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**Loves**  
STORE NUMBER: 860  
I-59, EXIT 1  
NICHOLSON, MS 39466  
JOB NUMBER: 03-23-30009

ISSUE BLOCK

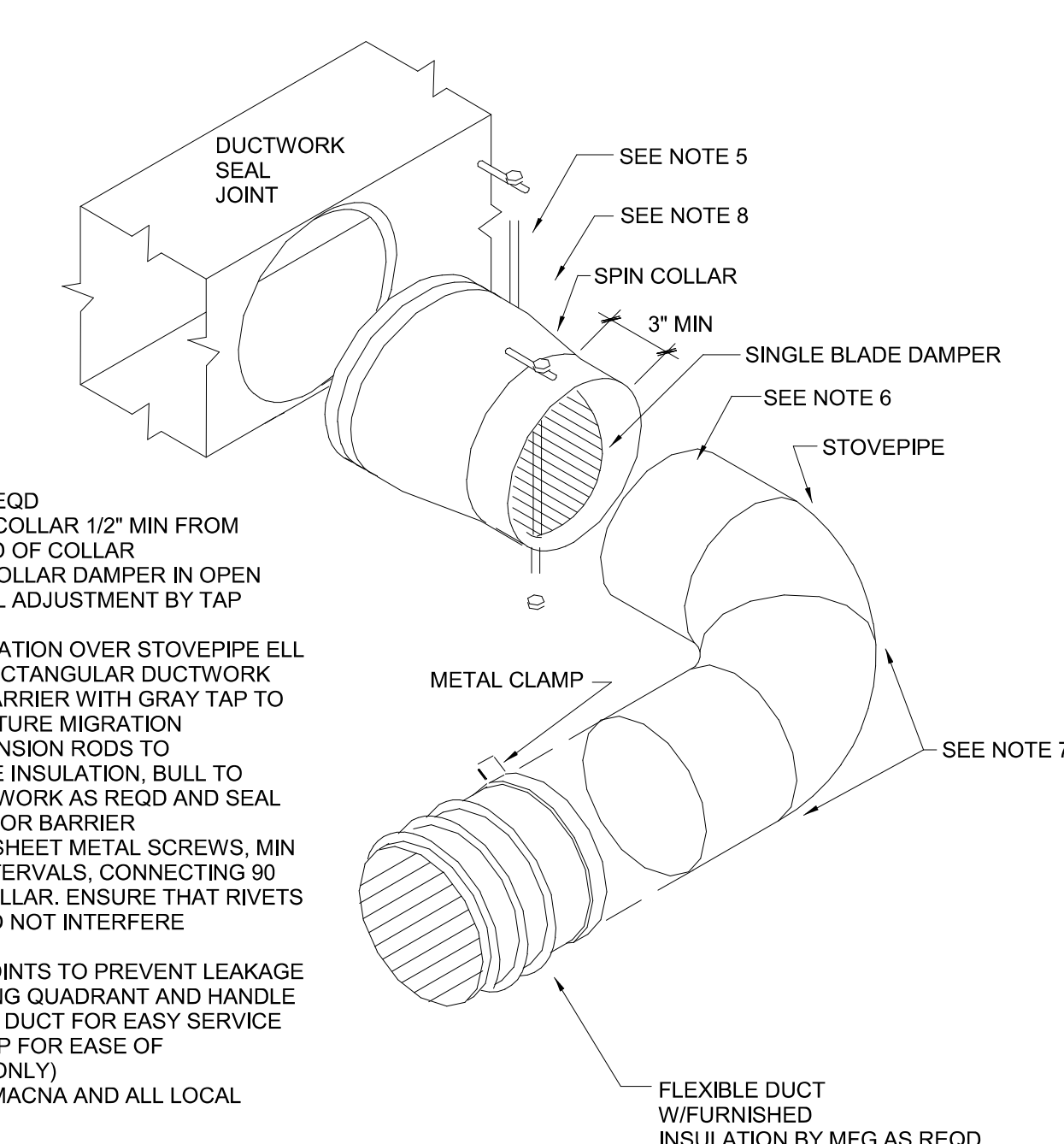

CHECKED BY: JKR  
DRAWN BY: PRC  
DOCUMENT DATE: 2/7/2023  
PROTO: TIER 1 180  
PROTO CYCLE: Q4 - 2022



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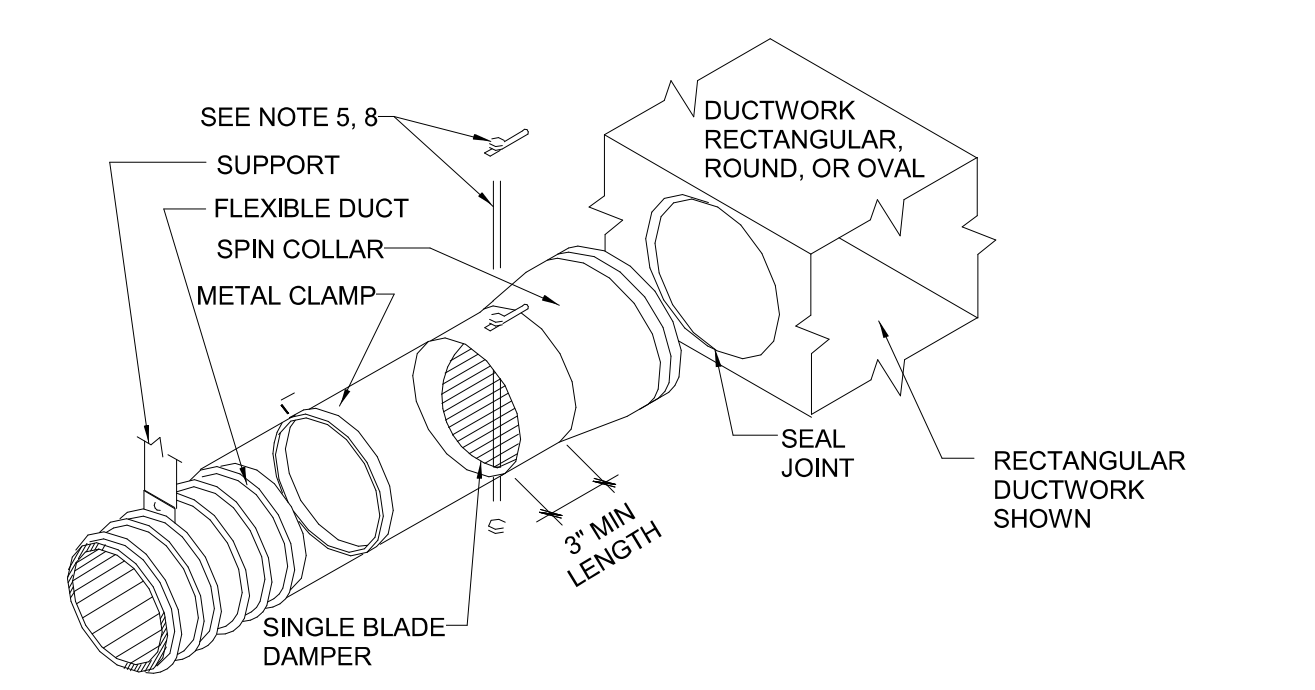
MECHANICAL DETAILS

