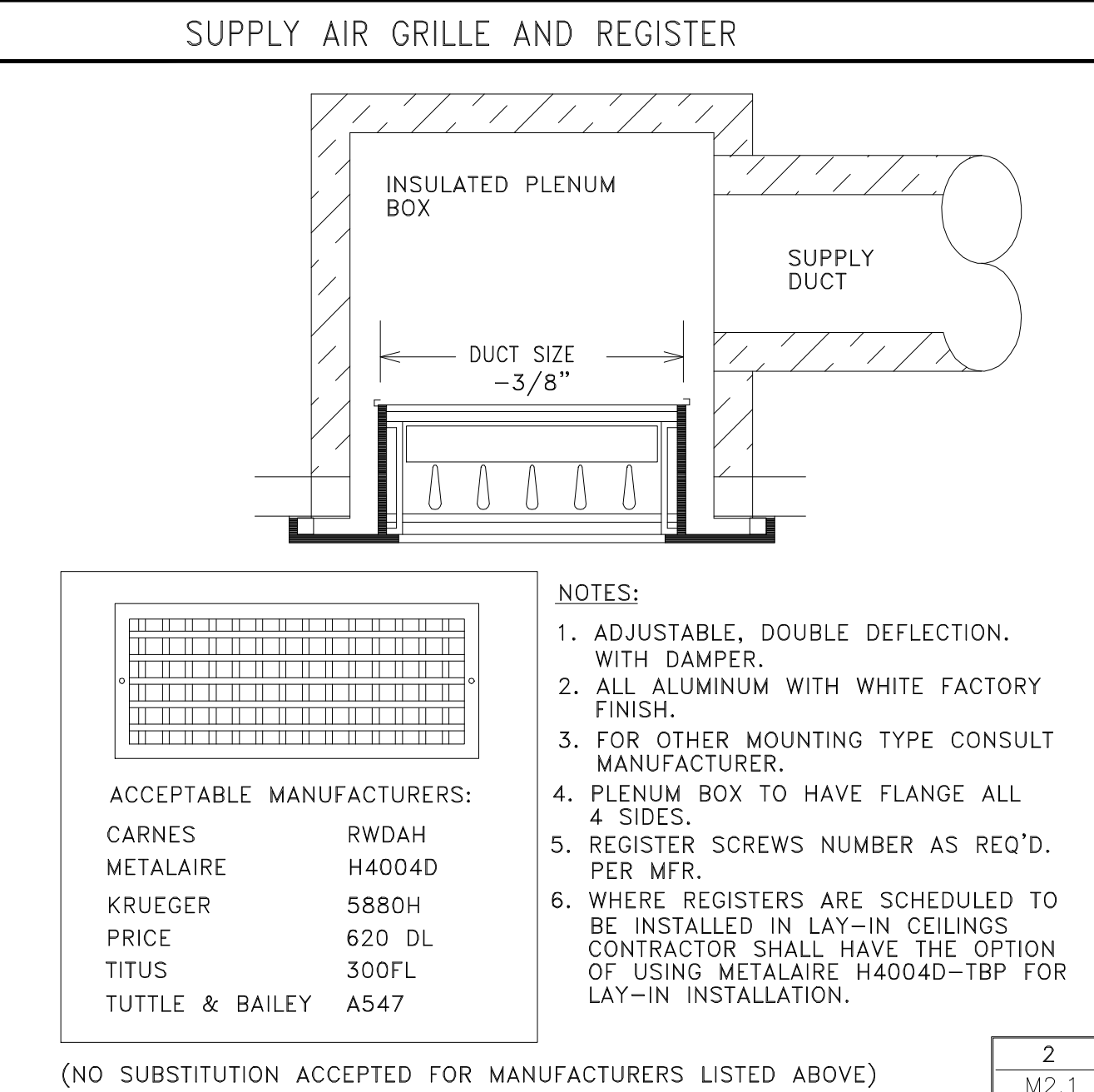
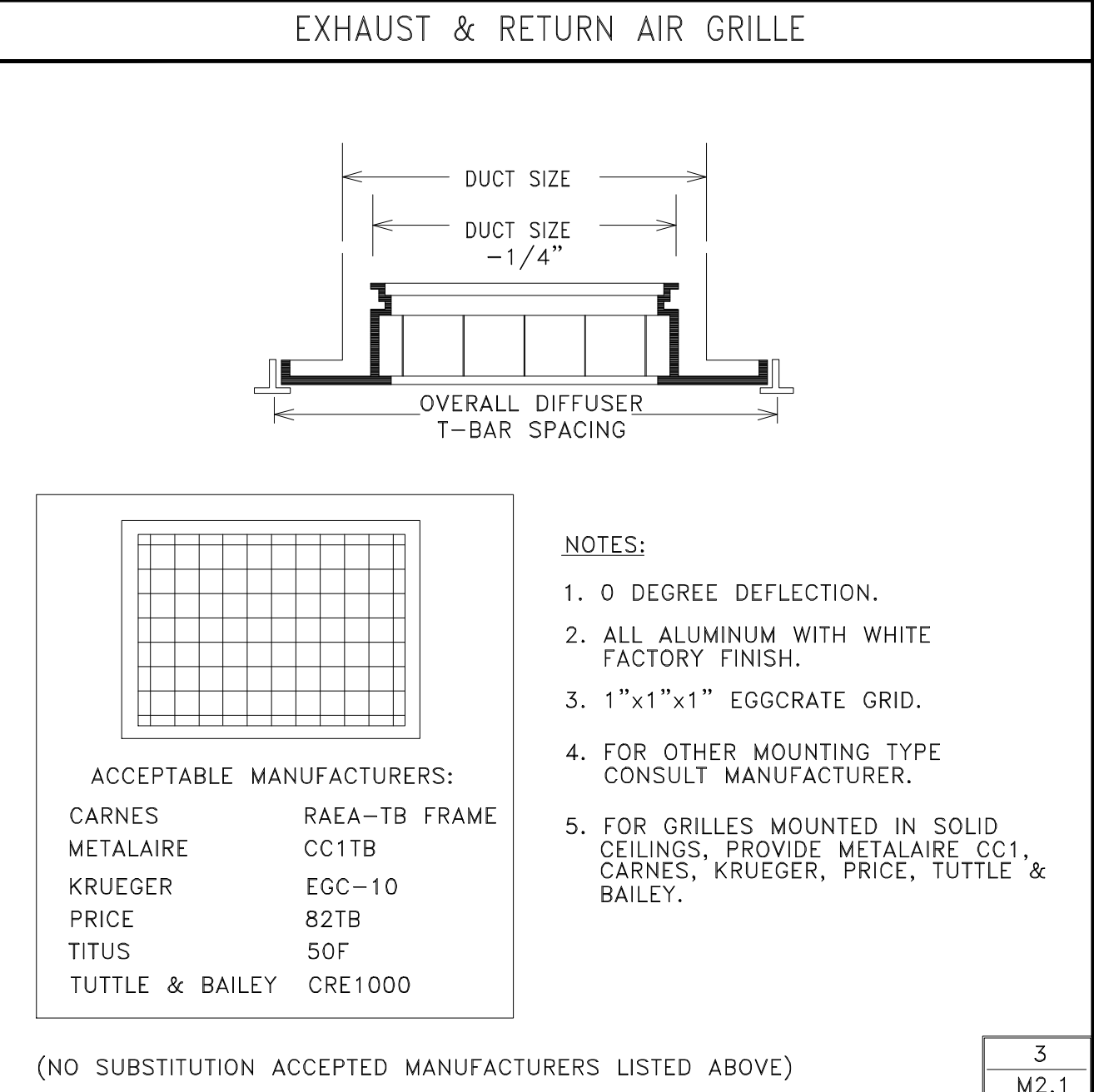


