



Phone: (419) 865-5000 • Fax: (419) 865-1375
www.awv.com

MAINTENANCE AND OPERATING MANUAL

4" and 6" Deep Stationary Louvers

LOUVER STORAGE INSTRUCTIONS

Louvers are crated at AWW's factory in an open crate system (unless otherwise specified by customer). All crates upon arrival at the jobsite should be covered with a tarp or waterproof cover to assure maximum protection. AWW recommends not opening crating at the jobsite until the time of installation.

LOUVER INSTALLATION

Reference the appropriate installation drawing for louver mounting details and instruction (see table below). Lift louvers into place; use a spreader bar if required. Care must be taken to ensure the louver frame is not overly racked or twisted. Louvers are to be installed per louver mounting details (see table below) with respect to blade orientation and airflow. Louvers must be installed square and plumb. Install flashing (if required) and seal around perimeter of louver as required.

Drawing Number	Drawing Title	Revision
900	Standard Installation Methods	A
900-1	Standard Installation Methods for Extensions and Sill Pans	A
22465-STD	Standard Mullion Installation Instructions	A
22466-STD	Architectural Mullion Installation Instructions	A

LOUVER MAINTENANCE INSTRUCTIONS

Check for and remove any foreign matter that may have accumulated on blades, linkage, screens, or other surfaces which would cause interference with the movement or resistance of airflow.

Make sure all moving parts; blades, linkage, bearings and shafts are free and can move easily. Inspect, clean and lightly lubricate these surfaces with either Moli-spray oil or dry graphite as required. Never use regular lubricating oil as it tends to attract dirt and grit.

Check for and remove any foreign materials that may interfere with complete blade closure effective sealing.

Observe the units through full operating cycle. Tighten and loose connections at the actuator. If the unit does not open properly or does not close tightly, adjustments should be made at the actuator linkage. It may be advisable to have the adjustment accomplished by a local control contractor.



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MAINTENANCE AND OPERATING MANUAL

4" and 6" Deep Stationary Louvers

LOUVER FINISH CLEANING

If you have a painted louver and the need to clean or remove deposits arises a variety of methods are available. Two precautions: (1) Do not use wire brushes, abrasives, or similar cleaning tools which will mechanically abrade the coating surface. (2) The use of one of the following cleaning agents listed below should be used on finished surfaces. Other harsh cleaning agents should be avoided, such as aromatic and chlorinated solvents, keytones, esters, lacquer thinner and paint remover.

HOT OR COLD DETERGENT SOLUTIONS

A 5% solution in water of commonly used commercial and industrial detergents will not have any deleterious effect on the finished surface. These solutions should be followed by an adequate rinse of water. Use a cloth or soft bristled brush for application.

SOLVENTS

Solvents that may be used to remove non- water soluble deposits (tar, grease, oil, paint, graffiti, etc.) from the finished surface.