SHEET: M301



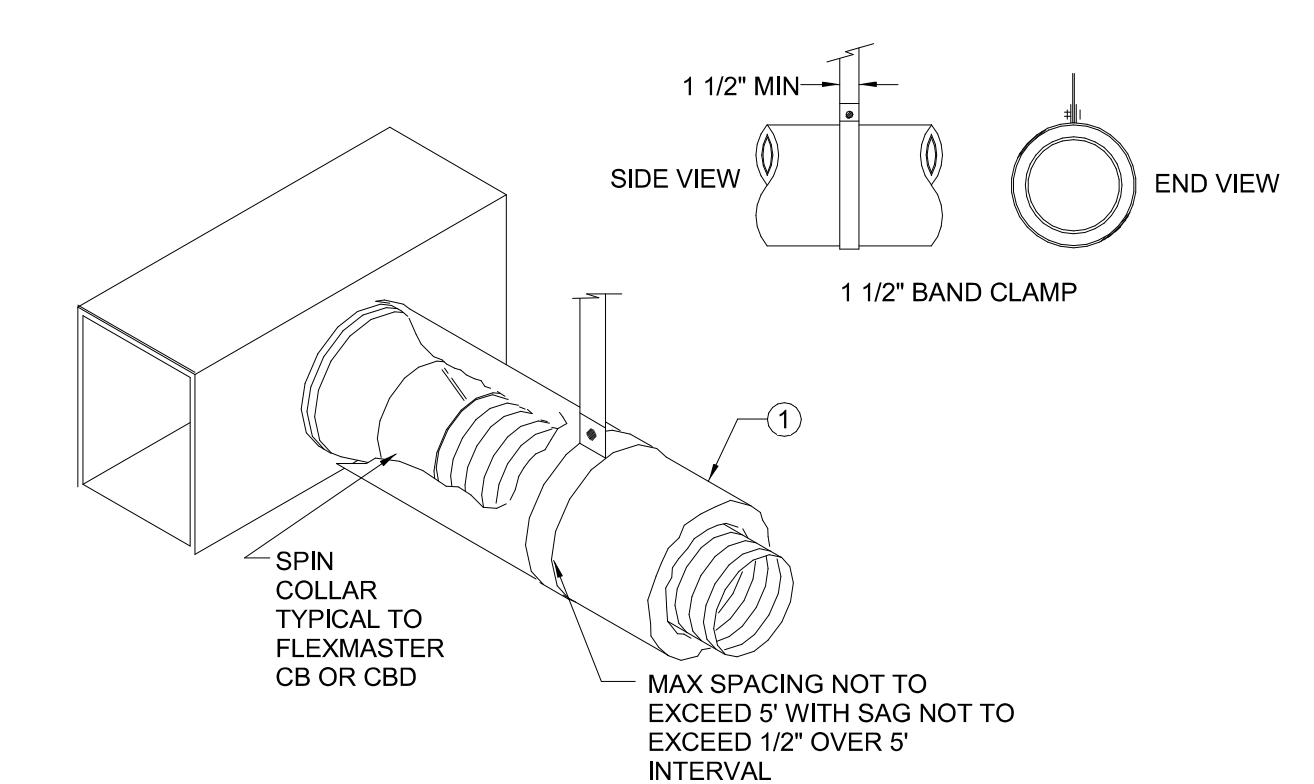
- NOTES:
- SUPPORT AS REQD
  - BAND FLEX TO COLLAR 1/2" MIN FROM OUTBOARD END OF COLLAR
  - INSTALL SPIN COLLAR DAMPER IN OPEN POSITION; FINAL ADJUSTMENT BY TAB CONTRACTOR
  - PROVIDE INSULATION OVER STOVEPIPE ELL TO EDGE OF RECTANGULAR DUCTWORK SEAL VAPOR BARRIER WITH GRAY TAP TO PREVENT MOISTURE MIGRATION
  - PROVIDE EXTENSION RODS TO ACCOMMODATE INSULATION, BULL TO EDGE OF DUCTWORK AS REQD AND SEAL TO EFFECT VAPOR BARRIER
  - POP RIVET OR SHEET METAL SCREWS, MIN 3 EA AT 120" INTERVALS, CONNECTING 90 ELL TO SPIN COLLAR. ENSURE THAT RIVETS OR SCREWS DO NOT INTERFERE W/DAMPER.
  - TAPE & SEAL JOINTS TO PREVENT LEAKAGE
  - INSTALL LOCKING QUADRANT AND HANDLE ON BOTTOM OF DUCT FOR EASY SERVICE (SHOWN ON TOP FOR EASE OF ILLUSTRATION ONLY)
  - INSTALL PER SMACNA AND ALL LOCAL CODES

