

## MECHANICAL SPECIFICATIONS

### 1.0 GENERAL

#### 1.1 GENERAL PROVISIONS

- 1.1.1 THE CONTRACTOR SHALL PROVIDE A COMPLETE AND FULLY OPERATIONAL MECHANICAL SYSTEM.
- 1.1.2 THE CONTRACTOR SHALL EXAMINE THE SITE PRIOR TO SUBMITTING THEIR QUOTE TO FAMILIARIZE THEMSELVES WITH THE WORK INVOLVED.
- 1.1.3 ANY DISCREPANCIES AND OMISSIONS DISCOVERED SHALL BE REPORTED TO THE ENGINEER IMMEDIATELY AND PRIOR TO TENDER CLOSING FOR RECERTIFICATION BY ADDENDUM.
- 1.1.4 EACH CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR LAYING OUT THEIR WORK AND FOR ANY DAMAGE CAUSED BY IMPROPER EXECUTION OF THEIR WORK. CONTRACTOR TO CARRY ALL NECESSARY INSURANCE COVERAGE.

- 1.2.0 WARRANTY
- 1.2.1 THE MECHANICAL CONTRACTOR AS A CONDITION PRECEDENT TO FINAL PAYMENT AFTER COMPLETION OF THIS WORK SHALL PROVIDE THE OWNER WITH A WRITTEN GUARANTEE WARRANTING ALL MATERIALS, LABOUR, AND EQUIPMENT FOR ONE (1) FULL YEAR FROM DATE OF ACCEPTANCE.
- 1.3.0 WORK, PRODUCTS, AND QUALITY
- 1.3.1 EQUIPMENT AND MATERIALS TO BE NEW AND FREE FROM DEFECTS AND HAVE DESIGN CHARACTERISTICS AS SPECIFIED.
- 1.3.2 ALL WORK AND MATERIALS SHALL BE INSTALLED AS SHOWN AND IN ACCORDANCE WITH THE NATIONAL BUILDING CODE AND ALL LOCAL CODES AND BUILDING REGULATIONS.
- 1.3.3 ALL EQUIPMENT SHALL BE C.S.A. APPROVED.

- 1.4.0 FEES AND PERMITS
- 1.4.1 THE MECHANICAL CONTRACTOR WILL OBTAIN AND PAY FEES FOR ALL PERMITS NECESSARY FOR COMPLETION OF THIS CONTRACT.
- 1.4.2 CONTRACTOR TO FURNISH ALL CERTIFICATES NECESSARY AS EVIDENCE THAT THE WORK CONFORMS WITH STANDARDS AND REQUIREMENTS OF THE AUTHORITIES HAVING JURISDICTION.
- 1.5.0 TESTING
- 1.5.1 TEST ALL EQUIPMENT AND MATERIALS WHERE REQUIRED BY THE SPECIFICATIONS OR AUTHORITIES HAVING JURISDICTION TO DEMONSTRATE ITS PROPER OPERATION TO THE OWNER.
- 1.5.2 CARRY OUT ALL HYDRAULIC TESTS PRIOR TO COVERING PIPE IN ANY WAY. – TEST DOMESTIC WATER PIPING AT 700 kPa (100 psi) PRESSURE FOR A PERIOD OF TWO (2) HOURS WITH NO APPRECIABLE PRESSURE DROP. – TEST DRAINAGE SYSTEMS BY FILLING SYSTEMS WITH WATER TO PRODUCE PRESSURE OF 3.0m (10ft.) OF WATER COLUMN. KEEP SYSTEM FILLED WITH WATER FOR 15 MINUTES.
- 1.5.3 TEST LOW VELOCITY DUCTWORK FOR TIGHTNESS AND LEAKAGE. ALL LEAKS SHALL BE REPAIRED BEFORE THE SYSTEM IS BALANCED.

- 1.6.0 EXCAVATION AND BACKFILLING
- 1.6.1 THE MECHANICAL CONTRACTOR SHALL DO ALL NECESSARY EXCAVATION. BACKFILL WITH SAND OR OTHER APPROVED MATERIAL TO A MINIMUM OF 300mm (12") OVER ALL PIPING OR AS NECESSARY TO PROTECT THEIR WORK AND THEN COMPACT WITH A MECHANICAL TAMPER. THE REMAINDER OF THE BACKFILL TO BE DONE BY THE MECHANICAL CONTRACTOR AS PER THE REQUIREMENTS OF THR GENERAL CONTRACTOR. COORDINATE ELEVATIONS AND LOCATION OF GAS, WATER, AND SEWER SERVICES AND PROVIDE 2.0m (7'9") OF SEPARATION FROM GAS, ELECTRICAL, AND TELEPHONE SERVICE BEFORE INSTALLING.
- 1.7.0 CUTTING AND PATCHING
- 1.7.1 THE MECHANICAL CONTRACTOR SHALL CONFER WITH THE GENERAL CONTRACTOR IN REGARDS TO THIS WORK AND SHALL GIVE LOCATIONS FOR ALL HOLES FOR PIPE AND DUCTS ETC. AND PROVIDE SLEEVES 200mm (8") DIAMETER AND SMALLER AS REQUIRED TO EXECUTE THE MECHANICAL INSTALLATION.

