

| ROOFTOP UNIT SCHEDULE |          |             |                |             |                      |             |            |               |                |                              |                               |                |                           |                           |                    |                   |                       |                    |
|-----------------------|----------|-------------|----------------|-------------|----------------------|-------------|------------|---------------|----------------|------------------------------|-------------------------------|----------------|---------------------------|---------------------------|--------------------|-------------------|-----------------------|--------------------|
| ID                    | LOCATION | SERVES      | SUPPLY FAN CFM | MOTOR DRIVE | MIN. OUTDOOR AIR CFM | ESP (IN WG) | MOTOR (HP) | VOLTAGE/PHASE | HEATING MEDIUM | HEATING INPUT CAPACITY (MBH) | HEATING OUTPUT CAPACITY (MBH) | COOLING MEDIUM | GROSS COOL CAPACITY (MBH) | SENS. COOL CAPACITY (MBH) | FILTER SIZE/NUMBER | FILTER EFFICIENCY | MANUFACTURER          | REMARKS            |
| RTU-1                 | ROOF     | SALES FLOOR | 8,000          | DIRECT      | 1,710                | 1.5         | 10.0       | 208/3         | GAS            | 405                          | 328.1                         | R-410A         | 314.3                     | 223.5                     | 16X20X2-9          | MERV 8            | CES-MPU-025-RH-V7&8T3 | (1)(2)(3)(4)(4)(6) |
| RTU-2                 | ROOF     | OFFICE AREA | 700            | DIRECT      | 160                  | 0.5         | 1/4        | 208/1         | GAS            | 65.0                         | 32.0                          | R-410A         | 24.4                      | 23.6                      | 16X20X2-4          | 30%               | LENNOX KGB02454D      | (6)(7)(8)(9)       |

- PROVIDE 14" HIGH INSULATED ROOF CURB & BURGULAR BARS ON SUPPLY AND RETURN OPENINGS. RTU-1 ROOF CURB IS BY AES INDUSTRIES CONTACT GEORGE LASHER T(800)786-0402 X 216. MECHANICAL CONTRACTOR IS RESPONSIBLE FOR PURCHASING THE ROOF CURB DIRECTLY FROM AES INDUSTRIES.
- PROVIDE WITH THROUGH THE BASE SINGLE POINT ELECTRICAL CONNECTION, DISCONNECT, VFD 2-SPEED OPERATION, OA HOOD, PROOF AIRFLOW SWITCH, CLOGGED FILTER SWITCH, STAINLESS STEEL DRAIN PAN, 120V CONVENIENCE OUTLET, REHEAT COIL & DEHUMIDIFICATION CONTROL.
- UNIT SUPPLIED BY OWNER, RECEIVED, RIGGED AND INSTALLED BY MECHANICAL CONTRACTOR.
- ROOFTOP UNIT CONTROLLER IS FACTORY INSTALLED IN THE CES MULTI-PATH MPU. SPACE TEMPERATURE, SUPPLY AIR TEMPERATURE & SPACE HUMIDITY SENSORS ARE SUPPLIED BY CD CONTROLS AND SHIPPED TO REFRIGERATION CONTRACTOR FOR FIELD INSTALLATION.
- CES MULTI-PATH MPU IS MANUFACTURED BY AAOIN INC. (PRODUCTION 10 - 12 WEEKS) TO COORDINATE MPU SHIPPING OR FOR TECHNICAL SUPPORT CONTACT CES INC T(866)706-2647 X222. [ALDIORDERS@CESINC.CA](mailto:ALDIORDERS@CESINC.CA)
- MECHANICAL CONTRACTOR TO REVIEW AND CONFIRM RTU SETPOINTS/STORE HOURS WITH ALDI DIRECTOR OF REAL ESTATE AND SIEMENS ENERGY MANAGEMENT USER GUIDE.
- PROVIDE WITH GLOBAL ECONOMIZER SECTION AND BAROMETRIC RELIEF DAMPERS.
- ALDI HAS A NATIONAL ACCOUNT WITH LENNOX INDUSTRIES. ALL LENNOX HVAC EQUIPMENT SHOULD BE QUOTED AND ORDERED THROUGH LENNOX NATIONAL ACCOUNTS. PLEASE CALL 800-367-6285 AND HIT "2" FOR SALES AND ASK FOR THE ALDI'S NATIONAL ACCOUNT SALES ADMINISTRATOR WHO WILL ASSIST YOU WITH QUOTES, AVAILABILITY AND ORDERS.
- PROVIDE 14" HIGH INSULATED ROOF CURB & BURGULAR BARS ON SUPPLY AND RETURN OPENINGS. FIELD VERIFY LOCATION.
- PROVIDE WITH CONDENSER COIL HAIL GUARD.

