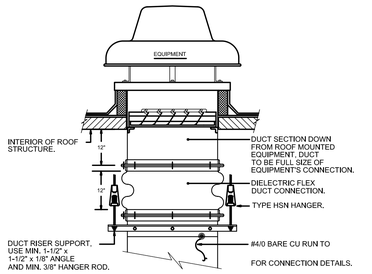
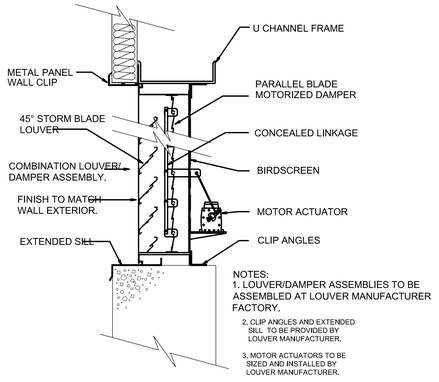
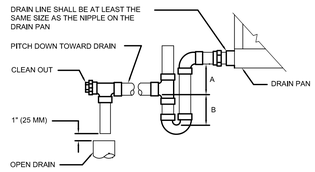


1 DIELECTRIC FLEX DUCT CONNECTION DETAIL FOR ROOF PENETRATIONS
N.T.S.



NOTES:
1. LOUVER/DAMPER ASSEMBLIES TO BE ASSEMBLED AT LOUVER MANUFACTURER FACTORY.
2. CLIP ANGLES AND EXTENDED SILL TO BE PROVIDED BY LOUVER MANUFACTURER.
3. MOTOR ACTUATORS TO BE SIZED AND INSTALLED BY LOUVER MANUFACTURER.
4. INSTALLATION OF LOUVER TO BE IN ACCORDANCE WITH LOUVER MANUFACTURER'S RECOMMENDATIONS.

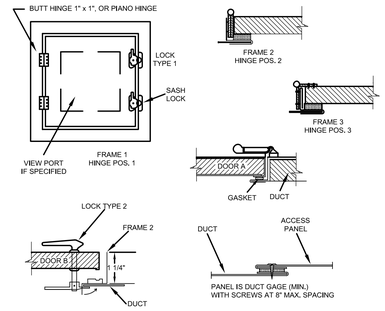
2 LOUVER/DAMPER DETAIL
N.T.S.



DESIGNER'S NOTE:

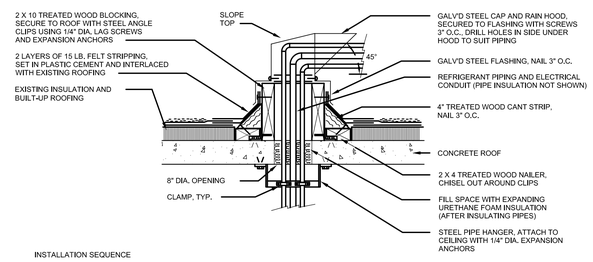
UNIT TYPE	A	B
DRAW THRU	2" (50 MM) PLUS X	X
BLOW THRU	1" (25 MM) MINIMUM	2X

4 AIR HANDLER UNIT DRAIN TRAP DETAIL
N.T.S.



	DOOR SIZE	NO. HINGES	NO. LOCKS	METAL GAGE FRAME	DOOR	BACK
2" W.G. STATIC AND LESS	12" x 12" 16" x 20" 24" x 24"	2 2 3	1-S 2-S 2-S	24 22 22	26 24 22	26 26 26
3" W.G. STATIC	12" x 12" 16" x 20" 24" x 24"	2 2 3	1-S 1-S,1-T,1-B 2-S,1-T,1-B	22 20 20	22 20 20	26 26 24
4" W.G. TO 10" W.G.	12" x 12" 16" x 20" 24" x 24"	2 3 3	1-S,1-T,1-B 2-S,1-T,1-B 2-S,2-T,2-B	20 18 18	20 18 18	26 24 24
S = SIDE OPPOSITE HINGES, T = TOP, B = BOTTOM						

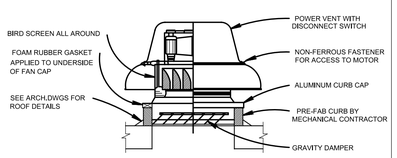
5 DUCT ACCESS DOORS
N.T.S.



