



emco rolling foot grids

emcobad

emcobau

emcoklima

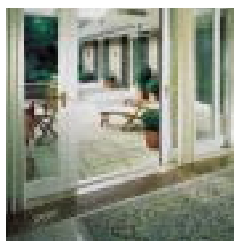
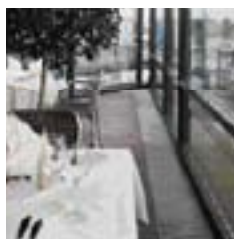
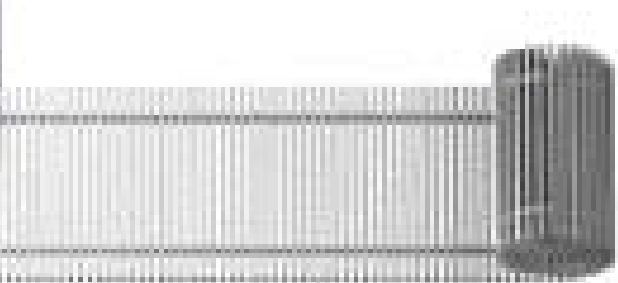
EMCO

Rolling foot grids and linear foot grids

Rolling foot grids have been manufactured by emco for more than 3 decades for the most diverse fields of application with specific construction details to this end.

Upon closer inspection it becomes clear that there are marked advantages, which make the product safer and more durable. Advantages, which have grown from our experience and which are demonstrated by the most appropriate material selection, by the design and modern manufacturing methods.

In the face of all these advantages the benefits to ensure the maximum effectiveness of progressive energy saving is to the fore.



emco **rolling foot grids**
emco **linear foot grids**

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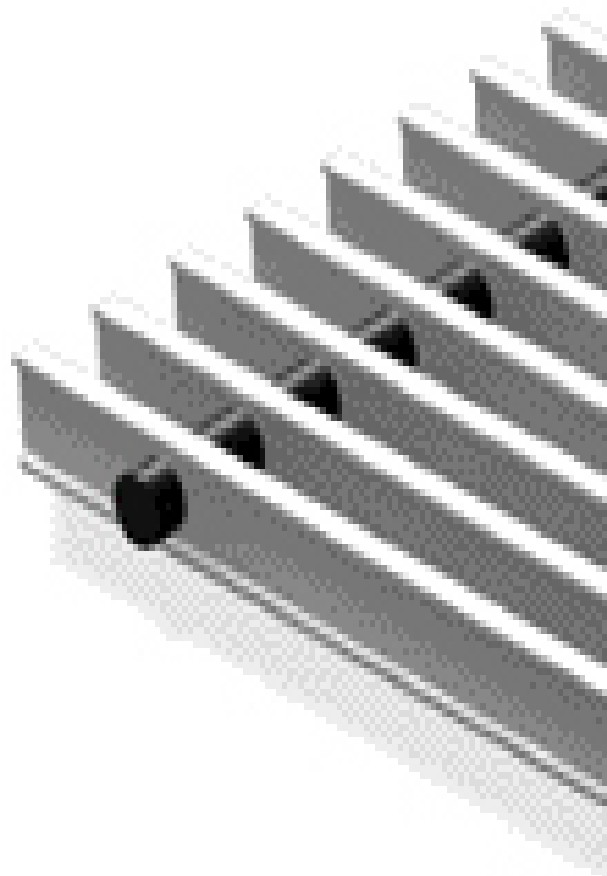
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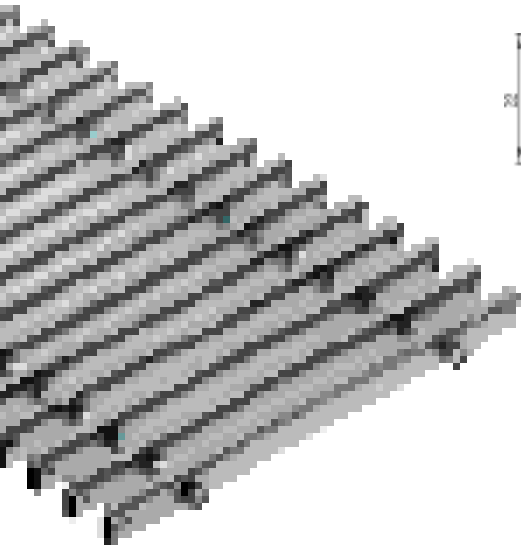
Creating free space to live and work in, that is the underlying concept for the varied emco rolling foot grid range. emco delivers the predestined design for all buildings in the residential, property and industrial sectors, for window sills, shop windows, kitchens and all types of convector and air conditions. Designs with specific advantages in various different designs and

the most appropriate materials; developed based on 4 decades of experience with the most modern manufacturing methods.

