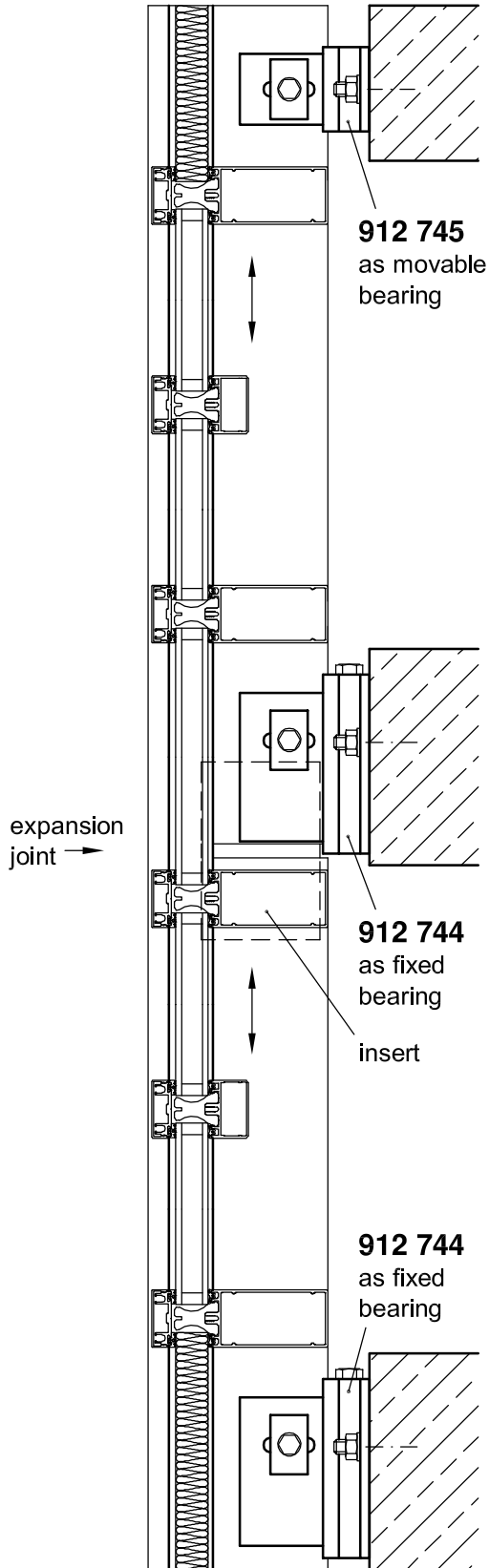
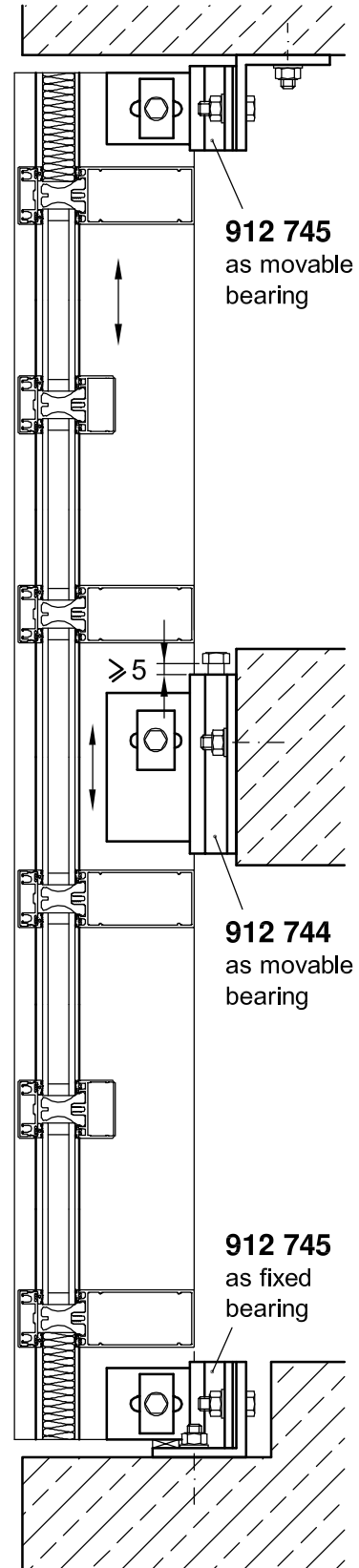


**single-span beam**



**double-span beam supported  
at ends and propped at the centre**



## Console series Fixing for façades Statics

Façades must be stable and fixed securely to the building. The stability and the transmission of all façade loads to the building are to be substantiated by means of a static calculation for buildings over a height of 8 metres.

In addition to the dead weight of the façade, wind pressure or wind suction has a load effect. The size of this wind load depends on the height **H** and the shape of a building. The greatest load arises in the case of wind suction in the corner area of a building.

The mullions may not be narrower than 50 mm.

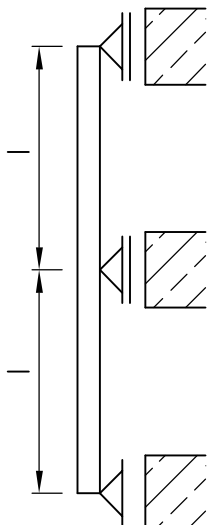
### – Long console **912 744**

Maximum mullion distance **B** can be seen on table 2 depending on the position of the console on the building and the building height **H** when fixing the console to an anchor rail or using dowels.

Building height h (m)	Dynamic pressure q (kN/m <sup>2</sup> )	Wind pressure $W_D = 1.25 \cdot 0.8 \cdot q$ (kN/m <sup>2</sup> )	Wind suction in corner area $W_S = 2 \cdot q$ $a/8 \leq 2 \text{ m}$ (kN/m <sup>2</sup> )
0 - 8	0.5	0.5	1.00
8 - 20	0.8	0.8	1.60
20 - 100	1.1	1.1	2.20

Table1 Wind loads according to DIN 1055 part 4

Statical proof for this façade fixing system was carried out using a dead weight of  $g = 0.46 \text{ kN/m}^2$ .



		Long console 912 744 Console distance $l \leq 3.25 \text{ m}$		
Position of console	Building height h	Mullion distance $B \leq$		
Standard area	0 - 20 m	2.00 m	2.00 m	2.00 m
Corner area		1.45 m	1.30 m	1.25 m
Standard area	20 - 100 m	1.80 m	1.80 m	1.80 m
Corner area		1.10 m	1.00 m	1.00 m
Fixing to the building using		1	2	3
1 Anchor rail : e. g. Halfen insert HTA 49/30, metre-length material or $l = 25 \text{ cm}$ , M12 2 Anchor rail : e. g. Halfen insert HTA 38/17, $l = 25 \text{ cm}$ , M12 3 Dowel : e. g. Fischer FZA 18 x 80, M12 4 Dowel : e. g. Fischer FZA 22 x 100, M12i  Anchoring material made by other manufacturers and yielding the same permissible loads can also be used. Minimum edge distances in the concrete are to be considered depending on the anchoring material.				

Table 2

### – Short console **912 745**

The dead weight of the façade is deposited on the ceiling boards for façades between floors. The maximum mullion distance **e** can be seen in table 3.

		Short console 912 745 $l \leq 3.25 \text{ m}$
Position of console	Building height h	Mullion distance $B \leq$
Corner area	$\leq 100 \text{ m}$	1.70 m

Table 3