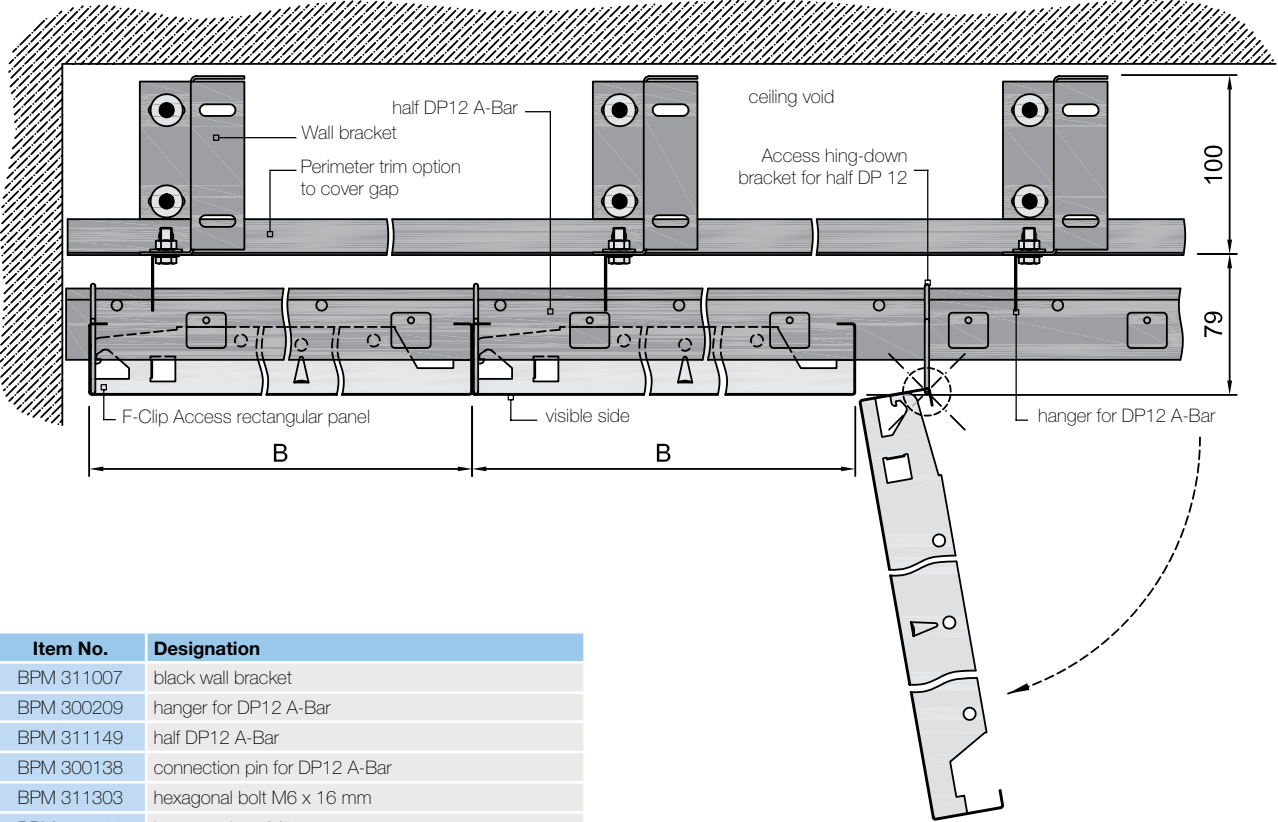
(1) RAL 9010 colour, without acoustic inlay. (2) RAL 9010 colour, with black acoustic fleece glued on rear. (3) Wipeable moist cloth for perforated tiles with fleece. Scrubbable for plain tiles or perforated tiles without fleece.

CROSS-SECTION



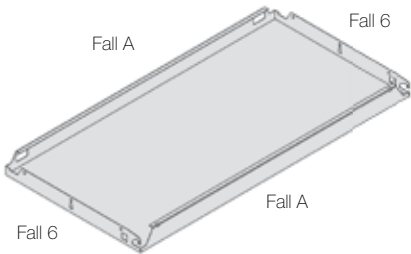
*Wall bracket can be swept and installed without perimeter trim, for a gap of 1 - 90 mm

LONGITUDINAL-SECTION

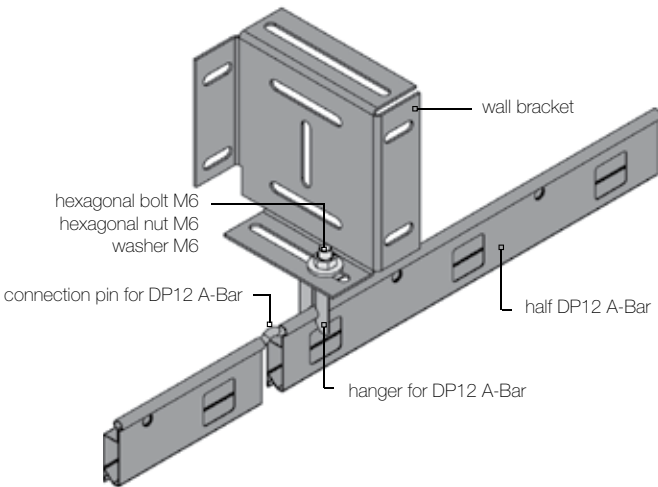


Item No.	Designation
BPM 311007	black wall bracket
BPM 300209	hanger for DP12 A-Bar
BPM 311149	half DP12 A-Bar
BPM 300138	connection pin for DP12 A-Bar
BPM 311303	hexagonal bolt M6 x 16 mm
BPM 311103	hexagonal nut M6
BPM 311305	washer M6 18 x 1.6 mm
BPM300189	access hinge-down bracket for half DP12 A-Bar
BPM 300106	security clip
BPM 311028	extraction tool

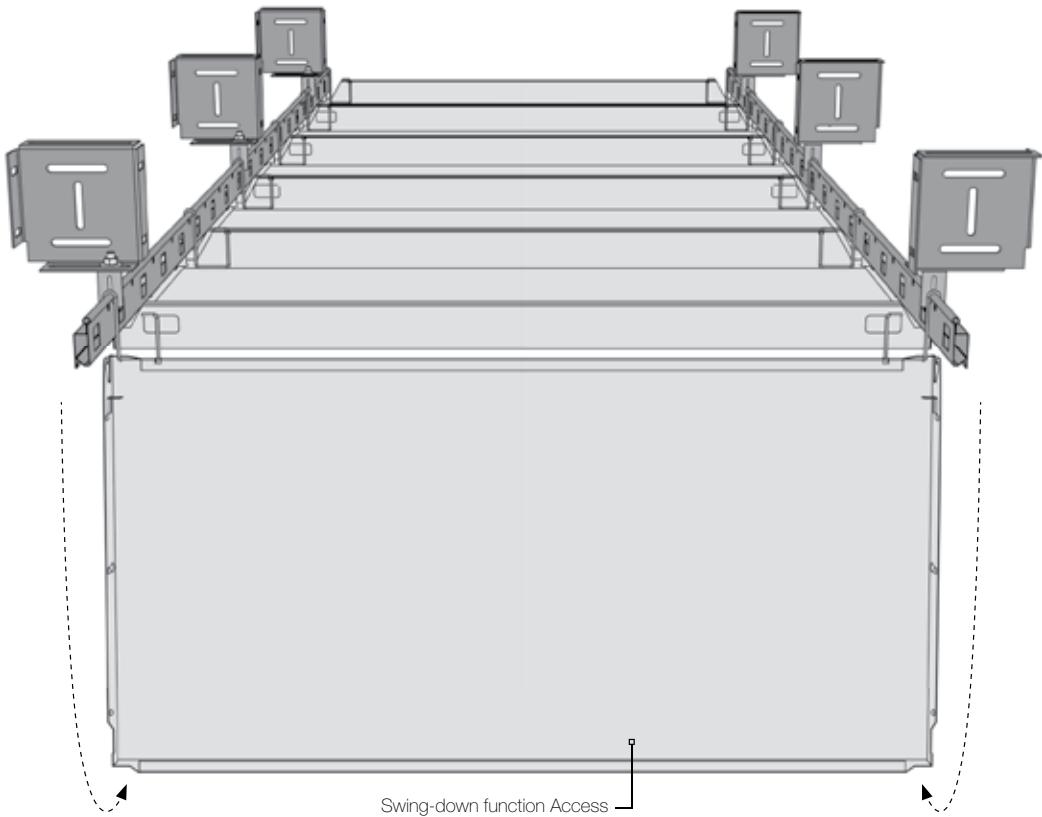
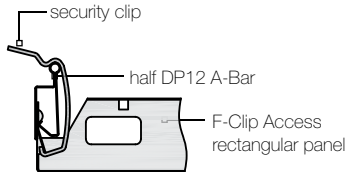
Detail A F-Clip Access rectangular panel



Detail B grid system



Detail C security clip



For further information about the edge detail execution of metal tiles, please see the Metal Edge Detail Execution datasheet



Metal
product

CI/SfB | (35) | Xy |
11/2015

Q-CLIP SYSTEM

Square tiles

Inspiring Great Spaces™

Armstrong®



BENEFITS

- Concealed grid system for a monolithic ceiling surface
- Downwardly demountable with the use of an extraction tool for access to the ceiling void.

- Cost effective
- Solution with optional swing-down "Window" function

APPLICATION AREA

- Used in a variety of ceiling areas: from small service rooms to large commercial office buildings and major transportation terminals.

PROJECT: GGZ Oost Brabant (NL) ::::: ARCHITECT: MAS Architectuur

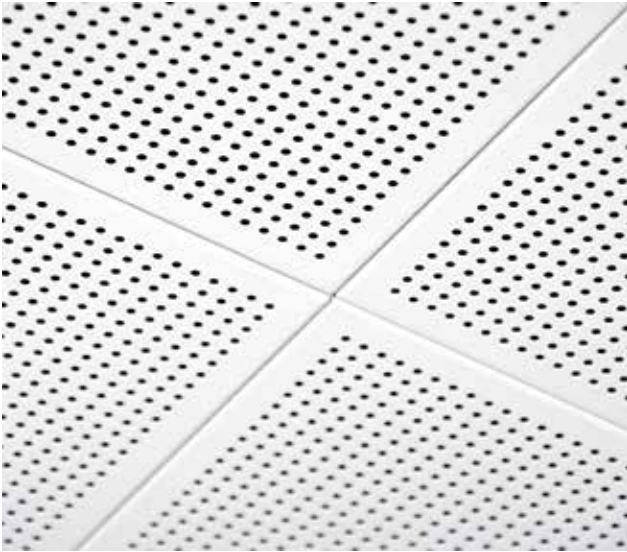
Q-CLIP SYSTEM SQUARE TILES

SPECIFICATION

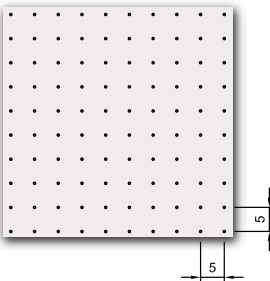
System	Armstrong ceiling system Q-Clip, Clip-In solution with concealed grid, with optional swing-down "Window" function, suspension height min. 100 mm
Tile material	galvanised steel sheet 0.5 mm (aluminium or further materials on request)
Coating	RAL 9010 pure white post-coated powder painted visible surface, other RAL or NCS colours on request
Execution*	Q-Clip: square tile square edged Q-Clip F: square tile bevel edged 3 mm
Gap solution	0 mm gap, without gasket
Acoustic inlay	Black non-woven acoustic fleece as standard. Other options available on request.
Standard modules	Q-Clip: 600 x 600 mm 625 x 625 mm Q-Clip F: 500 x 500 mm 600 x 600 mm 600 x 300 mm (no "Window" function) 625 x 625 mm 625 x 312.5 mm (no "Window" function)
Grid system	U-profile + DP12 A-Bar, security clip optional available, further suspension methods on request

* For further information about the edge detail execution of metal tiles, please see the Metal Edge Detail Execution datasheet

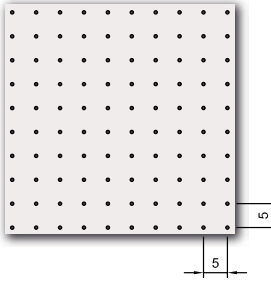
Perimeter solution	Range of standards trims in steel and aluminium plus custom bulkheads available.
Service integration	standard round or rectangular cut-outs plus customized options on request.
Special capabilities	- secured exterior ceiling solution - seismic ceiling solution - clean room ceiling solution - can be combined with other Armstrong products



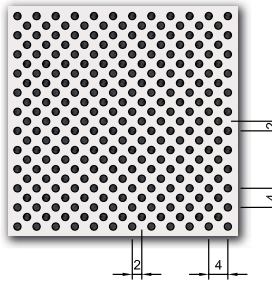
STANDARD PERFORATION PATTERNS



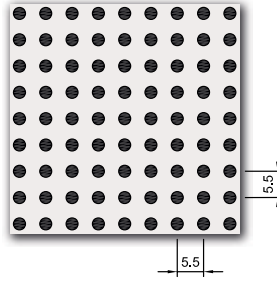
Ultra Microperforation Rg 0501
Hole diameter: 0.5 mm
Open area: 0.64 %



Extra Microperforation Rg 0701
Hole diameter: 0.7 mm
Open area: 1.5 %



Microperforation Rd 1522
Hole diameter: 1.5 mm
Open area: 22%



Standard Perforation Rg 2516
Hole diameter: 2.5 mm
Open area: 16%

Other perforation patterns available on request.

ACOUSTIC PERFORMANCE

Metal ceiling systems have been tested for their acoustic performance of sound absorption. All perforated products can be supplied with a variety of factory fitted acoustic infill options. Please contact us for more information.

THERMAL CONDUCTIVITY

(λ) W/mK
50.0 : Steel
0.04 : Acoustic fleece

HUMIDITY EXPOSURE

Up to 95% RH (for short term exposure).

SERVICES INTEGRATION

Metal panels can be supplied with factory produced cut outs and apertures for the integration of building services equipment.

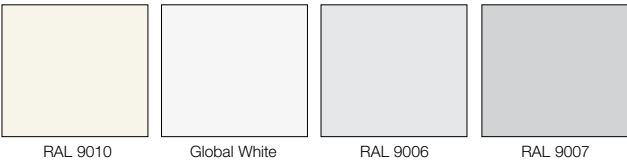
CLEANING

Dust should be removed from the painted surface by wiping with a clean soft cloth. More stubborn marks should be removed with a mild household detergent in warm water. Excessive use of water should be avoided. The use of abrasive cleaners of the painted surface is not recommended.

COLOUR

Standard colours

RAL 9010	20% gloss
Global White	12% gloss
RAL 9006	30% gloss
RAL 9007	30% gloss



Special colours

Other RAL and NCS colours available on request

QUALITY STANDARD

Armstrong is a certified **EN ISO 9001:2008** Quality Assumed Manufacturer. All Armstrong ceiling and grid systems are manufactured to the relevant tolerances and quality standards appropriate to material. Where differences exist between this and any expressed or implied architectural specificaitons or requirements then Armstrong's manufacturing standards will prevail unless stated otherwise.

ENVIRONMENTAL

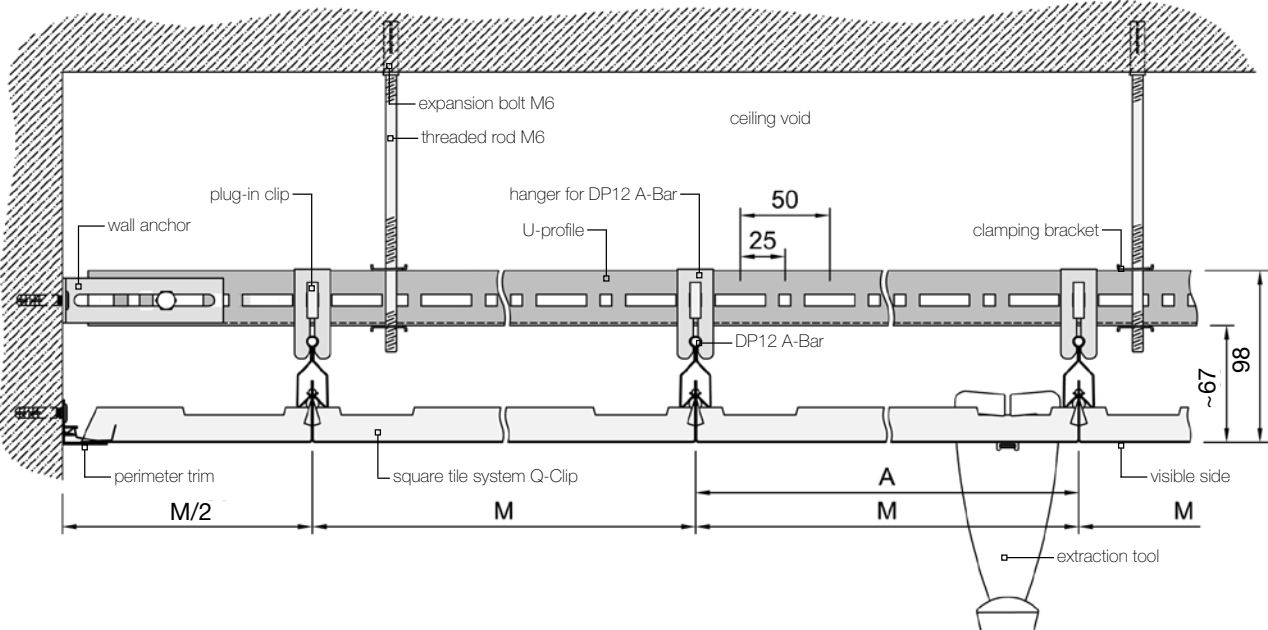
Our metal panels have an average of up to 30% recycling content. Our European manufacturing plants are certified to: **ISO 14001:2004 + Cor. 1:2009**
Armstrong is a member of TAIM (Technical Association of Industrial Metal Ceilings).

