



REVISIONS:  
  
FILE:  
PROJ: PWT-0703  
DATE: 03-23-09  
DWG BY: SH  
CHK BY: PE

**MECHANICAL LEGEND**

SYMBOL	DESCRIPTION
CD	CONDENSATE DRAIN LINE
→	FLOW IN DIRECTION OF ARROW
↘	SLOPE DOWN IN DIRECTION OF ARROW
⊘	GATE VALVE
⊘	BUTTERFLY VALVE
⊘	BALL VALVE
⊘	UNION
⊘	CAP
↕	RISE AND DROP IN PIPING
C.R.	CONCENTRIC REDUCER
E.R.	ECCENTRIC REDUCER
⊙ 2-3	THERMOSTAT (UNIT & ZONE DESIGNATION)
⊙ 2-3	HUMIDISTAT (UNIT & ZONE DESIGNATION)
⊙	TEMPERATURE SENSOR
⊙	SMOKE DETECTOR
↗	RISE IN DUCT
↘	DROP IN DUCT
↔	SUPPLY DUCT
↔	RETURN OR EXHAUST DUCT
F	FIRESTAT
M	MANUAL DAMPER
M	MOTORIZED DAMPER
F	FIRE DAMPER
S	SMOKE DAMPER
⊙	CONNECTION TO EXISTING

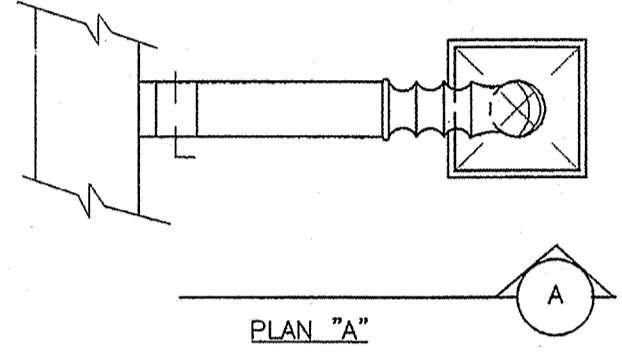
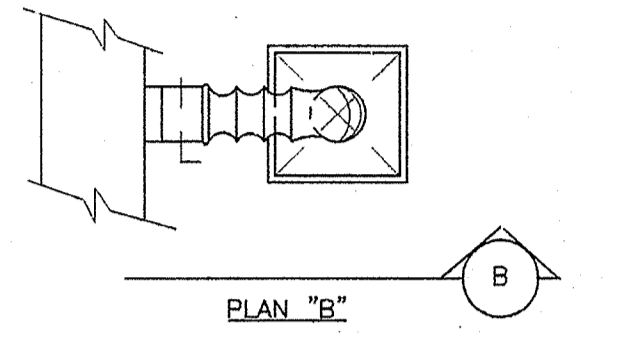
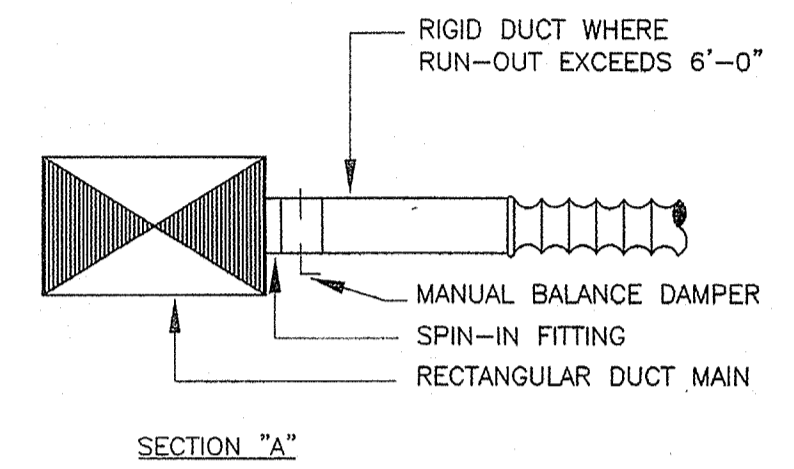
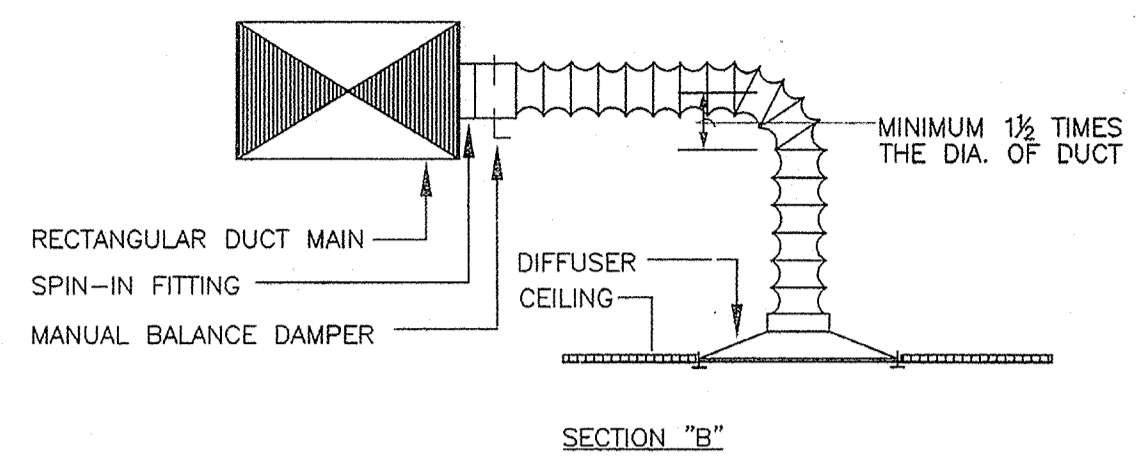
NOTE: NOT ALL SYMBOLS SHOWN ARE NECESSARILY USED

