

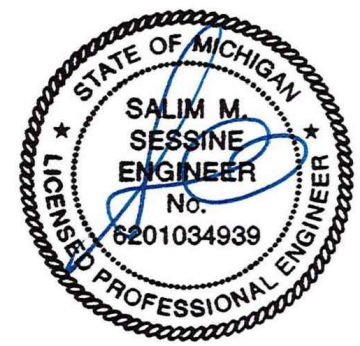
COVER ALL HVAC DUCT SYSTEMS OPENINGS TO PROTECT FROM CONSTRUCTION DUST AND DEBRIS UNTIL CONSTRUCTION IS COMPLETE. IF HVAC SYSTEM IS OPERATED BEFORE CONSTRUCTION IS COMPLETE, PROVIDE MERV8 FILTERS AT ALL AIR INTAKES INSIDE THE BUILDING.

DUCT AND DIFFUSER PLAN 1/4" = 1'-0" **A**

1. DINING ROOM LIGHT FIXTURE LOCATIONS ARE CRITICAL. COORDINATE DUCTWORK LOCATIONS WITH LIGHTING AND STRUCTURAL.
2. THERMOSTATS SHALL BE PROGRAMMABLE THERMOSTAT WITH SUBBASE AND REMOTE TEMPERATURE SENSOR (PROVIDED WITH RTU PACKAGE).
3. HUMIDITY SENSOR APPLICATION IS VARIABLE PER SITE SPECIFIC CONDITIONS. REFER TO HVAC UNIT SCHEDULE FOR APPLICATION CONDITIONS.

- 1 AIR DUCT UP TO UNIT.
- 2 SEE DETAIL 4 ON DRAWING M4.0 FOR SUPPLY AIR TAKE-OFF TO CEILING DIFFUSERS AND GRILLES.
- 3 FACTORY INSTALLED SMOKE DETECTOR MOUNTED IN ROOFTOP UNIT.
- 4 LOCATE THERMOSTAT CONTROLS ON WALL IN OFFICE AT 48" A.F.F. COORDINATE LOCATION WITH LIGHT SWITCHES AND OTHER WALL MOUNTED ACCESSORIES. RUN 24 VAC POWER AND SIGNAL CONDUCTORS IN TWO (2) SEPARATE TWO (2) CONDUCTOR CABLES, 18 AWG.
- 5 MOUNT THERMOSTAT REMOTE SENSOR AT 60" ABOVE FINISHED FLOOR. CONNECT TO THERMOSTAT WITH 18 AWG 2 CONDUCTOR CABLE PER MANUFACTURER INSTALLATION INSTRUCTIONS. ENSURE THAT TEMPERATURE SENSOR IN DINING AREA IS NOT LOCATED ON TILE WALL.
- 6 UNDERCUT RESTROOM DOORS MINIMUM 3/4" FOR MAKE-UP AIR.
- 7 PROVIDE SHOE TAP AT CONNECTION TO DUCT DROP FROM ROOFTOP UNIT.
- 8 RUN DUCT THROUGH OPEN WEBBING OF ROOF TRUSSES (WHERE POSSIBLE). COORDINATE WITH TRUSS DESIGN PRIOR TO DUCTWORK FABRICATION.
- 9 RUN DUCTWORK BETWEEN TRUSSES AS HIGH AS POSSIBLE UNDER ROOF JOISTS.
- 10 10"x10" EXHAUST AIR DUCT DOWN AND TRANSITION TO FIELD CUT EXHAUST CONNECTION AT HOOD.
- 11 EXHAUST DUCT SHALL RUN BETWEEN ROOF JOISTS TO CONNECT TO ROOF EXHAUST FAN EF-1. SEE HOOD DETAILS ON DRAWING M3.0. SEE DETAIL 10 ON SHEET M4.0 FOR FIRE PROTECTION OF DUCT WORK. SEE DETAIL 11 ON SHEET M4.0 FOR EXHAUST DUCT TRANSITION.

- 12 PROVIDE 3" PVC WATER HEATER INTAKE AND FLUE VENT. TERMINATION ON ROOF. COORDINATE WORK WITH ALL TRADES.
- 13 PROVIDE SMOKE DETECTOR RESET SWITCH WITH KEY. RESET SWITCH SHALL BE 'SYSTEM SENSOR' MODEL # RT5151 KEY. MOUNT NEXT TO THERMOSTATS @ 48" A.F.F. - INSTALL PER MANUFACTURER'S REQUIREMENTS.
- 14 PROVIDE AIR CURTAIN IN LOCATION AS SHOWN ON PLAN. MOUNT AIR CURTAIN ON MULLION DIRECTLY ABOVE SERVICE OPENING DOORS AT DRIVE-THRU WINDOW. AIR CURTAIN SHALL BE BERNER MODEL DTU03-2026A, WITH 120/160 POWER CONNECTION. REFER TO MANUFACTURERS INSTALLATION INSTRUCTIONS FOR MORE DETAILS.



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 PROJECT # 22002

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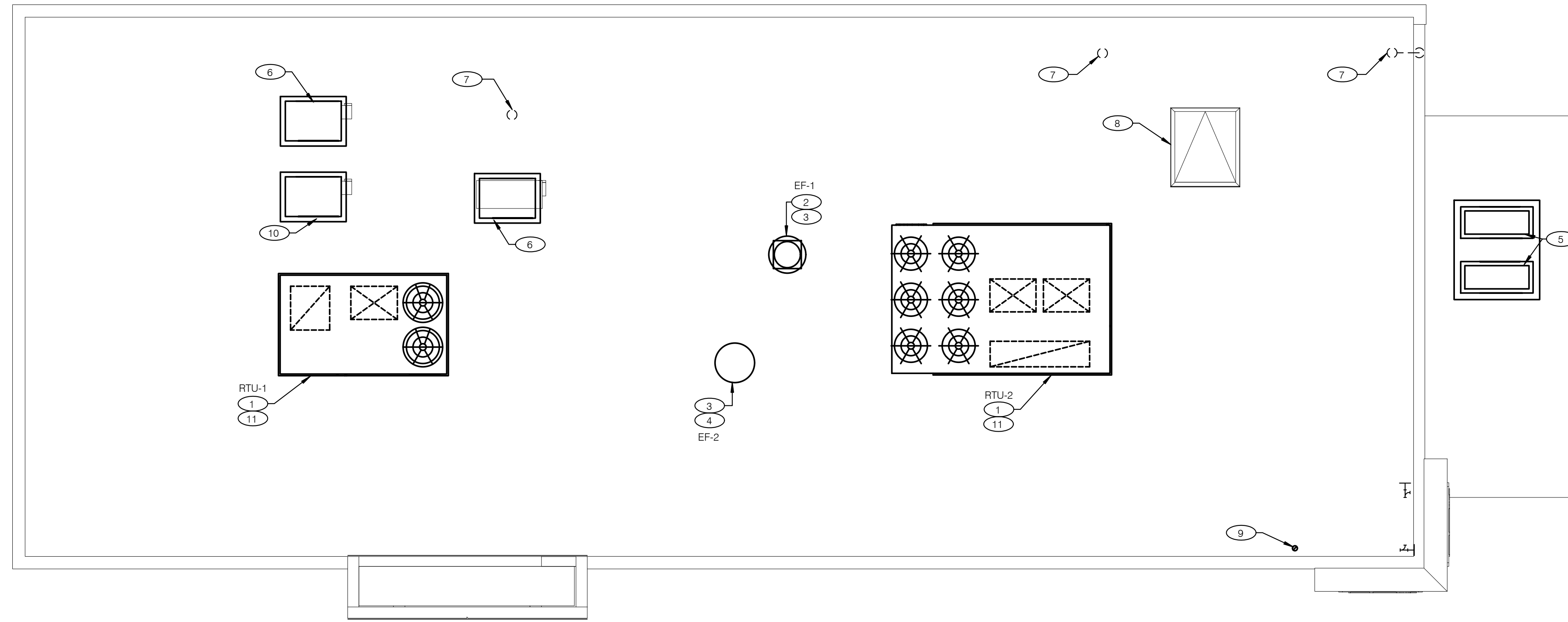
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GREAT LAKES TACO, LLC
 2717 Main Street (M-53)
 Marlette, Michigan 48453