Sustainability		Acoustics						Safe & Healthy				
ISO 14021												
Recycled content (%)	Light reflectance (%)	α _w up to	Sound absorption class	NRC up to	Dncw / Dnfw (dB) up to	Rw (dB) up to	Fire reaction	Humidity Resistance (%) up to	Cleanability	Bioguard paint option	Scratch resistance	

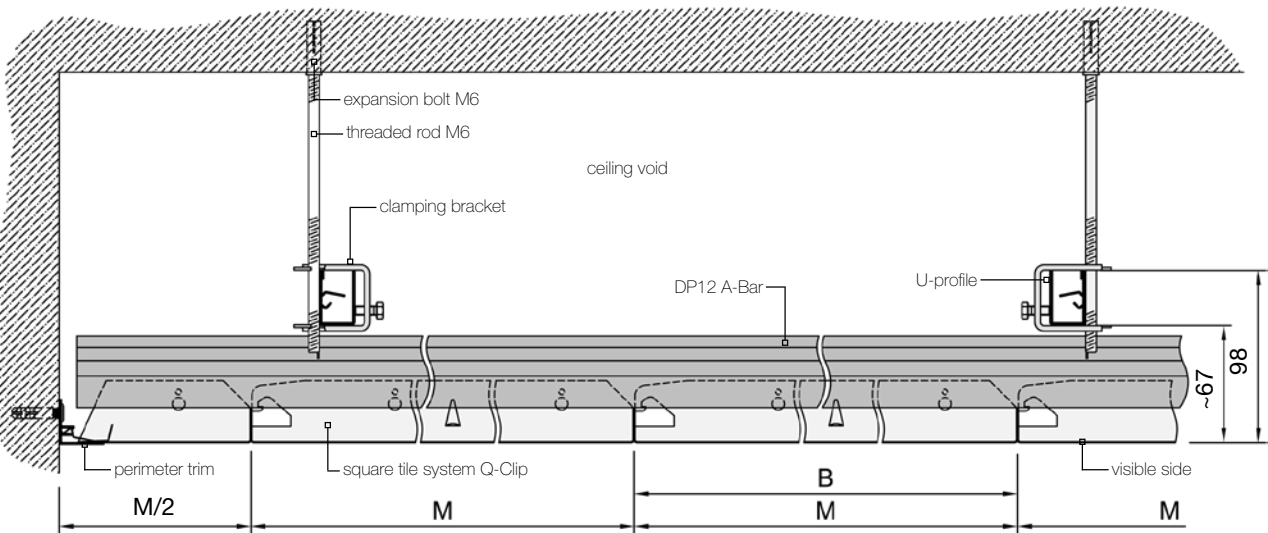
Ultra Microperforation Rg 0501 (1)	up to 30	83	0.45(L)	D	0.55	18	8	A1	95	scrubbable	✓	✓
Extra Microperforation Rg 0701 (2)	up to 30	80	0.55(L)	D	0.65	21	10	A2-s2, d0	95	wipeable moist cloth (3)	✓	✓
Microperforation Rd 1522 (2)	up to 30	65	0.70	C	0.70	16	6	A2-s2, d0	95	wipeable moist cloth (3)		✓
Standard Perforation Rg 2516 (2)	up to 30	70	0.75(L)	C	0.80	18	8	A2-s2, d0	95	wipeable moist cloth (3)		✓
Plain / Unperforated (1)	up to 30	85	0.10(L)	Not Classified	0.10	44	19	A1	95	scrubbable, high pressure water cleaning (4)	✓	✓

(1) RAL 9010 colour, without acoustic inlay. (2) RAL 9010 colour, with black acoustic fleece glued on rear. (3) Wipeable moist cloth for perforated tiles with fleece. Scrubbable for plain tiles or perforated tiles without fleece. (4) Only for plain Clip-In systems with silicone sealed joints (reduced water pressure to the minimum).

CROSS-SECTION Q-CLIP



LONGITUDINAL-SECTION Q-CLIP

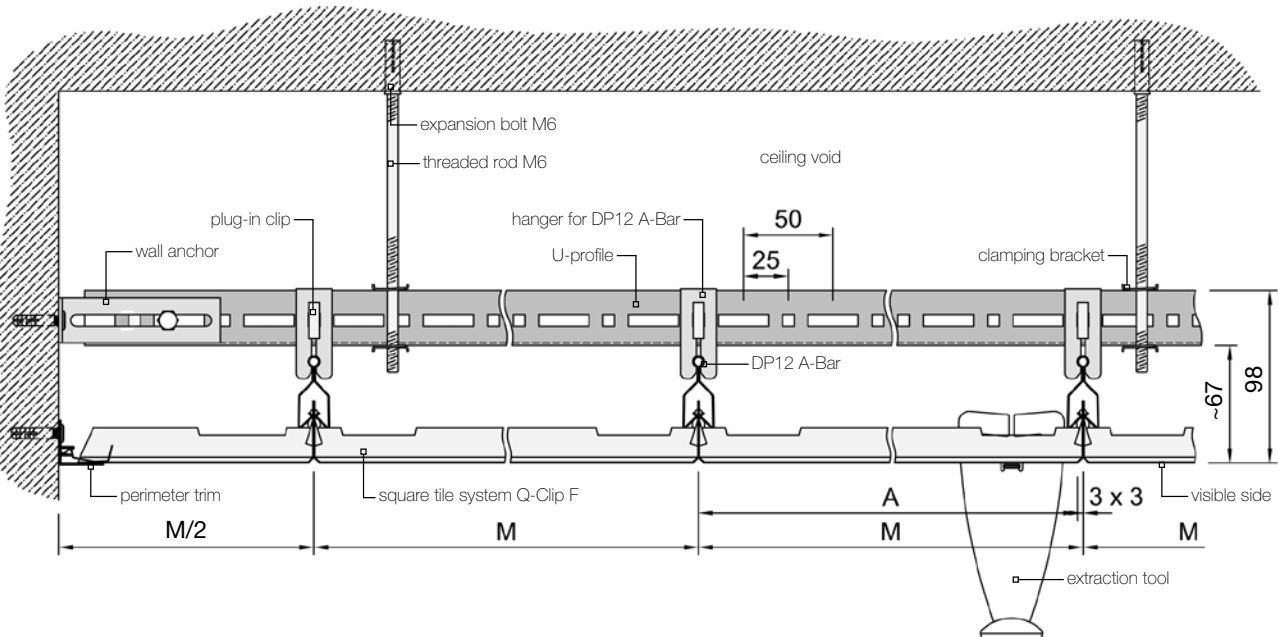


M = module size / A = tile length / B = tile width

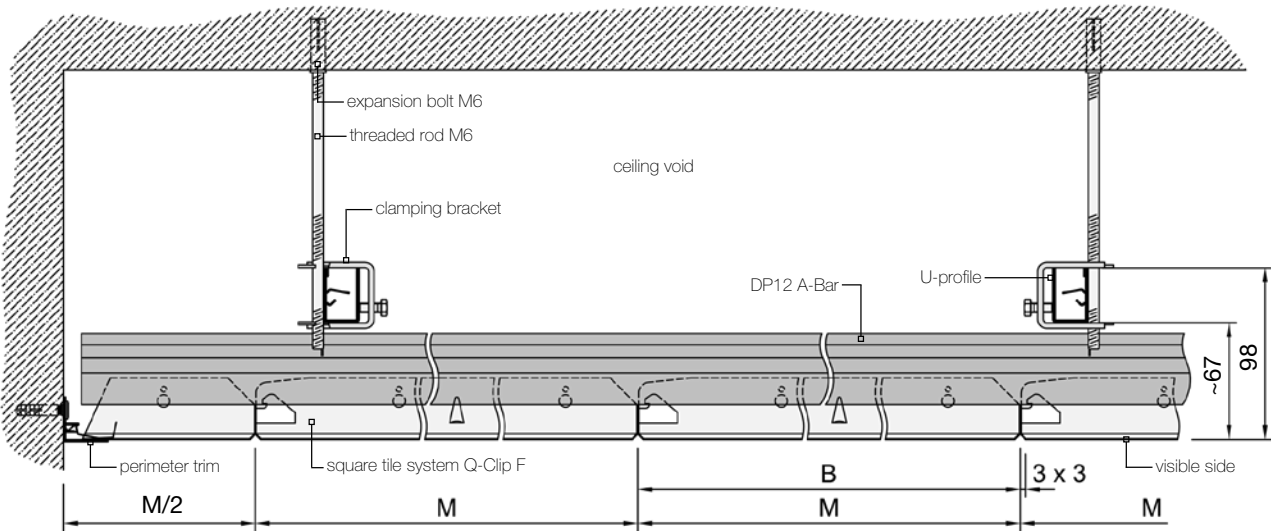
Item No.	Designation
BPM 300100	U-profile
BPM 300119	connector for U-profile
BPM 300120	plug-in clip
BPM 300140	wall anchor
BPM 300121	clamping bracket
BPM 311111	expansion bolt M6 x 30 mm
BPM 311099	threaded rod M6 x 1'000 mm
BPM 311022	DP12 A-Bar
BPM 300138	connector pin for DP12 A-Bar

Item No.	Designation
BPM 300105D	hanger for DP12 A-Bar
BPM 311303	hexagonal bolt M6 x 16 mm
BPM 311103	hexagonal nut M6
BPM 311305	washer M6 18 x 1.6 mm
BPM 300106	security clip
BPM 311028	extraction tool
BPM 311027	hinge-down bracket for Window function
BPM 300157	security clamp for Window function

CROSS-SECTION Q-CLIP F

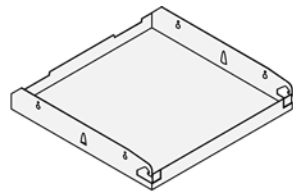


LONGITUDINAL-SECTION Q-CLIP F

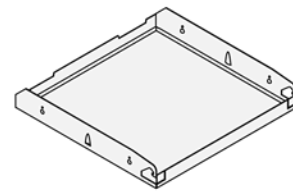


M = module size / A = tile length / B = tile width

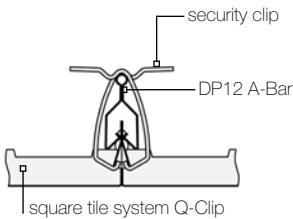
Detail A Q-Clip square tile



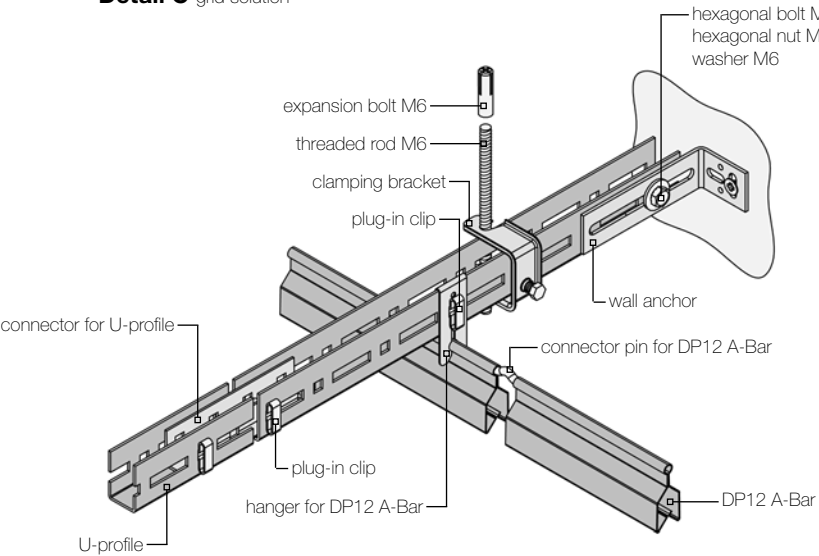
Detail B Q-Clip F square tile



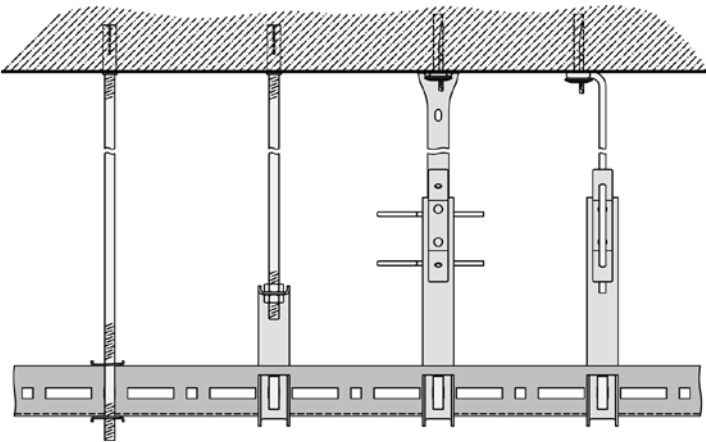
Detail D security clip



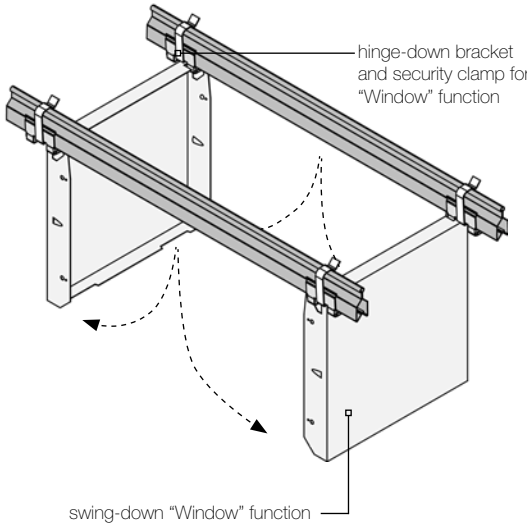
Detail C grid solution



Detail E suspension methods



clamping bracket with threaded rod U-profile hanger with threaded rod combi Nonius hanger with Nonius to part combi Nonius hanger with eye wire



For further information about the edge detail execution of metal tiles, please see the Metal Edge Detail Execution datasheet

Metal
product

CI/SfB

(35) Xy

11/2015

R-CLIP SYSTEM

Rectangular panels / planks

Inspiring Great Spaces™

Armstrong®



BENEFITS

- Versatile system and simple design
- Concealed grid for a monolithic effect
- Excellent acoustic performance
- Ease of installation (alignment) and fully demountable
- Easy access to the ceiling void
- Maintenance friendly system
- Downwardly demountable with the use of an extraction tool for access to the ceiling void

APPLICATION AREA

- Suitable for large open plan / circulation areas.

PROJECT: Strabag company (PL) ::::: ARCHITECT: Strabag sp.z o.o.

R-CLIP SYSTEM

RECTANGULAR PANELS / PLANKS

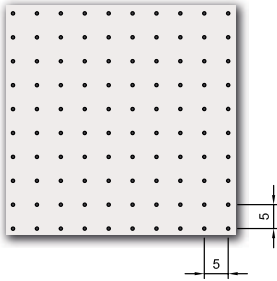
SPECIFICATION

System	Armstrong ceiling system R-Clip, Clip-In solution with concealed grid, with optional swing-down "Window" function, suspension height min. 100 mm
Panel material	galvanised steel sheet R-Clip: panel width up to 400 mm 0.6 mm panel width from 401 mm 0.7 mm R-Clip F: panel length 1200 mm 0.5 mm panel length 1800 mm 0.6 mm (aluminium or further materials on request)
Coating	RAL 9010 pure white post-coated powder painted visible surface, other RAL or NCS colours on request.
Execution*	R-Clip rectangular panel square edged long sides CA / DA (40 mm) short sides E6 / F6 (38 mm) R-Clip F rectangular panel bevel edged 3 mm long sides CC / DC (35 mm) short sides E6 / F6 (38 mm)
Gap solution	0 mm gap, without gasket
Acoustic inlay	Black non-woven acoustic fleece as standard. Other options available on request.

