



Standard cell frames for wall installation

Standard cell frames: F210, F220, F240

- » Base element for mounting a filter wall in ventilation systems
- » Fitting of filter pads and filter elements for separation of coarse and fine dust
- » Secure sealing within the cell frame by means of clamping mechanism



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Detail



Standard cell frames

» Application

Base element for mounting a filter wall in ventilation systems.

Fitting of filter elements for separation of coarse dust, fine dust, and for the adsorption of gaseous odorous substances and contaminants.

» Material

Standard cell frame made of sheet steel, either in a galvanised or stainless construction.

» Construction

- Type F210: Standard cell frame for filter pads.
- Type F220: Standard cell frame for Z-line filters and minipleat filter panels with plastic frames.
- Type F240: Standard cell frame for pocket filter inserts, minipleat filter inserts, metal filter panels.

» Equipment

- Four spring clips for secure sealing between cell frame and filter elements.
- Standard cell frame with support grid and press-in frame for filter pads.
- Standard cell frame with foamed continuous seal for pocket filter inserts, Z-line filters, minipleat filter panels, minipleat filter inserts, and metal filter panels.

» Unit size

- Basic elements in different sizes.
- Standard cell frames for a wall can use up to 5 cells in height and can have any number on width.

» Accessories

Type B221: Special installation subframe and flat steel stiffeners for filter wall.

The installation subframe is inserted into the slots of the cell frame and bolted into place at the corners. The flat steel stiffeners provide static stability.

» Associated TROX filter elements

Associated filter elements to be ordered separately.

» Installation and maintenance

Simple installation by insertion into slots of the standard cell frame.

Suitable filter elements

To optimise compliance with specific requirements, various filter constructions, shapes and filter classes can be selected.

» Filter pads (F7/1/././.)

- Coarse dust filters: TROX-o-fil F702 (G3), Type F704 (G3), Type F711 (G4)
- Fine dust filter: Type F706 (F5)

» Z-line filters (F7/1/././.)

- Coarse dust filter: Type F718 (G4)
- Fine dust filter: Type F719 (F5)

» Pocket filter inserts made of nonwoven chemical fibres (F7/2/././.)

- Coarse dust filter: Type F743 (G4)
- Fine dust filter: Type F745 (F5)

» Pocket filter inserts made of nonwoven synthetic fibres (F7/3/././.)

- Fine dust filters: Type F725 (F5), Type F726 (F6), Type F728 (F7), Type F729 (F8)

» Pocket filter inserts made of nonwoven glass fibres (F7/4/././.)

- Fine dust filters: Type F744 (F5), Type F746 (F6), Type F748 (F7), Type F749 (F9)

» Activated carbon filter inserts (F7/1/././.)

- Type F760
- Filter media: Granulated activated carbon

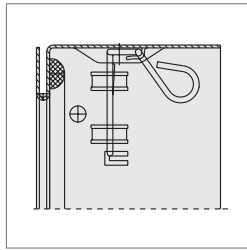
» Minipleat filter inserts (F7/5/././.)

- Fine dust filters: Type F756 (F6), Type F757 (F7), Type F759 (F9)

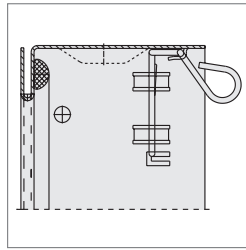
» Minipleat filter panels used as fine dust filters (F7/8/././.)

- Fine dust filters: Type F756 (F6), Type F757 (F7), Type F759 (F9)

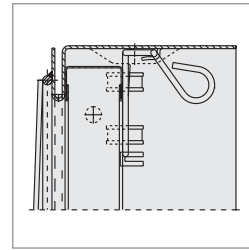
Standard cell frame variants



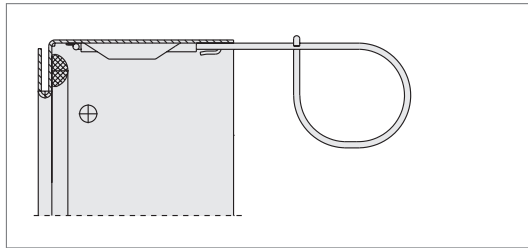
Detail drawing 1:
Construction for pocket filter inserts and minipleat filter inserts



Detail drawing 2:
Construction for Z-line filters and minipleat panels with plastic frames (T = 48 mm)



Detail drawing 3:
Construction with support grid and press-in frame for filter pads



Detail drawing 4: Construction for Z-line filters and minipleat panels with plastic frames (T = 96 mm)

