MODULAR WIRING SYSTEMS FOR POWER, VOICE AND DATA





The American Cable Systems Solution – The Intelligent Choice

For building owners, architects, construction managers, facilities engineers, and network administrators alike, ACS modular zone distribution systems are the intelligent choice. ACS takes the basic idea of zone wiring and combines it with pre-cut, pre-tested cable and plug-in connectors, to provide power and telecommunication systems that can be installed under raised floors (The Intelligent Floor®), or in accessible ceilings (The Intelligent Ceiling®).

ACS systems meet the challenges posed by new construction and renovation in offices, retail outlets, and institutional facilities by improving cable management, enhancing flexibility, reducing installation costs and showing dramatic cost savings throughout the life-cycle due to adds, moves and changes. Here's how...

Modular Wiring + Zone Distribution = Modular Zone Distribution

Zone distribution is not a new concept; it has been applied for years in open office power and telephone service. And as cabling standards have evolved, it has been applied to data communication wiring as well.



ACS provides schools and other institutions with flexible wiring systems that handle power, voice and data.

A typical zone might include 4 to 6 work stations – cubicles in an office, or retail checkout stands. Power and telecommunication home run cables are routed from the wiring closet to a distribution point in each zone, where they connect to individual cables that fan out to each workstation.



Add the benefits of modular wiring; pre-cut cabling, connector-to-connector coupling, and pre-installation testing and you have a system that allows easy installation, reliability, and flexibility, eliminating the laborious process of hanging conduit, pulling wire and hand terminating connectors.

The installer simply refers to CAD drawings developed by the ACS engineering staff to lay out the components and snap them together. This planning saves time and money on the jobsite.

The Intelligent Floor[®] and The Intelligent Ceiling[®] can be configured to provide power, telecommunications, or both services combined, giving you the flexibility to select the system that best fits your application.

The Intelligent Ceiling[•] is used in various applications such as the wiring of retail checkouts.



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The Advantages of Modular Zone Distribution



The modularity offered by ACS eliminates all field terminations and on-site measuring, cutting and pulling of cable



Lexan is a registered trademark of General Electric.

The Cost Advantage

Due to their "plug and play" nature, total installed costs can be reduced 30% or more by using ACS Modular Zone Distribution Systems. And there are potential tax benefits to the system. Because it can be moved and relocated, the system may qualify as personal property, which can be depreciated over five to seven years.

With churn rates of over 40% common in today's office environment, moves, adds and changes are simple and economical with ACS systems. In-house facilities staff can add new users or re-configure open areas quickly with existing components by simply unplugging the connections, moving the components, and reconnecting them. The result? Lower cost throughout the life-cycle of the building.

The Quality Advantage

As an ISO 9001 certified facility, ACS designs and manufactures modular zone distribution systems to exacting standards. ACS systems, constructed from high quality materials, are recognized throughout the industry for their durability. All distribution boxes are constructed of heavy gauge steel. Both the power connector housing and its latch and strike connecting mechanism is steel too - not plastic. Connector pins and sleeves are made of high performance, highly conductive copper alloy, and are enclosed in tough GE Lexan[®]. Our telecommunication cables are manufactured using high quality, industry standard components from the vendor of your choice. The entire assembly of each power and telecommunication system is 100% factory tested prior to shipment, assuring a high quality, reliable product.

"The connections into the floor access box are all pre-connectorized, so you just unplug them and replug them."

David Salak, Senior Information Officer, Information and Technology Services, The World Bank







Today's constantly changing office requires a system that is easy to upgrade and relocate

"You get a blueprint from ACS that shows where everything goes. It probably saves about 50 to 75 percent on installation time which means labor savings are tremendous!"

Fred Cooper, Construction Maintenance Manager, Bernard Kilgore Center,Dow Jones & Company

The Capacity Advantage

Growth capacity is designed into ACS modular zone distribution systems to allow for easy expansion. Distribution boxes are designed with sufficient spare capacity allowing for the addition of services as new workstations are created. And if services are reduced or eliminated in one area of the building, zone boxes and cables can be moved to other areas.

The Standards Advantage

ACS power systems are designed for installation in compliance with the National Electrical Code, Section 604, Manufacturing Wiring Systems, and are UL listed.

ACS telecommunication systems meet the criteria of TIA 568A, and for zone wiring as outline detailed in TSB75.

The Flexibility Advantage

With conventional hard wired systems, a change in office layout means replacing wire from the workstation all the way back to the wiring closet. But with an ACS zone distribution system, whether in the ceiling or below a raised floor, the only wiring affected is the segment from the distribution box to the workstation. The plug-in connectors on the power and telecommunication cables allow for the easy movement of components. When changes are made for individual workstations, service is uninterrupted for other users in the zone.





