

System F - Free Span Systems

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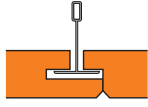

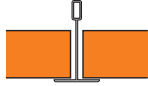

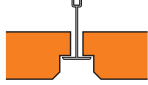
System F as a free span system which can span up to 2.50 m is our ideal solution for corridors. It is quick and efficient, both during installation and for maintenance as each individual tile can be demounted allowing access to the ceiling void, depending on construction variant. The tiles lie on perimeter trims at both ends, resulting in an extensive and homogenous appearance due to the low number of joints. The corridor is visually more open and has a high-quality look.

System F 1 - THERMATEX®

Product Range

Product	Thickness [mm]	Weight [kg/m ²]	Edge configuration	Module [mm]
Product programme THERMATEX®	THERMATEX® Plain	15 19	SK/SK* VT/SK (15 mm)* AW/SK GN/SK	300/1200*; 400/1200-1250*; 600/1200*; 312.5/1250*; 625/1250*; 300/1800-2500; 400/1800-2500; 312.5/1800-2500 * Special sizes on request
	THERMATEX® Fine Stratos	15 19		
	THERMATEX® Star	15 19		
	THERMATEX® Fine Stratos micro perforated	15 19		
	THERMATEX® Mercure	15 19	SK/SK* VT/SK (15 mm)* AW/SK GN/SK	300/1200*; 300/1500*; 400/1200-1250*; 600/1200*; 312.5/1250*; 625/1250*; 300/1800-2500; 312.5/1800-2500 * Special sizes on request
	THERMATEX® Alpha HD	19	AW/SK GN/SK	300/1200-1800
	THERMATEX® Acoustic	19		
	THERMATEX® dB Acoustic (24 mm)	24		
	THERMATEX® Plain Hygena	15 19	AW/GN	600/600; 625/625
	THERMATEX® Varioline Acoustic / Metal / Wood / Motif	19	AW/SK	300/1200-1800
	THERMATEX® Kombimetal	21	AW/SK GN/SK	300/1600; 300/1800; 300/2000; 300/2500

Edge Configurations

AW	
GN	
SK	
VT 24	
VT 15	

Material requirements/ key

The quantities and installation times stated are for guideline only. They do not allow for waste or project specific scenarios. Please pay particular attention to the maximum span tables for the perimeter trims (chapter, Perimeter trims) and the reinforcement profiles (chapter, Reinforcement profiles).

Product description		Unit	Module mm / requirement for every m ² ceiling											
			300 x 1600	300 x 1800	300 x 2000	300 x 2500	312,5 x 1600	312,5 x 1800	312,5 x 2000	312,5 x 2500	400 x 1600	400 x 1800	400 x 2000	400 x 2500
AMF mineral tiles	1	pcs.	2.08	1.85	1.67	1.34	2.00	1.78	1.60	1.28	1.56	1.39	1.25	1.00
T and Z main profile for variants F 1.2 and F 1.3	2	lin. m	3.34	3.34	3.34	3.34	3.20	3.20	3.20	3.20	2.50	2.50	2.50	2.50
U main profile for variant F 1.1	2	lin. m	6.68	6.68	6.68	6.68	6.40	6.40	6.40	6.40	5.00	5.00	5.00	5.00
Perimeter trim	3	lin. m	1.50	1.33	1.20	0.96	1.50	1.33	1.20	0.96	1.50	1.33	1.20	0.96
Installation time		min.	24	24	22	22	23	23	21	21	22	22	20	20

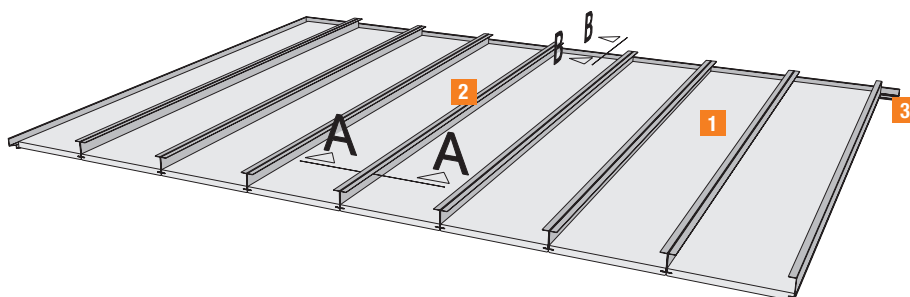
Note

For easy and simple installation of tiles and profiles, a minimum suspension height of 100 mm is required (for shadow edge perimeter trims) and up to 300 mm (L section perimeter trims). Please also consider the installation heights.

System F 1.1 - THERMATEX® GN (non) demountable

System variant F 1.1 uses a GN (slotted) edge tile. Depending on the reinforcement profile used, the tiles may be demountable or non-accessible. The required profile cross-sections (main profiles and perimeter trim) depend on the required span, as shown in the span tables in the chapters, Perimeter trims and Reinforcement profiles.

Figure 1.1



If Z or T profiles are used as reinforcement profiles, the tiles cannot be removed after installation as they are joined to the adjacent tiles via the profile (Figure 1.2 and 1.6).

If the tiles need to be demountable when using the GN edge, a U profile can be used (two profiles required per tile; Figures 1.3 and 1.7).

Perimeter trims

Regardless of the perimeter trim used, whether it be L-wall angle or shadow trim, it must be ensured that the tiles and the reinforcement profiles are supported on at least 2/3 of the horizontal leg of the perimeter trim (Figures 1.4 and 1.5).

Access

As shown in Figure 1.6, individual tiles can not be later removed. If access is required, U reinforcement profiles can be used and every tile and profile lifted as in Figure 2.7. Alternatively, variant F 1.2 can be used.

Figure 1.4 - section B-B

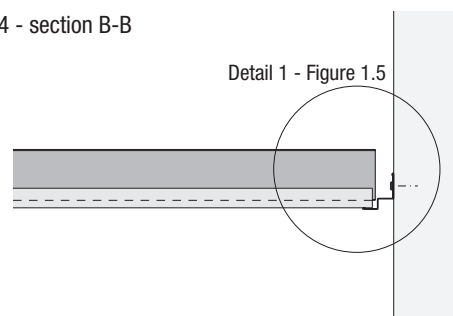


Figure 1.5 - Detail 1

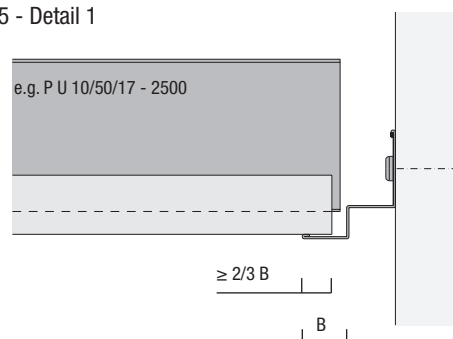


Figure 1.2 - Section A-A, non-accessible



Figure 1.3 - Section A-A, demountable (alternative)



Figure 1.6 - Application 1

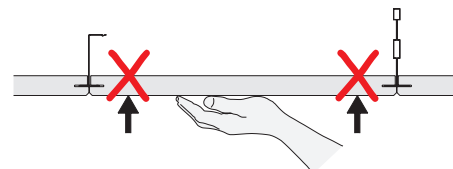
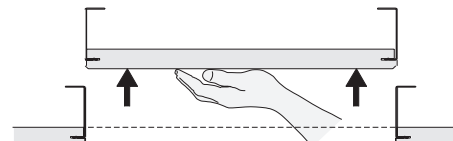


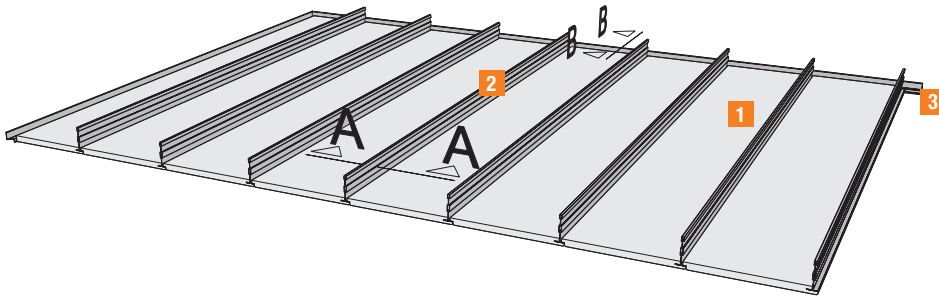
Figure 1.7 - Application 2



System F 1.2 - THERMATEX® AW demountable

System F 1.2 uses tiles with an AW (shiplap) edge detail on the long edges and is therefore fully demountable. The required reinforcement profiles and perimeter trims depend on the span, as shown in the span tables in the chapters, Perimeter trims and Reinforcement profiles.