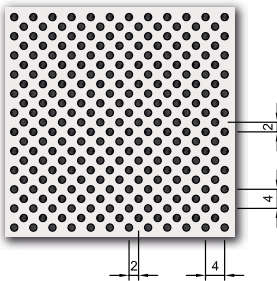
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Standard modules	R-Clip 1500 x 312.5 mm 1500 x 400 mm 2000 x 312.5 mm 2000 x 400 mm 2500 x 312.5 mm 2500 x 312.5 mm R-Clip F: 1200 x 300 mm 1200 x 600 mm 1800 x 400 mm
Configurable dimensions	R-Clip: panel length (A) 600 - 2500 mm panel width (B) 275 - 600 mm
Grid system	U-profile + DP12 A-Bar, security clip optional available, further suspension methods on request.
Perimeter solution	Range of standards trims in steel and aluminium plus custom bulkheads available.
Service integration	standard round or rectangular cut-outs plus customised options on request.
Special capabilities	- secured exterior ceiling solution - can be combined with other Armstrong products - clean room ceiling solution (R-Clip F)

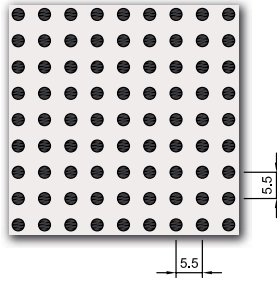
STANDARD PERFORATION PATTERNS



Extra Microperforation Rg 0701
Hole diameter: 0.7 mm
Open area: 1.5 %



Microperforation Rd 1522
Hole diameter: 1.5 mm
Open area: 22%



Standard Perforation Rg 2516
Hole diameter: 2.5 mm
Open area: 16%

Other perforation patterns available on request.

ACOUSTIC PERFORMANCE

Metal ceiling systems have been tested for their acoustic performance in terms of sound absorption, sound attenuation and sound reduction. These performance values will depend upon the perforation and the acoustic infill. Please contact us for more information on the available factory fitted acoustic options.

THERMAL CONDUCTIVITY

(λ) W/mK
50.0 : Steel
0.04 : Acoustic fleece

HUMIDITY EXPOSURE

Up to 95% RH (for short term exposure).

SERVICES INTEGRATION

Metal panels can be supplied with factory produced cut outs and apertures for the integration of building services equipment.

CLEANING

Dust should be removed from the painted surface by wiping with a clean soft cloth. More stubborn marks should be removed with a mild household detergent in warm water. Excessive use of water should be avoided. The use of abrasive cleaners of the painted surface is not recommended.

COLOUR

Standard colours

RAL 9010	20% gloss
Global White	12% gloss
RAL 9006	30% gloss
RAL 9007	30% gloss



Special colours

Other RAL and NCS colours available on request

QUALITY STANDARD

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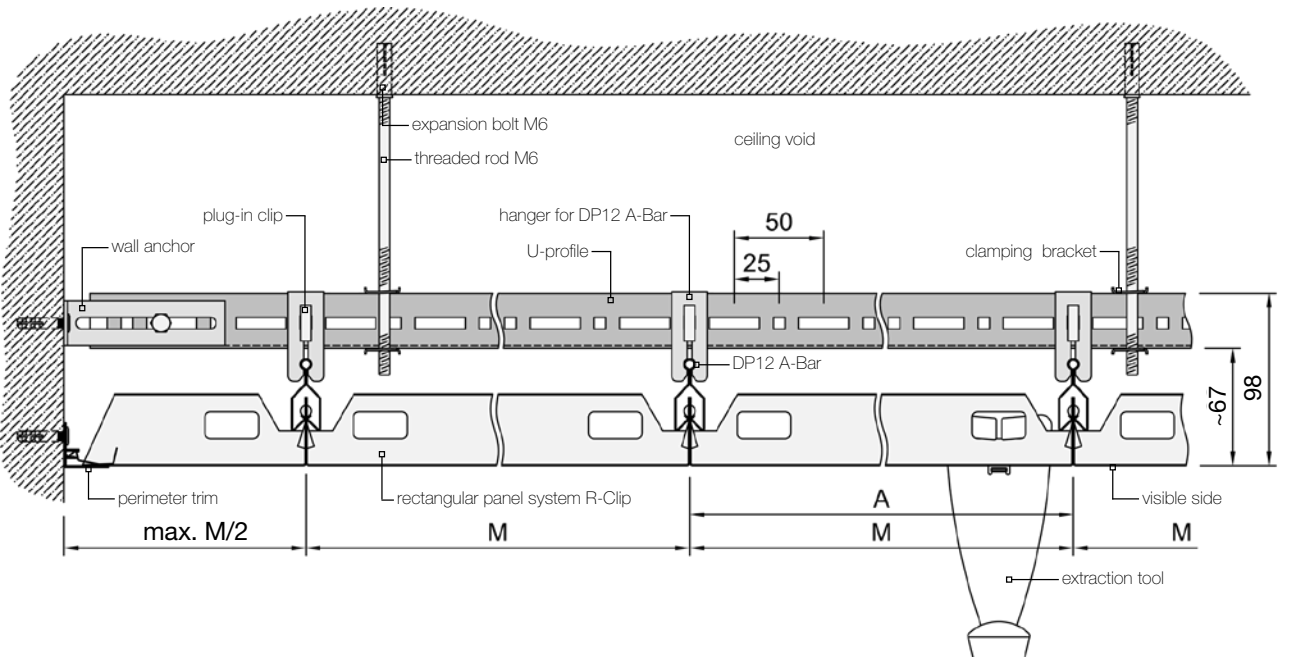
ENVIRONMENTAL

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Armstrong is a member of TAIM (Technical Association of Industrial Metal Ceilings).

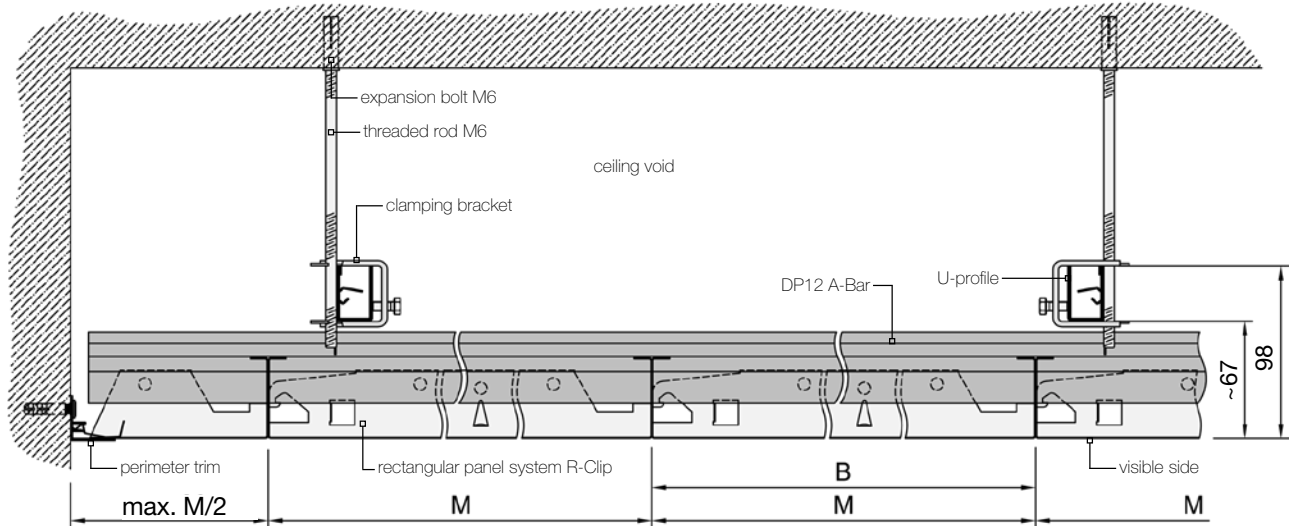
Sustainability		Acoustics						Safe & Healthy					
ISO 14021													
Recycled content (%)	Light reflectance (%)	αw up to	Sound absorption class	NRC up to	Dncw / Dnfw (dB) up to	Rw (dB) up to	Fire reaction	Humidity Resistance (%) up to	Cleanability	Bioguard paint option	Air quality	Scratch resistance	
Extra Microperforation Rg 0701 (2)	up to 30	80	0.55(L)	D	0.65	21	10	A2-s2, d0	95	wipeable moist cloth (3)	✓		✓
Microperforation Rd 1522 (2)	up to 30	65	0.70	C	0.70	16	6	A2-s2, d0	95	wipeable moist cloth (3)			✓
Standard Perforation Rg 2516 (2)	up to 30	70	0.75(L)	C	0.80	18	8	A2-s2, d0	95	wipeable moist cloth (3)			✓
Plain / Unperforated (1)	up to 30	85	0.10(L)	Not Classified	0.10	44	19	A1	95	scrubbable, high pressure water cleaning (4)	✓	ISO 5 (5)	✓
Premium B15 (5)	up to 30	depends on perforation	0.65	C	0.60	41	20	A2-s1, d0	95	wipeable moist cloth			✓
Premium OP19 (5)	up to 30	depends on perforation	1.00	A	0.90	31	15	A2-s2, d0	95	wipeable moist cloth			✓

(1) RAL 9010 colour, without acoustic inlay. (2) RAL 9010 colour, with black acoustic fleece glued on rear. (3) Wipeable moist cloth for perforated tiles with fleece. Scrubbable for plain tiles or perforated tiles without fleece. (4) Only for plain Clip-in systems with silicone sealed joints (reduced water pressure to the minimum). (5) Available only for R-Clip F.

CROSS-SECTION R-CLIP



LONGITUDINAL-SECTION R-CLIP

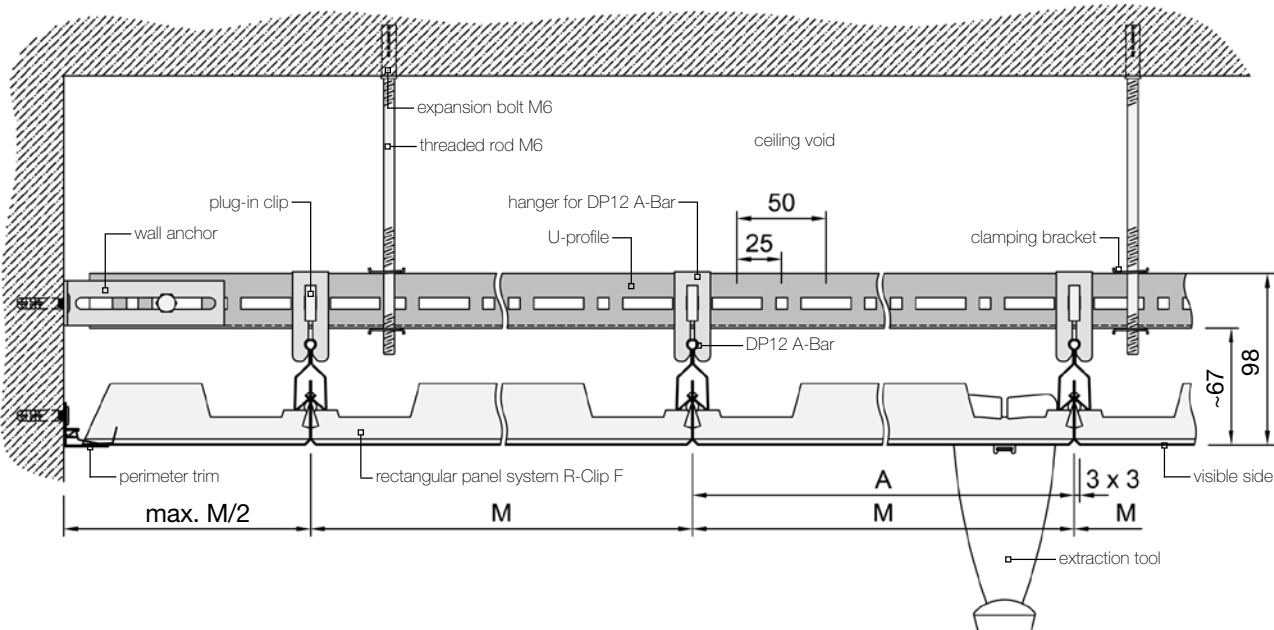


M = module size / A = panel length / B = panel width

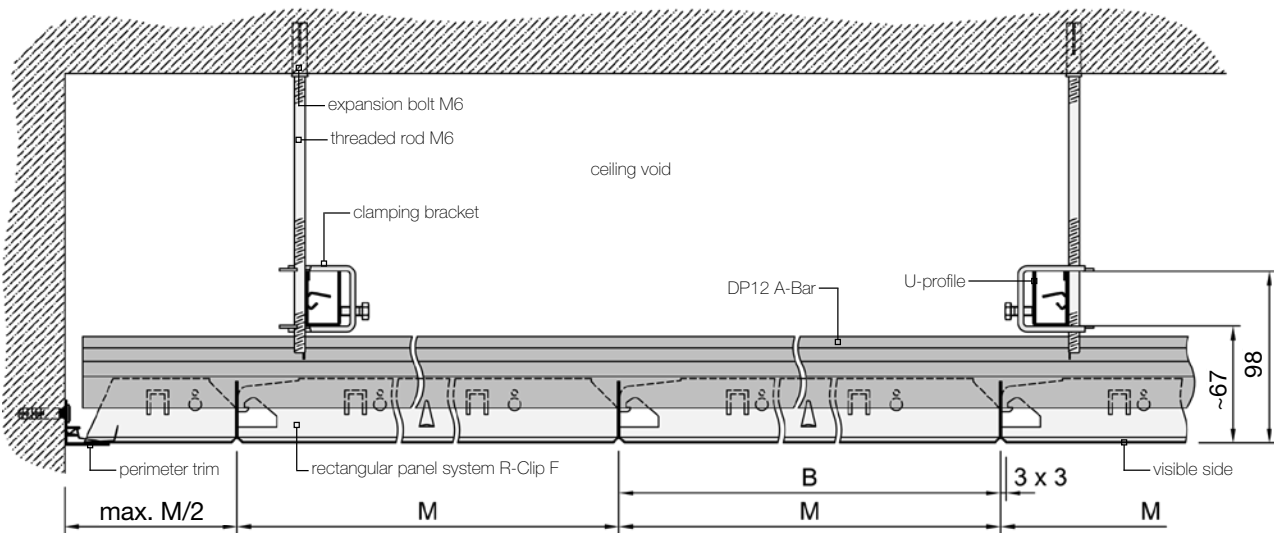
Item No.	Designation
BPM 300100	U-profile
BPM 300119	connector for U-profile
BPM 300120	plug-in clip
BPM 300140	wall anchor
BPM 300121	clamping bracket
BPM 311111	expansion bolt M6 x 30 mm
BPM 311099	threaded rod M6 x 1'000 mm
BPM 311022	DP12 A-Bar
BPM 300138	connector pin for DP12 A-Bar

Item No.	Designation
BPM 300105D	hanger for DP12 A-Bar
BPM 311303	hexagonal bolt M6 x 16 mm
BPM 311103	hexagonal nut M6
BPM 311305	washer M6 18 x 1.6 mm
BPM 300106	security clip
BPM 311028	extraction tool
BPM 311027	hinge-down bracket for Window function
BPM 300157	security clamp for Window function

