Ventilation system ComfoAir Standard
Manual for the user

zehnder

always
around you

Heating | Cooling | Fresh Air | Clean Air

ComfoAir 180

ComfoAir 200

ComfoAir 350

ComfoAir 550

Foreword

Read this document carefully before use.

This document provides all the information required for safe and optimal operation and maintenance of the ComfoAir 180, 200, 350 or 550. In this document they will be referred to as “the unit”. The unit is subject to continuous development and improvement. As a result, the unit may slightly differ from the descriptions.

The following pictograms are used in this document:

Point of attention.

Risk of:
- damage to the device;
- performance of the device is compromised if instructions are not observed carefully.

Risk of personal injury for the user.

Maintenance

Questions
Please contact the supplier if you have any questions or would like to order a new document or new filters. The contact details of the main supplier can be found on the back page of this document.

Use of the unit
The unit may only be used when it is properly installed according to the instructions and guidelines in the installer manual of the unit. The unit can be used by:
- children aged from 8 years and above;
- persons with reduced physical capabilities;
- persons with reduced sensory capabilities;
- persons with reduced mental capabilities;
- persons with lack of experience and knowledge, if they have been given supervision or instruction concerning use of the unit in a safe way and understand the hazards involved.

Childeren shall not play with the appliance.
Cleaning and user maintenance shall not be carried out by children without supervision.

The following information can be found in this document:

Information	Chapter
General information about the ventilation system.	1
Safety instructions which must be followed.	1
Operating devices available for the unit.	2
The meaning of the information shown on the display of the unit.	2
Using the display to set different parameters (P-menus).	2
A summary of all the different parameters (P-menus).	2
Warranty and liability conditions.	3
What to do with the unit at the end of its life.	3
EEC declaration of conformity.	3
How to replace or clean the filters of the unit.	4
How to clean the valves of the ventilation system.	4
When the installer or service engineer must come by for the maintenance of the unit.	4
What to do in event of a malfunction.	5

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[3] Not available on the ComfoAir 180.

1 Introduction and safety

The unit is a balanced ventilation system with heat recovery in order to create energy-efficient ventilation in houses. Balanced ventilation means that pollutants from the kitchen, bathroom, wc(s) and possibly the utility room are extracted, while the same amount of fresh air is blown into the living room and bedrooms. Gaps under or near doors ensure a good through-flow in the dwelling.

Ensure that the gaps under or near doors are never obstructed. For example by furniture, draught excluders or deep-pile carpet.

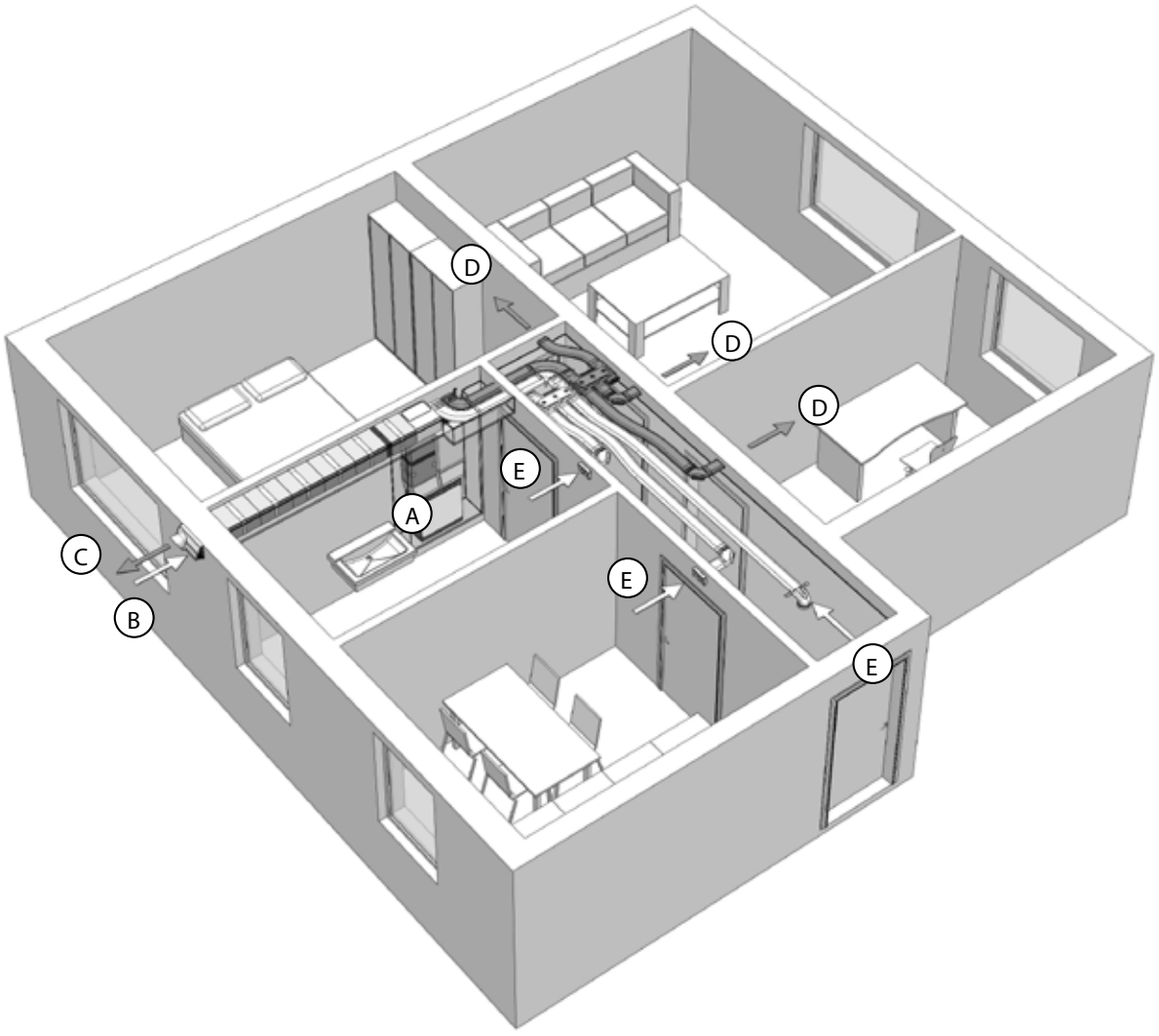
A balanced ventilation system consists of:

- The unit (A);
- Duct system for the intake of outdoor air (B);
- Duct system for the exhaust of indoor air (C);
- Supply valves in the living room and bedrooms (D);
- Exhaust valves in the kitchen, bathroom, wc and (if present) the utility room (E).

Safety instructions

Always follow the safety regulations, warnings, comments and instructions given in this document. Personal injury or damage to the unit can arise from non-compliance with the safety regulations, warnings, comments and instructions in this document.

- It is recommended to take out a maintenance contract so that the device is checked on a regular basis. The supplier can provide a list of registered installers nearby;
- The unit may only be installed, connected, rendered operational and maintained by an appropriately approved installer, unless otherwise indicated in this document;
- Store this document for the entire working life of the unit;
- Instructions with regard to maintenance of the filters must be carefully observed;
- When carrying out any work on the unit, make sure the power is disconnected and cannot be inadvertently reconnected;
- If the unit is disconnected from the power supply, mechanical ventilation of the dwelling will cease. This can lead to a buildup of moisture and result in problems with mould;
- The unit cannot be opened without using tools.



2 Operation

How to use and read the operating devices of the unit is mentioned in the document of the operating device.
How to use and read the display on the unit is mentioned in this document.

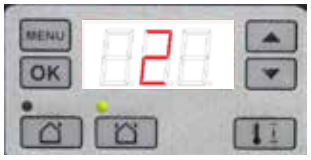
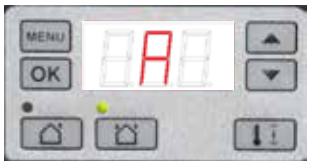
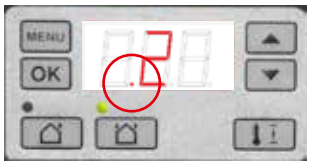
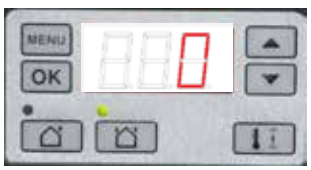
2.1 Available operating devices

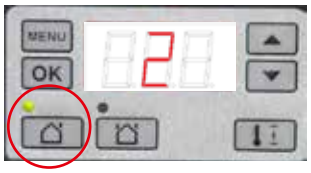
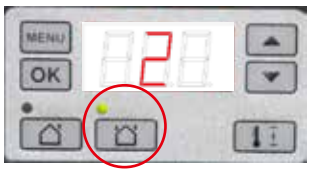
One or more of the following operating devices can be present to operate the unit:

Appearance	Name	Functions
	Display on unit	Indicating the set ventilation level; Indicating a malfunction or filter alert; Indicating if the bypass is open; Turning the supply fan on and off; Indicating and setting the comfort temperature; Setting the P-menus; Resetting the malfunctions and filter alert. **The desired ventilation level cannot be set with the display on the unit.**
	CCB	Set the desired ventilation level: 1 = Low; 2 = Normal; 3 = High; Overrun timer.
	CCBL[3]	Set the desired ventilation level: 1 = Low; 2 = Normal; 3 = High; Overrun timer. Indicating a malfunction or filter alert.
 Example switch	Bathroom switch	Activating the overrun timer.