### 5 SPIN COLLAR FLEXIBLE DUCT CONNECTOR WITH DAMPER AND STOVEPIPE ELBOW



- NOTES:
- SUPPORT AS REQUIRED
  - BAND FLEX TO COLLAR 1/2" MIN FROM OUTBOARD END OF COLLAR
  - INSTALL SPIN COLLAR DAMPER IN OPEN POSITION; FINAL ADJUSTMENT BY TAB CONTRACTOR
  - BULL FLEXIBLE DUCTWORK INSULATION UP TO END OF SPIN COLLAR AT EDGE OF RECTANGULAR DUCTWORK; SEAL VAPOR BARRIER W/GRAY TAPE TO PREVENT MOISTURE MIGRATION
  - PROVIDE EXTENSION RODS TO ACCOMMODATE INSULATION, PULL TO EDGE OF DUCTWORK AS REQD AND SEAL TO EFFECT VAPOR BARRIER
  - POP RIVET OR SHEET METAL SCREWS, MIN 3 EA AT 120" INTERVALS, CONNECTING STOVEPIPE TO COLLAR. ENSURE RIVETS OR SCREWS DO NOT INTERFERE W/DAMPER
  - TAPE AND SEAL ALL JOINTS TO PREVENT LEAKAGE
  - INSTALL LOCKING QUADRANT AND HANDLE ON BOTTOM OF DUCT FOR EASY SERVICE (SHOWN ON TOP FOR EASE OF ILLUSTRATION ONLY)
  - INSTALL PER SMACNA AND ALL LOCAL CODES