Figure 2.1



Depending on the span, either Z or T reinforcement profiles are used (Figure 2.2).

Perimeter trims

Regardless of the perimeter trim used, whether it be L-wall angle or shadow trim, it must be ensured that the tiles and the reinforcement profiles are supported on at least 2/3 of the horizontal leg of the perimeter trim (Figure 2.4).

Access

As shown in Figure 2.5, individual tiles are fully demountable. The tiles are first lifted on the side with the rebated edge and can be slid or removed with the reinforcement profile.

Figure 2.2 - section A-A, demountable

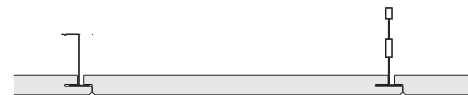


Figure 2.3 - section B-B

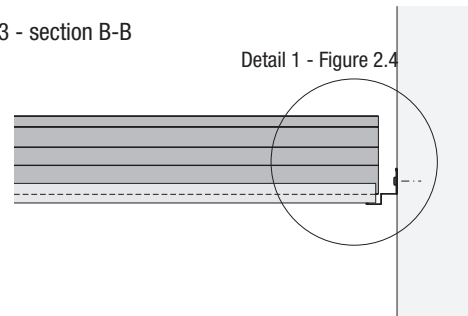


Figure 2.4: Detail 1

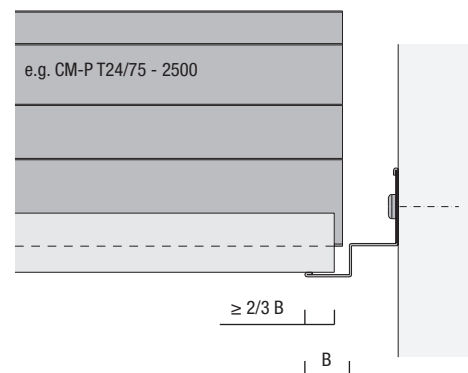
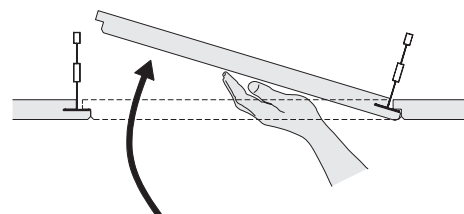


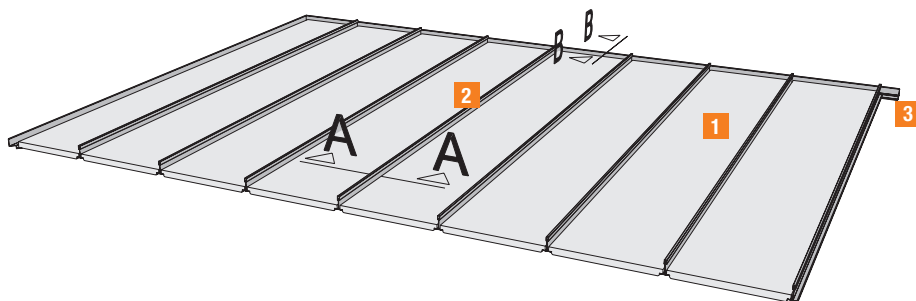
Figure 2.5 - Access



System F 1.3 - THERMATEX® VT demountable

System F 1.3 uses either a VT 15 or VT 24 (recessed) edge or an SK (square) edge on the long edges of the tile and is demountable. The required profile sections (main profile and perimeter trim) depend on the span, as shown in the span tables in the chapters, Perimeter trims and Reinforcement profiles.

Figure 3.1



T-sections are generally used as reinforcement profiles (Figures 3.2 and 3.3) as they provide a finished surface on the visible side.

Perimeter trims

Regardless of the perimeter trim used, whether it be L-wall angle or shadow trim, it must be ensured that the tiles and the reinforcement profiles are supported on at least 2/3 of the horizontal leg of the perimeter trim (Figures 3.4 and 3.5).

In the standard version (SK edge on short side) with VT 15 or VT 24 on the long edge, the supporting profile is higher and cannot rest directly on the perimeter trim. In this case a filler piece is required (Figure 3.6). As a special solution, tiles with all round VT edges can be supported directly on the perimeter trim (Figure 3.5). This requires either exact, parallel walls (same dimension over the entire corridor length) or cutting the tiles exactly including reforming the edges with milling/edge planing/painting.

Access

As shown in Figure 3.7, the individual tiles can be easily removed. The tiles can be individually lifted and slid / removed.

Figure 3.4 - section B-B

Edges: long side VT
short side SK

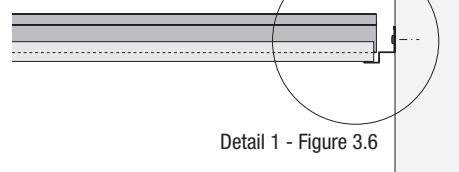


Figure 3.5 - section B-B (alternative)

Edges: long side VT
short side VT

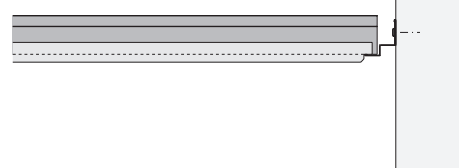


Figure 3.2 - section A-A, demountable with VT edges

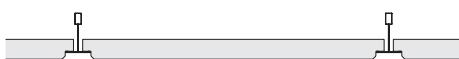


Figure 3.3 - section A-A, demountable with SK edges



Figure 3.6 - Detail 1

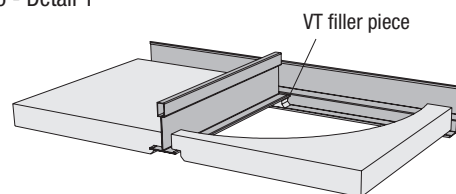
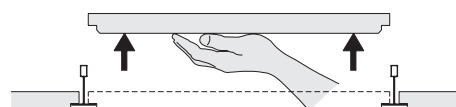


Figure 3.7 - access



Tiles

As shown in Figure 3.8, there are several possible edge configurations for the long and short sides of tiles. The standard configuration for the short edge is a square edge (SK). Only in special cases will this edge be produced in a recessed (VT) edge. The details of the long edges are shown in Figure 3.9 with the resulting widths (face and reverse side), based on an example module width of 300 mm.

Tiles	Thickness [mm]	Weight [kg/m ²]
THERMATEx® (standard)	15	4.0
	19	5.3
THERMATEx® Alpha HD	19	4.7
THERMATEx® Acoustic	19	4.6
THERMATEx® dB Acoustic	24	8.4
THERMATEx® Kombimetal	21	9.5
THERMATEx® Symetra	19	5.3

Please consult the price list for the full range of available formats, some of which may be subject to minimum order quantities.

Figure 3.8

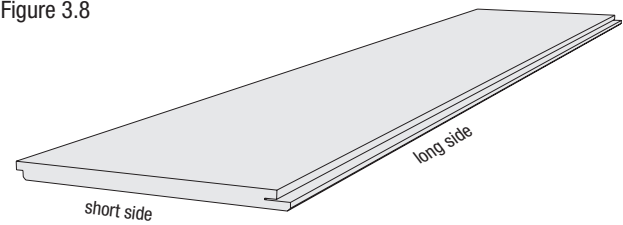
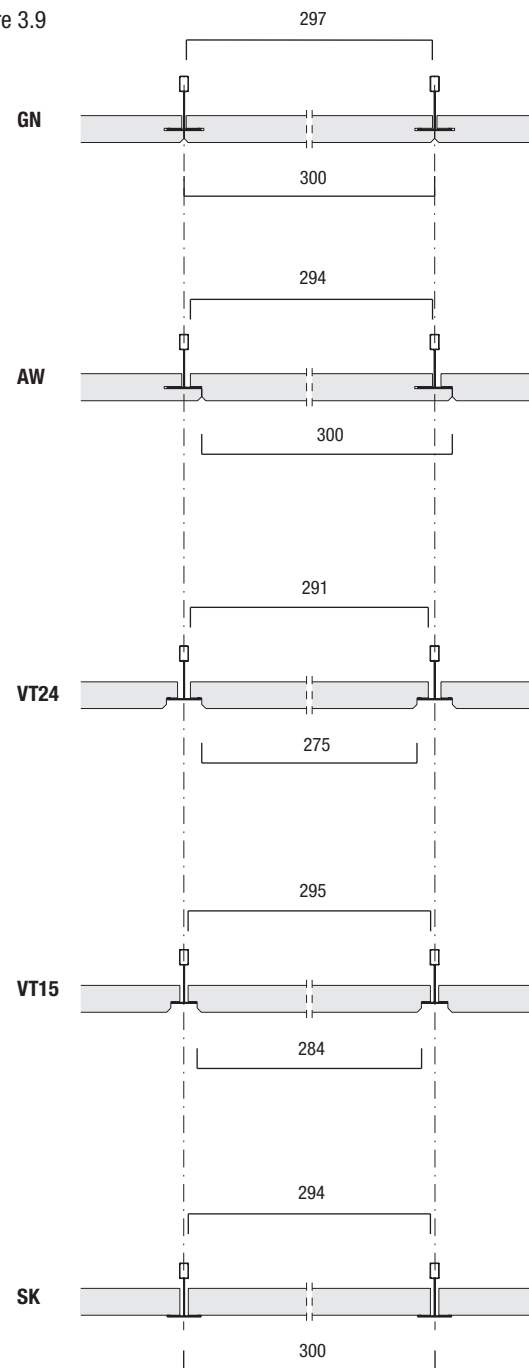


Figure 3.9



dimensions in [mm]

Perimeter trims

Fixing

For connecting to surrounding walls (solid or light-weight partition) and supports, a wide range of white, galvanised profiles are available.