- 1.8.0 FLASHING AND COUNTERFLASHING
- 1.8.1 ALL MECHANICAL WORK PASSING THROUGH THE ROOF SHALL BE FLASHED BY THE MECHANICAL CONTRACTOR. COUNTERFLASHING TO BE DONE BY THE ROOFING CONTRACTOR.
- 1.9.0 APPROVALS
- 1.9.1 REQUEST FOR APPROVAL OF EQUIVALENT EQUIPMENT FROM MANUFACTURER'S NOT SPECIFIED ON DRAWINGS SHALL BE MADE IN WRITING SEVEN DAYS PRIOR TO TENDER CLOSING.
- 1.10.0 SHOP DRAWINGS
- 1.10.1 PRIOR TO THE FABRICATION OF ANY MATERIALS AND EQUIPMENT, SUBMIT A MINIMUM OF SEVEN (7) COMPLETE SETS OF SHOP DRAWINGS AND DATA SHEETS COVERING ALL ITEMS OF MECHANICAL EQUIPMENT UNDER THIS CONTRACT FOR REVIEW BY THE ENGINEER.

- 1.11.0 ELECTRIC MOTORS AND WIRING
- 1.11.1 SUPPLY ALL MECHANICAL EQUIPMENT WITH ELECTRIC MOTORS AS REQUIRED.
- 1.11.2 THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE TO SUPPLY ALL MOTOR STARTERS AND DISCONNECT SWITCHES FOR ALL MOTORS FOR THIS PROJECT AND INSTALL LINE VOLTAGE WIRING TO STARTERS AND FROM STARTERS TO MOTORS, EXCEPT WHERE PRE-WIRED IN PACKAGED EQUIPMENT.
- 1.11.3 ELECTRICAL CONTROLS CONNECTED TO MECHANICAL EQUIPMENT SHALL BE SUPPLIED BY THE MECHANICAL CONTRACTOR AND SHALL BE INSTALLED, WIRED, AND CONNECTED BY THE MECHANICAL CONTROLS SUBCONTRACTOR.
- 1.11.4 MECHANICAL SHALL CONFIRM ALL EQUIPMENT ELECTRICAL RATINGS WITH ELECTRICAL DRAWINGS AND REPORT ANY DISCREPANCIES TO THE ENGINEER PRIOR TO ORDERING EQUIPMENT.

- 1.12.0 MAINTENANCE MANUALS
- 1.12.1 FURNISH THREE (3) SETS OF MAINTENANCE MANUALS WITH INFORMATION OUTLINED BELOW TO THE ENGINEER PRIOR TO FINAL INSPECTION FOR APPROVAL.
- 1.12.2 MAINTENANCE MANUALS SHALL CONTAIN THE FOLLOWING:
  - WARRANTY CERTIFICATE
  - DESCRIPTION OF ALL SYSTEMS
  - DESCRIPTION OF COMPONENTS OF EACH PIECE OF EQUIPMENT
  - DESCRIPTION OF CONTROL SYSTEM
  - COMPLETE SET OF DRAWINGS
  - DETAILED MAINTENANCE AND LUBRICATION SCHEDULE
  - OPERATING AND MAINTENANCE INSTRUCTIONS FOR MAJOR EQUIPMENT
  - LIST OF EQUIPMENT SUPPLIERS AND MANUFACTURERS
  - DATA TO BE ASSEMBLED IN HARD COVER BINDERS
  - IDENTIFY FRONT COVER WITH PROJECT NAME & PROJECT LOCATION
  - LIST OF CONTRACTORS AND CONSULTANTS
  - PROVIDE INDEX AND INDEX LABELS

- 1.13.0 OPERATING INSTRUCTIONS
- 1.13.1 ARRANGE AND PAY FOR THE SERVICE OF FULLY QUALIFIED PERSONNEL INCLUDING MANUFACTURER'S REPRESENTATIVES TO INSTRUCT THE OWNER IN OPERATION AND PREVENTIVE MAINTENANCE OF EACH PIECE OF EQUIPMENT AND SYSTEM SUPPLIED AND INSTALLED.
- 1.14.0 SUPPORTS, ANCHORS, AND SLEEVES
- 1.14.1 INSTALL SUPPORTS OF STRENGTH AND RIGIDITY TO SUIT LOADING WITHOUT UNDULY STRESSING OF BUILDING. LOCATE ADJACENT TO EQUIPMENT TO

