

crypticair®

WHERE DESIGN MEETS FUNCTIONALITY

INSTALLATION GUIDE

Cryptic Pro

Mud-In Linear Diffuser



OVERVIEW

A diffuser that finishes inside the ceiling, not on it.

The Cryptic Pro installs at the framing stage, before drywall.

In most regular grills, even hidden ones, the diffuser sits on top of the drywall, which often causes cracks, uneven edges, and visible imperfections over time.

Cryptic Pro mounts directly to the framing so the drywall is fitted around the diffuser lips, creating a seamless, flush finish that resists cracking and looks perfectly clean.

NOTE

This product is optimal for new construction and can also be installed in renovations by opening the drywall in the desired location.

THE INSTALL, AT A GLANCE

- 01 Build the plenum box and connect it to the diffuser
- 02 Build the frame
- 03 Connect the diffuser and box to the frame
- 04 Install the drywall
- 05 Apply mud, tape, sand, and paint

BEFORE YOU START

Dimensions and materials

PLENUM BOX · EXTERNAL DIMENSIONS

MODEL	BOX WIDTH	BOX LENGTH
Cryptic Pro 1-Slot	6 1/2 in	Same as the diffuser length
Cryptic Pro 2-Slot	8 3/4 in	Same as the diffuser length

FRAME OPENING · INTERNAL DIMENSIONS

MEASUREMENT	SET IT TO
Frame length	Diffuser length + 1/8 in
Frame width	Box width + 1/2 in

WORKED EXAMPLE

For a 60 in 1-slot diffuser with a 6 1/2 in box, the frame opening is **60 1/8 in × 7 in**.

TOOLS AND MATERIALS

- ☐ Duct board, if you are building the plenum box yourself
- ☐ UL-rated foil HVAC tape
- ☐ Wood or metal framing profiles
- ☐ Screws for the diffuser flanges and drywall
- ☐ Drill or driver
- ☐ Tape measure and level
- ☐ Drywall
- ☐ Joint compound (mud)
- ☐ Fiberglass mesh joint tape
- ☐ Taping knife
- ☐ Sandpaper or sanding sponge
- ☐ Paint to match the ceiling or wall

01

STEP ONE

Build the plenum box and connect it to the diffuser

The box sits inside the diffuser and the diffuser neck wraps around it. Sealed correctly, the two become one airtight assembly before anything goes in the ceiling.

NOTE

We can supply ready-made plenum boxes that ensure a perfect fit. The instructions below are provided in case you prefer to build the box yourself.

- ① Make the plenum box from duct board according to the model you purchased.
 - Cryptic Pro 1-Slot: 6 1/2 in wide (external dimensions)
 - Cryptic Pro 2-Slot: 8 3/4 in wide (external dimensions)
 - Box length: same as the diffuser length (external dimensions)
- ② Insert the box into the diffuser. The box sits inside the diffuser, and the diffuser neck wraps around the box.
- ③ Seal the connection between the diffuser neck and box using UL-rated foil HVAC tape, applying it firmly all around for an airtight fit.

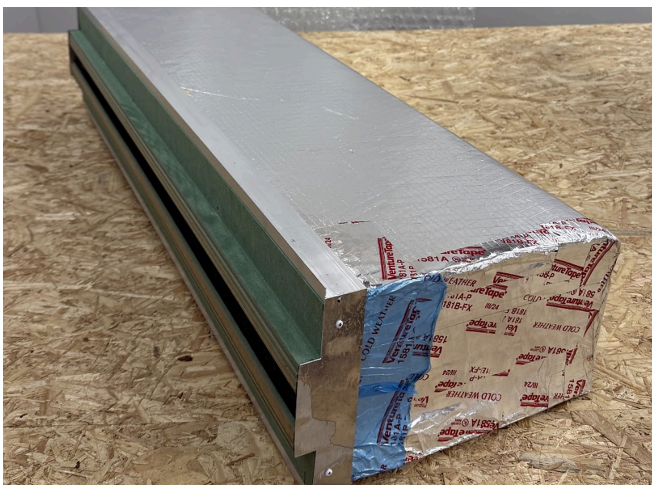


Fig. 1 The box seated inside the diffuser, seam sealed all around with foil HVAC tape.



