



NEW SIDE DUCT MOUNTED SUPPLY AIR GRILLE. PROVIDE NEW SPIN-IN, OPPOSED BLADE DAMPER TO BE ACCESSIBLE THROUGH FACE OF REGISTER. REFER TO SCHEDULE

2 PROVIDE AND INSTALL NEW EXHAUST AIR FAN. PROVIDE NEW SPIN-IN, OPPOSED BLADE DAMPER TO BE ACCESSIBLE THROUGH FACE OF REGISTER. REFER TO SCHEDULE

3 NEW THERMOSTAT/SENSOR. PROVIDE NEW CONTROL WIRING. FIELD VERIFY EXACT FINAL LOCATION WITH ARCHITECT PRIOR TO INSTALLATION TO AVOID CONFLICT WITH SHELVING, FURNITURE, ETC.

4 PROVIDE AND INSTALL NEW THERMOSTAT/SENSOR AS SHOWN. MAINTAIN MAINTENANCE ACCESS CLEARANCES FOR AIR UNIT. ROUTE TRANSITIONS/LEADS AS REQUIRED TO ROUTE DUCTWORK AS SHOWN. PROVIDE WITH INTEGRAL CONDENSATE DRAIN. PROVIDE WITH FACTORY PROGRAMMABLE THERMOSTAT.

5 CONDENSATE DRAIN TO MOP-SINK, HUBS, TRAIL, FLOOR DRAIN IN MECHANICAL ROOM, OR OTHER CODE APPROVED LOCATION. PROVIDE OVERFLOW DRAIN PAIL WITH FLOAT SWITCH AND LOCAL ALARM AS SHOWN. IF WATER LEAK IN PAIL, CALL FOR SERVICE. PROVIDE OVERFLOW DRAIN PAIL. PROVIDE UNIT WITH ISOLATION VALVES. REFER TO SCHEDULE, DETAILS AND SPECIFICATIONS FOR MORE INFORMATION.

6 PROVIDE AND INSTALL NEW EXHAUST AIR FAN. FAN TO BE INTERLOCKED WITH FAN VFD AND EXHAUST AIR CONTROLS. EXHAUST AIR FAN SHALL BE SET TO A MINIMUM VENTILATION SETPOINT (400 CFM) AND INCREASE TO DESIGN CFM RATE WHEN REFRIGERANT IS DETECTED. REFER TO SCHEDULE AND SPECIFICATIONS FOR MORE INFORMATION.

7 NEW REFRIGERANT DETECTOR/SENSOR. PROVIDE NEW CONTROL WIRING. FIELD VERIFY EXACT FINAL LOCATION WITH ARCHITECT PRIOR TO INSTALLATION TO AVOID CONFLICT WITH SHELVING, FURNITURE, ETC.

8 PROVIDE AND INSTALL NEW CONDENSING UNIT ON WALL, HIGH IN SPACE. FIELD VERIFY EXACT FINAL ROUTING BETWEEN UNIT AND DX COIL. SIZE REFRIGERANT PIPING PER MANUFACTURER'S REQUIREMENTS. MAINTAIN MANUFACTURER'S RECOMMENDED CLEARANCES AROUND CONDENSER COILS. COILS TO BE MOUNTED ON WALL IN MECHANICAL ROOM.

9 NEW INDOOR WALL MOUNTED EVAPORATOR UNIT. COORDINATE EXACT FINAL LOCATION IN THE FIELD. REFER TO MECHANICAL HYDROGEN/REFRIGERANT PIPING PLANS FOR PIPE ROUTING. MAINTAIN MAINTENANCE ACCESS CLEARANCES FOR AIR UNIT. ROUTE UNITS FULL SIZED CONDENSATE DRAIN LINE TO NEW SINK OR FLOOR DRAIN. PROVIDE OVERFLOW DRAIN PAIL WITH FLOAT SWITCH AND LOCAL ALARM AS SHOWN. PROVIDE WITH INTEGRAL CONDENSATE PUMP. PROVIDE WITH FACTORY PROGRAMMABLE THERMOSTAT.

10 PROVIDE AND INSTALL NEW WATER-COOLED CHILLER. COORDINATE EXACT FINAL LOCATION IN THE FIELD. UNIT TO BE INSTALLED ON HOUSEKEEPING PAD. COORDINATE NEW ELECTRICAL CONNECTIONS WITH THE ELECTRICAL CONTRACTOR. REFER TO CHILLER PIPING SCHEMATIC, SCHEDULE, DETAILS AND SPECIFICATIONS FOR MORE INFORMATION.