CROSS-SECTION R-CLIP F

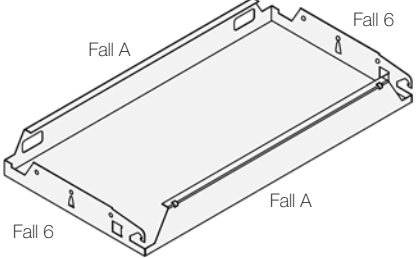


LONGITUDINAL-SECTION R-CLIP F

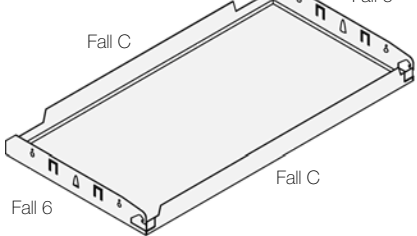


M = module size / A = panel length / B = panel width

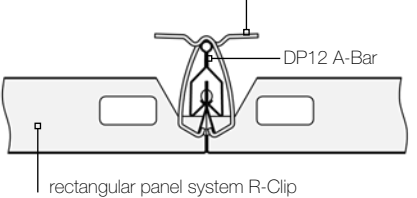
Detail A R-Clip panel



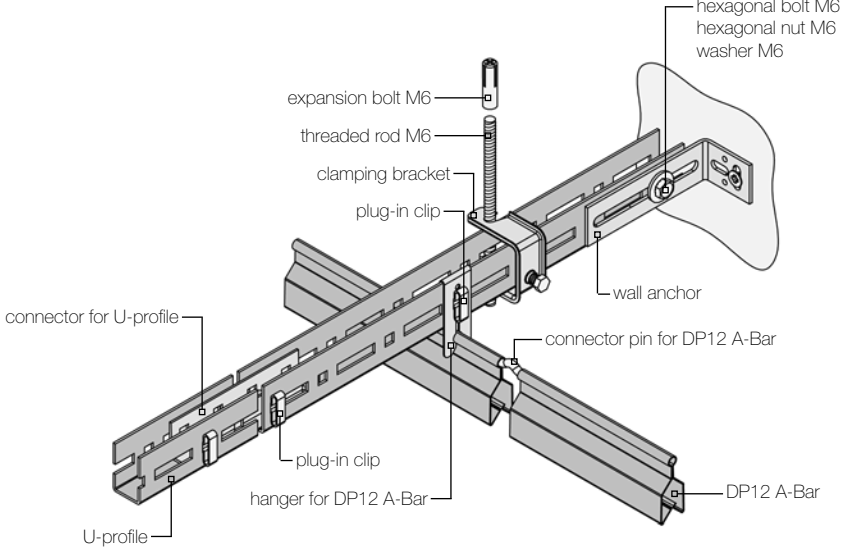
Detail B R-Clip F panel



Detail D security clip

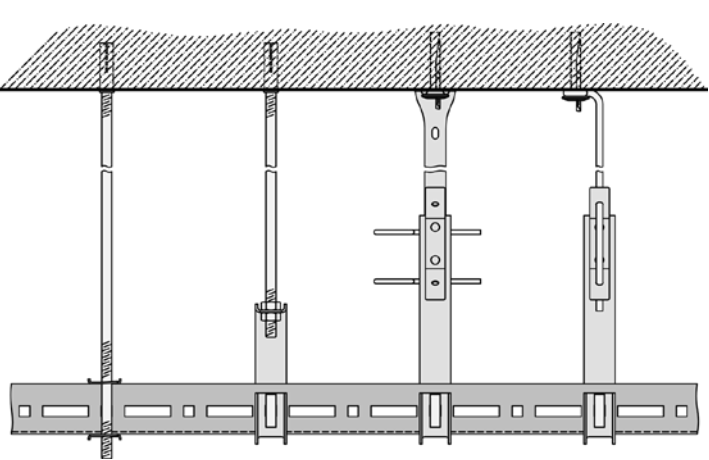


Detail C grid system



For further information about the edge detail execution of metal tiles, please see the Metal Edge Detail Execution datasheet

Detail E suspension methods



clamping bracket with threaded rod U-profile hanger with threaded rod combi Nonius hanger with Nonius to part combi Nonius hanger with eye wire

Metal
product

Cl/SfB | (35) | Xy |
11/2015

S-CLIP F SYSTEM

Square & rectangular tiles

Inspiring Great Spaces™

Armstrong®



S-CLIP F SYSTEM

SQUARE & RECTANGULAR TILES

SPECIFICATION

System	Armstrong ceiling system S-Clip F, Clip-In solution with concealed grid, with included swing-down function, suspension height min. 95 mm
Tile material	galvanised steel sheet 0.5 mm (aluminium or further materials on request)
Coating	RAL 9010 pure white post-coated powder painted visible surface, other RAL or NCS colours on request
Execution*	Square tile bevel edged 3 mm with standard notching
Gap solution	0 mm gap, without gasket
Acoustic inlay	Black non-woven acoustic fleece as standard. Other options available on request.
Standard modules	600 x 600 mm 625 x 625 mm 625 x 312.5 mm 300 x 900 mm 300 x 1200 mm 300 x 1500 mm
Grid system	U-profile + DP12 A-Bar, further suspension methods on request

* For further information about the edge detail execution of metal tiles, please see the Metal Edge Detail Execution datasheet

Perimeter solution	Range of standards trims in steel and aluminium plus custom bulkheads available.
Service integration	standard round or rectangular cut-outs plus customized options on request.



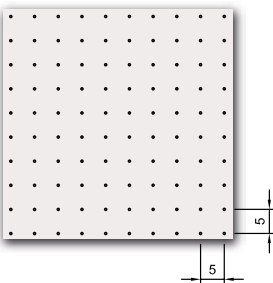
BENEFITS

- Concealed grid system for a monolithic ceiling surface
- Downwardly demountable with the use of an extraction tool for access to the ceiling void.
- Cost effective
- Excellent acoustic performance
- With integrated swing-down function

APPLICATION AREA

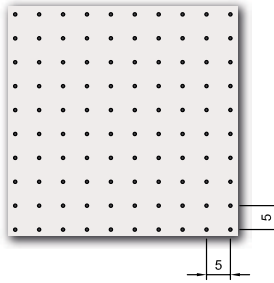
- Used in a variety of ceiling areas: from small service rooms to large commercial office buildings and major transportation terminals.

STANDARD PERFORATION PATTERNS



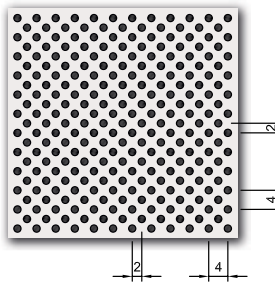
Ultra Microperforation Rg 0501*

Hole diameter: 0.5 mm
Open area: 0.64 %



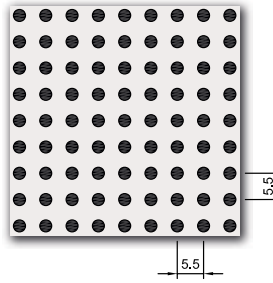
Extra Microperforation Rg 0701

Hole diameter: 0.7 mm
Open area: 1.5 %



Microperforation Rd 1522

Hole diameter: 1.5 mm
Open area: 22%



Standard Perforation Rg 2516

Hole diameter: 2.5 mm
Open area: 16%

*Only available for square tiles.

Other perforation patterns available on request.

ACOUSTIC PERFORMANCE

Metal ceiling systems have been tested for their acoustic performance in terms of sound absorption, sound attenuation and sound reduction. These performance values will depend upon the perforation and the acoustic infill. Please contact us for more information on the available factory fitted acoustic options.

THERMAL CONDUCTIVITY

(λ) W/mK
50.0 : Steel
0.04 : Acoustic fleece

HUMIDITY EXPOSURE

Up to 95% RH (for short term exposure).

SERVICES INTEGRATION

Metal panels can be supplied with factory produced cut outs and apertures for the integration of building services equipment.

CLEANING

Dust should be removed from the painted surface by wiping with a clean soft cloth. More stubborn marks should be removed with a mild household detergent in warm water. Excessive use of water should be avoided. The use of abrasive cleaners of the painted surface is not recommended.

COLOUR

Standard colours

RAL 9010	20% gloss
Global White	12% gloss
RAL 9006	30% gloss
RAL 9007	30% gloss



Special colours

Other RAL and NCS colours available on request

QUALITY STANDARD

Armstrong is a certified **EN ISO 9001:2008** Quality Assured Manufacturer. All Armstrong ceiling and grid systems are manufactured to the relevant tolerances and quality standards appropriate to material. Where differences exist between this and any expressed or implied architectural specifications of requirements then Armstrong's manufacturing standards will prevail unless stated otherwise.

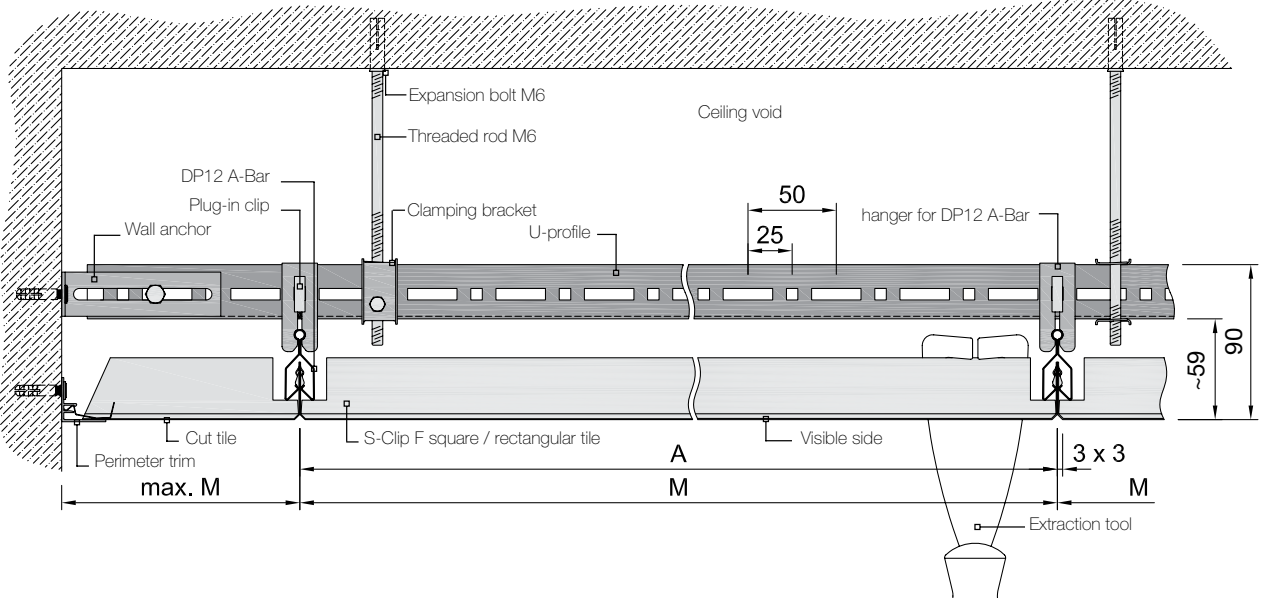
ENVIRONMENTAL

Our metal panels have an average of up to 30% recycling content. Our European manufacturing plants are certified to: **ISO 14001:2004 + Cor. 1:2009**
Armstrong is a member of TAIM (Technical Association of Industrial Metal Ceilings).

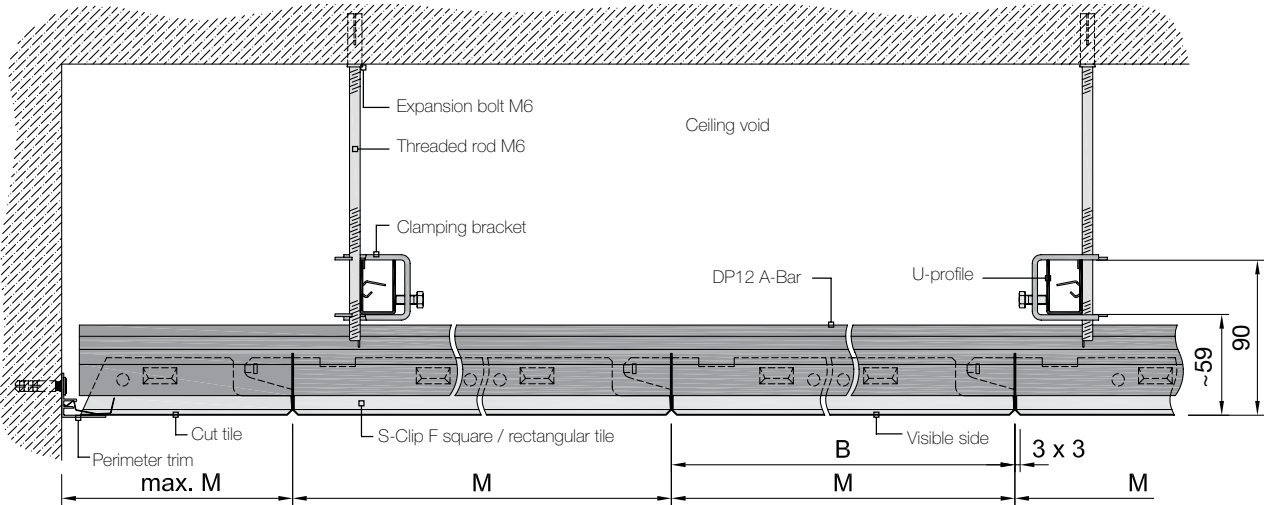
Sustainability		Acoustics						Safe & Healthy				
Recycled content (%)	Light reflectance (%)	α _w up to	Sound absorption class	NRC up to	Dncw / Dnfw (dB) up to	Rw (dB) up to	Fire reaction	Humidity Resistance (%) up to	Cleanability	Bioguard paint option	Scratch resistance	
Ultra Microperforation Rg 0501 (1)	up to 30	83	0.45(LM)	D	0.55	18	8	A1	95	scrubbable	✓	
Extra Microperforation Rg 0701 (2)	up to 30	80	0.55(L)	D	0.65	21	10	A2-s2, d0	95	wipeable moist cloth (3)	✓	
Microperforation Rd 1522 (2)	up to 30	65	0.70	C	0.70	16	6	A2-s2, d0	95	wipeable moist cloth (3)	✓	
Standard Perforation Rg 2516 (2)	up to 30	70	0.75(L)	C	0.80	18	8	A2-s2, d0	95	wipeable moist cloth (3)	✓	
Plain / Unperforated (1)	up to 30	85	0.10(L)	Not Classified	0.10	44	19	A1	95	scrubbable	✓	
Premium B15	up to 30	depends on perforation	0.65	C	0.60	41	20	A2-s1, d0	95	wipeable moist cloth	✓	
Premium OP19	up to 30	depends on perforation	1.00	A	0.90	31	15	A2-s2, d0	95	wipeable moist cloth	✓	

(1) RAL 9010 colour, without acoustic inlay. (2) RAL 9010 colour, with black acoustic fleece glued on rear. (3) Wipeable moist cloth for perforated tiles with fleece. Scrubbable for plain tiles or perforated tiles without fleece.