Figure 3.10 - RW L19/24, 3000

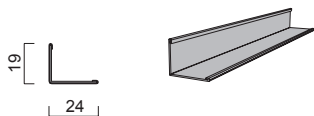


Figure 3.11 - RW L24/24, 3000

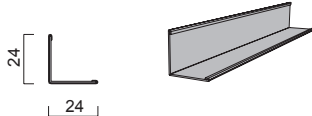


Figure 3.12 - RW L31/31, 3050

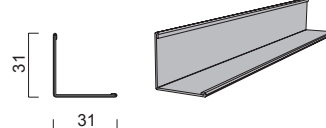


Figure 3.13 - RW L40/30, 4000

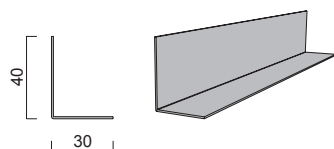


Figure 3.14 - SRW 25/15/8/15, 3000

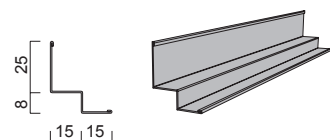


Figure 3.15 - SRW 25/15/10/15, 3000

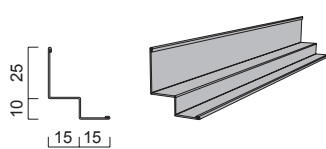


Figure 3.16 - SRW 20/20/20/20, 3050

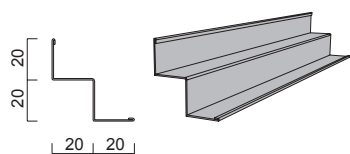


Figure 3.17 - SRW 42/20/23/24, 3750

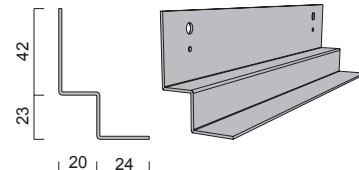
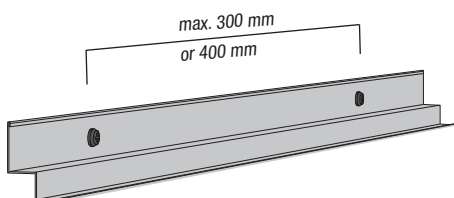


Table 3.1 shows which profiles can be used depending on the tile type, weight and format.

The perimeter trims should be fixed using approved plugs and screws. For solid walls, the fixings should be at maximum 400 mm centres ($d \leq 0.7$ mm: max. 300 mm). Light-weight trims (less than 0.7 mm) should be fixed at maximum 300 mm centres. Connections to light-weight partition walls can be made around the partition studs (max. 625 mm centres) with at least one screw and in between with a threaded bolt ($d \leq 0.7$ mm: min. two screws/ third point). Screws without a flat head are unsuitable for fixing as incorrect installation can lead to deformation of the perimeter trim. The perimeter trim should be mitred at the corners.









Figure 3.18



Span table for perimeter trims

Irrelevant of the element width, there are maximum permissible spans and therefore maximum loading of the perimeter trim for different element thicknesses.

Table 3.1

Profile		Weight [kg/m²]		
		5.0	6.0	9.5
		max. span [mm]		
RW L 19/24 d=0.5 mm		1700	1500	1200
RW L 24/24 d=0.5 mm		1700	1500	1200
RW L 31/31 d=1.0 mm		2500	2500	2500
RW L 40/30 d=1.0 mm		2500	2500	2500
SRW L 25/15/8/15 d=0.5 mm		1400	1300	-
SRW L 20/20/20/20 d=0.7 mm		1800	1500	1200
SRW L 25/15/10/15 d=1.0 mm		1900	1600	1300
SRW L 42/20/23/24 d=1.5 mm		2500	2500	2500

Reinforcement profiles

Profile cross sections

Not all reinforcement profiles are suitable for all edge configurations. For example, U profiles can only be used for system F 1.1 (GN edge configuration) and Z profiles can not be used for system F 1.3 with SK and VT edge configurations, as their unfinished surface would be visible.

Figure 3.19 - P U12/38/12, 2000
GN edge

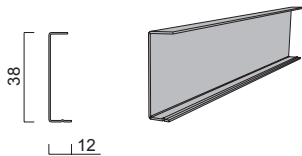


Figure 3.20 - P U10/50/17 - 2500
GN edge

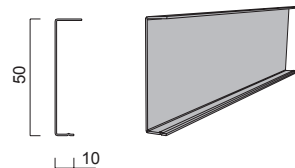


Figure 3.21 - P U10/74/17 - 2500
GN edge

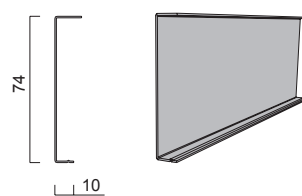


Figure 3.22 - T24/38 - 1800
GN, AW, SK, VT edge

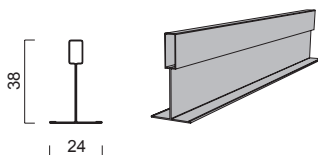


Figure 3.23 - DXE 24ZG - 2500
GN, AW, SK, VT edge

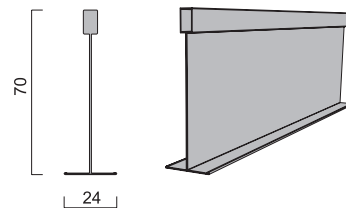
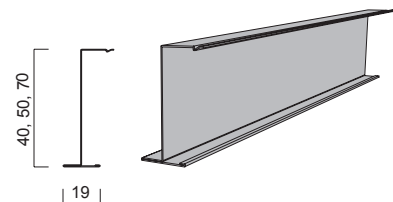


Figure 3.24 - P Z19/40, 50, 70 - 2500
GN, AW edge



T24/38 profiles

T24/38 main runner profiles are often used. As a general rule, main runners from AMF system C with corresponding punching for hangers etc. are used. The fire expansion notch (Figure 3.25) represents a considerable weak point in the profile and therefore shouldn't be used.

The installation of the reinforcement profile with hangers (Figure 3.26) is a possible option. Usually a T24/38 profile with central suspension (element length < 2.50 m, width < 400 mm) is sufficient.

However, several points need to be considered:

- Due to fixing the profiles, demounting is considerably harder
- The risk of damage to the tile by the hanger increases, especially with hook/eye wire hangers
- For installation of the hangers, open access to the soffit is required
- The additional work increases the installation time

Due to the above reasons, it is recommended to install a free span system **without** hangers.

Figure 3.25 - T24/38 main runner

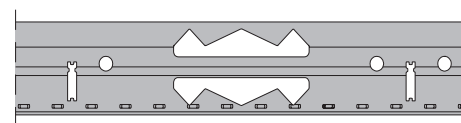
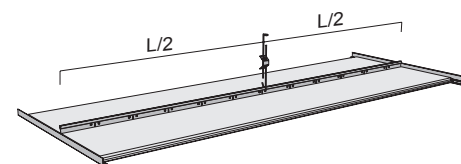


Figure 3.26 - central hanger



Span table

According to the system and reinforcement profile used, there is a maximum permissible span dependent on tile thickness.