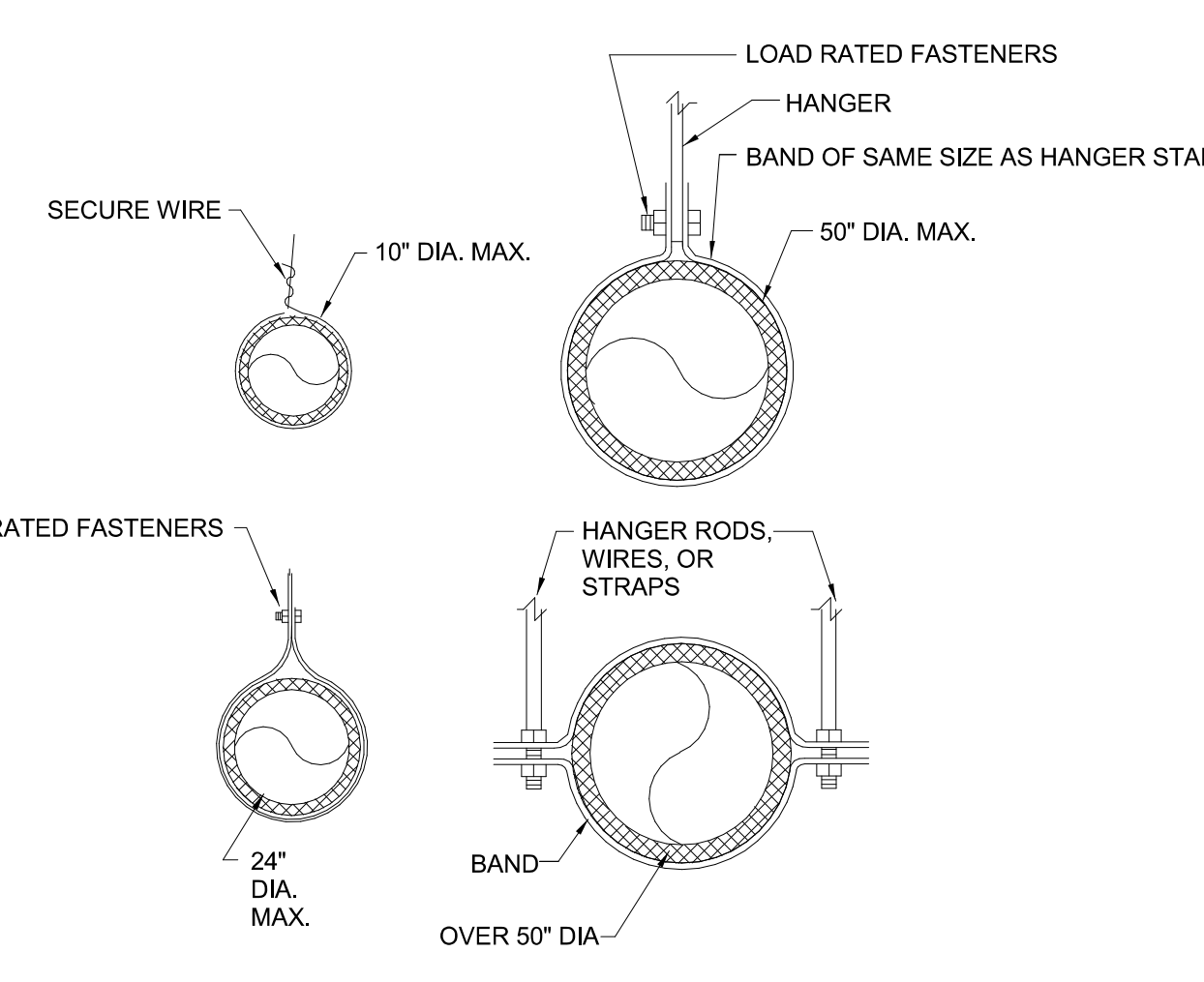
### 6 SPIN COLLAR FLEXIBLE DUCT CONNECTOR WITH DAMPER



GAUGE	THK.	1" STRAP CAPABILITY	MAXIMUM LOAD
24	.028	840	168
22	.034	1070	216
20	.040	1298	259

- \* ELASTIC LIMIT ASSUMED 30ksi; RECOMMEND MAX LOAD (20% OF YIELD STRENGTH).
- NOTES:
- FLEX DUCT WITH EXTERNAL INSULATION AND VAPOR BARRIER JACKETING TYPICAL TO "FABRIFLEX"
  - ALL FLEX DUCT SHALL CONFORM TO UL STANDARD 181 WITH THE UL LABEL PRINTED ON THE DUCT EVERY 10 FEET.