Power Distribution Boxes

Main Distribution Box:



The heart of the modular wiring system, the Main Distribution Box (MDB) delivers power to the Secondary Distribution Boxes via Power Extender Cables. The MDB comes standard in 6 double port General Purpose (GP) and Isolated Ground (IG) or 6, 9, or 12 single port configurations. Single ports can be configured for General Purpose power or Isolated Ground. A prefabricated Metal Clad Type MC Home Run® or Super Neutral® cable with oversized neutral conductor(s) is provided as an integral part of the system.

Secondary Distribution Box:



The Secondary Distribution Box (SDB) is the point from which General Purpose (GP) branch circuit power or Isolated Ground (IG) power is delivered to user outlets. The SDB comes standard in 4 double port or 4 or 6 single port configurations.

Telecommunications Distribution Boxes

Zone Distribution Box:



The Zone Distribution Box functions as a telecommunication Consolidation Point (CP) or Multi-User Telecommunication Outlet box (MUTO). This enclosure, when combined with our pre-terminated telecommunication home run cable, provides a communication wiring distribution point between the telecommunication closet and the end user location.

The enclosure can be fitted with a variety of industry standard copper or fiber telecommunication modules which provide connectivity, cable

management, and slack storage for cables. The standard telecommunication home run cable is a bundled and armored assembly consisting of unshielded twisted pair or fiber optic cable. The telecommunication system is factory tested to meet TIA 568A performance specifications. Standard 12 or 18 port copper and/ or fiber configurations are available.

Furniture Transition Box

Transition Box:



Transition Box with Terminal strip is prewired with Whip End Extender Cable fed from a Main Distribution Box via Extender Cable. All Furniture feed boxes receive a terminal strip and are labeled for contractor friendly installation. A knockout is provided for field wiring of Manufactures' Furniture systems electrical connections.

Whip End Extender Cables are manufactured with Type MC Cable and feature 90°C insulated #12 AWG, solid copper conductors and a #12 AWG solid copper ground.

Whip End Extender Cables are rated for use on 20 ampere branch circuits and are keyed and color-coded according to specific voltage requirements.



Extender Cables

Power Extender Cables:



A Whip End Extender Cable carries branch circuit power from the "power out" tap on the Extender Cable to access floor modules or to support connections to modular furniture systems.

A single (5 pin) or double (10 pin) port Extender Cable runs from MDB to SDB and from SDB to Whip End Extender Cable at point of use. It may also run directly from MDB to Whip End Extender. This versatile component also provides extension capability in the event of changing length requirements.

Power Extender Cables are manufactured from Metal Clad Type MC Cable,

consisting of 90°C insulated #12 AWG solid copper conductors and #12 AWG solid copper ground. These cable sets are also available with #10 AWG super conductors. All Extender Cables are rated for use on 20 ampere branch circuits, and are dead-fronted for safety. To eliminate inter-voltage connection, each cable is keyed and color-coded to meet specific voltage requirements.

Telecommunication Extender Cables:



These cables are used to connect desktop devices to the ZDB. Cable configuration varies based on user requirements. For a Consolidation Point (CP) configuration, these cables generally use RJ45MP or SC connectors at the ZDB and are factory-terminated on a RJ45MJ or SC connector at the faceplate. On the Multi-User Telecommunication Outlet (MUTO) configuration, these cables generally use RJ45MP connectors on both ends providing direct connection of the desktop devices to the ZDB.

Accessories

Access Floor Module:



Easily integrated into The Intelligent Floor® System, the ACS Access Floor Module allows easy access to power and telecommunication outlets in an access floor. The floor module can be equipped with both General Purpose and Isolated Ground receptacles as well as industry standard telecommunication connectors from the vendor of your choice. The Access Floor Module is easy to relocate when moves, adds and changes occur.

Pre-Wired Duplex Assembly

Duplex Assembly:



The Duplex Assembly has a 4" sq 2 1/8" deep box with duplex receptacles wired to cable ready leads for easy field installation. Assembly includes mud-ring, bracket, prewired receptacle and Device Protector.

The 1PTA** Power "T" wires into the device's cable ready leads with wago 2 port connectors and is simple color to color wiring. The Power "T" is fed from the under floor power distribution system. Devices available in your specified color and by your specified Manufacturer.





ACS Power, Voice and Data Systems for Floor and Ceiling Applications

POWER SYSTEM



General Purpose and Isolated Ground power are distributed throughout a zone with this system. Metal Clad Home Run® Cable runs from the electrical panel to the Main Distribution Box (MDB). Metal Clad Extender Cables carry power to Secondary Distribution Boxes (SDB). The SDB's then deliver power to individual user outlets and workstations and/or electrified furniture feed locations.