ENDEAVOR 2.0 DUCT AND DIFFUSER PLAN

M2.0



COVER ALL HVAC DUCT SYSTEMS OPENINGS TO PROTECT FROM CONSTRUCTION DUST AND DEBRIS UNTIL CONSTRUCTION IS COMPLETE. IF HVAC SYSTEM IS OPERATED BEFORE CONSTRUCTION IS COMPLETE, PROVIDE MERV8 FILTERS AT ALL AIR INTAKES INSIDE THE BUILDING.

MECHANICAL ROOF PLAN 1/4" = 1'-0" **A**

- 1 PROVIDE RTU IN LOCATION AS SHOWN ON PLANS. COORDINATE EXACT RTU LOCATION AND DUCT DROPS WITH STRUCTURAL TRUSS LAYOUT. MAINTAIN MINIMUM 10'-0" CLEARANCE BETWEEN OUTSIDE AIR INTAKES AND EXHAUST TERMINATIONS.
- 2 PROVIDE TYPE I EXHAUST FAN IN LOCATION AS SHOWN PLANS. CONNECT 10"x10" EXHAUST DUCT FROM EXHAUST HOOD UP TO EF-1 ON ROOF. COORDINATION EXHAUST DUCT ROUTING WITH STRUCTURAL TRUSS LAYOUT.
- 3 COORDINATE EXHAUST FAN LOCATION WITH ROOFTOP UNIT. MAINTAIN ROOFTOP UNIT MANUFACTURER'S REQUIRED CLEARANCE AND MINIMUM 10 FT TO ROOFTOP UNIT'S OUTSIDE AIR INTAKE.
- 4 PROVIDE EXHAUST FAN IN LOCATION AS SHOWN PLANS. CONNECT 10"x10" EXHAUST DUCT FROM RESTROOM EXHAUST GRILLES TO EF-2 ON ROOF. COORDINATION EXHAUST DUCT ROUTING WITH STRUCTURAL TRUSS LAYOUT.
- 5 CONDENSING UNIT SERVING WALK-IN COOLER/FREEZER. COORDINATE EXACT LOCATION WITH ROOF LAYOUT. CONTRACTOR TO FIELD VERIFY EXACT REFRIGERANT PIPING. PROVIDE ALL NECESSARY PIPING ACCESSORIES INCLUDING PIPING INSULATION AND INSTALL ON APPROPRIATE EQUIPMENT SUPPORTS.
- 6 CONDENSING UNIT SERVING ICE MAKER. COORDINATE EXACT LOCATION WITH ROOF LAYOUT. CONTRACTOR TO FIELD VERIFY EXACT REFRIGERANT PIPING. PROVIDE ALL NECESSARY PIPING ACCESSORIES INCLUDING PIPING INSULATION AND INSTALL ON APPROPRIATE EQUIPMENT SUPPORTS.
- 7 PLUMBING VENT. REFERENCE 1/P2.0.
- 8 ROOF HATCH. REFER TO ARCHITECTURAL DRAWINGS FOR MORE INFORMATION.
- 9 PROVIDE MANUFACTURER'S CONCENTRIC TERMINATION VENT KIT SERVING HOT WATER HEATER BELOW. INSTALL IN STRICT ACCORDANCE WITH MANUFACTURER'S REQUIREMENTS. ENSURE AT LEAST 10'-0" DISTANCE BETWEEN OUTDOOR AIR INTAKES.
- 10 CONDENSING UNIT SERVING FROZEN BEVERAGE MACHINE. COORDINATE EXACT LOCATION WITH ROOF LAYOUT. FIELD VERIFY EXACT REFRIGERANT PIPING. PROVIDE ALL NECESSARY PIPING ACCESSORIES INCLUDING PIPING INSULATION AND INSTALL ON APPROPRIATE EQUIPMENT SUPPORTS.
- 11 ALL UTILITY PIPING FOR RTUS SHALL RUN UP THROUGH ROOF INSIDE EACH UNIT'S ROOF CURB.

