

NOTE:

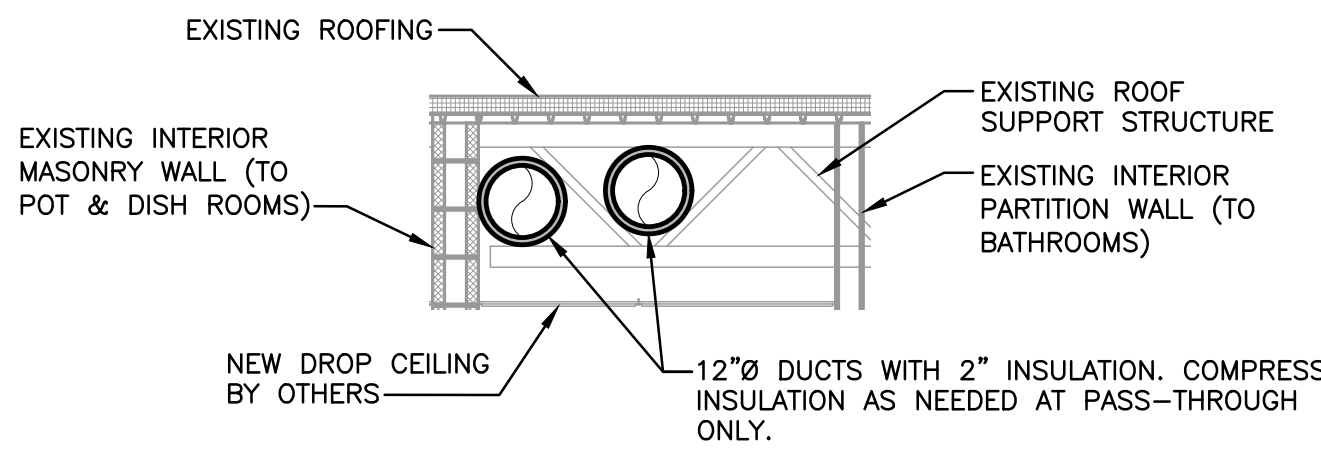
1. THIS DETAIL IS SHOWN FOR COORDINATION PURPOSES. SHOP DRAWINGS SHALL REFLECT THIS COORDINATION EFFORT WHERE LIGHTING, DUCT AND/OR PIPING CROSS. CONTRACTORS SHALL REFER TO OTHER TRADE DRAWINGS FOR COORDINATION PURPOSES. WHERE DUCT, PIPE OR CONDUIT DO NOT CROSS, SAME SHALL BE INSTALLED AS TIGHT TO STEEL AS PRACTICAL.
2. THE FOLLOWING PRIORITIES SHALL BE MAINTAINED IF A ROUTING CONFLICT ARISES: LIGHTING, DUCT WORK, PIPING (INCLUDING WATER, ELECTRICAL AND SPRINKLER). THIS, HOWEVER, DOES NOT ALLEVATE THE CONTRACTOR FROM PROPER COORDINATION WITH OTHER TRADES.
3. WHERE THE ABOVE CONFLICTS WITH CODE, CODE REQUIREMENTS SHALL PREVAIL.
4. ROUTE DUCT UNDER EXISTING MEMBERS OR THROUGH TRUSSES. MECHANICAL STRUCTURAL CONTRACTOR SHALL NOT PIERCE, CUT OR ALTER EXISTING STRUCTURAL MEMBERS.

Figure 1 consists of two schematic diagrams of hydraulic control valves, labeled (a) and (b). Diagram (a) shows a single-ported valve with a spool (1) and a piston (2). The spool has a control edge (3) and a return spring (4). The piston has a control edge (5) and a return spring (6). The valve has two ports (7) and a central port (8). Diagram (b) shows a three-ported valve with a spool (1) and a piston (2). The spool has a control edge (3) and a return spring (4). The piston has a control edge (5) and a return spring (6). The valve has three ports (7) and a central port (8). Arrows indicate the flow directions in both diagrams.

- ① MAIN SUPPLY, RETURN OR EXHAUST DUCT (LOW OR MEDIUM PRESS.
- ② BRANCH DUCT (DIVERGING OR CONVERGING FLOW)
- ③ MAIN OR BRANCH DUCT W/ DIVERGING OR CONVERGING FLOW
- ④ VOLUME DAMPER AS INDICATED ON PLANS (TYP)
- ⑤ TRANSITION AS REQUIRED
- ⑥ RADIUSED ELBOW TRANSITION
- ⑦ DIMENSIONS OF SPLIT PER SMACNA DUCT MANUAL OR AS ON PLANS

NOTE: FABRICATE SPLIT FITTINGS, ELBOWS, TRANSITIONS, ETC. PER LATEST EDITION OF SMACNA DUCT CONSTRUCTION MANUAL, AS INDICATED ON PLANS, OR AS DESCRIBED IN SPECIFICATION.

PROVIDE DUCT SPLIT ARRANGEMENT AS SHOWN ON PLANS.