In the swimming pool sector emco manufactures overflow grids with the specific properties to this end.

rolling foot grids





emco rolling foot grids model 900

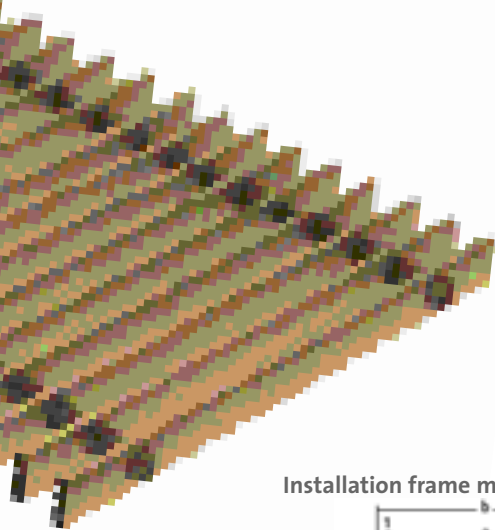
emco rolling foot grid, which you can walk on, with transverse profile bars made of steel, zinc coated and additionally stove-enamelled.

Bar size 22 x 8 mm with PVC walking surfaces, comes optionally in the shades aluminium, beige, brass, bronze, black and white.

The connection of the profile bar is carried out by means of galvanised steel springs. The exact profile gap of 10 mm (55% free cross-section) or 17 mm (70% free cross section)

is achieved by means of plastic distance sleeves which go with the colour of the PVC walking surface.

For the assembly the use of the **installation frame model 540** made of aluminium corner sections 25 x 28 x 3 mm optionally available in the colours grey, brass, bronze or anodised black is recommended. Frame including the steel wall cramps and spacer angles.



emco rolling foot grids model 810

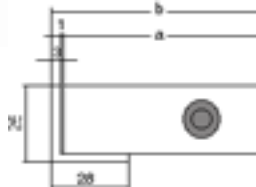
emco rolling foot grid, which you can walk on with transverse profile bars made of brass grey CuZn 37 (Ms 63) bar dimension 22 x 8 mm.

The connection of the profile bars is carried out by means of galvanised steel springs. The exact profile gap of 10 mm (55% free cross-section) or 17 mm (70% free cross section) is achieved by means of the use of plastic distance sleeves.

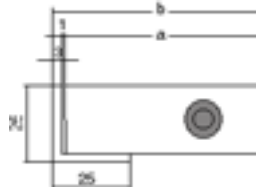
For the assembly of the model 810 the use of the **installation frame model 543** made of brass corner sections grey coloured, CuZn 37 (Ms 63) 25 x 25 x 3 mm with wall cramps and spacer angles is recommended.



Installation frame model 540



Installation frame model 543



Width in mm. Intermediate dimensions can be delivered, a and b see installation frame

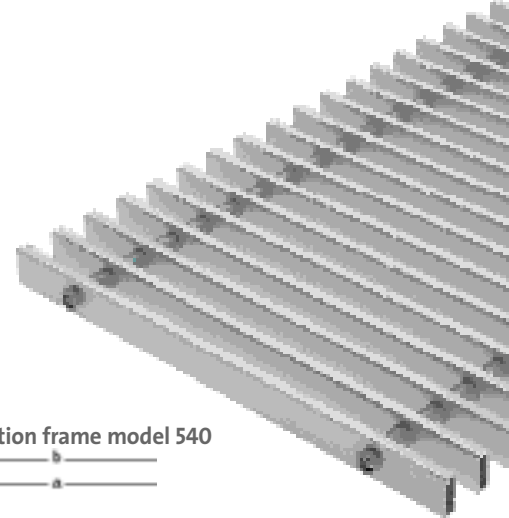
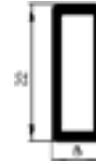
l	2000		1500			1000			800			
a	150	200	250	282	300	362	400	442	500	522	600	692
b	158	208	258	290	308	370	408	450	508	530	608	700



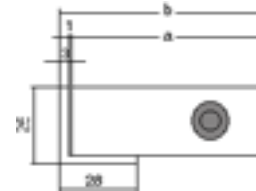


emco rolling foot grid model 616
emco rolling foot grid, which you can walk on with transverse profile bars made of aluminium AlMgSi 0,5, bar dimension 22 x 8 mm. Optionally available in the colours anodised grey, E6/CO, anodised brass E6/EV3, anodised bronze E 6/C 33 or anodised black E 6/C 35 . The connection of the profile bars is carried out by means of galvanised steel springs. The exact profile gap of 10 mm (55% free cross-section) or 17 mm

(70% free cross section) is achieved by means of the use of plastic spacer shells which go with the selected anodised colour. For the assembly the use of the **installation frame model 540** made of aluminium corner sections 25 x 28 x 3 mm optionally available in the colours grey, brass, bronze or anodised black is recommended. Frame including steel wall cramps and spacer angles.