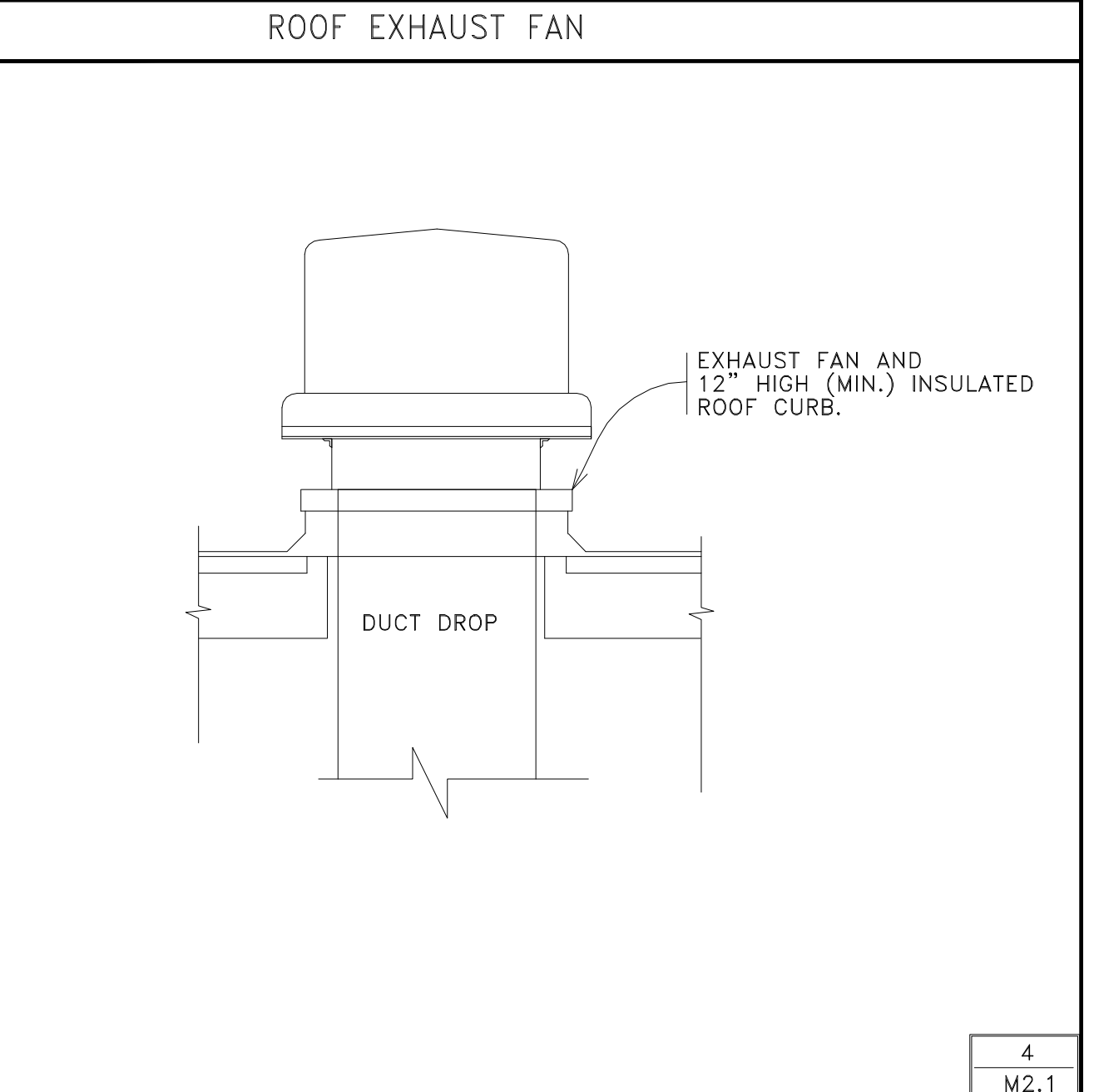
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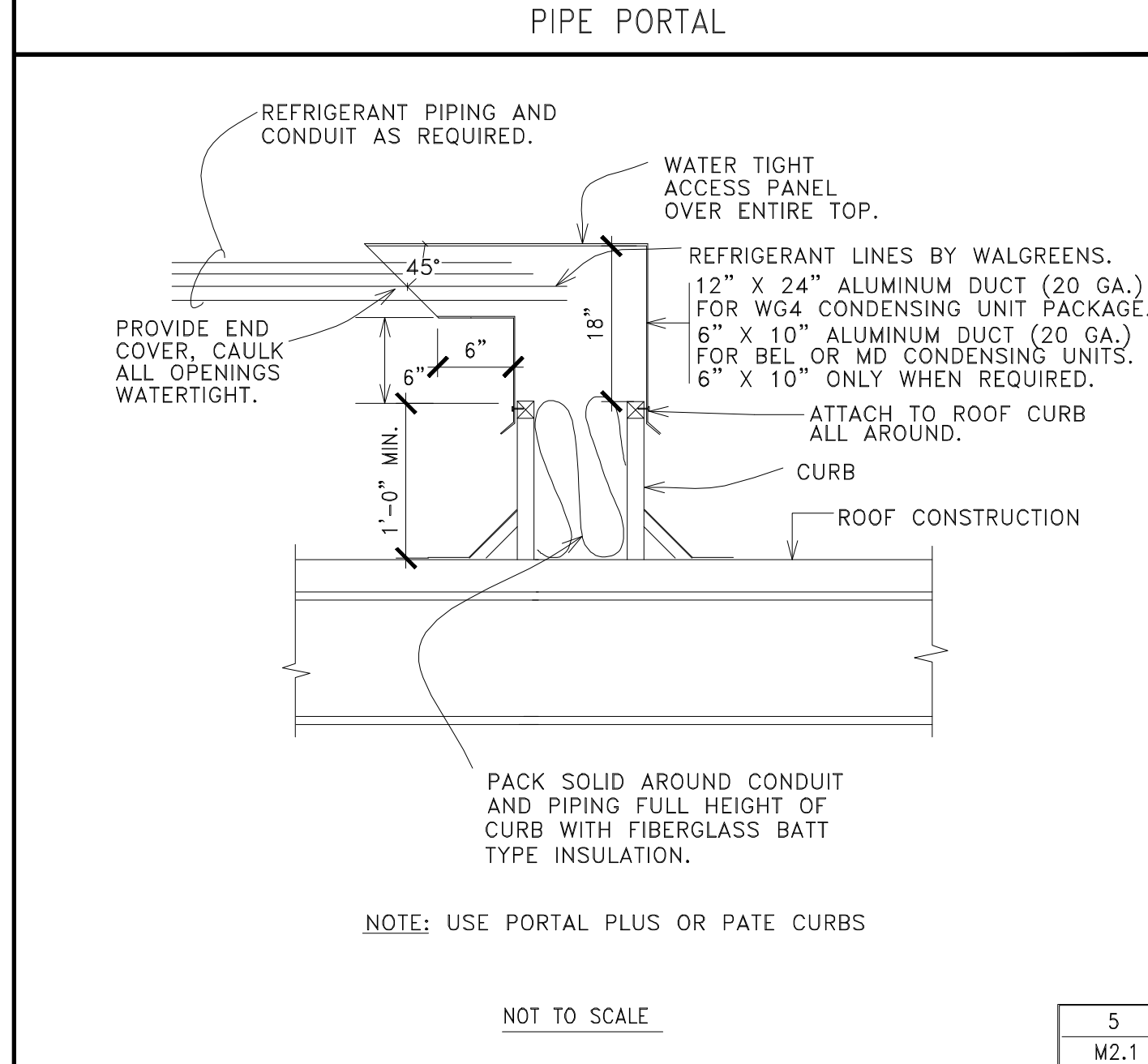
