

Reco-Air Standard Unit Specification

Reco-Air recirculating kitchen extract unit

- The recirculating extract unit shall be as manufactured from the Reco-Air product range. It is equipped with a full air treatment system to remove grease, steam, smoke and odours from the vitiated extract air.
- The Reco-Air unit shall be supplied complete, fully pre-wired and pre-commissioned from the factory and ready to be installed. The following specifications shall be fully observed.
- Flatpack delivery and on-site construction is available upon request.

General Unit Construction

- Unit shall be constructed with 25 mm double skinned panels galvanised steel finish internally and white Platisol finish external. They shall be insulated using 45 kg/m³ density mineral wool to ensure good acoustic performance & thermal properties.
- Depending on unit size, the panels shall be mounted on a 30 or 40 mm satin anodised aluminium Pentapost framework with powder coated black adjustable support feet or base frame.
- Access doors to the main filter sections shall be lift off or mounted on hinges and equipped with lockable black handles for access by Authorised Personnel only. Fan(s) access doors shall be screw fixed.

Unit Classifications

- Each Reco-Air unit is constructed to meet the following Eurovent (EN1886:2007) Classifications:-
- Air Leakage - Classification L2.
- External Panel Deflection - Classification D1.

Specific Requirements

- As a minimum requirement, each unit shall incorporate the following grade filter media:
 - F1 > G4 - Large grease particulate component
 - F2 > M6 - Fine grease particulate removal
 - F3 > E10 - Smoke removal
 - F4 > Food Grade Activated Carbon cylinders - Odour suppression, minimum dwell time shall be 0.2 seconds.
- As a minimum requirement, each unit shall incorporate the following fan assembly:
 - > EC Plug fan, 230 or 400 V (depending on unit capacity)
 - > Single /Three phase, suitable for 0 to 10V signal control

- > Unit Duty to suit current DW/172 Specific Extract Flow Rate (SEFR) or supplier's recommendation when applicable as well as design requirements
- > Max. ambient working temperature to suit specific application
- > Each fan shall be Inverter Controlled, so fan speed ramps up as the filter pressure increases to maintain a constant air volume flow rate at the cookline / hood.

Control & Interface Requirements

- All Reco-Air Standard units are available with either Standard or Premium Control operating platforms.
- Both Control Systems incorporate unique safety features and ensure operation ceases if any of the following scenarios arise:
 - > Filter access door is left open or ajar
 - > Filters are removed or left out of the unit
 - > Fire Alarm system is activated
 - > Registered filter pressure drop across any of the primary 3 sets of filters exceeds pre-set Warning levels & reaches Critical levels
 - > Internal Time Control unit, activated on filter Alarm, has been allowed to 'Time Out'
 - > Unit Isolator is turned Off
 - > A system Timeclock - external controls - is not calling for system activation
 - > A remote Shut-off safety feature - external controls - has been activated
- When requested, an Electrical Interlock System can be incorporated, which disables all essential cooking equipment whenever a 'No Air Flow' status is present.
- This ensures that no cooking operation can be effected without a proven & adequate air flow / extraction rate from the recirculation system / unit.
- In addition to satisfying the above features, the Premium Control platform incorporates the option to provide remote connectivity via a broadband router or 4G Sim Card.
- Allowing for continuous monitoring of filter pressure drops and unit status and enabling adjustment of values, activity logging and emergency restart. Providing Real Time filter status and monitoring, ensuring use of filters to full life.
- Our Premium Control platform also incorporates an Intuitive, User Friendly HDMI Touchscreen, which can be located adjacent to the Cookline or remote from the Kitchen.

Air Commissioning / Testing

- The Reco-Air unit(s) shall be delivered pre-commissioned from the factory.
- On completion of any Reco-Air unit installation, the air volume flow rates to extract & return air ductwork must be verified by a suitably qualified commissioning engineer & a report produced as point of record.
- All test points must be sealed with proprietary plugs on completion of this operation.

Reco-Air Unir Service & Maintenance

- When planning the installation of a Reco-Air unit - however configured - adequate clearance must be allowed to facilitate safe operative replacement of filter media & fan(s).
- To comply with specific Landlords/Authority approvals - a Service Contract is required with an accredited service partner.
- Evidence of same must be made available prior to formal approval being acknowledged.
- Failure to engage in a formal Service Contract could invalidate warranty at a future date.

Reco-Air Unit Noise Breakout

- In normal 'Internal' instances, breakout noise from the unit shall not exceed 60 dB(A) when measured at 1 metre (free field).
- Where Specific Authorities enforce lower noise levels, the unit construction shall be modified accordingly.

Approvals

Reco-Air's Specification is fully compliant with UK industry standards and guidelines & meets globally recognised advanced safety standards.

- DW/172: 2018 (section 25) Recirculation introduced by BESA to Kitchen Ventilation Systems industry guidelines, reflecting Reco-Air's smart controls and integrated safety features.
- City of Westminster Guidelines: Reco-Air Specification approved as an alternative to high level discharge by EHO and Planning Departments.
- UL710b Listed models available on request. A range of Reco-Air models are UL710b Listed - Underwriters Laboratories accredited - a global certification approving Reco-Air for high-risk cooking in high-risk locations.
- CE: European Conformity Compliant.