[3] Not available on the ComfoAir 180.

2.2 Reading the display on the unit

Appearance	Description	What to do
	All lights are off. The power of the unit is turned off.	Turn on the power of the unit.
	One number is displayed in the middle of the display. The current ventilation setting is displayed. Possible displayed settings are: ▯ 1 = Low; ▯ 2 = Normal; ▯ 3 = High.	No action required.
	The letter “A” is displayed in the middle of the display. The current ventilation setting is displayed. The displayed setting is “Absent”.	No action required.
	The letter “t” is displayed at the left of the display (with one number in the middle of the display). An overrun timer is activated (and the current ventilation setting is displayed).	No action required.
	A point is displayed next to the middle of the display (with one number in the middle of the display). The bypass is opened (and the current ventilation setting is displayed).	No action required.
	The letters “FiL” and “tEr” are alternately flashing on the display. The “internal filter malfunction“ is displayed.	Clean or replace the filters as mentioned in the "Maintenance" chapter.
	The letter “A” is flashing at the left of the display with one or two numbers on the right of the display. The current “malfunction code“ is displayed.	Contact the installer or service engineer as mentioned in the "Malfunctions" chapter.
	The letter “E” is flashing at the left of the display with one number on the right of the display. The current “malfunction code“ is displayed.	Contact the installer or service engineer as mentioned in the "Malfunctions" chapter.
	The letters “EA” are flashing at the left of the display with one number on the right of the display. The current “malfunction code“ is displayed.	Contact the installer or service engineer as mentioned in the "Malfunctions" chapter.
	The letter “P” is displayed at the left of the display with one or two numbers on the right of the display. The current chosen “P-menu” is displayed.	No action required. **At this time the lower buttons of the display are not functional.**
	One, two or three numbers are displayed in the right of the display. The current setting of the chosen “P-menu” is displayed.	No action required. **At this time the lower buttons of the display are not functional.**

Appearance	Description	What to do
	Three numbers with a point after the second number are displayed in the display. The current setting of the comfort temperature is displayed.	No action required.
	The light above the icon with one arrow is lit. The supply fan is turned off. There is no supply of fresh air.	Do not forget to turn on the supply fan again when the supply fan has been turned off manually.
	The light above the icon with two arrows is lit. The supply fan is turned on. There is balanced ventilation.	No action required.

2.3 Reading and setting the comfort temperature

The unit will strive for the most comfortable supply air temperature based on the set comfort temperature.

It is best to set the comfort temperature to the same temperature as the room thermostat (of the central heating system).

The comfort temperature can be set between 12°C and 28°C. How to read or set the comfort temperature on the present operating device can be found in the document of the operating device.

	Action on display	Reaction on display[4]	Explanation
1	Press and hold for at least 3 seconds		Current set comfort temperature is being displayed.
2	Press		Comfort temperature is increased by 0.5°C.
	Or press		Comfort temperature is decreased by 0.5°C.
3	Press OK		Comfort temperature is confirmed and the display returns to the default screen.

2.4 Switching the supply fan on and off

When required, the supply fan of the unit can be turned off manually. This may be desired to keep out unpleasant odours from outside. Bear in mind that switching off the supply or exhaust fan will temporarily immobilise your dwelling's balanced ventilation system, so do not forget to turn the supply fan on again. How to switch the supply fan on or off on the present operating device can be found in the document of the operating device.

When can the supply fan not be turned off on the display?

To prevent air being sucked back from the chimney of a fireplace the unit is fitted with an open fire programme. When needed the installer or service engineer can turn this programme on. If the open fire programme is turned on the supply fan cannot be turned on or off manually.

When can the supply fan not be turned on?

The supply fan cannot only be operated manually but can also be controlled automatically by the unit itself. This occurs in the winter to protect the unit from freezing. If the supply air is too cold for the unit, the unit will automatically switch the supply fan off. In this case the supply fan cannot be turned on manually.