Table 3.2















Tile width [mm]				300 and 312.5 mm					
Weight [kg/m ²]				4.0	5.0	6.0	7.5	8.5	9.5
Profile		Height [mm]	Weight [kg/lin. m]	max. span [mm]					
DONN 24/70		70	0.75	2500	2500	2460	2360	2310	2260
T24/38		38	0.35	1530	1460	1400	1340	1300	1270
P Z19/70		70	0.55	2470	2440	2360	2260	2200	2150
P Z19/50		50	0.45	2160	2070	2000	1910	1850	1810
P Z19/40		40	0.40	1870	1790	1720	1650	1600	1560
P U10/50		50	0.35	2350	2250	2160	2060	2000	1960
P U12/38		38	0.45	2200	2110	2040	1940	1890	1850

Table 3.3

Tile width [mm]				400 mm					
Weight [kg/m ²]				4.0	5.0	6.0	7.5	8.5	9.5
Profile		Height[mm]	Weight [kg/lin. m]	max. span [mm]					
DONN 24/70		70	0.75	2500	2440	2360	2260	2200	2150
T24/38		38	0.35	1450	1380	1330	1260	1230	1200
P Z19/70		70	0.55	2430	2320	2240	2140	2080	2020
P Z19/50		50	0.45	2060	1970	1900	1810	1760	1720
P Z19/40		40	0.40	1780	1700	1640	1560	1520	1480
P U10/50		50	0.35	2240	2130	2050	1950	1900	1850
P U12/38		38	0.45	2100	2000	1930	1840	1790	1750

Note

The reinforcement profiles must be installed over the full length of the elements/tiles, shorter profiles can not be butted together. Please note that not all possible combinations of edge configuration, tile length and thickness are available as stock items. The full range of available formats can be found in the price list. The load tables allow for a maximum 1.0 mm deflection of the profile. The standard EN 13964 class A1 ($l/500 \leq 4$ mm) allows for a deflection of 4 mm, we recommend a much lower deflection allowance for aesthetic reasons.

Should you require an optimised solution, please contact our technical department.

Installation height

Installation height with shadow trim

For systems F1.1, F 1.2 or F 1.3 there is a minimal installation height due to the use of perimeter shadow trim (e.g. 25x15x10x15 mm). By slightly lifting on one side (depending on version) and displacing it, every tile can be installed or removed (Figure 3.27).

Minimum installation for perimeter shadow trim:

Element length ≤ 1500 mm: Height H approx. 100 mm

Element length > 1500 mm: Height H approx. 150 mm

Installation height with L wall angle

Installation height using L-section perimeter trims. For systems F1.1, F 1.2 or F 1.3 there is a significantly larger installation height using L wall angle (e.g. 31 x 31 mm) than shadow trim. To remove the tile, one edge has to be raised high enough to allow the opposite edge to be removed from the perimeter trim (Figure 3.28).

Longer elements require more installation height.

Minimum installation for L wall angle:

Element length ≤ 1500 mm: Height H approx. 250 mm

Element length > 1500 mm: Height H approx. 350 mm

Figure 3.27

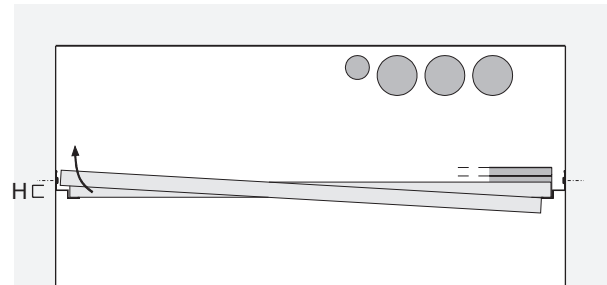
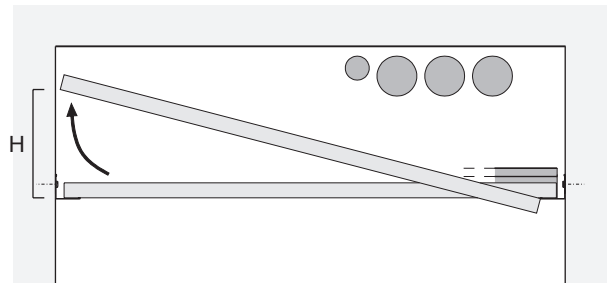


Figure 3.28



General

Packaging

To take out the tiles, open the packaging on all sides and then remove completely (Figure 3.29).

Handling

Care must be taken when handling full cartons as well as individual tiles. They must not be thrown, dragged or knocked. The cartons and tiles must not be placed or stored on their edges or corners.

Due to the length of each tile, it is essential to handle and install the tiles using both hands. If the tiles are supported using only one hand (in the middle), there is a significant risk of breakage (Figure 3.30 and 3.31).

The individual tiles should always be handled with clean gloves (white material).

Cut tiles

All AMF mineral tiles can be cut without difficulty using a standard Stanley knife (Figure 3.32). When doing so, always place the tile on a clean, even surface and use a suitable guide (metal bar).

AW edge configuration

Unlike SK, VT and GN edges, tiles with AW edges have two different long edges. When preparing the first (cut) tile, ensure that the rebated edge is removed (Figure 3.3). In the case of the last tile (also cut), the grooved side should be removed.

Figure 3.29

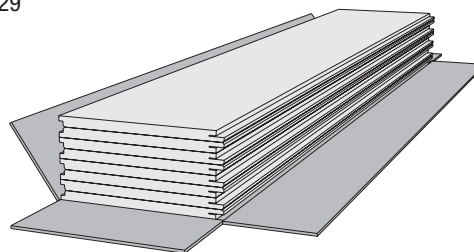


Figure 3.30

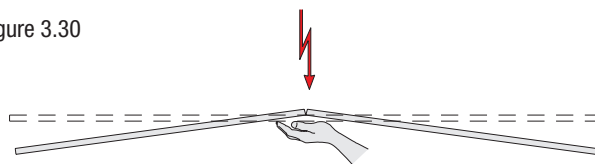


Figure 3.31



Figure 3.32

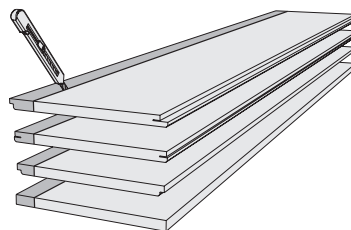
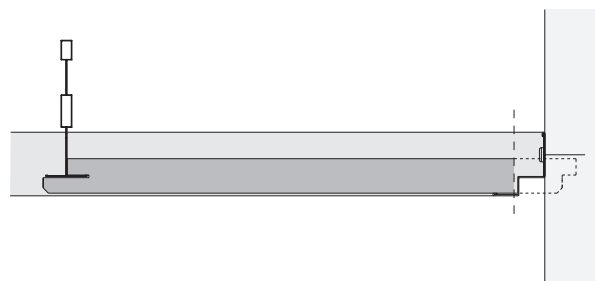


Figure 3.33



Corridor layout / ceiling symmetry

Layout

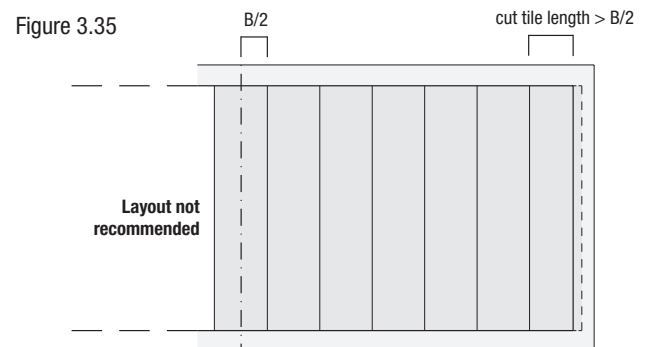
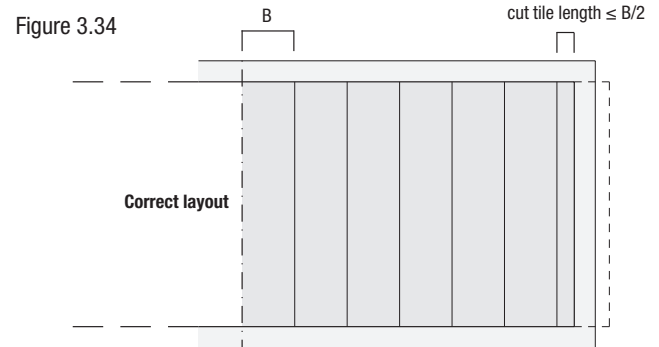
Starting from the middle of the corridor, the layout continues in element widths = B. The example shown (Figure 3.34) results in a very small cut tile length.

Note

If the last cut tile is smaller than half a tile width ($\leq B/2$), the layout is not recommended for optical reasons.

Correction

It is aesthetically more pleasing and more efficient to install a ceiling with larger cut tiles. If, as described above, the ceiling is set out from the middle of the corridor but results in an unfavourable layout, the ceiling layout should be moved over by half a module width. This always results in a cut tile larger than half a tile width (Figure 3.35).

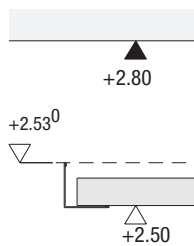


Installation height of perimeter trim

Due to the different possible combinations of perimeter trim, e.g. L-wall angle or shadow trim and edge configurations (Figure 3.36), there are different installation heights of the perimeter trim, for the same ceiling height, i.e. to the lower edge of the suspended ceiling (2.50 m in the example shown).

