

Air grilles
protective



ALWT(-2)

Hygienic certificate:
HK/B/1121/01/2007



Air grilles ALWT and ALWT-2 are designed for application in the low- and medium-pressure ventilation systems. Because of the reinforced construction they are highly recommended for the facilities where the increased risk of mechanical damage occurs e.g. in gym or sport halls.

◀ **Aluminium grilles ALWT**

with single row of stationary vanes
inclined under the angle of 15 degrees.

Aluminium grilles ALWT-2 ▶
with single row of stationary vanes
inclined under the angle of 45 degrees.



Air grilles ALWT(-2)

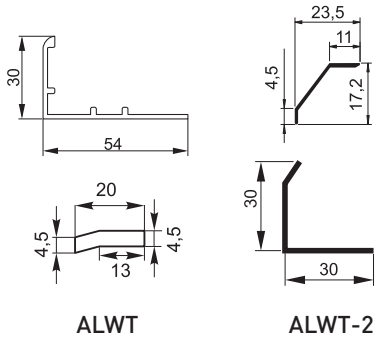
Material

The grille frame and stationary vanes are made out of anodised aluminium in natural colour or varnished in white RAL9010. On order, it is possible to varnish them in another RAL colour.

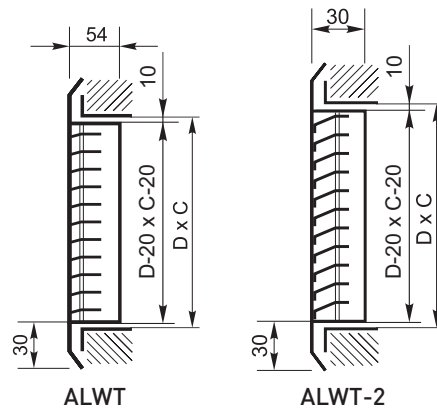
ALWT version has the vanes inclined under the angle of 15 degrees. ALWT-2 version has the vanes inclined under the angle of 45 degrees

Frame construction

The grille frames and vanes are made out of the profiles as in the figure.



Dimensions



Assembly

The grilles can be mounted with tap bolts through the holes in the grille frame.

Dimensions, active surface, grille weight ALWT



The standard dimensions of the grilles are given below. On customer's request, it is possible to produce the grilles with the dimensions other than the standard ones.

C	D	ALWT		C	D	ALWT-2	
		A _{eff}	Mass			A _{eff}	Mass
[mm]	[mm]	m ²	kg	[mm]	[mm]	m ²	kg
225	75	0,006	0,5	225	75	0,006	0,3
325	75	0,009	0,7	325	75	0,009	0,4
425	75	0,012	0,8	425	75	0,012	0,4
525	75	0,014	1,0	525	75	0,014	0,5
625	75	0,017	1,2	625	75	0,017	0,6
825	75	0,023	1,5	825	75	0,023	0,8
1025	75	0,029	1,9	1025	75	0,029	0,9
1225	75	0,034	2,2	1225	75	0,034	1,0
225	125	0,011	0,7	225	125	0,011	0,4
325	125	0,017	1,0	325	125	0,017	0,5
425	125	0,022	1,3	425	125	0,022	0,6
525	125	0,028	1,5	525	125	0,028	0,7
625	125	0,033	1,8	625	125	0,033	0,8
825	125	0,044	2,3	825	125	0,044	1,0
1025	125	0,055	2,9	1025	125	0,055	1,2
1225	125	0,066	3,4	1225	125	0,066	1,4
225	225	0,022	1,2	225	225	0,022	0,6
325	225	0,033	1,6	325	225	0,033	0,8
425	225	0,043	2,1	425	225	0,043	0,9
525	225	0,054	2,6	525	225	0,054	1,1
625	225	0,064	3,0	625	225	0,064	1,3
825	225	0,086	4,0	825	225	0,086	1,5
1025	225	0,107	4,9	1025	225	0,107	1,8
1225	225	0,128	5,8	1225	225	0,128	2,1
325	325	0,048	2,3	325	325	0,048	1,0
425	325	0,064	3,0	425	325	0,064	1,2
525	325	0,080	3,6	525	325	0,080	1,5
625	325	0,096	4,3	625	325	0,096	1,7
825	325	0,128	5,6	825	325	0,128	2,1
1025	325	0,159	6,9	1025	325	0,159	2,4
1225	325	0,191	8,2	1225	325	0,191	2,8
425	425	0,085	3,8	425	425	0,085	1,5
525	425	0,106	4,6	525	425	0,106	1,9
625	425	0,127	5,5	625	425	0,127	2,1
825	425	0,170	7,2	825	425	0,170	2,6
1025	425	0,212	8,9	1025	425	0,212	3,0
1225	425	0,254	10,6	1225	425	0,254	3,5
525	525	0,133	5,7	525	525	0,133	2,3
625	525	0,159	6,7	625	525	0,159	2,6
825	525	0,211	8,8	825	525	0,211	3,1
1025	525	0,264	10,9	1025	525	0,264	3,6
1225	525	0,316	13,0	1225	525	0,316	4,1
625	625	0,190	8,0	625	625	0,190	3,0
825	625	0,253	10,4	825	625	0,253	3,6
1025	625	0,316	12,9	1025	625	0,316	4,3
1225	625	0,379	15,3	1225	625	0,379	4,9

Where:

C - width of the assembly hole in mm

D - height of the assembly hole in mm

A_{eff} - active surface in m²

Mass - grille weight in kg

Selection of ALWT(-2)



Nomograms presenting the hydraulic and acoustic characteristics of the grilles are on page 369.

Accessories and how to order ALWT(-2)

While making the order, it is necessary to provide the information according to the below-mentioned method:

<GRILLE TYPE> - <C>x<D> - <P><RAL> / <ADD>

Where:

<GRILLE TYPE>- ALWT lub ALWT-2

<C> - width of the assembly hole in mm

<D> - height of the assembly hole in mm

<P> - finishing: *

AA – finishing: *

AL – varnished aluminium

<RAL> - colour according to the RAL palette (for finishing of SL or AL)*

<ADD> - here you should determine the additional accessories as below:

Accessories **

<GA> - backward damper made out of aluminium

<GS> - concurrent damper made out of the galvanised steel

<GC> - tangent-balance damper

<GM> - arc damper

<GT> - slot damper

<RM> - assembling frame

<RM+F> - assembling frame with filter

<LO1> - screen deflector with useful surface of 38% section

<LO2> - screen deflector with useful surface of 58% section

<NDS><S> - NDS connector pipe for round ducts
(in <S> give the required connector diameter in mm)

Plenum box according to the configuration as below:

<SR><I>-<H>-<K><D><R>

<I> - insulation:

none = no insulation

t = insulated

<H> - box height in mm *

<K> - position of connector pipe:

b = lateral

g = upper

<D> - connector pipe diameter in mm *

<R> - damper in the connector pipe:

none = no damper

P = damper with regulation from outside the box

* optional values, when they are not given, the default values shall apply

Example of the order:

ALWT-2 – 525x225 – AL9010 / SRt – 270 – b160P