	Action on display	Reaction on display	Explanation
1	Press and hold for at least 3 seconds		The supply fan is turned off. The light above the button turns green.
2	Press and hold for at least 3 seconds		The supply fan is turned on. The light above the button turns green.

The supply fan will not automatically turn back on. Do not forget to turn the supply fan back on.

[4] The displayed settings are the standard setting of the unit. This may differ from the actual setting of the unit.

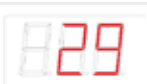
2.5 Setting an overrun timer for the CCB or CCBL[3]

The ventilation setting can be increased for a set time. This can be useful when additional ventilation is needed for a short time like during cooking and showering. How to switch the overrun timer on or off can be found in the document of the CCB or CCBL[3]. The overrun timer can be set in P-menu 23 between 0 minute and 120 minutes.

	Action on display	Reaction on display[4]	Explanation
1	Press MENU		The main P-menus are being entered.
2	Press OK		The sub P-menus of the selected P-menu are being entered
3	Press ▲ until P23 appears		The different sub P-menus of the selected P-menu are being displayed.
4	Press OK		The selected P-menu is being entered.
5	Press ▲		Time delay is increased by 1 minute.
	Or press ▼		Time delay is decreased by 1 minute.
6	Press OK		Time delay is confirmed and returned to the sub P-menus of the selected P-menu.
	Press MENU		Old settings are restored and returned to the sub P-menus of the selected P-menu.
7	Press MENU		Returned to the main P-menus.
8	Press MENU		Returned to the default screen.

2.6 Setting an overrun timer for the bathroom switch

The ventilation setting can be increased for a set time. This can be useful when additional ventilation is needed for a short time like during cooking and showering. How to switch the overrun timer on or off can be found in the document of the bathroom switch. The overrun timer can be set in P-menu 22 between 0 minute and 120 minutes.

	Action on display	Reaction on display[4]	Explanation
1	Press MENU		The main P-menus are being entered.
2	Press OK		The sub P-menus of the selected P-menu are being entered
3	Press ▲ until P22 appears		The different sub P-menus of the selected P-menu are being displayed.
4	Press OK		The selected P-menu is being entered.
5	Press ▲		Time delay is increased by 1 minute.
	Or press ▼		Time delay is decreased by 1 minute.
6	Press OK		Time delay is confirmed and returned to the sub P-menus of the selected P-menu.
	Press MENU		Old settings are restored and returned to the sub P-menus of the selected P-menu.
7	Press MENU		Returned to the main P-menus.
8	Press MENU		Returned to the default screen.

[3] Not available on the ComfoAir 180.
[4] The displayed settings are the standard setting of the unit. This may differ from the actual setting of the unit.

2.7 Setting a delay timer for the bathroom switch

A high ventilation setting is not always desired, for instance when you only go to the bathroom for a short time. Therefore a delay time, in which the unit will do nothing with the information it receives from the bathroom switch, can be set. How to switch the delay timer on or off can be found in the document of the bathroom switch. The delay timer can be set in P-menu 21 between 0 minute and 15 minutes.

	Action on display	Reaction on display[4]	Explanation
1	Press MENU		The main P-menus are being entered.
2	Press OK		The sub P-menus of the selected P-menu are being entered
3	Press OK		The selected P-menu is being entered.
4	Press ▲		Time delay is increased by 1 minute.
	Or press ▼		Time delay is decreased by 1 minute.
5	Press OK		Time delay is confirmed and returned to the sub P-menus of the selected P-menu.
	Press MENU		Old settings are restored and returned to the sub P-menus of the selected P-menu.
6	Press MENU		Returned to the main P-menus.
7	Press MENU		Returned to the default screen.

2.8 Setting the delay timer for the filter alert

How fast the filters of the unit need cleaning or replacing depends on the air quality of the environment.

In the countryside the filters may not pollute as fast as in urban places. Therefore the filter alert has an adjustable delay timer. After the delay timer has run out, the following filter malfunctions appear alternately on the display:  and  .

How to clean or replace the filters is mentioned in the “Maintenance” chapter. The delay timer can be set in P-menu 24 between 10 weeks and 25 weeks.