Installation frame model 540

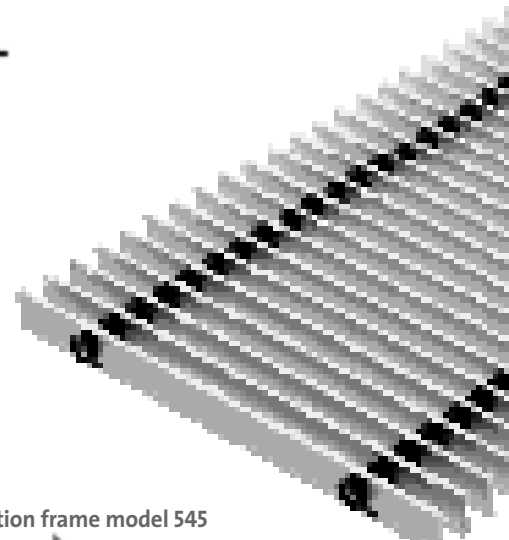


Width in mm. Intermediate dimensions can be delivered, a and b see installation frame

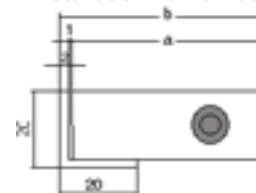
I	2000		1500			1000				800		
a	150	200	250	282	300	362	400	442	500	522	600	692
b	158	208	258	290	308	370	408	450	508	530	608	700

emco rolling foot grid model 624
emco rolling foot grid, which you can walk on with transverse profile bars made of Aluminium AlMgSi 0,5, bar dimension 18 x 5 mm. Optionally available in the colours anodised grey, E 6/CO, anodised brass E 6 /EV 3, anodised bronze E 6/C 33 or anodised black. The connection of the profile bars is carried out by means of galvanised steel springs.

The exact profile gap of 12 mm (70% free cross-section) is achieved by means of the use of colour-matched plastic distance bushes. For the assembly the use of the **installation frame model 545** made of aluminium corner sections 20 x 20 x 2 mm optionally available in the colours grey, brass, bronze or anodised black is recommended. Frame including steel wall cramps and spacer angles.



Installation frame model 545

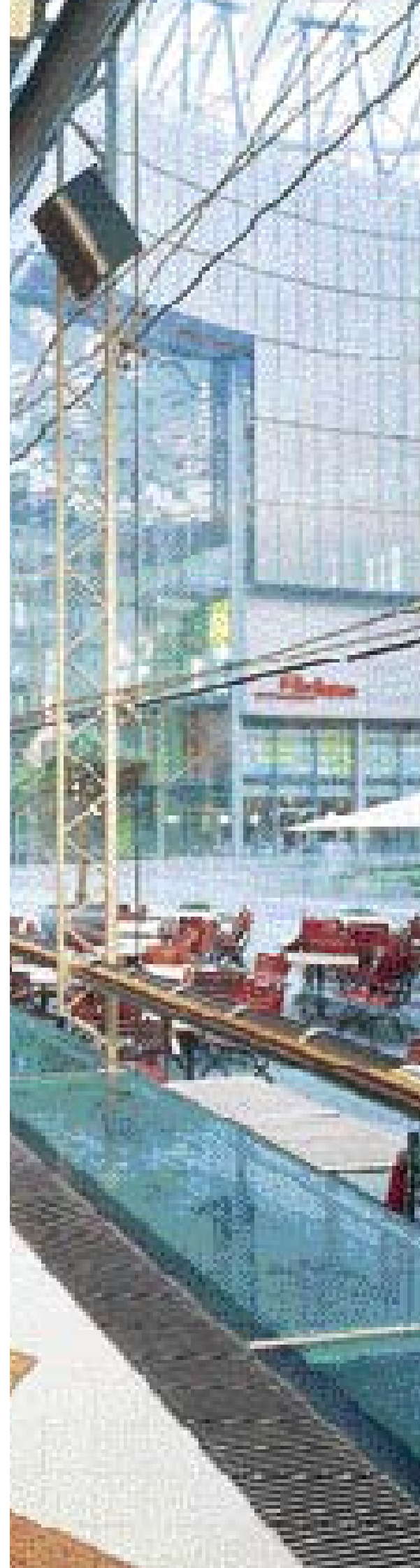


Width in mm. Intermediate dimensions can be delivered, a and b see installation frame



I	2000					1500		1000			
a	50	100	150	200	250	300	350	400	450	500	
b	56	106	156	206	256	306	356	406	456	506	

Physical values of emco rolling foot grids model 730

Physical data	Test method	Unit	Value
Density	DIN 53479 ISO R 823 ASTM D 1505	g/ml	1,43 (0,91)
Tensile strength	DIN 53455 ISO R 527 ASTM D 638	N/mm²	48 (34)
Stretch expansion	DIN 53455 ISO R 527 ASTM D 638	%	> 15 (> 7)
Vicat softening point	DIN 53460/B ISO R 306	°C	80 (90)
Elasticity module	DIN 53457 ISO R 306	N/mm²	2500 (1250)
Water absorption (100 °C, 24 h)	DIN 53471 ISO R 117	%	< 0,1 (0,1)
Notch impact value	DIN 53453	KJ/m²	30 (7)
Ball indentation hardness	DIN 53456	N/mm²	65 (100)
Max. environment temperature		°C	106 (70)
Longitudinal expansion-coefficient		10⁻⁴/K	0,7 (1,5)