CROSS-SECTION S-CLIP F



LONGITUDINAL-SECTION S-CLIP F

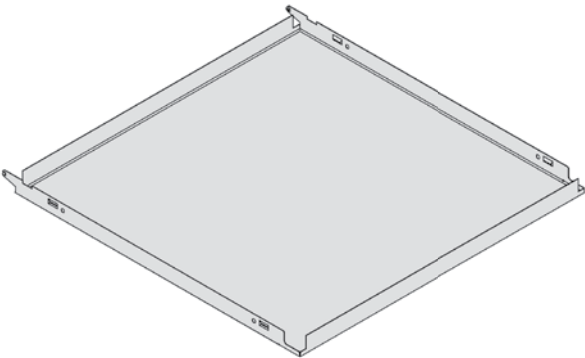


M = module size / A = tile length / B = tile width

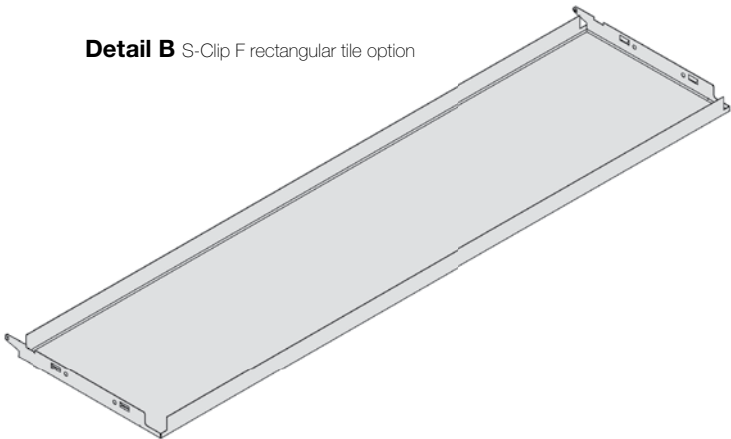
Item No.	Designation
BPM 300100	U-profile
BPM 300119	connector for U-profile
BPM 300120	plug-in clip
BPM 300140	wall anchor
BPM 300121	clamping bracket
BPM 311111	expansion bolt M6 x 30 mm
BPM 311099	threaded rod M6 x 1000 mm

Item No.	Designation
BPM 311022	DP12 A-Bar
BPM 300138	connection pin for DP12 A-Bar
BPM 300105D	hanger for DP12 A-Bar
BPM 311303	hexagonal bolt M6 x 16 mm
BPM 311103	hexagonal nut M6
BPM 311305	washer M6 18 x 1.6 mm
BPM 311046	extraction tool

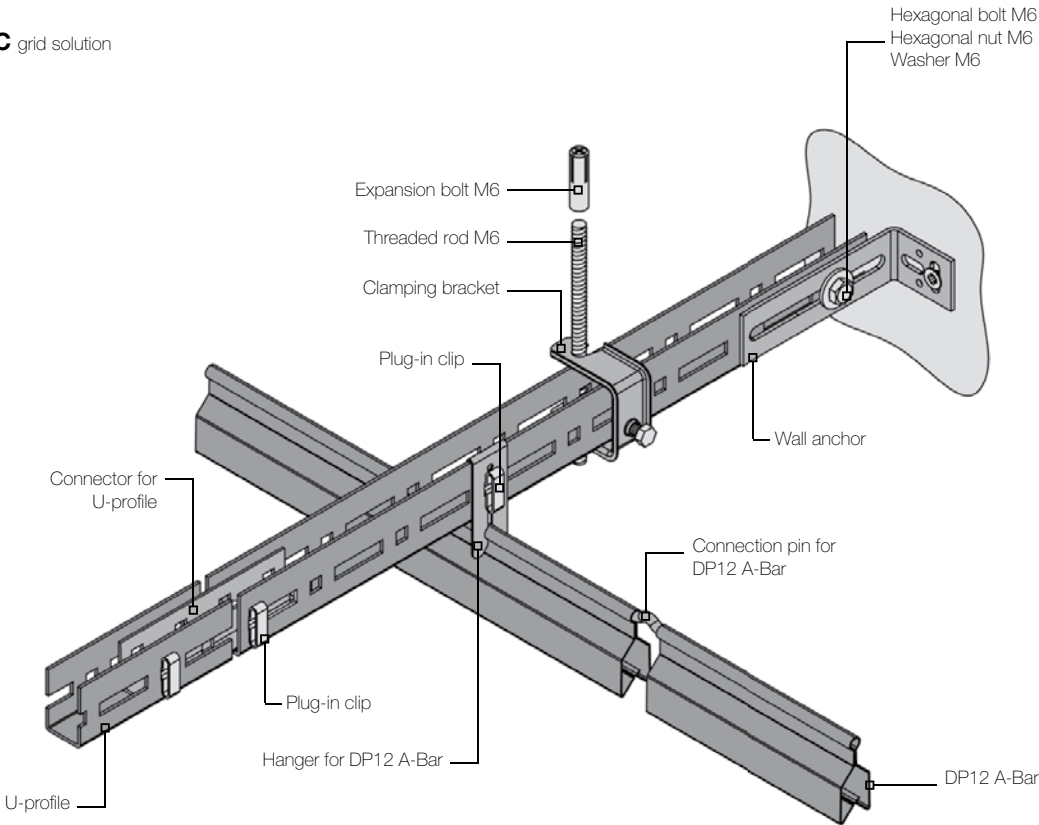
Detail A S-Clip F square tile



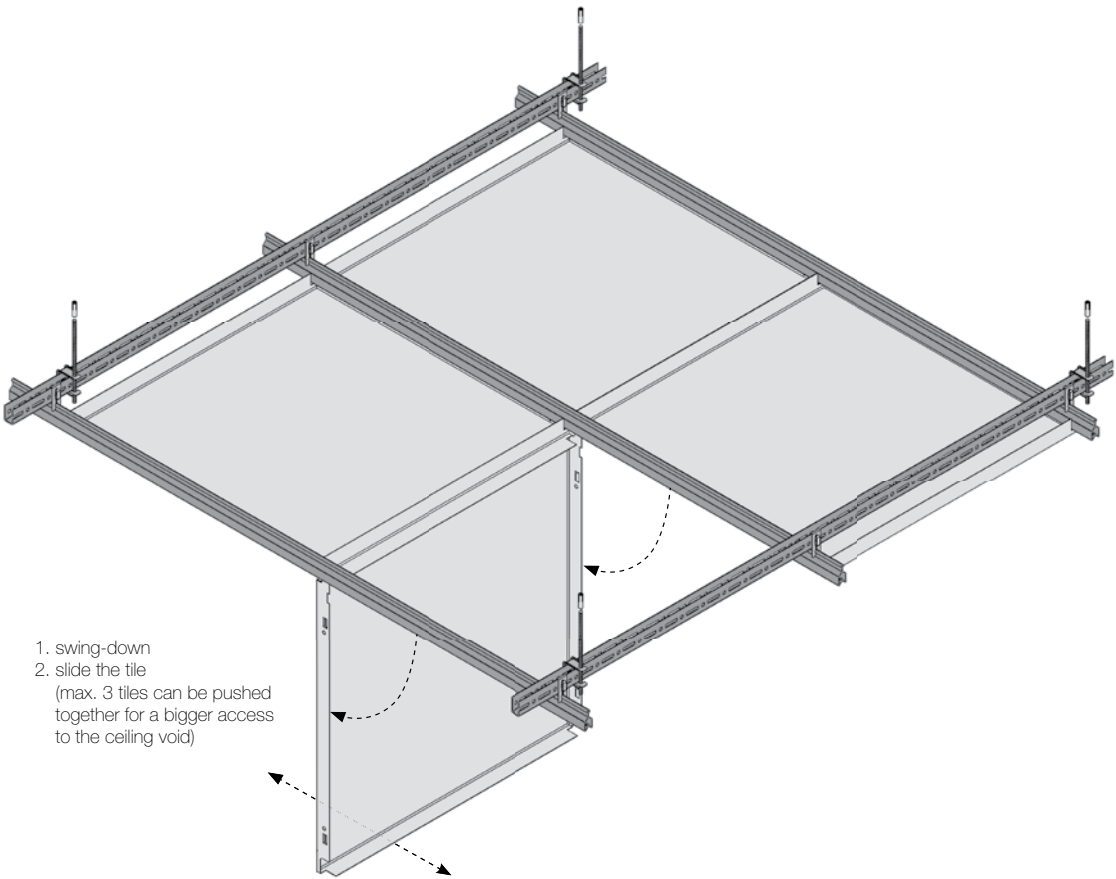
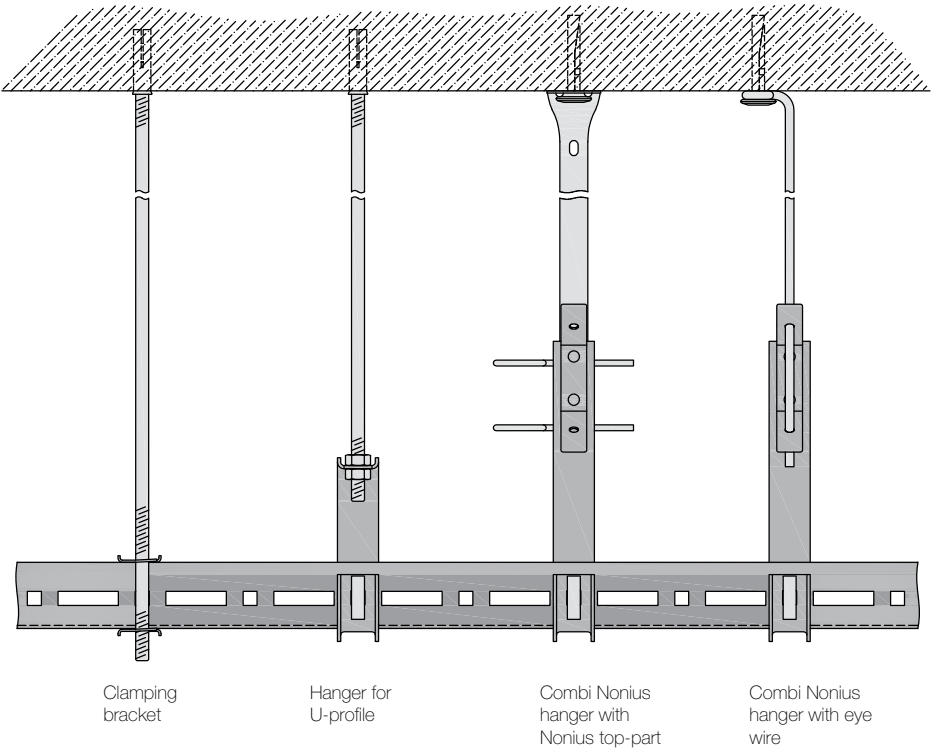
Detail B S-Clip F rectangular tile option



Detail C grid solution



Detail D U-profile suspension methods



Metal
product

CI/SfB

(35) | Xy |
11/2015

T-CLIP F SYSTEM

Square & rectangular tiles

Inspiring Great Spaces™

Armstrong®



BENEFITS

- Concealed grid system for a monolithic ceiling surface
- Downwardly demountable with the use of an extraction tool for access to the ceiling void.

- Cost effective
- Excellent acoustic performance

APPLICATION AREA

- Used in a variety of ceiling areas: from small service rooms to large commercial office buildings and major transportation terminals.

PROJECT: Learning Commons Building - Manchester University (UK) : ARCHITECT: Sheppard Robson

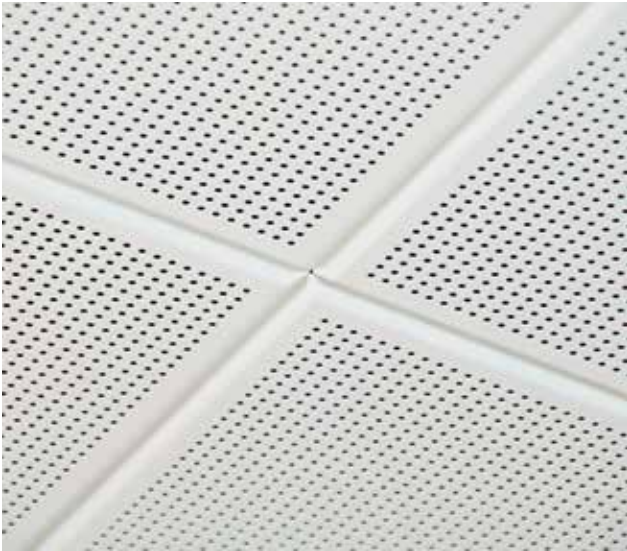
T-CLIP F SYSTEM

SQUARE & RECTANGULAR TILES

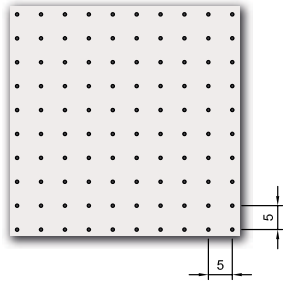
SPECIFICATION

System	Armstrong ceiling system T-Clip F, Clip-In solution with concealed grid, suspension height min. 90 mm	Grid system	C-channel + Spring-T Optional U-profile + Spring-T
Tile material	Galvanised steel sheet 0.5 - 0.6 mm	Perimeter solution	Range of standards trims in steel and aluminium plus custom bulkheads available
Coating	RAL 9010 pure white post-coated powder painted visible surface, other RAL or NCS colours on request	Service integration	Standard round or rectangular cut-outs plus customized options on request
Execution*	T-Clip F square or rectangular tile bevel edged 5 mm, optional T-Clip rectangular tile square edged		
Gap solution	0 mm gap, without gasket		
Acoustic inlay	Black non-woven acoustic fleece as standard. Other options available on request		
Standard modules	T-Clip F: 500 x 500 mm 600 x 600 mm 675 x 675 mm 750 x 750 mm Additional rectangular modules available 600 x 1200 mm 300 x 1200 mm 600 x 1200 mm 300 x 1500 mm		
Configurable dimensions	Panel length (A) 600 - 2500 mm Panel width (B) 300 / 400 / 500 / 600 mm		

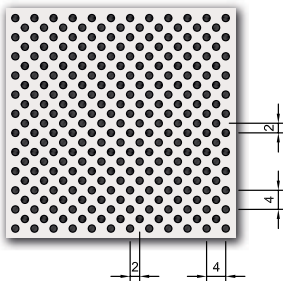
* For further information about the edge detail execution of metal tiles, please see the Metal Edge Detail Execution datasheet.



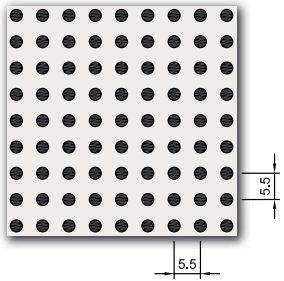
STANDARD PERFORATION PATTERNS



Extra Microperforation Rg 0701
Hole diameter: 0.7 mm
Open area: 1.5 %



Microperforation Rd 1522
Hole diameter: 1.5 mm
Open area: 22 %



Standard Perforation Rg 2516
Hole diameter: 2.5 mm
Open area: 16 %

Other perforation patterns available on request.

ACOUSTIC PERFORMANCE

Metal ceiling systems have been tested for their acoustic performance in terms of sound absorption, sound attenuation and sound reduction. These performance values will depend upon the perforation and the acoustic infill. Please contact us for more information on the available factory fitted acoustic options.

THERMAL CONDUCTIVITY

(λ) W/mK
50.0 : Steel
0.04 : Acoustic fleece

HUMIDITY EXPOSURE

Up to 95% RH (for short term exposure).

SERVICES INTEGRATION

Metal panels can be supplied with factory produced cut outs and apertures for the integration of building services equipment.

CLEANING

Dust should be removed from the painted surface by wiping with a clean soft cloth. More stubborn marks should be removed with a mild household detergent in warm water. Excessive use of water should be avoided. The use of abrasive cleaners of the painted surface is not recommended.

COLOUR

Standard colours

RAL 9010 20% gloss
Global White 12% gloss
RAL 9006 30% gloss
RAL 9007 30% gloss



Special colours

Other RAL and NCS colours available on request

QUALITY STANDARD

Armstrong is a certified **EN ISO 9001:2008** Quality Assured Manufacturer. All Armstrong ceiling and grid systems are manufactured to the relevant tolerances and quality standards appropriate to material. Where differences exist between this and any expressed or implied architectural specifications or requirements then Armstrong's manufacturing standards will prevail unless stated otherwise.

ENVIRONMENTAL

Our metal panels have an average of up to 30% recycling content. Our European manufacturing plants are certified to: **ISO 14001:2004 + Cor. 1:2009**. Armstrong is a member of TAIM (Technical Association of Industrial Metal Ceilings).

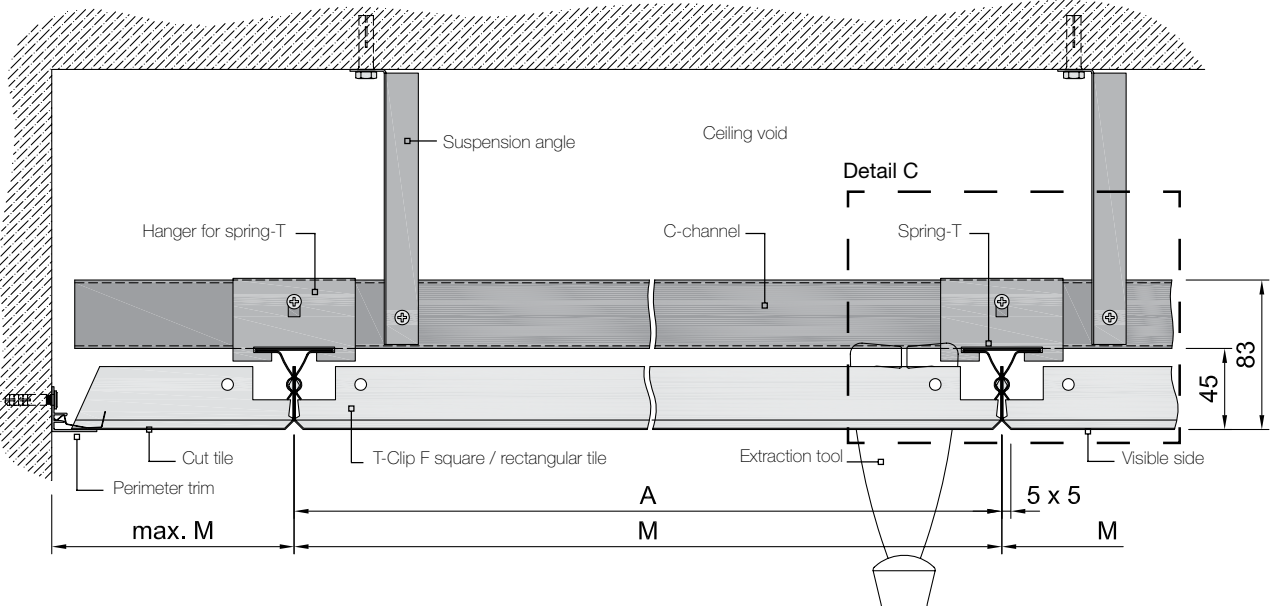
Sustainability		Acoustics						Safe & Healthy				
ISO 14021												
Recycled content (%)	Light reflectance (%)	α _w up to	Sound absorption class	NRC up to	Dncw / Dnfw (dB) up to	Rw (dB) up to	Fire reaction	Humidity Resistance (%) up to	Cleanability	Bioguard paint option	Scratch resistance	
Extra Microperforation Rg 0701 (2)	up to 30	80	0.55(L)	D	0.65	21	10	A2-s2, d0	95	wipeable moist cloth (3)	✓	✓
Microperforation Rd 1522 (2)	up to 30	65	0.70	C	0.70	16	6	A2-s2, d0	95	wipeable moist cloth (3)		✓
Standard Perforation Rg 2516 (2)	up to 30	70	0.75(L)	C	0.80	18	8	A2-s2, d0	95	wipeable moist cloth (3)		✓
Plain / Unperforated (1)	up to 30	85	0.10(L)	Not Classified	0.10	44	19	A1	95	scrubbable	✓	✓
Premium B15	up to 30	depends on perforation	0.65	C	0.60	41	20	A2-s1, d0	95	wipeable moist cloth		✓
Premium OP19	up to 30	depends on perforation	1.00	A	0.90	31	15	A2-s2, d0	95	wipeable moist cloth		✓

(1) RAL 9010 colour, without acoustic inlay. (2) RAL 9010 colour, with black acoustic fleece glued on rear. (3) Wipeable moist cloth for perforated tiles with fleece. Scrubbable for plain tiles or perforated tiles without fleece.