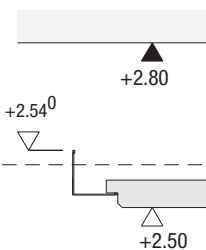
Figure 3.36

Edge configurations
SK, GN, AW

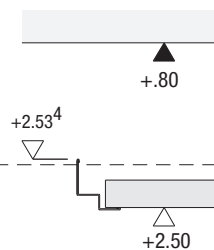


L-wall angle 31x31 mm

VT

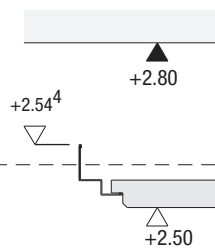


SK, GN, AW



Shadow trim 25x15x10x15 mm

VT



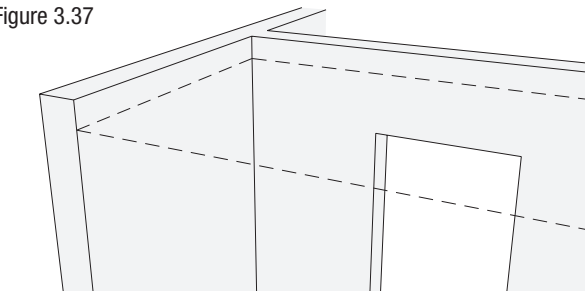
Installation guidelines

Please read the preceding chapters before continuing. In this chapter, detailed explanations and instructions for correct installation of the system are provided.

Marking out (Figure 3.37)

Before proceeding with the installation, mark the desired installation height on the surrounding structural elements (walls, supports...) all the way around the corridor (upper edge of perimeter trim).

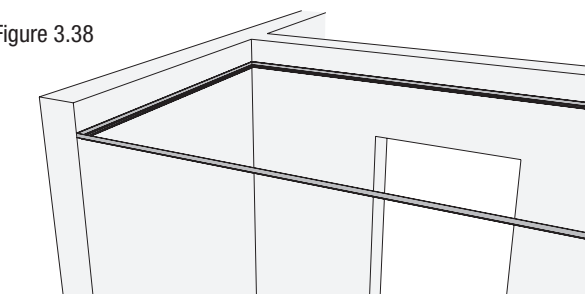
Figure 3.37



Perimeter trims (Figure 3.38)

The perimeter trim should be fixed as described in the chapter, Perimeter trims (fixings, centres...). Corners are generally mitred.

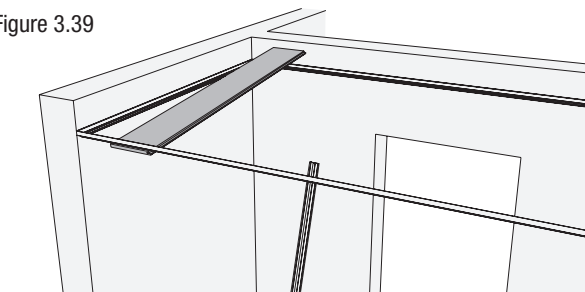
Figure 3.38



First element (Figure 3.39)

Depending on the corridor dimensions, a cut tile is usually installed first. For system F 1.2, the AW edge should be facing the installer.

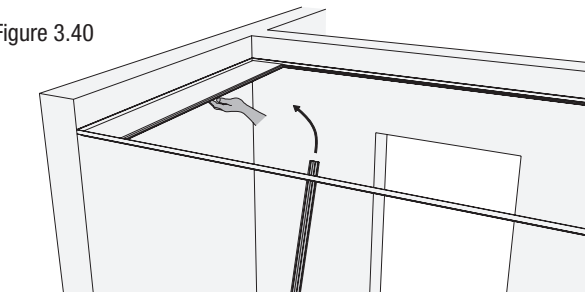
Figure 3.39



Handling (Figure 3.40)

Never leave the tile unsupported from perimeter trim to perimeter trim without a reinforcement profile; keep the reinforcement profile within reach as the tile is installed, then support the tile with one hand as the profile is inserted with the other hand.

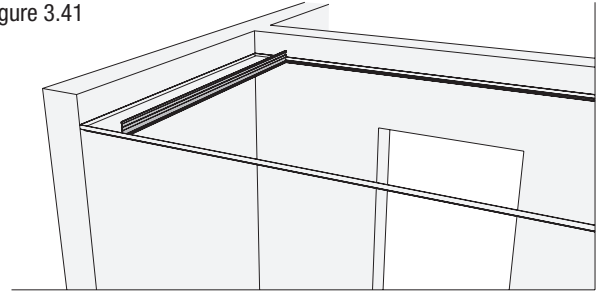
Figure 3.40



Reinforcement profiles (Figure 3.41)

The dimensions of the reinforcement profiles are according to the span table in the chapter, Reinforcement profiles.
Irrelevant which system is used, all tile long edges must be supported by a profile (pushed in, lay on...)

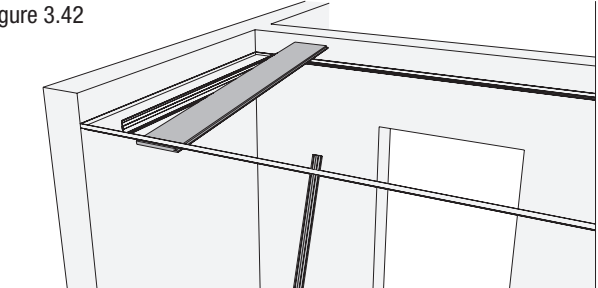
Figure 3.41



Continued elements (Figure 3.42)

Tiles are continuously installed with their associated reinforcement profiles. Please ensure no tile is installed, without a reinforcement profile.

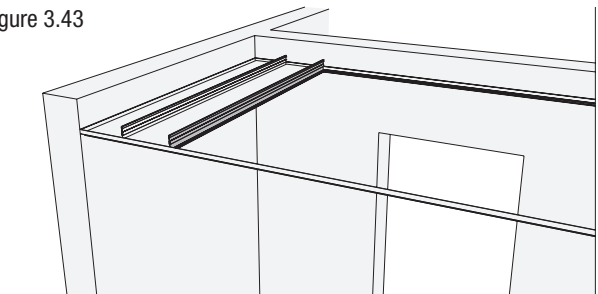
Figure 3.42



Continued elements (Figure 3.43)

The individual tiles should only be gently pressed against one another without force. This makes it easy to remove tiles in the future.

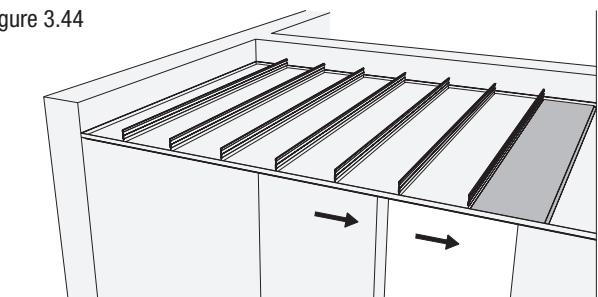
Figure 3.43



Continued elements (Figure 3.44)

Install the remaining tiles and reinforcement profiles. The last element will also be a cut tile.

Figure 3.44



Lighting / Additional loads

General

Additional loads should generally be independently supported from the soffit. No loading should be applied to the tiles. For integrated elements such as downlights, loudspeakers, etc. reinforcement is required on the reverse side to transfer the load to the grid (additional hangers on the grid). Exceptions include loads less than 0.3 kg for which no additional measures are required. For screw-mounted items, always provide a patress of suitable material.

Recessed lighting

All recessed lights should be supported from the soffit by a minimum of two additional hangers to avoid any additional loading to the tiles or reinforcement profiles. To correctly centre the light on a tile with an AW edge type, consideration must be given to the small offset between the face side and reverse side.

Section A-A:

The maximum aperture size cannot be defined precisely. However, we recommend a residual width of minimum 80 mm (Figure 3.46) and a residual length of minimum 200 mm (Figure 3.47).

The larger the aperture, the more susceptible the tile will be to damage and breakage. Careful handling of the tile is therefore essential.