Use recommendation

								Page
Rolling foot grid model 900	■	■	■					8
Rolling foot grid model 810	■	■						8
Rolling foot grid model 616	■	■	■					11
Rolling foot grid model 624	■	■			■			11
Rolling foot grid model 730	■	■		■			■	12-13
Rolling foot grid model 860	■	■	■					14
Rolling foot grid model 950	■	■						14
linear foot grid model 631							■	18
linear foot grid model 632							■	18



for private living areas



for commercial high rise buildings



For sports hall
(only rigid systems)



for swimming pools
and damp rooms



for windows and bench heating,
shop windows, shops in store, DIY
kitchens



Only recommendable
to a limited extent



Outdoor covers



Recommendable

Colours Steel zinc coated, stove enamelled



aluminium,
white RAL 9006



beige
RAL 1001



brass
RAL 1036



bronze
RAL 8014



black
RAL 9005



white
RAL 9010

Colours aluminium, anodised



grey
E6/C0



brass coloured
E6/EV3



bronze coloured
E6/C33



black
E6/C35

Colours polyester



white



grey



anthracite

Colours wood



light oak

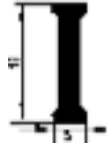
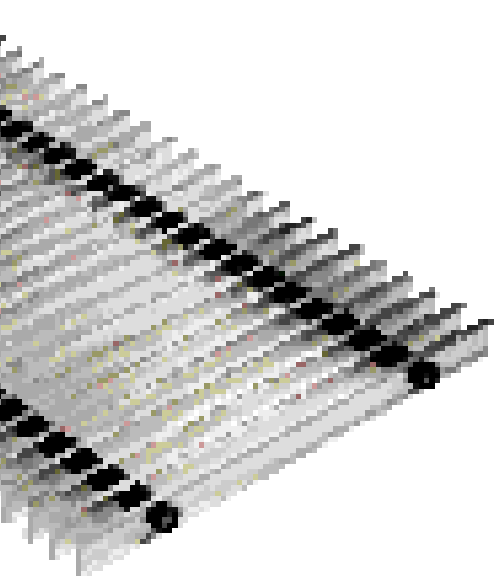
Load table foot grid

	width (a)											
	150	200	250	282	300	362	400	442	500	522	600	692
Model 900	206	154	123	109	103	85	77	70	62	59	51	45
Model 810	135	101	81	72	68	56	51	46	41	39	34	29
Model 616	169	127	102	90	85	70	63	57	51	49	42	37
Model 624	92	70	55	49	45	38	35	31	26	25	23	20
Model 730*	44	33	26	23	21	-	-	-	-	-	-	-
Model 860	181	137	108	96	88	74	68	59	52	49	46	38
Model 950	137	103	82	73	69	57	51	46	41	39	34	30

All the load information in kg/individual bar. The load values states are dead lump loads, which are exerted in the bar centre respectively. The permissible load values are higher as a load per surface area arises.

Permissible overall load: number of loaded bars x permissible individual load.

*For model 730, load values apply for a maximum ambient temperature of 30° C.



emco roll-rost model 860

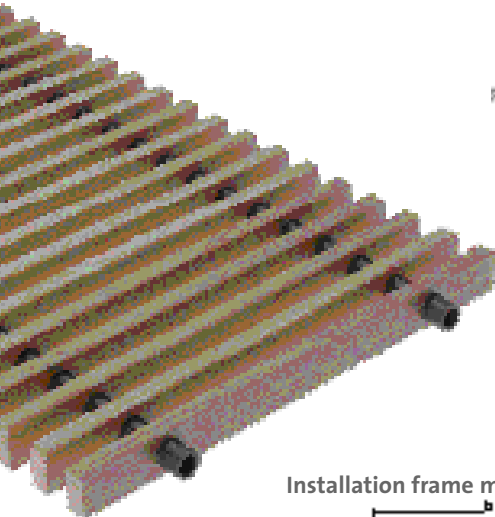
emco rolling foot grid, which you can walk on, with transverse profile bars made of chrome nickel steel (V 2 A, material no. 1.4301), bar dimensions 18 x 5 mm. The connection of the pro-file bars is carried out by means of chrome nickel steel springs. The exact profile gap of 12 mm (70% free cross-section) is achieved by means of the use of standard black plastic distance bushes.

(colour matched distance bushes are available upon request)
For the assembly the use of the **installation frame model 547** made of chrome nickel steel corner sections (V 2 A, material no.1.4301) 2 x 20 x 2 mm with chrome nickel steel wall braces and spacer angles made of steel is recommended.



Width in mm. Intermediate dimensions can be delivered, a and b see installation frame

l	2000				1500		1000			
a	50	100	150	200	250	300	350	400	450	500
b	56	106	156	206	256	306	356	406	456	506



emco roll-rost model 950

emco rolling foot grid, which you can walk on with transverse profile bars made of light or medium brown basralocus wood, bar dimension 27 x 13 mm. The connection of the profile bars is carried out by means of galvanised steel springs. The profile gap of 15 mm (60% free cross-section) is achieved by means of the use of colour-matched plastic distance bushes.

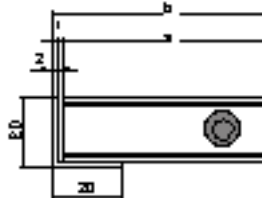
For the assembly the use of the **installation frame model 542** made of aluminium corner sections 30 x 30 x 3mm optionally available in the colours grey, brass, bronze or anodised black is recommended. Frame including steel wall cramps and spacer angles.