A. Alcohols

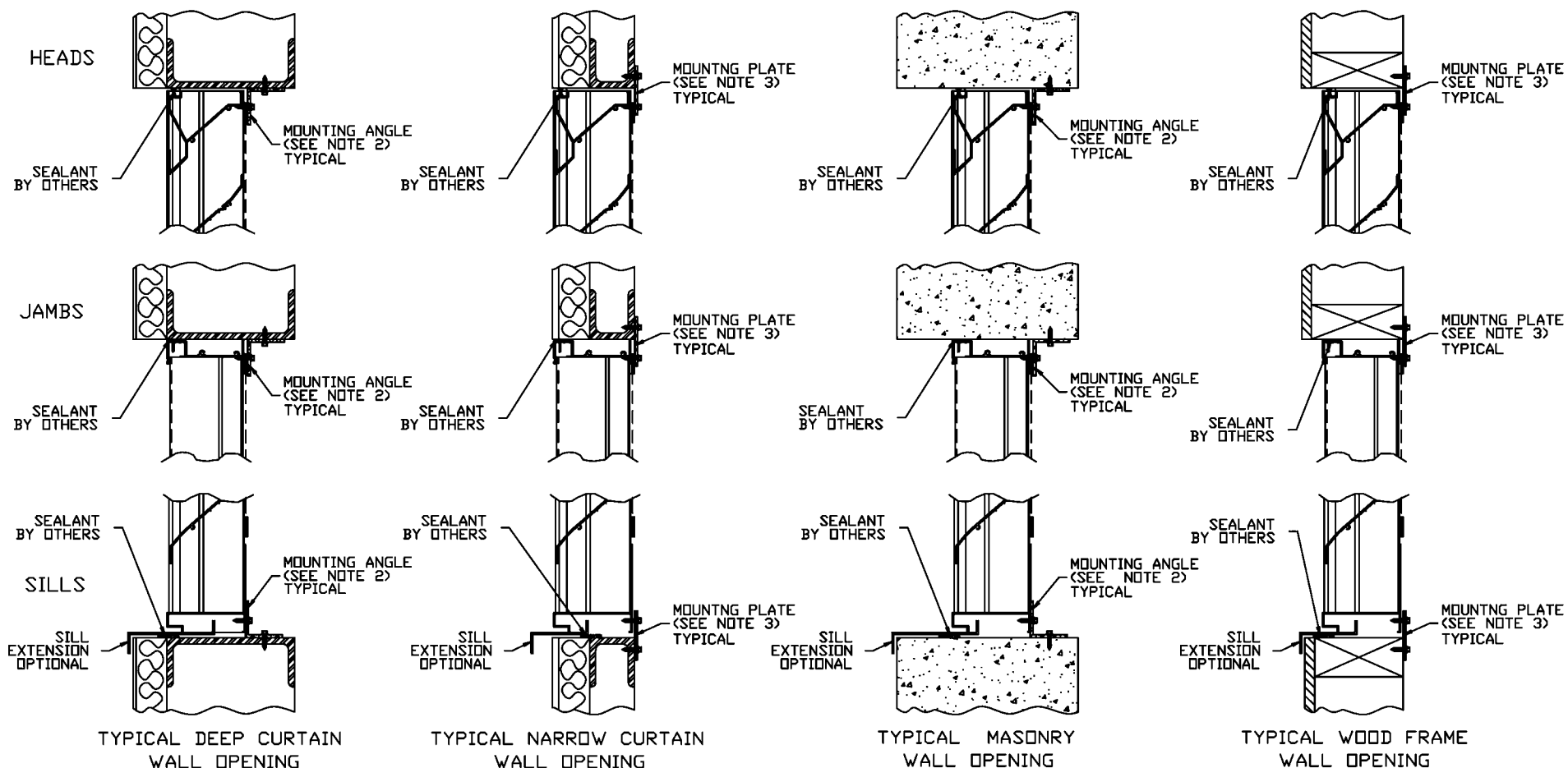
- Denatured alcohol (ethanol)
- Isopropyl (rubbing alcohol)
- Methanol (wood alcohol)

B. Petroleum Solvents and Turpentine

- VM & P naptha
- Mineral Spirits
- Kerosene
- Turpentine

WARRANTY

Misuse or abuse of the cleaning agents listed above will result in a voiding of any warranty for the surface affected.



