

A

B

C

D

E

F

one eighth inch = one foot

three inches = one foot

one and one half inches = one foot

one inch = one foot

three quarters inch = one foot

one half inch = one foot

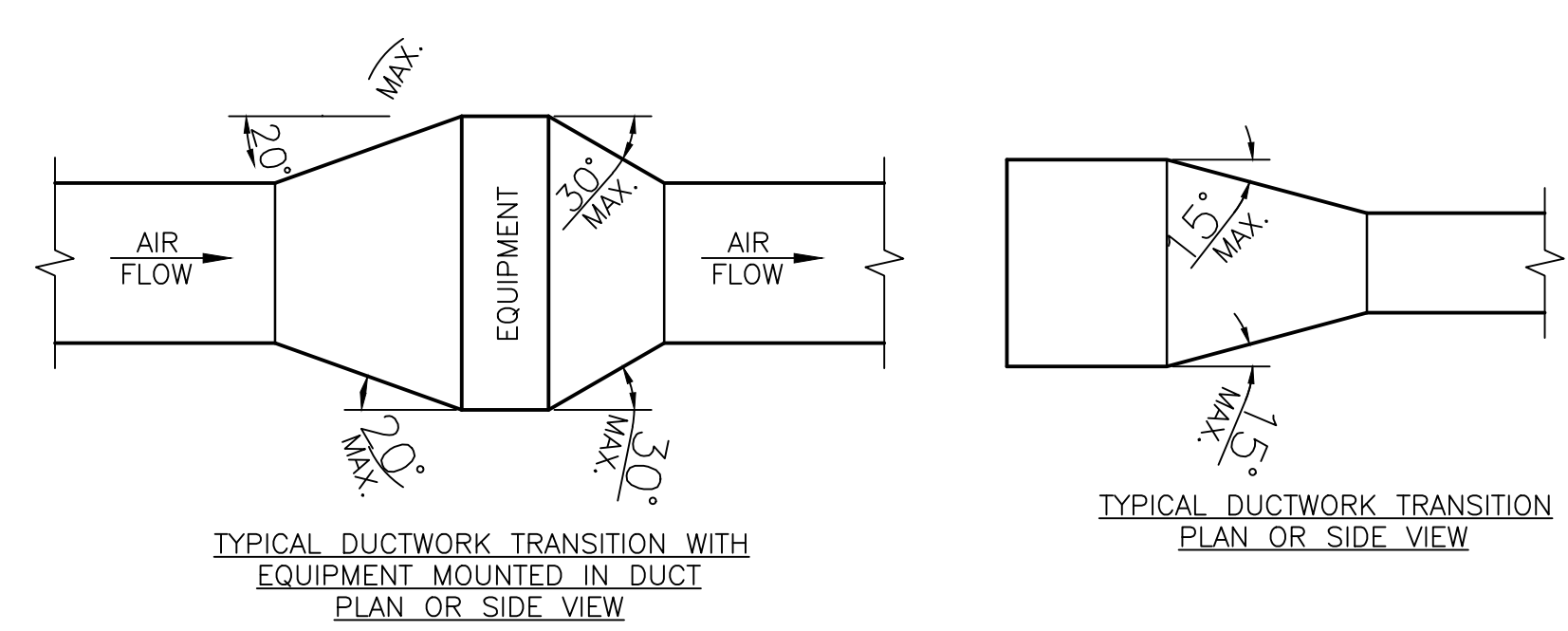
one eighth inch = one foot

