



## ALS & ALF – Linear Diffusers

 Install plenum in ceiling & install drywall



Insert Linear Diffuser with its bracket in the plenum opening

• Reveal the adjustment screw behind the pattern controller slider





(This step for ALS17, ALS27, ALS37 only)

• Screw the Linear Diffuser Bracket to raise the flange to the drywall



• Hide the adjustment screw behind the pattern controller slider



(This step for ALS17, ALS27, ALS37 only)



## AIRVECTOR. INSTALLATION INSTRUCTIONS

Hemmed Lea Plenum (option ALFxPL)

## ALS & ALF – Linear Diffusers

The following steps are for -P option only

## Installation and Surface Finishing **Procedure (Frame/Option -P)**

1. Install a 28 gauge sheet metal angle 1/2" x 1" on edge of drywall opening on the inside of ceiling or wall and screw drywall screws 1/2" from the edge at least every 12" apart. See Figure 1.

2. Secure the linear diffuser in the ceiling with either concealed mounting brackets on drywall or in a hemmed leg plenum (see page 1 above) or without the concealed mounting brackets directly into a plenum or framing member. Punch counter-sunk holes in flange and/or screw through the flange of the linear diffuser and through drywall into the sheet metal angle at least every 12" (305) with drywall screws 1/8" from the edge of the linear diffuser flange. See Figure 2.

3. Clean and degrease tapered border with cleaner/degreaser (ex. Pure Strength by Rust-Oleum). Continue to step 2.

4. Apply a bonding agent (ex. Plaster Weld by Larsen Products Corp.) to tapered border and allow to dry minimum 1 hour or to manufacturer's instructions.

5. Apply a first coat of joint compound (ex. Dura bond by US Gypsum) onto diffuser flange and extend 3" (76) from edge of flange onto drywall.

6. Embed 4" (102) wide mesh tape into joint compound and add another layer of joint compound atop the mesh tape and smooth. Let dry completely before moving to the next step. Tip: Be sure to eliminate all air bubbles from mesh tape and overlap onto drywall to assure best results, but do not extend tape into slot opening of the diffuser.

7. Apply minimum two coats of standard finish compound (spackle), letting each dry completely and smooth each coat with fine grit sand paper until flush with drywall. Tip: Use wetted sponge for very rough areas of spackle and finish with fine grit sand paper.

8. Apply primer to flush finishing compound and paint as scheduled.

9. DO NOT run HVAC system before allotting enough time for compounds to cure. Doing so could cause compound to be more prone to cracking.



Punch counter sunk hole in flange and/or screw through flange and drywall into sheet metal angle at least every 12" (305) Concealed bracket Screws installed (option -4) in figure 1 Sheet Metal Angle **Finishing Flange** Drywall Joint Compound Bonding Agent 4" (102) Wide Mesh Tape 1/8" from flange edge Finishing Compound (spackle)

Figure 1

Figure 2