- PREVENT UNDUE STRESS IN PIPING AND EQUIPMENT.
- 1.14.2 PROVIDE CHROME PLATED FLOOR, CEILING, AND WALL ESCUTCHEONS AS REQUIRED FOR PIPING IN FINISHED AREAS.
- 1.14.3 SEISMIC RESTRAINTS SHALL BE PROVIDED AS REQUIRED BY LOCAL CODE. WHEN LOCAL CODE HAS NO STANDARDS, SEISMIC RESTRAINTS SHALL BE PROVIDED AND INSTALLED PER SMACNA STANDARDS.
- 1.15.0 IDENTIFICATION
- 1.15.1 THE MECHANICAL CONTRACTOR SHALL SUPPLY AND PERMANENTLY INSTALL LAMACODS TO PROVIDE IDENTIFICATION OF ALL INSTALLED EQUIPMENT LIKE RADIANT HEATERS, EXHAUST FANS, AND THEIR SWITCHES.
- 1.15.2 IDENTIFY ALL WATER PIPING BY MEANS OF COLORED, SELF-ADHESIVE LABELS AND DIRECTIONAL ARROWS USING 19mm (3/4") HIGH LETTERING.
- 1.15.3 LABEL ALL VALVES LARGER THAN 25mm (1").
- 1.16.0 RECORD DRAWINGS
- 1.16.1 THE MECHANICAL CONTRACTOR SHALL KEEP ON SITE EXTRA SETS OF PRINTS AND SPECIFICATIONS ON WHICH ALL CHANGES AND DEVIATIONS FROM THE ORIGINAL DESIGN SHALL BE RECORDED DAILY. THESE CHANGES MUST BE NEATLY ADDED TO A CLEAN SET OF DRAWINGS AND GIVEN TO THE OWNERS MARKED "AS-BUILT".

- 1.17.0 EQUIPMENT AND MATERIALS CLEAN-UP
- 1.17.1 PIPING, FIXTURES, DUCTS, AND EQUIPMENT SHALL BE THOROUGHLY CLEANED OF DIRT, GREASE, ADHESIVE LABELS, AND FOREIGN MATERIALS.
- 1.18.0 GAS
- 1.18.1 MECHANICAL CONTRACTOR SHALL INSTALL GAS SERVICE FROM EXISTING BUILDING GAS SERVICE TO ALL NEW GAS FIRED EQUIPMENT COMPLETE WITH ALUMINIZED PAINT COATING ON PIPE WHERE EXPOSED TO OUTDOORS. LINES CONCEALED SHALL BE BRAZED SEAMLESS COPPER K OR L (UP TO 32mm OR 1 1/4") BLACK STEEL SCHEDULE 40 WITH THREADED CONNECTION UP TO 50mm OR 2".
- 1.18.2 ALL GAS PIPING FITTINGS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH CSA STANDARD B-149 INSTALLATION CODE.

- 2.0 PLUMBING
- 2.1.0 GENERAL
- 2.1.1 PROVIDE COMPLETE DOMESTIC WATER, DRAINAGE, AND VENT PIPING SERVING ALL NEW PLUMBING FIXTURES. ALL WATER PIPING SHALL EXTEND TO THE EXISTING BUILDING SERVICES. INSURE THAT SEWER SERVICES ARE RUN WITH SUFFICIENT SLOPE FOR DRAINAGE WITH ADEQUATE COVER TO PREVENT FREEZING.
- 2.1.2 PROVIDE MANUFACTURED SHOCK ABSORBERS ANCON MODEL SG OR AIR CHAMBERS TO PREVENT WATER HAMMER. INSTALL ON ALL HOT AND COLD WATER SUPPLIES TO EACH FIXTURE OR EACH GROUP OF FIXTURES. AIR CHAMBERS SHALL BE A MINIMUM OF 19mm (3/4") DIAMETER AND 450mm (18") LONG.
- 2.1.3 INSTALL OVERSIZED CLAMPS AND 13mm (1/2") "ARMAFLEX" FOAM RUBBER INSULATION, 75mm (3") LONG AROUND EACH PLUMBING DRAINAGE STACK AND EACH DOMESTIC WATER PIPE AT EACH SUPPORT POINT THROUGH WOODEN STRUCTURE.
- 2.1.4 PROVIDE VACUUM BREAKERS ON LINES SERVING EQUIPMENT OR FIXTURES WHERE CONTAMINATION OF DOMESTIC WATER MAY OCCUR.

