



OPERATION & MAINTENANCE MANUAL

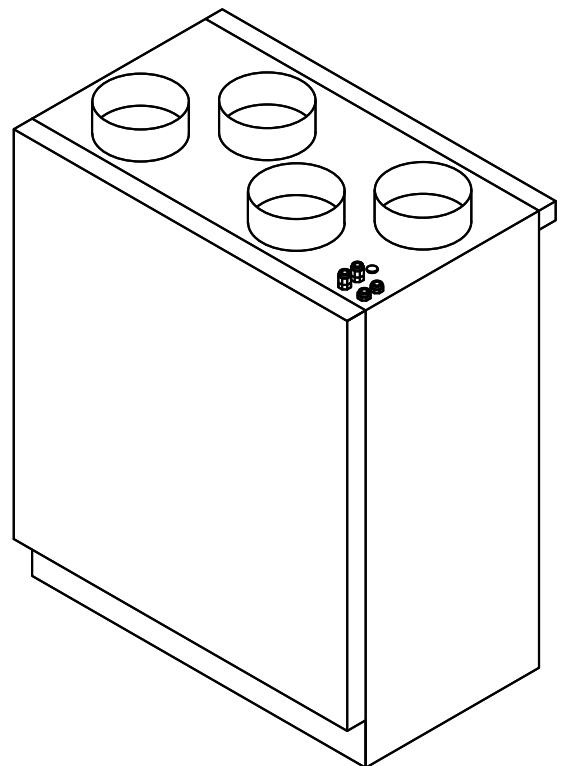
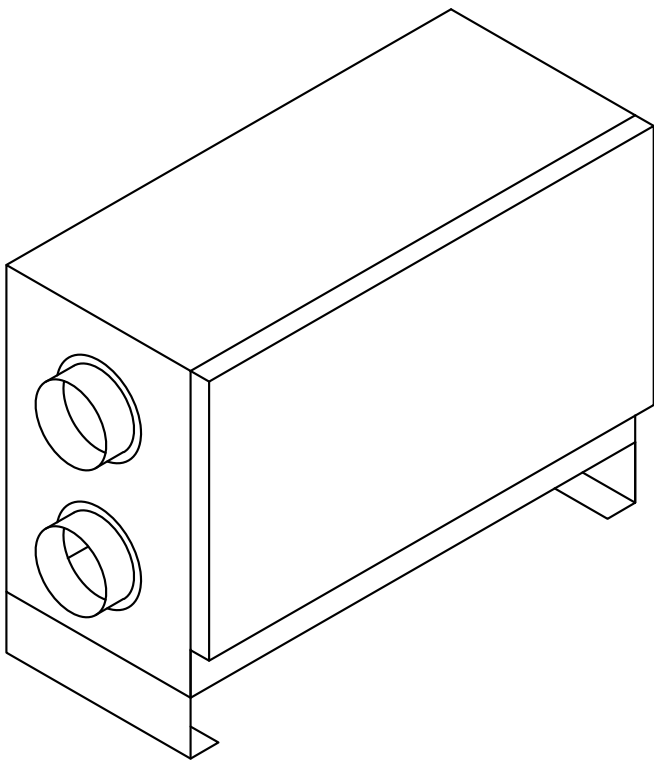


SYSTEM OVERVIEW

Your home is fitted with a mechanical ventilation system with heat recovery. This system is designed to provide a continuous supply of fresh air, while simultaneously removing the damp, polluted air from the bathrooms and wet areas.