STANDARD POWER SYSTEMS INCLUDE:

- 6 port (GP & IG) MDB coupled with up to size 4 port (GP & IG) SDB
- 6 port (GP or IG) MDB coupled with up to six 4 port or 6 port (GP or IG) SDB
- 9 port (GP & IG) MDB coupled with up to nine 4 port or 6 port (GP & IG) SDB
- 12 port (GP or IG) MDB coupled with up to twelve 4 port or 6 port (GP or IG) SDB



TELECOMMUNICATION SYSTEM



This system distributes voice and data throughout the zone. A telecommunication home run cable runs from the telecom closet to a Zone Distribution Box (ZDB). Extender Cables then bring service from the ZDB to individual users.

Consolidation Point (CP) and Multi-User Telecommunication Outlet (MUTO) configurations are available.

Standard Telecommunications Systems Include:

- 24 port ZDB coupled with 12 x 4 pair UTP and 12 x 1 pair fiber
- 18 port ZDB coupled with 18 x 4 pair UTP
- $\cdot\,$ 18 port ZDB coupled with 12 x 4 pair UTP and 6 fiber
- 12 port ZDB coupled with 12 x 4 pair UTP
- 12 port ZDB coupled with 2 x 25pair UTP
- 12 port ZDB coupled with 12 fiber

CASINO POWER SYSTEM



General Purpose power is distributed throughout a zone with this system. Metal Clad Home Run® Cable runs from the electrical panel to the Main Distribution Box (MDB). Metal Clad Extender Cables carry power to pre-wired quad and duplex assemblies for gaming stations and slot signage.

Standard Casino Systems Include:

- 6 port (GP & IG) MDB coupled with up to size 4 port (GP & IG) SDB
- 6 port (GP or IG) MDB coupled with up to six 4 port or 6 port (GP or IG) SDB
- 9 port (GP & IG) MDB coupled with up to nine 4 port or 6 port (GP & IG) SDB
- 12 port (GP or IG) MDB coupled with up to twelve 4 port or 6 port (GP or IG) SDB

Why use Access Floor Boxes?

Access Floor Boxes provide the ability to adapt a floor plan to meet the needs of the space. Have you ever been in a room and had the need to plug in your phone or laptop and no outlet was close enough? Access Floor Boxes provide outlets hidden within the floor for easy access when needed.

Using raised floor systems, Access Floor Boxes provide power to workstations, conference rooms and more without the need for a wall outlet. Floor boxes provide the ability to rearrange the room without concern for locating the nearest power source. Casinos often rearrange slot machines to bring in newer equipment to change up the floor plan. With access floor boxes this process is made easier and more efficient.

Boxes can be customized to meet the need of the customer, including the number of receptacles, USB ports and Ethernet connections. Customization even includes the box profile, shape, capacity, etc. Using raised floors, these access floor boxes can be easily concealed in the floor to maintain the aesthetics of the area. To further customize the floor plan, take advantage of low-profile boxes. Low profile boxes can be located to another spot in the floor when used with the ACS/Uni-Fab Plug & Play modular wiring system and designed for flexibility requirements driven by office churn.

ACS/Uni-Fab also offers round floor boxes which are designed to be installed into the same size hole as standard air diffusers commonly used in raised floor systems. Round boxes eliminate the need for tiles with custom cutouts.

Floor boxes are designed to be easily removed for reconfiguration as needed and blend in with the look of the carpet or floor tiles. Some applications include office spaces, casinos, government offices, commercial, and more.





High Capacity 2000



For use in raised access floors of today's offices and equipment rooms, the High Capacity 2000 is designed to meet the growing flexibility requirements driven by office churn. Designed not to compete with or detract from the crafted aesthetics of modern work spaces, it offers an attractive alternative to both "poke-thru" and standard furniture power.

Leaky air ruins the efficiency of HVAC systems and creates uncomfortable work spaces. Our zero air leakage box allows your HVAC to run at peak efficiency and keeps your people happy.

Features & Specifications:

- Cable management tools to keep cables neatly arranged
- · Zero air leakage
- 4 Duplexes
- 3 Trade size single gang openings for voice/data and A/V
- 11 3/4" Square lid assembly
- 1/8" Thin low profile trim frame
- 4 7/8" Overall depth for 5" minimum floor height
- · 2,000 lb lid load rating

- Standard color is black
- Protective door to prevent trip hazard in cable openings
- Lid accommodates carpet or vinyl inserts to blend with floor finish
- Quick relocation capable when used with the ACS/Uni-Fab Plug & Play modular wiring system
- Consolidation of power, voice and data in a common enclosure with effective wire management



Three things make our floor box air tight:

- 1. A gasket between floor and box keeps air from leaking around the sides.
- 2.Our "green seal" makes the lid air tight.
- 3. Brushes seal the gaps around power and network cables.