INSTALLATION NOTES

1. ALL MOUNTING FASTENERS TO OPENINGS, SEALANT, SHIMS, MASONRY ANCHORS, ETC. ARE NOT SUPPLIED OR INSTALLED BY LOUVER MFG.
2. CLIP ANGLES, MOUNTING PLATES, FASTENERS TO LOUVERS, AND STRUCTURAL SUPPORTS CAN ONLY BE PROVIDED AT AN ADDITIONAL COST. PLEASE CONSULT FACTORY FOR PRICING.
3. RECOMMENDED MOUNTING FOR DEEP WALL OPENINGS: AS A MINIMUM USE 1-1/2 x 1-1/2 x 1/8 CONTINUOUS PLATE OR CLIP ANGLES ON INSIDE PERIMETER OF LOUVER FRAME WITH 1/4" DIAMETER FASTENERS ON MAX. 18" CENTERS. THE LOCATION OF 1/4" DIAMETER MOUNTING ANCHOR BOLTS SHOULD BE SUCH AS TO GIVE A MINIMUM OF 2 BOLTS ON A SIDE.
3. RECOMMENDED MOUNTING FOR NARROW WALL OPENINGS: AS A MINIMUM USE 1/8 x 1-1/2 x 3 MOUNTING PLATES OR CONTINUOUS PLATE ON INSIDE PERIMETER OF LOUVER FRAME WITH 1/4" DIAMETER FASTENERS ON MAX. 18" CENTERS. THE LOCATION OF 1/4" DIAMETER MOUNTING BOLTS SHOULD BE SUCH AS TO GIVE A MINIMUM OF 2 BOLTS ON A SIDE.

5. WIDTH AND HEIGHT DIMENSIONS ARE OPENING SIZES. LOUVERS ARE MADE UNDERSIZED, TYPICAL 1/4" AROUND PERIMETER OF LOUVER FRAME. LOUVERS WITH LARGER UNDERSIZING CAN BE SUPPLIED UPON REQUEST.

6. THESE ARE GENERAL MOUNTING ARRANGEMENTS FOR LOUVER WALL OPENINGS. VIEWS SHOWN SHOULD COVER MOST MOUNTING SITUATIONS ENCOUNTERED. LARGE MULTIPLE WIDE AND/OR HIGH LOUVER PANEL ASSEMBLIES REQUIRE STRUCTURAL SUPPORT ON INTERIOR OF LOUVER PANELS, WHICH CAN BE PROVIDED AT AN ADDITIONAL COST.

