



**Linear
Slot Diffusers
Models SLAD/Free Flo/Pro Jet
Installation
Operation
and Maintenance**

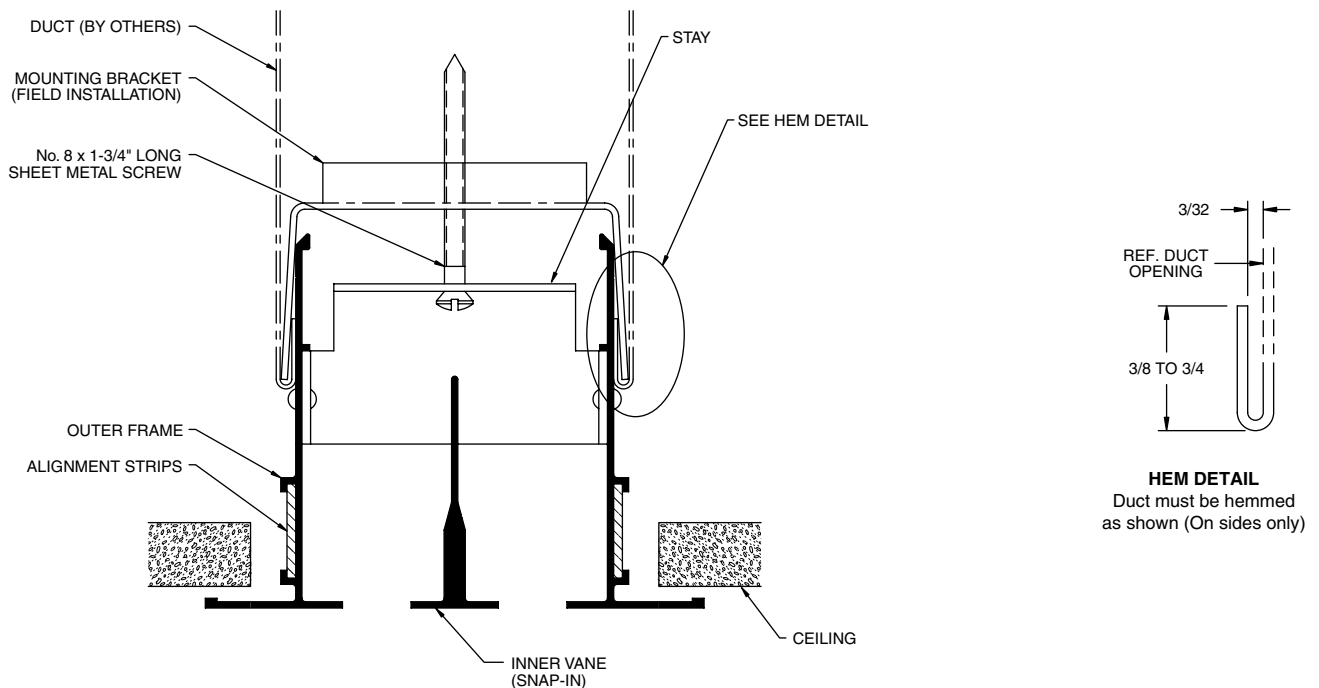
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SLAD / Free Flo / Pro Jet Installation Instructions

A. HEMMED DUCT INSTALLATION

- Duct supports linear diffuser
 - Drywall pre-installed
1. After plenum is securely fixed above the ceiling, position mounting brackets in the hem edge of the plenum so that they will line up with the linear diffuser's cross members (stays). The hem edge may be crimped into the hole of the mounting bracket with pliers. This will retain the mounting bracket in position as the mounting screws are attached.
 2. Before positioning the diffuser in the ceiling, remove the pattern control element/adjustment vane assembly from a 1-slot diffuser, or remove the inner vane(s) from a 2- or more-slot diffuser to expose the mounting holes in the diffuser cross member (stay). Both the pattern control element/adjustment vane assembly and the inner vane(s) can be removed by pulling them out of the friction clip from the face side of the diffuser. This is more easily done at the floor level.
 3. Position the diffuser in the ceiling and push the No.8 x 1-3/4" screw through the diffuser cross member and screw into the mounting bracket until the diffuser is pulled snug to the ceiling.
 4. Re-attach the pattern control element/adjustment vanes assembly or vanes that were previously removed.