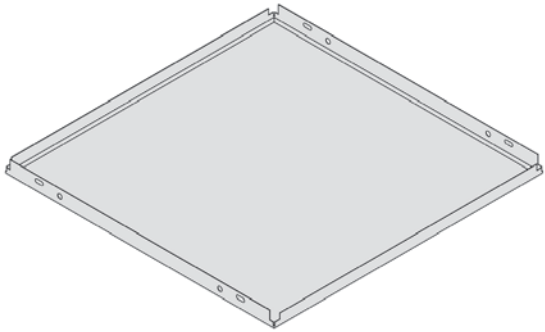


PROJECT: Theological Faculty of Silesian University ::::: ARCHITECT: STABIL SP. Z O.O.

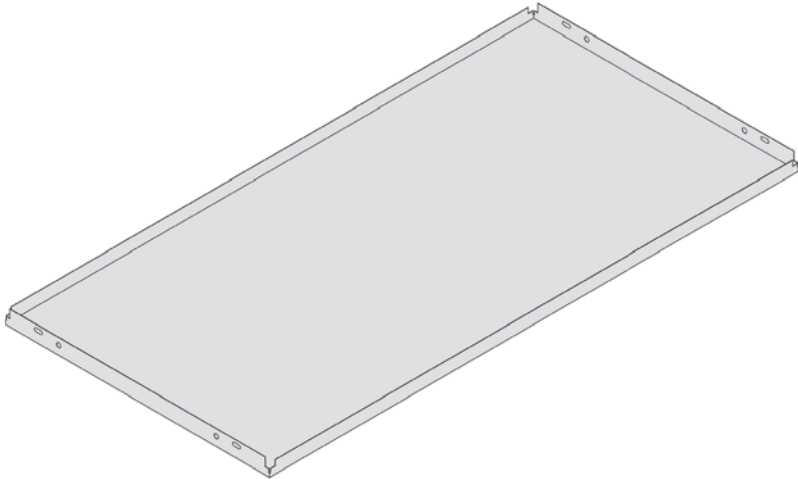
CROSS-SECTION T-CLIP F with C-channel solution



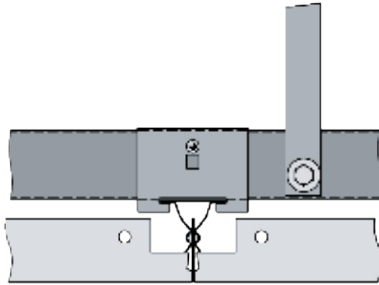
Detail A T-Clip F square tile



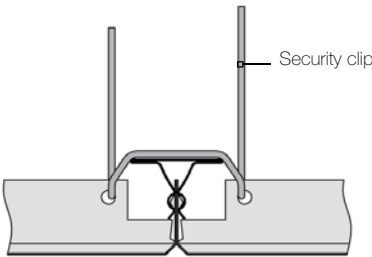
Detail B T-Clip rectangular tile option



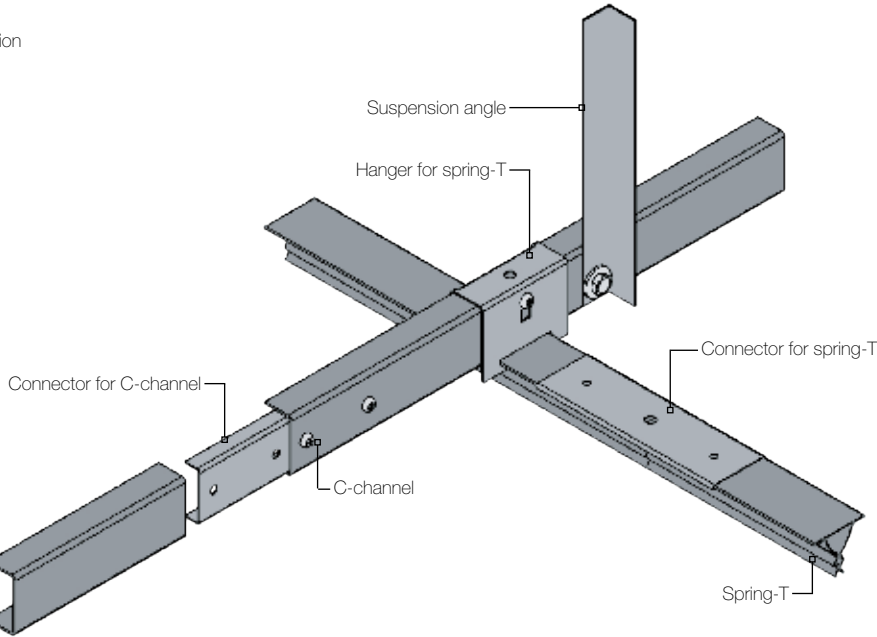
Detail C Square edged option T-Clip



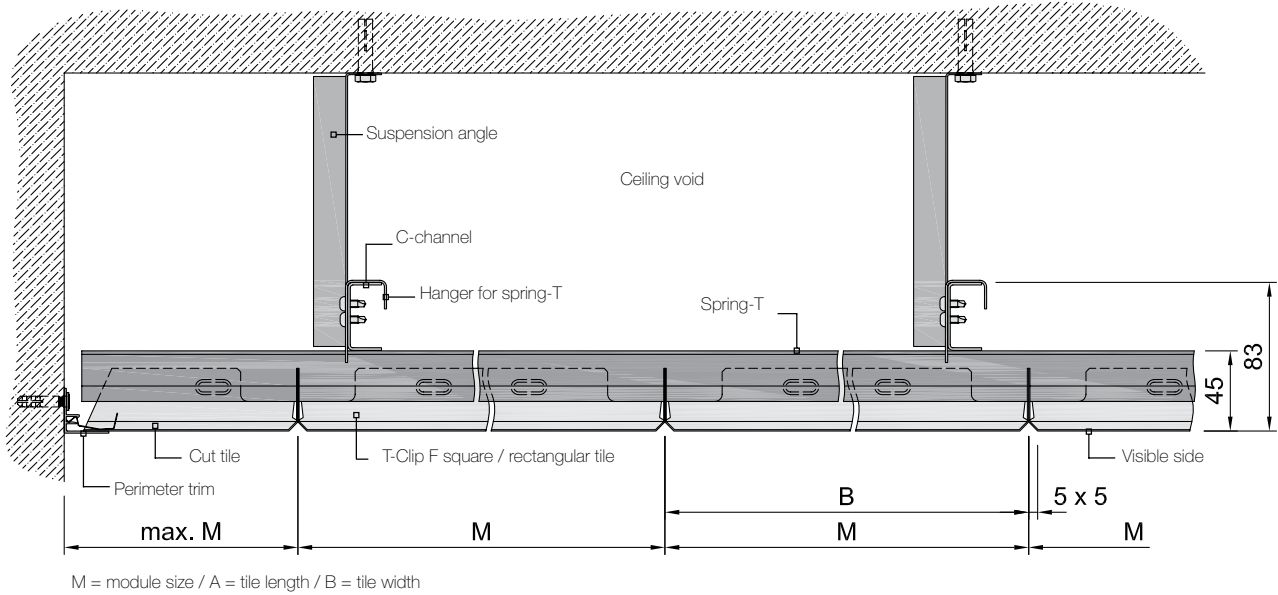
Detail D Security clip option



Detail E C-channel solution



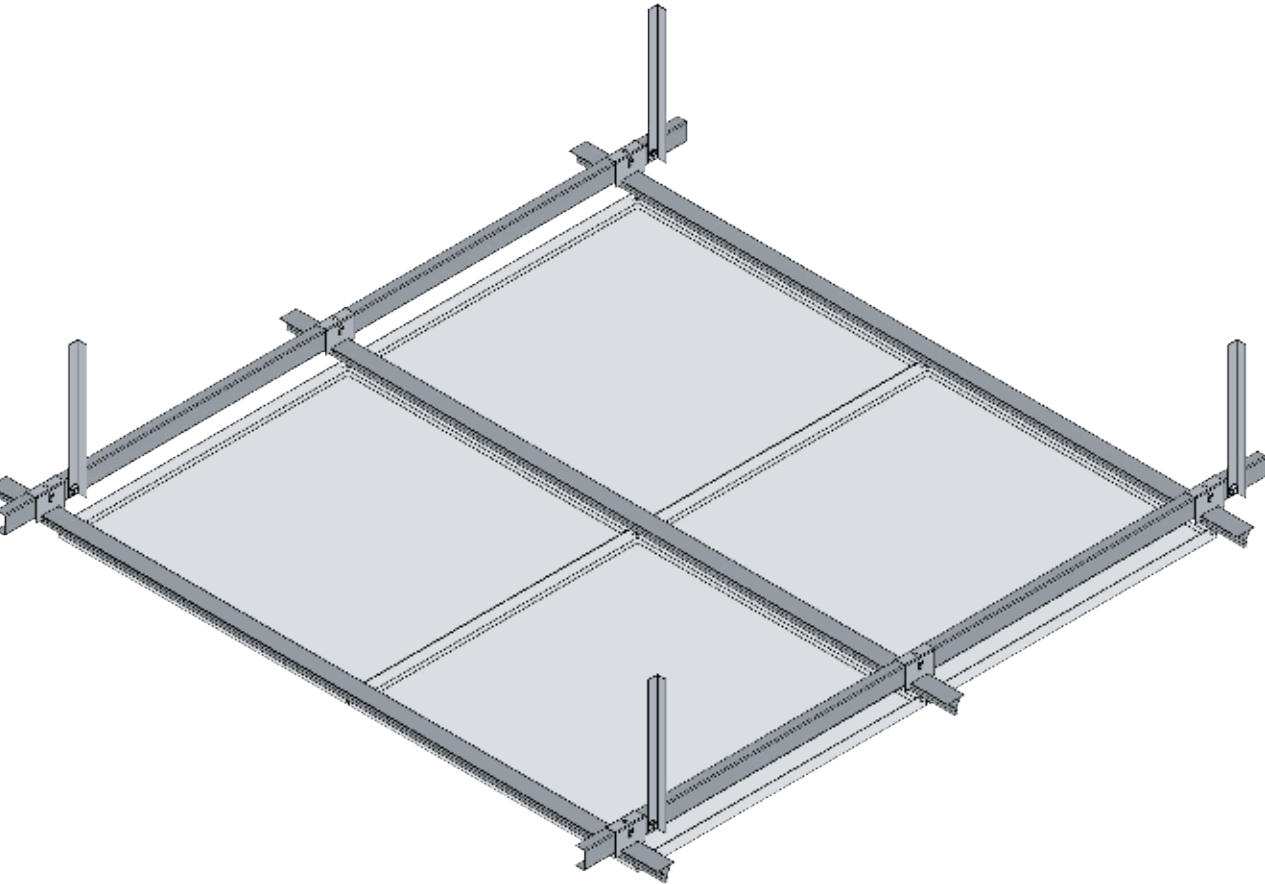
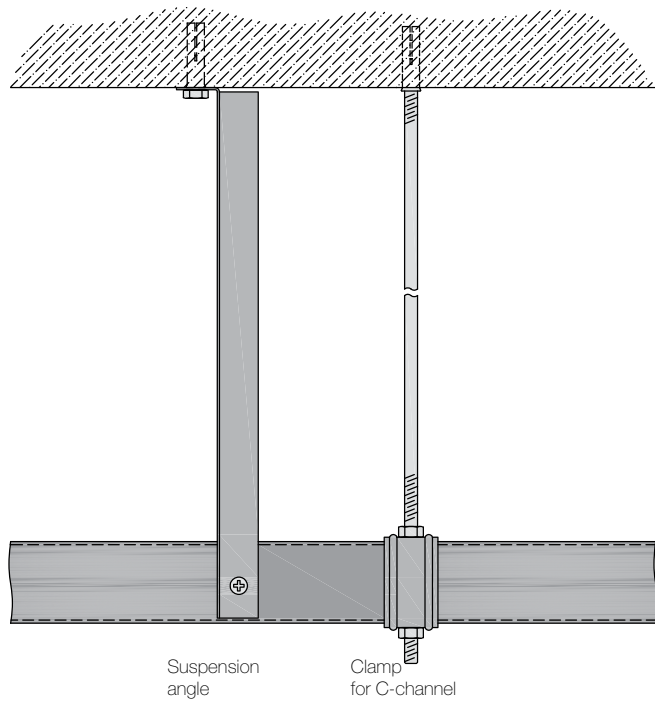
LONGITUDINAL-SECTION T-CLIP F with C-channel solution



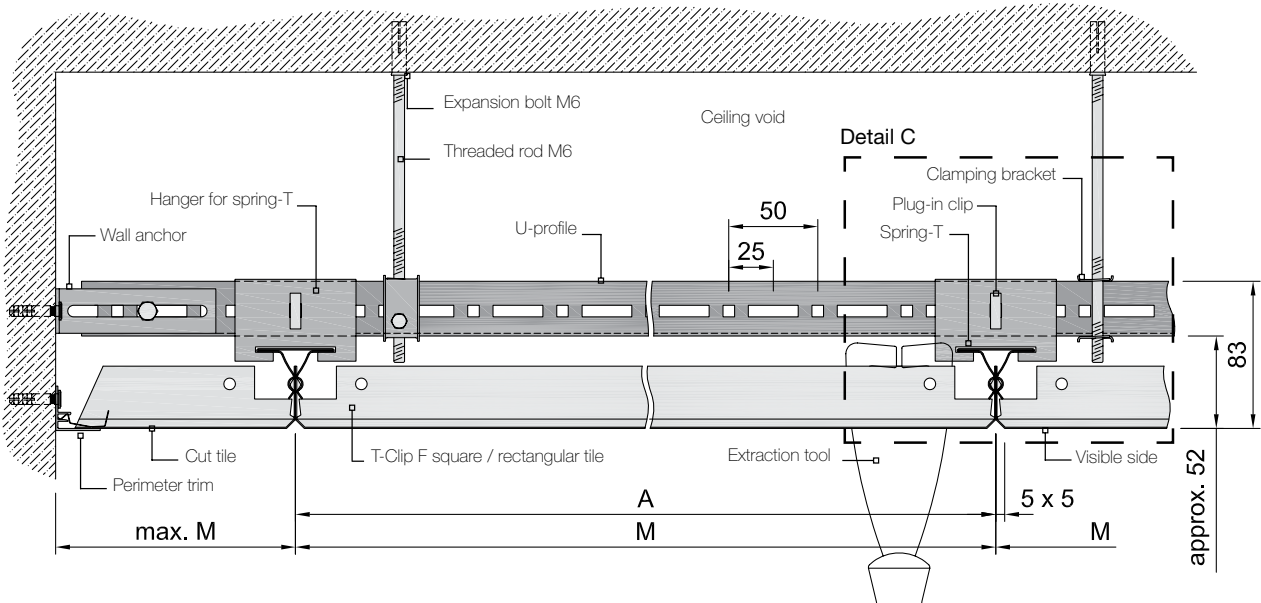
Item No.	Designation
BPC 3000G	C-channel
BPC 7140	Connector for C-channel
BPA 952G	Suspension angle
BPC2090A	Hanger for spring-T
BPM311191	Self-drilling screw 3.5x9.5 mm

