

CHICAGO PLENUM



Features & Benefits

THE CHICAGO MODEL

Enhanced Fire Safety Standards

Materials must have extremely low flame spread and smoke development ratings.

Material Testing & Certification

All materials, including wiring, lighting fixtures and ductwork, must pass rigorous fire resistance tests to be certified for use in plenums.

Local Adaption of National Codes

Due to differing urban density and a high-rise construction profile, Chicago adapts national and international model codes by adding stricter interpretations and additional requirements tailored to the city's unique built environment.

Inspection & Enforcement

Building inspectors ensure compliance during construction and renovations. Non-compliant materials in plenum spaces can lead to failed inspections, fines, and mandatory replacement of materials.

BUILT TO LAST Certified to Protect

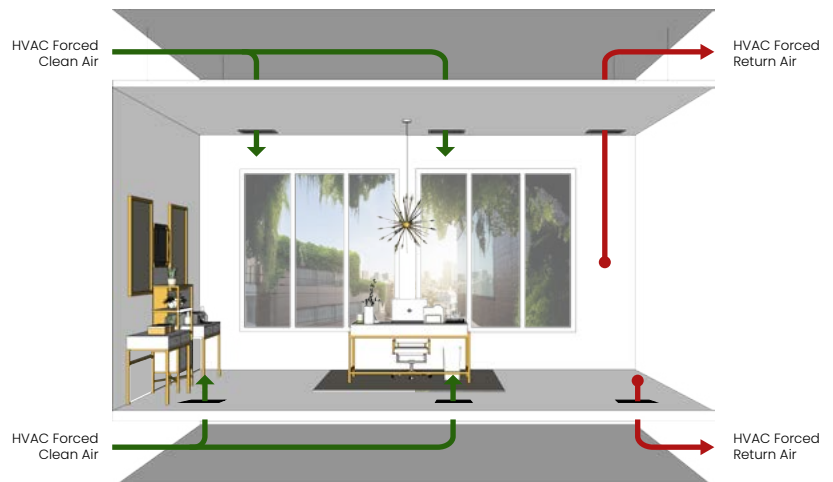
Vode offers fixture, power, and system solutions to meet strict CCEA compliance requirements where needed.



WHAT IS PLENUM?

Plenum is an HVAC term used to identify open airspaces, usually above drop-down ceilings or below raised floors, which facilitate airflow circulation for heating and cooling.

While important for air circulation, the open airflow can quickly spread fire and smoke throughout a building. Because of this risk, any cable installed within plenum areas must be plenum-rated. **Non-plenum** cable will help spread the fire and introduce a higher level of toxic smoke.



Plenum and **non-plenum** cables can be any type of cable – coaxial, Ethernet, HDMI, fiber optic, etc. The term “Plenum” and “Non-Plenum” simply refers to the outer jacket/cover that protects the cable.

Plenum-rated cables, also known as **CMP** (Communications Multipurpose Plenum), have the highest flame rating and the highest cost. They're covered with a low-smoke polyvinyl chloride (**PVC**) or fluorinated ethylene polymer (**FEP**) fire-retardant jacket.

The jacket is designed to restrict flame propagation within 5 ft, reduce the amount of smoke and toxic fumes released, and self-extinguish in the event of a fire. Thus, fire and building safety codes mandate plenum-rated cables be used in plenum spaces and air ducts. They can also be used in non-plenum areas.

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PLENUM CHALLENGES

Many standard materials used in lighting fixtures, like plastics, adhesives, and certain coatings, are not compliant with CP standards and using fire-resistant materials often increases production costs and limits design flexibility.

VODE'S PLENUM PROMISE

While Chicago Plenum is a local requirement, it influences lighting specifications nationwide.

Vode deeply values fire safety, which is why we've made easily specifiable Chicago Plenum compliant options for our products. We produce fixtures that protect what truly matters in a space: the people within it.

"Chicago Plenum compliance further advances fire safety."

ANN SCHIFFERS, PRESIDENT
VODE LIGHTING

VODE'S PLENUM RESOURCES

Visit our website to learn more about Vode's integration of stringent fire safety standards into the manufacturing and design of our luminaires.

Be **good**. Do **good**. Create **good**.

vode.com/chicagoplenum

CHICAGO PLENUM RATED

Current Lighting Solution:

- Mainly integral power
- Remote power needs to run flexible conduit everywhere - but how do you terminate at the fixture?

Vode's Solution:

- Chicago Plenum Power: CP VodeNODE is separate and can be an addition to the following fixture mounting conditions
- Surface mount drywall: uses micro J-Box
- Surface mount t-bar (suspended ceiling): CP fixture adapter
- Suspended product: does not need special CP mounting

Chicago Plenum T-Bar Fixture Adapter

A custom adapter that allows remote power to be terminated at the fixture install location - with minimal reveal/destruction of the ceiling. Shipped as a separate component so that individual CCEA fixture SKUs are not needed.

Is your fixture adapter applicable in Chicago?

1. Is the fixture running power within the plenum?
2. Is the ceiling constructed of t-bar?
3. Is the fixture surface mounted to the t-bar?

If all 3 of those questions are answered YES, Vode's T-Bar Fixture Adapter is applicable.