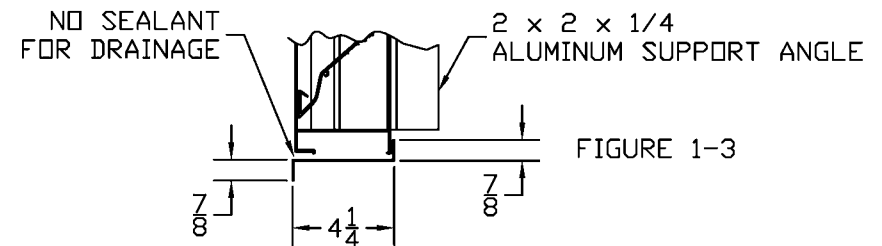
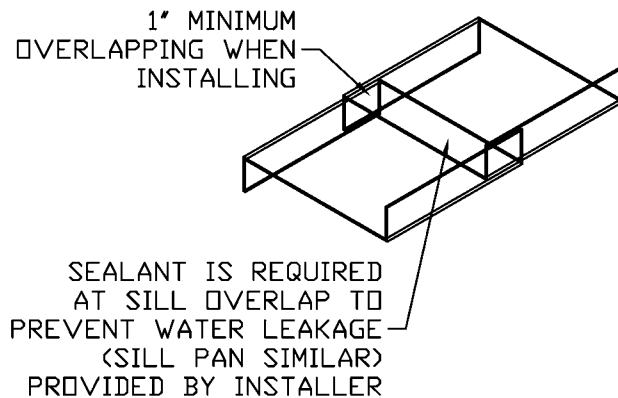
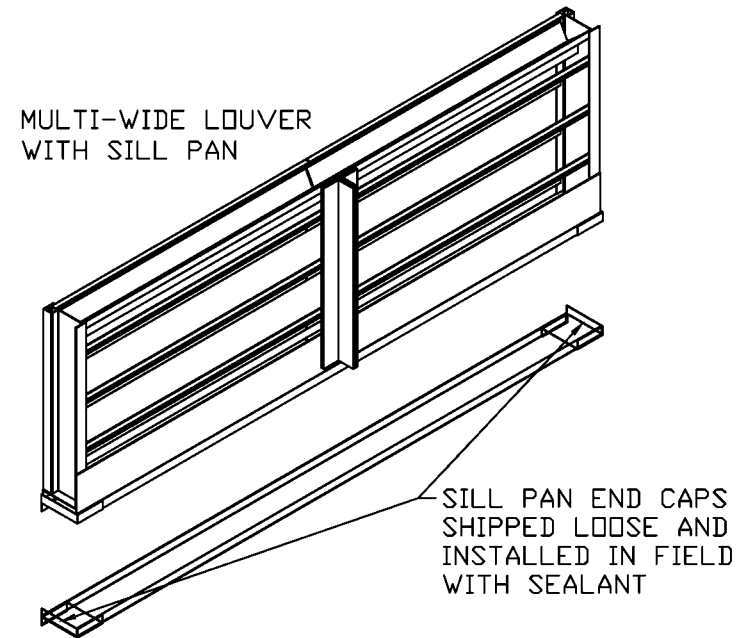
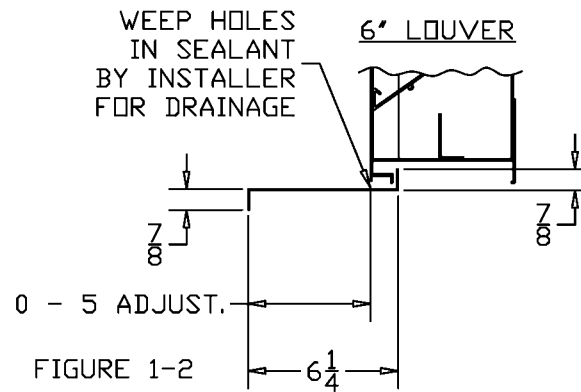
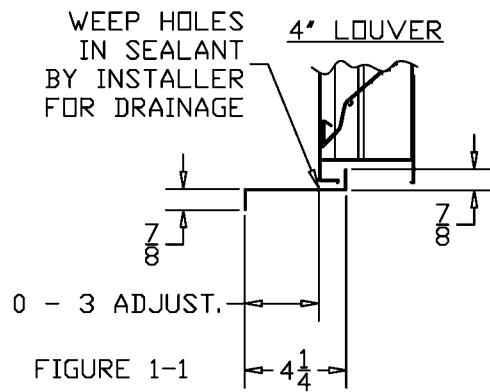
7. REFERENCE DRAWING No. 22465 AND 22466 FOR LOUVER MULLION INSTALLATION INSTRUCTIONS AS REQUIRED.

8. BECAUSE LOCAL BUILDING CODES AND INSTALLATION STANDARDS MAY VARY FROM OUR RECOMMENDED MINIMUMS, WE RECOMMEND THAT THEY BE USED OVER OURS WHEN AND WHERE REQUIRED.

9. LOUVERS ARE NOT TO BE LIFTED OR RIGGED USING LOUVER BLADES OR HOLES PRESENT OR PLACED IN THE LOUVER FRAME.

B	ADDED NOTE 9	7-23-99	ML
A	UPDATED	8-23-01	JNC
REVISION		DATE	BY APPR
awv american warming and ventilating A MESTEK COMPANY 7301 INTERNATIONAL DRIVE HOLLAND, OHIO Phone (419) 865-5000 Fax (419) 865-1375			
STANDARD INSTALLATION METHODS			
CKD BY	APP'D BY	DWG. NO.	REV.
DRN BY	BY	DATE	9-30-96
900			B