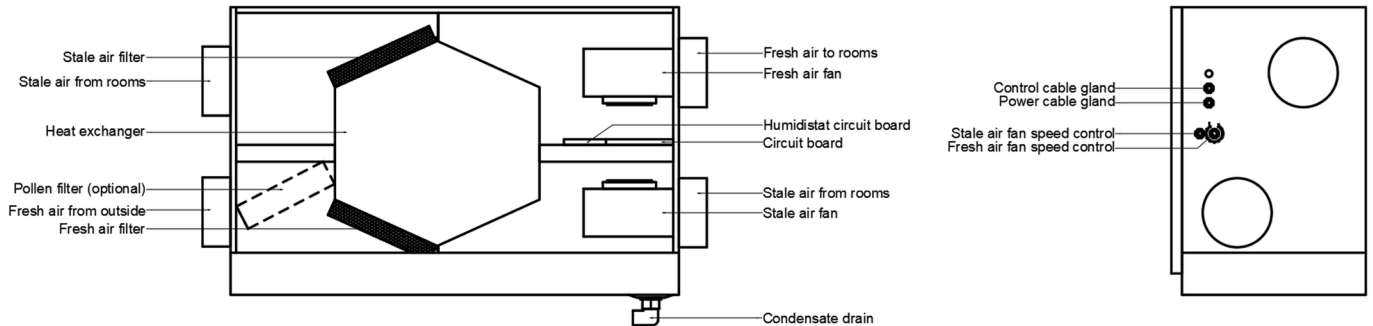
The house will be fitted with a main ventilation unit, either wall mounted or loft mounted. This unit is equipped with two fans; one to remove the stale air, one to provide fresh air. Each of the habitable and wet rooms in the home will have a vent fitted into the ceiling or walls, responsible for either providing fresh air or extracting stale air.

The MVHR unit is fitted with a heat exchanger which recovers the heat from the extracted stale air, which is then used to pre-warm the incoming fresh air, reducing overall heating costs.

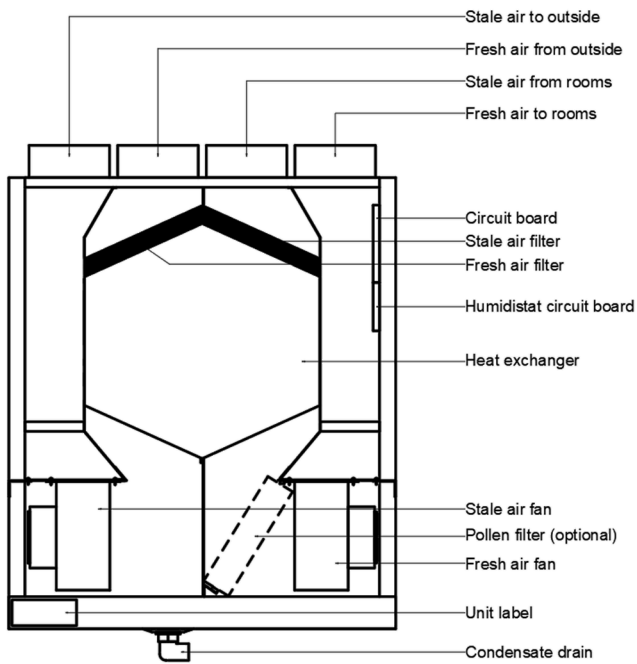


UNIT OVERVIEW

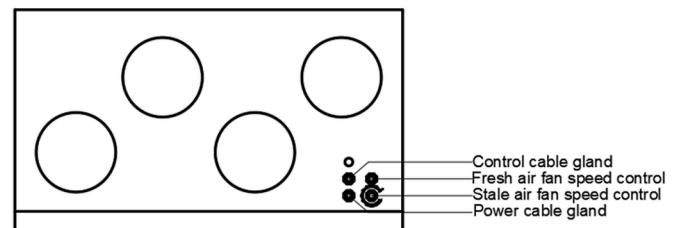
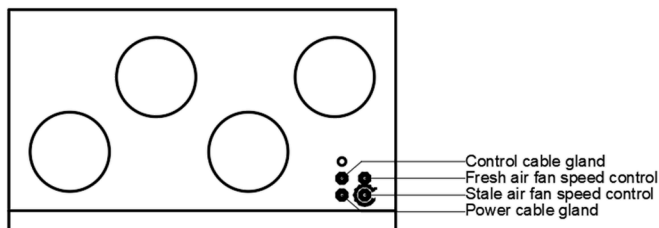
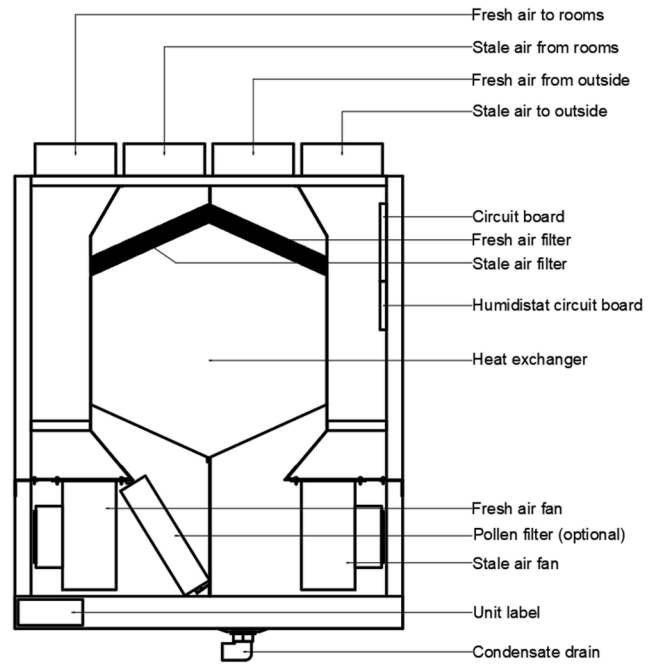
LOFT UNIT



