

## Drywall Finishing for Mud-In Frame / Tape-and-Spackle Border

Improper installation of concealed frame linear diffusers can lead to phone calls and headaches as ugly cracking begins to appear around the diffuser

**Different manufacturers have slightly different methods of fastening the linear diffuser to the framing member and drywall:**

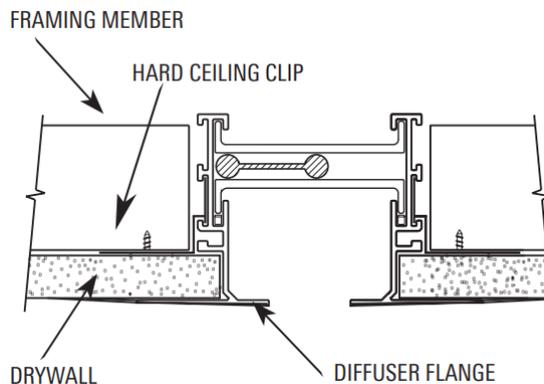
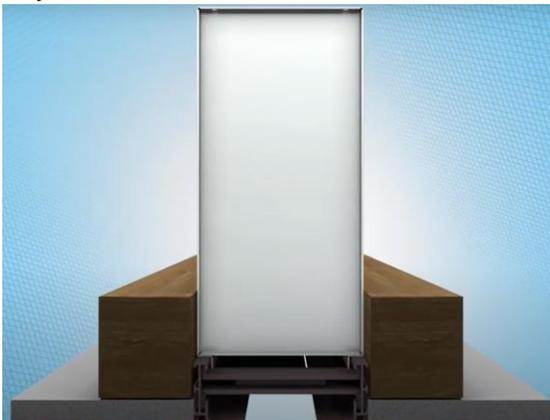
Before drywall is installed <https://www.youtube.com/watch?v=EwtGFyEIUDA>

After drywall is installed <https://www.priceindustries.com/resources/videoplayer/3672>

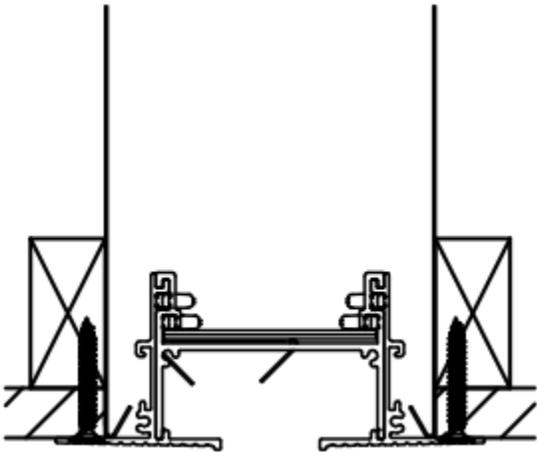
**Before Drywall:** Hard ceiling clips with flat head screws are used to fasten linear diffuser to framing



Drywall then slides in between the mounting clips and the linear diffuser flange



**After Drywall:** Install linear diffuser into framed opening after drywall has been installed, but not finished, using drywall screws

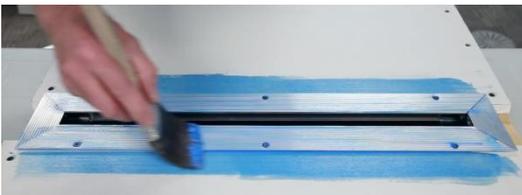


## Proper installation requires the use of both bonding agent and mesh or paper tape

STEP 1: Thoroughly clean diffuser flanges with **cleaning solvent** like isopropyl alcohol to remove any oils or residue from surface.



STEP 2: Apply one coat of **bonding agent** that is compatible with plaster over entire surface of flange, and allow to dry as per manufacturer's instructions.



STEP 3: Apply one coat of **drywall compound** on diffuser flanges and approximately 3" onto drywall beyond flange.



STEP 4: Apply a 4" **wide mesh or paper tape to joint compound**. Be sure to smooth out and remove air pockets. Mesh or tape should cover diffuser flange, but not the inside vertical edge of diffuser frame.



Apply second coat of drywall compound over tape and smooth. Allow to dry.

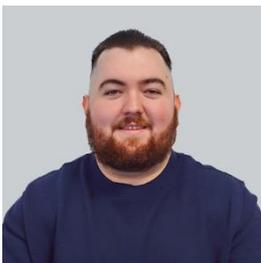
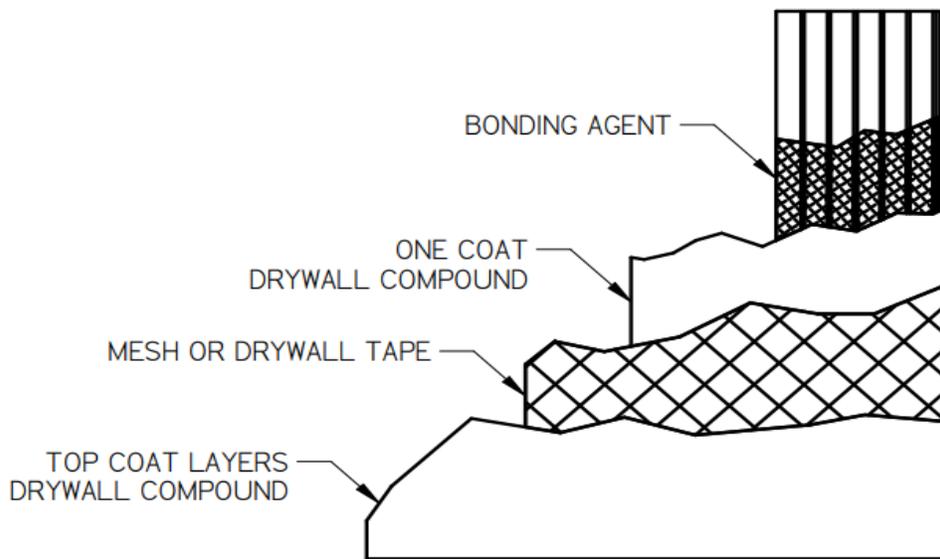


STEP 5: Apply at least two coats of finishing compound. Allow to dry. Afterwards, sand smooth, prime, and paint surface.



#### Additional Tips:

- For units longer than twelve feet, a 1/8" gap between sections is recommended to allow for thermal expansion.
- Do not run the HVAC system during the finishing procedures. This could cause premature drying of the compounds, making them more prone to cracking.
- Avoid thermal shocks. Excessive temperature and moisture variations can cause premature drying of the drywall mud and make it more prone to cracking. Increasing heat to accelerate drywall mud curing may cause cracking.
- Wood studs will naturally absorb moisture causing them to swell and warp. Use caution when using wood studs as this shifting may cause drywall mud to crack. It is recommended to condition the space after framing is complete to allow wood studs to reach their natural state.



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## Examples of results due to improper installation