| DUCTLESS SPLIT FAN COIL UNIT SCHEDULE |          |        |            |                      |       |     |                     |                     |        |               |              |   |             |                   |                 |         |
|---------------------------------------|----------|--------|------------|----------------------|-------|-----|---------------------|---------------------|--------|---------------|--------------|---|-------------|-------------------|-----------------|---------|
| ID                                    | LOCATION | SERVES | SUPPLY FAN |                      |       |     | COOLING COIL        |                     |        |               | HEATING COIL |   | FILTER SIZE | FILTER EFFICIENCY | MANUFACTURER    | REMARKS |
|                                       |          |        | FAN CFM    | MIN. OUTDOOR AIR CFM | IN WG | RPM | TOTAL CAPACITY BTUH | SENS. CAPACITY BTUH | MEDIUM | CAPACITY BTUH |              |   |             |                   |                 |         |
| FCU-1                                 | OFFICE   | OFFICE | 300        | 30                   | -     | -   | 208/1               | 9,000               | -      | R-410A        | 10,400       | - | MERV 8      | LG - LCN098HV4    | (1)(2)(3)(4)(5) |         |

- DUCTLESS SPLIT FAN COIL UNIT SHALL BE ORDERED, RECEIVED AND INSTALLED BY THE CONTRACTOR. THE EQUIPMENT COST SHALL BE BILLED DIRECTLY TO ALDI. FOR ORDERING INFO CONTACT MIKE THORNE AT [MTHORNE@MEIERSUPPLY.COM](mailto:MTHORNE@MEIERSUPPLY.COM) OR BY PHONE 607-797-7700.
- PROVIDE WITH DRY CONTACT PDRYC8300 (INSTALLED BY REFRIGERATION CONTRACTOR) FOR INTEGRATION WITH SIEMENS BMS. CONTROLLED BY WALL MOUNTED TEMPERATURE SENSOR PROVIDED SIEMENS AND INSTALLED BY THE REFRIGERATION CONTRACTOR. REFER TO DRAWING EMS-1 FOR DETAILS.
- COORDINATE REFRIGERANT LINE SIZING PER MANUFACTURER'S RECOMMENDATIONS.
- PROVIDE WITH MATCHING AIR COOLED HEAT PUMP SCHEDULED.
- PROVIDE VENTILATION KIT PTVK430, INLINE BOOSTER FAN (S&P USA TD100), CASSETTE GRILLE & CONDENSATE PUMP, INLINE BOOSTER FAN TO BE INSTALLED BY THE MECHANICAL CONTRACTOR; POWER WIRING BY THE ELECTRICIAN, CONTROL RELAY AND WIRING BY REFRIGERATION CONTRACTOR, INLINE BOOSTER FAN SHALL RUN WHEN THE FAN COIL UNIT OPERATES.

| AIR COOLED HEAT PUMP SCHEDULE |            |        |                            |                 |                            |             |                    |      |                      |                      |          |          |               |         |
|-------------------------------|------------|--------|----------------------------|-----------------|----------------------------|-------------|--------------------|------|----------------------|----------------------|----------|----------|---------------|---------|
| ID                            | LOCATION   | SERVES | TOTAL COOLING CAPACITY MBH | OUTDOOR TEMP DB | TOTAL HEATING CAPACITY MBH | REFRIGERANT | COMPRESSORS NUMBER | SEER | REFRIGERANT CIRCUITS | CONDENSER FAN NUMBER | VOLTS/PH | MCA/MOCP | MANUFACTURER  | REMARKS |
| HP-1                          | UTILITY RM | FCU-1  | 9.9                        | 95              | 12.1                       | R-410A      | 1                  | 20.2 | 1                    | 1                    | 208/1    | 11.9/15  | LG - LUU097HV | (1)(2)  |

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- PROVIDE WITH MATCHING DUCTLESS SPLIT FAN COIL.