WALL UNIT LEFT HANDED



WALL UNIT RIGHT HANDED



CONTROLS

Air Flow Control

MVHR systems are designed to run constantly at a low air flow rate. The system is equipped with two speed controls; one for each fan, to control the overall ventilation rate for the property. The air flow for each room is set using the adjustable air vents.

These flow rates are set in accordance with Building Regulations Part F to provide the correct ventilation rate for the property and should not be adjusted, unless the system is being rebalanced.

Turning the system off

As the MVHR system is responsible for maintaining a healthy home environment, it should not be switched off unless carrying out maintenance. As such, the only means of turning off the system is by cutting the mains power feed. Turning the system off will not affect the settings of the system and when power is restored it will return to normal operation

User Controls

The system is fitted with a single gang control switch with two switches. A boost switch and a fresh air control.

Boost

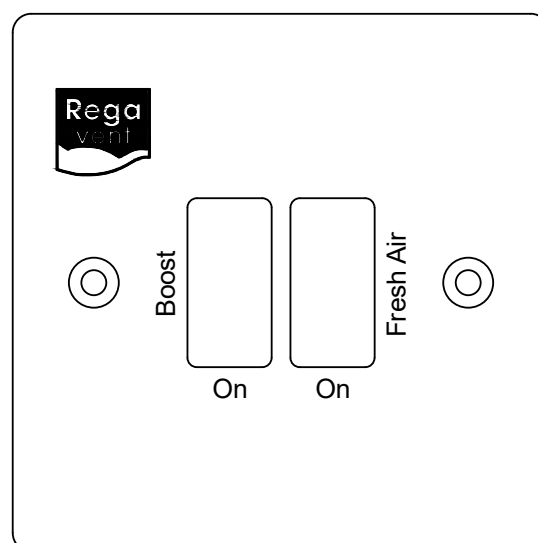
When the boost switch is set to the 'On' position, the extraction rate of the system will be set to its maximum speed to rapidly remove moisture and pollutants.

Fresh Air

In normal operation, the Fresh Air should be set to the 'On' position. During this time the system will be extracting and supplying fresh air to the property.

During the summer, it may be preferable to open windows to allow more fresh air to enter the property. With open windows, the fresh air fan can be disabled using the switch and the system can be used for extraction only.

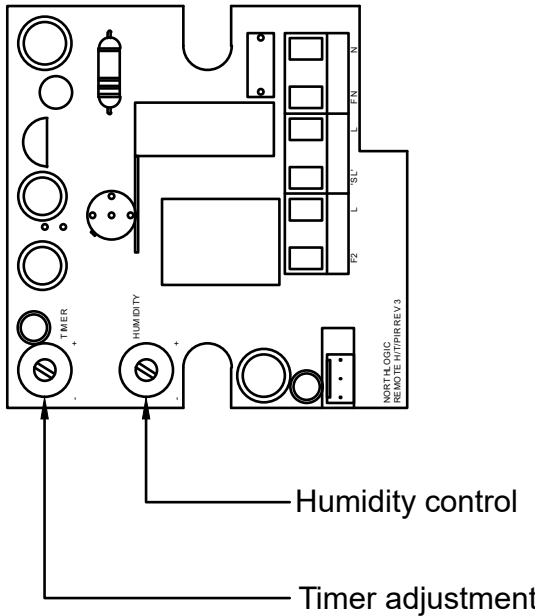
**It is important that the fresh air fan is only switched off when windows are open or this can lead to a build-up of pollutants and stale air.