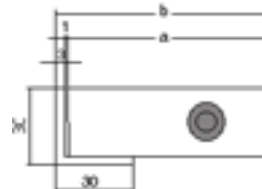
Width in mm. Intermediate dimensions can be delivered, a and b see installation frame

l	2000			1500		1000			800
a	150	200	250	282	300	362	400	442	500
b	158	208	258	300	308	370	408	450	508

Installation frame model 547



Installation frame model 542

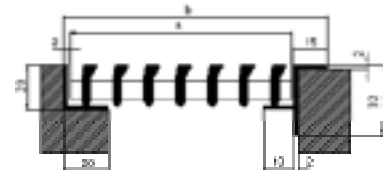




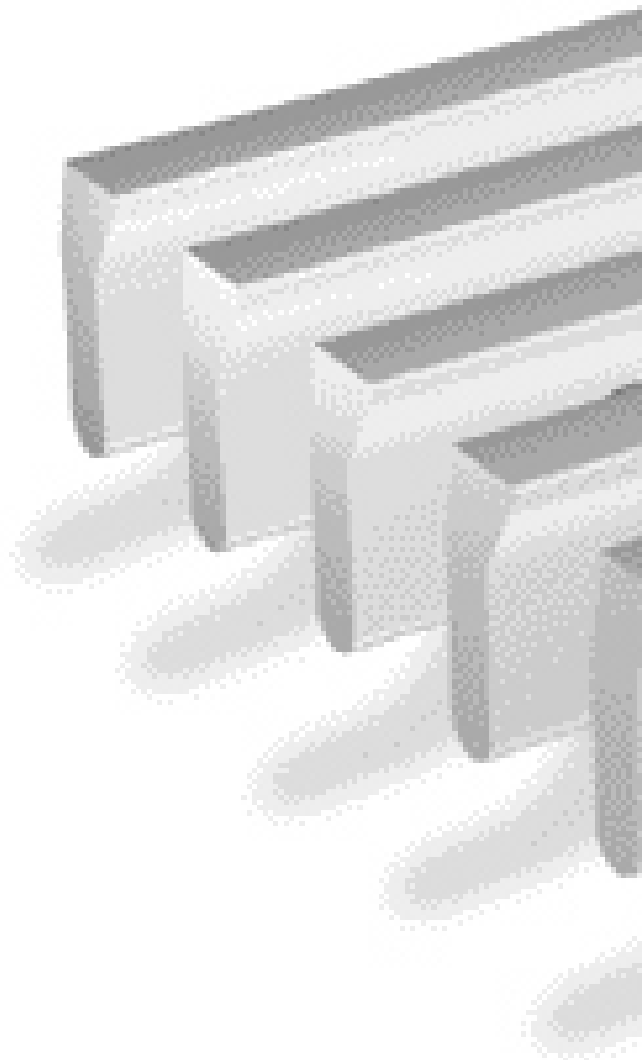
Beautifully designed grid inserts made of aluminium (AlMgSi 0,5), longitudinal sectional bars, bar design solid profile, you cannot walk on it.

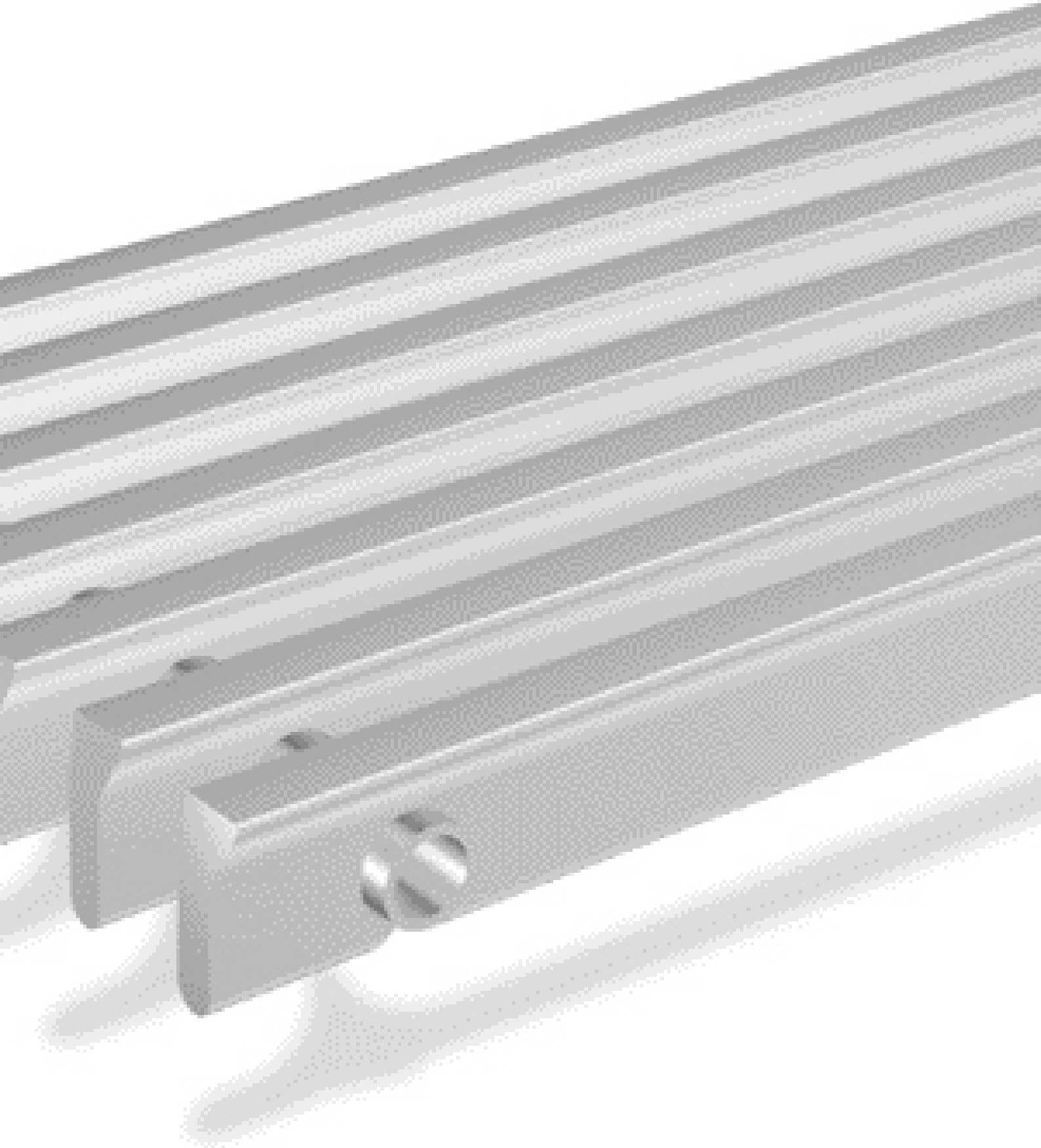
Optionally available in the standard anodised colours grey, E6/CO, anodised brass E6/EV3, anodised bronze E6/C33 or anodised black.