INSTALLATION METHODS



SILL EXTENSIONS

SILL PANS

STANDARDS & INSTALLATION NOTES

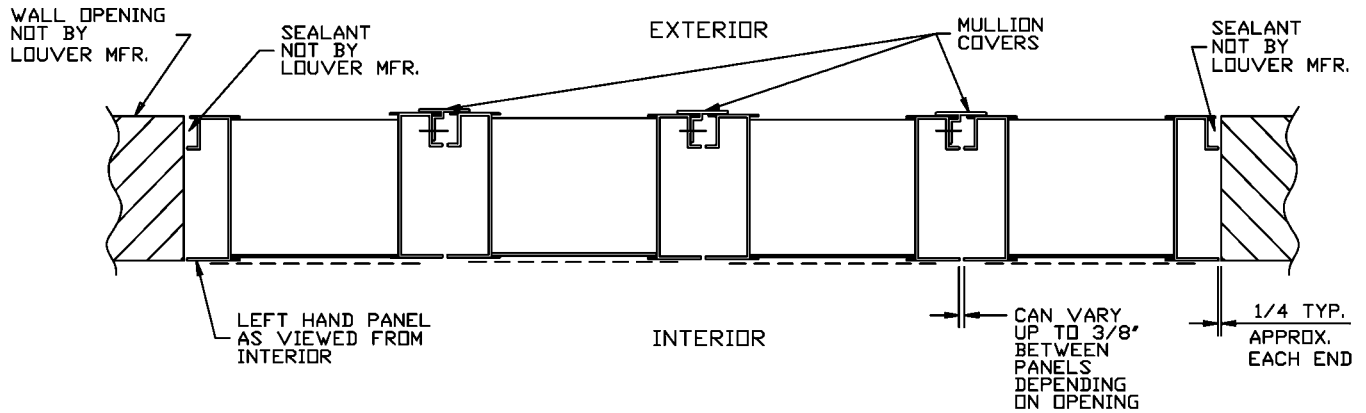
1. SILL EXTENSIONS ARE SUPPLIED IN STANDARD LENGTHS & DEPTHS
2. SILL PANS ARE A STANDARD IN MULTI-WIDE LOUVER ASSEMBLIES THAT HAVE AN ARCHITECTURAL MULLION. THE PROVISION OF SILL PANS WITH OTHER LOUVERS IS OPTIONAL. SILL PANS CAN BE FORMED IN VARIOUS LENGTHS & DEPTHS TO SUIT CUSTOMER NEEDS.
3. SILL EXTENSIONS & PAN SILLS FOR MULTI-WIDE LOUVER ASSEMBLIES ARE PROVIDED IN TYPICAL LENGTHS UP TO 96' (8'-0").

4. BOTH SILL EXTENSIONS & SILL PANS ARE FINISHED TO MATCH THE TYPE OF FINISH & COLOR PROVIDED ON THE LOUVER ASSEMBLY.
5. SILL EXTENSIONS ARE ADJUSTABLE TO THE EXTERIOR SIDE OF THE LOUVER. PROVISION OF ADDITIONAL DEPTH IS OPTIONAL. (SEE FIGURES 1-1 & 1-2).
6. SILL EXTENSIONS & SILL PANS ARE PROVIDED IN 0.025" THICK ALUMINUM OR 20 GA. GALVANIZED STEEL. PROVISION OF ADDITIONAL MATERIAL THICKNESS IS OPTIONAL.

A	UPDATED	02/23/06	JMC	
	REVISION	DATE	URL	APPD
STD. INSTAL. METHODS FOR SILL EXTENSIONS & SILL PANS				
CKD BY	APPD BY			
DRN BY	8 JV	DWG. NO.		
DATE	10/01/96	900-1	A	

INSTALLATION INSTRUCTIONS FOR STANDARD VERTICAL AND HORIZONTAL LOUVER MULLIONS

MULTI-WIDE LOUVERS WITH VERTICAL MULLION COVER(S)