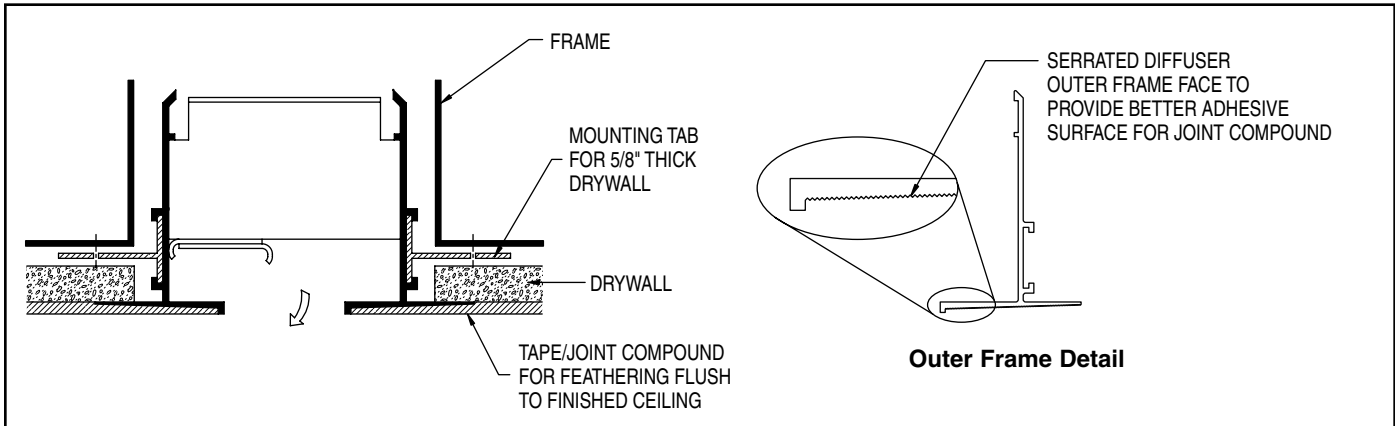


Free Flo / Pro Jet Installation Instructions

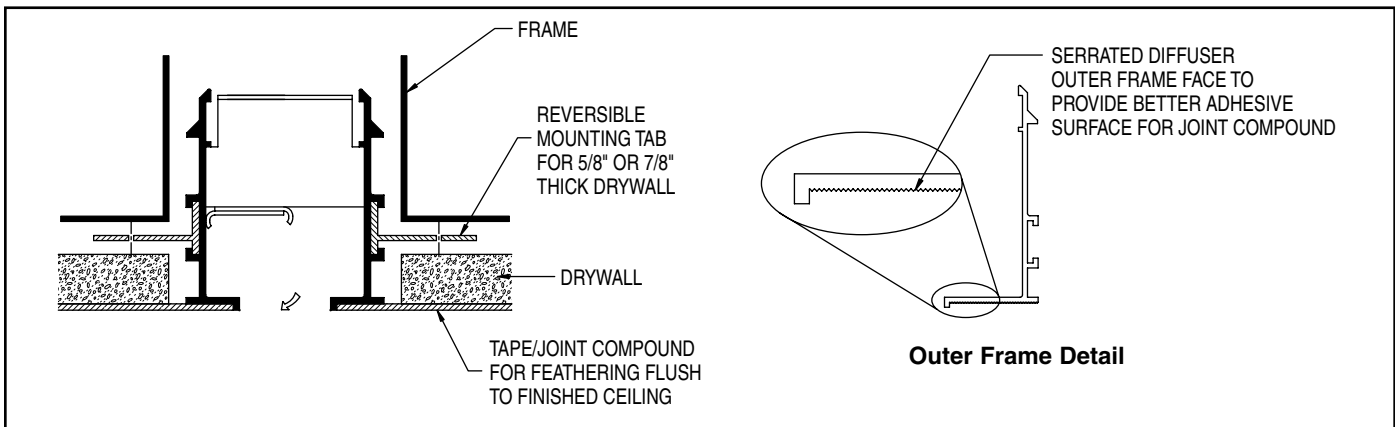
B. Ceiling Supported

- Installed prior to drywall installation

