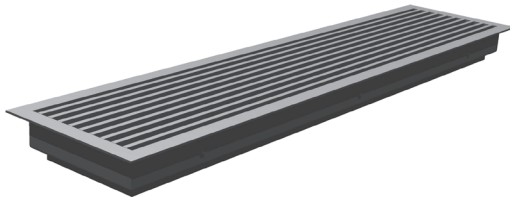


**FLOOR GRILL
LINEAR, FIXED BLADES**

TBV | TCV TYPE



- ✓ Supply
- ✓ Return



Application

The grills type TBV and TCV are grills with a firm design for mounting in the floor. The grill is suitable for the supply of warm and / or cold air as well for return air. Type TBV and TCV can be applied separately or as long continuous grill by using alignment pins.

Technical information

Features:

- Supply and return grill (aluminium).
- Linear grill with fixed blades.
- Type TCV: removable internal core for maintenance or hidden mounting.
Type TBV: fixed core.
- Deflection options: 0° or 15°.
- Optional: volume control damper equipped with opposed blades, adjustable from the front.

Construction:

- Frame width: floor frame 15 mm wide.
- Core: 5 mm wide profiles with 13 mm centre to centre.
- Material: extruded aluminium.
- Standard polish nr.9 blank anodised .
- Optional: finish in RAL colour, however please contact our sales staff for advice because of the nature of this grill (floor).
- Grills > 1600 mm are delivered in parts.
- Alignment of the sections (grill strips) is simplified by alignment pins. Because of this a firm, uninterrupted appearance over the entire length of the grill is created.
- Other types available upon request.

Delivery:

- Available in standard heights: 80, 100, 140, 200 and 240 mm. Deviating heights and / or lengths available upon request.
- Grill with volume control damper is delivered assembled.
- With the order the desired deflection needs to be indicated in coding:
0° (T...O...) or 15° (T...F...).

Mounting:

- By using steel spring clips on the backside of the grill (standard).
- By using screw holes in the flange optionally by indicating the coding (T...G.).
- By using of mounting brackets in raw floor.

Common types

- TBV000. : Linear floor grill with fixed core consisting of blades with 0° deflection. Suitable for standard mounting with spring clips.
- TBV000. : As mentioned above, equipped with volume control damper.
- TCVOFG. : Linear floor grill with removable core consisting of blades with 15° deflection. Equipped with screw holes.

Specifications

Example:

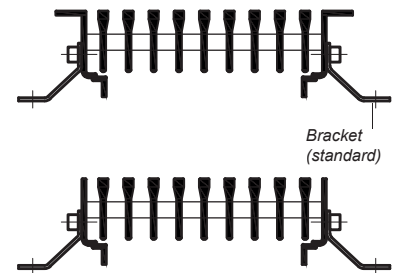
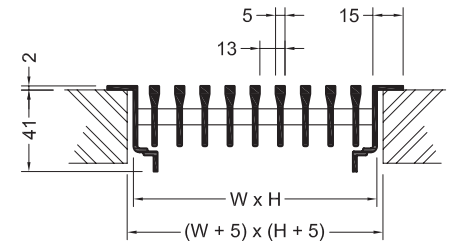
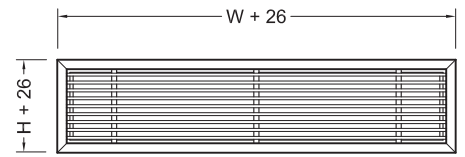
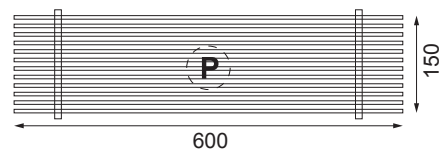
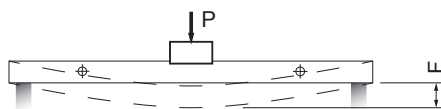
Supply grills with a firm design for mounting in the floor for the supply of warm and / or cold air. The grill has a removable core with a deflection of 15°, a frame width of 20 mm and a volume control damper. Mounting by using springclips.

Polish nr. 9 blank anodised.

HC Barcol-Air type: TCVVF09 – 0600 – 0200.

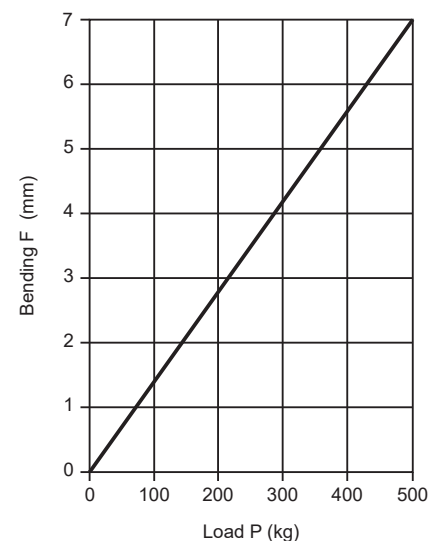
Load restrictions

- The floor grill has been subjected to a load test. For this, the weight is placed on a cylinder with a diameter of 100 mm. In the graph below, the deflection F is shown as a function of the weight. The maximum load is 500 kg on an area of 79 cm² (this is the area of a circle with a diameter of 100 mm). This corresponds to a maximum load of 6.4 kg / cm².