KEYNOTES - MECHANICAL ROOF PLAN NTS **B**



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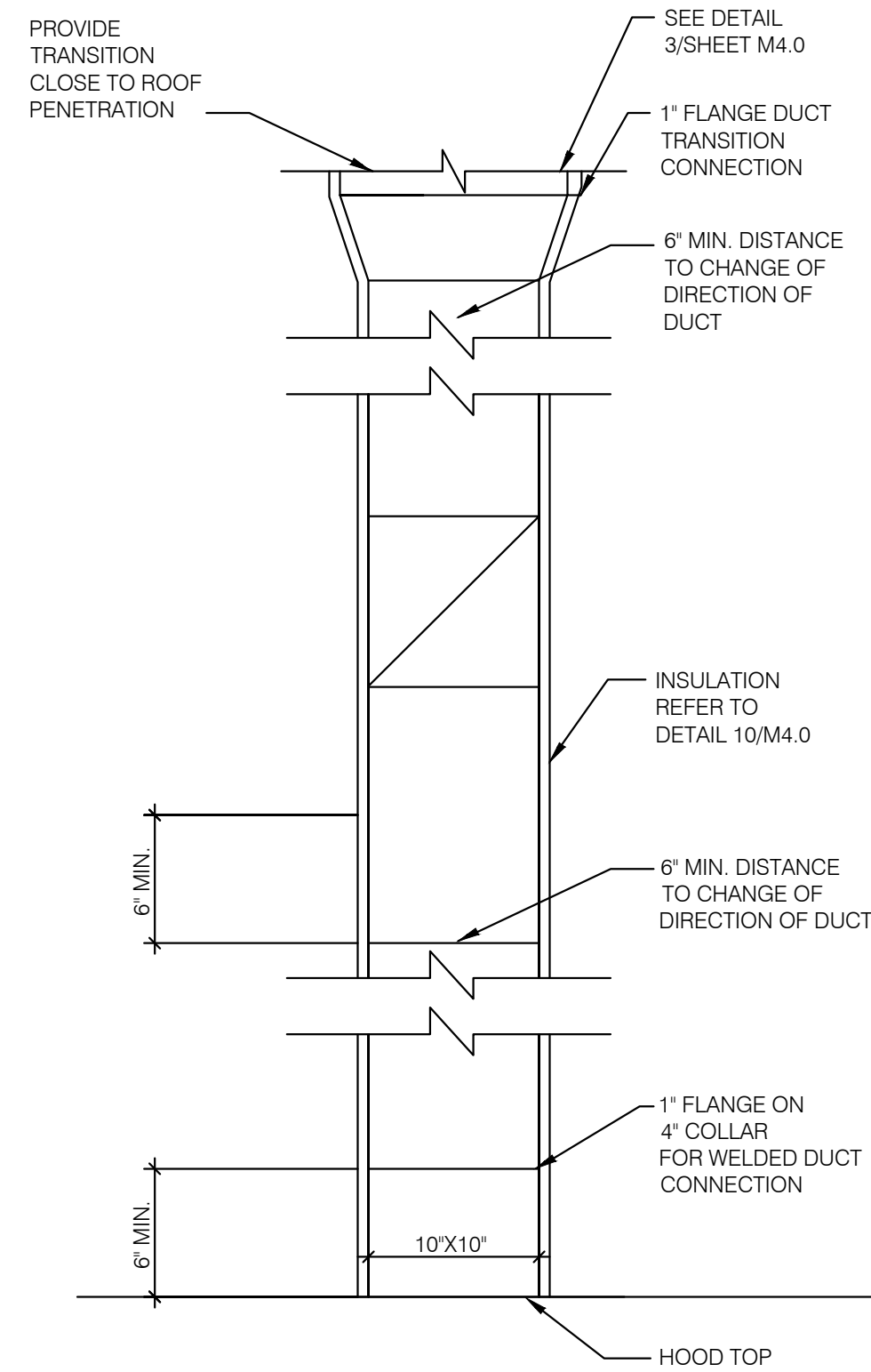
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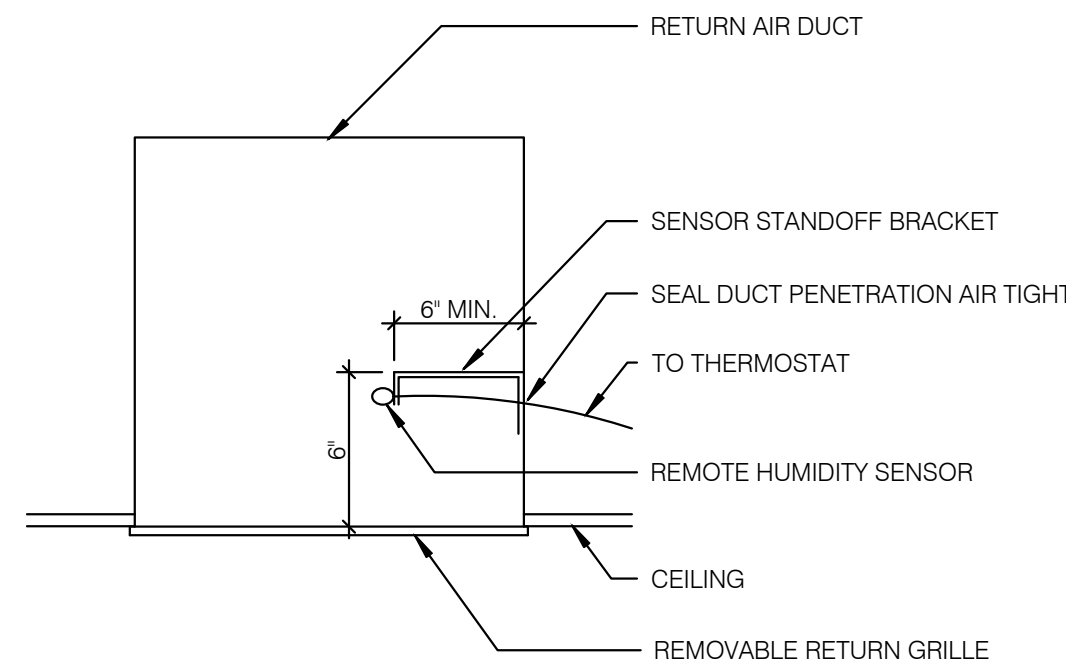
ENDEAVOR 2.0 MECHANICAL ROOF PLAN