**GRILLES, REGISTERS AND DIFFUSERS**

DESIG.	DESCRIPTION	TYPE	MATERIAL	FINISH	MAX. N.C. LVL.	OPPOSED BLADE DAMPER	EQUALIZING GRID	MFG. / MODEL	REMARKS
A	SUPPLY DIFFUSER LOUVERED	LAY-IN	STEEL	WHITE	30	NO	NO	TITUS TMS	24"x24" FACE
B	SUPPLY DIFFUSER-LOUVERED	SURFACE MTD.	STEEL	WHITE	30	NO	NO	TITUS TMS	24"x24" FACE
C	SIDEWALL SUPPLY REGISTER	SURFACE MTD.	STEEL	WHITE	40	YES	NO	TITUS 300 FS	ADJUSTABLE DOUBLE DEFLECTION
D	RETURN AIR GRILLE	LAY-IN	ALUM.	WHITE	30	NO	NO	TITUS 50F	1/2"x1" EGGRATE W/FRAMED BORDER
E	EXHAUST REGISTER	SURFACE MTD.	ALUM.	WHITE	30	YES	NO	TITUS 355 FL	35 DEG. FIXED DEFLECTION
F	RETURN GRILLE	SURFACE MTD.	ALUM.	WHITE	30	NO	NO	TITUS 355 FL	35 DEG. FIXED DEFLECTION
G	SUPPLY-SLOT	LAY-IN	ALUM.	WHITE	30	NO	NO	TITUS FL10	2 SLOT WITH PLENUM AND JETHROW PATTERN CONTROLLER
H	SUPPLY-SLOT	LAY-IN	ALUM.	WHITE	30	NO	NO	TITUS FL10	1 SLOT WITH PLENUM AND JETHROW PATTERN CONTROLLER
K	SUPPLY/DIFFUSER LOUVER	LAY-IN	STEEL	WHITE	17	NO	NO	TITUS TDCA	24"x24" FACE 12"x12" NECK WITH SQUARE TO 12" ROUND ADAPTER