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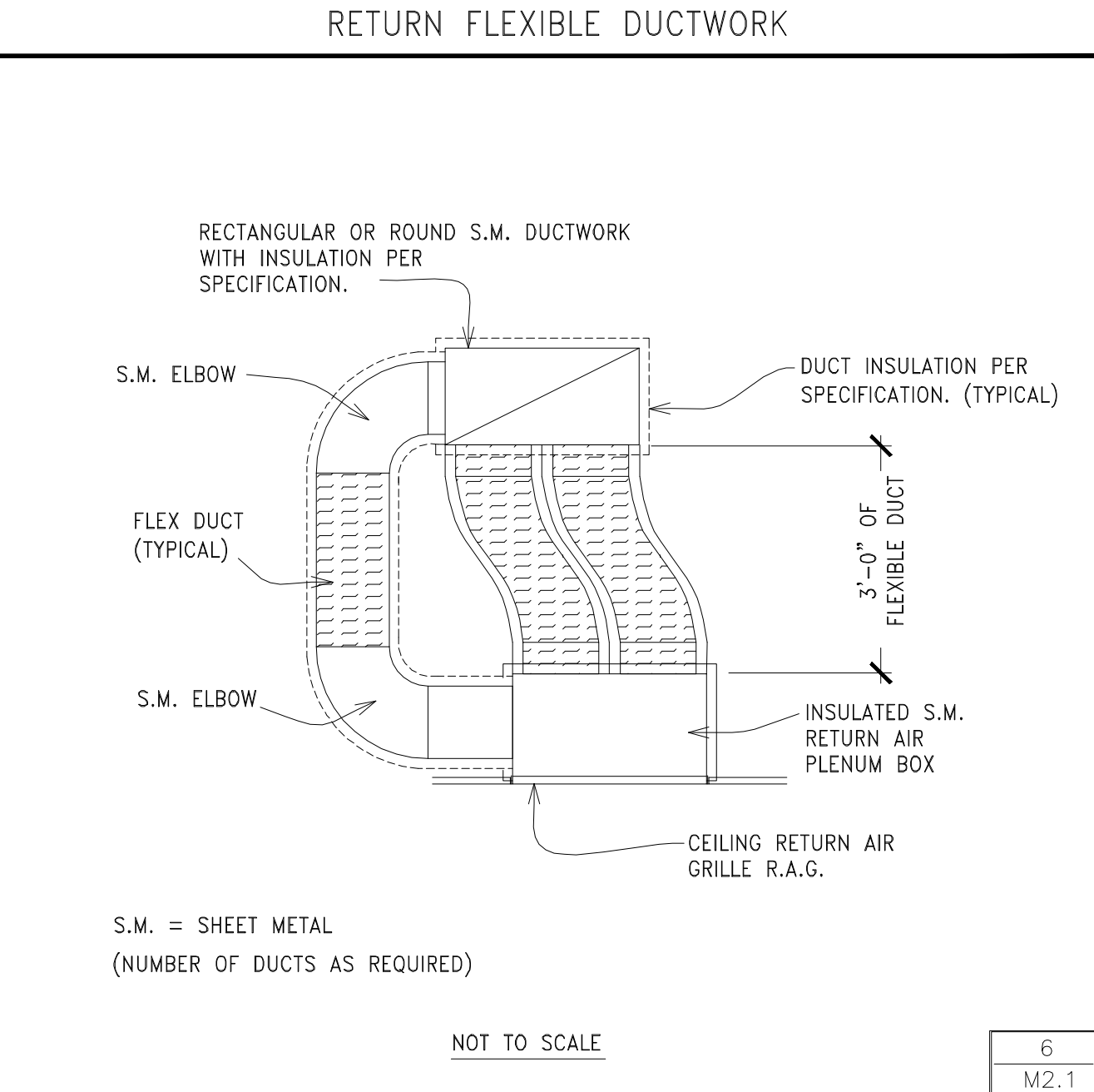
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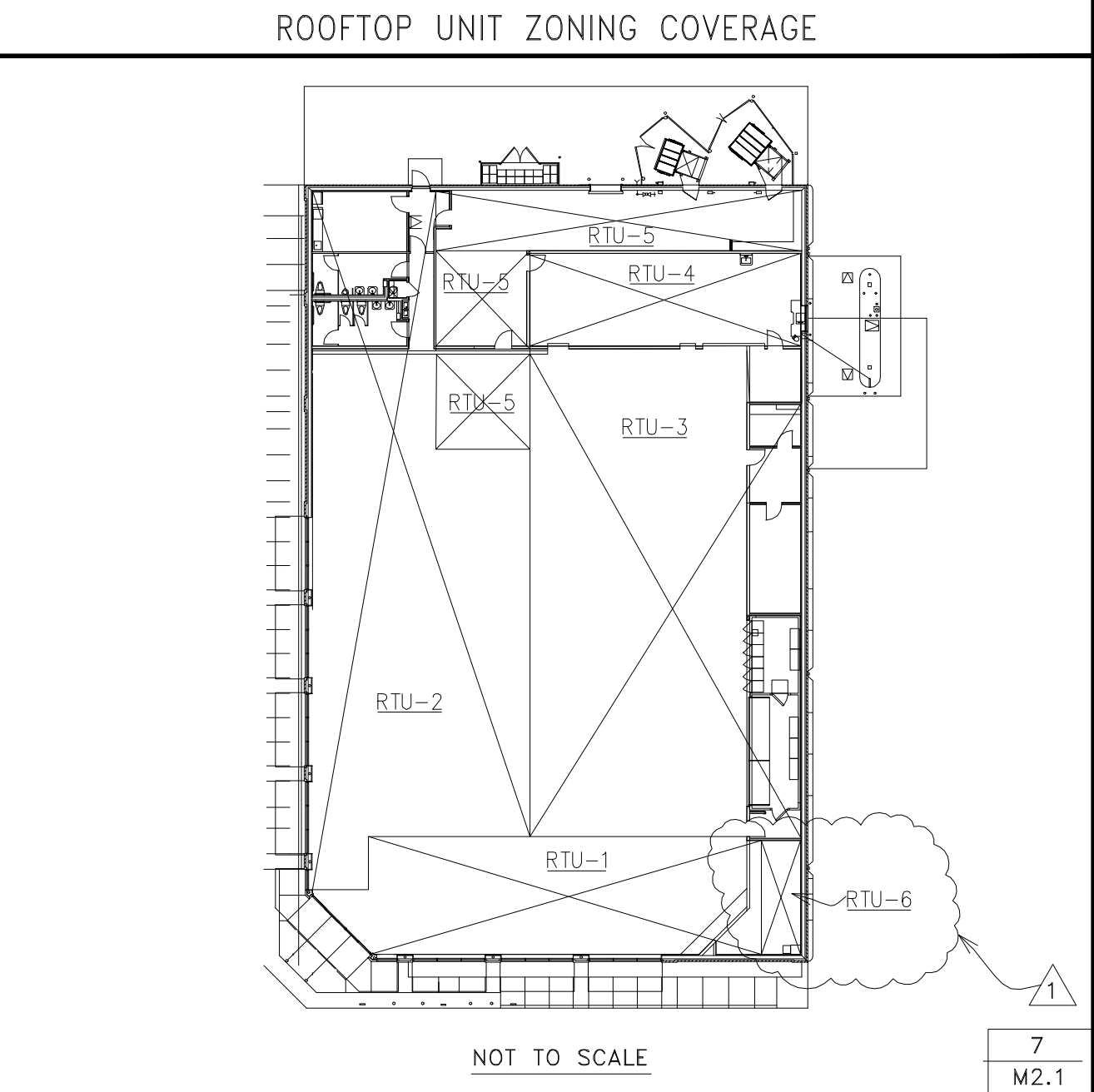