Cutaway with Dimensions



Floor Cut Dimensions



High Capacity 3000 - Metal Lid

For use in raised access floors of today's offices and equipment rooms, the High Capacity 3000 (PVD Servicenter™) is designed to meet the growing flexibility requirements driven by office churn. They offer an attractive alternative to both "poke-thru" and standard furniture power, voice and data service distribution designs. The Servicenter is flush mounted to the access floor and can be readily relocated when used with the ACS/Uni-Fab modular wiring system. Cable openings in the lid allow for convenient, closed-lid cable pass-thru.

Features & Specifications:

- Metal lid provides brute strength needed for heavy traffic areas
- 4 Duplexes
- · 3 Trade size single gang openings for voice/data and A/V
- 11 ¼" Square lid assembly
- 16" Thin low profile trim frame
- 4 5/8" Overall depth for 5" minimum floor height
- 1,500 lb lid load rating
- Standard color is black
- Flush lid design
- Quick relocation capable when used with the ACS/Uni-Fab Plug & Play modular wiring system
- Consolidation of power, voice and data in a common enclosure with effective wire management

Performance Properties - High Capacity, Standard Floor Height PVD Servicenter™

Panel Cut-Out Dimensions	10 ½" x 10 ½"
Dimensions	10.25" H x 10.25" W x 4.625" D
Inside Working Volume	180 in. ³
Box Body	Galvanized Steel
Lid/Frame Assembly	Powdercoated Steel
Lid Color	Black
Voice/Data Capacity	3 Multiport Interface Plates
Wiring Options	ACS/Uni-Fab Modular connectors or Field Wired (no receptacles)
U.L. Designations*	E63807, E106951

* Factory wired boxes are listed in U.L. file E63807. Field wired boxes are listed in U.L. file E106951.





Low Profile 1500

For use in raised access floors of today's offices and equipment rooms, the Low Profile 1500 (PVD Servicenter™) is designed to meet the growing flexibility requirements driven by office churn. They offer an attractive alternative to both "poke-thru" and standard furniture power, voice and data service distribution designs. The Servicenter is flush mounted to the access floor and can be readily relocated when used with the ACS/Uni-Fab modular wiring system. Cable openings in the lid allow for convenient, closed-lid cable pass-thru. The lid is available in Black, Gray or Brown, and is designed to accept carpet or vinyl inserts.

Features & Specifications:

- · Low Profile for use in low raised floor heights
- · 2 Duplexes
- · 2 Furniture adapter openings for voice/data and A/V
- 11 1/4" Square lid assembly
- 1/8" Thin low profile trim frame
- · 2 %" Overall depth for 2 1/2" minimum floor height
- 1,500 lb lid load rating
- · Standard lid color is Black; Gray and Brown are available
- Lid accommodates carpet or vinyl inserts to blend with floor finish
- Quick relocation capable when used with the ACS/Uni-Fab Plug & Play modular wiring system
- Consolidation of power, voice and data in a common enclosure with effective wire management

Performance Properties - High Capacity, Low Floor Height PVD Servicenter™

Panel Cut-Out Dimensions	10 ½" x 10 ½"
Dimensions	10.25" H x 10.25" W x 2.375" D
Inside Working Volume	75 in. ³
Box Body	Galvanized Steel
Lid/Frame Assembly	Powdercoated Steel
Lid Color	Black
Voice/Data Capacity	2 Multiport Interface Plates
Wiring Options	ACS/Uni-Fab Modular connectors or Field Wired (no receptacles)
U.L. Designations*	E63807, E106951

* Factory wired boxes are listed in U.L. file E63807. Field wired boxes are listed in U.L. file E106951.





Access Floor Boxes

Low Profile 3000 - Metal Lid

For use in raised access floors of today's offices and equipment rooms, the Low Profile 3000 (PVD Servicenter™) is designed to meet the growing flexibility requirements driven by office churn. They offer an attractive alternative to both "poke-thru" and standard furniture power, voice and data service distribution designs. The Servicenter is flush mounted to the access floor and can be readily relocated when used with the ACS/Uni-Fab modular wiring system. Cable openings in the lid allow for convenient, closed-lid cable pass-thru.