Remarks dimensions:

1. Dimensions in millimetres.
2. Hole dimension = grill dimension + 5 mm.



Floor grill bending type TBV / TCV

Selection data

90 - 2800 m³/h

Width in mm		400			500			600			700			800			900			1000			1100			1200			
Air flow		Height mm	throw	ΔPs	LpA	throw	ΔPs	LpA	throw	ΔPs	LpA	throw	ΔPs	LpA	throw	ΔPs	LpA	throw	ΔPs	LpA	throw	ΔPs	LpA	throw	ΔPs	LpA			
m³/s	m³/h		m	Pa	dB(A)	m	Pa	dB(A)	m	Pa	dB(A)	m	Pa	dB(A)	m	Pa	dB(A)	m	Pa	dB(A)	m	Pa	dB(A)	m	Pa	dB(A)			
0,025	90	80	2,6	6	--																								
0,030	108	80	3,0	8	--	2,6	3	--																					
0,040	144	80	4,1	15	--	3,8	6	--	3,1	6	--																		
0,050	180	100	4,6	10	--	4,1	4	--	3,6	4	--																		
0,060	216	100	5,4	15	--	4,6	6	--	4,3	6	--	4,2	4	--	3,8	3	--												
		120	4,8	8	--	4,3	3	--	4,2	3	--																		
0,070	252	100	6,1	20	--	5,8	8	--	4,9	8	--	4,7	6	--	4,6	4	--	4,3	3	--									
		120	5,4	11	--	5,2	5	--	4,7	5	--	4,2	3	--	4,2	2	--												
		140	5,2	7	--	4,7	3	--	4,2	3	--																		
0,080	288	120	6,7	15	--	6,0	6	--	5,5	6	--	4,8	4	--	4,6	3	--	4,3	3	--									
		140	6,0	9	--	5,4	4	--	4,9	4	--	4,3	3	--															
		180	5,4	5	--	4,9	2	--	4,4	2	--																		
0,100	360	140	7,8	15	--	6,7	6	--	6,0	6	--	5,6	4	--	5,4	3	--	4,6	3	--									
		180	6,6	7	--	6,0	3	--	5,4	3	--	5,0	2	--															
		200	6,2	6	--	5,8	2	--	5,0	2	--																		
0,125	450	160	9,6	16	--	7,8	7	--	7,2	7	--	7,0	5	--	6,2	4	--	5,8	3	--	5,5	2	--						
		180	8,6	12	--	7,3	5	--	6,7	5	--	6,1	3	--	5,9	3	--	5,5	2	--									
		200	8,2	9	--	7,0	4	--	6,2	4	--	5,8	3	--	5,4	2	--												
0,150	540	200	10,2	13	--	8,5	5	--	8,2	5	--	7,0	4	--	7,0	3	--	6,2	2	--	6,2	2	--						
		240	7,8	8	--	8,2	3	--	7,2	3	--	6,6	2	--	6,2	2	--												
0,200	720	200	14,6	23	26	11,5	9	16	10,9	9	--	9,0	7	--	9,1	5	--	9,0	4	--	8,2	3	--	7,9	3	--	7,2	2	--
		240	12,0	15	18	10,8	6	--	8,6	6	--	9,0	4	--	8,6	3	--	8,2	3	--	7,2	2	--	7,2	2	--			
0,250	900	200				14,4	15	27	10,8	15	18	12,0	11	--	11,5	8	--	10,9	6	--	10,6	5	--	9,7	4	--	9,8	3	--
		240	14,6	23	29	12,6	9	18	9,6	9	--	11,0	7	--	10,8	5	--	9,6	4	--	9,8	3	--	9,0	3	--	8,5	2	--
0,300	1080	200				16,8	21	36	16,2	21	28	14,6	15	19	14,2	11	--	13,4	9	--	12,6	7	--	12,0	6	--	11,4	5	--
		240				16,2	13	28	14,4	13	18	13,2	10	--	12,6	7	--	12,0	6	--	11,5	5	--	10,8	4	--	10,8	3	--
0,400	1440	200										19,2	27	36	18,6	20	29	17,0	16	22	16,3	13	15	15,6	10	--	15,2	9	--
		240							19,8	24	34	17,0	17	26	16,2	13	18	15,6	10	--	15,6	8	--	14,4	7	--	14,0	6	--
0,500	1800	200																21,8	25	36	20,4	20	30	19,4	16	24	18,0	14	18
		240										21,6	27	40	20,4	20	32	19,4	16	25	18,2	13	18	16,8	10	--	16,8	9	--
0,600	2160	200																		24,0	29	42	23,2	24	36	22,2	20	30	
		240																	22,8	23	37	20,4	18	30	20,4	15	24	20,4	13
0,700	2520	200																									27,6	27	41
		240																	27,0	25	41	24,6	21	35	25,2	17	29		
0,778	2800	200																											
		240																								27,0	25	43	27,0