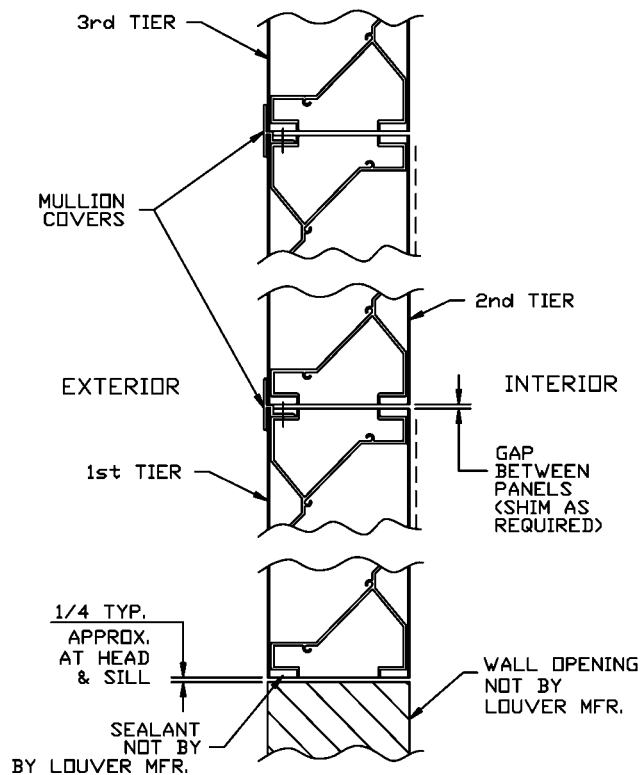
TYPICAL PLAN SECTION VIEW

WHEN INSTALLING FROM INTERIOR SIDE OF OPENING, THE RIGHT HAND SIDE OF EACH LOUVER PANEL WILL HAVE A MULLION COVER ATTACHED EXCEPT FOR THE FAR RIGHT UNIT.

INSTALL UNITS LEFT TO RIGHT.

MULLION COVER(S) ARE NOT REQUIRED TO BE FASTENED TO THE OVERLAPPED UNIT.

MULTI-HIGH LOUVERS WITH HORIZONTAL MULLION COVER(S)



TYPICAL ELEVATION SECTION VIEW

HORIZONTAL MULLION COVERS ARE ATTACHED AT THE HEAD OF THE 1st, 2nd, 3rd, ETC. TIER OF LOUVERS.

THE 1st TIER HORIZONTAL MULLION COVER OVERLAPS THE 2nd TIER; 2nd TIER HORIZONTAL MULLION COVER OVERLAPS THE 3rd TIER, ETC.

THE TOP TIER UNIT(S) HAS NO HORIZONTAL MULLION COVERS ATTACHED.