Humidity Sensor

The MVHR unit is equipped with a humidity sensor to provide automatic boost when an increase in moisture levels is detected. This can assist with the removal of damp air after the use of showers or baths.

The sensitivity and operation time of the humidity sensor can be adjusted using the potentiometers on the circuit board located within the main unit.



Timer

This controls how long the system will continue to boost after detecting an increase in moisture. With the potentiometer set all the way anti-clockwise the boost will operate for a minimum of 2 minutes, up to 20 minutes when turned fully clockwise.

Humidity

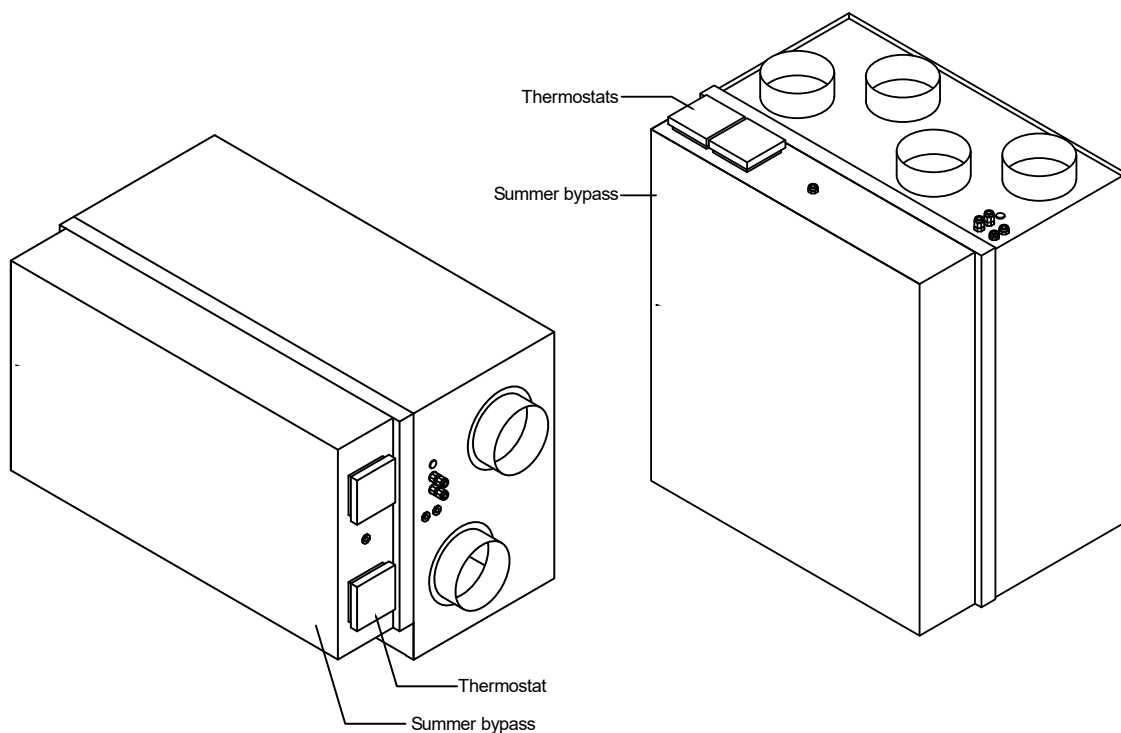
This setting is used to adjust the sensitivity of humidity-based boost activation. Turning this anti-clockwise will increase the sensitivity, whilst turning clockwise will reduce the sensitivity.

Summer Bypass

Your MVHR system may be fitted with a summer bypass. This is a device used to provide automatic heat exchanger bypass. The summer bypass is a different lid which is fitted to the unit and has two thermostats for control.

Thermostat settings

The thermostats on the summer bypass should be set to the same value; at the maximum temperature you wish your house to achieve (slightly higher than the heating stat). If the internal house temperature exceeds the set-point, the bypass will detect the temperature of the external air and if cooler outside air is available, will open the bypass to deliver this cooler air directly into the house.



MAINTENANCE

The MVHR system is designed to operate continuously with minimal maintenance. The only regular maintenance requirement of the system is to keep the filters clean to ensure adequate air flow and minimal noise. There are filters fitted into each of the extraction vents and in the main unit.