Item No.	Designation
BPC 1801H	Spring-T
BPC 1805H	Connector for spring-T
BPC 1775A	Security clip
BPM 311046	Extraction tool

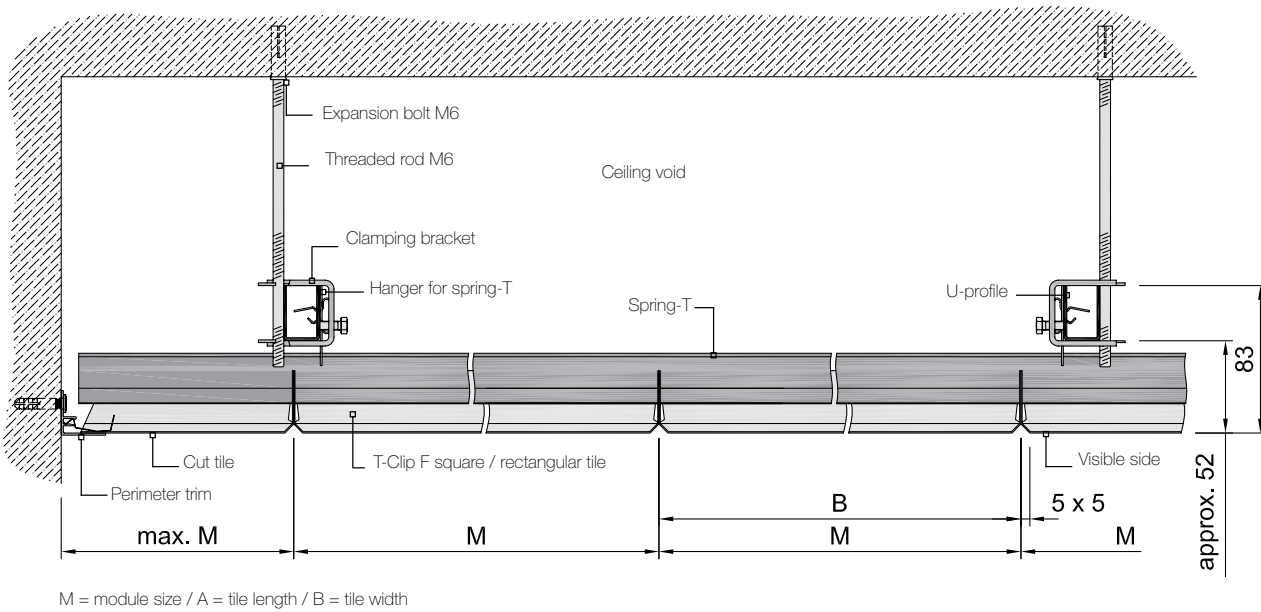
Detail F C-channel suspension methods



CROSS-SECTION T-CLIP F with U-profile system



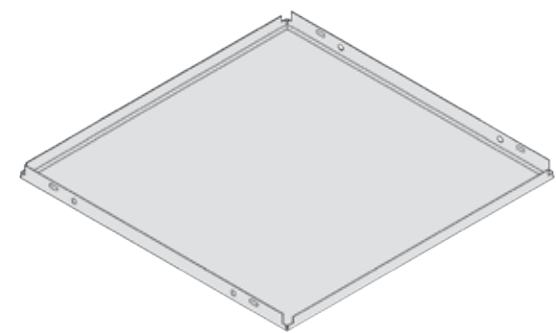
LONGITUDINAL-SECTION T-CLIP F with U-profile system



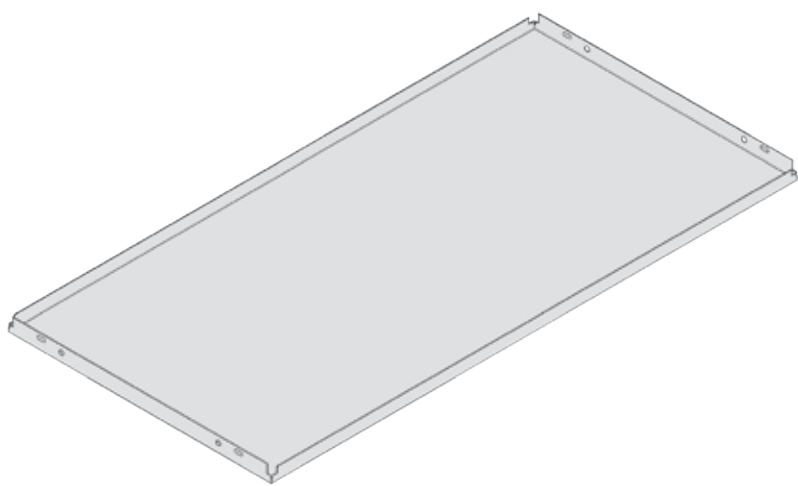
Item No.	Designation
BPM 300100	U-profile
BPM 300119	Connector for U-profile
BPM 300120	Plug-in clip
BPM 300140	Wall anchor
BPM 300121	Clamping bracket
BPM 311111	Expansion bolt M6 x 30 mm

Item No.	Designation
BPM 311099	Threaded rod M6 x 1000 mm
BPC2090A	Hanger for spring-T
BPC 1801G	Spring-T
BPC 1805H	Connector for Spring-T
BPC 1775A	Security clip
BPM 311046	Extraction tool

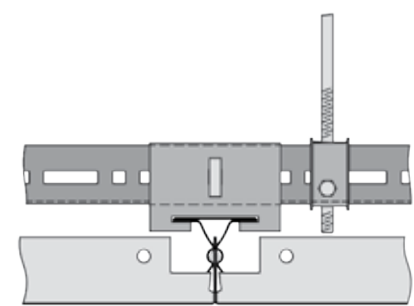
Detail A T-Clip F square tile



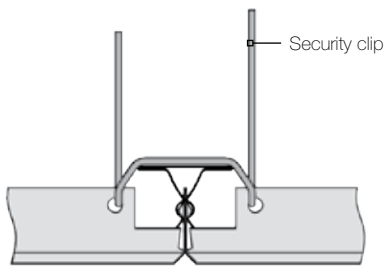
Detail B T-Clip rectangular tile option



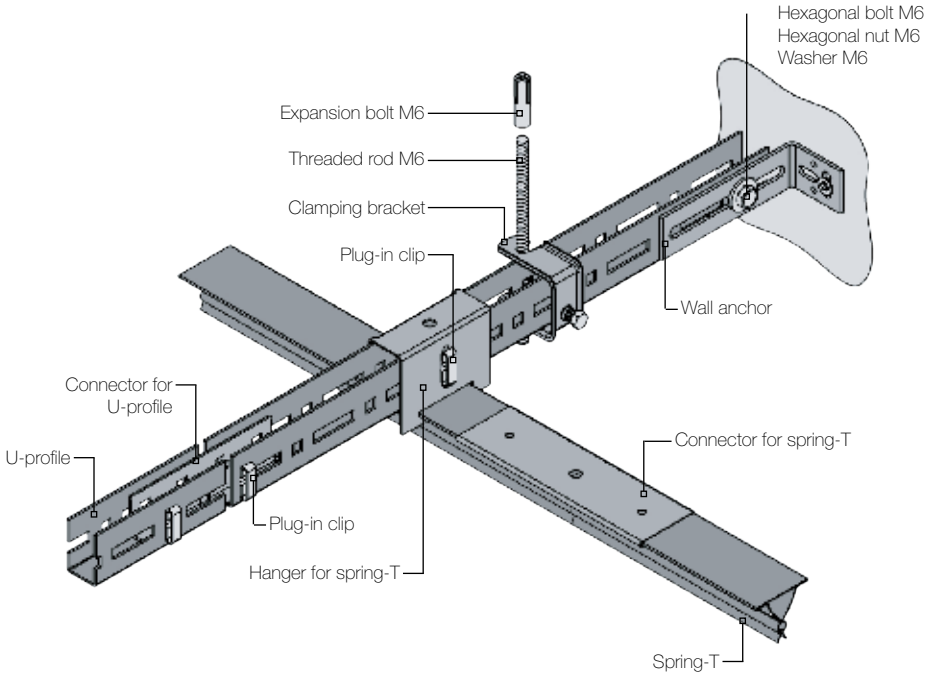
Detail C Square edged option T-Clip



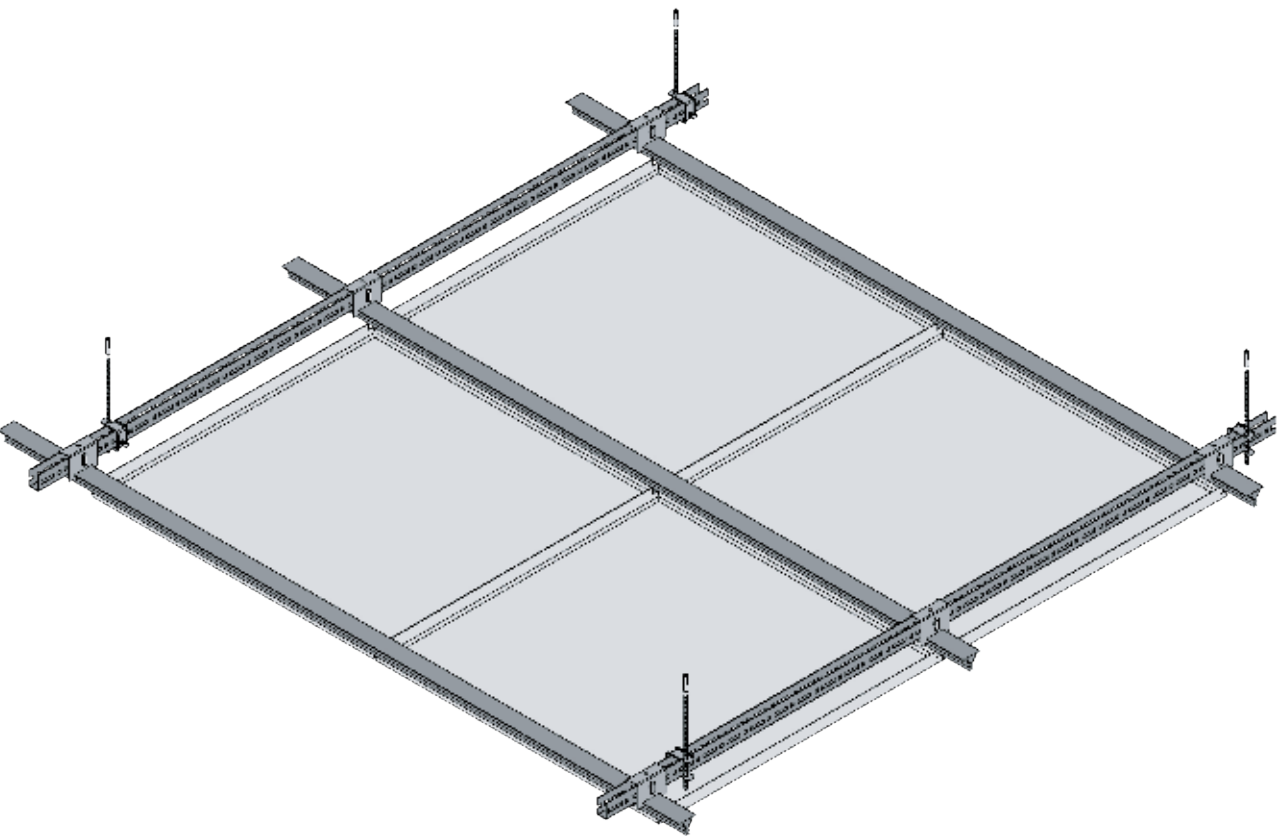
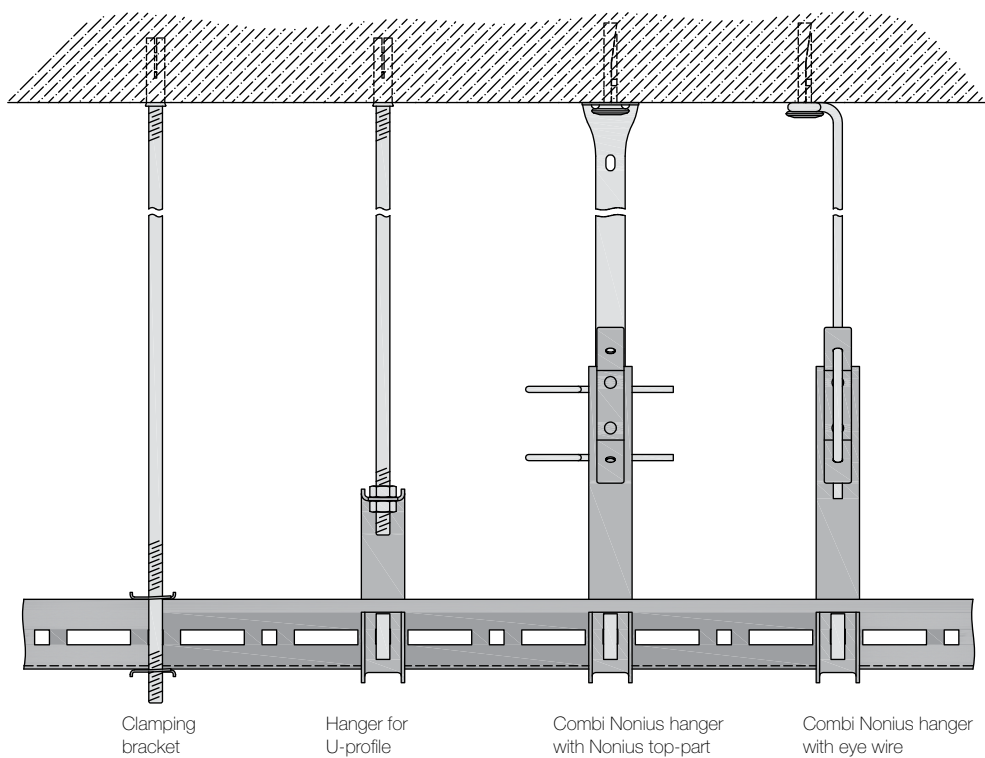
Detail D Security clip option



Detail E Grid system



Detail F U-profile suspension methods



Metal
product

CI/SfB

(35) Xy

11/2015

D-CLIP SYSTEM Floating Ceilings

Inspiring Great Spaces™

Armstrong®



BENEFITS

- Modular concept for Optimum flexibility
- Visually defines a space
- Freedom in design
- Modern absorber solution for exposed concrete ceilings

- Standard panels available with swing-down function Access

APPLICATION AREA

- A contemporary design and acoustic solution for all market segments.

