|  |  |
| --- | --- |
| {{ customer }}  {{ company }}  {{Address}}  **{{quote\_title}}** | Date: {{ date }}  Halton Ref: {{ project\_number }}  Sales Contact:  {{sales\_contact\_name}} {{contact\_number}} |

Dear {{ customer\_first\_name }},

*Re:* **{{project\_name}}, {{location}}**

With reference to the above project and your recent enquiry, we have pleasure in submitting our keenest quotation as follows.

The units listed within this quotation have been designed and selected based upon the provisional site-specific specification provided by your good selves.

*Specification(s):*

*Drawing Number(s):* N/A

For further technical advice or assistance please either call by telephone the primary sales contact listed above, the sales department on 01634 666111 or visit our website at [www.halton.com/](http://www.halton.com/)foodservice.

We trust the quotation meets with your approval. Should you have any further requirements or queries, please do not hesitate to contact me.

Yours sincerely,

{{estimator\_name}}

({{estimator\_role}})

Customer Service Department

For & behalf of Halton Foodservice Limited

*Re:* **{{project\_name}}, {{location}}.**

**Reco-Air Unit Specification**

**General Unit Construction**

Reco-Air Units are constructed with 25mm double skinned panels galvanised steel finish internally and White Plastisol finish externally.

Providing a robust outer casing ensuring good acoustic performance & thermal properties.

Where requested, the external appearance is finished to comply with specific requirements.

Panels are insulated using 45 kg/m3 density mineral wool, with hinged access doors to the main filter sections and lockable black handles.

Reco-Air Units are configured to suit the particular application e.g. ceiling suspended, floor mounted or roof mounted. Unit construction utilises 30-40mm Satin Anodised Aluminium Pentapost framework with powder coated black adjustable support feet or base frame.

**Specific Requirements**

As a minimum requirement, each Reco-Air unit shall incorporate the following grade

(or equivalent) filter media:-

* F1Grade G4 – Large grease particulate removal.
* F2Grade M6 – Fine grease particulate removal.
* F3Grade H10 – Smoke, Steam & Moisture removal
* F4Food Grade Activated Carbon cylinders – Odour removal minimum dwell time of 0.2 seconds.

All filter & fan doors shall incorporate a locking device, which can only be accessed by Authorised Personnel.

As a minimum requirement, each Reco-Air Unit incorporates the following fan assembly:-

* Fan section (EC Plug fan) 230 V 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) & 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 cook line / canopy.

**Control & Interface Requirements**

Reco-Air’s patented controls system protocol ensures the unit ceases to function if any of the following scenarios arise:

* A unit filter access door is left open or ajar
* Filters are removed or left out of the unit
* The Fire Alarm system is activated
* The registered filter pressure drop across any of the primary three sets of filters exceeds pre-set
* Warning levels & reaches Critical levels
* The 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 Interface system which facilitates remote access & permanently monitors the filter pressure drops and enables adjustment of values, activity logging and emergency re-start is installed. This also provides access to Real Time filter status and ensures use of filters to full life.

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 no cooking operation can be affected without a proven & adequate airflow / extraction rate

from the recirculation system / unit.

**Air Commissioning / Testing**

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 are sealed with proprietary plugs on completion of this operation.

**Reco-Air Unit Service & Maintenance**

When planning the installation of the recirculation unit – however configured - adequate clearance must be allowed to facilitate safe Operative replacement of the filter media & fan(s). To comply with our Standard Terms of Warranty, a service contract is required.

To obtain further information, advice OR a full quotation to provide a full servicing and maintenance programme to your Reco Air unit, please contact the Halton’s servicing and maintenance department by telephone at 01634 666 111.

**Reco-Air Unit Noise Breakout**

In normal ‘Internal’ instances breakout noise from our Reco-Air unit will not exceed 60 dBA when measured at 1 metre (free field). Where Specific Authorities enforce lower noise levels, the Reco-Air unit construction can be modified accordingly.