### 2 SUGGESTED SUPPORT REQUIREMENTS FOR FLEX DUCT

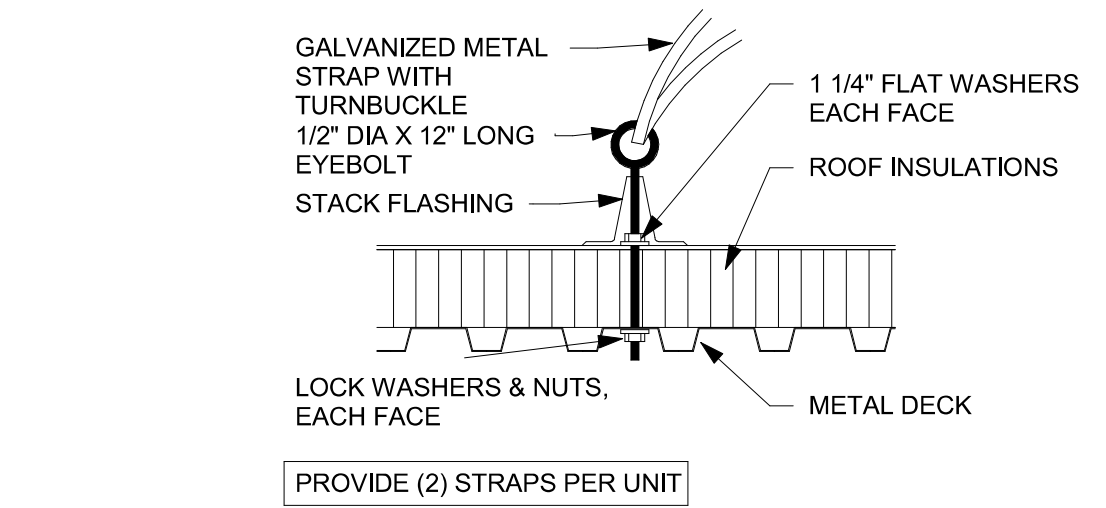


MINIMUM HANGER SIZES FOR ROUND DUCT

DIA.	MAX. SPACING	WIRE DIAMETER	ROD	STRAP
10"DN	12'	(1) 12 GA.	1/4"	1"X22 GA.
11-18"	12'	(2) 12 GA. OR (1)8 GA.	1/4"	1"X22 GA.
19-24"	12'	(2) 10 GA.	1/4"	1"X22 GA.
25-36"	12'	(2) 8 GA.	3/8"	1"X20 GA.
37-50"	12'	---	(2) 3/8"	(2)1"X20 GA.
51-60"	12'	---	(2) 3/8"	(2)1"X18 GA.
61-84"	12'	---	(2) 3/8"	(2)1"X16 GA.