one quarter inch = one foot

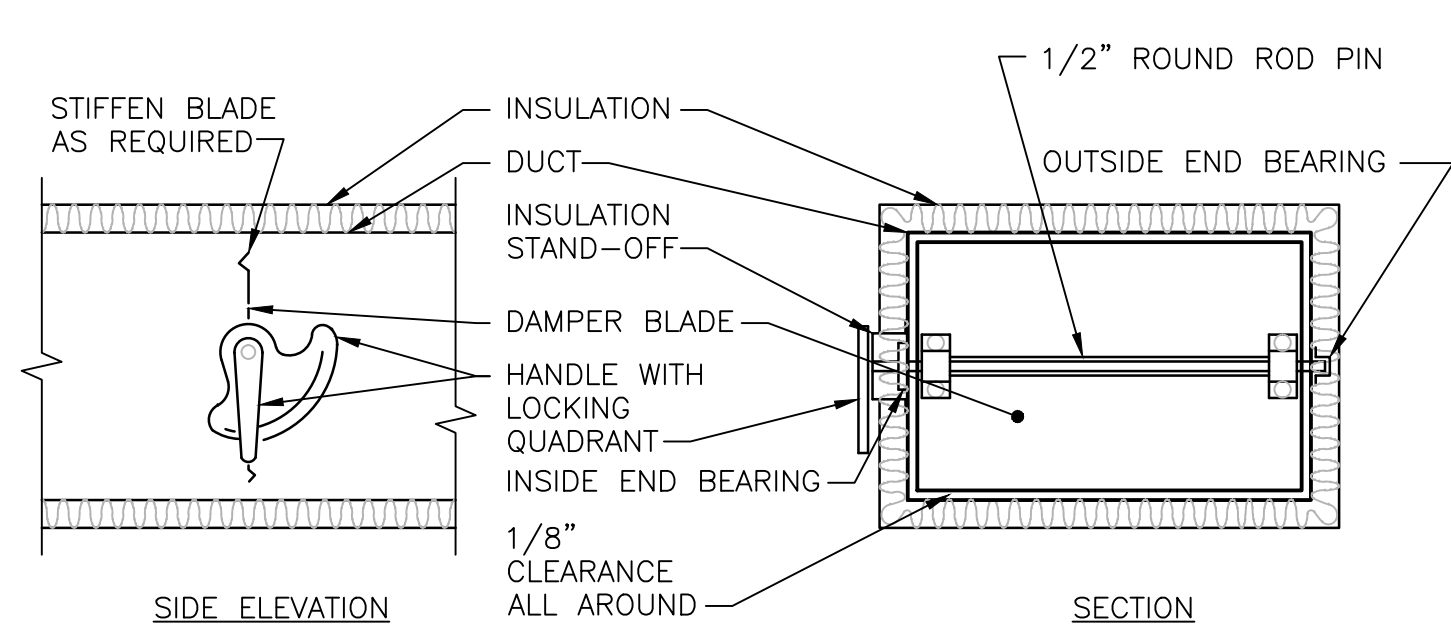
one eighth inch = one foot

one eighth inch = one foot

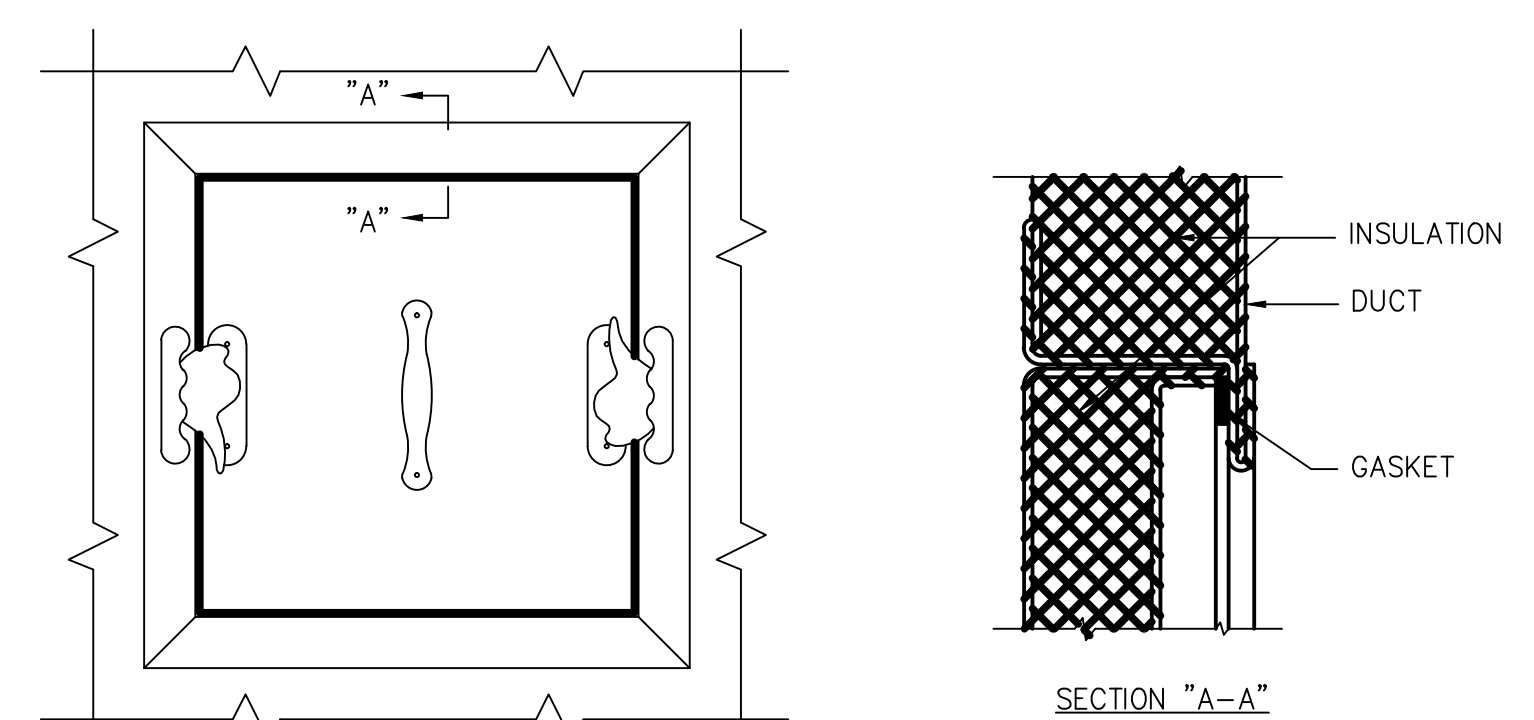
one eighth inch = one foot



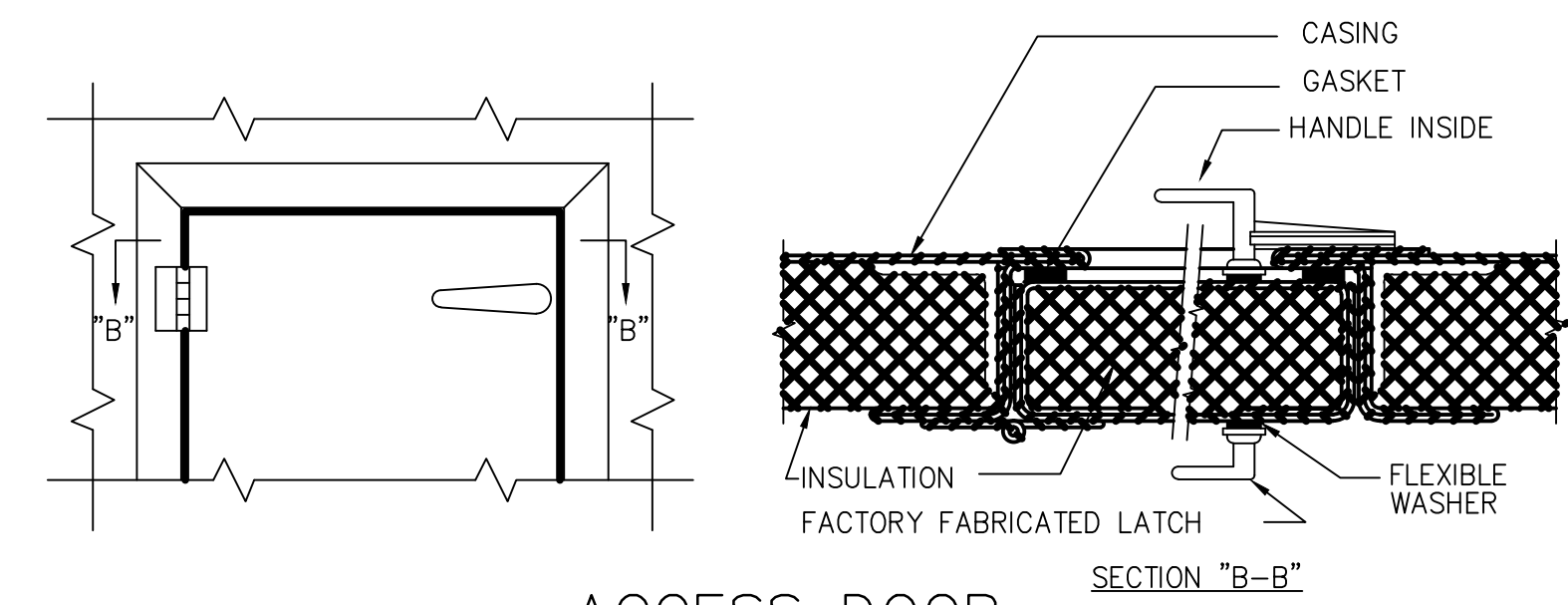
NOTE:  
UNLESS OTHERWISE INDICATED ON PLANS, MAXIMUM ANGLES SHOWN SHALL APPLY.



NOTE:  
1. DELETE INSULATION STAND-OFF ON DUCTWORK WITHOUT EXTERIOR INSULATION.  
2. DETAIL SHOWS SINGLE BLADE DAMPER. DAMPER INSTALLATION SHALL BE SIMILAR FOR MULTI-BLADE DAMPERS & ROUND DAMPERS.