MAIN CORRIDOR

NOTE:

1. DO NOT INSULATE EXHAUST DUCTWORK.

Diagram illustrating the installation of a flexible duct system. The diagram shows a rigid supply or return ductwork connected to a flexible duct. The flexible duct is supported by a strap support to the roof structure. The flexible duct is labeled "FLEX DUCT" and is supported by a "STRAP SUPPORT TO ROOF STRUCTURE". The flexible duct is connected to a "RIGID 90° ELBOW" which leads to a "DIFFUSER OR REGISTER". The diagram also shows a "NOTE: INSULATE BACK OF SUPPLY DIFFUSER" and a dimension of "5'-0\" MAXIMUM" for the distance between the diffuser and the roof structure. Other labels include "SEE BRANCH TAKE-OFF DETAIL", "UTILIZE STAINLESS STEEL WORM DRIVEN CLAMPS AND U.L. APPROVED MASTIC SEALANT FOR ATTACHING FLEXIBLE DUCT TO CLINCH COLLAR", and "RECTANGULAR TO ROUND TRANSITION, IF NEEDED".

Labels in the diagram include:

- RIGID SUPPLY OR RETURN DUCTWORK
- SEE BRANCH TAKE-OFF DETAIL
- STRAP SUPPORT TO ROOF STRUCTURE
- FLEX DUCT
- UTILIZE STAINLESS STEEL WORM DRIVEN CLAMPS AND U.L. APPROVED MASTIC SEALANT FOR ATTACHING FLEXIBLE DUCT TO CLINCH COLLAR
- RIGID 90° ELBOW
- RECTANGULAR TO ROUND TRANSITION, IF NEEDED
- DIFFUSER OR REGISTER
- NOTE: INSULATE BACK OF SUPPLY DIFFUSER
- 5'-0" MAXIMUM
- CEILING

The diagram illustrates the quadrant damper assembly for both supply and return air ducts. It shows a cross-section of the damper mechanism, which is a quadrant (galvanized) pivoted on a brass hinge. The damper is controlled by a pilot casting (galvanized) connected to an adjustable rod with position marks (galvanized) and a set screw for locking in position. The damper is shown in two positions: one for supply air flow and one for return air flow. The damper is labeled with dimensions: $W/2$ for the width of the damper, W for the width of the duct, and W for the width of the supply or return exhaust. The damper is also labeled with a 45° angle. The damper is shown in two positions: one for supply air flow and one for return air flow. The damper is labeled with a 45° angle. The damper is shown in two positions: one for supply air flow and one for return air flow. The damper is labeled with a 45° angle.

Diagram illustrating the installation of a flexible duct system. The diagram shows a rigid supply or return ductwork connected to a flexible duct. The flexible duct is supported by a strap support to the roof structure. The flexible duct is labeled "FLEX DUCT" and is supported by a "STRAP SUPPORT TO ROOF STRUCTURE". The flexible duct is connected to a "RIGID 90° ELBOW" which leads to a "DIFFUSER OR REGISTER". The diagram also shows a "NOTE: INSULATE BACK OF SUPPLY DIFFUSER" and a dimension of "5'-0\" MAXIMUM" for the distance between the diffuser and the roof structure. Other labels include "SEE BRANCH TAKE-OFF DETAIL", "UTILIZE STAINLESS STEEL WORM DRIVEN CLAMPS AND U.L. APPROVED MASTIC SEALANT FOR ATTACHING FLEXIBLE DUCT TO CLINCH COLLAR", and "RECTANGULAR TO ROUND TRANSITION, IF NEEDED".

Labels in the diagram include:

- RIGID SUPPLY OR RETURN DUCTWORK
- SEE BRANCH TAKE-OFF DETAIL
- STRAP SUPPORT TO ROOF STRUCTURE
- FLEX DUCT
- UTILIZE STAINLESS STEEL WORM DRIVEN CLAMPS AND U.L. APPROVED MASTIC SEALANT FOR ATTACHING FLEXIBLE DUCT TO CLINCH COLLAR
- RIGID 90° ELBOW
- RECTANGULAR TO ROUND TRANSITION, IF NEEDED
- DIFFUSER OR REGISTER
- NOTE: INSULATE BACK OF SUPPLY DIFFUSER
- 5'-0" MAXIMUM
- CEILING

NOTE:
INSULATE BACK OF
SUPPLY DIFFUSER

UNAUTHORIZED ALTERATION OR ADDITION TO A PLAN BEARING A
LICENSED PROFESSIONAL ENGINEER'S SEAL IS A VIOLATION OF
SECTION 7209, SUB-DIVISION 2 OF THE N.Y. STATE EDUCATION LAW
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1/8" 1/4" 1/2" 0 1" 2"

REFERENCE SCALE

DRAFT CONSTRUCTION DOCUMENT - NOT FOR PERMIT OR CONSTRUCTION

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Revisions

H7.01

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NOTES:

IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED ARCHITECT OR ENGINEER, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE SEAL OF AN ARCHITECT OR ENGINEER IS ALTERED, THE ALTERING ARCHITECT OR ENGINEER SHALL AFFIX TO HIS ITEM THE SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

DO NOT SCALE DRAWINGS. WRITTEN DIMENSIONS GOVERN.

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SEAL
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