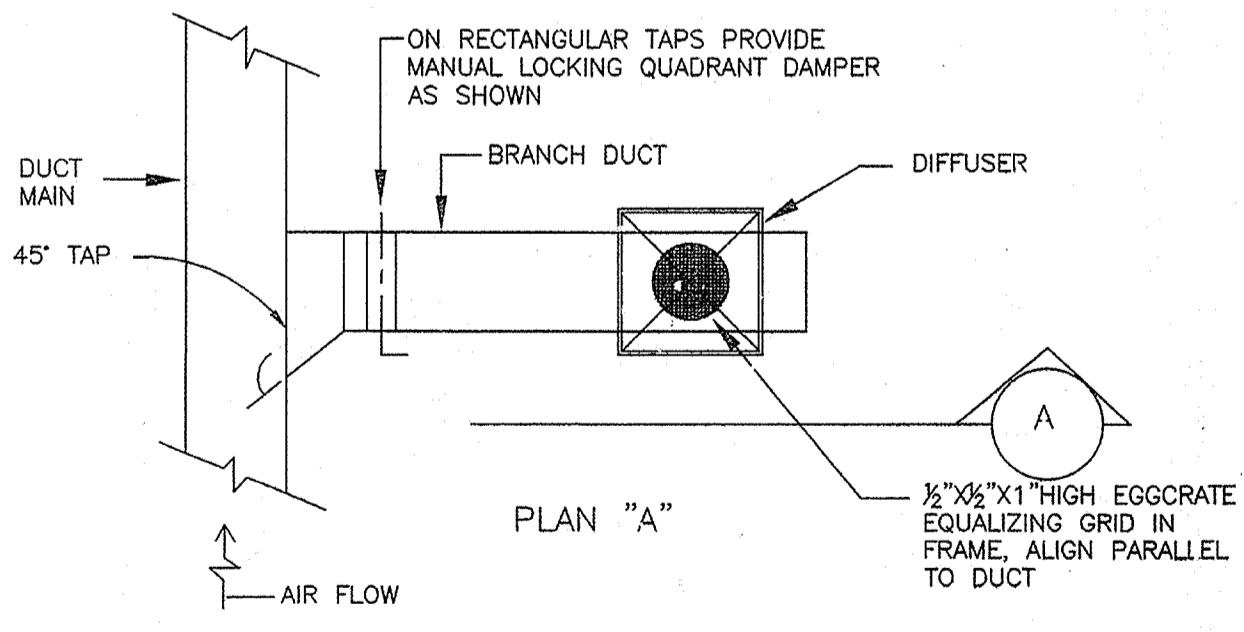
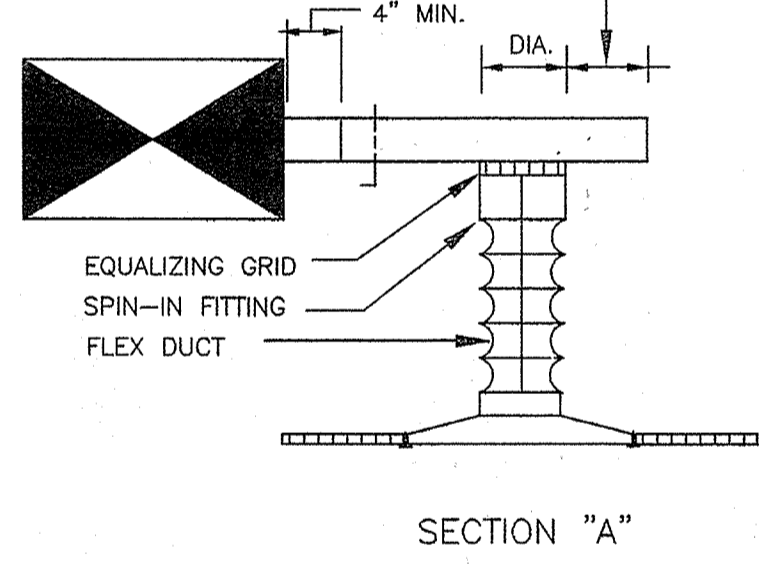
NECK SIZE → 2-8" NK-C → DESIGNATION  
← 350 CFM ← AIR QUANTITY