Features & Specifications:

- · Low Profile for use in low raised floor heights
- Metal lid provides brute strength needed for heavy traffic areas
- · 2 Duplexes
- · 2 Furniture adapter openings for voice/data and A/V
- 11 ¼" Square lid assembly
- ۰ ۲/۱۵" Thin low profile trim frame
- · 2 ¾" Overall depth for 2 ½" minimum floor height
- 1,500 lb lid load rating
- Standard lid color is black
- Flush lid design
- Quick relocation capable when used with the ACS/Uni-Fab Plug & Play modular wiring system
- Consolidation of power, voice and data in a common enclosure with effective wire management

Performance Properties - High Capacity, Low Floor Height PVD Servicenter™

Panel Cut-Out Dimensions	10 ½" x 10 ½"
Dimensions	10.25" H x 10.25" W x 2.375" D
Inside Working Volume	75 in. ³
Box Body	Galvanized Steel
Lid/Frame Assembly	Powdercoated Steel
Lid Color	Black
Voice/Data Capacity	2 Multiport Interface Plates
Wiring Options	ACS/Uni-Fab Modular connectors or Field Wired (no receptacles)
U.L. Designations*	E63807, E106951

* Factory wired boxes are listed in U.L. file E63807. Field wired boxes are listed in U.L. file E106951.





Round 1500

Today's architectural design frequently demands a more symmetrical option when it comes to terminating power, voice and data in the access floor. ACS/ Uni-Fab has responded with the Round 1500 (PVD Servicecenter™) designed to accommodate commercially available air diffusers most commonly used in raised access flooring applications.

Features & Specifications:

- Round design allows the box to be installed in the same size hole as standard air diffusers – eliminates the need for multiple raised-floor tiles with customsized cutouts
- · Zero air leakage
- 4 Duplexes
- 1 opening for voice/data and A/V. Metal plate accommodates up to 6 jacks.
- 9 ¾" Diameter round lid assembly
- 1/8" Thin low profile trim frame
- 5 1/8" Overall depth for 6" minimum floor height
- 2,000 lb lid load rating
- · Standard lid color is black
- Flush lid design
- Quick relocation capable when used with the ACS/Uni-Fab Plug & Play modular wiring system
- Consolidation of power, voice and data in a common enclosure with effective wire management







- A. = duplex location (see wiring dwg for details)
- B. = custom voice/data interface plate. Jacks and collars provided by others.
- C. = black GPC-FR510S(T) door and frame w/ cable management hooks. Lid diameter: 9.67"
- D. = mounting clip secures the floor box to the access floor tile.





Round 3000 - Metal Lid

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- Metal lid provides brute strength needed for heavy traffic areas
- 4 Duplexes
- 1 opening for voice/data and A/V. Metal plate accommodates up to 6 jacks.
- 9 ¾" Diameter round lid assembly
- 1/8" Thin low profile trim frame
- 5 ⅔" Overall depth for 6" minimum floor height
- 1,500 lb lid load rating
- Standard lid color is black
- Flush lid design
- Quick relocation capable when used with the ACS/Uni-Fab Plug & Play modular wiring system
- Consolidation of power, voice and data in a common enclosure with effective wire management





Raised Floor Assemblies

PDU Assemblies Technical Specifications

ACS/Uni-Fab Lab Boxes, Power Points and Floor Boxes are the building blocks for a unique, user friendly system of Computer Room Power Distribution assemblies. We combine the benefits of custom design with the flexibility and installation ease of a modular system.

This system supports all requirements between 15 and 60 Amperes - a capability not normally available on other systems. PDU Cable Assemblies are designed for raised floor branch circuit applications. They can be configured with a Bell Box and stainless steel cover or a 4" square box and industrial raised cover. The assemblies are capable of utilizing straight blade and locking type devices in a variety of configurations. Lab Boxes and PMPP's are furnished with a custom bracket for easy hand installation which eliminates the dust and metal shavings produced by drilling for conventional support methods. All power distribution assemblies are shipped with home runs attached – made from Liquidtight, MC or jacketed MC cable, or flexible metal conduit.

Our modules are assembled from off the shelf materials to allow for easy field modifications. This means last minute design changes can be done on-site. For the long term, the same modular features, which allow for installation ease contribute to the longevity of the system. Even removal for relocation or storage can be accomplished quickly, with confidence that the system will be ready for future use.





Raised Floor Assemblies

PDU Assemblies Technical Specifications

Lab Box 1





1 Duplex Receptacle



2 Duplex Receptacle



1 Twist Lock Cover

Device Capability of Each	Straight Blade	Twist Lock	Pin & Sleeve
4 sq w/IRC	2	1	_
Bell Box w/SS Cover	2	1	_
РМРР	6	6	4

Lab Box 4



- · Assemblies are available with general purpose, isolated ground, straight blade or twist-lock devices
- Lab 1, Lab 4 and PMPP Power Distribution Assemblies are shipped with ACS/Uni-Fab's custom pedestal supports
- All power distribution assemblies are shipped with Home Run Cable® attached



Raised Floor Assemblies

PDU Assemblies Technical Specifications

Pedestal Mounted Power Point-(PMPP)







Custom Plate

Sample Submittals









WHY CHOOSE ACS/UNI-FAB?

