X-series

- Easy adjustable adjacent zone
- Environmental friendly
- Easy to install and commission
- Test nipple for measuring the air flow rate
- Maintenance free



Function

The new X-Series Displacement Terminal provide a completely new method of using Displacement Ventilation.

The patented X-series nozzle has been designed using 20 years experience in the design and use of Displacement Terminals.

They provide the following advantages:

Adjustable adjacent zone

Air direction from panel can be changed without the use of tools or technical expertise.

When the direction is modified the air is still supplied equally over the entire face of the panel and the pressure characteristic remains the same.

Induced air

A main consideration in the use of Displacement Terminals with low supply air temperature is the low floor temperature which can be created in a badly designed system.

Because of the higher level of mixing created by the X-Series nozzle, lower air supply temperatures can be used and consequently the Displacement Ventilation performs with higher load factors.

Construction

The X-series are designed for multiple use. Built around aluminium profiles the unit can be rapidly installed and

easily dismounted should internal duct cleaning be required.

A shaped edge takes away the uneven line normally created between wall and panel.

With its very rigid construction damage is unlikely but should this occur it is a simple matter to change any section of the unit.

Environmentally Friendly

The new X-series units were designed to protect the environment in that all materials can be recycled and the reduction in transport sizes reduces shipping and transport loads on the environment.

Installed Economy

When calculating the cost of a panel it is essential to include the labour cost of installing and commissioning.

As the adjacent zone and panel are smaller they reduce the floor area which need to be allowed.

Maintenance, running costs and pressure losses all reduce the use of energy in the system.

If refurbishment is required of the building where X-series are installed then they can easily be refitted.

Design

Standard panel height is 2 metres with the facility for a duct cover to fit between the top of the panel and ceiling.

Although the length of the aluminium profile can be cut at works the profile can also be cut on site as the front plate overlaps the cover.

It is recommended that the panel is mounted 100 - 150 mm above the floor.

Many types of X-Series are available:

RVX is a shallow bow shaped panel.

RAX is a half round wall model.

VRX is a quarter round corner model.

Alternative design

An aluminium profile can be used to cover the nozzle slits (RVXs). The increased turbulence means that the induction of warm air is improved giving rise to a higher floor temperature.

This patented system provide a very attractive appearance often preferred by architects and designers.

Dimensions and weight.

Size	ød	В	D	kg
RVX 100	100	400	155	16
RVX 125	125	500	175	18
RVX 160	160	600	215	22
RVX 200	200	750	255	29





Material

Front and rear:SteelCorner profiles:AluminiumX-Nozzles:ABS plasticEven the powder coat finish uses no solvent for degrea-

sing as our system uses steam for this purpose.

Specials

RAX, VRX and RVX can be provided with a standard perforation (ø3 mm, 6 mm pitch) or special perforation together with the REPUS nozzle. See our special leaflet.

Technical data

Pressure drops, sound data and adjacent zone are given in the diagrams. Sound levels are shown at 10 $\ensuremath{m^2}$ Sabine.

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RVXS 100	100	400	155	16
RVXS 125	125	500	175	18
RVXS 160	160	600	215	22
RVXS 200	200	750	255	29





X-series

kg

14

16

20

25

28

Size	ød	В	D	kg
RAX 200	200	350	350	21
RAX 250	250	350	350	23
RAX 315	315	400	400	26
RAX 400	400	500	500	29



Producte code

	a <u>a</u> a.b	<u>b</u> b.c	
Туре			
RVX, RVXS, RAX, VRX			
Size			
100, 125, 160, 200			
Length in cm			
200			
Accessories			
0 = Top connection			
1 = Bottom connection			

- 2 = With extended cover*, top conn.
- 3 = With extended cover*, bottom conn.

	7		
[
	00	20	
80	16		

Size

VRX 125

VRX 160

VRX 200

VRX 250

VRX 315

D

ø d

125

160

200

250

315

D

d

 D

200

250

300

400

450

VRX 125-315

Descriptive text

REPUS® supply air panel type.....The panel must be equipped with REPUS® X-nozzles for internal air distribution.

Material: Galvanised sheet steel Paint: White (RAL 9010) Accessories:

Maintenance

The panel is designed for ease of maintenance. The front is easy to dismantle if cleaning is necessary. To clean the panel use a damp cloth and a mild detergent.

*The duct cover can be made to measure.

X-series

Installing

Panel without duct cover plate

- 1. Loosen the locking screw at the bottom of the panel.
- 2. Pull out the front (up and out)
- 3. Screw the back plate to the wall through the aluminium profile. Leave 100 mm between the bottom of the unit and the floor.
- 4. Replace the front cover and the locking screws.

Panels with duct cover plate.

- 1. Loosen the locking screw at the bottom of the panel.
- 2. Pull out the front (up and out)
- 3. The two extension profiles are cut to the right length or ordered to the right dimensions. With the cut end upwards press into the panel profile.
- 4. Screw the back plate and the extension to the wall through the aluminium profile. Leave 100 mm between the bottom of the unit and the floor.
- 5. Press the duct cover into the profile and insert screws from each side passing through the profile.
- 6. The panel front is replaced to overlap the duct cover and held in place using the locking screws.









500

125

 \otimes

V1

175

2000

800

X-series

RVX

RVX100



RVX125



X-series

RVX









X-series



RAX200



V1





X-series RAX

RAX315



RAX400



X-series VRX



200 125



V1 (m/s)





300

200

 $(\times$

V1

300

2000

1680



VRX200



1.0

0.5

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X-series VRX



450 **VRX315** 315 Volmisi 10,2111 4R P_{tot} (Pa) 450 100 V1 40 50 35 40 0.40 2.0 30 30 - 3.0 25 20 20 0.30 - 2.0 2000 15 10 1680 0.20 1.0 10 1.5 ىن_ەنى 100 500 200 300 400 1000 Q (I/s) 4 2 3 5 6 7 8 9 10

V₁ (m/s)