| VENTILATION RATE SCHEDULE                                       |                 |              |                      |                            |                 |                |                   |                           |               |
|---|-----------------|--------------|----------------------|----------------------------|-----------------|----------------|-------------------|---------------------------|---------------|
| INTERNATIONAL MECHANICAL CODE 2009 - TABLE 403.3 - SUPERMARKETS |                 |              |                      |                            |                 |                |                   |                           |               |
| ROOM NUMBER   | ROOM NAME       | IMC CATEGORY | GROSS AREA (SQ. FT.) | OCCUPANTS PER 1000 SQ. FT. | TOTAL OCCUPANTS | CFM PER PERSON | CFM PER SQ. FT.   | VENTILATION EFFECTIVENESS | REQD OA (CFM) |
| 101,102,103   | SALES/VESTIBULE | SUPERMARKET  | 11,019               | 8                          | 88              | 7.5            | 0.06              | 0.80                      | 1653          |
| 104   | OFFICE          | OFFICE       | 165                  | 5                          | 1               | 5.0            | 0.06              | 0.80                      | 12            |
| 105   | BREAK ROOM      | CONFERENCE   | 181                  | 50                         | 2               | -              | 0.06              | 0.80                      | 14            |
| 106   | WOMENS          | TOILET RM.   | 125                  | -                          | -               | -              | 50 <sup>(1)</sup> | 0.80                      | -             |
| 107   | MENS            | TOILET RM.   | 84                   | -                          | -               | -              | 50 <sup>(1)</sup> | 0.80                      | -             |
| 108   | HALL            | CORRIDOR     | 43                   | -                          | -               | -              | 0.06              | 0.80                      | 3             |
| 109   | UTILITY ROOM    | WAREHOUSE    | 181                  | -                          | -               | -              | 0.06              | 0.80                      | 14            |
| 110   | BACK ROOM       | WAREHOUSE    | 2,123                | -                          | -               | -              | 0.06              | 0.80                      | 159           |
| TOTAL OA REQUIRED:  |                 |              |                      |                            |                 |                |                   |                           | 1,855         |
| TOTAL OA PROVIDED:  |                 |              |                      |                            |                 |                |                   |                           | 1,900         |

- RATE PER WATER CLOSET/URINAL WITH EXHAUST OPERATING CONTINUOUSLY DURING OCCUPIED HOURS.

| EXHAUST & DESTRATIFICATION FAN SCHEDULE |             |            |       |        |       |                 |         |      |         |                    |           |
|---|-------------|------------|-------|--------|-------|-----------------|---------|------|---------|--------------------|-----------|
| ID                                      | SERVES      | LOCATION   | TYPE  | DRIVE  | CFM   | EXT. SP IN. WG. | FAN RPM | HP   | VOLTAGE | MANUFACTURER       | REMARKS   |
| EF-1                                    | WOMEN'S     | WOMEN'S    | CENT. | DIRECT | 315   | 0.38            | 1,000   | 1/10 | 120/1   | GREENHECK CSP-A410 | (1)(3)    |
| EF-2                                    | BACKROOM    | ROOF       | CENT. | DIRECT | 800   | 0.40            | 1,725   | 1/4  | 120/1   | GREENHECK G-09B-A  | (1)(2)(3) |
| EF-3                                    | MEN'S       | MEN'S      | CENT. | DIRECT | 315   | 0.38            | 1,000   | 1/10 | 120/1   | GREENHECK CSP-A410 | (1)(3)    |
| EF-4                                    | UTILITY     | UTILITY    | CENT. | DIRECT | 315   | 0.38            | 1,000   | 1/10 | 120/1   | GREENHECK CSP-A410 | (1)(3)    |
| DF-1                                    | SALES FLOOR | ROOF JOIST | CENT. | DIRECT | 1,061 | -               | 1,550   | 31 W | 120/1   | AIR-ROW F-18       | (4)(5)(6) |
| DF-2                                    | SALES FLOOR | ROOF JOIST | CENT. | DIRECT | 1,061 | -               | 1,550   | 31 W | 120/1   | AIR-ROW F-18       | (4)(5)(6) |
| DF-3                                    | SALES FLOOR | ROOF JOIST | CENT. | DIRECT | 1,061 | -               | 1,550   | 31 W | 120/1   | AIR-ROW F-18       | (4)(5)(6) |