**Please Note: If not paired with Halton canopies the filters in the unit may need to be changed more frequently.**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **ITEM** | **MODEL** | **DIMENSIONS (mm)** | | | **EXT.VOL.** | **P. DROP** | **MOTOR**  **KW / PH** | **WEIGHT** | **LOCATION** |
| **REF.** | **REF.** | **L** | **W** | **D** | **(m³/s)** | **(Pa)** | **(Kgs)** | **INT / EXT** |
| 01.E.01 | RAH1.5 | 1130 | 1540 | 1900 | 1.0 | 300 |  |  |  |
| 01.E.02 | RAH1.5 | 1130 | 1540 | 1900 | 1.0 | 300 |  |  |  |
| 01.W.01 | RAH2.5 | 1815 | 1540 | 1900 | 2.03 | 300 |  |  |  |
| 01.W.02 | RAH2.5 | 1815 | 1540 | 1900 | 2.07 | 300 |  |  |  |
| 01.W.03 | RAH2.5 | 1815 | 1540 | 1900 | 2.03 | 300 |  |  |  |
| 02.W.01 | RAH2.0 | 1430 | 1540 | 1900 | 1.39 | 300 | 2.20 / 3PH | 765 | Internal |

**DW/172 Compliance**

The Halton Foodservice range of kitchen ventilation products are designed, manufactured and installed to comply with industry standard DW/172:2018, *BESA Specification for Kitchen Ventilation Systems”.*

**Pricing Schedule**

|  |  |  |  |
| --- | --- | --- | --- |
|  | ***ITEM*** | ***UNIT SCHEDULE*** | ***PRICE*** |
| 1.01 |  | £ |
|  |  | £ |
|  |  | £ |
| ***SUB TOTAL*** | | **£** |

|  |  |  |  |
| --- | --- | --- | --- |
|  | ***ITEM*** | ***ADDITIONAL ITEMS*** | ***PRICE*** |
| 2.01 |  | £ |
| 2.02 |  | £ |
| 2.03 |  | £ |
| ***SUB TOTAL*** | | **£** |

|  |  |  |
| --- | --- | --- |
| **£** | **TOTAL *(EXCLUDING VAT)*** | **£** |

**Inclusions**

1. Site survey within normal working hours to check final dimensions, access and sequence of works.
2. Issue of AutoCAD drawings for client approval and co-ordination.
3. Manufacture in accordance with client approved drawings.
4. Delivery to site in one consignment.
5. Installation to be carried out during normal working hours and in a continuous manner. Any overtime, broken time, night work or the like required to suit the client’s works conditions will be chargeable.
6. Maximum fixing height up to 4.5m above finished floor level.
7. Operating & maintenance manuals.
8. Commissioning of Unit.

**Exclusions**

1. VAT at the prevailing rate.
2. **We specifically exclude any works not mentioned for within this quotation. If you think we have missed something out, please call the Sales Team immediately for clarification.**
3. Any form of main contractor’s discount.
4. Retentions.
5. Builders work, including cutting openings and making good.
6. Specialist heavy lifting equipment i.e. crane
7. We have assumed that there is adequate access and facilities (i.e. lifts) available to move our product from the point of delivery to the designated working area.
8. Scaffolding.
9. Obtaining planning permission from the landlord or local authority.
10. Working outside normal working hours.
11. Site removal of protective film from finished installations.
12. Fans, ductwork, silencers etc. unless specifically included for.
13. Extract / make up air to the remainder of the kitchen (General kitchen ventilation)
14. Return air cooling.
15. Fire Suppression System.
16. Suitably sized and isolated power supplies to all plant items provided by Halton Foodservice Ltd. (HFL will be responsible for all wiring (mains & controls) from isolators to plant items)
17. All associated electrical site wiring, power, controls and final connections.

**Drawings**

Drawings could be submitted with 10 days from receipt of an order. All contract issue drawings in DWG format should be provided by the contractor when an order is placed, to enable drawing work to commence.

These timescales are for guidance only and are subject to review.

**Availability**

Site works could commence within 6-8 weeks of approval of our manufacturing drawings. These timescales are for guidance only and are subject to review.

**Terms**

Subject to account status. All invoices are strictly net cash, to be settled 30 days from date of invoice.

**Price Validity**

All prices are calculated as at the date of this quotation and remain open for acceptance for 30 days thereafter. *ALL PRICES ARE SUBJECT TO A FULL AND THOROUGH SITE SURVEY.*

We trust the quotation meets with your approval. Should you have any further requirements or queries, please do not hesitate to contact the Halton Sales Team or your Area Sales Manager listed at the top of this quotation.