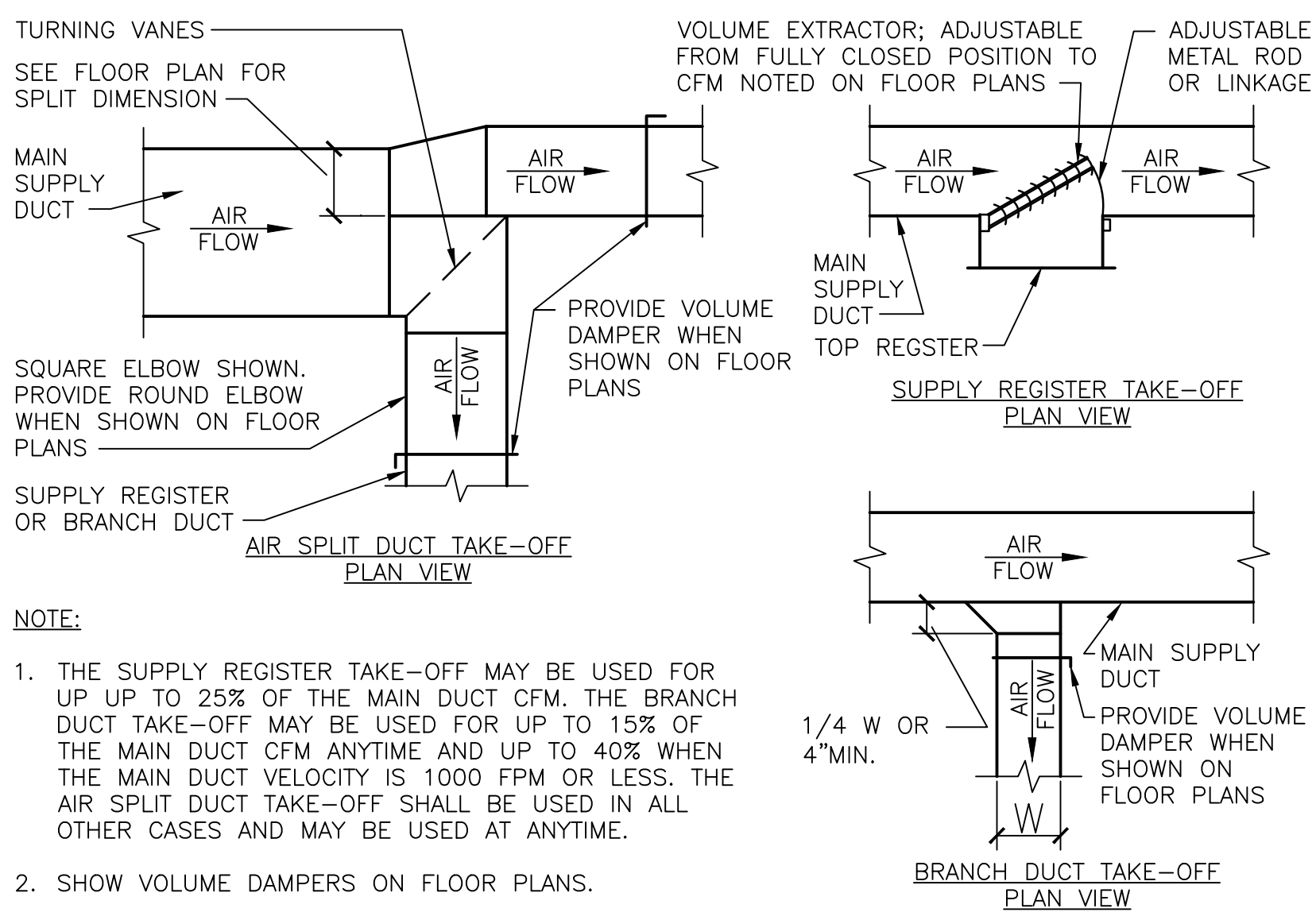
ACCESS PANEL



ACCESS DOOR

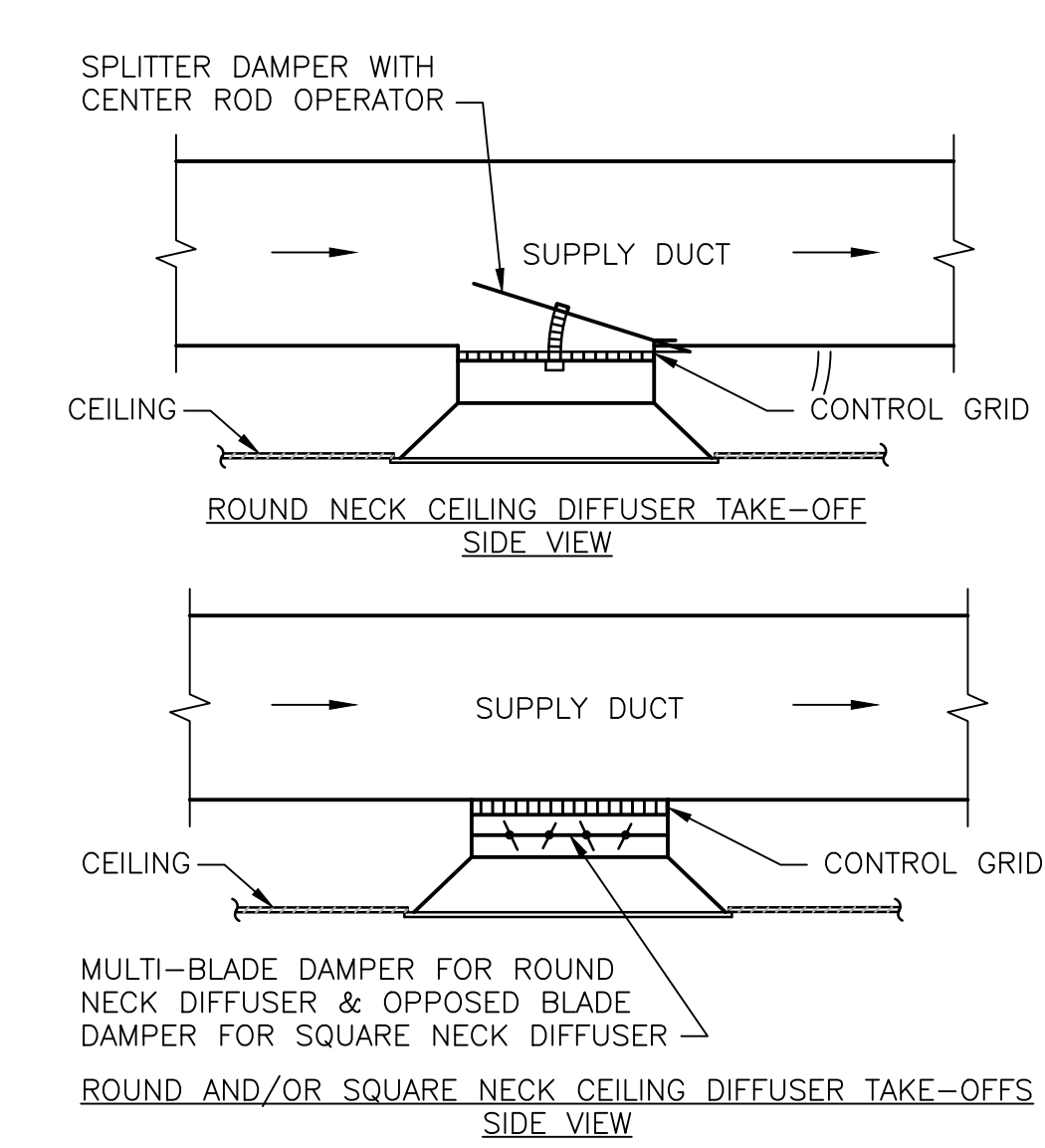
NOTES:  
1. LATCHES SHALL BE OF THE WEDGE TYPE TO CLOSE DOORS TIGHTLY.  
2. HINGES ON THE ACCESS DOORS SHALL HAVE NON-CORROSIVE PINS.  
DESIGNERS' NOTES:  
1. USE ACCESS DOORS ON AIR HANDLING UNITS AND DUCTWORK INSTALLED IN EQUIPMENT ROOMS.  
2. USE ACCESS PANELS ON ALL EQUIPMENT AND DUCTWORK INSTALLED ABOVE FINISHED CEILINGS.