11 PROVIDE AND INSTALL NEW BOLLER. COORDINATE EXACT FINAL LOCATION IN THE FIELD. UNIT TO BE INSTALLED ON HOUSEKEEPING PAD. ROUTE UNITS FULL SIZED INSULATED CONDENSATE DRAIN LINE TO SINK OR FLOOR DRAIN. PROVIDE OVERFLOW DRAIN PAIL WITH FLOAT SWITCH AND LOCAL ALARM. REFER TO HOT WATER PIPING SCHEMATIC, SCHEDULE, DETAILS AND SPECIFICATIONS FOR MORE INFORMATION.

12 PROVIDE AND INSTALL CHILLED WATER VARIABLE FREQUENCY DRIVE (VFD) IN MECHANICAL ROOM. COORDINATE EXACT MOUNTING LOCATION TO MAINTAIN PROPER CLEARANCES RECOMMENDED BY MANUFACTURER.

13 PROVIDE AND INSTALL HOT WATER PUMP VARIABLE FREQUENCY DRIVE (VFD) IN BOILER ROOM. COORDINATE EXACT MOUNTING LOCATION TO MAINTAIN PROPER CLEARANCES RECOMMENDED BY MANUFACTURER.

14 PROVIDE AND INSTALL EXHAUST FAN VARIABLE FREQUENCY DRIVE (VFD) IN MECHANICAL ROOM. COORDINATE EXACT MOUNTING LOCATION TO MAINTAIN PROPER CLEARANCES RECOMMENDED BY MANUFACTURER. EXHAUST FAN SHALL BE SET TO A MINIMUM VENTILATION SETPOINT.

15 PROVIDE AND INSTALL EMERGENCY SHUTOFF "PANIC BUTTON" IN BOILER ROOM. COORDINATE WITH MANUFACTURER AND ARCHITECT FOR FINAL LOCATION PRIOR TO MOUNTING.

16 PROVIDE AND INSTALL MOUNTED ALUMINUM LOUVER SIMILAR TO GREENHECK MODEL ESD-6353E OR APPROVED EQUAL. TO BE INSTALLED AND USED FOR INTAKE AIR. PAINT TO MATCH EXTERIOR WALL COLOR OR OTHER COLOR AS REQUIRED BY THE ARCHITECT. PROVIDE AND TRANSITION NEW CONNECTION TO NEW EXHAUST FAN AS SHOWN. PROVIDE BIRDSCREEN AT LOUVER. PROVIDE PLENUM OUTDOOR CONNECTION BEHIND LOUVER TO BE SAME SIZE AS LOUVER. COORDINATE EXACT LOUVER LOCATION AND ALL WORK WITH ARCHITECT PRIOR TO INSTALL.

17 PROVIDE AND INSTALL MOUNTED ALUMINUM LOUVER SIMILAR TO GREENHECK MODEL ESD-6353E OR APPROVED EQUAL. TO BE INSTALLED AND USED FOR COMBUSTION AIR. PAINT TO MATCH EXTERIOR WALL COLOR OR OTHER COLOR AS REQUIRED BY THE ARCHITECT. PROVIDE AND TRANSITION NEW CONNECTION TO NEW EXHAUST FAN AS SHOWN. PROVIDE BIRDSCREEN AT LOUVER. PROVIDE PLENUM OUTDOOR CONNECTION BEHIND LOUVER TO BE SAME SIZE AS LOUVER. COORDINATE EXACT LOUVER LOCATION AND ALL WORK WITH ARCHITECT PRIOR TO INSTALL.

18 NEW WALL MOUNTED ALUMINUM LOUVER SIMILAR TO GREENHECK MODEL ESD-6353E OR APPROVED EQUAL. TO BE INSTALLED AND USED FOR EXHAUST AIR. PAINT TO MATCH EXTERIOR WALL COLOR OR OTHER COLOR AS REQUIRED BY THE ARCHITECT. PROVIDE AND TRANSITION NEW CONNECTION TO NEW EXHAUST FAN AS SHOWN. PROVIDE BIRDSCREEN AT LOUVER. PROVIDE PLENUM OUTDOOR CONNECTION BEHIND LOUVER TO BE SAME SIZE AS LOUVER. COORDINATE EXACT LOUVER LOCATION AND ALL WORK WITH ARCHITECT PRIOR TO INSTALL.

