**Heat Recovery Ventilation System Specification**

* HRV unit to be a PCDB (SAP Appendix Q) listed product such as a ProAir Systems PA 600LI or equal approved.
* HRV ducting layout and airflows to be designed by suitably qualified persons, in accordance to TGD Part F: 2009 - Ventilation, prior to installation.
* The heat recovery unit(s) to be placed within the airtight envelope of the house where possible, otherwise in the attic, and ducted to each room with either an air supply or an extract. HRV unit must be accessible for future service and maintenance.
* A Hybrid manifold/branch ducting system with acoustic lining to be used to avoid cross talk and noise transfer between rooms.
* All ducting is to be rigid oval ducting, such as Duct & Joint system or similar approved, to minimise system resistance.
* All ducting to be kept within the thermal envelope, underneath the air tightness membrane where possible. If duct is located outside of the thermal envelope a minimum of 200mm insulation to be provided by others above the duct as part of the overall building insulation strategy. Approved details available from ProAir Systems.
* Where possible, an unobstructed service cavity of 100mm min. under each floor to be provided to allow for ducting system.
* The unit will require a standard domestic socket fitted approx. 1 meter from the HRV unit (location to be decided).
* Provision for the ingress and egress of air to and from the HRV unit will be necessary. Two external vents 150mm each. They can be in the wall, roof or soffit. For wall installation, a ProAir FEX terminal, or equal approved, to be located on an external wall close to the unit location. For roof installation, two G5 (20,000mm²) roof vents must be supplied which will need to be installed by your roofer. For soffit installation two 150mm vents are required placed at a minimum 2m apart or on opposing roof faces.
* A condensate drain to be provided from the HRV unit. This will be a standard 32mm ABS waste and will need to be connected to the internal waste system by your plumber.
* The main control unit to be installed in the utility/kitchen on the ground floor. A standard single switch box will be required at this point. Boost control switches to be installed at each wet area. A switch box is required for each of these. Standard white switches (CLICK) to be provided. Wall chasing if needed, to be completed by others.
* Work is best carried out in 2 phases (i) Installation of ducting and(ii) unit installation plus commissioning of the system.
* Ducting work should be carried out at 1st fix stage and if possible prior to electrical and plumbing. In the case of concrete floors, no battens or mesh for suspended ceilings should be in situ prior to installation of the system.
* Before work commences a reflective ceiling plan showing the position of all lights, fittings, sensors, speakers etc. to be provided to HRV contractor to ensure no clashes with electrics.
* A dedicated external air supply to be provided to stoves above 5Kw, in accordance with TGD Part: J - Heat Producing Appliances.
* Where a cooker extract ducted to the outside is installed, an electric damper to be installed to maintain airtightness levels when cooker extract is not in use. Cooker extract should not be connected directly to the HRV system.
* In certain circumstances, a re-circulation cooker hood can be used with the HRV removing smells and moisture.