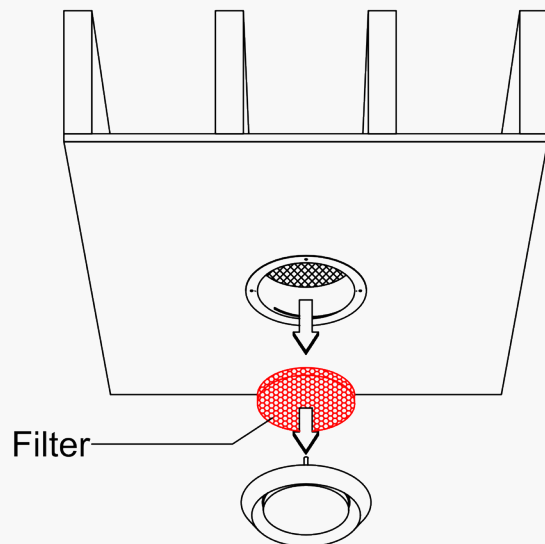
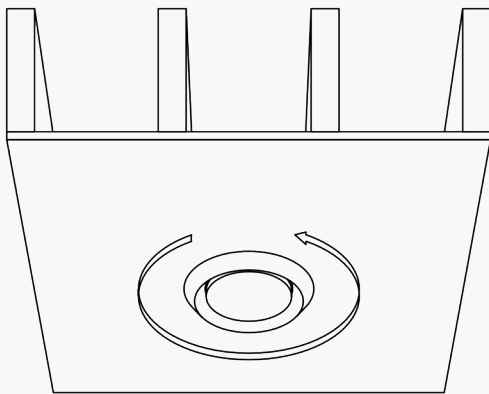
See maintenance checklist below:

Extraction Vent Filters

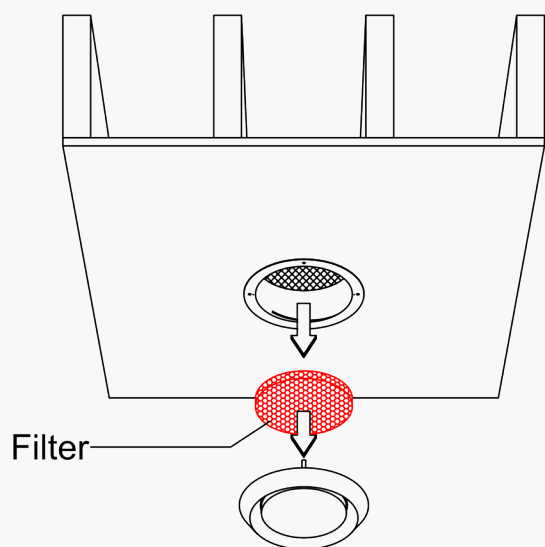
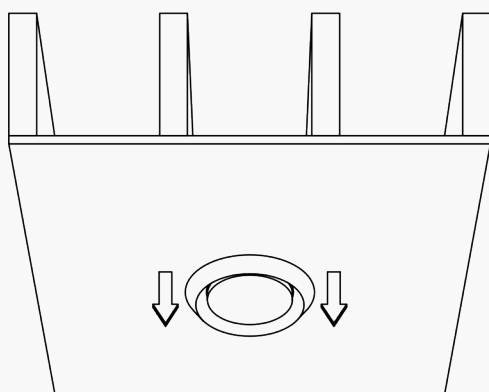
These filters should be cleaned once every 2 – 3 months. To access the filter, simply rotate the entire cover anti-clockwise to remove. The filter can then be removed and washed under running water.

The vent covers are set during the commissioning process to balance airflows. Take care to ensure the correct cover is placed back on the same vent after removal to retain system balance.

White Metal Valves

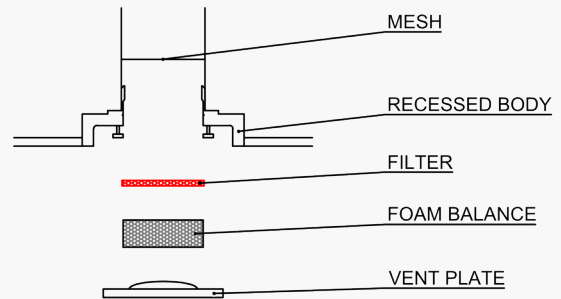
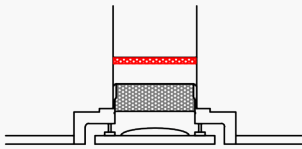


Stainless Steel Valves



MAINTENANCE

Recessed Valves



UNIT MAINTENANCE

Unit Filters

The filters in the main unit should be cleaned once every 12-18 months. These can be accessed by removing the main unit cover. Remove the filters and clean under running water.