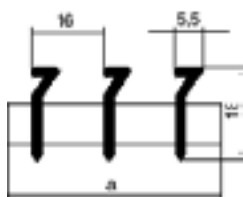
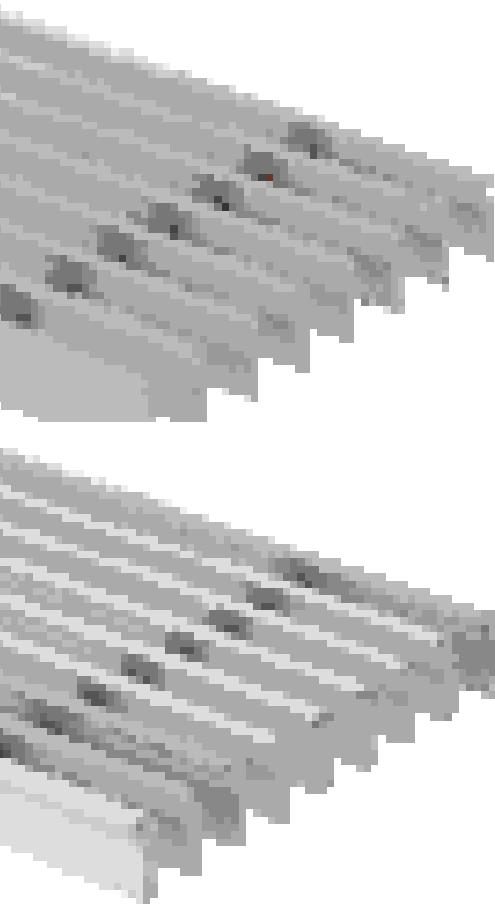
For the assembly the use of the **installation frame model 545** made of aluminium angle sections 20 x 20 x 2 mm or the **Z-frame Model 546** made of aluminium 15 x 20 x 15 x 2 mm is recommended.



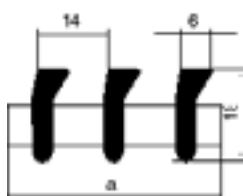
linear foot grids







emcolinear foot grid model 631
 Air exit under 30 degrees, spacing of collector bars 16 mm, 64% free cross section, you cannot walk on it.

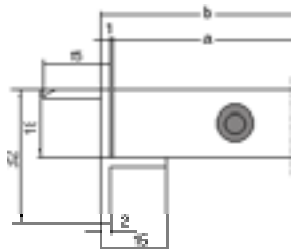


emcolinear foot grid model 632
 Air exit under 30 degrees, spacing of collector bars 14 mm, 57% free cross section, you cannot walk on it.

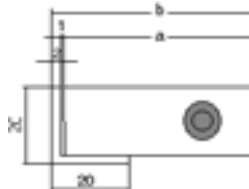
You can only walk on it conjunction with emco therm floor convectors.