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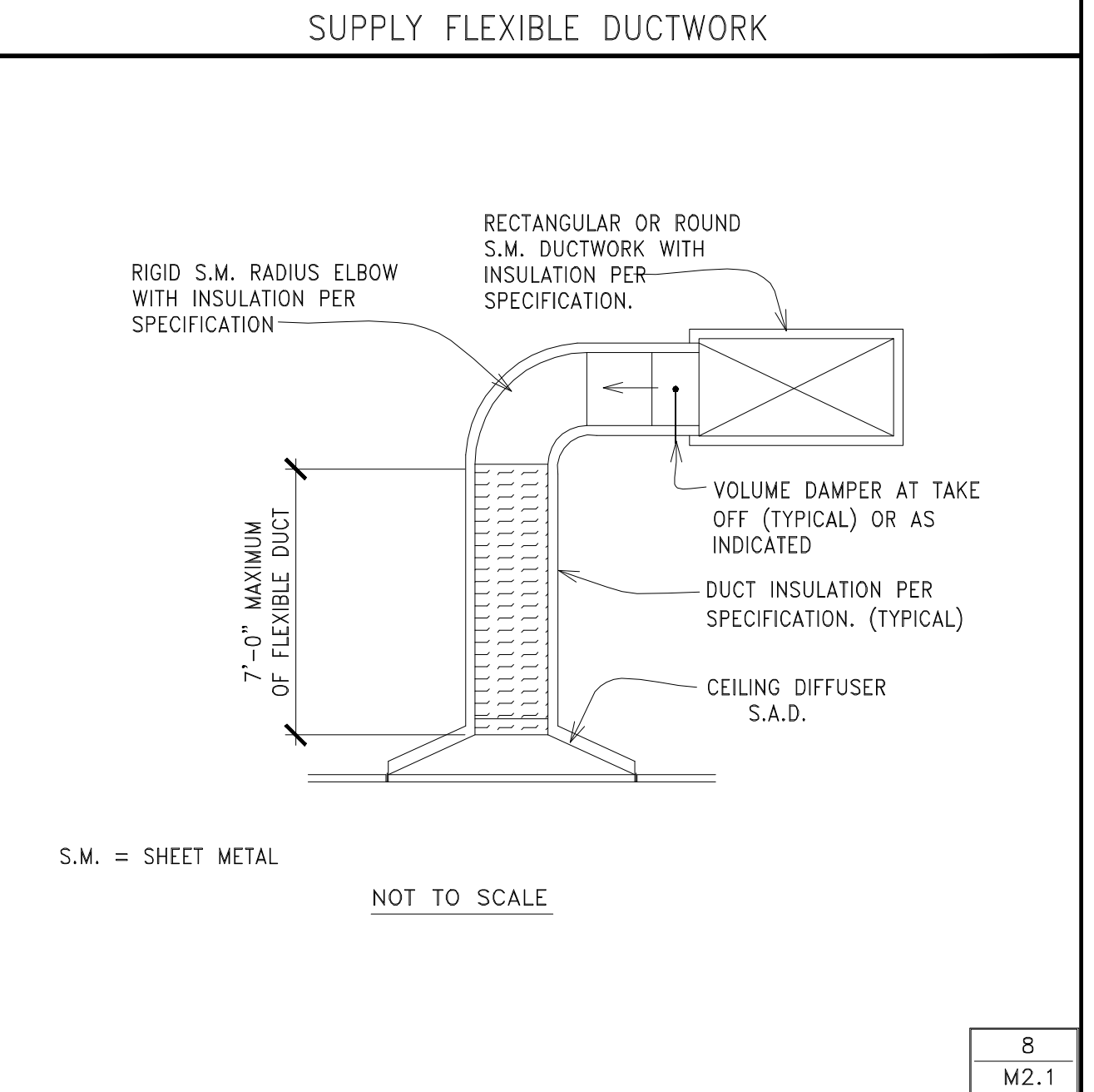
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