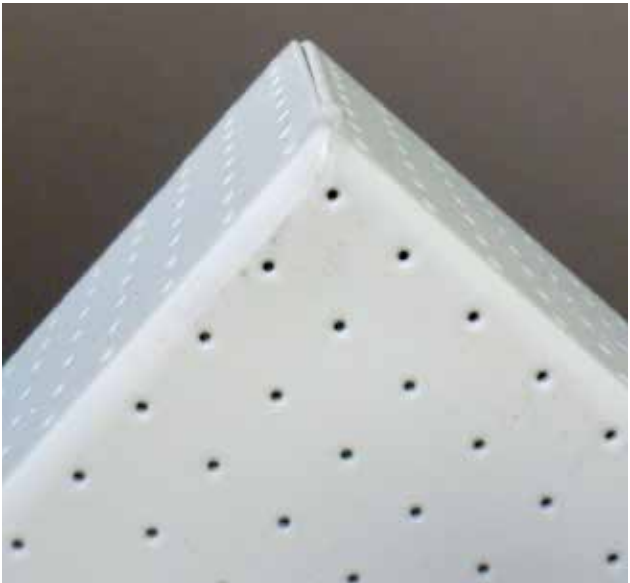
PROJECT: Akademia Obrony Narodowej (PL) : ARCHITECT: Kontrapunkt V-projekt

D-CLIP SYSTEM FLOATING CEILINGS

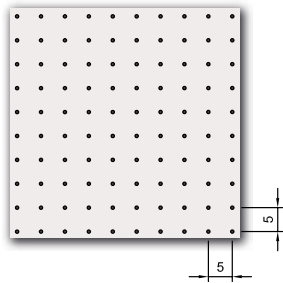
SPECIFICATION

System	Armstrong ceiling system D-Clip, Island clip-in solution with concealed grid, suspension height min. 100 mm
Panels material	galvanised steel sheet panel width up to 400 mm 0.6 mm panel width from 401 mm 0.7 mm (aluminium or further materials on request)
Coating	RAL 9010 pure white post-coated powder painted visible surface, other RAL or NCS colours on request
Standard panel execution	rectangular panel square edged long sides CA / DA (40 mm) not visible, with standard notching short sides E2 / F2 (40 mm) visible and closed, with optional swing-down function Access
End panel execution	rectangular panel square edged long sides CA / DA (40 mm) one side not visible, with standard notching one side visible and closed short sides E2 / F2 (40 mm) visible and closed
Single panel execution	rectangular panel square edged long sides CA / DA (40 mm) visible and closed short sides E2 / F2 (40 mm) visible and closed
Gap solution	0 mm gap, without gasket
Perforation	according to Armstrong range

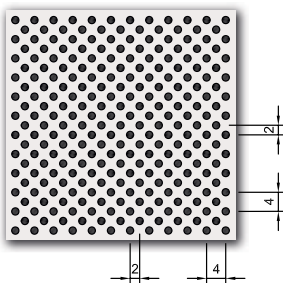
Acoustic inlay	Black non-woven acoustic fleece as standard. Other options available on request.
Configurable dimensions	panel length 600 - 2500 mm panel width 247 - 600 mm
Grid system	U-profile + DP12 A-Bar security clip optional available
Service integration	standard round or rectangular cut-outs according to customer needs



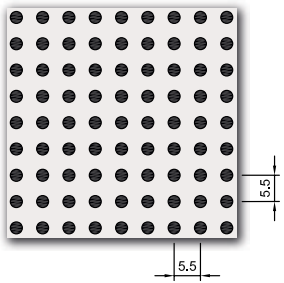
STANDARD PERFORATION PATTERNS



Extra Microperforation Rg 0701
Hole diameter: 0.7 mm
Open area: 1.5 %



Microperforation Rd 1522
Hole diameter: 1.5 mm
Open area: 22%



Standard Perforation Rg 2516
Hole diameter: 2.5 mm
Open area: 16%

Other perforation patterns available on request.

ACOUSTIC PERFORMANCE

Metal ceiling systems have been tested for their acoustic performance in terms of sound absorption, sound attenuation and sound reduction. These performance values will depend upon the perforation and the acoustic infill. Please contact us for more information on the available factory fitted acoustic options.

THERMAL CONDUCTIVITY

(λ) W/mK
50.0 : Steel
0.04 : Acoustic fleece

HUMIDITY EXPOSURE

Up to 95% RH (for short term exposure).

SERVICES INTEGRATION

Metal panels can be supplied with factory produced cut outs and apertures for the integration of building services equipment.

CLEANING

Dust should be removed from the painted surface by wiping with a clean soft cloth. More stubborn marks should be removed with a mild household detergent in warm water. Excessive use of water should be avoided. The use of abrasive cleaners of the painted surface is not recommended.

COLOUR

Standard colours

RAL 9010 20% gloss
Global White 12% gloss
RAL 9006 30% gloss
RAL 9007 30% gloss



Special colours

Other RAL and NCS colours available on request

QUALITY STANDARD

Armstrong is a certified **EN ISO 9001:2008** Quality Assured Manufacturer. All Armstrong ceiling and grid systems are manufactured to the relevant tolerances and quality standards appropriate to material. Where differences exist between this and any expressed or implied architectural specifications or requirements then Armstrong's manufacturing standards will prevail unless stated otherwise.

ENVIRONMENTAL

Our metal panels have an average of up to 30% recycling content. Our European manufacturing plants are certified to: **ISO 14001:2004 + Cor. 1:2009**. Armstrong is a member of TAIM (Technical Association of Industrial Metal Ceilings).

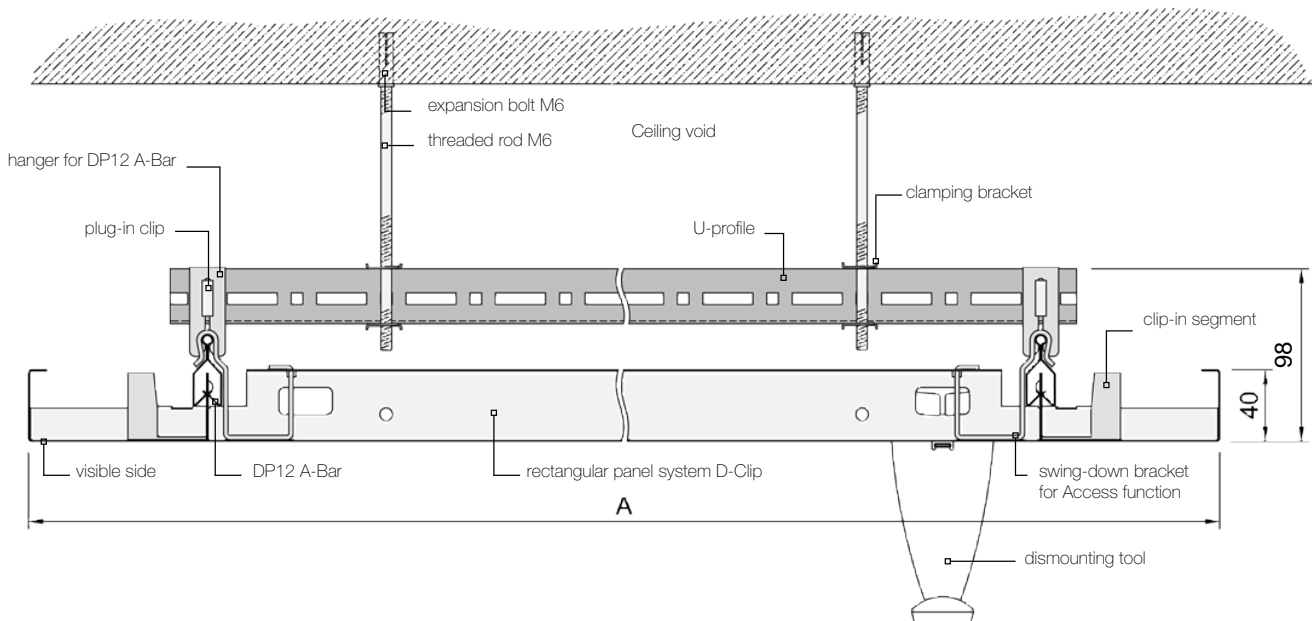
Sustainability		Acoustics						Safe & Healthy				
ISO 14021												
Recycled content (%)	Light reflectance (%)	α _w up to	Sound absorption class	NRC up to	Dncw / Dnfw (dB) up to	Rw (dB) up to	Fire reaction	Humidity Resistance (%) up to	Cleanability	Bioguard paint option	Scratch resistance	
Extra Microperforation Rg 0701 (2)	up to 30	80	0.55(L)	D	0.65	21	10	A2-s2, d0	95	wipeable moist cloth (3)	✓	✓
Microperforation Rd 1522 (2)	up to 30	65	0.70	C	0.70	16	6	A2-s2, d0	95	wipeable moist cloth (3)		✓
Standard Perforation Rg 2516 (2)	up to 30	70	0.75(L)	C	0.80	18	8	A2-s2, d0	95	wipeable moist cloth (3)		✓
Plain / Unperforated (1)	up to 30	85	0.10(L)	Not Classified	0.10	44	19	A1	95	scrubbable	✓	✓

(1) RAL 9010 colour, without acoustic inlay. (2) RAL 9010 colour, with black acoustic fleece glued on rear. (3) Wipeable moist cloth for perforated tiles with fleece. Scrubbable for plain tiles or perforated tiles without fleece.

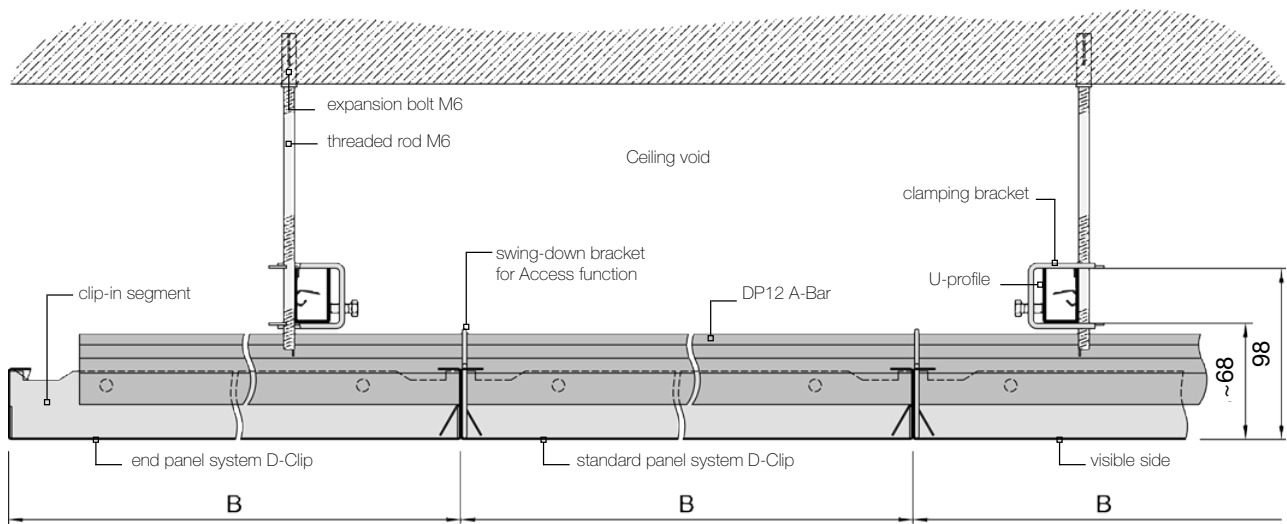


PROJECT: SWAREFLEX GMBH – Vomp ::::: ARCHITECT: BESTO ZT GmbH, Arch. Bernhard Stoehr

CROSS-SECTION



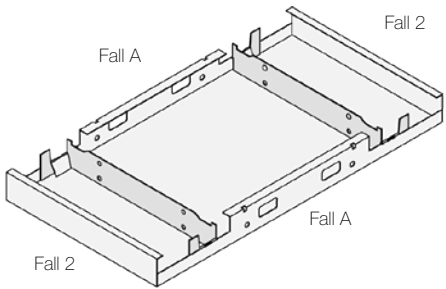
LONGITUDINAL-SECTION



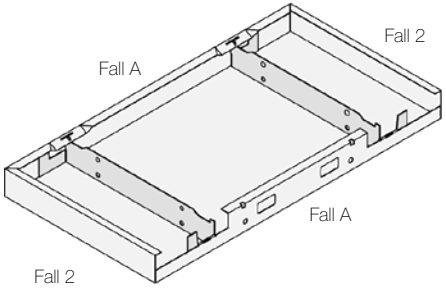
Item No.	Designation
BPM 300100	U-profile
BPM 300121	clamping bracket
BPM 311111	expansion bolt M6 x 30 mm
BPM 311099	threaded rod M6 x 1'000 mm
BPM 311022	DP12 A-Bar
BPM 300138	connection pin for DP12 A-Bar

Item No.	Designation
BPM300105D	hanger for DP12 A-Bar
BPM 300120	plug-in clip
BPM 300188	swing-down bracket for Access function
BPM 300106	security clip
BPM 311028	dismounting tool

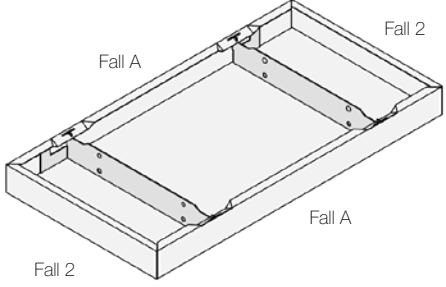
Detail A D-Clip standard panel



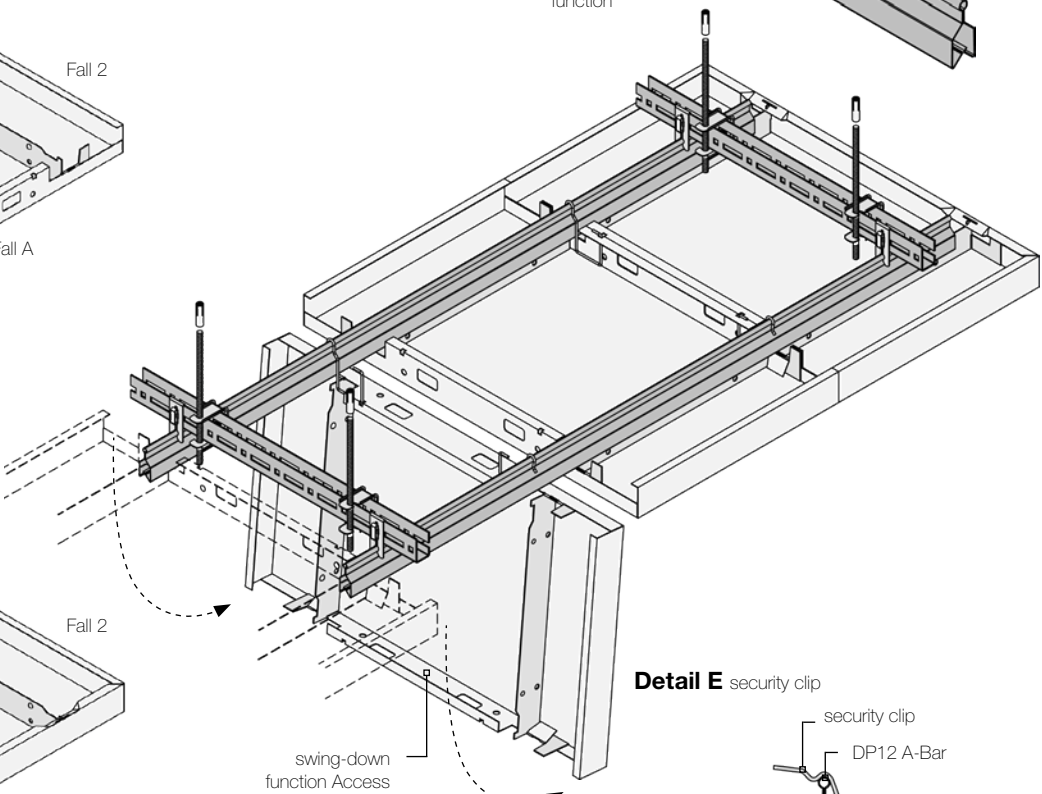
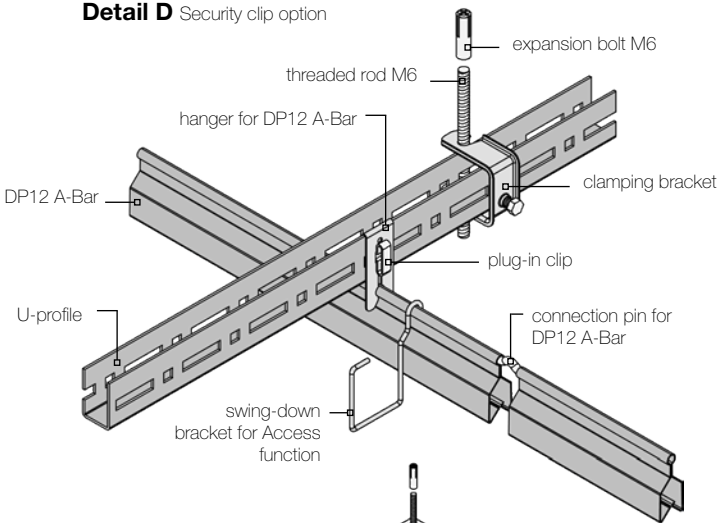
Detail B D-Clip end panel



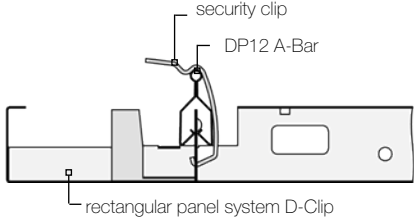
Detail C D-Clip single panel



Detail D Security clip option



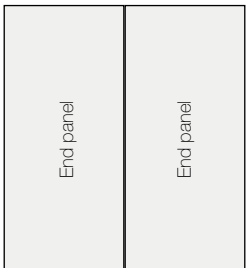
Detail E security clip



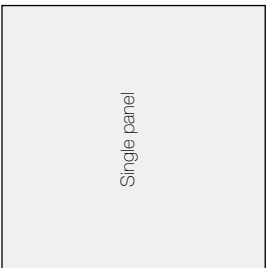
Layout options



Modular option 1



Modular option 2



Single panel option

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