- 2.1.5 INSTALL WATTS SERIES 900 BACKFLOW PREVENTER OR APPROVED EQUAL ON ALL POTABLE WATER WHERE BACKFLOW AND CROSS CONNECTION MAY OCCUR.
- 2.1.6 INSTALL AUTOMATIC TRAP SEAL PRIMERS ANCON MS-810 COMPLETE WITH INTEGRAL VACUUM BREAKER FOR FLOOR DRAINS AS REQUIRED BY PLUMBING CODE OR PLUMBING INSPECTOR.
- 2.1.7 PROVIDE ALL VALVES AS SHOWN ON THE DRAWINGS OR AS REQUIRED BY THE AUTHORITIES HAVING JURISDICTION. INSTALL ISOLATION VALVES AT ALL CONNECTIONS TO EQUIPMENT, AND IN ALL BRANCHES, FIXTURES, OR GROUPS OF FIXTURES.
- 2.1.8 ISOLATE EACH PLUMBING FIXTURE WITH SHUT-OFF VALVES. USE QUICK OPENING "HENDERSON NEWMAN SUPERBALL" VALVES FOR WATER AND GAS.
- 2.1.9 PLUMBING FIXTURES SHALL BE AS SPECIFIED, OR APPROVED EQUAL, ON DRAWING M6.2.
- 2.1.10 STERILIZE WATER SERVICE WITH CHLORINE AS PER CITY AND PROVINCIAL PLUMBING CODE STANDARDS AND PROVIDE A WRITTEN REPORT FLUSH SYSTEM AND HAVE BACTERIOLOGICAL TESTS COMPLETED AT A RECOGNIZED CERTIFIED LABORATORY.

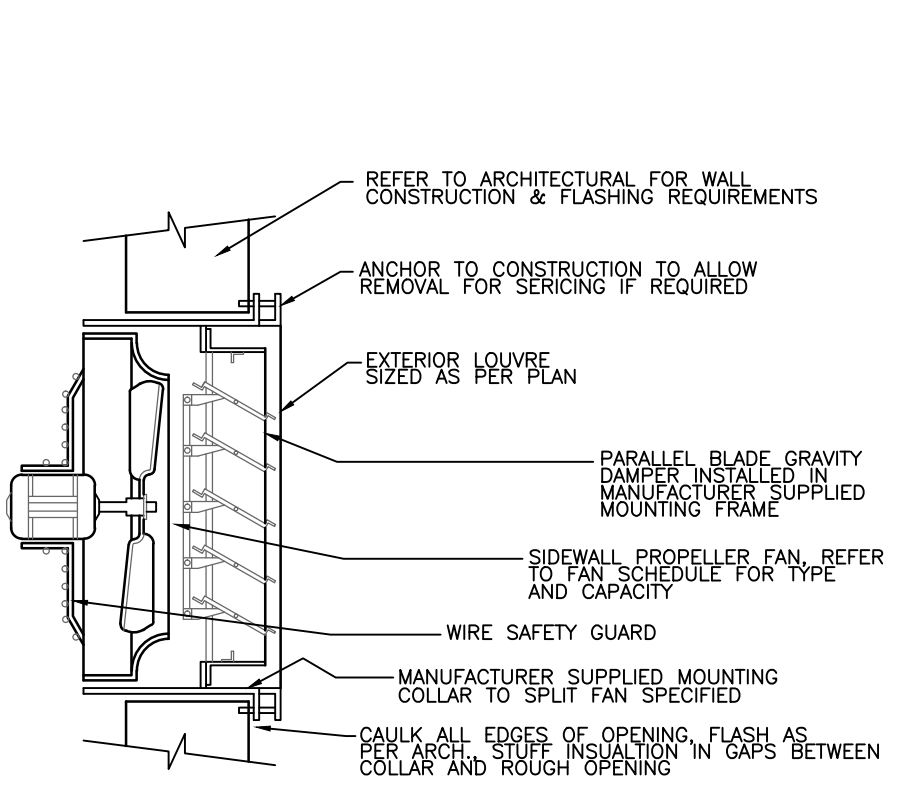
- 2.2.0 PIPE AND FITTINGS
- 2.2.1 ALL PIPING SHALL MEET THE REQUIREMENTS OF THE PROVINCIAL PLUMBING CODE AND NATIONAL BUILDING CODE.
- 2.2.2 DOMESTIC WATER ABOVE GROUND: TYPE K OR TYPE L, HARD COPPER, 95/5 SOLDER JOINTS, WROUGHT COPPER OR BRONZE FITTINGS. OVER 75mm (3"): GALVANIZED STEEL, SCREWED JOINTS. AQUAPEX PIPING IS ALSO ACCEPTABLE.
- 2.2.3 DOMESTIC WATER BELOW GRADE: TYPE K SOFT COPPER, FLARED JOINTS. OVER 50mm (2"): CAST IRON PIPE, CAST IRON FITTINGS, MECHANICAL JOINTS. HDPE, PVC ALSO ACCEPTABLE.
- 2.2.4 WASTE AND VENT PIPING ABOVE GROUND: TYPE DWV OR HARD DRAWN DRAINAGE TUBE, CAST BRASS FITTINGS, 50/50 SOLDER JOINTS. CAST IRON SOIL PIPE AND FITTINGS, MECHANICAL JOINTS. PVC AND ABS PIPING IS ACCEPTABLE.
- 2.2.5 WASTE AND VENT PIPING BELOW GRADE: 150mm (6") AND SMALLER, CAST IRON PIPE, CAST IRON FITTINGS, MECHANICAL JOINTS. PVC AND ABS PIPING ACCEPTABLE.