Pollen Filter

The MVHR unit has the capacity to be fitted with an additional F7 grade pollen filter, alongside the standard dust filters. This will assist with the removal of fine harmful particles from the air such as allergens and diesel particles.

Unlike the dust filter, the pollen filter is not washable and will require replacement every 6 months.

It is crucial that a used pollen filter is removed after 6 months. A blocked filter will heavily increase system pressure, resulting in increased noise levels and a risk of fan damage if prolonged.

Fans

The fans in the MVHR system are sealed bearing and maintenance free. Check the fans are rotating freely. If there is any dust build-up on the impellor this can be cleaned off with a small brush.

Condensate Drain

The MVHR unit is connected to a condensate drain to remove moisture from the system. Locate the condensate drain within the extract chamber and pour roughly 500ml of water close to the drain to ensure this is flowing freely.

TROUBLE SHOOTING

Why does the incoming air feel cold?

As the heat exchanger in the unit is not 100% efficient, the fresh air supplied at the vents will always feel colder than the temperature in your house. The system should recover around 80-90% of the heat in the house, meaning that if the temperature is 0 degrees outside and 20 degrees inside, the fresh air supplied by the MVHR should be around within a few degrees of the internal air temperature. We recommend measuring the temperature at the vents using a thermometer to test this out.

Why is my system noisy?

An increased noise level from the system can be a result of a few issues. The most common, is that the filters have become blocked and require cleaning/replacement. As the filters get blocked the fans will work harder to try to deliver the same air volume which will increase noise.

If the noise seems to be more mechanical, it could be that the bearings in one of the fans have started to fail. Inspection of the fans at the unit may reveal more. Replacement fans are available direct from Rega.

Only one fan is operating?

The fresh air fan can be turned off using the main control for the system. This is to allow for the system to be used as extraction only during the summer, with open windows providing replacement air. If your system appears to be operating on extraction only, check the 'Fresh air' switch on the main control is set to the 'On' position.

If this does not resolve the issue, then it is most likely a fan failure or an issue with the switch.

MAINTENANCE CHECKLIST

MAINTENANCE CHECKLIST			EXTRACT VALVE FILTERS CLEANED	UNIT FILTERS CLEANED	FANS RUNNING FREELY	CONDENSATE DRAIN CHECKED	POLLEN FILTER REPLACED (IF YOU HAVE ONE)
SCHEDULE	DATE	NOTES					
MONTH 3			<input type="checkbox"/>				
MONTH 6			<input type="checkbox"/>				<input type="checkbox"/>
MONTH 9			<input type="checkbox"/>				<input type="checkbox"/>
MONTH 12			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
MONTH 15			<input type="checkbox"/>				
MONTH 18			<input type="checkbox"/>				<input type="checkbox"/>
MONTH 21			<input type="checkbox"/>				<input type="checkbox"/>
MONTH 24			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
MONTH 27			<input type="checkbox"/>				
MONTH 30			<input type="checkbox"/>				<input type="checkbox"/>
MONTH 33			<input type="checkbox"/>				<input type="checkbox"/>
MONTH 36			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
MONTH 39			<input type="checkbox"/>				
MONTH 42			<input type="checkbox"/>				<input type="checkbox"/>
MONTH 45			<input type="checkbox"/>				<input type="checkbox"/>
MONTH 48			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
MONTH 51			<input type="checkbox"/>				
MONTH 54			<input type="checkbox"/>				<input type="checkbox"/>
MONTH 57			<input type="checkbox"/>				<input type="checkbox"/>
MONTH 60			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
MONTH 63			<input type="checkbox"/>				
MONTH 66			<input type="checkbox"/>				<input type="checkbox"/>
MONTH 69			<input type="checkbox"/>				<input type="checkbox"/>
MONTH 72			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>