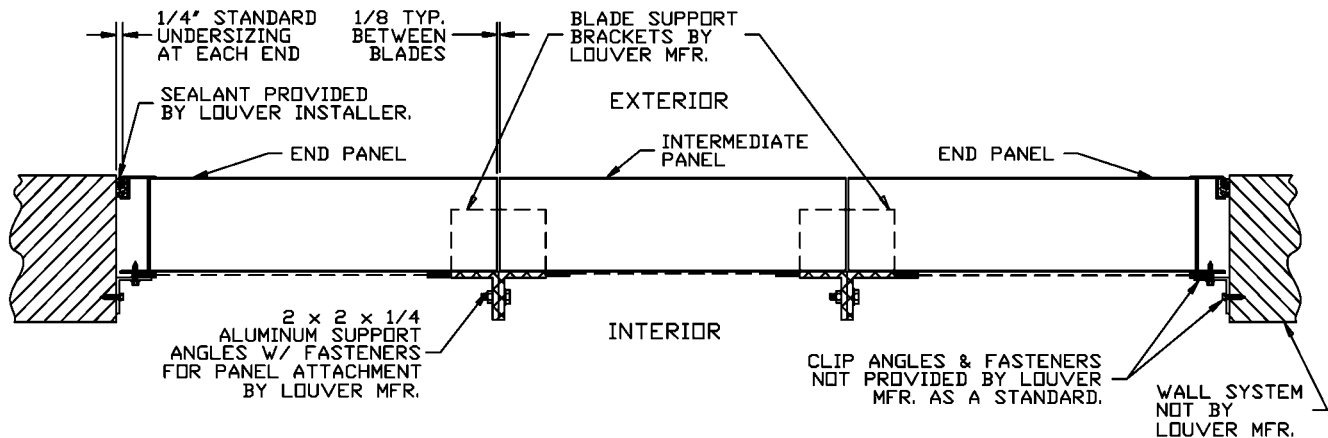
OPENINGS THAT REQUIRE MULTIPLE LOUVER PANELS IN BOTH WIDTH AND HEIGHT WILL REQUIRE INTERNAL STRUCTURAL SUPPORTS. IT IS RECOMMENDED THAT LARGE QUANTITIES BE DIVIDED WITH STRUCTURAL MEMBERS SO THAT THE LOUVERS WILL SPAN EITHER WIDTH OR HEIGHT WITH A SINGLE PANEL. UNUSUALLY HIGH WIND LOADING MAY REQUIRE STRUCTURAL SUPPORTS OF NON-MULTIPLE WIDE AND MULTIPLE HIGH ASSEMBLIES. STRUCTURAL SUPPORTS AND MOUNTING ACCESSORIES ARE AVAILABLE AS OPTIONAL EQUIPMENT FROM LOUVER MANUFACTURER.

A		UPDATED	02/05/00	JMC	
REVISION		DATE	DRN	APP'D	
awv american warming and ventilating A MESTEK COMPANY 7301 INTERNATIONAL DRIVE HOLLAND, OHIO Phone (419) 885-5000 Fax (419) 885-1375					
MULLION INSTALLATION INSTRUCTIONS					
CHK'D BY	APP'D BY				
DRN'D BY	BJD	DWG. NO.			
DATE	04/16/96	22465-STD	REV.	A	