Figure 3.45

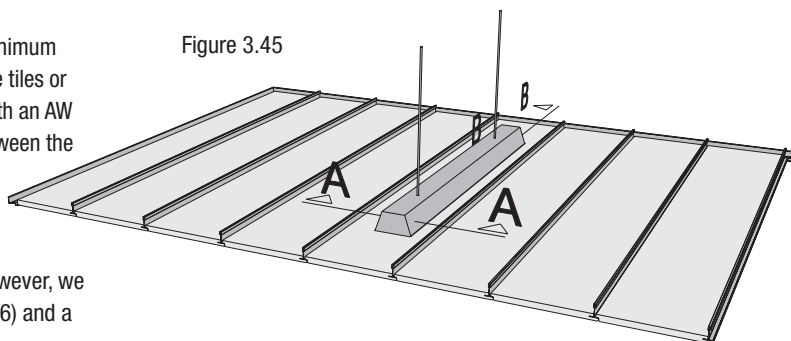


Figure 3.46 - section A-A

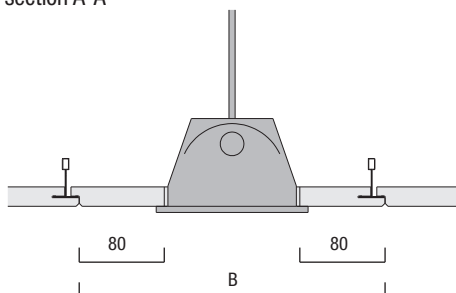
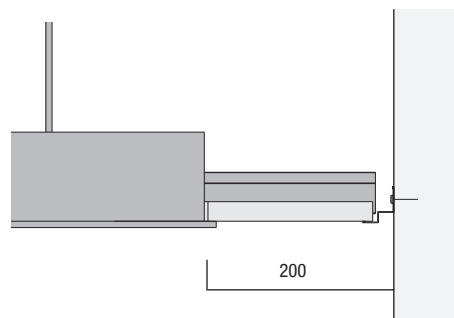


Figure 3.47 - section B-B



Downlights / loud speakers

As with the requirements for lighting, smaller fixtures should also be suspended directly from the soffit. A single additional hanger per item is generally sufficient.

Figure 3.48

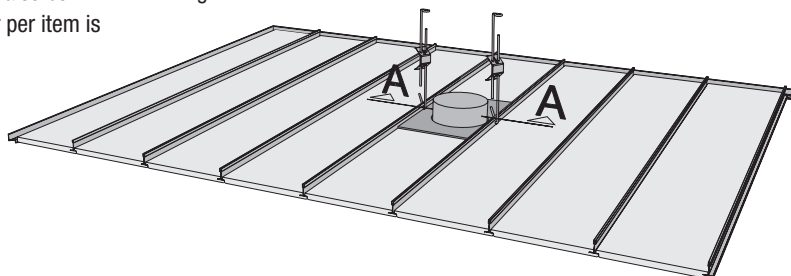
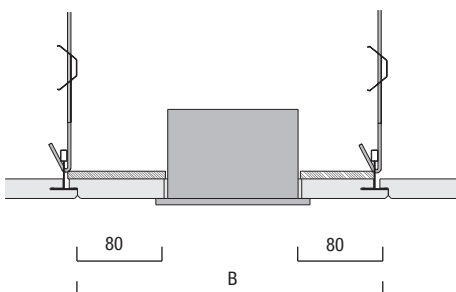


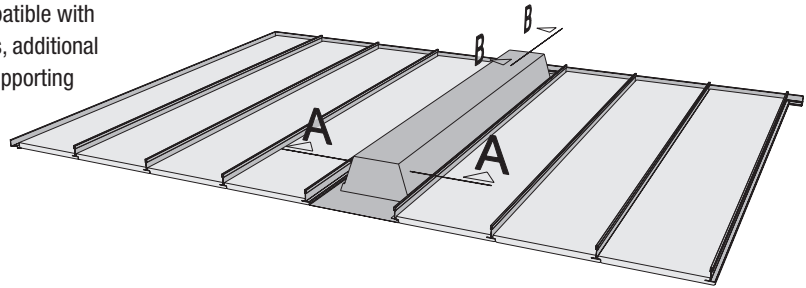
Figure 3.49 - section A-A



Modular lighting

Various manufacturers offer suitable lights in the same format as the ceiling tiles (Figure 3.50). Please ensure that these are compatible with the selected edge configuration. Just as with recessed lights, additional hangers should be used. The only exception to this is self-supporting light systems.

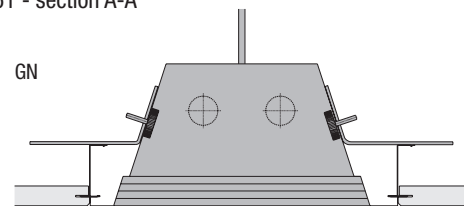
Figure 3.50



GN edge configuration (Figure 3.51)

For fine adjustment or to accurately align the lights, pre-fitted retaining clips can be used. However, always ensure load transfer by attaching additional hangers either directly to the light or the reinforcement profiles.

Figure 3.51 - section A-A

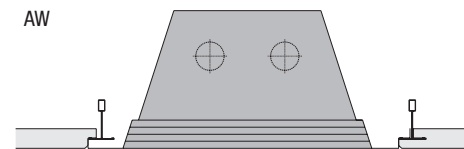


AW edge configuration (Figure 3.52)

Self-supporting light elements

An asymmetrically positioned housing is required when using the AW edge type. There are, however, lights available for this application that are self-supporting and can therefore be placed from perimeter trim to perimeter trim like a tile without the need for additional hangers or reinforcement profiles.

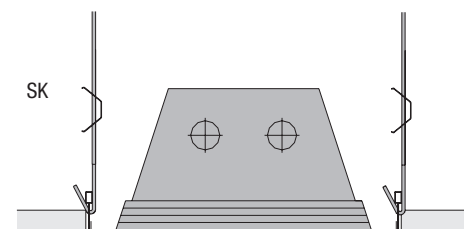
Figure 3.52 - section A-A



SK edge configuration (Figure 3.53)

As a lay-in installation, load transfer must be ensured with additional hangers fixed directly to the light or to the reinforcement profiles.

Figure 3.53 - section A-A



Special configurations

Plasterboard margin

Besides their visual appeal, plasterboard margins also offer practical advantages:

- wall irregularities can be easily compensated for
- projections or recesses can be easily integrated
- cut tiles can be avoided
- corridor widths over 2.50 m can be easily accommodated

Note

Regardless of the perimeter option used, the perimeter trim should always be fixed to the metal substructure.

Margin with L-wall angle

A simple solution for a flush connection is to use L-wall angles (Figure 3.54). The angle must be fixed to the CD-profile.

Margin with shadow trim

As an alternative to the flush connection, the ceiling surface can be accentuated by using a shadow trim (shadow gap) possibly mounted with a height offset (Figure 3.55). A layer of plasterboard should also be inserted vertically.

Margin with adjustable wall bracket and L-wall angle

Where the margin cannot be fixed to the soffit, it is possible to incorporate an adjustable wall bracket (Figure 3.56). The adjustable bracket allows wall irregularities to be easily compensated for. The wall brackets must be installed at maximum 625 mm centres (on stud profiles in the case of light-weight partition walls). The perimeter trim should be screwed to the cover plate of the wall bracket. Due to the larger fixing centres, only perimeter trims with a thickness of more than $d \geq 1.0$ mm should be used.

Margin with adjustable wall bracket and shadow trim

Installation as above, however, an additional vertical plasterboard strip is used (Figure 3.57).

Figure 3.54 - Margin with L-wall angle

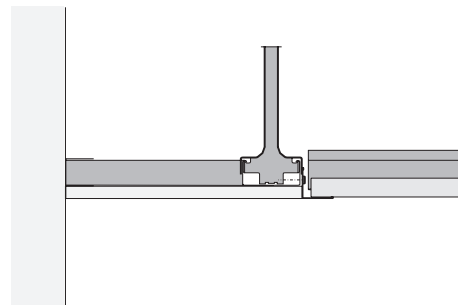


Figure 3.55 - Margin with shadow trim

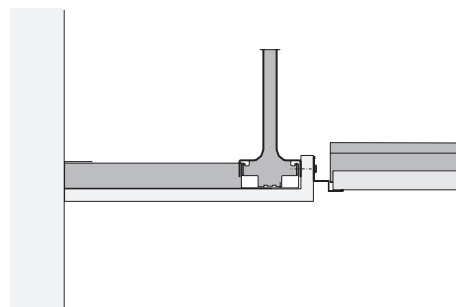


Figure 3.56 - Margin with wall bracket

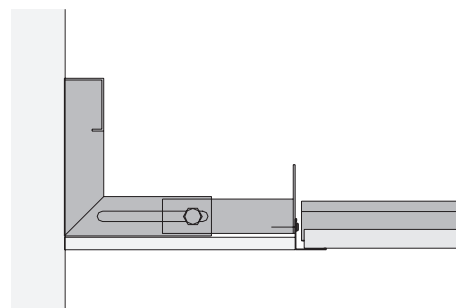
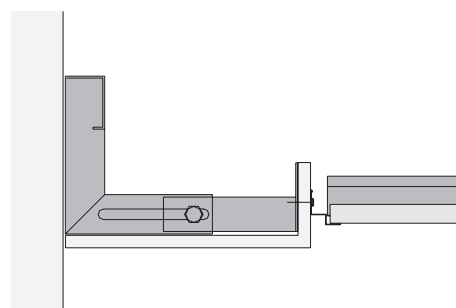


Figure 3.51 - Margin with wall bracket and shadow trim

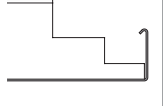
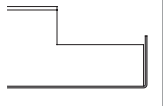


System F 4.1 - MONDENA® corridor system

Product Range

	Product	Thickness [mm]	Edge Configurations	Module [mm]
Product programme MONDENA®	Plank tile	0.6	Hook-on system	L = 800 - 3000, B = 250 - 625
	Plank tile	0.6	Lay-in system	

Edge Configurations

Hook-on system	
Lay-in system	

- No substructure necessary
- Flexible shadow gap
- Simple installation and demounting
- No tools required for demounting
- Almost 100% of the ceiling void can be used for installations (ventilation ducts, cable trays, wiring)
- Very low system height
- The system is suitable for hallways, corridors and traffic areas
- For ceiling projects with very little space in the ceiling void and low construction heights

System overview

System F, spanning up to 3.00 m, is an ideal solution for corridors. The corridor tiles are hooked-on to horizontal Z-profiles at both ends, so no further hangers are required. Therefore, almost 100% of the ceiling void can be used, especially with the hook-on system. The optical shadow gap gives the corridor an elegant optic with a high quality, modern look.