	Action on display	Reaction on display[4]	Explanation
1	Press MENU		The main P-menus are being entered.
2	Press OK		The sub P-menus of the selected P-menu are being entered
3	Press ▲ until P24 appears		The different sub P-menus of the selected P-menu are being displayed.
4	Press OK		The selected P-menu is being entered.
5	Press ▲		Time delay is increased by 1 week.
	Or press ▼		Time delay is decreased by 1 week.
6	Press OK		Time delay is confirmed and returned to the sub P-menus of the selected P-menu.
	Press MENU		Old settings are restored and returned to the sub P-menus of the selected P-menu.
7	Press MENU		Returned to the main P-menus.
8	Press MENU		Returned to the default screen.

[4] The displayed settings are the standard setting of the unit. This may differ from the actual setting of the unit.

2.9 P menus for the user

The software of the unit can be customised to the users requirements by changing the values in the P-menus of the software.
Menu P1 and menu P9 are read-only menus, menu P2 is for setting time delays among other things.
A summary of all the accessible P-menus is given below.

Menu P1 > Status of time programmes

		Status
Submenu	Description	Activated
P11	Is menu P21 currently active?	Yes (1) / No (0)
P12	Is menu P22 currently active?	Yes (1) / No (0)
P13	Is menu P23 currently active?	Yes (1) / No (0)
P14	Is menu P24 currently active?	Yes (1) / No (0)
P15	Is menu P25 currently active?	Yes (1) / No (0)
P16	Is menu P26 currently active?	Yes (1) / No (0)
P17	Is the Summermode currently active?	Yes (1) / No (0)

Menu P9 > Status of additional programmes

		Status
Submenu	Description	Activated
P90	Open fire programme active?	Yes (1) / No (0)
P91	Bypass open?	Yes (1) / No (0)
P94	n/a	Yes (1) / No (0)
P95	Frost protection or pre heater active?	Yes (1) / No (0)
P97	Enthalpy programme active?	Yes (1) / No (0)

Menu P2 > Setting time delays

		Time delay values		
Submenu	**Description**	**Minimum**	**Maximum**	**General reset**
P21 **Only applies to systems fitted with a bathroom switch.**	Delay timer for the bathroom switch (to switch to high position). ▯ ‘x‘ minutes after operating the bathroom switch, the unit switches to the high setting.	0 Min.	15 Min.	0 Min.
P22 **Only applies to systems fitted with a bathroom switch.**	Overrun timer for the bathroom switch (to switch to normal position). ▯ ‘x‘ minutes after operating the bathroom switch, the unit switches back to the normal setting.	0 Min.	120 Min.	30 Min.
P23 **Only applies to systems fitted with a CCB, or CCBL[3] switch.**	Overrun timer for ventilation position 3 (using a hardwired 3-position switch). ▯ If ventilation setting 3 (high) is switched on briefly (< 3 sec), the unit will switch to the high setting for ‘x’ minutes and then automatically returns to the normal setting. If any switch is operated during this lagging time the unit will instantly revert to the ventilation position as set at that time.	0 Min.	120 Min.	0 Min.
P24	Filter warning ▯ ‘x’ weeks after cleaning or replacing the filters the “filter dirty” alert will reappear.	10 weeks	26 weeks	16 weeks
P25	n/a	1 Min.	20 Min.	10 Min.
P26	n/a	1 Min.	120 Min.	30 Min.
P27	n/a	0 Min.	120 Min.	30 Min.

[3] Not available on the ComfoAir 180.

3 CE certification and warranty

Warranty conditions

The unit is covered by a manufacturer's warranty for a period of 24 months after fitting up to a maximum of 30 months after the date of manufacture. Warranty claims may only be submitted for material faults and/or construction faults arising during the warranty period. In the case of a warranty claim, the unit must not be dismantled without written permission from the manufacturer. Spare parts are only covered by the warranty if they were supplied by the manufacturer and have been installed by an approved installer.

The warranty becomes invalid if:

- The guarantee period has elapsed;
- The device is used without filters;
- Parts are used that have not been supplied by the manufacturer;
- Non-authorised changes or modifications have been made to the unit;
- Installation has not been carried out according to the applicable regulations;
- The defects are due to incorrect connection, inexpert use, or contamination of the system.

On-site (dis)assembly costs are not covered by the terms of the warranty. This also applies to normal wear and tear. The manufacturer retains the right to change the construction and/or configuration of its products at any time without being obliged to alter previously delivered products.

Liability

The unit has been designed and manufactured for use in balanced ventilation systems incorporating Zehnder heat recovery systems. Any other application is seen as inappropriate use and can result in damage to the unit or personal injury, for which the manufacturer cannot be held liable. The manufacturer is not liable for any damage originating from:

- Non-compliance with the safety, operating and maintenance instructions in this document;
- The use of components not supplied or recommended by the manufacturer. Responsibility for the use of such components lies entirely with the installer;
- Normal wear and tear.