- 2.3.0 VALVES
- 2.3.1 VALVES ON HOT WATER AND COLD WATER PIPING SHALL BE AS FOLLOWS:
  - GATE VALVES 50mm (2") AND SMALLER: CRANE No. 1320C
  - GATE VALVES 65mm (2 1/2") AND LARGER: CRANE No. 465 1/2C
  - GLOBE VALVES 50mm (2") AND SMALLER: CRANE No. 1310
  - GLOBE VALVES 65mm (2 1/2") AND LARGER: CRANE No. 351
  - CHECK VALVES 50mm (2") AND SMALLER: CRANE No. 1342
  - CHECK VALVES 65mm (2 1/2") AND LARGER: CRANE No. 373
  - BALL VALVES 6mm (1/4") THRU 50mm (2"): GRINNELL FIG. 1550

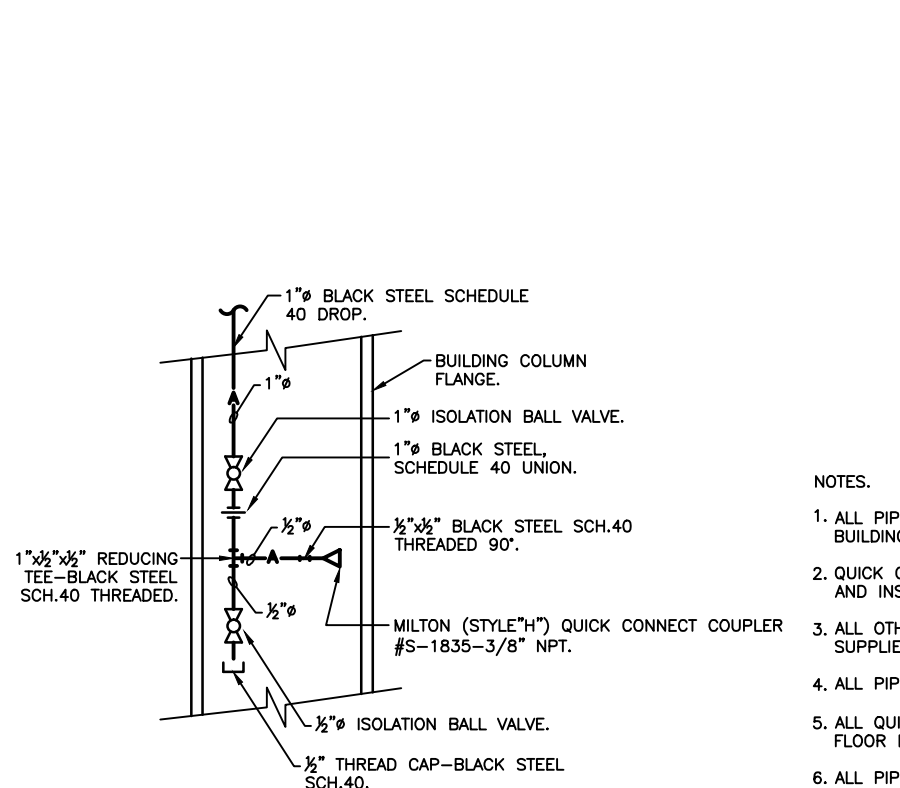
- 3.0 HEATING/VENTILATION
- 3.1.0 GENERAL
- 3.1.1 DUCTWORK SHALL BE GALVANIZED STEEL AND LOCK FORMING QUALITY. ALL DUCTWORK SHALL BE CONSTRUCTED BRACED, CONNECTED, JOINTED, AND INSTALLED IN ACCORDANCE WITH THE LATEST ISSUE OF ASHRAE GUIDE AND DUCT CONSTRUCTION STANDARDS ISSUED BY SMACNA, NFPA 90 AND 90A, PROVINCIAL CODE, AND LOCAL REGULATIONS. INSTALL ALL SUPPLY, RETURN, AND EXHAUST DUCTS COMPLETE WITH GRILLES AND DIFFUSERS AS SHOWN ON THE DRAWINGS.
- 3.1.2 FIRE DAMPERS AND FIRE STOPS SHALL BE ULC LABELED. INSTALL WHERE SHOWN AND/OR REQUIRED BY AUTHORITIES HAVING JURISDICTION. PROVIDE ACCESS FOR SERVICING AND INSPECTION. FIRE DAMPERS SHALL BE TYPE 'B' WITH DAMPER BLADES FULLY CLEAR OF THE AIR STREAM. SEAL WITH DOW CORNING RTV SILICONE FOAM.
- 3.1.3 BALANCING DAMPERS SHALL BE INSTALLED IN ALL BRANCHES AS REQUIRED.
- 3.1.4 ALL EQUIPMENT SHALL BE AS SPECIFIED ON DRAWING M6.1 OR APPROVED EQUAL.