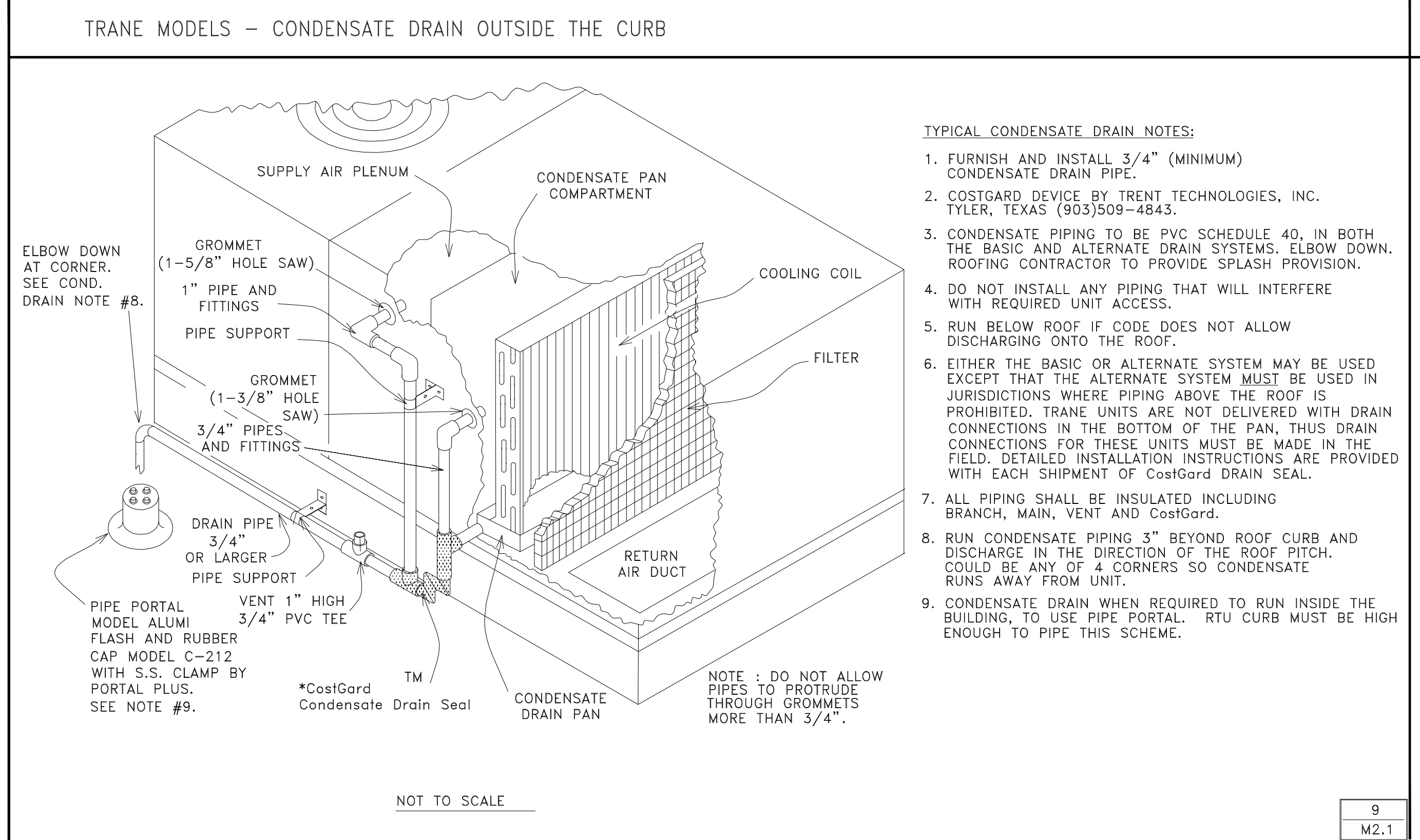
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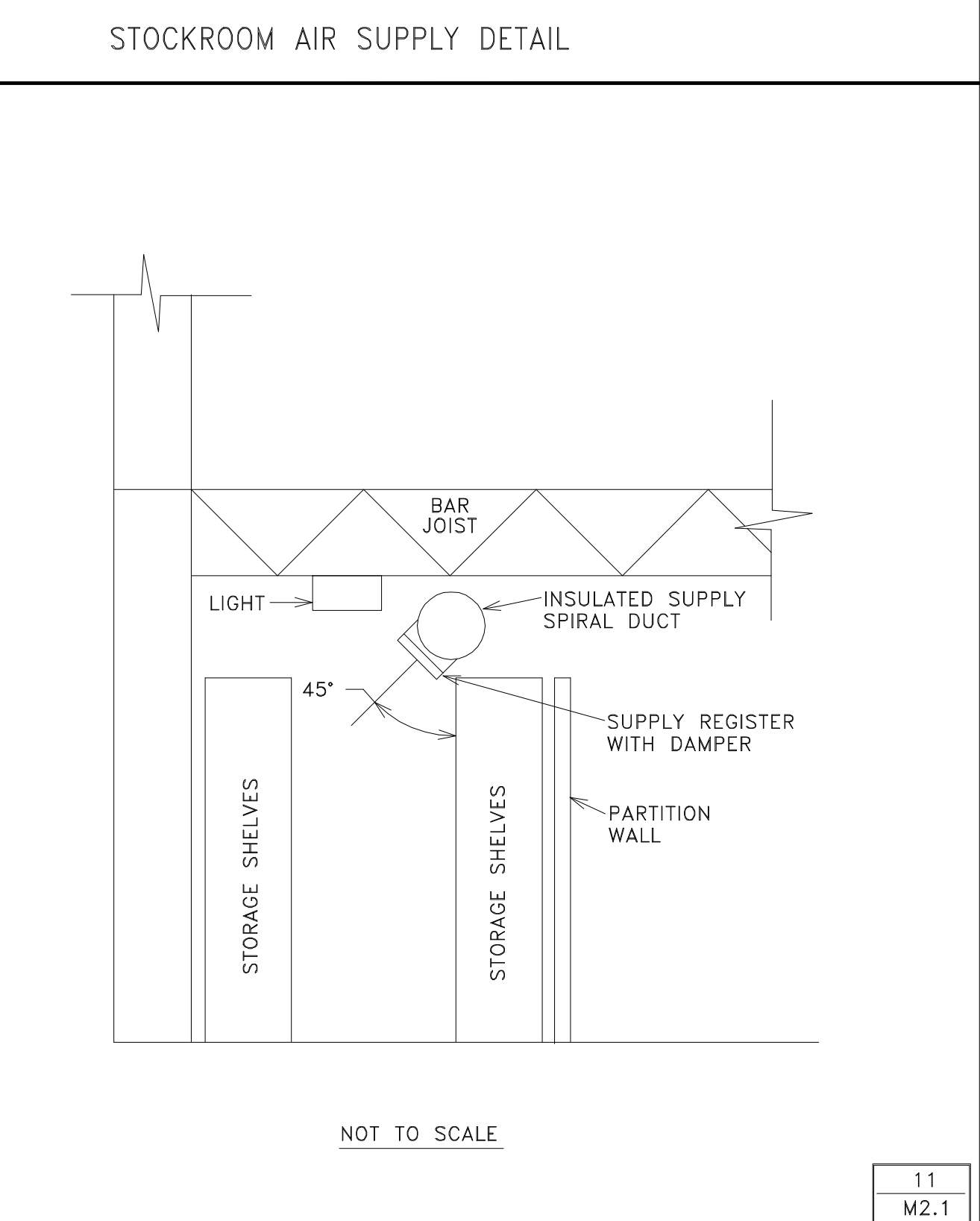
7
M2.1