M2.1

PLOT DATE: 6/23/2022

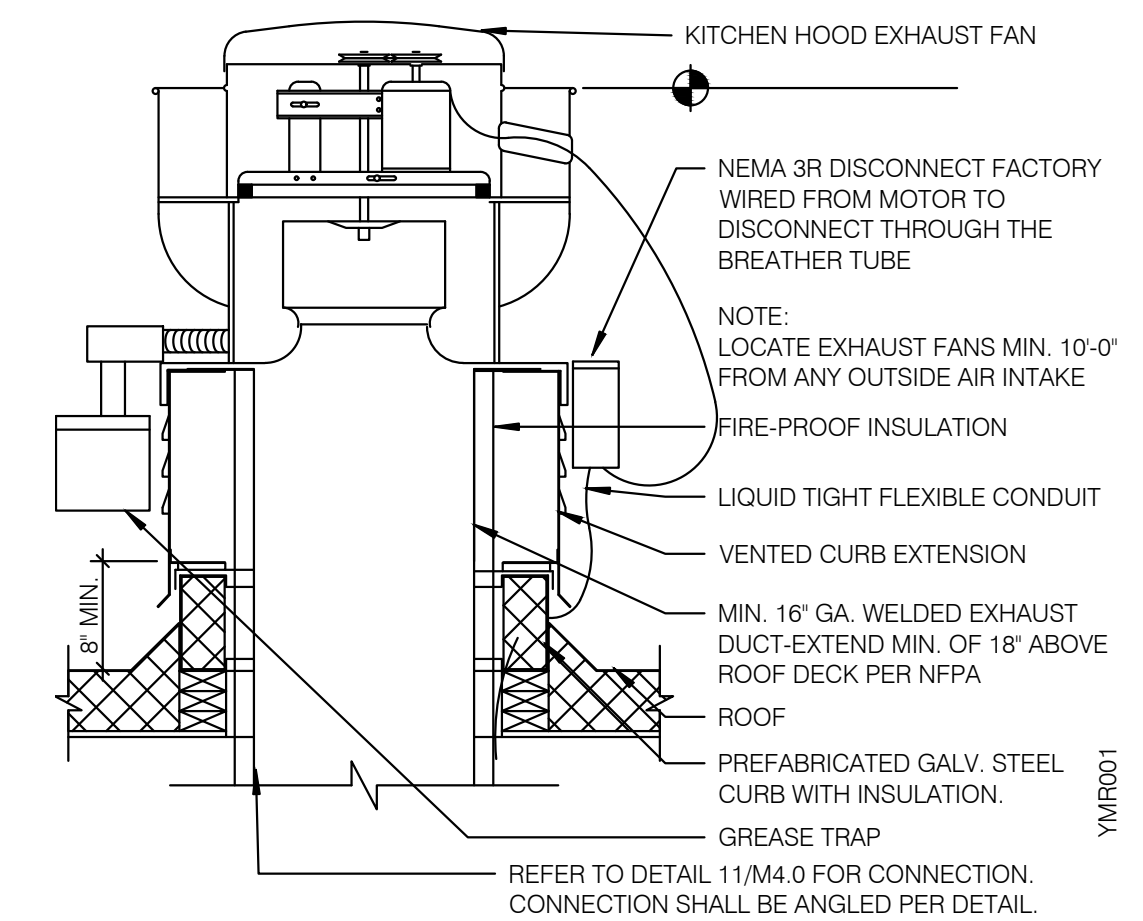


TB HOOD DUCT TRANSITION NTS **11**

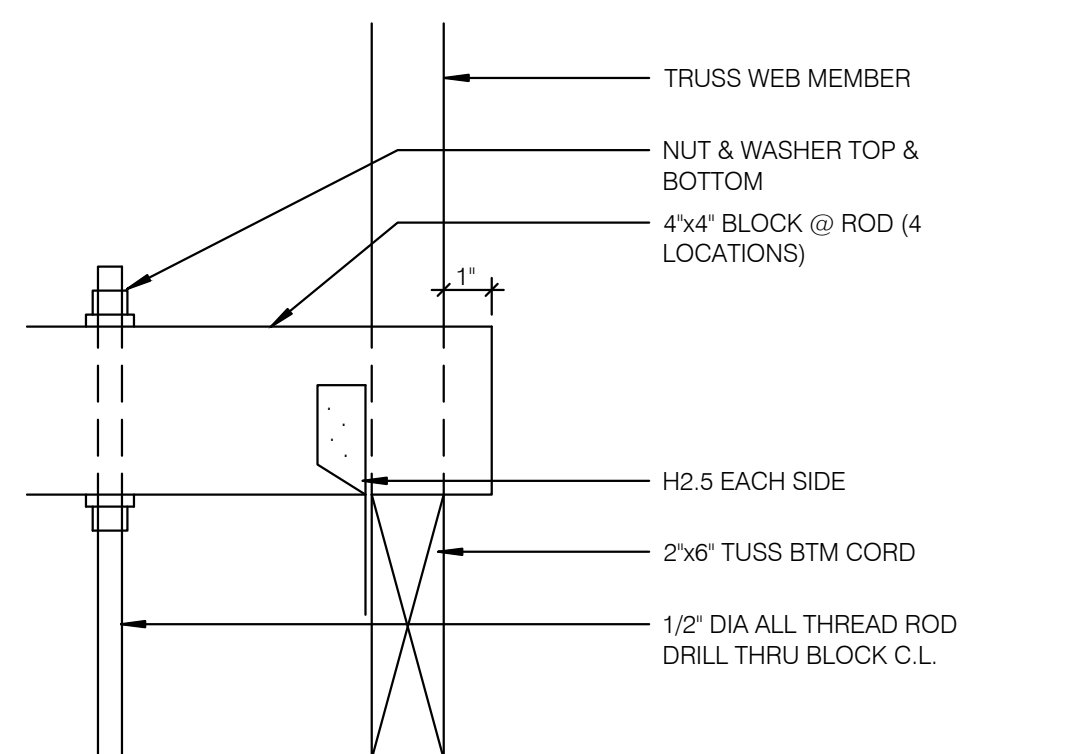


REMOTE HUMIDITY SENSOR NTS **8**

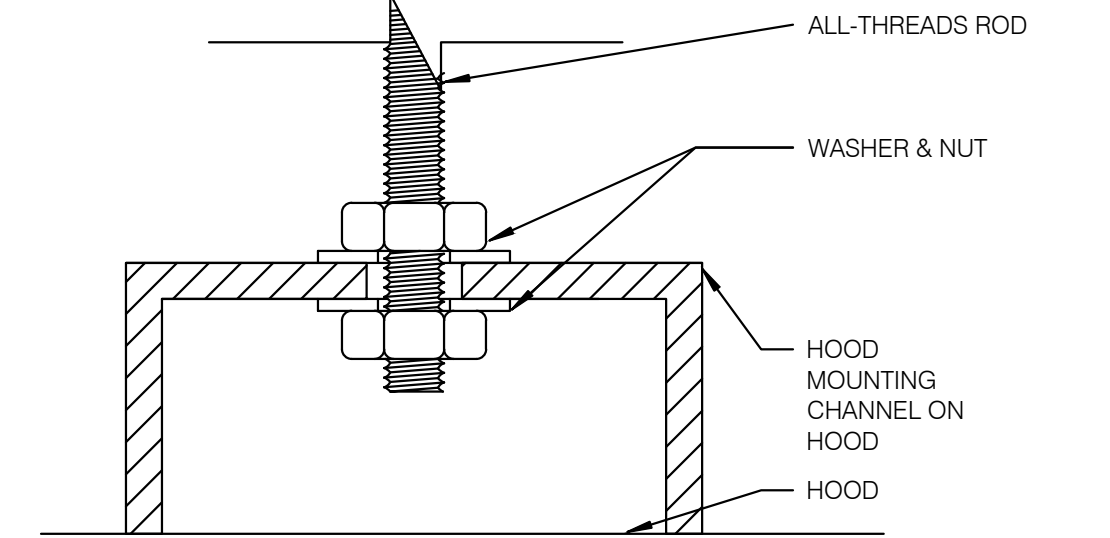
NOT USED NTS **6**



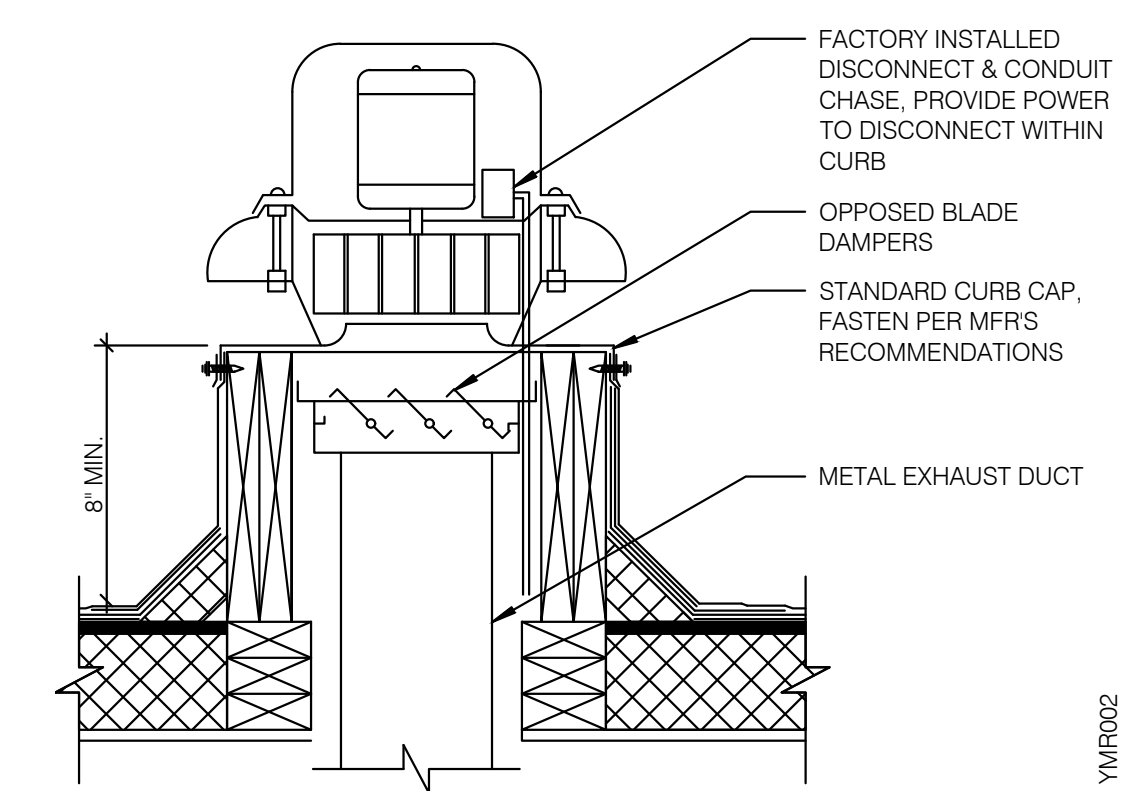
EXHAUST FAN (EF-1) NTS **3**



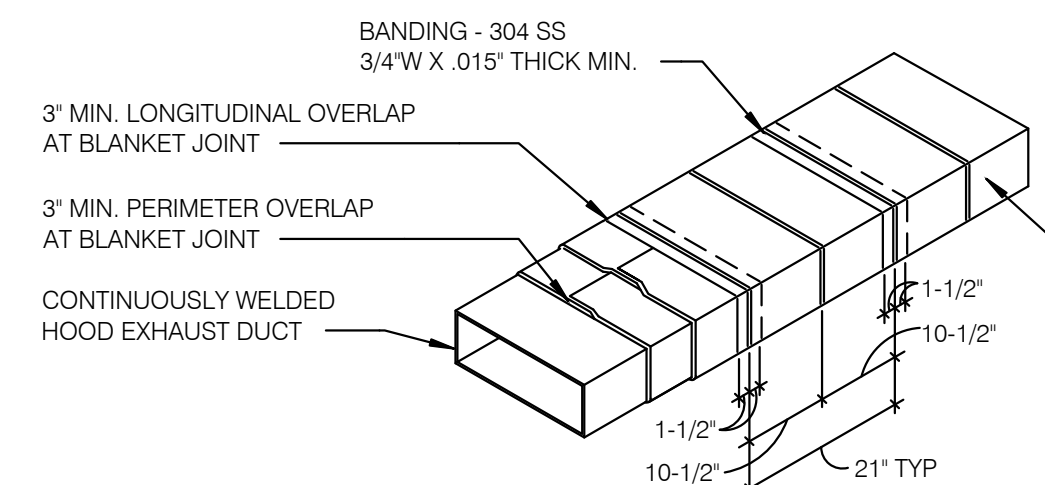
ROD ATTACHMENT NTS **7**



BOLT CONNECTION TO HOOD NTS **5**

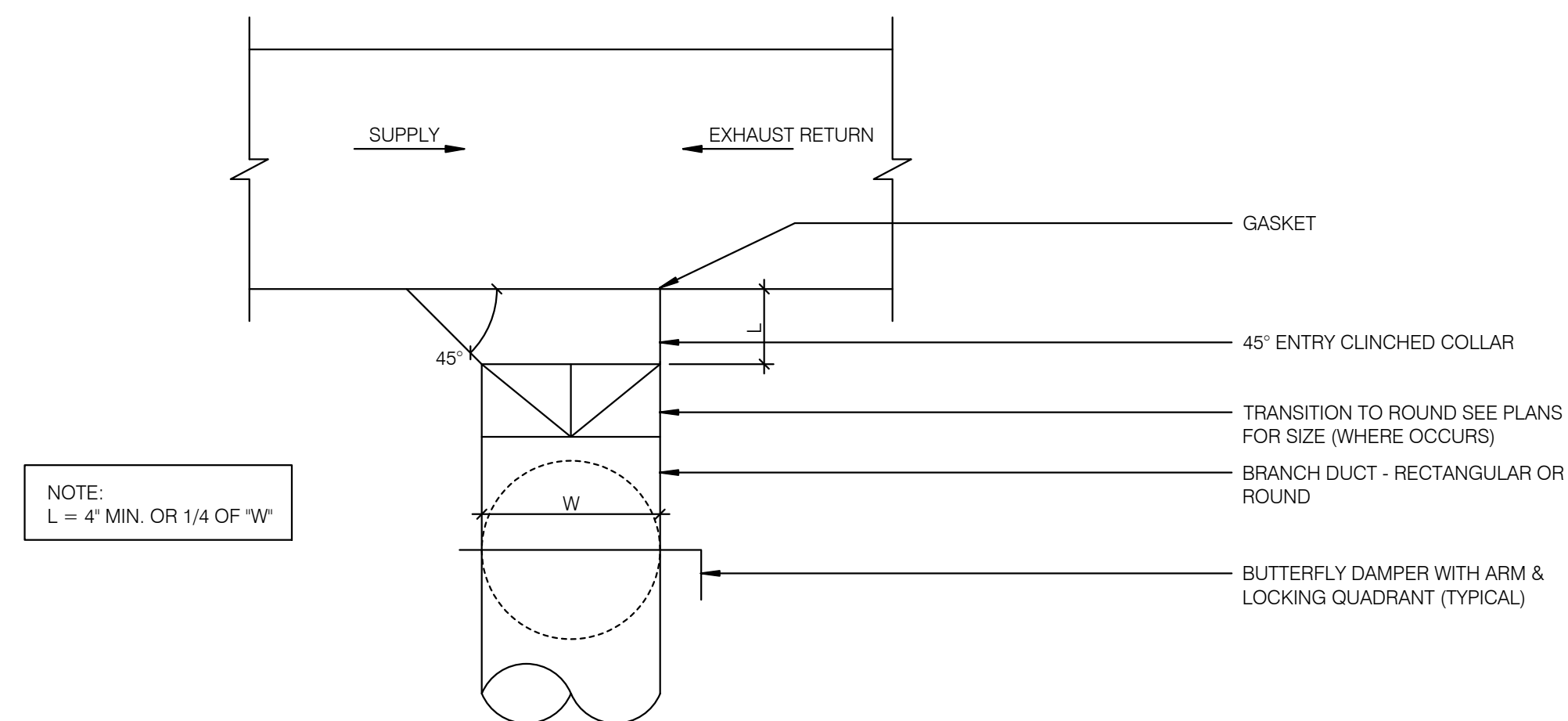


