



## VENTILATION NOTES:

- THIS DRAWING IS FOR COSTING ONLY. FULLY CO-ORDINATED, DETAILED INSTALLATION DRAWINGS MUST BE PROVIDED BY THE CONTRACTOR.
- ALL EQUIPMENT AND GRILLES TO BE SUSPENDED BY BUILDING STRUCTURE.
- ALL SHEET METAL DUCTWORK SHALL BE PROVIDED WITH ACCESS DOORS IN COMPLIANCE WITH RECOMMENDATIONS MADE WITHIN HVAC PUBLICATION 'CLEANLINESS OF VENTILATION TRIT'. ALL POSITIONS OF ACCESS DOORS SHALL BE DETAILED ON THE CONTRACTORS WORKING DRAWING. ACCESS PANELS TO BE PROVIDED BOTH SIDED OF FRESMOKE DAMPERS & VOLUME CONTROL DAMPERS.
- ALL FLEXIBLE CONNECTIONS TO BE MAXIMUM OF 300mm.
- ALL GRILLES TO BE CO-ORDINATED ON SITE IN CONJUNCTION WITH ALL OTHER SERVICES.
- THE CONTRACTOR SHALL ALLOW FOR ALL SECONDARY STEELWORK NECESSARY FOR DUCTWORK SUPPORTS, ETC.
- THE LAYOUT SHOWS A GENERAL SOLUTION FOR PRINCIPLE CO-ORDINATION ROUTES. THEY ARE NOT CONSTRUCTION DRAWINGS AND THEREFORE DO NOT SHOW ALL BENDS, TEES, SETS etc. THAT MAY BE NECESSARY TO LOCATE SERVICES CORRECTLY TO AVOID CLASHES AND MAXIMISE MAINTENANCE ACCESS. THE CONTRACTOR IS NEVER THE LESS DEEMED TO HAVE INCLUDED ALL SUCH MATERIALS AS REQUIRED TO PRODUCE A COMPLETE, FULLY CO-ORDINATED LAYOUT.
- ALL DUCTWORK TO BE MANUFACTURED IN ACCORDANCE WITH HVCA DW 144 AND TO BE INTERNALLY LINED, INTERNAL 25mm INSULATION dw PPC EXTERNAL FINISH AS PER ARCHITECTS PREFERENCE RAL 9010
- ALL DUCTWORK PASSING THROUGH FIRE WALLS TO BE COMPLETE WITH FRESMOKE DAMPERS INCLUDING BUILDING IN FRAMES.
- THE FRESMOKE DAMPER INSTALLATION METHOD MUST HAVE BEEN TESTED AND COMPLY WITH BS EN 1366-2 AND DW145. CONTRACTOR TO CHECK DAMPER MANUFACTURERS LATEST TESTED AND APPROVED INSTALLATION METHODS PRIOR TO INSTALLATION.

## NOTES:

THIS IS A DESIGN DRAWING NOT AN INSTALLATION DRAWING. DIMENSIONS SHOULD NOT BE SCALED. SITE DIMENSIONS TO BE CHECKED BEFORE PRODUCTION OF CRITICAL MANUFACTURING DRAWINGS. THE DRAWING IS COPYRIGHT AND NO PART MAY BE REPRODUCED WITHOUT WRITTEN CONSENT.

## LEGEND:

|      |                           |
|------|---------------------------|
| MVE  | EXTRACT DUCTWORK          |
| MVEA | EXHAUST AIR DUCTWORK      |
| MVFI | FRESH AIR INTAKE DUCTWORK |
| MVS  | SUPPLY DUCTWORK           |
| MVR  | RETURN DUCTWORK           |

## DUCT SYSTEM ABBREVIATIONS

|      |                                         |
|------|-----------------------------------------|
| EG   | EXTRACT GRILLE                          |
| RG   | RETURN GRILLE                           |
| SD   | SUPPLY DIFFUSER                         |
| SD   | SUPPLY SWIRL DIFFUSER                   |
| BM   | BELL MOUTH                              |
| ATT  | ATTENUATOR                              |
| CTA  | CROSS TALK ATTENUATOR                   |
| FD   | FIRE DAMPER                             |
| FSD  | FRESMOKE DAMPER                         |
| FCU  | FAN COIL UNIT                           |
| MHR  | HEAT RECOVERY UNIT                      |
| VCD  | VOLUME CONTROL DAMPER                   |
| MVFI | MECHANICAL VENTILATION FRESH AIR INTAKE |
| MVEA | MECHANICAL VENTILATION EXTRACT AIR      |
| MVE  | MECHANICAL VENTILATION EXTRACT          |
| C    | WALL MOUNTED CONTROLLER                 |

|            |                                           |           |                |          |
|------------|-------------------------------------------|-----------|----------------|----------|
| Rev<br>C02 | STAGE 4 ISSUE - MCC COMMENTS INCORPORATED |           |                |          |
|            | By: JD                                    | Chkd: JFH | Date: 06.12.24 | App: JCF |

|            |                        |           |                |          |
|------------|------------------------|-----------|----------------|----------|
| Rev<br>C01 | STAGE 4 CONTRACT ISSUE |           |                |          |
|            | By: JN                 | Chkd: JFH | Date: 16.08.24 | App: JCF |

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|-----------|--------------------------------|---------|
| Status A4 | Description STAGE 4A COMPLETED | Stage 4 |
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|        |                                                           |
|--------|-----------------------------------------------------------|
| Client | <b>MANCHESTER</b><br>1824<br>The University of Manchester |
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|---------|----------------------------------------------|
| Project | UNIVERSITY OF MANCHESTER RUTHERFORD BUILDING |
|---------|----------------------------------------------|

|         |                                                                                 |
|---------|---------------------------------------------------------------------------------|
| Drawing | MECHANICAL SERVICES<br>VENTILATION<br>FIRST FLOOR<br>GENERAL ARRANGEMENT LAYOUT |
|---------|---------------------------------------------------------------------------------|



NEWCASTLE ■ TEESIDE ■ YORKSHIRE ■ NORTH WEST

|                |                            |          |     |
|----------------|----------------------------|----------|-----|
| Drawing Number | UOMRB-CAD-XX-01-DR-M-57001 | Revision | C02 |
|----------------|----------------------------|----------|-----|

|              |      |
|--------------|------|
| Scale        | Size |
| As indicated | A1   |

Drawing Origins :  
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