(26) ALL HVAC SYSTEMS SHALL RUN ABOVE THE EXISTING HUNG CEILING OF THE RATED FLOOR/CEILING ASSEMBLY, PROVIDE FIRE STOPPING, FIRE DAMPERS AND RATED AIR DEVICES AT ALL PENETRATIONS TO MAINTAIN THE REQUIRED (1) THE HVAC CONTRACTOR SHALL BE RESPONSIBLE TO ENSURE THAT ALL HVAC WORK IS PROVIDED AND INSTALLED IN STRICT COMPLIANCE WITH STATE CODE. (16) FLEXIBLE DUCTWORK MUST BE INSTALLED WITH SUPERIOR WORKMANSHIP MAINTAINING FULL CROSS SECTIONAL AREA DESCRIPTION SYMBOL THROUGHOUT, SUPPORT FROM STRUCTURE AT 24' INTERVALS TO RATING OF THE EXISTING FLOOR/CEILING ASSEMBLY. ENSURE FULL CROSS SECTIONAL AREA FOR MAXIMUM AIR FLOW, USE FLEXIBLE DUCT ONLY AT LINEAR DIFFUSERS. ALL WORK AND MATERIALS SHALL BE PERFORMED AND INSTALLED IN ACCORDANCE WITH ALL NATIONAL, STATE, AND LOCAL CODES AND (27) DISPOSE OF ALL MATERIALS AS DIRECTED BY AN BURGER MAKER REPRESENTATIVE. CD 4-WAY CEILING DIFFUSER (17) PROVIDE FIRE DAMPERS WITH RATED ACCESS DOORS AT ALL DUCT PENETRATIONS THROUGH FIRE RATED WALLS, SMOKE AND FIRE (28) DO NOT SCALE FROM THESE DRAWINGS. CD 3-WAY CEILING DIFFUSER STOPPING, SHAFTS, FLOORS, RATED CEILINGS AND PARTITIONS AS (3) REFER TO SPECIFICATIONS FORM PART FOR THE FULL PROJECT REQUIRED TO MAINTAIN ARCHITECTURAL FIRE RATINGS. REFER TO THE (29) SYSTEM BALANCE SHALL BE PERFORMED IN STRICT COMPLIANCE WITH ALL APPLICABLE CODES, REGULATIONS, PLANS AND WRITTEN SPECIFICATION. ARCHITECTURAL PLANS AND SPECIFICATIONS FOR LOCATIONS AND THE EXACT MOUNTING HEIGHTS AND LOCATIONS OF ALL HVAC EQUIPMENT SHALL BE FIELD VERIFIED AND COORDINATED WITH ALL OTHER NEW AND EXISTING MECHANICAL, ELECTRICAL, ARCHITECTURAL AND STRUCTURAL EXISTING MECHANICAL, ELECTRICAL, ARCHITECTURAL CD 2-WAY CEILING DIFFUSER FIRE RATING REQUIREMENTS. (30) HVAC CONTRACTOR MUST VISIT THE SITE TO CAREFULLY EXAMINE AND FAMILIARIZE THEMSELVES WITH THE EXISTING CONDITIONS PRIOR TO BIDDING, SUBMISSION OF 4 PROPOSAL WILL BE CONSIDERED AS EVIDENCE THAT SUCH AN EXAMINATION HAS BEEN PERFORMED, LATER CLAIMS FOR EXTRA CR , EG RETURN OR EXHAUST CEILING GRILLE (18) ALL ACCESS DOORS REQUIRED IN GENERAL CONSTRUCTION ARE TO BE PROVIDED AND INSTALLED BY THE GENERAL CONTRACTOR, ACCESS DOORS ARE INTENTIONALLY NOT SHOWN ON DRAWINGS PENDING FINAL SHOP DRAWING AND STRUCTURAL SYSTEMS. (5) THE FINISH AND COLOR OF THE AIR DEVICES, AND ALL OTHER EXPOSED HVAC EQUIPMENT SHALL BE COORDINATED WITH THE RG OR EG RETURN OR EXHAUST GRILLE LAYOUT REQUIREMENTS SINCE DNE ACCESS DOOR MAY SERVICE MULTIPLE TRADES. IT IS THE RESPONSIBILITY OF THIS CONTRACTOR TO IDENTIFY SIZE, TYPE AND LOCATION OF SUCH DOORS FOR PROPER ACCESS TO ALL LABOR OR MATERIALS REQUIRED DUE TO DIFFICULTIES ENCOUNTERED NOT BE RG ON ECT