- NOTES:
- STRAPS ARE GALVANIZED STEEL; RODS ARE UNCOATED OR GALVANIZE STEEL; WIRE IS BLACK ANNEALED, BRIGHT BASIC OR GALVANIZED STEEL; ALL ARE ALTERNATIVES
  - TABULATED DATA FROM 1985 SMACNA STANDARDS ALLOWS FOR DUCT REINFORCING AND INSULATION, BUT NO EXTERNAL LOAD.
  - HANGERS MUST NOT DEFORM DUCT SHAPE.

### 7 ROUND DUCT HANGER SPACING



### 9 HOLD DOWN STRAPS

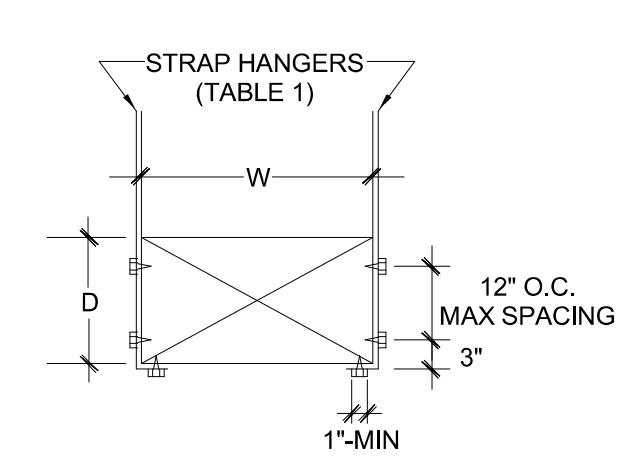
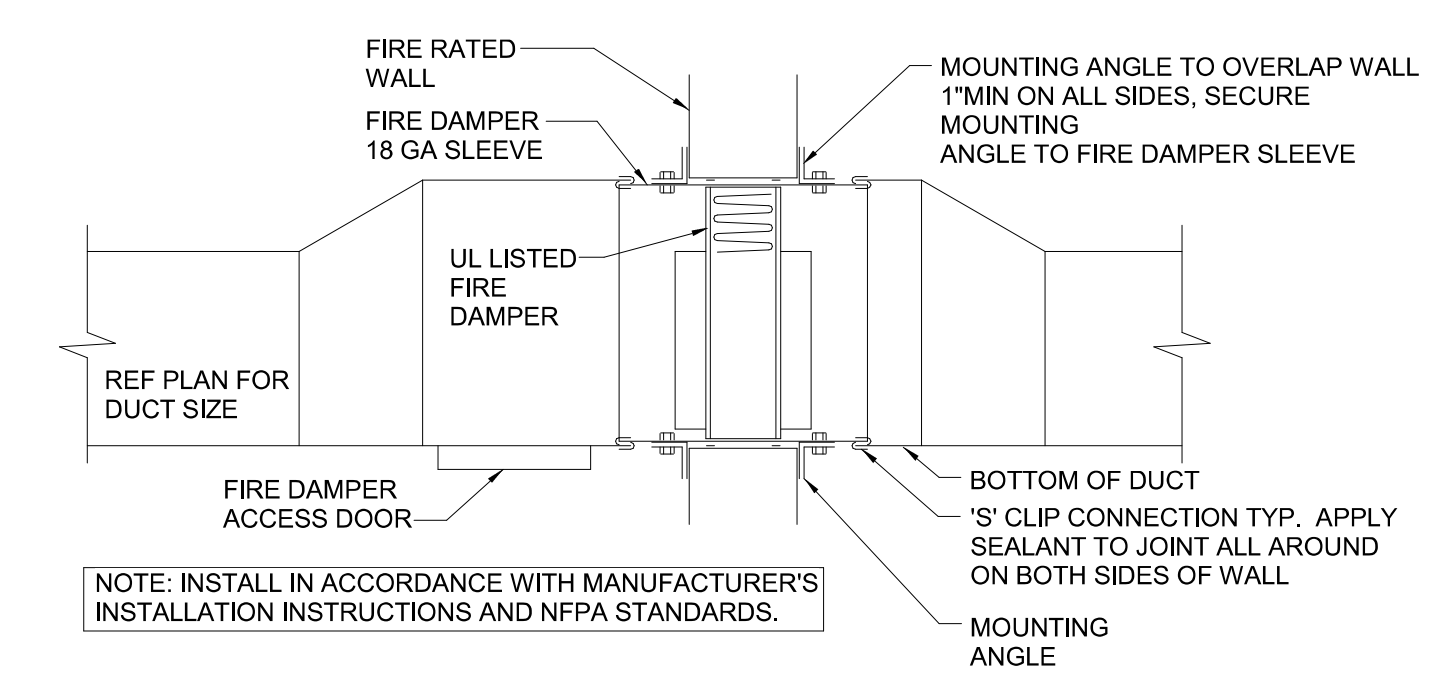