RESTROOM FAN (EF-2) NTS **2**

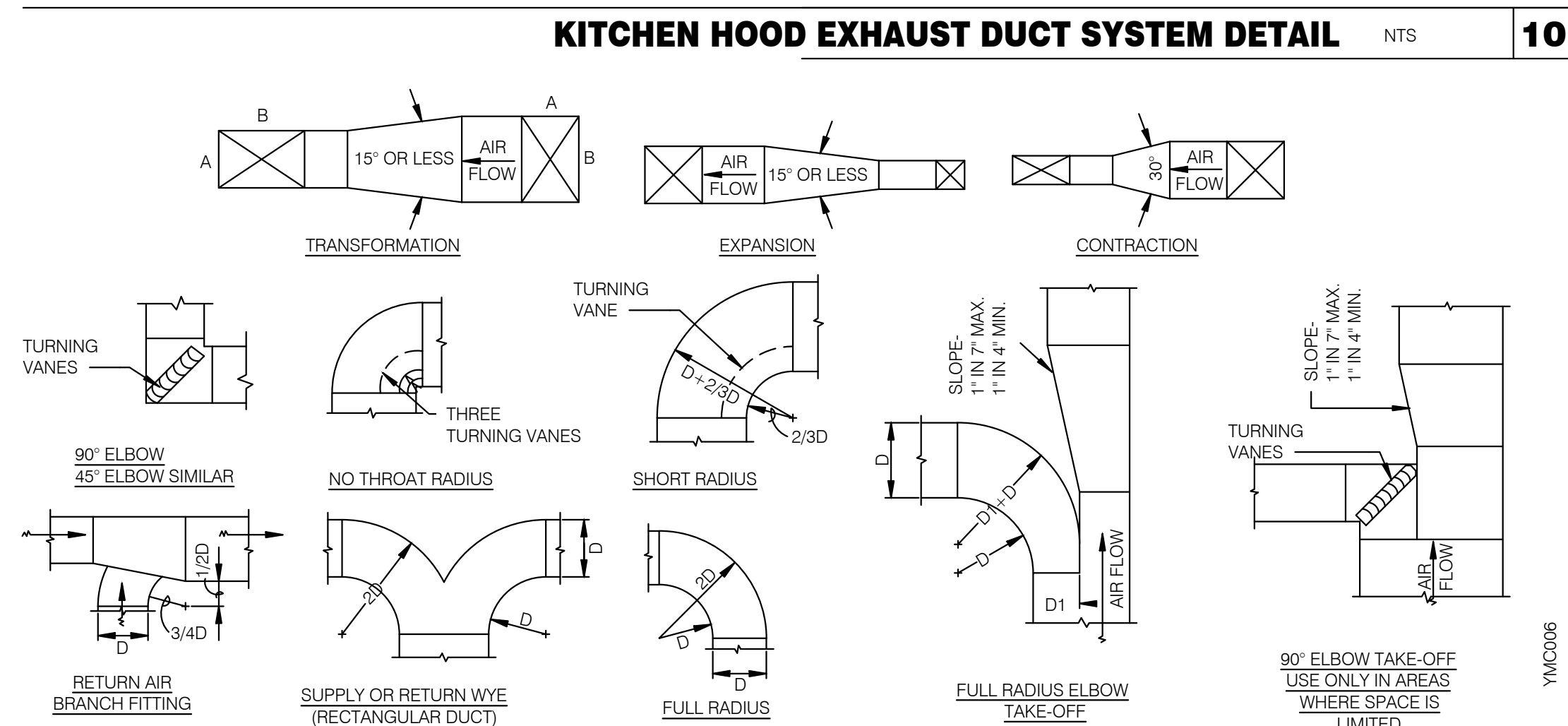


- NOTES:
1. WRAP GREASE DUCT CONTINUOUS AS SHOWN FROM CONNECTION AT FAN THROUGH CURB AND EXTEND 18' MIN. BELOW ROOF DECK.
 2. FOR HORIZONTAL RUNS OF EXHAUST DUCTS PROVIDE TYPICAL TRAPEZE SUPPORT SYSTEM WITH 1/2" HANGER RODS A MAXIMUM OF 6' FROM INSULATION EDGE. TRAPEZE SUPPORTS SHALL BE SPACED A MAXIMUM OF 60" ON CENTER FROM CENTERLINE OF VERTICAL EXHAUST DUCT.