Fig. 2 The finished assembly. Fully wrapped and airtight before it goes up.

02 STEP TWO Build the frame

A level rectangular opening between the joists or studs, sized slightly larger than the diffuser and box so the assembly drops in clean.

- ① Measure and mark the area where the diffuser will be installed.
- ② Build a rectangular, level frame between joists or studs using wood or metal profiles.
- ③ Set the internal dimensions slightly larger than the diffuser and box.
 - Frame length: diffuser length + 1/8 in
 - Frame width: box width + 1/2 in
- ④ Confirm the frame is straight and aligned before continuing.

WORKED EXAMPLE

For a 60 in 1-slot diffuser with a 6 1/2 in box, the frame opening is **60 1/8 in × 7 in**.



Fig. 3 The framed opening between joists. Straight and level here is what makes the drywall fit right three steps from now.

03

STEP THREE

Connect the diffuser and box to the frame

Screws pass through the diffuser flanges into the framing. The assembly should end up rigid, centered, and level.

- ① Insert the diffuser with the attached box into the frame opening.
- ② Ensure the diffuser is centered and level.
- ③ Use screws to secure the diffuser and box directly to the frame. The screws should pass through the diffuser's flanges and into the framing material.
- ④ Install enough screws along the full length so the assembly is rigid and secure.

CRITICAL

Verify that the diffuser lips are flush with the framing. This is what gives you a perfect drywall fit. If the lips sit proud or recessed here, every step after this one will show it.



Fig. 4 A screw driven through the diffuser flange into the framing. Repeat along the full length until the assembly does not move.

04

STEP FOUR

Install the drywall

The drywall is cut to wrap the diffuser lips and sit flush and snug against them, with no gaps left to fill later.

- ① Measure the lips and cut the drywall to fit around the diffuser lips. The goal is for the drywall to sit flush and snug against the lips.
- ② Position the drywall around the diffuser and check alignment.
- ③ Fasten the drywall to the framing using screws every 12 inches, ensuring no gaps remain.

CRITICAL

The drywall has to sit flush and snug against the lips. Check alignment along the full length before you fasten, and confirm no gaps remain.



Fig. 5 Drywall hung around the diffuser, screwed off every 12 inches.



Fig. 6 Flush and snug against the lips. No gap to hide.

05

STEP FIVE

Apply mud, tape, sand, and paint

Three coats of mud, mesh tape reinforcing every layer, feathered outward. This is the step that makes the finish look like it was always part of the ceiling.

- ① Clean the area so finishing materials adhere properly.
- ② Apply a thin first coat of joint compound (mud) around the diffuser lips to fill gaps and smooth the transition.
- ③ While it is still slightly wet, apply fiberglass mesh joint tape over the seam.
- ④ Let it dry, then apply a second coat of mud, again placing mesh tape between each layer. Repeat so that each coat has tape reinforcement.
- ⑤ Apply a total of 3 coats, letting each dry before the next, feathering outward for a seamless finish.
- ⑥ When dry, sand lightly until perfectly smooth, wipe away dust, and paint to match the ceiling or wall.