RESONATE OR EXHAUST GRILLE (6) VERIFY ALL EQUIPMENT VOLTAGES WITH THE ELECTRICAL (31) ALL ROOFTOP EQUIPMENT SHALL BE PAINTED. THE COLOR MUST BE COORDINATED WITH THE ARCHITECT PRIOR TO ORDERING EQUIPMENT. CONCEALED EQUIPMENT REQUIRED ACCESS. CONTRACTOR PRIOR TO ORDERING EQUIPMENT. THIS CONTRACTOR SHALL IDENTIFY THESE REQUIREMENTS ON A COORDINATED SHOP DRAWING PRIOR TO SYSTEM FABRICATION AND INSTALLATION. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE THE QUANTITY, SIZE AND LOCATION OF SUM TOTAL OF ALL ACCESS DOORS SUPPLY DUCT UP OR DOWN (7) PROVIDE DISCONNECT SWITCHES FOR ALL HVAC EQUIPMENT (32) PROVIDE 120V SMOKE DE ECTORS WITH AUXILIARY CONTACTS. UPON ACTIVATION, THE SMOKE DETECTORS SHALL SHUT DOWN THE AIR INCLUDING WEATHERPROOF DISCONNECT AS REQUIRED. RETURN OR EXHAUST DUCT UP OR DOWN DISTRIBUTION SYSTEMS AND ACTIVATE A VISIBLE AND AUDIBLE SUPERVISORY SIGNAL AT A CONSTANTLY ATTENDED LOCATION VIA SPRINKLER/FIRE ALARM PANEL. SMOKE DETECTORS MUST BE COMPATIBLE (8) PROVIDE PHASE LOSS PROTECTION FOR ALL POLY-PHASE MOTOR WHICH ADEQUATELY SERVICE ALL TRADES. DEVICES (9) THE FINAL LOCATION OF AIR DEVICES MUST BE COORDINATED WITH THE REFLECTED CEILING PLAN AND ALL OTHER NEW AND EXISTING MECHANICAL, ELECTRICAL, SPRINKLER, ARCHITECTURAL, AND ROUND DUCT WITH THE INSTALLED FIRE ALARM SYSTEM. (19) ALL WALL AND ROOF OPENINGS 12' X 12' OR LARGER ARE TO BE EQUIPPED WITH BURGLAR BARS USING 5/8' DIAMETER RODS RUNNING 6' ON CENTER IN BOTH DIRECTIONS, AND WELDED AT ALL INTERSECTING POINTS, SECURE THE FLEXIBLE DUCT STRUCTURAL SYSTEMS. O) DUCTWORK SHALL BE CONSTRUCTED OF GALVANIZED SHEET STEEL IN STRICT COMPLIANCE WITH THE LATEST EDITION OF THE ASHRAE, NFPA, AND SMACNA GUIDE RECOMMENDATIONS. ALL DUCTS TO HAVE PITTSBURGH TYPE LOCK FOR LONGITUDINAL SEAMS AND DRIVE SLIP/
'S' SLIP FOR TRANSVERSE JOINTS. 'DUCT-MATE' JOINT SYSTEM IS ACCEPTABLE IN LIEU OF PRIOR SEAM SYSTEMS. SIZES AS SHOWN INDICATE INSIDE CLEAR DIMENSIONS OF THE AIR PASSAGE, DUCTWORK PERIMETER FRAME ASSEMBLY TO THE WALL DR ROOF FRAMED ASSEMBLY. FC FLEXIBLE CONNECTOR (20) IT IS THE RESPONSIBILITY OF THE HVAC CONTRACTOR TO PREPARE A COMPLETE SUBMISSION DEPICTING A TOTALLY ENGINEERED COOKING EQUIPMENT VENTILATION SYSTEM BASED UPON THE FINAL APPROVED AND PURCHASED EQUIPMENT AND ACTUAL FIELD CONDITION STATIC PRESSURES. THIS SHALL INCLUDE BUT NOT BE LIMITED TO HOODS, DUCTWORK, GREASE THIS SHALL INCLUDE BUT NOT BE LIMITED TO HOODS, DUCTWORK, GREASE MANUAL VOLUME DAMPER --- F) FD | FIRE DAMPER WITH ACCESS DOOR FILTERS AND EXHAUST/SUPPLY FANS FUNCTIONING COLLECTIVELY AS A SHALL BE FULLY INSULATED AS PER SPECIFICATIONS. COMPLETE SYSTEM DELIVERING THE SPECIFIED DESIGN CRITERIA. --- M