- The air throw data has been determined at a terminal velocity 0.25 m/s
- The throw data is determined at an end velocity of 0.25 m/s.
- The given LpA values include room absorption of 10 dB.
- Sound pressure levels of less than 20dB (A) are stated as --.
- For different mounting height vertical discharge or deviating temperatures see the correction table.
- For deviating grill selections we advise you to contact our technical staff.

Throw increase in meters at + 10 K (vertical discharge)

Throw decrease in meters at - 10 K (vertical discharge)

Height	Air velocity on grill m/s (gross surface)					
	1	1,5	2	2,5	3	
80	+/-	0,8	1,0	1,3	1,6	2,0
100	+/-	0,9	1,3	1,8	2,0	2,3
140	+/-	1,2	1,6	2,3	2,6	2,8
200	+/-	1,9	2,5	3,0	3,5	4,1
240	+/-	2,2	3,3	3,8	4,8	5,6

1. The above throw data are determined with (vertical) discharge along a vertical wall. If the air is freely dispatched, a throw reduction applies of 25%.

✓ Return

Selectietabel

36 - 1539 m³/h

Width mm	Height mm	0,5 m/s		1 m/s		1,5 m/s		2 m/s	
		0,5 Pa		0,75 Pa		2,1 Pa		3,1 Pa	
		Air flow		Air flow		Air flow		Air flow	
		m ³ /s	m ³ /h	m ³ /s	m ³ /h	m ³ /s	m ³ /h	m ³ /s	m ³ /h
400	80	0,01	36	0,02	72	0,03	108	0,04	144
500		0,01	45	0,03	90	0,04	135	0,05	180
600		0,02	54	0,03	108	0,05	162	0,06	216
800		0,02	72	0,04	144	0,06	216	0,08	288
1000		0,03	90	0,05	180	0,08	270	0,10	360
1200		0,03	110	0,06	220	0,09	329	0,12	439
1400		0,04	127	0,07	254	0,11	382	0,14	509
400	100	0,01	45	0,03	90	0,04	135	0,05	180
500		0,02	56	0,03	112	0,05	167	0,06	223
600		0,02	68	0,04	137	0,06	205	0,08	274
800		0,03	90	0,05	180	0,08	270	0,10	360
1000		0,03	113	0,06	227	0,09	340	0,13	454
1200		0,04	137	0,08	274	0,11	410	0,15	547
1400		0,04	160	0,09	320	0,13	480	0,18	640
400	140	0,02	63	0,04	126	0,05	189	0,07	252
500		0,02	79	0,04	158	0,07	238	0,09	317
600		0,03	94	0,05	187	0,08	281	0,10	374
800		0,04	126	0,07	252	0,11	378	0,14	504
1000		0,04	158	0,09	317	0,13	475	0,18	634
1200		0,05	191	0,11	382	0,16	572	0,21	763
1400		0,06	223	0,12	446	0,19	668	0,25	891
400	200	0,03	90	0,05	180	0,08	270	0,10	360
500		0,03	119	0,07	238	0,10	356	0,13	475
600		0,04	135	0,08	270	0,11	405	0,15	540
800		0,05	180	0,10	360	0,15	540	0,20	720
1000		0,06	225	0,13	450	0,19	675	0,25	900
1200		0,08	272	0,15	544	0,23	815	0,30	1087
1400		0,09	313	0,17	625	0,26	938	0,35	1251
400	240	0,03	108	0,06	216	0,09	324	0,12	432
500		0,04	137	0,08	274	0,11	410	0,15	547
600		0,05	162	0,09	324	0,14	486	0,18	648
800		0,06	216	0,12	432	0,18	648	0,24	864
1000		0,08	270	0,15	540	0,23	810	0,30	1080
1200		0,09	326	0,18	652	0,27	977	0,36	1303
1400		0,11	385	0,21	769	0,32	1154	0,43	1539

1. Sound volume data for return grills all are < 25 dB(A). When the air suction velocity > 3 m/s the sound level can increase.

2. For deviating grill selections we advise you to contact our technical staff



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BARCOL-AIR | AIR DISTRIBUTION

Cantekoogweg 10-12 - 1442 LG Purmerend, The Netherlands

T +31 (0)299 689 300 | **E** export@barcol-air.nl

WWW.BARCOL-AIR.NL