ST22465

INSTALLATION INSTRUCTIONS FOR ARCHITECTURAL VERTICAL AND HORIZONTAL LOUVER MULLIONS

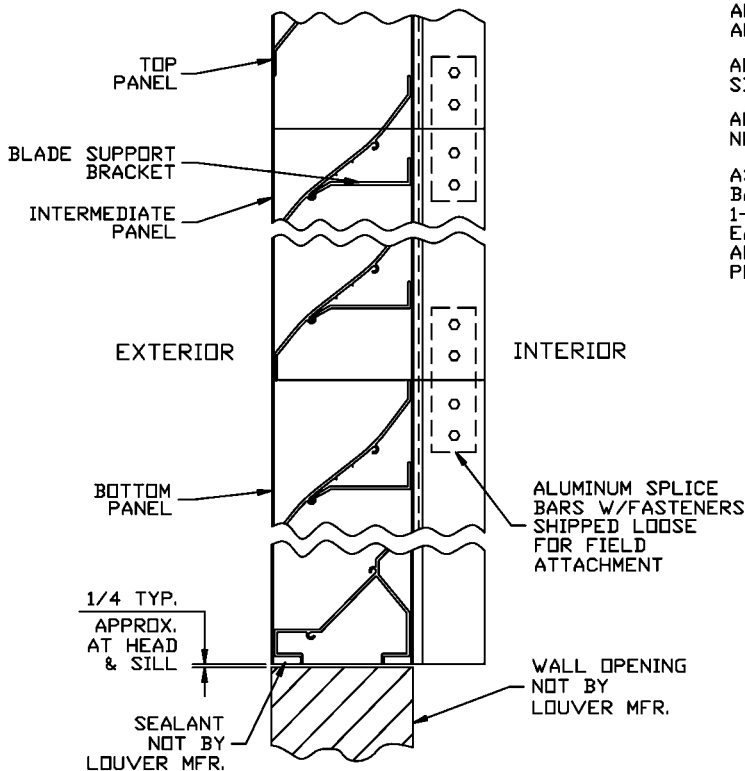
MULTI-WIDE LOUVERS WITH VERTICAL MULLION



WHEN INSTALLING FROM INTERIOR SIDE OF OPENING, THE END PANELS ARE FABRICATED WITH VISIBLE JAMB SECTIONS ON ONE END AND A BLADE SUPPORT ANGLE ON THE OTHER. ALL INTERMEDIATE PANELS HAVE BLADE SUPPORT ANGLES LOCATED ON THE INTERIOR. THIS GIVES A CONTINUOUS BLADE APPEARANCE FROM THE EXTERIOR.

INSTALL ONE END PANEL FIRST BY MOUNTING CLIP ANGLES & FASTENERS TO THE LOUVER & WALL SYSTEM AROUND INTERIOR PERIMETER. CONTINUE INSTALLING WITH ADJACENT INTERMEDIATE PANELS BY BOLTING PANELS TOGETHER AT $2 \times 2 \times 1/4$ SUPPORT ANGLES SUPPLIED WITH FASTENERS PROVIDED BY LOUVER MFR. EACH INTERMEDIATE PANEL ALSO NEEDS TO BE MOUNTED TO THE OPENING AT BOTH HEAD AND SILL FRAME MEMBERS. AFTER INSTALLING ALL INTERMEDIATE PANELS AS DESCRIBED, FINISH BY INSTALLING OPPOSITE END PANEL AS DISCUSSED EARLIER. REFERENCE DRAWINGS 900 AND 900-1.

MULTI-HIGH LOUVERS WITH HORIZONTAL MULLION



ALL TOP PANELS HAVE A HEAD FRAME MEMBER AND NO SILL MEMBER.

ALL INTERMEDIATE PANELS HAVE NO HEAD OR SILL FRAME MEMBERS.

ALL BOTTOM PANELS HAVE A SILL FRAME MEMBER AND NO HEAD MEMBER.

ASSEMBLE FROM BOTTOM TO TOP BY ATTACHING SPLICE BARS TO $2 \times 2 \times 1/4$ SUPPORT ANGLES AND/OR $1-1/2 \times 1-1/2 \times 1/8$ INTERMEDIATE STIFFENER ANGLES. EACH PANEL NEEDS TO BE INDIVIDUALLY FASTENED AROUND OUTER PERIMETER TO THE OPENING FOR PROPER INSTALLATION.

OPENINGS THAT REQUIRE MULTIPLE LOUVER PANELS IN BOTH WIDTH AND HEIGHT WILL REQUIRE INTERNAL STRUCTURAL SUPPORTS. IT IS RECOMMENDED THAT LARGE QUANTITIES BE DIVIDED WITH STRUCTURAL MEMBERS SO THAT THE LOUVERS WILL SPAN EITHER WIDTH OR HEIGHT WITH A SINGLE PANEL. UNUSUALLY HIGH WIND LOADING MAY REQUIRE STRUCTURAL SUPPORTS OF NON-MULTIPLE WIDE AND MULTIPLE HIGH ASSEMBLIES. STRUCTURAL SUPPORTS AND MOUNTING ACCESSORIES ARE AVAILABLE AS OPTIONAL EQUIPMENT FROM LOUVER MANUFACTURER.

TYPICAL ELEVATION SECTION VIEW

A		UPDATED	12/05/01	JHC	
REVISION		DATE	12/05/01	APPD	
awv american warming and ventilating A MESTEK COMPANY 7301 INTERNATIONAL DRIVE HOLLAND, OHIO Phone (419) 865-5000 Fax (419) 865-1375					
MULLION INSTALLATION INSTRUCTIONS					
CKD BY	APPD BY				
DRN BY	JJD	DATE	10/02/96	REV.	A
22466-STD					