Order code

<table border="1" style="margin: auto;"> <tr> <td>F</td><td>2</td><td>4</td><td>0</td><td>M</td><td>1</td><td>3</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td> </tr> <tr> <td colspan="4" style="text-align: center;">1</td> <td colspan="2" style="text-align: center;">2</td> <td colspan="2" style="text-align: center;">3</td> <td colspan="6" style="text-align: center;">4</td> </tr> </table>		F	2	4	0	M	1	3	0	0	0	0	0	0	0	1				2		3		4					
F	2	4	0	M	1	3	0	0	0	0	0	0	0																
1				2		3		4																					
<p>1 Unit type: Type F210: For filter pads Type F220: For Z-line filters and minipleat filter panels Type F240: For pocket filter inserts and minipleat filter inserts</p>	<p>3 Code number: For the dimensions of the standard cell frame, refer to Tables 1 - 4 See the code numbers in Tables 1 - 4</p>																												
<p>2 Construction: M= Frame made of galvanized sheet steel E = Frame made of stainless sheet steel</p>	<p>4 Zeros</p>																												

Example of a standard cell frame

- » Unit type: **F240**
- » Construction: frame made of galvanised sheet steel: **M**
- » Unit size 610 x 610 mm: **13**

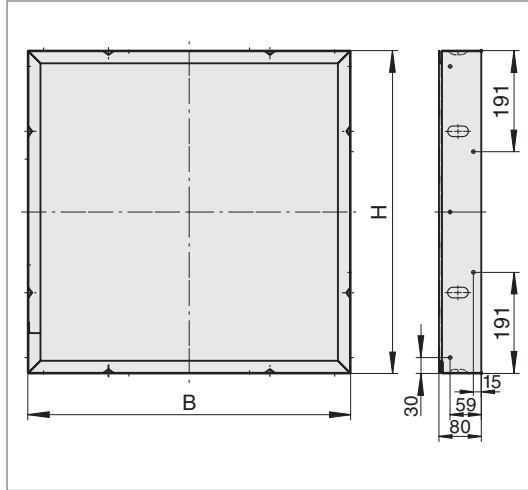
F	2	4	0	M	1	3	0	0	0	0	0	0	0
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Standard cell frames

Construction

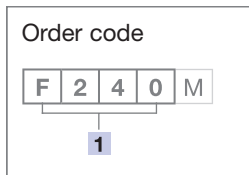
- 2 M= Frame made of galvanized sheet steel
- E = Frame made of stainless sheet steel

Technical data



Detail drawing 5: Standard cell frame

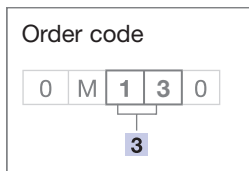
Standard cell frame for filter pads



Dimensions mm			Weight	Code
B	H	T	Approx. kg	number ³
305	610	80	3.0	35
610	610	80	4,1	33

Table 1: Technical data for F210

Standard cell frame for Z-line filters and minipleat filter panels (T = 48 mm)



Dimensions mm			Weight	Code
B	H	T	Approx. kg	number ³
305	610	80	1,9	25
508	610	80	2.4	24
610	610	80	2.5	23

Table 2: Technical data for F220

Standard cell frame for Z-line filters and minipleat filter panels (T = 96 mm)

Dimensions mm			Weight	Code
B	H	T	Approx. kg	number ³
305	610	80	1,9	65
508	610	80	2.4	64
610	610	80	2.5	63

Table 3: Technical data for F220

All weights are net, without packaging.

Standard cell frame for pocket filter inserts, minipleat filter inserts (T = 25 mm)

The following sizes are part of the filter wall; see pages 6 and 7:
610 x 610 mm
305 x 610 mm

Dimensions mm			Weight	Code
B	H	T	Approx. kg	number ³
305	305	80	1.2	16
305	610	80	1,9	15
508	610	80	2.4	14
610	610	80	2.5	13
305	910	80	2.5	12
508	910	80	3.0	11
610	910	80	3.2	10