Models FFBF / PJBF Installation Detail



Models FFCM / PJCM Installation Detail

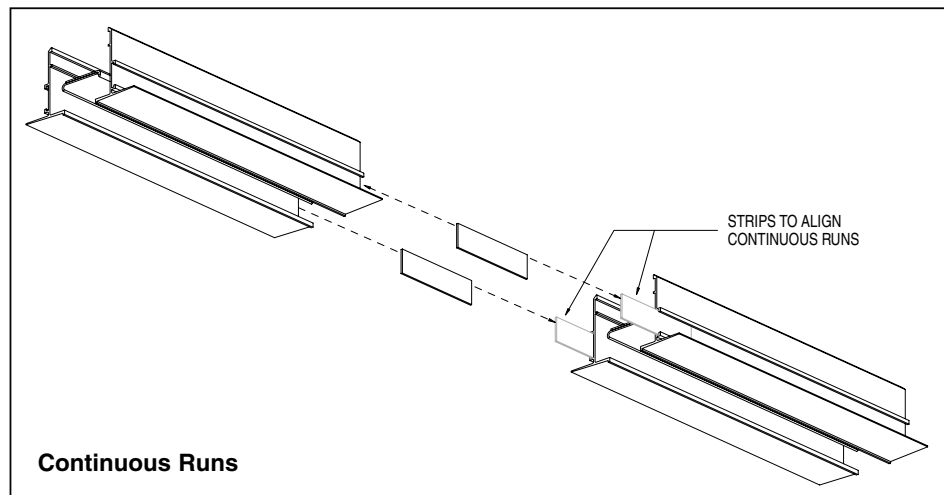
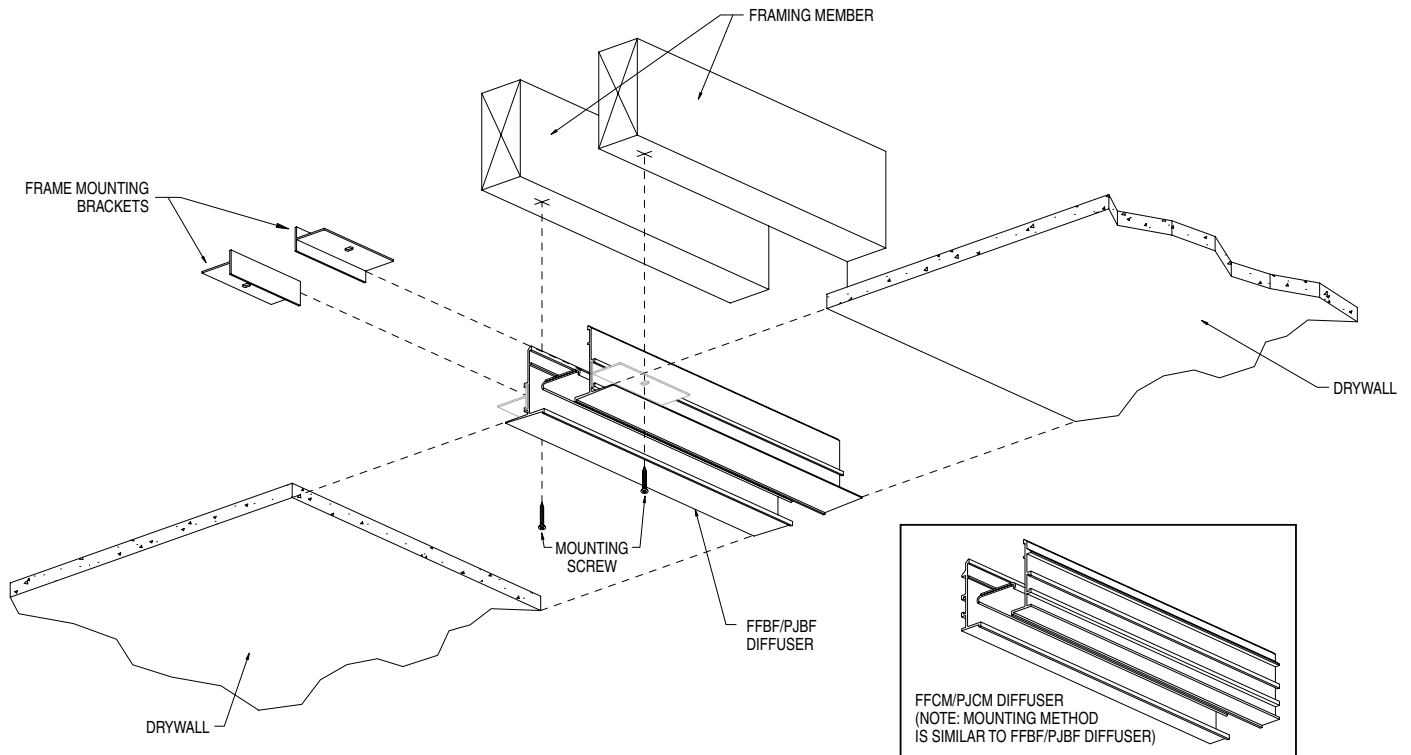