1  
MH-501  
TYPICAL DUCTWORK TRANSITION WITH EQUIPMENT MOUNTED IN DUCT  
NTS

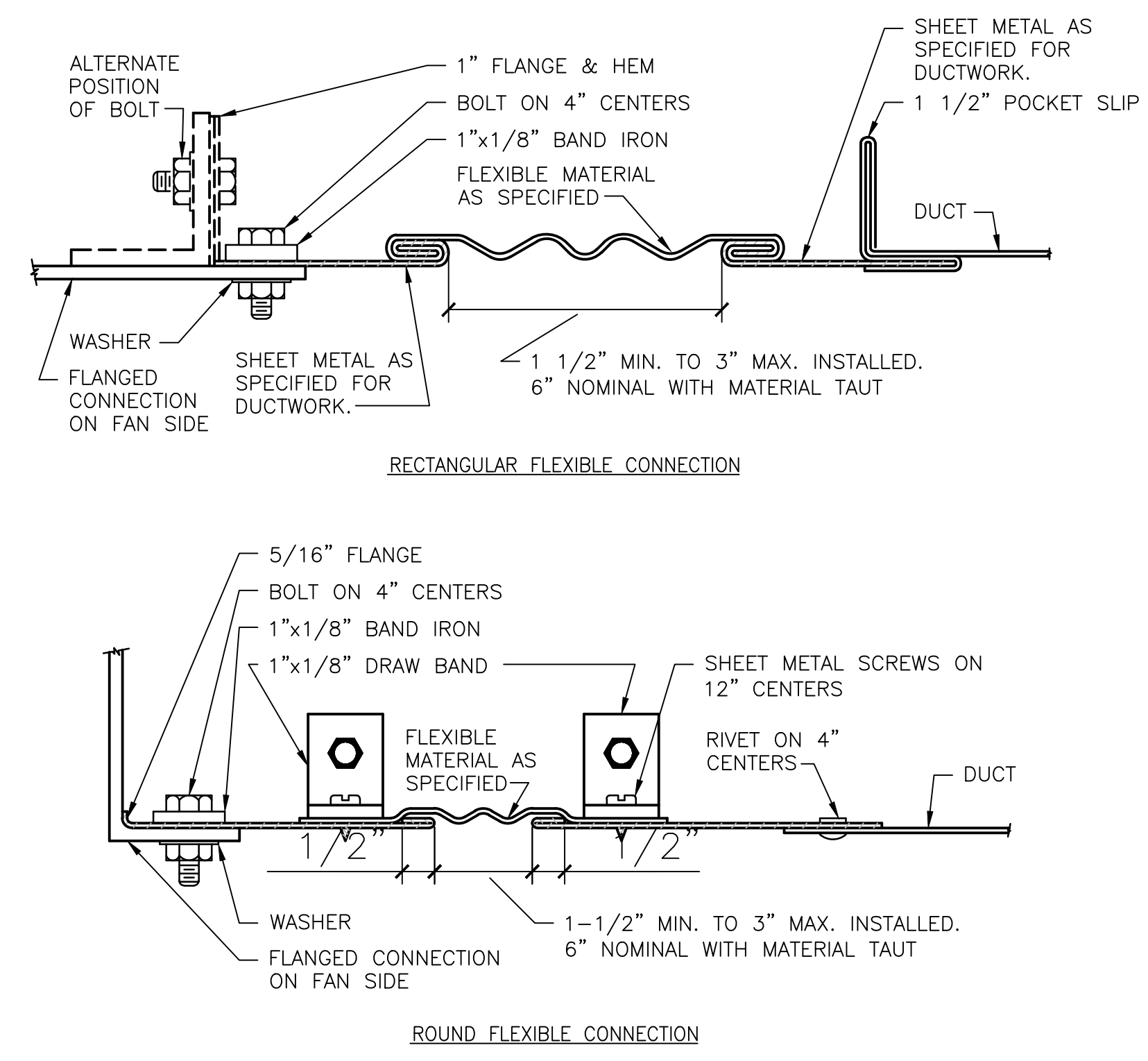


NOTE:  
1. THE SUPPLY REGISTER TAKE-OFF MAY BE USED FOR UP TO 25% OF THE MAIN DUCT CFM. THE BRANCH DUCT TAKE-OFF MAY BE USED FOR UP TO 15% OF THE MAIN DUCT CFM ANYTIME AND UP TO 40% WHEN THE MAIN DUCT VELOCITY IS 1000 FPM OR LESS. THE AIR SPLIT DUCT TAKE-OFF SHALL BE USED IN ALL OTHER CASES AND MAY BE USED AT ANYTIME.  
2. SHOW VOLUME DAMPERS ON FLOOR PLANS.