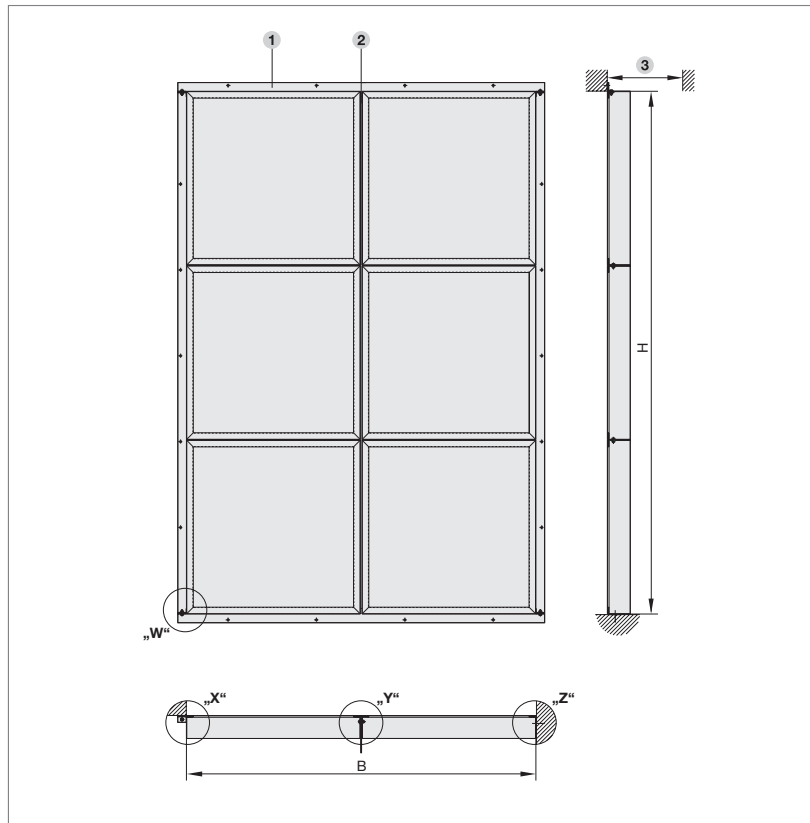
Table 4: Technical data for F240

Technical data

Filter wall made of standard cell frames.

The filter wall consists of individual standard cell frames. For the dimensions of the standard cell frames, refer to Page 4.

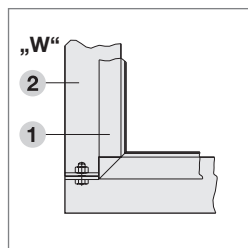
The installation subframe is inserted into the slots of the cell frame and bolted into place at the corners. The flat steel stiffeners provide static stability.



1	Special installation subframe	2	Flat steel stiffener	3	Minimum space requirement for filter change 650 mm
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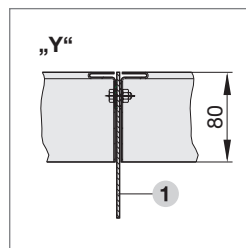
Detail drawing 6: Special installation subframe for filter wall with flat steel stiffeners

The frame is to be sealed to the structure.



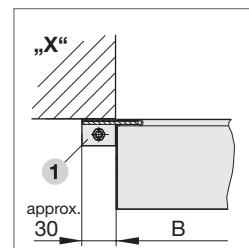
1	Standard cell frame
2	Special installation subframe

Detail drawing 7:
Detail "W"



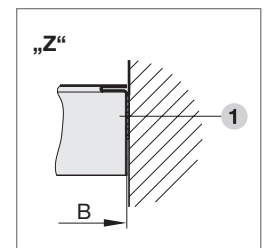
1	Flat steel stiffeners (above 4 1/2 stacked frames 130 mm)
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Detail drawing 8:
Detail "Y"



1	Installation example with special installation subframe
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Detail drawing 9:
Detail "X"



1	Installation example without special installation subframe
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Detail drawing 10:
Detail "Z"

Filter wall

Technical data

The filter wall consists of individual standard cell frames.

For the dimensions of the standard cell frames, refer to Page 4.

In the selection list, the volume flow rate for pocket filter inserts is specified as an example.

For filter pads and other filter elements, the volume flow rate has to be determined and calculated for the size of the filter wall.

All weights are net, without packaging.