Diffuser Face Preparation Notes

- Diffuser face comes serrated for better adhesion of joint compound.
- Thoroughly remove any oil, dust, dirt, or residue from the entire diffuser face using a solvent or degreaser.
- For increased adhesion, apply a bonding agent along the entire diffuser face. Be sure to allow sufficient drying time before applying joint compound.
- Embed mesh or paper tape as standard practice across joints to prevent cracking.

Free Flo / Pro Jet Installation Instructions

During Hard Ceiling Installation



BF/CM Frame Style Installation

- Slide mounting brackets into diffuser outer frame channels. Make sure brackets are appropriately spaced to evenly distribute diffuser weight (approximately 20" - 24").
- Lift Free Flo/Pro Jet diffuser up to the framing members. Secure into place using mounting screws appropriate for the framing material. Screws are field supplied.
- Position drywall between diffuser frame mounting brackets and flanged face of diffuser.
- Apply joint compound to face of diffuser and feather to drywall ceiling for a clean, finished look. (See "Diffuser Face Preparation Notes", page 4)

Expansion & Contraction (in inches) of Linear Aluminum Diffusers

The expansion and contraction of aluminum linear diffusers, due to temperature differential, is shown below. In most normal installations, the slight hairline crack that results when linear diffusers are butted together, will be sufficient to allow for normal expansion.

GRILLE LENGTH (ft.)	TEMPERATURE DIFFERENTIAL										
	5°	10°	15°	20°	30°	40°	50°	60°	70°	80°	90°
5'	.004	.008	.012	.016	.024	.032	.039	.048	.054	.062	.070
10'	.008	.016	.024	.031	.048	.060	.078	.096	.110	.120	.160
20'	.016	.031	.047	.062	.093	.130	.160	.190	.220	.250	.320
30'	.024	.047	.070	.093	.140	.190	.230	.280	.330	.380	.470
40'	.031	.062	.093	.130	.190	.250	.310	.380	.440	.500	.630
50'	.040	.080	.120	.160	.240	.310	.390	.470	.550	.620	.700
60'	.047	.093	.140	.190	.280	.380	.470	.560	.650	.750	.840
80'	.060	.130	.190	.250	.380	.500	.620	.750	.870	1.000	1.120
100'	.080	.160	.230	.310	.470	.620	.780	.930	1.090	1.250	1.400
120'	.093	.190	.280	.380	.560	.750	.940	1.120	1.310	1.490	1.680
140'	.110	.220	.330	.440	.660	.880	1.090	1.310	1.530	1.750	1.970
160'	.130	.250	.380	.500	.750	1.000	1.250	1.500	1.750	2.000	2.250
180'	.140	.280	.420	.560	.840	1.120	1.400	1.670	1.950	2.230	2.520
200'	.160	.310	.470	.620	.930	1.250	1.560	1.870	2.170	2.500	2.810

SLAD

How to use Adjustment Tool

A deflector adjustment tool is provided with each SLAD shipment. The adjustable vanes include an integral slot to allow the tool to engage the vane, and by rotating the tool as shown, position the vane as required for the pattern and air volume required for the application.