ACS/Uni-Fab Device Assemblies are your best choice for:

- Industry's broadest scope of products
- Easy installation saves money, saves time and eliminates errors associated with repetitive tasks
- · Custom build to your specifications
- Built to exacting standards by IBEW members
- JIT (Just-In-Time) manufacturing assures on-time delivery, wherever you need it, making inventory control easy and accurate
- All products built in accordance with UL and installed per NEC[®]
- UL listed Wiring Assembly (QQYZ)
- · 25 years experience in design and manufacturing expertise for unmatched support





That's ACS/UNI-FAB



Job-site conditions such as weather, clutter and human error have always had negative effects on quality and productivity. At ACS/Uni-Fab, we assemble components to exacting standards in a controlled environment and deliver products to you, ready to install. So you can get the job done right – while saving time and money.

ACS/Uni-Fab also offers the industry's broadest scope of products. We can help you design the best solution for any application. And you can order device assemblies as a standard part number or as a complete system, designed specifically for your job requirements.

Metal Device Protectors

There has been a growing concern about undetected damage caused by router bits cutting into devices and related wiring while these openings are being made. Our new Metal Device Protectors are installed on all standard assemblies to protect them from damage and dust during the installation process. Device protectors are constructed from 22 gauge steel for heavy duty protection from router/drywall damage.

Universal Mounting

The S-brackets are constructed from 20 gauge steel. These unique brackets feature universal mounting capability, ideal for mounting the assembly to either side of the stud, with built-in for side standoffs 2-1/2", 3-5/8" and 6".

It's all in the details.

Planning ahead and documenting your intentions lays the ground work for the successful execution of inevitable change orders and protects against, undocumented change requests. We look after the small details, thereby enhancing on-site productivity which, in turn, improves cost effectiveness.





Easier. Faster. Better.

When it comes to the installation of branch wiring, two factors are critical: quality and costeffectiveness. ACS/Uni-Fab Device Assemblies dramatically improve both.

Unmatched Quality

ACS/Uni-Fab assemblies are manufactured in a highly controlled manufacturing facility, to your precise specifications. The UL logo displayed on all of ACS/Uni-Fab's assemblies demonstrates our commitment to the highest level of quality.

ACS/Uni-Fab works in conjunction with the electrical contractor to determine the proper assembly to meet their required application: hotels, condos, dormitories, offices, multi-family housing units, assisted living centers, hospitals* and more.

*Except on emergency circuits as defined in NEC® 517

Superior Savings

ACS/Uni-Fab services such as project review, factory shop drawings, packaging by area and palletizing by floor, staged releases to reduce handling and on-site security; all greatly enhance on-site productivity and subsequently improve cost effectiveness.

Unsurpassed quality, high on-site productivity, significantly lower labor exposure, and easier on-site distribution makes ACS/Uni-Fab your value added partner.

Start by laying out the location of the assemblies. With the aid of a template, attach each assembly to a stud.

Punch the top track and feed cables into the ceiling and make them up into a j-box. When devices are within several feet of each other the device assembly box can be used to make joints.



Each ACS/Uni-Fab device assembly includes everything necessary to make the connection.



Secure cable as required by Code, and call for wall rough inspection. All assemblies are UL listed which frees the inspector from checking the internal wiring of each assembly.





ACS/Uni-Fab Device Assemblies



Templates

Templates are a tool designed to assist in mounting a device assembly. It supports the device assembly at the proper height from the floor, squares the ring with the floor, and supports the weight of the assembly while it is being mounted.

Templates are available in oneinch increments, from fifteen (15) to forty-eight (48), for vertical and horizontal ring orientation, one, two, three and four gang assemblies. Specials are also available upon request.

Home Run Cable® or Super Neutral®

When distributing power for lighting and devices, it is necessary to bring circuits from the electric closet to a point on the floor.

Home Run Cable or Super Neutral, unique types of MC cable, allow contractors to combine circuits rather than running each circuit individually – greatly reducing costs. Standard, isolated grounds, additional or oversized neutrals can be consolidated into a single cable, greatly reducing labor hours.

Home Run and Super Neutral come cut to length with one end prepared for panel installation and the other end prepared for the MTB. Each conductor is color-coded and marked for identification.