Dimensions of special installation subframe for filter wall with flat steel stiffeners (widths 610 - 2450 mm)

Dimensions mm		Nominal volume flow rate		Quantity Standard cell frames			Weight	Flat steel stiffeners		Order no. for installation subframe
B	H	l/s	m ³ /h	vertical	horizontal	total	Approx. kg	Quantity	Order number	
610	610	945	3400	1	1	1	3			B221CC0
610	915	1415	5100	1 + 1/2	1	1 + 1/2	4			B221CC1
610	1220	1890	6800	2	1	2	5			B221CC3
610	1525	2360	8500	2 + 1/2	1	2 + 1/2	5			B221CC4
610	1830	2835	10200	3	1	3	6			B221CC6
610	2135	3305	11900	3 + 1/2	1	3 + 1/2	7			B221CC7
610	2440	3780	13600	4	1	4	7			B221CC9
919	610	1415	5100	1	1 + 1/2	1 + 1/2	4			B221CE0
919	1220	2835	10200	2	1 + 1/2	2 + 2/2	7	1	B221CA2	B221CE1
919	1830	4250	15300	3	1 + 1/2	3 + 3/2	10	1	B221CA5	B221CE2
919	2440	5670	20400	4	1 + 1/2	4 + 4/2	12	1	B221CA8	B221CE3
1225	610	1890	6800	1	2	2	5			B221CG0
1225	915	2835	10200	1 + 1/2	2	2 + 2/2	7	1	B221CA0	B221CG1
1225	1220	3780	13600	2	2	4	8	1	B221CA2	B221CG3
1225	1525	4720	17000	2 + 1/2	2	4 + 2/2	9	1	B221CA3	B221CG4
1225	1830	5670	20400	3	2	6	10	1	B221CA5	B221CG6
1225	2135	6610	23800	3 + 1/2	2	6 + 2/2	11	1	B221CA6	B221CG7
1225	2440	7555	27200	4	2	8	13	1	B221CA8	B221CG9
1225	2745	8500	30600	4 + 1/2	2	8 + 2/2	17	1	B221CA9	B221CH0
1225	3050	9445	34000	5	2	10	18	1	B221CB1	B221CH2
1535	610	2360	8500	1	2 + 1/2	2 + 1/2	5			B221CJ0
1535	1220	4720	17000	2	2 + 1/2	4 + 2/2	11	2	B221CA2	B221CJ1
1535	1830	7085	25500	3	2 + 1/2	6 + 3/2	14	2	B221CA5	B221CJ2
1535	2440	9445	34000	4	2 + 1/2	8 + 4/2	17	2	B221CA8	B221CJ3
1535	3050	11805	42500	5	2 + 1/2	10 + 5/2	27	2	B221CB1	B221CJ4
1840	610	2835	10200	1	3	3	6			B221CL0
1840	915	4250	15300	1 + 1/2	3	3 + 3/2	10	2	B221CA0	B221CL1
1840	1220	5670	20400	2	3	6	11	2	B221CA2	B221CL3
1840	1525	7085	25500	2 + 1/2	3	6 + 3/2	13	2	B221CA3	B221CL4
1840	1830	8500	30600	3	3	9	15	2	B221CA5	B221CL6
1840	2135	9915	35700	3 + 1/2	3	9 + 3/2	16	2	B221CA6	B221CL7
1840	2440	11335	40800	4	3	12	18	2	B221CA8	B221CL9
1840	2745	12750	45900	4 + 1/2	3	12 + 3/2	25	2	B221CA9	B221CM0
1840	3050	14165	51000	5	3	15	27	2	B221CB1	B221CM2
2145	610	3305	11900	1	3 + 1/2	3 + 1/2	7			B221CN0
2145	1220	6610	23800	2	3 + 1/2	6 + 2/2	14	3	B221CA2	B221CN1
2145	1830	9915	35700	3	3 + 1/2	9 + 3/2	18	3	B221CA5	B221CN2
2145	2440	13220	47600	4	3 + 1/2	12 + 4/2	23	3	B221CA8	B221CN3
2145	3050	16525	59500	5	3 + 1/2	15 + 5/2	36	3	B221CB1	B221CN4
2450	610	3780	13600	1	4	4	7			B221CQ0
2450	915	5670	20400	1 + 1/2	4	4 + 4/2	13	3	B221CA0	B221CQ1
2450	1220	7555	27200	2	4	8	15	3	B221CA2	B221CQ3
2450	1525	9445	34000	2 + 1/2	4	8 + 4/2	17	3	B221CA3	B221CQ4
2450	1830	11335	40800	3	4	12	19	3	B221CA5	B221CQ6
2450	2135	13220	47600	3 + 1/2	4	12 + 4/2	21	3	B221CA6	B221CQ7
2450	2440	15110	54400	4	4	16	23	3	B221CA8	B221CQ9
2450	2745	17000	61200	4 + 1/2	4	16 + 4/2	34	3	B221CA9	B221CR0
2450	3050	18890	68000	5	4	20	37	3	B221CB1	B221CR2

Table 5: Technical data for special installation subframes and flat steel stiffeners

Technical data

The filter wall consists of individual standard cell frames.