TABLE 1 STRAP HANGERS (PAIR) SPACED

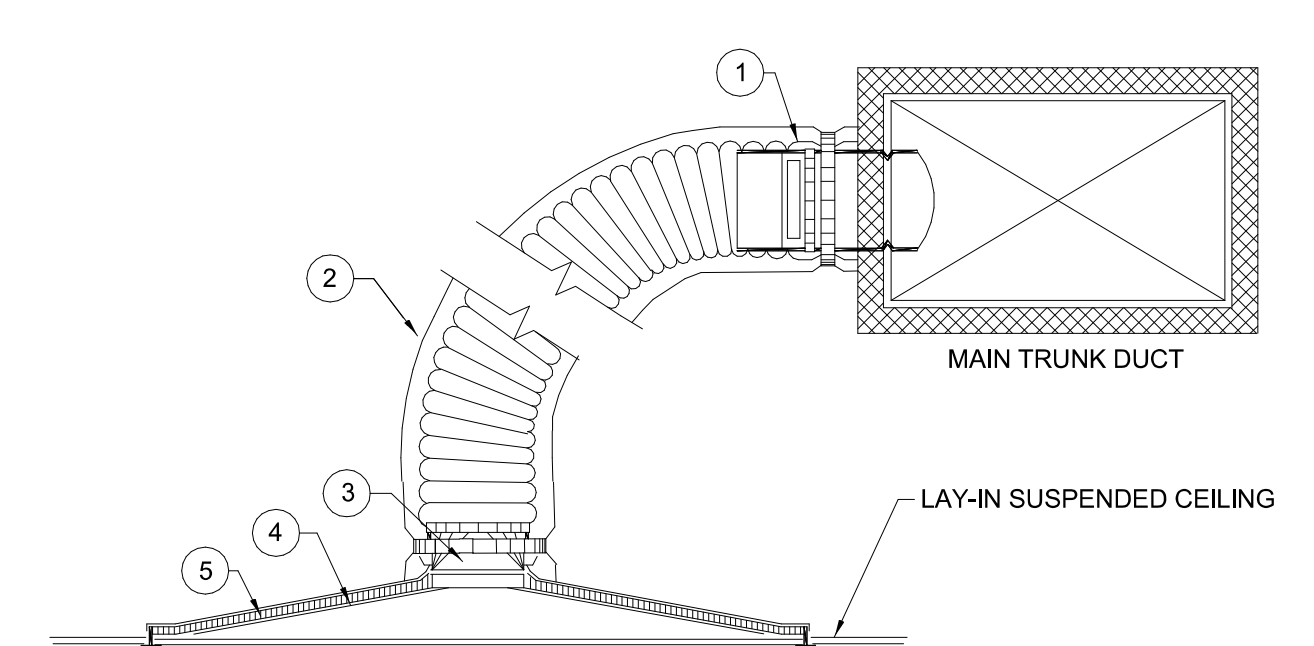
W+D MAX.	10' - 0" MAX	8' - 0" MAX	5' - 0" MAX
72"	1" X 22 GA.	1" X 20 GA.	1" X 22 GA.
96"	1" X 22 GA.	1" X 20 GA.	1" X 22 GA.
120"	1" X 22 GA.	1" X 18 GA.	1" X 22 GA.
168"	1" X 22 GA.	1" X 18 GA.	1" X 18 GA.
192"	1" X 22 GA.	1" X 18 GA.	1" X 16 GA.
193"	SPECIAL ANALYSIS REQUIRED		

- NOTES:
- TABULATED DATA FROM SMACNA ALLOWS FOR DUCT REINFORCING AND INSULATION, BUT NO EXTERNAL LOAD.
  - PROVIDE HIGH DENSITY INSERT AT TRAPEZE FOR INSULATED DUCTS.