MD MOTORIZED DAMPER DUCT SIZES MUST BE VERIFIED FOR CLEARANCES AT THE JOB SITE PRIOR TO FABRICATION. DIMENSIONS MAY BE CHANGED TO (21) ALL CEILING MOUNTED EQUIPMENT MUST BE SUPPORTED DIRECTLY FROM BUILDING STRUCTURE WITH COMBINATION SPRING AND NEOPRENE- IN-SHEAR ACCOMMODATE CONSTRUCTION AS LONG AS EFFECTIVE CROSS-SECTIONAL AREA IS MAINTAINED. DUCT TRANSITIONS SHALL BE CONSTRUCTED WITH A SLOPE OF 1' TO 4'. ALL DEVIATIONS FROM AIR FLOW THRU LOUVERED DOOR HANGERS AND ROD, PROVIDE SUPPLEMENTARY STEEL AS REQUIRED TO AIR FLOW THRU DOOR UNDERCUT DRIGINAL CONTRACT DRAWINGS SHALL BE REVIEWED BY ENGINEER (22) FIELD ADJUST THE DIRECTION OF SUPPLY AIR, SO THAT DIFFUSERS DO NOT DURING THE SHOP DRAWING PROCESS. BLOW INTO SOFFITS, CURTAIN WALLS, REFRIGERATED FIXTURES OR EXHAUST PROVIDE ELBOWS OR TEES WITH TURNING VANES FOR ALL CHANGES OF DUCT DIRECTION, PROVIDE SPLITTER DAMPERS WITH LOCKING THERMOSTAT (23) ALL EXTERIOR HVAC EQUIPMENT SHALL BE INSTALLED SUFFICIENTLY AWAY FROM EDGE OF BUILDING. IN ADDITION, ADEQUATE CLEARANCES SHALL BE PROVIDED FOR CLEANING AND MAINTENANCE REQUIREMENTS. THE FINAL DRY BULB SENSOR (13) PROVIDE MANUAL BALANCING DAMPERS AS REQUIRED TO PROPERLY BALANCE EACH INDIVIDUAL AIR DISTRIBUTION SYSTEM, IF THE LOCATION OF THE BALANCING DAMPER IS NOT DEFINED ON THE PROFESSIONAL CERTIFICATION HUMIDITY SENSOR DRAWINGS, THE FOLLOWING MINIMUM STANDARDS SHALL GOVERN. ALL SUPPLY, RETURN, AND EXHAUST MAIN BRANCHES FROM TRUNKS, EACH LOCATION OF ALL EXTERIOR UNITS MUST ALSO COMPLY WITH ALL OSHA I CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY SAFETY REQUIREMENTS. SPLIT, AND ALL SUB-BRANCHES FROM MAINS SHALL INCORPORATE (24) EXHAUST FLUES THAT PENETRATE THE EXTERIOR WALL OF THE BUILDING SHALL TERMINATE WITH A WEATHERPROOF VENT CAP AND BE SEAL SMOKE DETECTOR ME, AND THAT I AM A DULY LICENSED ARCHITECT UNDER THE LAWS OF BALANCING DAMPERS. THE STATE OF PENNSYLVANIA: PROVIDE FLEXIBLE CONNECTIONS AT ALL DUCT CONNECTIONS TO VIBRATING EQUIPMENT, THESE CONNECTIONS SHALL BE INSTALLED IN WEATHER TIGHT. F/C FAN CONTROL SWITCH (25) GUARANTEE ALL HVAC WORK AND EQUIPMENT FOR A PERIOD OF DNE YEAR FROM DATE OF STORE OPENING DURING THE ONE YEAR PERIOD, SERVICE EXPIRING ON _____ LICENSE NO. CLOSE PROXIMITY TO SUCH EQUIPMENT. F/C NECK SIZES IN DUCT SPLIT SHALL BE PROVIDED TWENTY-FOUR HOURS PER DAY SEVEN DAYS PER WEEK AND SHALL INCLUDE ALL SERVICE CALLS, PARTS, LABOR AND MAINTENANCE AT NO ADDITIONAL COST TO THE OWNER OR TENANT. ALL FILTERS SHALL BE CHANGED ONCE PER MONTH, IN ADDITION, ALL COMPRESSORS SHALL CARRY A) FLEXIBLE DUCT DIAMETER SHALL MATCH THE NECK SIZE OF THE DIFFUSER TO WHICH IT CONNECTS, UNLESS NOTED OTHERWISE.