8
M2.1



9
M2.1



11
M2.1

PROJECT: PROPOSED WALGREENS on SOUTH COLLEGE AND 17TH STREET EXTENTION WILMINGTON, NORTH CAROLINA

STORE NUMBER: 01560

REVISION NO.: 3/17/04

JOB NO.: 14L-0131-03

DATE: 01-13-2004

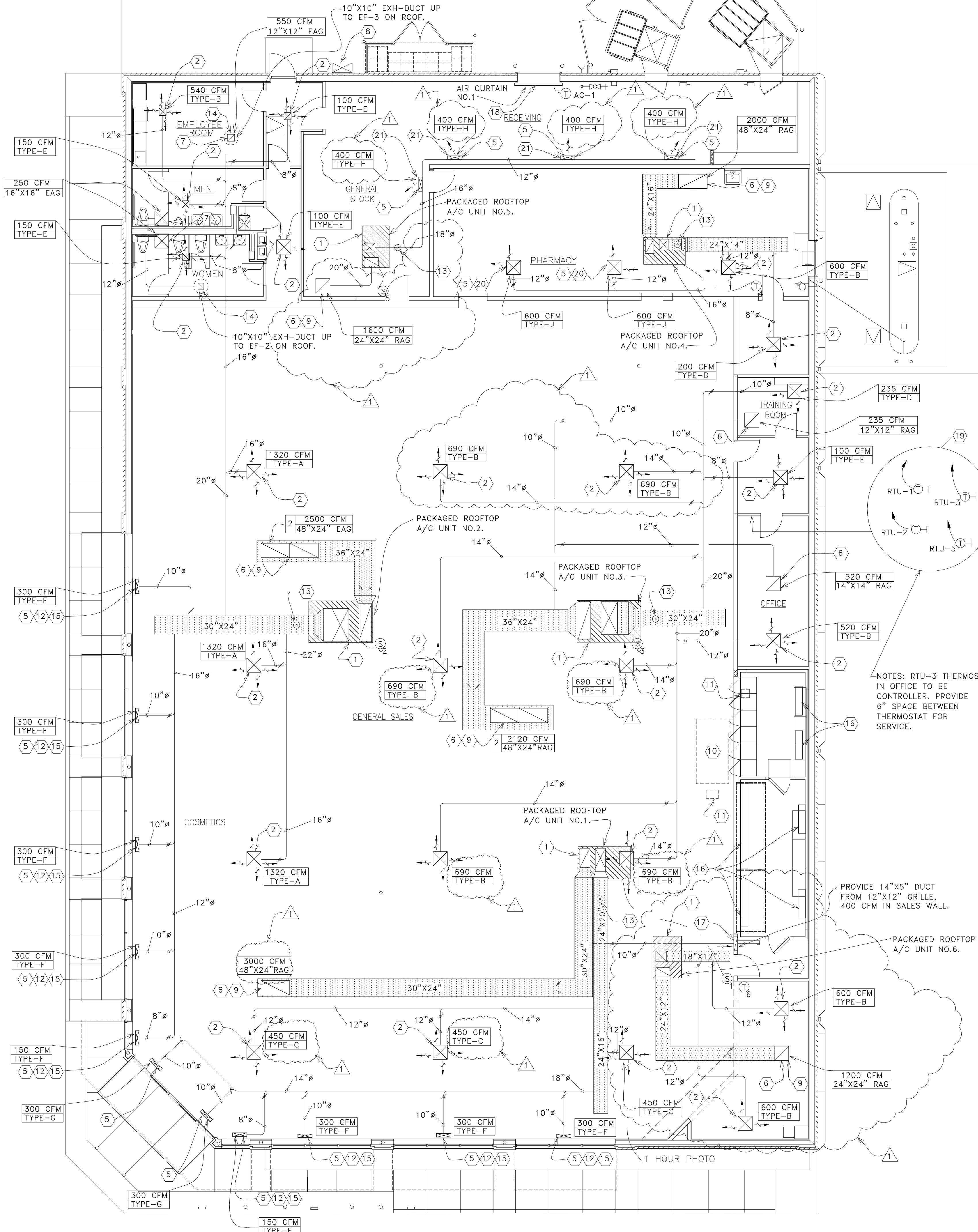
DRAWN BY: JCA

COMPUTER FILE: 23202-MD-DET.DWG

SHEET: M2.1

Drawing name: 23202-MD-DET.dwg
Saved on: March 11, 2004 at 11:27 AM

Drawing name: 23202-MD.dwg
 Saved on: March 11, 2004 at 2:55 PM



LEGEND

- SUPPLY AIR
- RETURN AIR
- MANUAL DAMPER
- THERMOSTAT (MOUNT 5'-0" UP) SEE CONTROL DIAGRAM, DRAWING M2.2.
- SENSOR FOR THERMOSTAT; SEE CONTROL DIAGRAM, DWG.M2.2. (MOUNT 6'-0" UP ON REAR OF COLUMN)
- AC AIR CURTAIN
- AHU AIR HANDLING UNIT
- CFM CUBIC FEET PER MINUTE
- CU CONDENSING UNIT
- SAD SUPPLY AIR DIFFUSER
- SAG SUPPLY AIR GRILLE
- EAG EXHAUST AIR GRILLE
- RAG RETURN AIR GRILLE
- RTU ROOF TOP UNIT
- EF EXHAUST FAN
- ⊙ SMOKE DETECTOR

DUCT AND DIFFUSER NOTES

A. THE ENTIRE DUCT SYSTEM THROUGHOUT THE BUILDING SHALL BE RIGIDLY SUPPORTED AND SO CONSTRUCTED AS TO ELIMINATE VIBRATION OR ANY OBJECTIONABLE NOISE WHEN THE VENTILATION MACHINERY IS IN OPERATION.

B. THE HORIZONTAL & VERTICAL SURFACES OF DUCTWORK SHALL HAVE STIFFENER ANGLES OF SIZE, WEIGHT & SPACING NOT LESS THAN THE FOLLOWING TABLES:

SURFACES WIDE/HIGH	TYPE OF TRANSVERSE JOINT CONNECTIONS	BRACING
UP TO 24"	S DRIVE POCKET OF BAR SLIPS, ON 7"10" CENTERS	NONE
25" TO 40"	S DRIVE 1" POCKET OR 1" BAR SLIPS ON 7"10" JOINTS	1 X 1 X 1/8 ANGLE 4" FROM
41" TO 60" 1 1/2"	ANGLE CONNECTIONS OR 1 1/2" POCKET OR 1 1/2" BAR SLIPS WITH 1 3/8" X 1/8" BAR REINFORCING ON 7"10" CENTERS.	1 1/2 X 1 1/2 X 1/2 ANGLES 4" FROM JOINTS
61" TO 90" 1 1/2"	ANGLE CONNECTIONS OR 1 1/2" POCKET OR 1 1/2" BAR SLIPS 3"9" MAXIMUM CENTERS WITH 1 3/8" X 1/8" BAR REINFORCING	1 1/2 X 1 1/2 X 1/8" DIAGONAL ANGLES OR 1 1/2 X 1 1/2 X 1/8" ANGLES 2" FROM JOINT
91" AND UP	2" ANGLE CONNECTIONS OR 1 1/2" POCKET OR 1 1/2" SLIPS 3"9" MAXIMUM CENTERS WITH 1 3/8" X 1/8" BAR REINFORCING	1 1/2 X 1 1/2 X 1/8" DIAGONAL ANGLES OR 1 1/2 X 1 1/2 X 1/8" ANGLE 2" FROM JOINT

THE RIVETING OF THE SHEETS TO THE ANGLES SHALL NOT EXCEED 6" ON CENTERS.

THE SPACING OF STIFFENERS ON FLAT SURFACES OF ELBOWS AND CURVES SHALL NOT EXCEED 30" ON CENTERS @ THE OUTSIDE PORTION OF ELBOW AND CURVES.

WEIGHT OF METAL DUCTS: UNITED STATES STANDARD GAUGE SHALL BE USED TO DESIGNATE WEIGHT OF ALL SHEETS. THE GAUGE OF FOR DUCT SIZES SHALL BE AS FOLLOWS:

DUCTS	GAUGE
UP TO 12"	26
13" TO 30"	24
31" TO 60"	22
61" TO 90"	20
91" & OVER	18

DESIGN CRITERIA SHOWN BASED ON WILMINGTON, NC