Installation frame model 546



Installation frame model 545

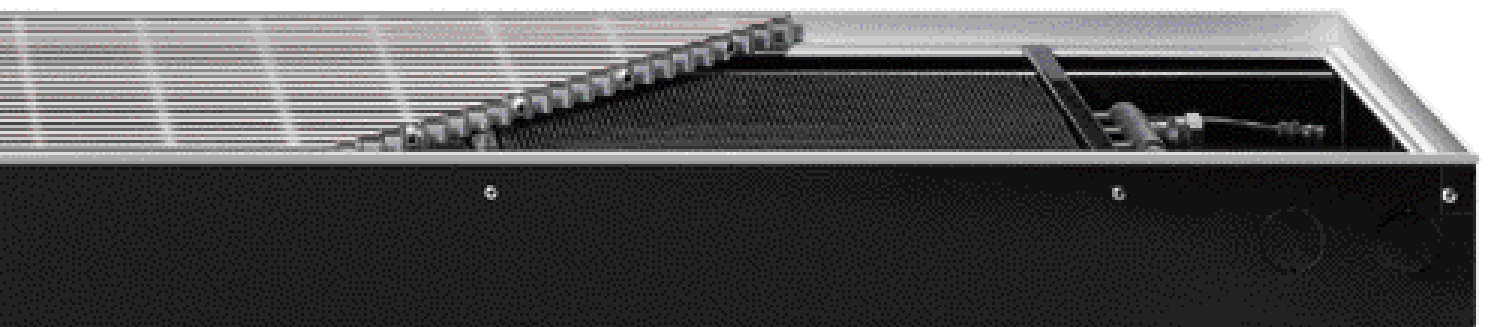


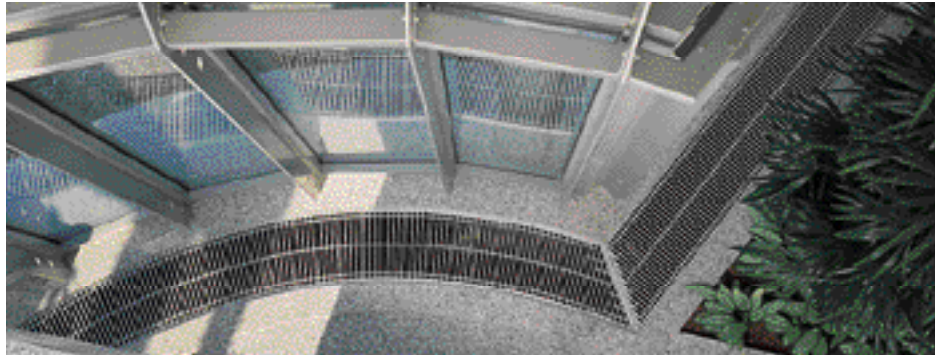


emco floor convectors:

Perfection under the rolling foot grille. emcotherm floor convectors are manufactured to heat, cool and ventilate in standard dimensions and as customised solutions. Regardless of whether you wish to be shielded from cold air, for full room heating, residual heat covering or rapid heating up of the room, property developers and architects value the varied programme for economic comfort air conditioning.

emco floor convectors



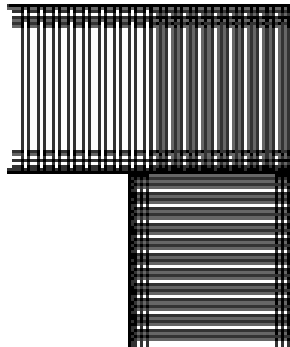


Special design forms

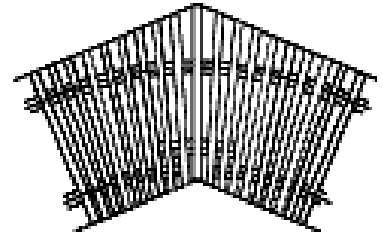
When laying rolling floor grids the following dimensions cannot be undershot (stated in mm) for production engineering reasons (stated in mm):

Grid dimension (a)	<362	>362
External radius	850	1250
Spacer interior	8,5	4
Spacer exterior	17	16

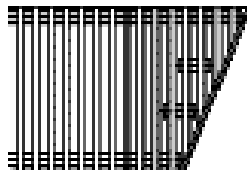
Rigid corner, 90°



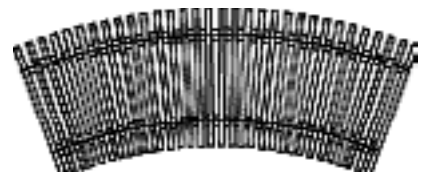
Radial corner, 179° – 135°



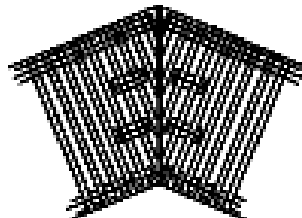
Grid end on mitre joint

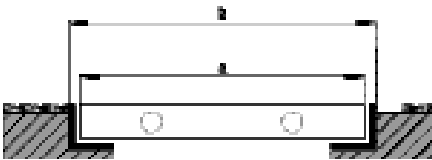
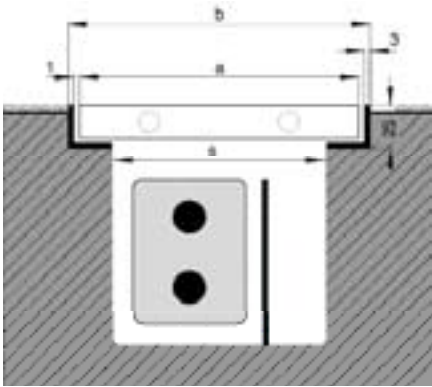


Laying in radii



Mitre joint corner, 90° – 135°





summary

Size specification

Width (a): rolling foot grid – bar width

Width (b): frame external dimensions

Length (l): frame external dimensions
or rolling foot grid dimensions

Determination of the frame external dimensions:

Model 900, 810, 616, 730

inside shaft dimensions plus 50 mm
in length (l) and width (b)

Model 624, 860

inside shaft dimensions plus 40 mm
in length (l) and width (b)

Model 950

inside shaft dimensions plus 60 mm
in length (l) and width (b)

Installation principle

The frame and the rolling foot grids should fit flush with the floor covering. The emco assembly frame is supplied with spacers in order to prevent deformation during the floor manufacturer.