### 8 RECTANGULAR DUCT HANGER

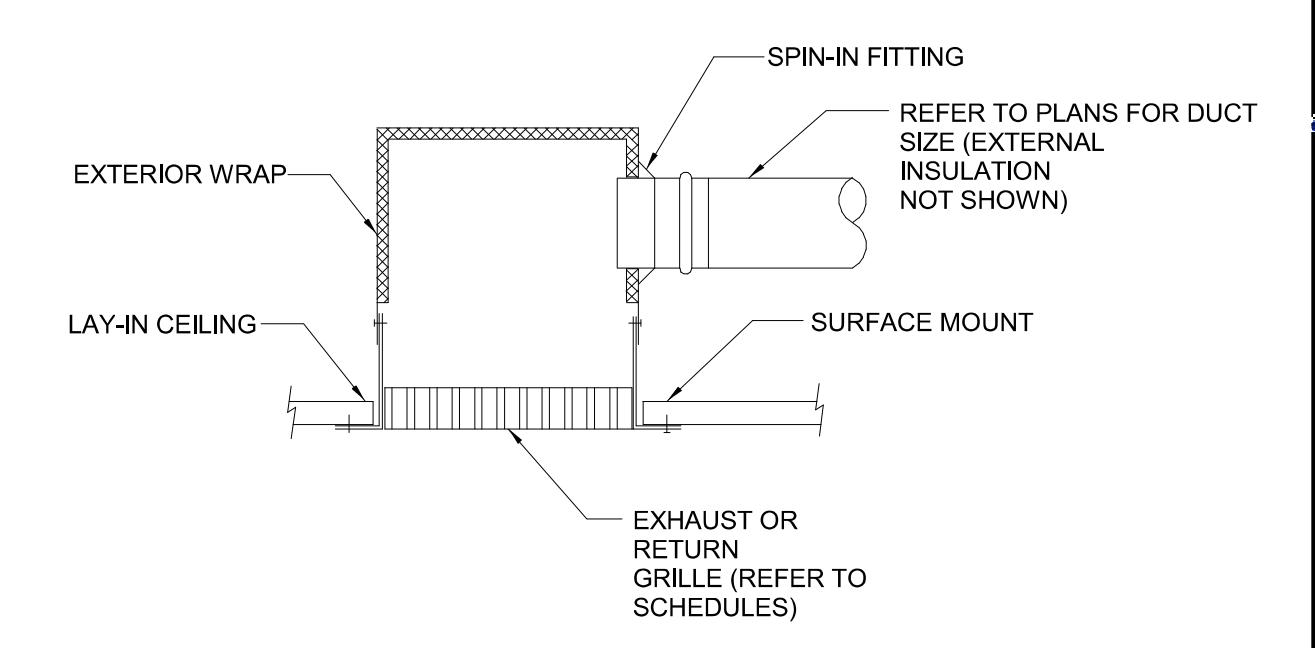


### 4 FIRE DAMPER



- NOTES:
- SPIN COLLAR TYPE CONNECTOR, EXTERNALLY INSULATED, WITH VOLUME DAMPER AND DAMPER LOCK, RE: DETAIL G BELOW.
  - PRE-INSULATED FLEX DUCT AS REQUIRED. INSTALLED, PERMANENTLY SEALED AND SUPPORTED TO PREVENT KINKING AND SHARP TURNS.
  - ROUND TO SQUARE ADAPTER AS REQUIRED
  - LAY-IN-TYPE CEILING DIFFUSER WITHOUT VOLUME DAMPER.
  - PROVIDE 1 1/2" THICK INSULATION; FOIL BACKED MINERAL WOOL JACKET TO COMPLETELY COVER DIFFUSER CONE FOIL TO CONE WITH FIBER REINFORCED FOIL BACKED TAPE.
  - 1-90° TURN ALLOWED
  - MAXIMUM FLEX LENGTH NOT TO EXCEED 10'-0"

### 3 TYPICAL FLEXIBLE DUCT DIFFUSER DETAIL



### 1 TYPICAL SURFACE MOUNT RETURN GRILLE

2/16/2023 10:46:49 AM  
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