 3. SLOPE HORIZONTAL EXHAUST DUCT RUNS A MINIMUM OF 1/4" PER FOOT (2% SLOPE) TOWARDS EXHAUST HOOD.
 4. PROVIDE INSULATED ACCESS DOOR OR PANEL NEAR MID POINT OF EXHAUST DUCT RUN FOR CLEANING AND INSPECTION OF DUCT. PROVIDE AN APPROVED SIGN ON ACCESS DOOR OR PANEL WHICH READS "ACCESS PANEL DO NOT OBSTRUCT."

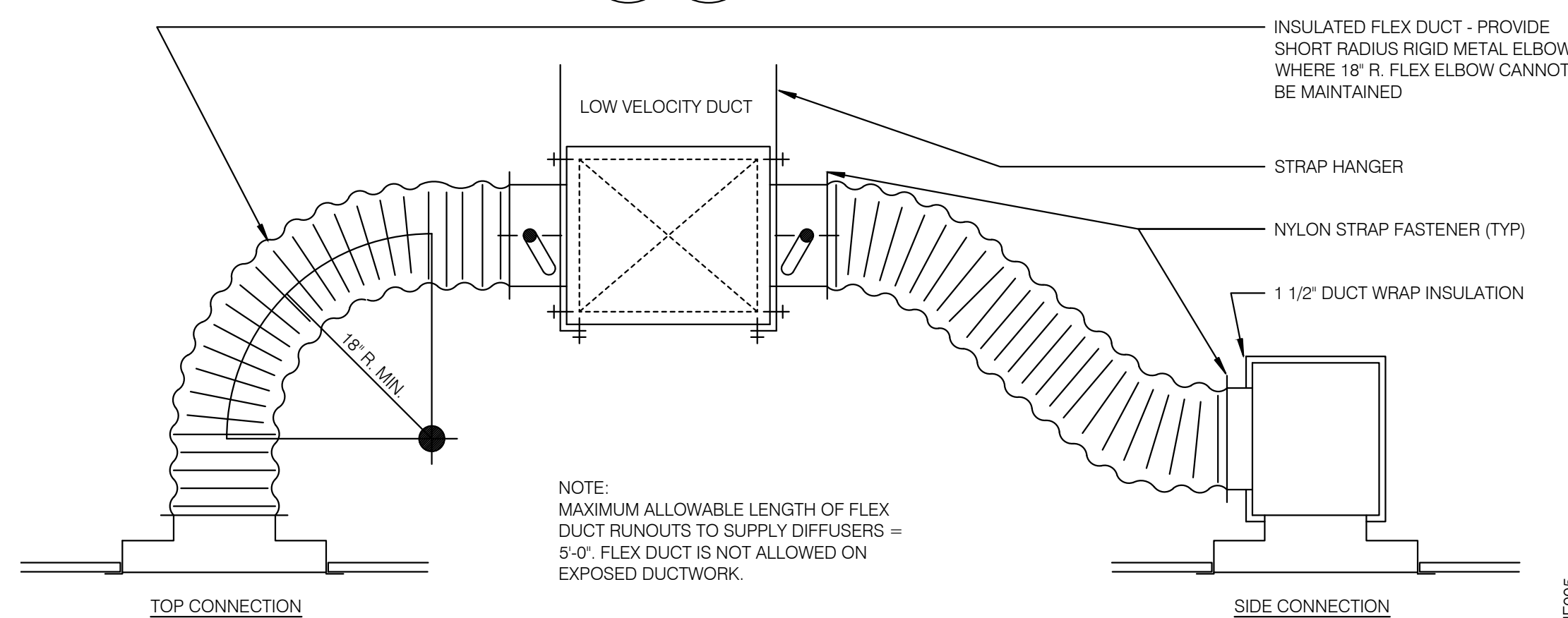
BANDING REQUIREMENTS: USE 304 STAINLESS STEEL BANDS A MAXIMUM 1-1/2" FROM BLANKET EDGE AND SPACED A MAXIMUM OF 10-1/2" ON CENTER.