We recommend that you only remove the spacers immediately prior to the installation of the rolling foot grid.

Determination of the rolling foot grid dimensions:

(Valid for all rolling foot grid series)

Length (l):

Frame dimension minus 2 x profile width
of the respective frame

Width (a):

Frame dimension minus 2 x profile width
of the respective frame, minus 2 mm

Partial length design

(example does not apply for model 623)

If the length of the remaining residual piece is smaller than 50% of a part length then the residual piece will be suspended to a section.

If the length of the remaining residual piece is greater than 50% of a part length then the residual piece will be manufactured as an individual section.

Example:

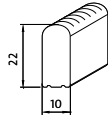
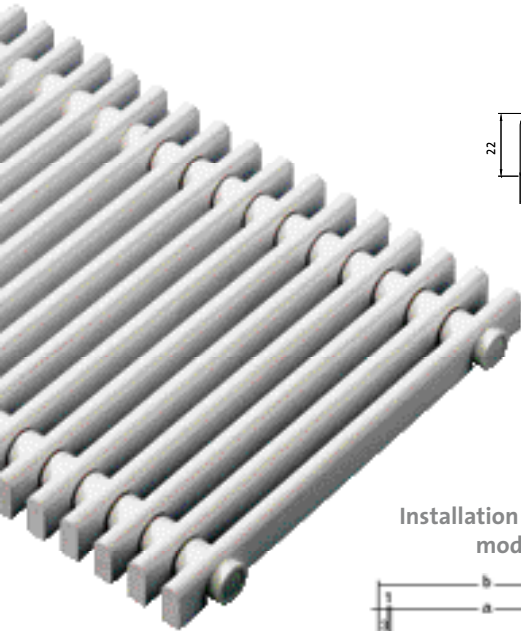
ordering dimensions

$l = 3450 \text{ mm}$ / $a = 362 \text{ mm}$

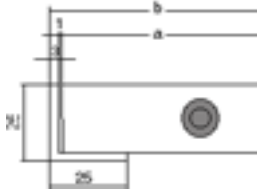
Calculation:

$3 \times 1000 \text{ mm}$, residual piece = 450 mm

450 mm is less than 50% of 1000 mm for
this reason $2 \times 1000 \text{ mm}$, $1 \times 1450 \text{ mm}$



Installation frame model 790

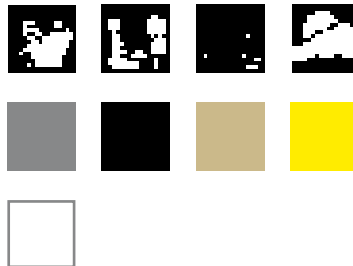


emco roll-rost typ 730

Roll-up grating, transverse rods, 22 x 10 mm solid profile made of high-grade, high-impact plastic. Corrosion-resistant, embossed safety profiles resistant to sea-water, chlorinated water and spa waters, slip-resistant according to DIN 51097, category C. Connecting elements made of PUR, spacers made of plastic.

Colour choices: White, beige, grey or yellow. Rod spacing is 8 mm (44 % free cross section). Walk-on design in connection with emco floor convectors.

For installation, it is recommended to use frame model 790 made of glass fibre reinforced corner profiles 25 x 25 x 3 mm in colours corresponding to the profile rods, with chromium-nickel steel wall anchors and angle spacers made of steel.



Chemical resistance of emco rolling foot grid model 730

Water	+
Inorganic acids	+
Weak acids	+
Strong acids	●
Oxidising acids	—
Hydrofluoric acids	●
Strong organic acids	▲
Weak bases	+
Strong bases	+
Aliphatic substancesf	+
Chlorine carbon hydride	—
Low alcohols	●
Ester	+
Ketons	—
Ether	+
Aromatic carbon hydride	—
Petroleum	+
Fuel mixture	—
Mineral oil	+
Fats, oils	+
Unsaturated chlorine carbon hydride	—
Turpentine	—

- + = resistant,
- ▲ = generally sufficiently resistant,
- = conditionally resistant,
- ★ = generally unresistant
- = unresistant

l	2000		1500		
	a	150	200	250	282
b	158	208	258	290	308

Almost all colours can be supplied on request.

Width in mm. Intermediate dimensions on request a and b see installation frame.

Grille dimensions between 100 and 300 mm.

www.emco.de

855-4173 / 04.06 - Technische Änderungen vorbehalten. The right of technical modification is reserved.



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