COOLING	91 DEGREES F. DRY BULB
	78 DEGREES F. WET BULB
HEATING	27 DEGREES F. DRY BULB

- ### GENERAL NOTES
- ALL WORK SHOWN SHALL COMPLY WITH ALL NATIONAL, STATE AND LOCAL CODES, ORDINANCES, ETC.
 - SEE ALL OTHER DRAWINGS AND WALGREENS SPECIFICATIONS FOR ADDITIONAL WORK OR CLARIFICATION OF NECESSARY WORK.
 - ALL FRESH AIR INTAKES ON ROOF SHALL BE LOCATED A MINIMUM OF 15'-0" AWAY FROM ANY EXHAUST DUCT, BLOWER DISCHARGE, PLUMBING VENT, ETC.
 - HVAC ROOF-TOP UNIT TO INCLUDE FLEXIBLE CONNECTIONS, TURN VANES, AND VIBRATION ELIMINATORS. OUTSIDE AIR INTAKE TO BE SIZED FOR A MINIMUM OF 100% OUTSIDE AIR FOR ECONOMIZER SYSTEMS.
 - ALL DUCTWORK TO BE GALVANIZED SHEET METAL. (LINED DUCTWORK WILL NOT BE ACCEPTED)
 - EACH HVAC UNIT TO HAVE ITS OWN CONTROLS. SEE DRAWING M2.2 FOR HVAC CONTROL WIRING DIAGRAM.
 - DO NOT INSTALL EQUIPMENT, DUCTWORK, PIPE, CONDUIT, ETC. AT ROOF HATCH LADDER.
 - NOT USED
 - HVAC UNITS MUST BE INSTALLED LEVEL ON ROOF.
 - THERMOSTAT SENSOR WIRING TO BE RUN INSIDE PIPE COLUMNS.
 - DO NOT INSTALL SUPPLY AIR DIFFUSERS IN CEILING PANEL ADJACENT TO ROW OF LIGHT FIXTURES. COORDINATE DIFFUSERS WITH REFLECTED CEILING PLAN ON ARCH. DWG.
 - FLEXIBLE DUCT LENGTH NOT TO EXCEED A MAXIMUM OF 7'-0". USE ONLY ON FINAL SUPPLY AIR RUN OFF FROM BRANCH DUCT TO SUPPLY AIR DIFFUSER, AND 3'-0" FROM THE RETURN AIR GRILLE TO THE METAL DUCTWORK. FOR BOTH CASES 90 DEG. TURNS ARE NOT ALLOWED. OFFSET ANGLES SHALL BE KEPT TO A MINIMUM. SEE DETAILS 6/M2.1 & 8/M2.1.
 - SUPPLY AND/OR RETURN AIR CEILING PLENUMS WILL NOT BE ACCEPTED.
 - PROVIDE THERMOSTAT AND SENSOR TAG TO THE UNIT SERVED.
 - NOT USED
 - MECHANICAL SYSTEMS PIPING AND DUCT WORK TO BE HELD TO 14' A.F.F. AND ABOVE. COORDINATE WITH STOCK ROOM SHELVING.
 - SEE ARCHITECTURAL DRAWINGS FOR HVAC ROOF CURB, ROOFTOP COMPRESSOR CURB AND SUPPORT DETAILS.
 - ALL NON-AIR CONDITIONING COMPRESSORS LISTED WITH REFRIGERANT PIPING SHALL BE FURNISHED BY WALGREENS.
 - PAINT THE INSIDE OF ALL DUCTWORK THAT IS VISIBLE THROUGH CEILING DIFFUSERS, GRILLES, AND REGISTERS WITH FLAT "DTM" (DIRECT TO METAL) NON SPECULAR BLACK PAINT.
 - REFER TO ARCHITECTURAL PLANS FOR THE ROOF PLAN INDICATING THE EXACT LOCATIONS OF THE ROOFTOP A/C UNITS AND ERY UNITS.
 - THE MECHANICAL CONTRACTOR SHALL COORDINATE ALL ROOF OPENINGS WITH THE ROOFING CONTRACTOR.
 - SUPPLY DIFFUSERS, GRILLES, AND REGISTERS SHALL BE FURNISHED WITH OPPOSED BLADE DAMPERS AS DETAILED.
 - REFER TO ARCHITECTURAL REFLECTED CEILING PLAN FOR EXACT LOCATIONS OF ALL CEILING MOUNTED DIFFUSERS AND GRILLES.