Figure 4.1 - hook-on system

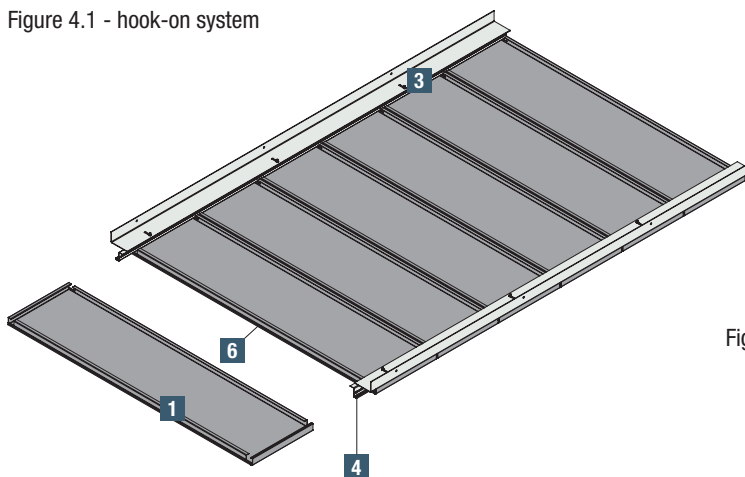
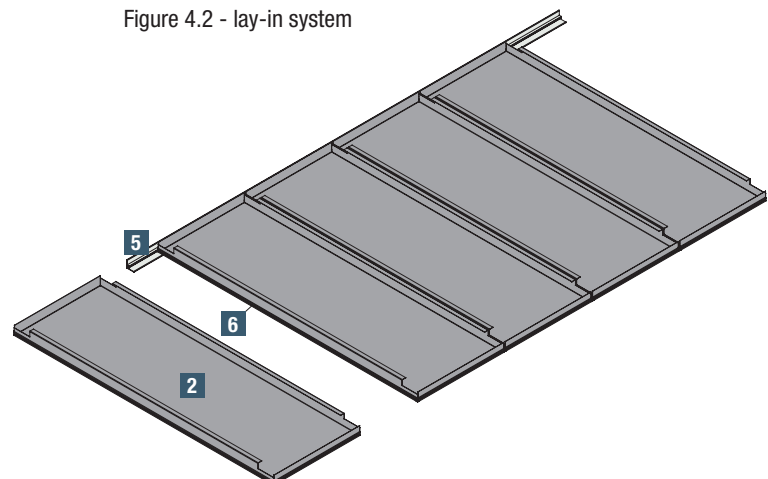
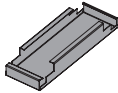
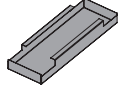
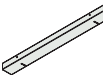

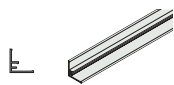


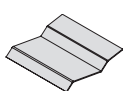


Figure 4.2 - lay-in system



Material requirements/ key

The quantities and installation times stated are for guideline only.
They do not allow for waste or project specific scenarios.

Product			Description	kg / packaging	PU	Requirement per m ² ceiling
1	Plank tile for hook-on system		Galvanised steel 0.6 mm	--	--	As required in pcs.
2	Plank tile for lay-in system		Galvanised steel 0.6 mm	--	--	As required pcs.
3	L – wall angle with slotted holes for hook-on system		Galvanised steel 1.5 mm 30 x 50 mm slotted hole 6.5 x 30 mm, hole 6.0 mm Length: 4000 mm	approx. 76.50	10 pcs.	As required in lin. m.
4	Z – hook-on profile for hook-on system		Galvanised steel 1.25 mm 19 x 38 x 15 x 7 mm slotted hole 6.25 mm x 25 mm Length: 4000 mm	approx. 27.00	10 pcs.	As required in lin. m.
5	Perimeter trim for lay-in system (hook-on system at corridor ends)		Aluminium 1.5 mm RWL 25/25 with groove for spring clip Length: 4000 mm	20,00	10 pcs.	As required in lin. m.
	Shadow trim for lay-in system (hook-on system at corridor ends)		Aluminium 1.5 mm SRW 25/20/20/25 with groove for spring clip Length: 4000 mm	22.73	5 pcs.	As required in lin. m.
6	Sealing strip / joint strip		9 x 3 mm 1x long side factory adhered	--	25 m/roll	--
	Spring clip (optional with cut tiles)		Aluminium 0.5 mm 38 x 40 mm	22.00	100 pcs.	2 - 4 pc./m ²

Plank tiles**Standard edges hook-on system:**

Short side 1:

H= 30 mm, C= approx. 14 mm inward edge with downward hooks

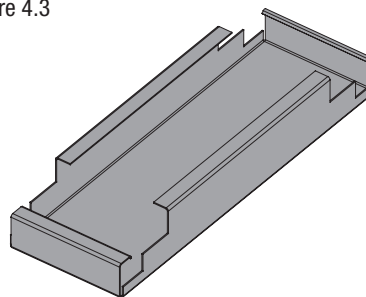
Short side 2:

H= 30 mm with inward hooks approx. 5 mm

Long sides:

H= approx. 35 - 45 mm, according to structural requirements, C= approx. 13 mm

Figure 4.3

**Standard edges lay-in system:**

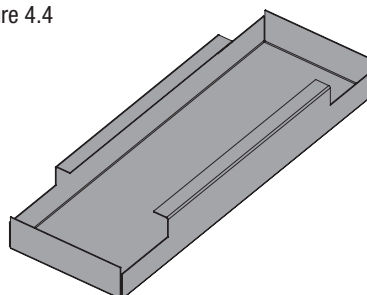
Short sides:

L-edges approx. 30 - 40 mm according to structural requirements

Long sides:

C-edges approx. 35 - 45 mm according to structural requirements, C= approx. 13 mm

Figure 4.4

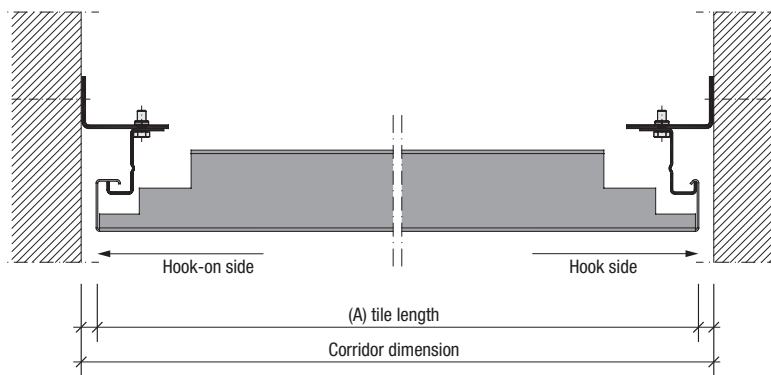


Technical properties

System	Plank tile for free span system - corridor
Material	Galvanised steel 0.6 mm (Aluminium 0.7 mm on request)
Dimensions	Length: 800 - 3000 mm, width: 250 - 625 mm
Edges hook-on system	Short side 1: inward hook, Short side 2: inward C-edge with downward hook, Long sides: C-edge
Edges lay-in system	Short side: L-edge approx. 30 - 40 mm according to structural requirements. Long sides: C-edge approx. 35 - 45 mm according to structural requirements, C = approx. 13 mm
Edge configuration	square edge, sealing strip 9 x 3 , 1x long side factory adhered
Perforation	Standard perforation pattern Rg 1613, Rg 2516, Rd 1625, Rd 3022 (other perforation patterns on request)
Coating	Powder coated pure white similar to RAL 9010, matt, gloss level 20%, other RAL colours on request
Light reflection	approx. 90 % pure white similar to RAL 9010, matt, gloss level 20%, as per DIN EN 5036 (standard)
Fixtures and fittings	Light apertures and loud speaker apertures available on request