End of useful life

Consult with the supplier about what should be done with the unit at the end of its useful life. If the unit cannot be returned to the supplier, avoid disposing of it with the domestic waste, and ask your local council about the options for recycling the components or processing the materials in an environmentally friendly manner.

CE certification

Zehnder Group Nederland B.V.
Lingenstraat 2 • 8028 PM Zwolle-NL
T +31 (0)38 4296911 • F +31 (0)38 4225694
Company register Zwolle 05022293

EEC declaration of conformity

Machine description	Heat recovery units:	ComfoAir 180, 200, 350, 550 series
Complies with the following directives	Machinery Directive	(2006/42/EEC)
	Low Voltage Directive	(2006/95/EEC)
	EMC Directive	(2004/108/EEC)

Zwolle, 15-01-2014
Zehnder Group Nederland B.V.

O. Schulte,
Directeur Productie Zwolle

4 Maintenance

Failure to carry out (periodic) maintenance on the unit ultimately compromises the performance of the ventilation system.

The unit should be inspected and cleaned every 2 years by a specialist. To ensure a hassle free lifespan for your unit, we recommend you take out a service agreement with an expert company.

Ensure the unit has been disconnected from mains power before carrying out any maintenance work.

The power to the unit should not be disconnected unless the unit is to be taken out of service due to a serious malfunction, or for filter replacement or any other compelling reasons.

If the power to the unit is disconnected, mechanical ventilation of the dwelling will cease. This can lead to a build-up of moisture and result in problems with mould.

4.1 Cleaning or replacing the filters

Your heat recovery unit is covered by our standard warranty which requires annual replacement of the filters. To register for your own FREE „Filter Reminder“ service go to www.greenwood.co.uk/homeownerregistration.

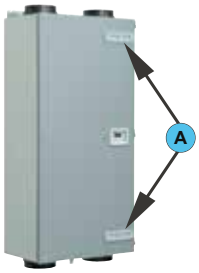
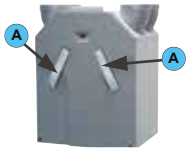
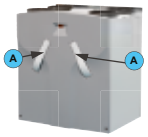
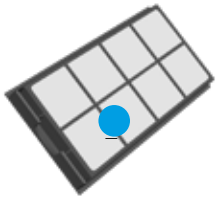
Replace the filters (at least) every six months and clean the filters every 2 or 3 months.

When indicated on the display you must clean or replace the filters.
The following filter malfunctions appears alternately on the display: FIL and tEr

The installer of the unit can provide the necessary new filters.

Unit type	Filter type	Order number
ComfoAir 180	2x G4	400100090
	1x F7 / 1x G4	400100091
ComfoAir 200	1x F7 / 1x G4	400100013
	2x G4	400100014
	2x F7	400100017
ComfoAir 350 ComfoAir 550	2x G4	400100085
	1x F7 / 1x G4	400100084
	2x F7	400100086

4.1.1 Replacing the internal filters

	Action	Explanation
1	 4 seconds	Reset the filter error by pressing OK on the display for at least 4 seconds until the filter warning disappears.
2		Disconnect the power from the unit.
3	 ComfoAir180  ComfoAir 200  ComfoAir 350  ComfoAir 550	Remove the handles (A) from the unit.
4	 ComfoAir 200  ComfoAir 180  ComfoAir350/550	Remove the dirty filters (B) from the unit.
5		Install the clean filter back into the unit and reconnect the power.

4.1.2 Cleaning the internal filters

Vacuum the filters (B) with a vacuum cleaner instead of replacing them with new filters.

When using the unit for the first time, it is recommended to clean the filters (and valves) first. During the construction phase the ventilation system could have become dirty with building dust.

4.2 Cleaning the valves

Clean the valves (at least) twice a year.

1. Mark the setting of the valve;
2. Remove the valve from the wall or ceiling;
3. Clean the valve in a solution of soap and warm water;
4. Rinse the valve thoroughly and wipe dry;
5. Place the valve back WITH EXACTLY THE SAME SETTING (and IN THE SAME HOLE);
6. Repeat this procedure for the other valves.

Some valves have a filter behind them. If a filter is present, clean it in the same way as the valve.