- ### MECHANICAL KEYED NOTES
- PACKAGED ROOF TOP UNIT. SEE GENERAL NOTES (ABOVE), DRAWING M2.1 AND SCHEDULE FOR ADDITIONAL INFORMATION.
 - S.A.D., CFM AND SIZE AS NOTED. SEE DETAIL 1/M2.1. S.A.D. SHALL HAVE A TOTAL STATIC PRESSURE DROP OF 0.12" OR LESS.
 - NOT USED
 - NOT USED
 - S.A.G., CFM AND SIZE AS NOTED. SEE DETAIL 2/M2.1. S.A.G. SHALL HAVE A TOTAL STATIC PRESSURE DROP OF 0.12" OR LESS.
 - R.A.G., CFM AND SIZE AS NOTED. SEE DETAIL 3/M2.1. R.A.G. SHALL HAVE A TOTAL STATIC PRESSURE DROP OF 0.12" OR LESS.
 - E.A.G., CFM AND SIZE AS NOTED. SEE DETAIL 3/M2.1. E.A.G. SHALL HAVE A TOTAL STATIC PRESSURE DROP OF 0.12" OR LESS.
 - GAS SERVICE, METER, REGULATOR AND VALVES. PHYSICAL PROTECTION OF EQUIPMENT BY GENERAL CONTRACTOR.
 - RETURN GRILLE SIZED FOR 100% RETURN AIR QUANTITY.
 - REFER TO ARCHITECTURAL ROOF PLAN FOR EXACT LOCATION OF ROOF-TOP CONDENSING UNITS FOR WALK-IN COOLER/FREEZER.
 - PIPE PORTAL FOR WALK-IN COOLER/FREEZER CONDENSING UNIT REFRIGERANT AND ELECTRICAL LINES. REFER TO DETAIL 5/M2.1 COORDINATE LOCATION WITH ARCH. PLANS.
 - ADJUST FRONT HORIZONTAL BARS TO AN ANGLE OF 45 Deg so THAT THE AIR FLOWS AWAY FROM THE WINDOW, TO HELP ELIMINATE CONDENSATION ON THE GLASS.
 - FURNISH AND INSTALL FIRESTATS AND SMOKE DETECTORS IN SUPPLY AIR DUCTS CONNECTED TO A/C UNITS HAVING A SUPPLY GREATER THAN 2000 CFM. AND/OR ANY A/C UNITS SERVING AN AREA THAT IS USED FOR EGRESS. (IF REQUIRED BY LOCAL CODES AN ADDITIONAL FIRESTAT/SMOKE DETECTOR MAY BE REQUIRED TO BE FURNISHED AND INSTALLED IN THE RETURN DUCT ALSO).
 - ROOF MOUNTED EXHAUST FAN. SEE DETAIL 4/M2.1.
 - INSTALL S.A.G. IN CENTER OF CEILING TILE CLOSEST TO WINDOW CENTER.
 - EVAPORATIVE UNIT. PROVIDE DX PIPING CONNECTION WITH ROOFTOP CONDENSING UNIT.
 - INSTALL RETURN GRILLE 8" A.F.F. INSTALL RETURN DUCT RISER IN WALL CAVITY AND COORDINATE WITH ARCHITECTURAL DRAWINGS.
 - OVERHEAD DOOR AIR CURTAIN WALL MOUNTED FROM AND SUPPORTED FROM BAR JOIST. POSITION TO CLEAR THE DOOR AND INSTALL PER MANUFACTURERS' DIRECTION. PROVIDE ELECTRIC HEAT, BASED ON WALGREENS CRITERIA. REFER TO ARCH. PLANS FOR ADDITIONAL INFORMATION.
 - REMOTE THERMOSTATS FOR ROOFTOP A/C NO. 1, 2, 3, AND 5.
 - DIRECT SUPPLY AIR AWAY FROM WEIGHT SCALE.
 - MOUNT REGISTERS ON SPIRAL DUCTWORK. REGISTERS SHALL HAVE DAMPER AND SHALL BE INSTALLED SO THAT THE AIR SUPPLY IS DIRECTED DOWN AT AN ANGLE, SHOWN ON DETAIL 11/M2.1

PROJECT: **PROPOSED WALGREENS** on **SOUTH COLLEGE AND 17TH STREET EXTENTION** WILMINGTON, NORTH CAROLINA
 STORE NUMBER: **01560**
 JOB NO.: **14L-0131-03**
 DATE: **01-13-2004**
 DRAWN BY: **JAM/KL**
 COMPUTER FILE: **23202-MD.DWG**
 REVISION NO.: **3/17/04**
 SHEET: **M1.1**
 RCE PROJ.# 23202
 PLOTTED ON 3-11-04