Determining tile length for hook-on system with shadow gap

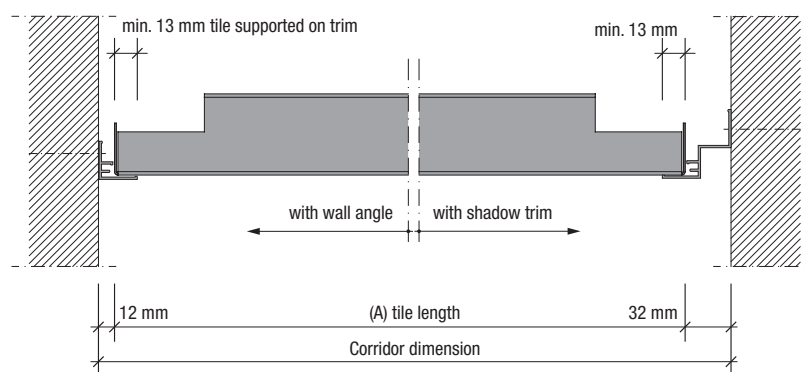
Figure 4. 5



Clear measurement (corridor width wall to wall) minus the required shadow gap (e.g. 10 mm + 10 mm = 20 mm) = tile length A

Determining tile length for lay-in system

Figure 4. 6

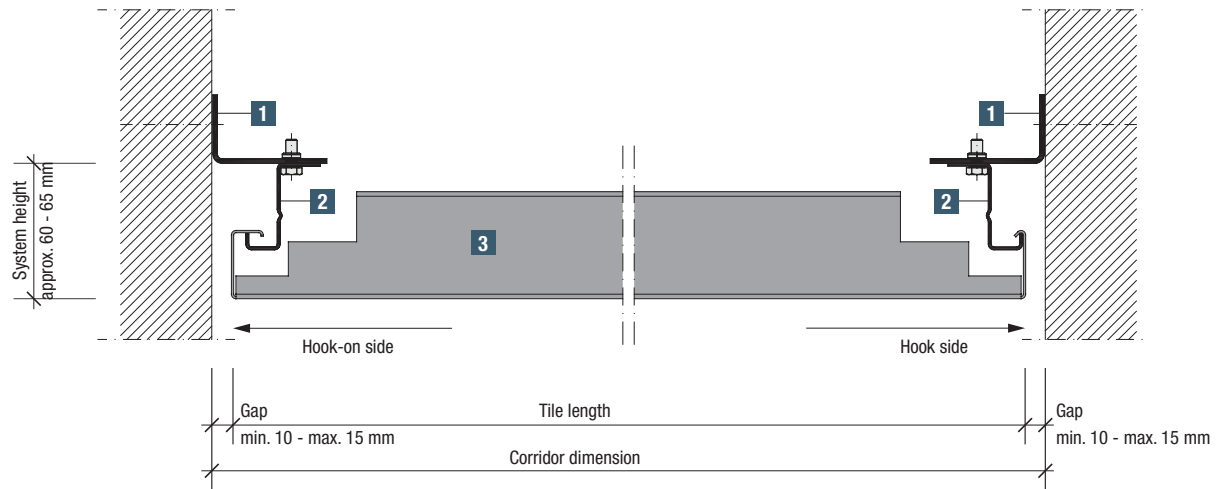


Clear measurement (corridor width wall to wall) minus 12 mm of the leg of the L-wall angle per side = tile length A

When using shadow trim SRW 25/20/20/25, 32 mm per side is deducted from the corridor width.

Installation guidelines - corridor system, hook-on version

Figure 4. 7



1. Mark the correct position or height for the L-angle profile **1** (30x50x1.5 mm) using a laser on both corridor walls and insert plugs.
Note the system height of approx. 60 mm!
2. Fix the L-angle profile **1** to the corridor walls using suitable screws. Centres should be approx. 600 mm
3. Fix the Z hook-on profile **2** (19x38x15x7 mm), with the open side to the wall (see diagram), using 6 mm cylinder head screws with metric thread together with suitable nuts and washers to the installed L-angle profile **1**.

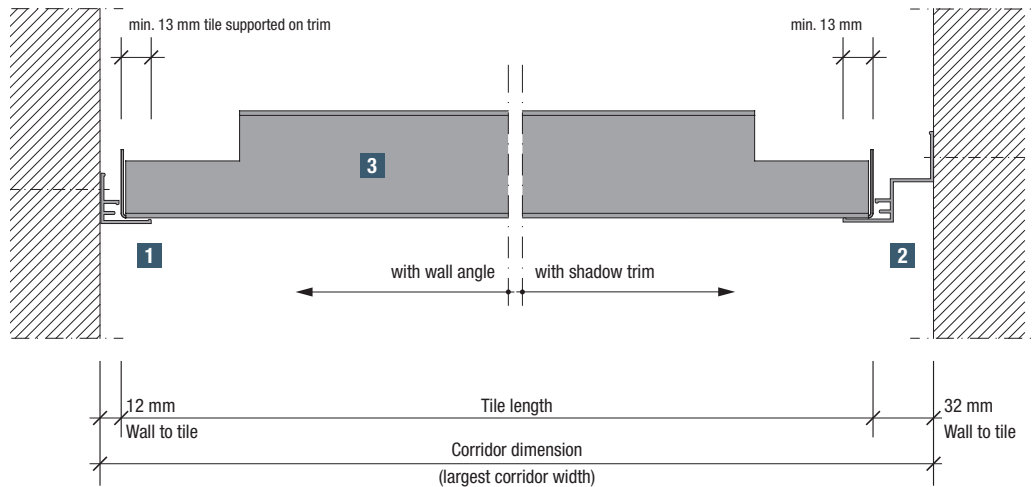
Note:

To ensure easy hooking on and off of the tiles **3**, on the hook side the minimum distance from the wall to the front edge of the Z-profile **2** is approx. 12 mm. Correct installation results in a visible gap of 10 mm!
On the hook-on side, the minimum distance from the wall to the front edge of the Z-profile **2** is approx. 15 mm. The Z-profile **2** should be positioned as central as possible in the hook-on edge (see diagram, above).

4. Hook-on the corridor tiles **3** one after the other.
 - 4.1 Hold the tiles **3** as horizontal and level as possible and push the tile on the hook-on side up and slide over the Z-profile.
 - 5.1 Continue to hold the tiles **3** horizontally and level and slide to the opposite hook side until it stops (do not tilt) and push up until it stops and then slide over the Z-profile **2**. The tile is lay on the Z-profile **2** by again lightly pushing in the direction of the hook-on side.

Installation guidelines - corridor system, lay-on version

Figure 4.8



Mark the correct position or height of the L-angle profile **1** or shadow trim **2** using a laser on both corridor walls and insert plugs. Centres should be approx. 600 mm

Note the minimum ceiling void heights (Table 4.1).

Fix the wall angle **1** or **2** to the corridor wall using suitable screws.

Note:

Observe the minimum support area of the tile on the perimeter trim!

Insert the corridor tiles **3** one after another.

Cut tiles at the perimeter must be fixed with perimeter wedges as spring-clips at the perimeter trim.

Fixtures or fittings (e.g. downlights, etc.) cannot be directly supported on the tile. Separate suspension is required.

Table 4.1

Tile length	Height H	
	RW - wall angle	SRW - shadow trim
600	100	60
700	105	60
800	105	60
900	110	60
1000	115	60
1100	120	60
1200	120	60
1250	120	60
1300	135	70
1400	135	70
1500	140	70
1600	140	70
1700	140	70
1800	140	70
1900	145	70
2000	150	70
2100	150	70
2200	150	70
2300	155	70
2400	155	70
2450	155	70
2500	165	80
2600	170	80
2700	170	80
2750	170	80
2800	180	85
2900	180	85
3000	180	85

Figure 4.9 - Variant RW-wall angle

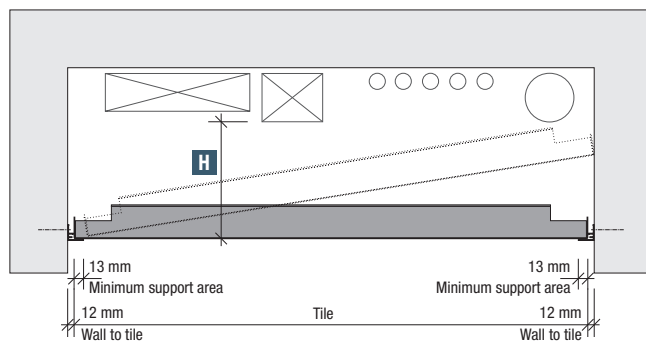


Figure 4.10 - Variant SRW-shadow trim