- 3.1.5 ALL EXPOSED DUCTWORK TO BE SPIRAL ROUND.
- 3.1.6 PROVIDE SHEET METAL FIRE STOPS TIGHT AROUND DUCTS PASSING THROUGH FIRE SEPARATIONS AND CEILINGS.
- 3.1.7 ALL DUCTWORK SHALL BE GALVANIZED STEEL: 28 GAUGE FOR UP TO 305mm (12") WIDE OR 205mm (8") DIAMETER; 24 GAUGE FOR 330mm (13") TO 760mm (30") WIDE OR 230mm (9") TO 760mm (30") DIAMETER. ALL FITTINGS TO MEET SMACNA DESIGN STANDARDS.
- 3.1.8 CLEAN ALL EQUIPMENT AND CHANGE ALL FILTERS PRIOR TO OCCUPANCY. PROVIDE 1 SET OF SPARE FILTERS ON SITE FOR OWNER.
- 4.0 INSULATION
- 4.1.0 GENERAL
- 4.1.1 ALL INSULATION AND MATERIALS ASSOCIATED WITH INSULATION SHALL HAVE A FLAME SPREAD RATING OF NOT MORE THAN 25 AND A SMOKE DEVELOPED CLASSIFICATION OF NOT MORE THAN 50.
- 4.1.2 ALL PIPING INSULATION SHALL BE FIBROUS GLASS WITH K VALUE MAXIMUM 0.3 W/m DEGREES CELSIUS AT 24 DEGREES CELSIUS WITH FACTORY APPLIED JACKET – MANSON AK PIPE INSULATION OR APPROVED EQUAL. APPLY PAINTABLE PVC JACKET ON ALL EXPOSED PIPING IN FINISHED AREAS.
- 4.1.3 RECOVERING JACKET ON DUCTWORK SHALL BE ULC LISTED "THERMO CANVAS" TREATED COTTON FABRIC, SUITABLE FOR PAINTING. PROVIDE RECOVERING JACKET ON ALL EXPOSED INSULATION THROUGHOUT, INCLUDING EQUIPMENT ROOM. INSULATION LOCATED IN PIPE SHAFTS AND SUSPENDED CEILING SPACES IS NOT CONSIDERED EXPOSED.
- 4.1.4 ENSURE INSULATION IS CONTINUOUS THROUGH INSIDE WALLS. PACK AROUND PIPES WITH FIRE-PROOF, SELF SUPPORTING INSULATION MATERIALS.
- 4.1.5 INSULATE DUCTWORK WITH MANSON ALLEY WRAP INSULATION OR EQUIVALENT FACED WITH FSK FOR AN EFFECTIVE VAPOUR BARRIER.
- 4.1.6 LINE DUCTWORK WITH MANSON ACOUSTI-LINER, 0.68 kg (1.5 lbs.) DENSITY COATED SURFACE SHALL FACE AIR STREAM. ALL DUCTWORK IN SUPPLY AND RETURN AIR PLENUMS SHALL BE INSULATED. DUCT SIZES SHOWN ARE CLEAR INSIDE.
- 4.1.7 INSULATION SCHEDULE:
  - EXHAUST DUCTS WITHIN 3.0m (10'-0") OF ATTIC OR COLD ROOF OR COLD WALL COMPLETE WITH FOIL FACED VAPOUR BARRIER – 25mm (1"); HOT AND COLD WATER LINES – 13mm (1/2"); PLUMBING VENTS WITHIN 3.0m (10'-0") OF ATTIC VENT OR COLD ROOF OR COLD WALL COMPLETE WITH FOIL FACED VAPOUR BARRIER – 25mm (1"); EXHAUST DUCTS FROM CEILING MOUNTED FANS TO ROOF OR WALL DISCHARGE – EXTERNAL 25mm (1");