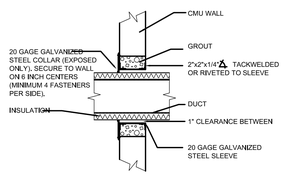
INSTALLATION SEQUENCE

1. CORE DRILL THE HOLE THROUGH THE ROOF.
2. INSTALL THE BLOCKING, CANT, ROOFING, AND FLASHING AS INDICATED.
3. INSTALL THE PIPE HANGER SUPPORT.
4. INSTALL THE VERTICAL SECTIONS OF THE NEW PIPES AND PROVIDE AN ELBOW AND A SHORT LENGTH OF HORIZONTAL PIPING ON EACH PIPE.
5. INSULATE THE INSTALLED SUCTION LINE REFRIGERANT PIPE.
6. INSTALL THE PORTION OF ELECTRICAL CONDUIT THAT WILL PASS THROUGH THE NEW ROOF OPENING AND HOODED FLASHING CAP.
7. DRILL THREE SEPARATE HOLES IN THE HOODED FLASHING CAP FOR THE TWO PIPES AND ONE ELECTRICAL CONDUIT.
8. INSTALL THE HOODED FLASHING CAP.
9. CAULK AROUND THE PIPE AND CONDUIT HOLES IN THE CAP AND ALSO ALL FLASHING SEAMS.
10. SPRAY URETHANE FOAM INSULATION IN THE VOID SPACE AROUND THE PIPES IN THE HOLE THROUGH THE ROOF.
11. INSTALL REMAINING PIPING AND CONDUIT.

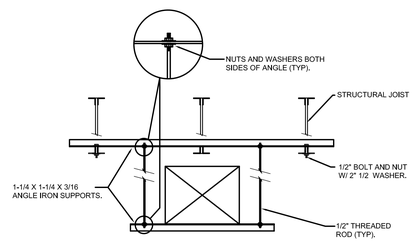
6 PIPING & CONDUIT ROOF PENETRATION
N.T.S.



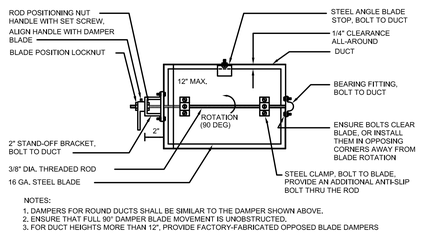
7 ROOF MOUNTED EXHAUST FAN DETAIL
N.T.S.



8 DUCT PENETRATION THROUGH WALL (NOT APPLICABLE TO FIRE-RATED WALLS)
N.T.S.

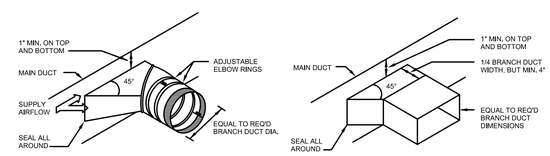


9 DUCT HANGER DETAIL
N.T.S.

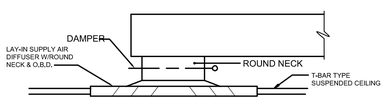


NOTES:
1. DAMPERS FOR ROUND DUCTS SHALL BE SIMILAR TO THE DAMPER SHOWN ABOVE.
2. ENSURE THAT FULL 90° DAMPER BLADE MOVEMENT IS UNOBSTRUCTED.
3. FOR DUCT HEIGHTS MORE THAN 12", PROVIDE FACTORY-FABRICATED OPPOSED BLADE DAMPERS

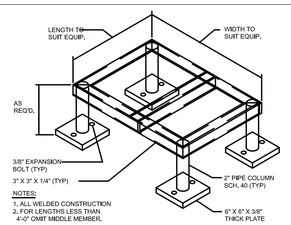
11 MANUAL DAMPER (ADJUSTABLE SINGLE-BLADE BALANCING TYPE)
N.T.S.