- GENERAL NOTES:**
- FOR ROUND DUCT USE STRAIGHT SPIN-IN TYPE FITTING W/SEPARATE LOCKING HANDLE BALANCING DAMPERS IN ALL AREAS W/LAY-IN CEILINGS.
  - IN AREAS WITH HARD CEILINGS USE STRAIGHT SPIN-IN FITTINGS AND DAMPERS WITH REMOTE YOUNG REGULATORS LOCATED ON THE CEILING ALTERNATELY PROVIDE CEILING ACCESS DOORS LARGE ENOUGH TO FACILITATE AIR BALANCING.
  - MAXIMUM LENGTH OF FLEXIBLE DUCT USED SHALL NOT EXCEED 6'-0".
  - RIGID AND FLEX DUCT DIAMETER TO BE EQUAL TO NECK SIZE SHOWN UNLESS SPECIFICALLY NOTED OTHERWISE. FLEXIBLE DUCT DROPS SHOULD BE STRAIGHT DOWN TO THE DIFFUSER NECK WITH NO MORE THAN A 10 DEGREE OFFSET FROM THE VERTICAL. PROVIDE A SMOOTH RADIUS TURN BEFORE THE DROP AS DETAILED.
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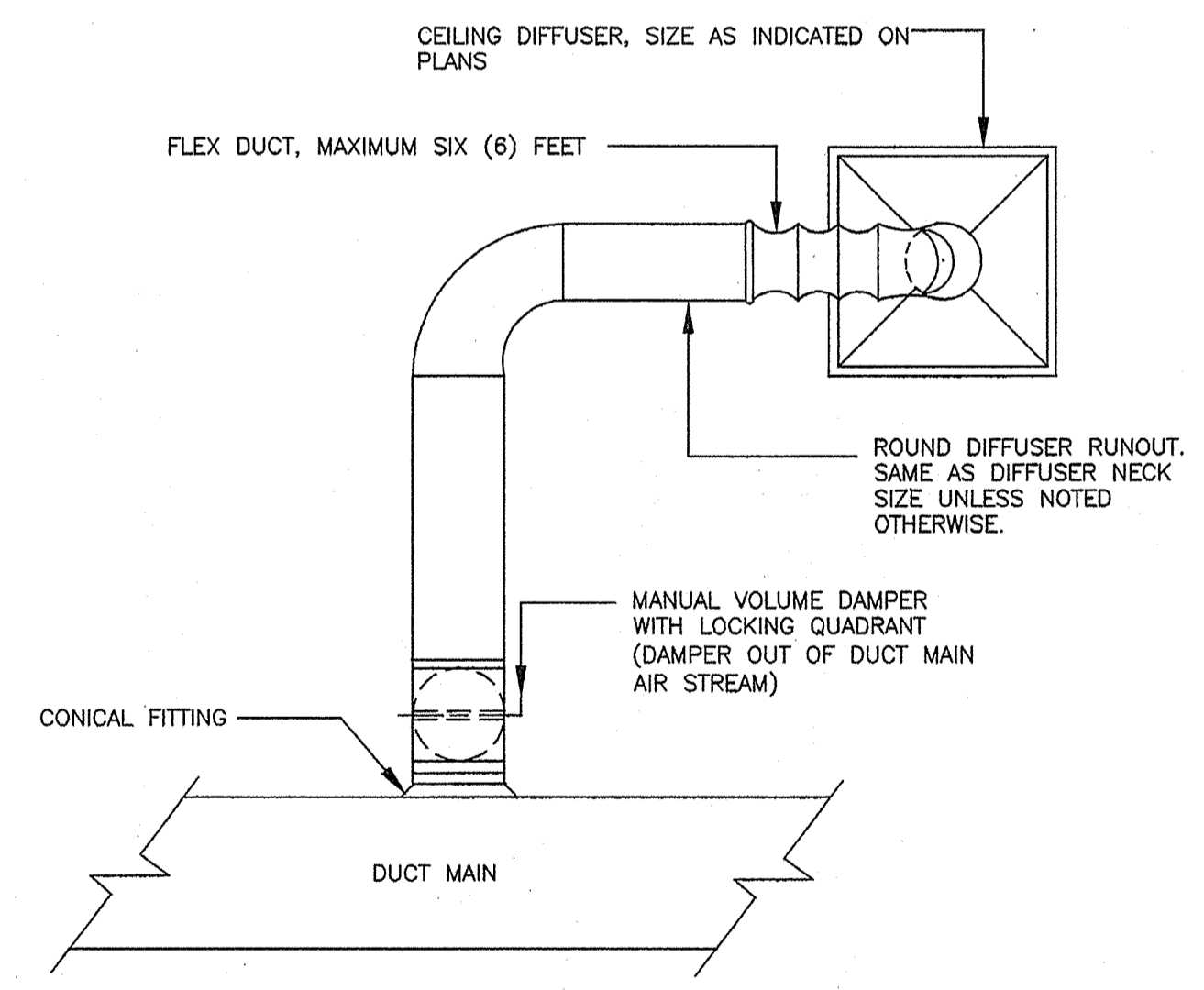