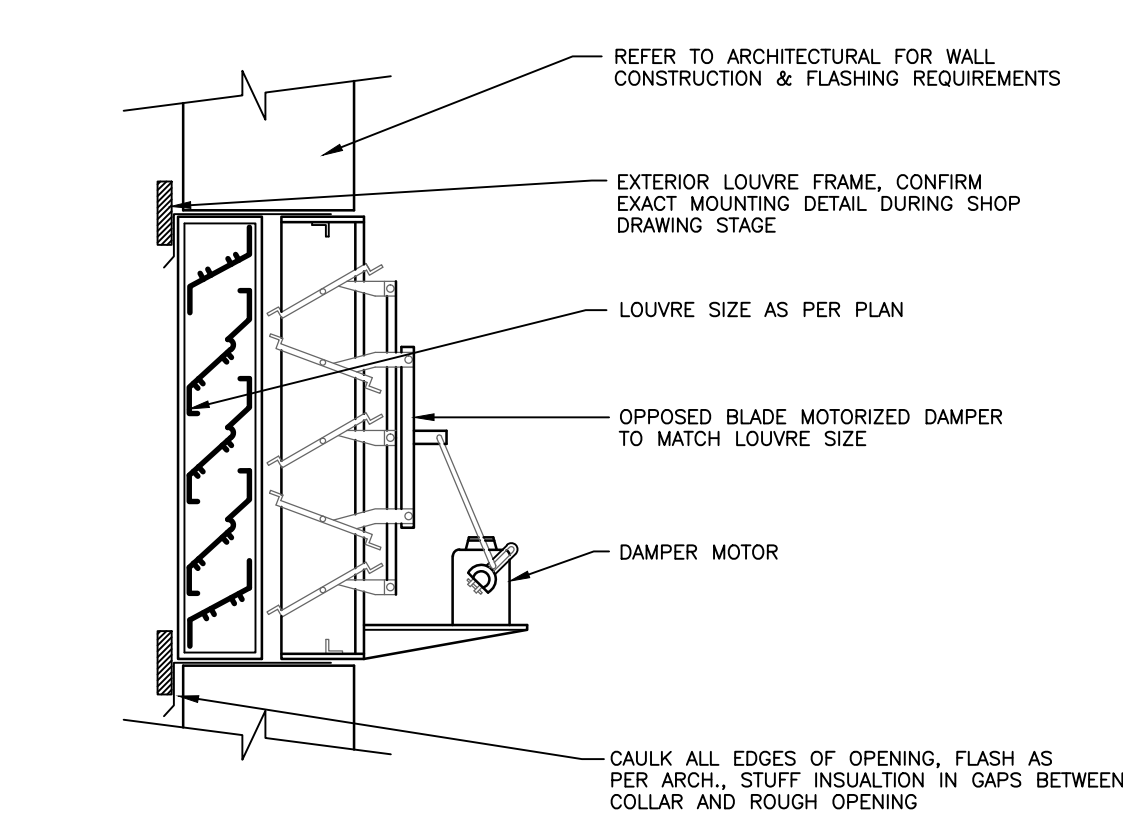
- 5.0 FIRE PROTECTION
- 5.1.0 GENERAL
- 5.1.1 FIRE EXTINGUISHERS
- FIRE EXTINGUISHERS: CONTRACTOR SHALL PROVIDE PORTABLE FIRE EXTINGUISHERS AS PER PLAN, IN ACCORDANCE WITH NFPA #10.
- 6.0 CONTROLS
- 6.1.0 GENERAL
- 6.1.1 ALL THERMOSTATS, THERMOMETERS, AND CONTROLLERS SHALL BE RATED IN CELSIUS DEGREES. ALL THERMOSTATS SHALL BE SUPPLIED BY THE MECHANICAL CONTRACTOR AND INSTALLED BY THE MECHANICAL CONTROLS SUB CONTRACTOR.
- 6.1.2 REFER TO ELECTRICAL DRAWINGS AND SPECIFICATIONS FOR POWER TO MECHANICAL EQUIPMENT BY THE ELECTRICAL CONTRACTOR.
- 6.1.3 PROVIDE INTERLOCK BETWEEN MOTORIZED DAMPER SHOP EXHAUST FAN, AND CARBON MONOXIDE/NITROGEN DIOXIDE DETECTOR AS SPECIFIED ON DRAWING M6.1.
- 6.1.4 PROVIDE ALL OTHER EXHAUST FAN CONTROLS AS SPECIFIED ON HVAC DRAWING M6.1.
- 6.1.5 CALIBRATE CARBON MONOXIDE/NITROGEN DIOXIDE DETECTORS.