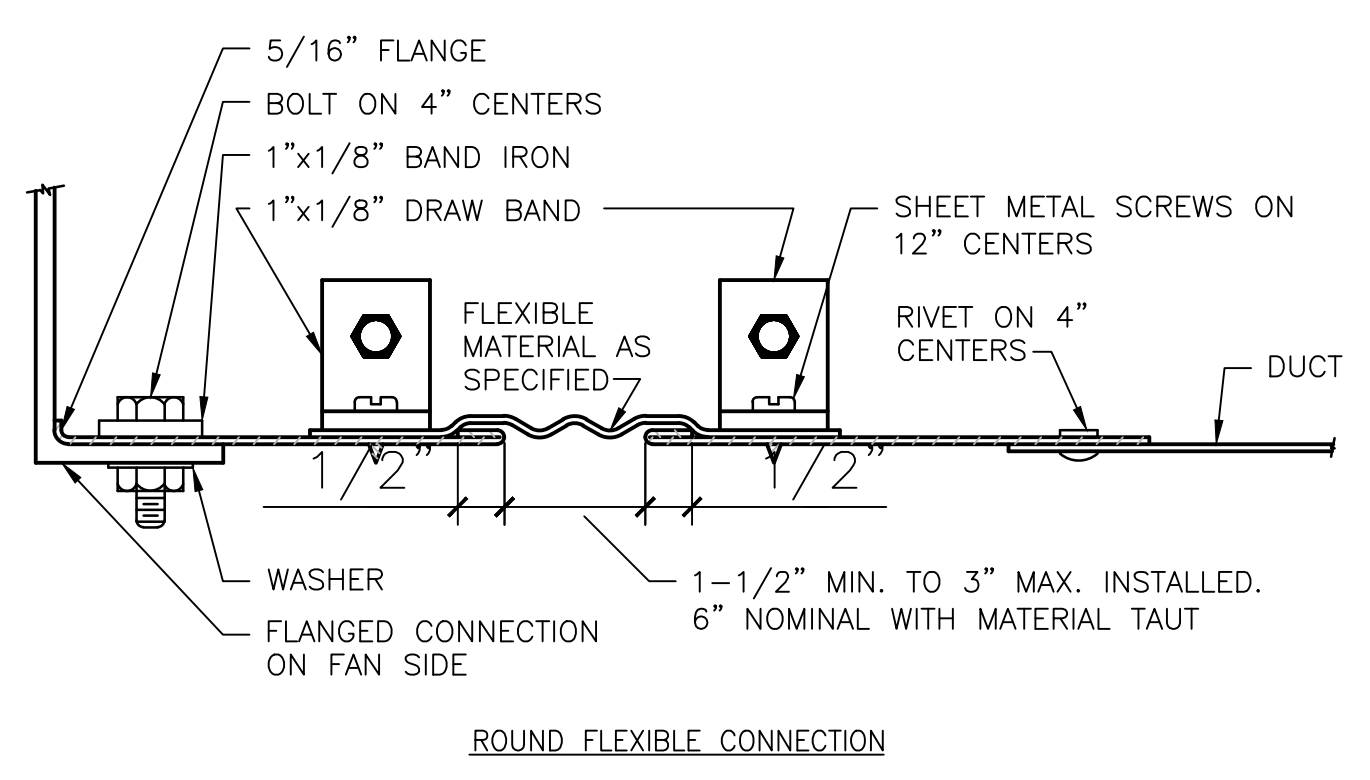
2  
MH-501  
VOLUME DAMPER DETAIL  
NTS



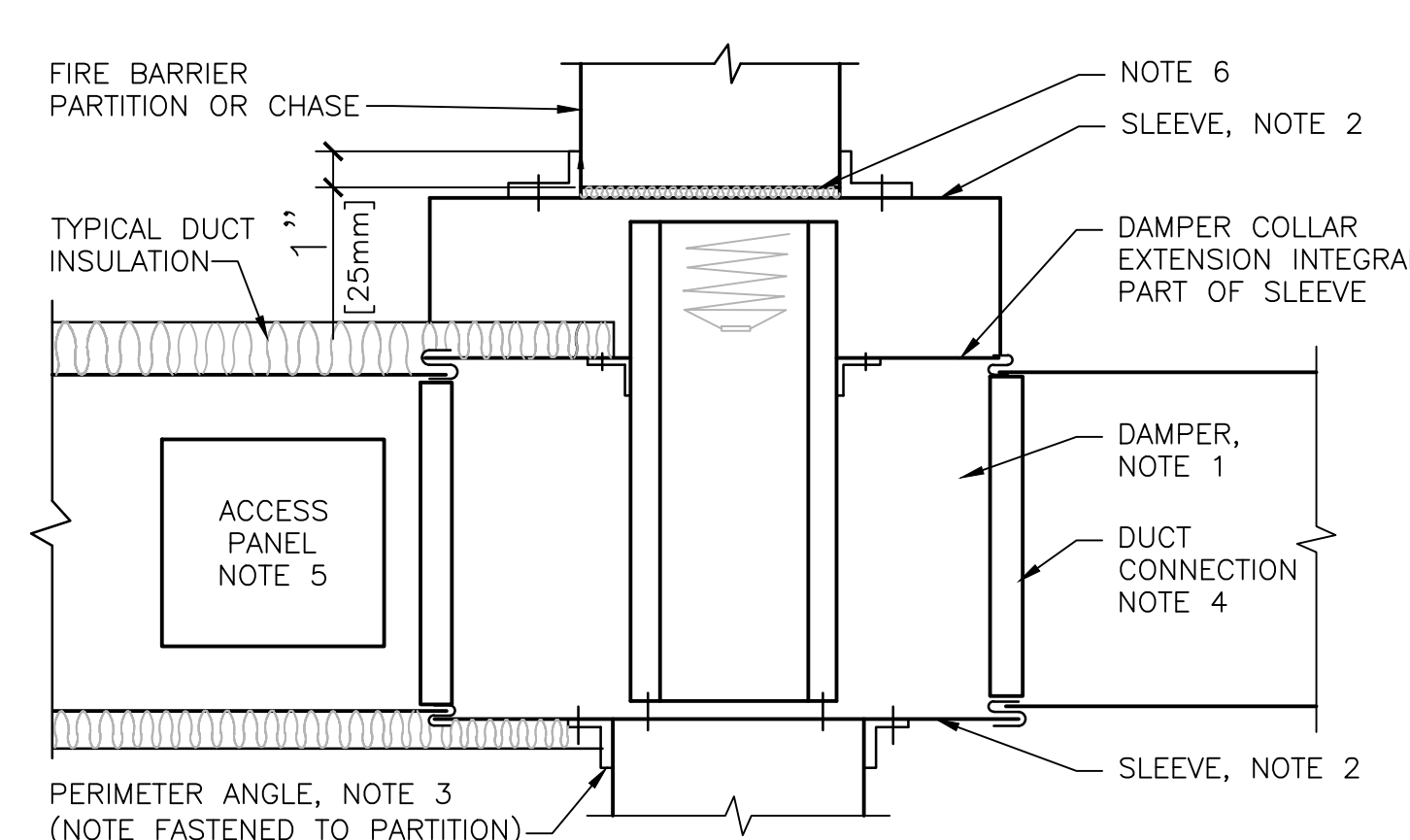
4  
MH-501  
CEILING DIFFUSER DUCTWORK TAKE-OFFS  
NTS



7  
MH-501  
RECTANGULAR AND ROUND FLEXIBLE CONNECTION DETAILS  
NTS

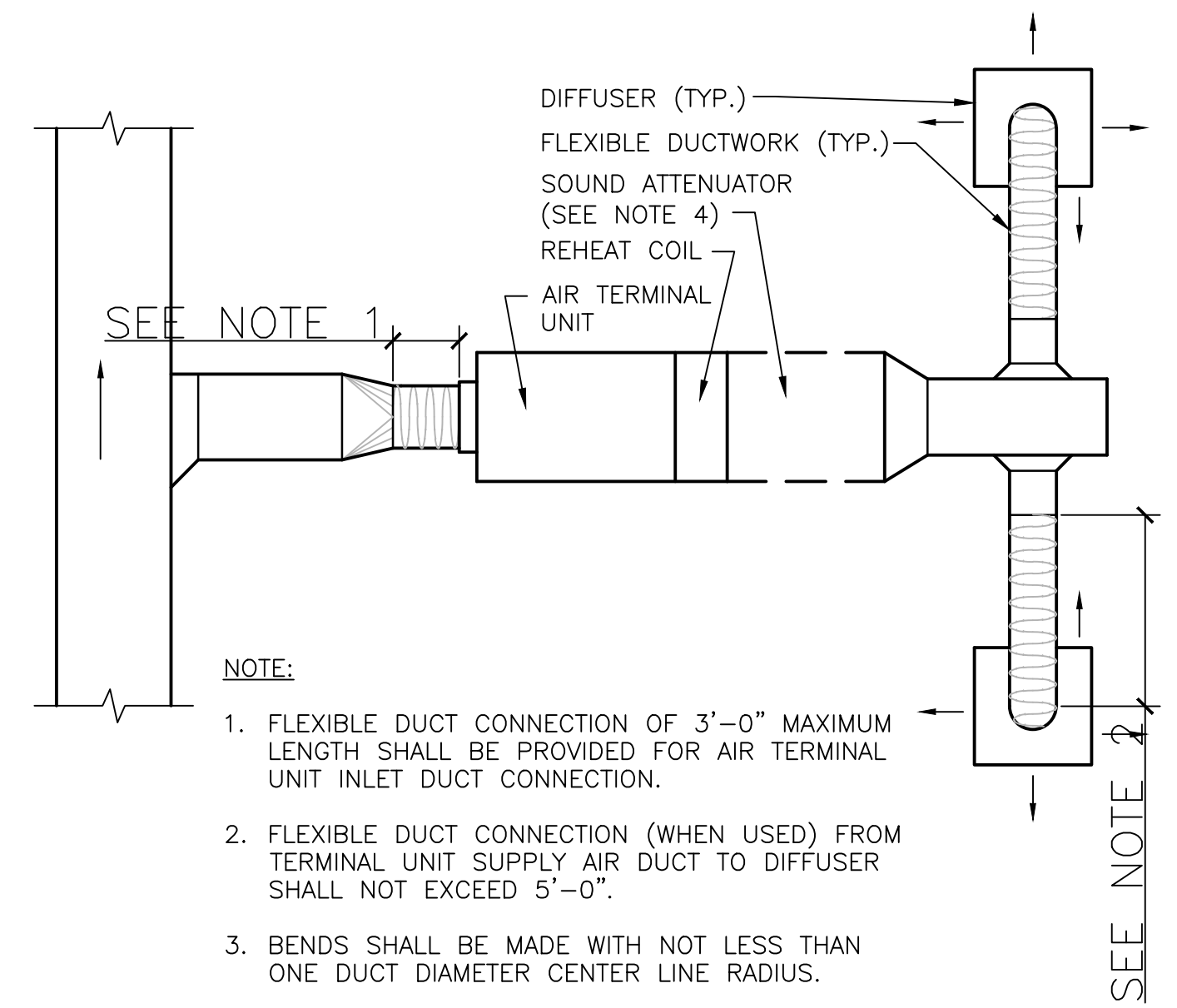


5  
MH-501  
ACCESS PANEL AND DOOR DETAIL  
NTS



NOTE:  
1. A VERTICAL DAMPER IS SHOWN. HORIZONTAL DAMPER INSTALLATION, IS SIMILAR. FOLLOW DAMPER MANUFACTURER'S INSTRUCTIONS, INCLUDING FASTENER OPTIONS AND GAGES FOR SLEEVE AND PERIMETER ANGLES. FIRE DAMPERS MUST BE INSTALLED IN THE PARTITION OR FLOOR AND NOT OUTSIDE THE PENETRATION.  
2. GALVANIZED SLEEVE: GAGE NOT LESS THAN CONNECTING DUCT. FASTEN SLEEVE TO DAMPER FRAME AND TO PERIMETER ANGLES.  