12 TYPICAL BRANCH TAKE-OFF FITTING
N.T.S.

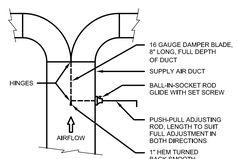


13 SUPPLY AIR DIFFUSER DETAIL
N.T.S.



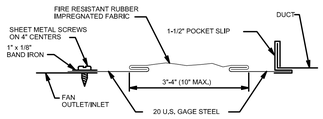
NOTES:
1. ALL WELDED CONSTRUCTION
2. FOR LENGTHS LESS THAN 4'-0" OMIT MIDDLE MEMBER.

14 TYPICAL SUPPORT FRAME DETAIL
N.T.S.

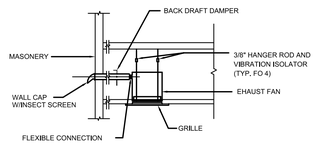


NOTES:
1. PROVIDE TWO ADJUSTING RODS FOR DUCTS OVER 24" DEEP.

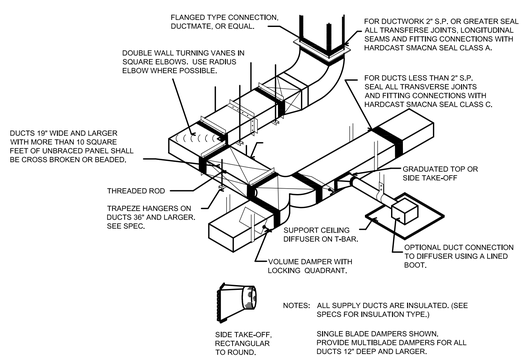
15 TYPICAL SPLITTER DAMPER
N.T.S.



16 TYPICAL FLEXIBLE CONNECTION DETAIL
N.T.S.

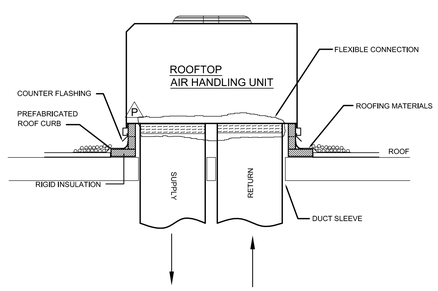


17 TYPICAL TOILET EXHAUST FAN DETAIL
N.T.S.

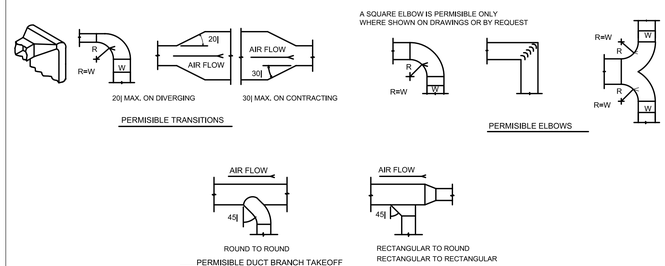


NOTES: ALL SUPPLY DUCTS ARE INSULATED. (SEE SPECS FOR INSULATION TYPE.)
SINGLE BLADE DAMPERS SHOWN. PROVIDE MULTIBLADE DAMPERS FOR ALL DUCTS 12" DEEP AND LARGER.

21 TYPICAL DUCT DETAIL
N.T.S.



19 ROOFTOP UNIT SUPPORT DETAIL
N.T.S.



20 TYPICAL DUCT TRANSITIONS
N.T.S.

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4	PERMIT	10-3-07
5	PERMIT	01-8-08
A	PERMIT	11/06/08

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Drawn: PAL
Checked: C.FORD
File No. BETH_A01

Drawing No.
M-3
- of -