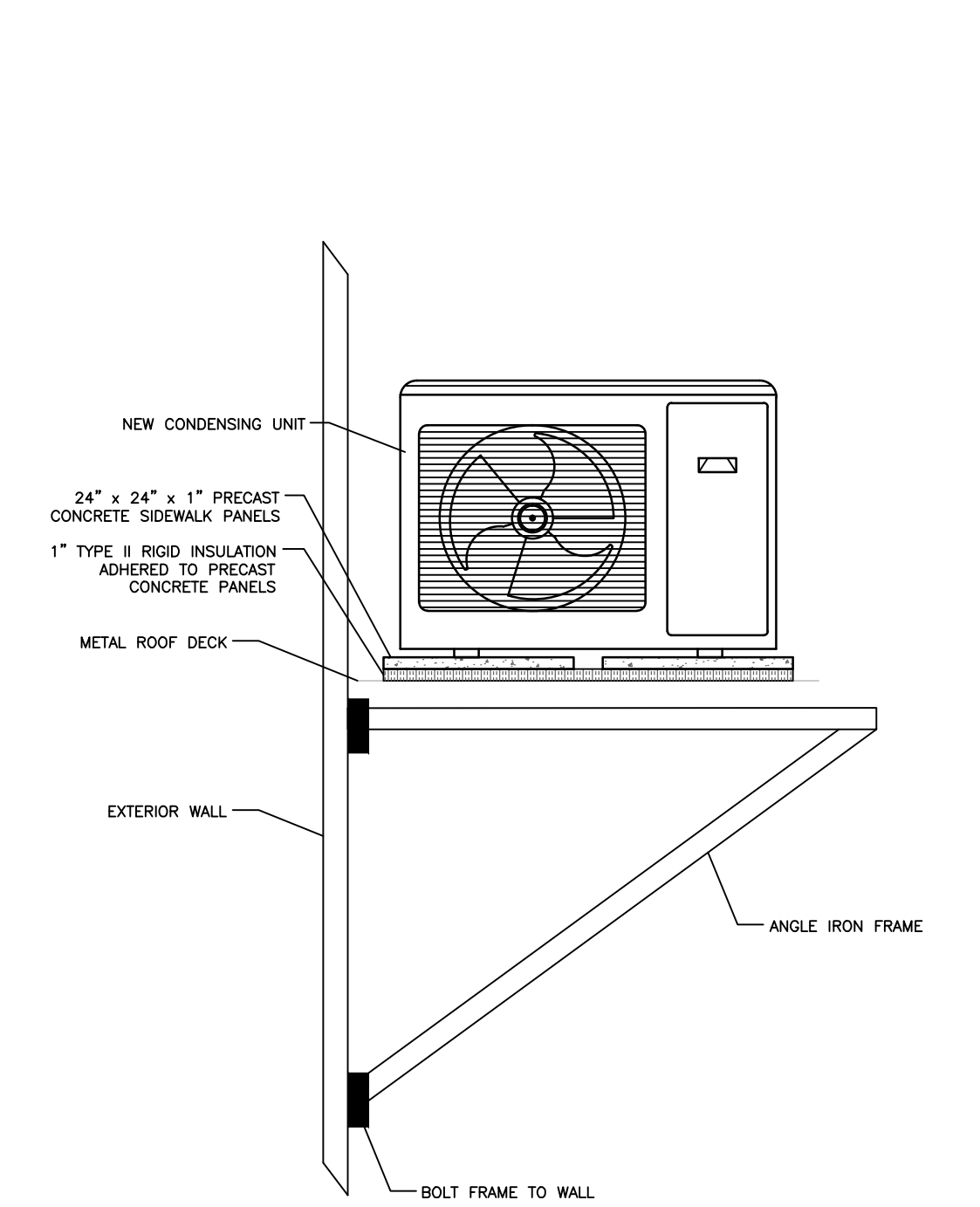
1 WALL EXHAUST FAN DETAIL  
SCALE: NTS



3 COMPRESSED AIR SINGLE QUICK CONNECT OUTLET  
SCALE: NTS



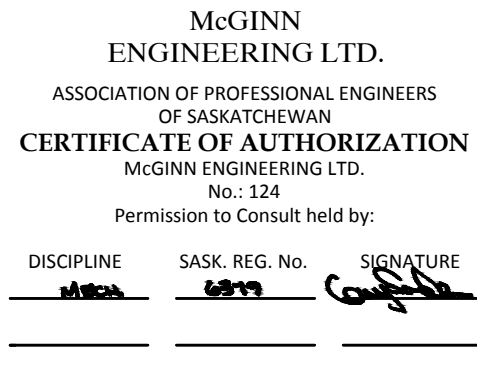
2 MOTORIZED LOUVRE DETAIL  
SCALE: NTS



4 CONDENSER CONCRETE PAD DETAIL  
SCALE: NTS

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Project Title:

## INDIAN HEAD AAFIC BUILDING B017 ADDITION

INDIAN HEAD, SASKATCHEWAN

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Revision No.: - Date: -

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