CEILING DIFFUSER CONNECTIONS NTS **4**

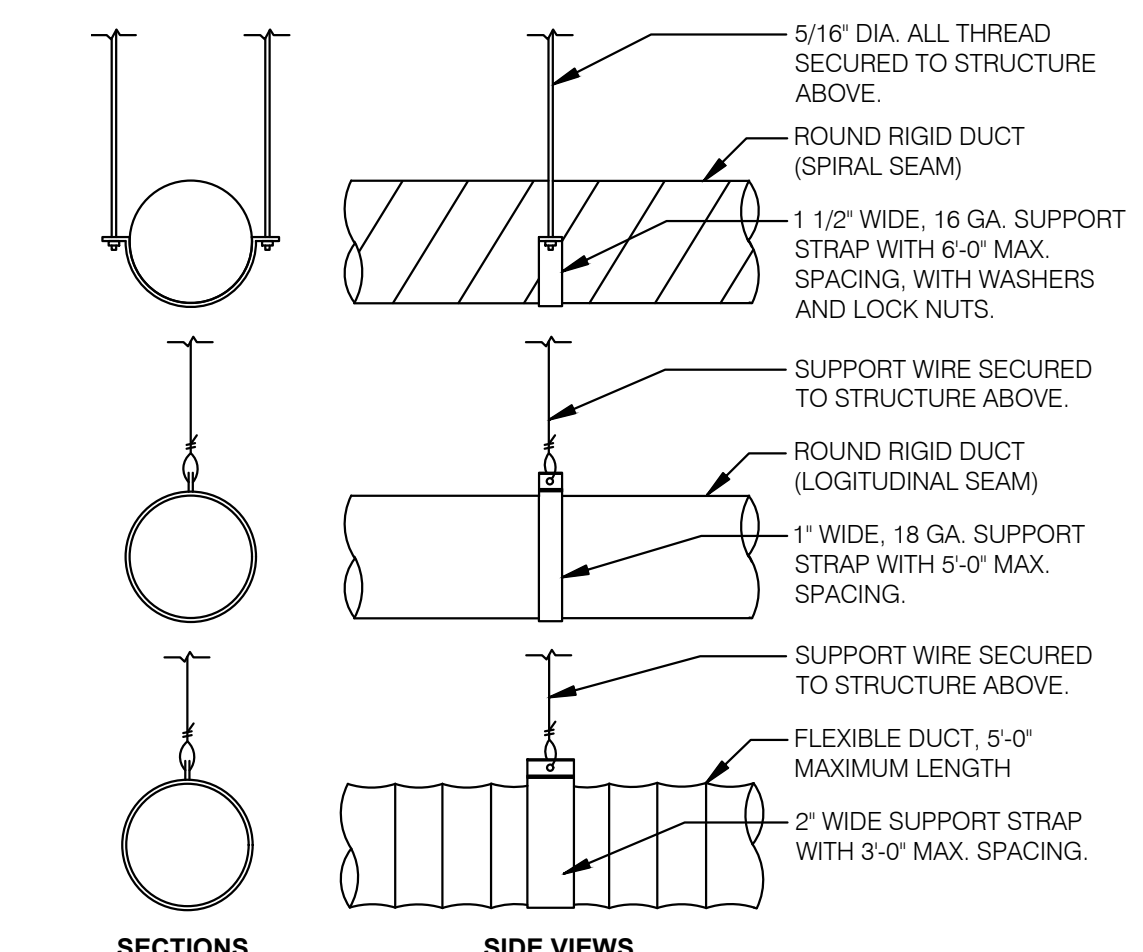


TYPICAL DUCTWORK DETAILS NTS **9**



NOTE: MAXIMUM ALLOWABLE LENGTH OF FLEX DUCT RUNOUTS TO SUPPLY DIFFUSERS = 5'-0". FLEX DUCT IS NOT ALLOWED ON EXPOSED DUCTWORK.

CEILING DIFFUSER CONNECTIONS NTS **4**



DUCT SUPPORT DETAIL NTS **1**



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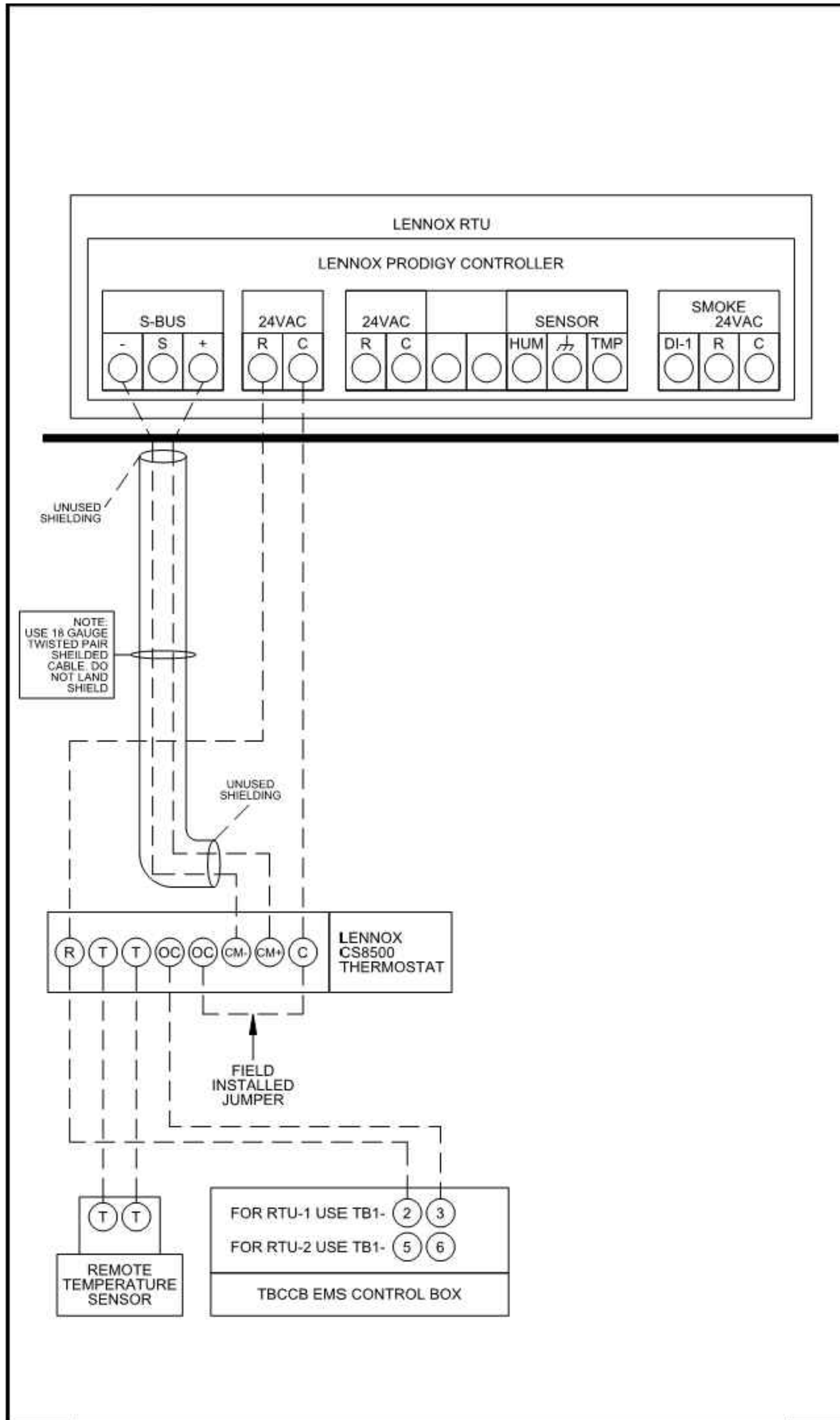
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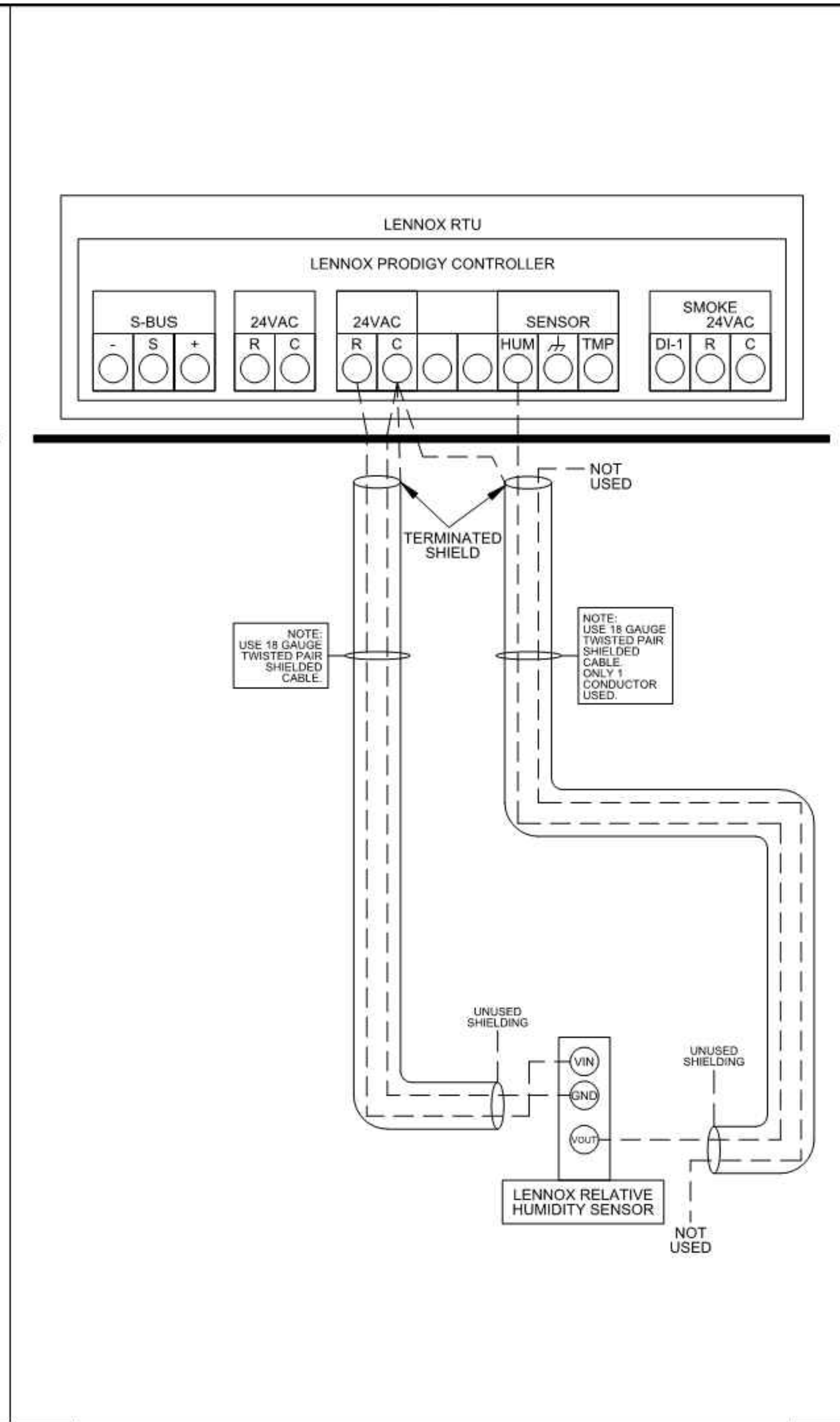
ENDEAVOR 2.0 MECHANICAL DETAILS