19 NEW WALL MOUNTED ALUMINUM LOUVER SIMILAR TO GREENHECK MODEL ESD-6353E OR APPROVED EQUAL. TO BE INSTALLED AND USED FOR EXHAUST AIR. PAINT TO MATCH EXTERIOR WALL COLOR OR OTHER COLOR AS REQUIRED BY THE ARCHITECT. PROVIDE AND TRANSITION TO OUTDOOR AIR OUTDOOR NEW CONNECTION AS SHOWN. PROVIDE BIRDSCREEN AT LOUVER. PROVIDE PLENUM OUTDOOR CONNECTION BEHIND LOUVER TO BE SAME SIZE AS LOUVER. COORDINATE EXACT LOUVER LOCATION AND ALL WORK WITH ARCHITECT PRIOR TO INSTALL.

20 APPROXIMATE LOCATION OF GAS WATER HEATER. COORDINATE EXACT FINAL LOCATION IN FIELD. COORDINATE WITH PLUMBING CONTRACTOR. FIELD VERIFY ALL WORK IN FIELD.

21 ROUTE NEW CONCENTRIC FLUE VENT TO EXTERIOR WALL. COORDINATE EXACT ROUTING BETWEEN WATER HEATER(S) AND EXTERIOR WALL. SIZE/INSTALL PER MANUFACTURER'S REQUIREMENTS. COORDINATE WITH PLUMBING CONTRACTOR. FIELD VERIFY ALL WORK IN FIELD.

22 PROVIDE AND INSTALL NEW COMBINATION FIRESMOKE DAMPER AS SHOWN. PROVIDE NEW DUCT SEALING AND FLEXIBLE KALKUL AIR DUCT NEW DUCT. REFER TO DETAIL. FIELD VERIFY ALL SIZES. ALL DUCTS TO BE INSTALLED PER DETAIL.

1	ALL DUCT TYPES SHOWN ARE INSIDE CLIM. INCREASE ACCORDINGLY WHERE INTERIOR LINER IS SHOWN OR SPECIFIED.
2	COORDINATE IN THE FIELD THE EXACT LOCATION OF ALL CEILING MOUNTED GRILLES AND DIFFUSERS WITH LIGHT FIXTURES AND ARCHITECT'S REFLECTED CEILING PLAN.
3	CONTRACTOR TO PROPERLY SEAL ALL NEW OR MODIFIED DUCTWORK.
4	SHOP PRIME ALL MISCELLANEOUS INTERIOR BRACKETS AND HANGERS UNLESS GALVANIZED OR STAINLESS STEEL. ALL EXTERIOR BRACKETS, CLAMPS, AND HANGERS SHALL BE HOT DIPPED GALVANIZED. COAT ALL UTS AND VENTS WITH "ZRC COATING" TO PREVENT RUSTING AND CORROSION.
5	FIELD COORDINATION WITH STRUCTURAL ENGINEER REQUIRED FOR ALL DUCTWORK AS REQUIRED.
6	THESE CONSTRUCTION DRAWINGS ARE DIAGNOSTIC, AND DO NOT NECESSARILY REFLECT ACTUAL DIMENSIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD-VERIFY ALL DIMENSIONS AND COORDINATE PLACEMENT OF ALL EQUIPMENT AND ROUTING OF ALL PIPING AND/OR DUCT SYSTEMS.
7	ALL CONSTRUCTION IS TO CONFORM TO THE SPECIFICATIONS OF THE PLAN, SPECIFICATION REQUIREMENTS AND THE FOLLOWING CODES: CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE FOLLOWING CODES. NO OTHER SPECIFICATIONS OR CODE REQUIREMENTS APPLY.
8	RETURN AIR IS THROUGH RETURN GRILLES AND BACK THROUGH RETURN AIR OPENINGS TO THE MECHANICAL ROOM. CONTRACTOR TO MAINTAIN RETURN AIR PATH. PROVIDE OPENINGS OR RETURN AIR BOOTS AS REQUIRED.
9	ALL DUCTWORK 15 FEET DOWNSTREAM OF AHU'S AND 10 FEET DOWNSTREAM OF FPP'S TO BE PROVIDED WITH KNAUF PERFORMANCE - INTERNAL LINER OR APPROVED EQUAL.
10	ALL TRANSFER AIR DUCTS/BOOTS TO BE PROVIDED WITH INTERNAL LINING.
11	PROVIDE RETURN AIR DUCTS/BOOTS ON ALL RETURN GRILLES FOR OFFICES, CONFERENCE ROOMS, ETC ON 4TH FLOOR.