3. PERIMETER ANGLES: GALVANIZED STEEL, NOT LESS THAN 1 1/2"x1 1/2", 14 GAGE, TO PROVIDE 1" MINIMUM OVERLAP OF OPENING ON ALL 4 SIDES.  
4. BREAKAWAY DUCT CONNECTION: CONTRACTOR'S OPTION OF TYPES SHOWN IN SMACNA LPDS, FIG. 2-13, SEAL JOINTS.  
5. ACCESS PANELS: SIZE AND LOCATION TO PERMIT SERVICING THE FUSIBLE LINK OR LINKS.  
6. PROVIDE 1/4" TO 1/2" CLEARANCE ON HEIGHT AND WIDTH. FILL OPEN SPACE WITH ROCK WOOL FIRESTOP FIBER.  
7. ALL DUCT WORK RISERS WHICH ARE RUN EXPOSED, SUCH AS THRU ATTIC FLOORS AND MECHANICAL ROOM FLOORS, SHALL BE PROVIDED WITH 3" HIGH CONCRETE CURB AROUND OPENING FOR DUCT.

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FLEXIBLE DUCT CONNECTION FOR AIR TERMINAL UNITS  
NTS



NOTE:  
1. FLEXIBLE DUCT CONNECTION OF 3'-0" MAXIMUM LENGTH SHALL BE PROVIDED FOR AIR TERMINAL UNIT INLET DUCT CONNECTION.  
2. FLEXIBLE DUCT CONNECTION (WHEN USED) FROM TERMINAL UNIT SUPPLY AIR DUCT TO DIFFUSER SHALL NOT EXCEED 5'-0".  
3. BENDS SHALL BE MADE WITH NOT LESS THAN ONE DUCT DIAMETER CENTER LINE RADIUS.  
4. USE SOUND ATTENUATOR ONLY IF REQUIRED TO MEET DESIGN ROOM NC LEVEL.

8  
MH-501  
SECTION THRU TYPICAL FIRE DAMPER INSTALLATION  
NTS

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FINAL SUBMISSION  
FULLY SPRINKLERED

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Date		

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Drawing Title	MECHANICAL DETAILS
Scale	NOT TO SCALE
Approved Project Director	

Project Title	BALTIMORE VA MEDICAL CENTER MANAGED CARE / ED IMPROVEMENTS AND ENROLLMENT CENTER
Location	BALTIMORE, MARYLAND
Date	8/17/2012

Project Number	512-511
Building Number	1
Drawing Number	MH-501
Dwg. 99 of 175	