- PROVIDE SPEED CONTROLLER MOUNTED ON EXHAUST DUCT ABOVE CEILING.
- PROVIDE WITH 14" HIGH INSULATED ROOF CURB, DAMPER TRAY AND BACKDRAFT DAMPER.
- CONTROLLED BY SIEMENS ENERGY MANAGEMENT SYSTEM.
- FAN PROVIDED AND INSTALLED BY THE MECHANICAL CONTRACTOR. CONTACT RAY MIERENS @ FRESHERSOURCE.ENERGY.SOLUTIONS (410) 544-8008. SUPPORT FAN FROM BUILDING STRUCTURE WITH BEAM CLAMPS AND AIRCRAFT CABLE. INSTALL AT 1'-0" BELOW ROOF DECK AND PER MANUFACTURER'S RECOMMENDATIONS.
- FAN SHALL RUN CONTINUOUSLY. WIRING PROVIDED BY DIVISION 26. FACTORY SHALL PRESET FAN SPEED TO MAXIMUM.
- FAN TO BE FACTORY PAINTED TO MATCH BUILDING STRUCTURE. NO MANUFACTURER SUBSTITUTIONS.

| AIR DEVICE SCHEDULE |          |          |           |           |                  |              |        |              |         |
|---------------------|----------|----------|-----------|-----------|------------------|--------------|--------|--------------|---------|
| ID                  | SERVES   | TYPE     | FACE SIZE | NECK SIZE | CONSTR. MATERIAL | CLAMPING     | MAX NC | MANUFACTURER | REMARKS |
| D-1                 | SUPPLY   | DIFFUSER | 24x24     | SEE PLANS | STEEL            | T-BAR        | 20     | PRICE SCDA   | (1)     |
| D-2                 | SUPPLY   | DIFFUSER | 12x12     | SEE PLANS | STEEL            | T-BAR        | 20     | PRICE SCDA   | (2)     |
| D-3                 | SUPPLY   | 6-WAY    | 30x12     | 40x40     | STEEL            | THREADED ROD | 20     |              | (3)     |
| R-1                 | RETURN   | GRILLE   | 12x12     | 12x12     | STEEL            | T-BAR        | 20     | PRICE PDDR   | (1)     |
| R-2                 | TRANSFER | GRILLE   | 48x12     | 12x12     | STEEL            | GWB          | 20     | PRICE 530    | (2)     |

- COORDINATE CEILING TYPE WITH ARCHITECTURAL CEILING PLAN.
- PROVIDE PRIMED FINISH. DEVICE TO BE PAINTED IN THE FIELD.
- PROVIDE WITH ONE (1) 1" DIA. 24" TALL INTERNALLY INSULATED PLENUM, VOLUME DAMPER & CABLE OPERATOR.

| SYMBOLS & ABBREVIATIONS |                                  |  |                              |
|-------------------------|----------------------------------|--|------------------------------|
|                         | DUCT UP                          |  | 12X12 SHEETMETAL ACCESS DOOR |
|                         | DUCT DOWN                        |  | FIRE DAMPER WITH ACCESS DOOR |
|                         | TEMPERATURE SENSOR               |  | ROUND CONCENTRIC TAKEOFF     |
|                         | HUMIDISTAT                       |  | BELL MOUTH TAKEOFF           |
|                         | SMOKE DUCT DETECTOR              |  | BOD<br>BOTTOM OF DUCT        |
|                         | DISCHARGE AIR TEMPERATURE SENSOR |  | EF<br>EXHAUST FAN            |
|                         | SINGLE BLADE VOLUME DAMPER       |  | RTU<br>ROOFTOP UNIT          |
|                         | OPPOSED BLADE VOLUME DAMPER      |  | UH<br>UNIT HEATER            |
|                         | DUCTWORK WITH 1" INTERNAL LINING |  | FCU<br>FAN COIL UNIT         |
|                         |                                  |  | HP<br>AIR COOLED HEAT PUMP   |

**DUCT SMOKE DETECTOR SYSTEM SPECIFICATION**

DUCT SMOKE DETECTOR SHALL BE SYSTEM SENSOR MODEL D4120 SERIES 4 WIRE, 120 V PHOTOELECTRIC HOUSING SHALL BE UL LISTED PER UL268A. PROVIDE REMOTE TEST STATION WITH KEY, RTS151KEY AND REMOTE ANNUNCIATOR. MECHANICAL CONTRACTOR SHALL PROVIDE AND INSTALL THE DUCT MOUNTED SMOKE DETECTOR.

| Issued:             | Date:    |
|---------------------|----------|
| A Client Review Set | 01/21/21 |
| B Permit Set        | 02/03/21 |
| C Bid Set           | 02/11/21 |
| D                   |          |

| Revisions: | Date: |
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| 1          |       |
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Project Name & Location:

| HVAC Schedules, Symbols & Notes |                      |
|---------------------------------|----------------------|
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