

# Design guidelines for ceiling connector assembly



### APPLICATIONS

The ceiling connector assembly (referred to as CCA) provides a means to connect horizontal cable to a short, single-ended patch cord assembly in the field. Whereas the CCA includes the patch cord for convenience, the ceiling connector is also available for those who wish to terminate the assembly to a single ended patch cord. Once installed, the plug ended link may be used to connect to cameras, access points, and other ceilingmounted devices. As an alternative to a connector termination with cord, a cable end can be easily terminated on the CCA and plugged into the end equipment. In a different application, office moves can sometimes require a change in outlet location, and the ceiling connector can be used if the new outlet location requires additional cable length. The ceiling connector is available in both shielded and unshielded versions.



Ceiling connector pigtail (UTP)



Building upon CommScope's cable engineering knowledge, the ceiling connector solution is designed to provide maximum performance, flexibility and durability. They feature a simplified termination that requires no special tools and can provide a high quality result in typically challenging working locations, such as over drop ceilings.

The ceiling connector supports the channel specifications of SYSTIMAX GigaSPEED X10D, GigaSPEED XL and PowerSUM solutions, as well as Uniprise and NETCONNECT solutions. The CCA-CAT6A supports the channel specifications for all of CommScope's Category 6A/Class EA infrastructure solutions. The CCA-CAT6 supports the channel specifications for all of CommScope's Category 6/Class E as well as Category 5e/Class D infrastructure solutions.

### **KEY FEATURES & BENEFITS**

Electrical performance:	ANSI/TIA-568-C.2 Category 6A / ISO 11801 Class EA performance compliant.Meets or exceeds all ANSI/TIA-568-C.2 Category 6A and ISO 11801 Class EA connector and channel transmission performance requirements.
	Meets applicable requirements of IEC 60603-7
	Supports IEEE 802.3af, 802.3at and proposed 802.3bt* PoE applications.
Mechanical features:	Flammability rating: The Connector is dual rated - Plenum and Low Smoke Zero Halogen
	Operating temperature:14°F to 140°F (-10°C to 60°C)
	Storage temperature: -40°F to 158°F (-40°C to 70°C)
Compliance:	Safety compliance: ETL Listed; UL 1863 and CAN/CSA-C22.2 (ETL File 3166536CRT-001)
	RoHS compliant
	Supports 20 re-termination cycles

\* Consult a CommScope Field Application Engineer if Type 4 Power Sourcing Equipment (PSE) is deployed.

### **CCA HANDLING**

The ceiling connector solution can be used in a conventional cable environment and can be routed and placed through typical indoor cabling pathways as cable, but should not be pulled through constraining pathway features. Conduit pulls are not supported, although they can be passed through short sleeves. For termination instructions, refer to 860634932 ceiling connector assembly Installation for UTP and 860656301 for Shielded Ceiling Connetor Installation.

## **CHANNEL CONFIGURATIONS**

While the ceiling connector allows for cable extension, cabling distance must still fall within infrastructure solution requirements to meet the performance specifications. Connector count must also satisfy solution requirements. When used in a channel, the ceiling connector should be counted as a connection. ceiling connectors are designed for direct cable or cord termination, so configurations are limited. The following configurations show some typical examples:



For ordering information on the ceiling connector assembly please refer to **Field installed connector solution for above ceiling applications** 

# **FIELD TESTING**

The CCA can be tested within either a link or a channel. Conventional link testing is defined between connector endpoints, while conventional channel testing is defined between plug endpoints.



For a link, the CCA may be test per ANSI-TIA568.2-D Annex F Modular Plug Terminated Link with the ceiling connector as the consolidation point. For additional details on MPTL solutions refer to 860656585 Design Guidelines for Modular Plug Terminated Link (MPTL).

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