M4.0

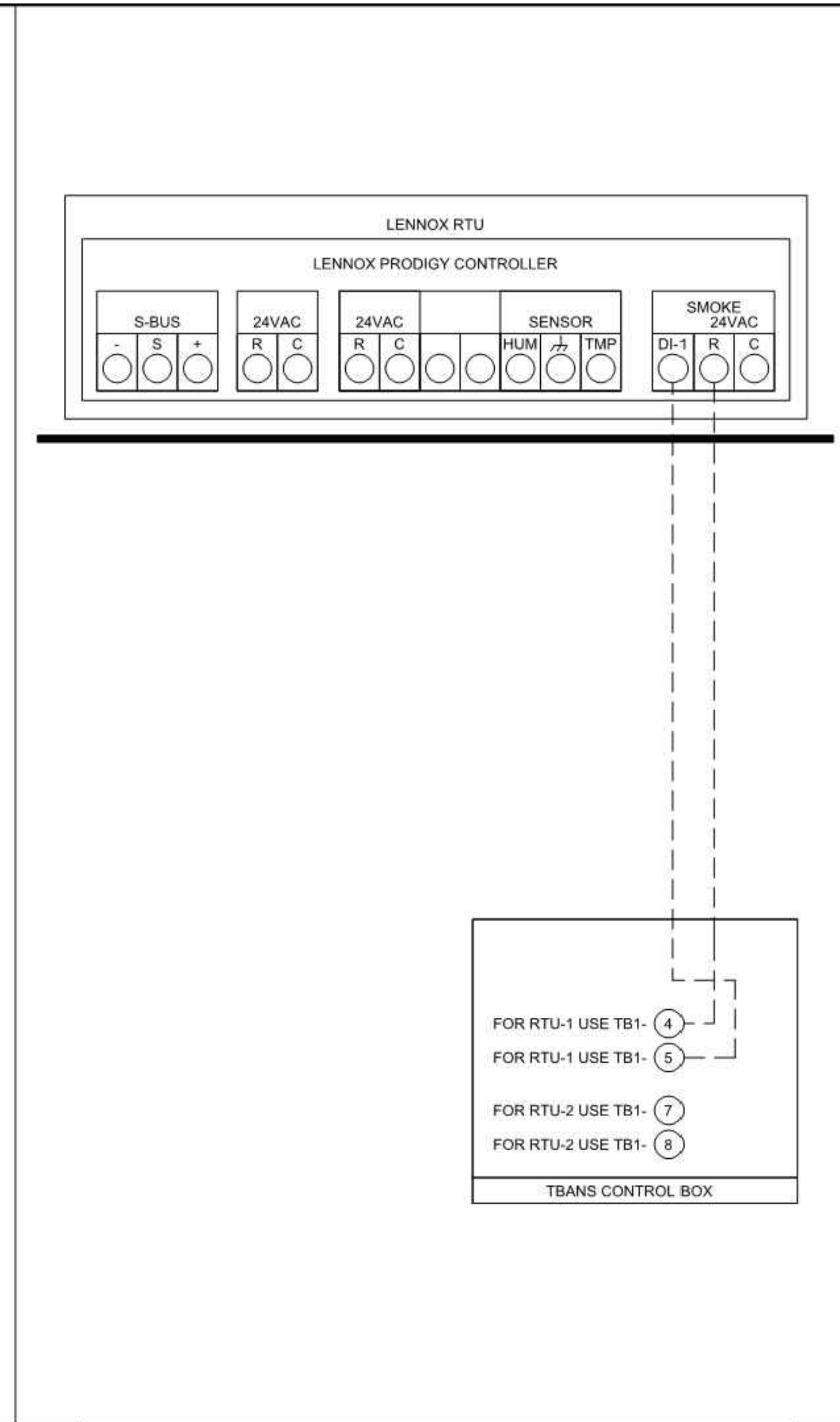
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1 LENNOX PRODIGY TO THERMOSTAT AND TO TBCCB CONNECTION NTS



2 LENNOX PRODIGY TO OPTIONAL HUMIDITY SENSOR CONNECTION NTS



3 LENNOX PRODIGY TO TBANS CONNECTION NTS



LENNOX RTU LOW VOLTAGE FIELD CONNECTIONS DETAIL

LENNOX LOW VOLTAGE CONNECTIONS

Rev	Date	Change

Job # T7647
 Designed By: JL
 Drawing By: EM
 Approved By:
 Date: 08-07-20
 Sheet: 1 of 1



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ENDEAVOR 2.0 CONTROLS DETAILS

M5.0