TOTAL LENGTH OF FLEXIBLE DUCT RUN SHALL NOT EXCEED 5'-0',
EXTEND SHEETMETAL DUCT WITHIN 5'-0' OF THE AIR DEVICE FOR
COMPLIANCE, FLEXIBLE DUCTWORK IS NOT PERMITTED FOR USE IN
ANY PARTS OF THE RETURN OR EXHAUST AIR SYSTEMS, FLEXIBLE PRAVIN PATEL, P.E. DUCTWORK W/INTERNAL LINING PATEL ENGINEERING FIVE YEAR WARRANTY FROM THE MANUFACTURER. 19 SCHERER COURT FLEXIBLE CONNECTION LAWRENCEVILLE, NJ 08648 DUCTWORK SHALL NOT PASS THROUGH FIRE RATED CONSTRUCTION. TEL: - 609 955 1677 2) SYMBOLS LEGEND DESCRIPTION SYMBOL SYMBOL DESCRIPTION CODE COMPLIANCE MOTOR OPERATED DAMPER ENERGY EFFICIENCY RATIO 2009 INTERNATIONAL BUILDING CODE (IBC). ABOVE FINISHED FLOOR 2009 INTERNATIONAL MECHANICAL CODE (IMC). MAKE UP AIR UNIT ABOVE FINISHED GRADE 2009 NATIONAL FIRE PROTECTION ASSOCIATION (NFPA). OUTSIDE AIR BLDG ASHRAE HANDBOOKS - AMERICAN SOCIETY OF HEATING, REFRIGERATION, Date OPNG OPENING ELECTRIC HEATER AND AIR CONDITIONING ENGINEERS (ASHRAE). BOTTOM OF DUCT 2008 NATIONAL ELECTRICAL CODE (NEC). PLUMBING CONTRACTOR EQUIP EQUIPMENT BOTTOM REGISTER RETURN AIR EXTERNAL STATIC PRESSURE BIRD SCREEN 5) CODES AND REGULATIONS INFORMATION REFRIGERATION CONTRACTOR ENTERING WET BULB BRITISH THERMAL UNIT RETURN GRILLE FLEXIBLE CONNECTION CEILING DIFFUSER RELATIVE HUMIDITY FIRE DAMPER WITH ACCESS DOOR CUBIC FEET PER MINUTE CEM RUNNING LOAD AMPS FULL LOAD AMPS CLG CEILING REVOLUTIONS PER MINUTE RPM FEET PER MINUTE COMPANY RETURN REGISTER GENERAL CONTRACTOR COMPRESSOR COMPR SUPPLY AIR GALLONS PER MINUTE CONDENSATE COND : DUCT SMOKE DETECTOR HOOD CONTRACTOR SMOKE DAMPER WITH ACCESS DOOR HVAC CONTRACTOR CEILING REGISTER SMOKE EXHAUST HORSEPOWER CONDENSING UNIT SUPPLY FAN HEATING & VENTILATING DRY BULB HEATING, VENTILATING, AND AIR SQUARE FEET SQ. FT. DOWN SUPPLY REGISTER LEAVING AIR TEMPERATURE DRAWNG(S) DWG(S) Manny Mathai TRANSFER GRILLE THOUSAND BTU PER HOUR EXHAUST AIR TYP TYPICAL ENTERING AIR TEMPERATURE MECHANICAL CONTRACTOR 6) DRAWING INDEX VOLUME DAMPER HEALTHCARE FACILITIES MINIMUM CIRCUIT AMPS ELECTRICAL CONTRACTOR WB WET BULB MOTORIZED DAMPER MD, M ENTERING DRY BULB NOTE: NOT ALL ABBREMATIONS LISTED ABOVE ARE NECESSARILY USED ON THIS PROJECT. GENERAL NOTES, HVAC NOTES, LEGEND AND SYMBOL LIST SCALE: NONE OVERVIEW PLAN MECHANICAL ABBREVIATIONS SK-2015-006 Project number 10/14/2015 Author Drawn by Ghecker Checked by SCHEMATIC DOCUMENT CONSTRUCTION DOCUMENT CONTRACT DOCUMENT

DOCUMENT DOCUMENT DOCUMENT ISSUE DATE: : 09/01/15 : 1/8" = 1'-0"