Master Terminal Box

The Master Terminal Box (MTB) is used to distribute 20 to 50 AMP branch circuits from the panel to remote locations by means of multi-circuit Home Run® or Super Neutral® cable. The MTB provides detailed panel and circuit information, as well as terminal-strip termination for up to 20 currentcarrying conductors (15 phase and 5 neutral), greatly reducing congestion in the electric closet.

MTBs can be factory assembled with the Home Run Cable or shipped separately. Each MTB has identified terminal strips for ease of wiring. MTBs can be designed for any application – under raised floors, in ceilings, in furniture or consoles.

Adjustable Ring

The Adjustable Ring is a one-gang 34" rise ring adjustable to 1½". This allows the device to be leveled with the finished wall for proper trim plate installation.

Standard Device Assemblies

Standard Device Assemblies are UL listed components assembled to



create a UL listed wiring assembly (UL QQ YZ) intended for field installation in accordance with the National Electrical Code (NEC®). They are available in a variety of configurations and styles to meet your project requirements.

Standard Device Assemblies are fast and convenient for projects such as tenant space, non-typical spaces, or when project scope or time allowed does not permit typical units.

Now featuring foam backing which eliminates taping.

Typical Units

Typical units are similar to Standard Units in quality and costeffectiveness, but are built to your specifications on a "made-toorder" basis.

Simply provide the specs and drawings for your project – we'll provide a quote (including room counts, device counts, estimated labor required and project recap); after your order is placed, detailed shop drawings will be developed; a complete job schedule will be done; and (upon approval) materials will be shipped packaged by room number, area and section.

This pre-planning and documentation lays the groundwork for the successful execution of inevitable change orders, and protects against undocumented change requests.



Assembly Required Device Assemblies



Features and Benefits:

- Fixed pricing
- The Contractor can provide his own cable
 or buy Uni-Fab's custom-cut whips
- Mounting templates greatly reduce installation time. Templates are available in one inch increments
- · Reduces material storage, waste and handling
- · Metal device protectors prevent damage by oth er trades
- Ideal for the non-typical floor layouts
- UL listed assembly (UL QQYZ)
- · IBEW/USA

ORDERING AND TECHNICAL INFORMATION

(Please check all that apply and fax back to 508.998.7720)

Assembly Require	d Device					
Manufacturer:	□ Leviton	🗆 Bryant	□ Hubbell	□ Pass & Seymour	□ Other:	
Device Grade:	Residential	Commercial	Industrial	🗆 Hospital		
Bracket:	Unifab Standard S	R16 adj "Big O"	🗆 R24 adj "Big O"	🗆 K18 Kick		
Device Style:	Standard	Decora	Tamper Resistant			
Box:	□ 4" sq. x 21⁄8" deep	□ 4 ¹ 1⁄16" sq. x 21⁄8" deep				
Ground Pin:						
Are there any half switched outlets?	□ Yes		□ Top switched	□ Bottom switched		
Switch type:	□ Single pole	🗆 Two pole	□ Three way	🗆 Four way		
Current rating:	□ 15A	□ 20A	□ 30A	□ 50A		
Receptacle:		□ Surge Suppressor	□ Isolated Ground			
Color:	□ lvory	□ White	Brown	Black	Gray	Other:
Drywall Thickness:	□ 1⁄2"	□ 5⁄8″	□ 3/4"	🗆 Adj for adjustable ring		
Are non-standard brackets needed?	□ 16" 24" adj	□ 18" tall kick	□ Other:			



Cable Ready Device Assemblies



Features and Benefits:

- Fixed pricing
- The Contractor can provide his own cable or buy Uni-Fab's custom-cut whips
- Mounting templates greatly reduce installation time. Templates are available in one inch increments
- · Reduces material storage, waste and handling
- \cdot Metal device protectors prevent damage by other trades
- $\cdot\,$ Ideal for the non-typical floor layouts
- UL listed assembly (UL QQYZ)
- · IBEW/USA

ORDERING AND TECHNICAL INFORMATION

(Please check all that apply and fax back to 508.998.7720)

Cable Ready Device							
Manufacturer:	Leviton	🗆 Bryant	□ Hubbell	Pass & Seymour	□ Other:		
Device Grade:	Residential	Commercial	Industrial	Hospital			
Bracket:	Unifab Standard S	R16 adj "Big O"	🗆 R24 adj "Big O"	🗆 K18 Kick			
Cable Ready Configuration:	🗆 In Only	□ I/O In and Out					
Device Style:	□ Standard	Decora	Tamper Resistant				
Box:	□ 4" sq. x 21⁄8" deep	□ 4 ¹ 1⁄16" sq. x 21⁄8" deep					
Ground Pin:							
Are there any half switched outlets?	□ Yes	□ No	□ Top switched	Bottom switched			
Switch type:	□ Single pole						
Current rating:	□ 15A	□ 20A	□ 30A	□ 50A			
Receptacle:		□ Surge Suppressor	□ Isolated Ground				
Color:	Ivory	U White	Brown	🗆 Black	Gray	□ Other:	
Drywall Thickness:	□ 1/2"	□ 5⁄8″	□ 3/4"	□ Adj for adjustable ring			
Are non-standard brackets needed?	🗆 16" 24" adj	18" tall kick	□ Other:				