About the valve settings

The ventilation air is supplied and discharged by means of valves. Gaps under or near doors in the dwelling ensure that the air flows in the right direction. In order to ensure that the correct ventilation volumes are maintained in the rooms, the following must be observed:

- Do not seal the gaps under or near doors. For example with furniture, draught excluders or deep-pile carpet. The gap should be at least 10mm;
- Do not change the settings of the valves;
- Do not replace the valves with one another.

The installer will have set all the valves to ensure the optimum performance of the ventilation system. Therefore, do not change the setting of the valves.

4.3 Condensation drain

Ensure that the water seal (u-bend) connected to the domestic waste-water system is always full of water.

4.4 Maintenance by the installer or service engineer

Not all neccesary maintenance can be done by the user.

Once every 2 years the installer or a service engineer should come by for the maintenance inside the balanced ventilation system.

Some installers offer a full maintenance contract package where the user maintenance can also be integrated.

5 Malfunctions

In the event of a malfunction, the corresponding malfunction code will be displayed on the display of the unit.

In event of a filter malfunction the filter must be cleaned or replaced as described in the „Maintenance“ chapter.

In the event of all other malfunctions:

	Action	Explanation
1		Note down the malfunction code that appears on the display of the unit
2		Note down the unit type. This is given on the identification plate on the unit near the power supply.
3		Contact the installer or service engineer and give him the noted information.

The system should not be disconnected from the power supply, unless the unit must be taken out of service due to a serious malfunction, or for filter cleaning/replacement or any other compelling reasons.

If the unit is disconnected from the power supply, mechanical ventilation of the dwelling will cease. This can lead to a build-up of moisture and result in problems with mould.

If the unit is installed in an area with a higher average humidity (such as bathroom or wc) the probability of condensation on the outside of the unit is high. This is similar to condensation on a window and no action is needed.

I Commissioning & Inspection Record

This should be used to record all installation details. The Commissioning Engineer should use the following Parts 1 to 3, to record important information relating to the installation, of which, copies should be given to the Building Control Body (BCB), the Developer, the Installer and also be incorporated into the Homeowner Pack for the homeowner to keep.

Part 1 System details and declarations
Part 2a Installation details
Part 2b Inspection of installation
Part 3 Airflow measurement test and commissioning details

Part 1 - System details and declarations

1.1 Installation Address Details	
Dwelling name/number	
Street	
Locality	
Town	
County	
Post Code	

1.2 Installation Details	
System classification[1]	System...
	Enter System 1 to 4 as defined by Approved Document F 2010
Manufacturer	
Model numbers	
Serial number (where available)	
Location of fan units	1.
	2.
	3.
	4.
	5.

[1]Note. If a system has been installed that is not defined by System 1 to 4 in Approved Document F, further installation checks and commissioning procedures may be required. Seek particular guidance from the manufacturer for these systems.

Part 2a - Installation details

2.1 Installation Checklist - General (all systems)	Tick as appropriate	
Has the system been installed in accordance with manufacturer's requirement	Yes	No
Have relevant systems installation clauses been followed as details in tables 1, 3, 5 and 7 applicable	Yes	No
Type of ductwork installed (e.g. rigid, semi-rigid)		
If any deviation from tables 1, 3, 5 and 7, these should be detailed here		
Description of installed controls (e.g. timer, central control humidistat, PIR, etc.)		
Location of document/override controls		
Signature		
Number (if applicable)		
Date of Installation (completion)		

2.2 Installation Engineer's Details	
Engineer's Name	
Company	
Address Line 1	
Address Line 2	
Telephone Number	
Post Code	
Signature	
Competent Person Scheme/ Registration number (if applicable)	
Date of installation (completion)	

2.3d Inspector's Details	
Name	
Company	
Address Line 1	
Address Line 2	
Telephone Number	
Post Code	
Signature	
Competent Person Scheme/ Registration number (if applicable)	
Date of installation (completion)	

Part 2b - Inspection of installation

This section should be completed by the commissioning engineer prior to completing Part 3.