For the dimensions of the standard cell frames, refer to Page 4.

In the selection list, the volume flow rate for pocket filter inserts is specified as an example.

For filter pads and other filter elements, the volume flow rate has to be determined and calculated for the size of the filter wall.

All weights are net, without packaging.

Dimensions of special installation subframe for filter wall with flat steel stiffeners (widths 2763 - 3683 mm)

Dimensions mm		Nominal volume flow rate		Quantity Standard cell frames			Weight	Flat steel stiffeners		Order no. for installation subframe
B	H	l/s	m³/h	vertical	horizontal	total	Approx. kg	Quantity	Order number	
2763	610	4250	15300	1	4 + 1/2	4 + 1/2	8			B221CS0
2763	1220	8500	30600	2	4 + 1/2	8 + 2/2	17	4	B221CA2	B221CS1
2763	1830	12750	45900	3	4 + 1/2	12 + 3/2	23	4	B221CA5	B221CS2
2763	2440	17000	61200	4	4 + 1/2	16 + 4/2	28	4	B221CA8	B221CS3
2763	3050	21250	76500	5	4 + 1/2	20 + 5/2	45	4	B221CB1	B221CS4
3068	610	4720	17000	1	5	5	9			B221CU0
3068	915	7085	25500	1 + 1/2	5	5 + 5/2	15	4	B221CA0	B221CU1
3068	1220	9445	34000	2	5	10	18	4	B221CA2	B221CU3
3068	1525	11805	42500	2 + 1/2	5	10 + 5/2	21	4	B221CA3	B221CU4
3068	1830	14165	51000	3	5	15	23	4	B221CA5	B221CU6
3068	2135	16525	59500	3 + 1/2	5	15 + 5/2	26	4	B221CA6	B221CU7
3068	2440	18890	68000	4	5	20	29	4	B221CA8	B221CU9
3068	2745	21250	76500	4 + 1/2	5	20 + 5/2	42	4	B221CA9	B221CV0
3068	3050	23610	85000	5	5	25	46	4	B221CB1	B221CV2
3377	1220	10390	37400	2	5 + 1/2	10 + 2/2	21	5	B221CA2	B221CW1
3377	1830	15585	56100	3	5 + 1/2	15 + 3/2	27	5	B221CA5	B221CW2
3377	2440	20775	74800	4	5 + 1/2	20 + 4/2	33	5	B221CA8	B221CW3
3377	3050	25970	93500	5	5 + 1/2	25 + 5/2	54	5	B221CB1	B221CW4
3683	1220	11335	40800	2	6	12	21	5	B221CA2	B221CY3
3683	1525	14165	51000	2 + 1/2	6	12 + 6/2	25	5	B221CA3	B221CY4
3683	1830	17000	61200	3	6	18	28	5	B221CA5	B221CY6
3683	2135	19835	71400	3 + 1/2	6	18 + 6/2	31	5	B221CA6	B221CY7
3683	2440	22665	81600	4	6	24	34	5	B221CA8	B221CY9
3683	2745	25500	91800	4 + 1/2	6	24 + 6/2	50	5	B221CA9	B221CZ0
3683	3050	28335	102000	5	6	30	55	5	B221CB1	B221CZ2

Table 6: Technical data for special installation subframes and flat steel stiffeners

Specification text

Standard cell frames for wall installation

- » Base element for mounting a filter wall in ventilation systems.
- » Fitting of filter pads and filter elements for separation of coarse and fine dust.
- » Standard cell frame made of sheet steel, either in a galvanised or stainless construction.
- » Clamping mechanism for secure sealing between cell frame and filter pads or filter elements.
- » With continuous foam seal (depending on filter element).

Construction of Type F210:

- » Standard cell frame for filter pads.

Construction of Type F220:

- » Standard cell frame for Z-line filters and minipleat filter panels with plastic frames.

Construction of Type F240:

- » Standard cell frames for pocket filters, minipleat filter inserts and metal filter panels.

Accessories Type B221:

- » Special installation subframe and flat steel stiffeners for filter wall.

Technical data:

Nominal volume flow rate _____ l/s (m³/h)

Dimensions of standard

cell frame _____ mm

Dimensions of filter wall _____ mm

Number of standard cell frames _____

Number of flat steel stiffeners _____

Net weight _____ kg

Order number for standard cell frame _____

Order number for installation subframe _____

Order number for flat steel stiffeners _____

Make: TROX

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Filters

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