**01 ROUND DIFFUSER BRANCH CONNECTION DETAIL**  
NOT TO SCALE

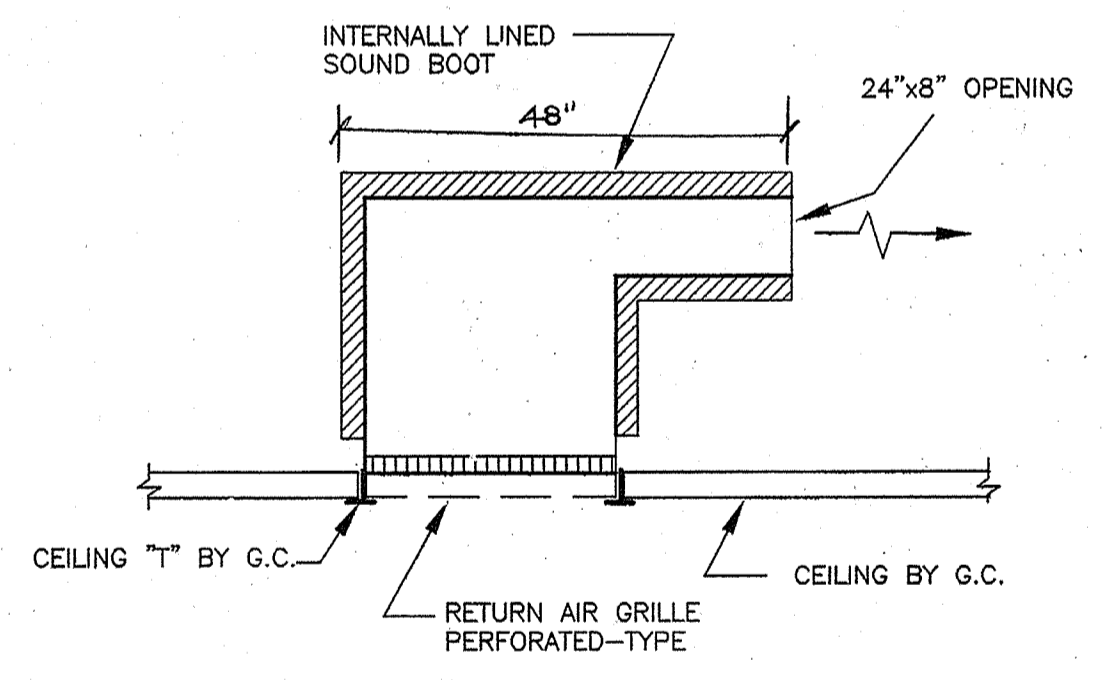
AT LAST DIFFUSER PROVIDE AIR CUSHION. MINIMUM LENGTH OF DUCT DIAMETER OF DIFFUSER NECK SIZE OR 12" MINIMUM, WHICHEVER IS GREATER.



**02 TYPICAL DIFFUSER DETAIL**  
NOT TO SCALE



**03 TYPICAL DIFFUSER DETAIL**  
NOT TO SCALE



**04 RETURN AIR GRILLE DETAIL**  
NOT TO SCALE

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