2.3a Visual inspections - General (all systems)		
Total installed equivalent area of background ventilators in dwelling		mm
Total floor area of dwelling		m^2
Does the total installed equivalent ventilator area meet the requirements given in tables 5.2a, 5.2b, or 5.2c in ADF?	Yes	No
Have all background ventilators been left in the open position?	Yes	No
Have the correct number and location of extract fans/terminals been installed that satisfies table 5.2a in ADF?	Yes	No
Is the installation complete with no obvious defects present?	Yes	No
Do all internal doors have sufficient undercut to allow air transfer between rooms (i.e. 10 mm over and above final floor finish)	Yes	No
Has all protection/packaging been removed (including background ventilators) such that system is fully functional?	Yes	No
For ducted systems, has the ductwork installation been installed in such manner that air resistance and leakage is kept to a minimum?	Yes	No
Are the correct number and size of background ventilators provided that satisfy ADF?	Yes	No
Has the entire system been installed such that there is sufficient access for routine maintenance and repair/replacement of components?	Yes	No
2.3a Visual inspections - General (systems 3 and 4 only)		
Have appropriate air terminal devices been installed to allow system balance?	Yes	No
Has the heat recovery unit (System 4 only) and all ductwork been effectively insulated where installed in unheated spaces?	Yes	No
Condensation connection is complete and drains to an appropriate location (System 4 only)?	Yes	No
2.3c Other inspections - General (systems 1, 3 and 4 only)		
Upon initial start up, was any abnormal sound or vibration experiences, or unusual smells detected?	Yes	No

Part 3 - Airflow measurement test and commissioning details

3.1 Test Equipment		
Schedule of air flow measurement equipment used (model and serial)		Date of last UKAS calibration
1.		
2.		
3.		

3.3 Air Flow Measurements (extract) - system 3 and 4 only				
Room reference (location of terminals)	Measured Air Flow High Rate (l/s)	Design Air Flow High Rate (l/s) Refer to Table 5.1b ADF	Measured Air Flow Low Rate (l/s)	Design Air Flow Low Rate (l/s) Refer to Table 5.1b in ADF
Kitchen				
Bathroom				
En Suite				
Utility				
Other...				
Other...				
Other...				

3.4 Air Flow Measurements (supply) - system 4 only				
Room reference (location of terminals)	Measured Air Flow High Rate (l/s)	Design Air Flow High Rate (l/s) Refer to Table 5.1b ADF	Measured Air Flow Low Rate (l/s)	Design Air Flow Low Rate (l/s) Refer to Table 5.1b in ADF
Living Room 1				
Living Room 2				
Dining Room				
Bedroom 1				
Bedroom 2				
Bedroom 3				
Bedroom 4				
Bedroom 5				
Study				
Other...				

3.5 Commissioning - systems 3 and 4 only		
Have controls been set-up in accordance with the manufacturer's recommendations?	Yes	No
Have all distribution grilles been locked to prevent un authorised adjustment?	Yes	No

3.6 Test Engineer's Details	
Name	
Company	
Address Line 1	
Address Line 2	
Telephone Number	
Post Code	
Signature	
Competent Person Scheme/Registration (if applicable)	
Date of test	

II Maintenance log

2 or 3 months after installation:

Activity	Y1	Y2	Y3	Y4	Y5	Y6	Y7
Clean the filters							

6 months after installation:

Activity	Y1	Y2	Y3	Y4	Y5	Y6	Y7
Replace the filters							
Clean the valves							

9 months after installation:

Activity	Y1	Y2	Y3	Y4	Y5	Y6	Y7
Clean the filters							

12 months after installation:

Activity	Y1	Y2	Y3	Y4	Y5	Y6	Y7
Replace the filters							
Clean the valves							
Inspect and clean the condensation drain	■		■		■		■
Inspect and clean the air ducts	■	■	■		■	■	■
Inspect and clean the casing of the unit	■		■		■		■
Inspect and clean the heat exchanger	■	■	■		■	■	■
Inspect and clean the fans	■		■		■		■
Inspect and clean the pre heater filter	■	■	■		■	■	■

Date	Activity	Initials

2 or 3 months after installation:

Activity	Y8	Y9	Y10	Y11	Y12	Y13	Y14
Clean the filters							

6 months after installation:

Activity	Y8	Y9	Y10	Y11	Y12	Y13	Y14
Replace the filters							
Clean the valves							

9 months after installation:

Activity	Y8	Y9	Y10	Y11	Y12	Y13	Y14
Clean the filters							

12 months after installation:

Activity	Y8	Y9	Y10	Y11	Y12	Y13	Y14
Replace the filters							
Clean the valves							
Inspect and clean the condensation drain		■		■		■	
Inspect and clean the air ducts		■	■	■		■	■
Inspect and clean the casing of the unit		■		■		■	
Inspect and clean the heat exchanger		■	■	■		■	■
Inspect and clean the fans		■		■		■	
Inspect and clean the pre heater filter		■	■	■		■	■

Date	Activity	Initials

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