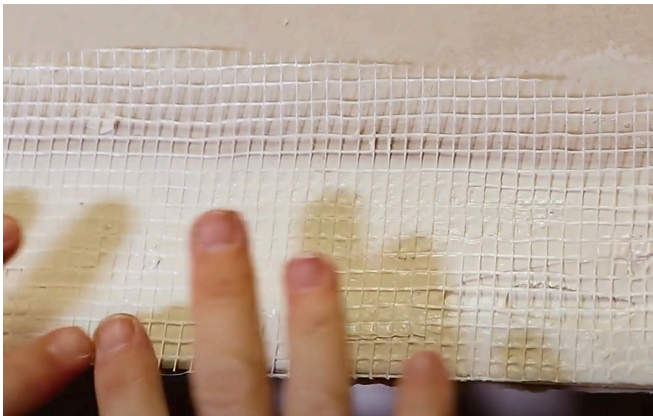
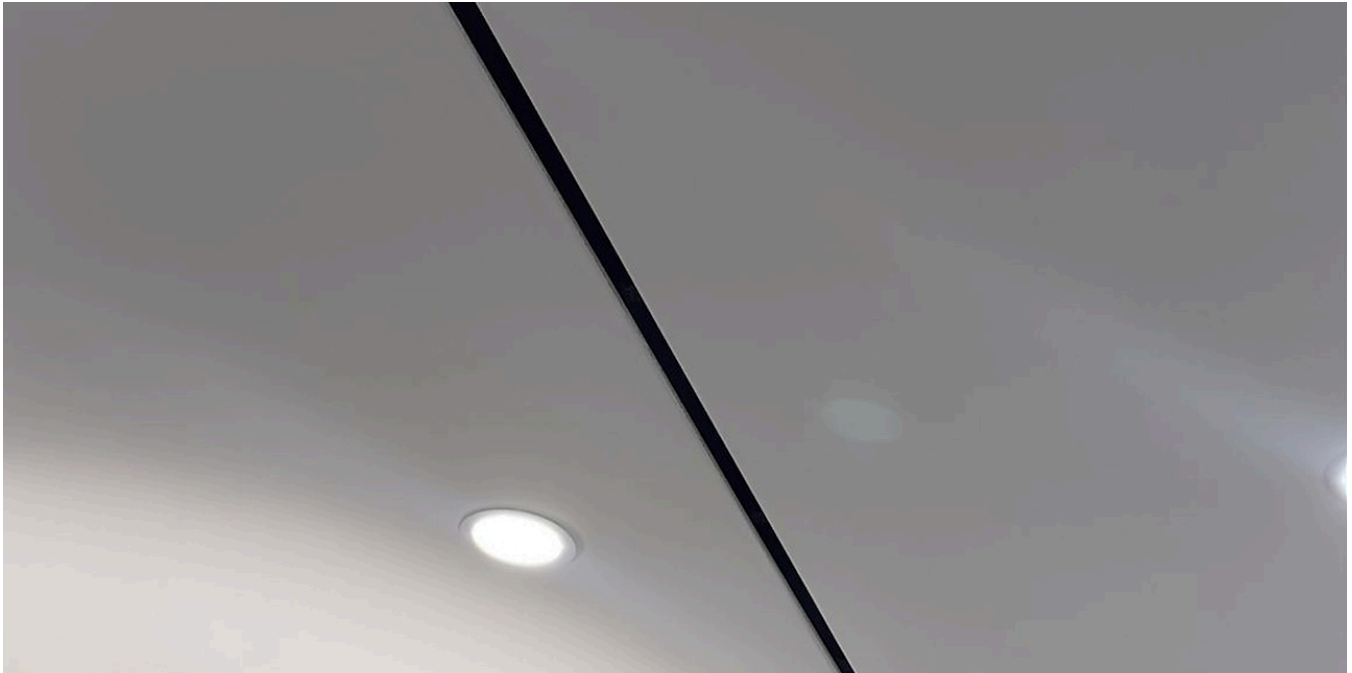


Fig. 7 Mesh tape pressed into the mud while it is still slightly wet.



Fig. 8 Each coat feathered outward so the transition disappears under paint.



THE FINISHED RESULT

No frame. No flange. Just a line in the ceiling.

Installed this way, there is no visible hardware to catch the eye and no seam to crack. The drywall meets the diffuser lips and the paint carries straight through, so what is left reads as a clean slot cut into the surface.

QUESTIONS

info@cryptic-air.com

PHONE

786-629-9699

ONLINE

cryptic-air.com**crypticair®**

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