Standard and/or Typical Unit Device Assemblies



Features and Benefits:

- Fixed pricing
- Mounting templates greatly reduce installation time. Templates are available in one inch increments
- Reduces material storage, waste and handling
- Metal device protectors prevent damage by other trades
- Ideal for the non-typical floor layouts
- UL listed assembly (UL QQYZ)
- · IBEW/USA

ORDERING AND TECHNICAL INFORMATION

(Please check all that apply and fax back to 508.998.7720)

Assembly Required Device								
Manufacturer:	□ Leviton	🗆 Bryant	□ Hubbell	Pass & Seymour	□ Other:			
Device Grade:	Residential	Commercial	Industrial	Hospital				
Device Style:	□ Standard	Decora	Tamper Resistant					
Box:	□ 4" sq. x 21⁄8" deep	□ 4 ¹ 1⁄16" sq. x 2 ¹ ⁄8" deep						
Ground Pin:								
Are there any half switched outlets?	□ Yes	□ No	□ Top switched	Bottom switched				
Switch type:	□ Single pole	🗆 Two pole	□ Three way	□ Four way				
Current rating:	□ 15A	□ 20A	□ 30A	□ 50 A				
Receptacle:		□ Surge Suppressor	□ Isolated Ground					
Color:	Ivory	U White	Brown	Black	Gray	□ Other:		
Drywall Thickness:	□ 1/2"	□ 5⁄8″	□ 3/4"	□ Adj for adjustable ring				
Are non-standard brackets needed?	🗆 16″ 24″ adj	□ 18" tall kick	□ Other:					



Standard and/or Typical Units Technical Specifications





Why Use ACS/Uni-Fab Typical Units?

- Planning ahead and documenting your intentions lays the ground work for the successful execution of inevitable change orders and protects against undocumented change requests. We look after the small details thereby enhancing on site productivity which, in turn, improves cost effectiveness.
- Typical Units are made to your specifications. Similar to Standard Units in offering quality and cost effectiveness, Typical Units are built on a "made-to-order" basis.
- This approach reduces and controls:
- Time spent on the job
- Storage space
- Material waste and handling
- Security issues
- We offer project assistance in the following areas:
- · Review
- Planning
- Design/layout
- Installation support

Applications:

• These units are used for hotels, condos, dormitories, office and retail spaces, assisted living and hospitals.

Construction:

• The units are UL listed components assembled to create a UL listed Wiring Assembly (UL QQYZ). They are intended for field installation in accordance with the National Electric Code (NEC®).

IBEW Assembled:

• ACS/Uni-Fab products are built by IBEW personnel.



Standard and/or Typical Unit Technical Specifications

Quote

Electronic files or the electrical prints as well as any special project requirements are required to generate a quotation. The quotation includes: room counts, device counts, estimated labor for individual rooms and a recap of the project.

Project Time Line Initial Design

ACS/Uni-Fab, with the Electrical Contractor, will coordinate the specific project requirements, which include project schedule, device type, color, amperage, height, ground up/down, wall thickness, etc. After receipt of the drawings and project requirements, the initial design process begins. A typical unit layout is generated, allowing a visual confirmation of the project scope and contractor intent. Also produced is a detail report which provides specific information about each detail represented by numbered triangles on the shop drawings. This detail number shows on both the shop drawing and the detail report and corresponds to the label on the back of each device assembly.

Electronic files, if available, are recommended as they expedite the design process.

Typical Unit Layout



Unit Detail Report

Generic Hotel (0000-01) Area			rea	Dou			uble Double	A						
	Group	A	\LL	Dra	wing	Revision	(01/06/20	000					
						Date		Near						
Detail	Cat #	Box	Ring	Bracket	Device 1	Device 2	Ca Arm	ble	Cable Strip	Far Conn.	Length	Conn.	Strip	Location
1	SMC902NI-16-18-14	4S Deep	1G ¾"	S	CSBI20-BI		MC	12/2	0.7	AFC-50	16	AFC-50	0.7	
	I	I	I	I	1	I	MC	12/2	0.7	AFC-50	18	AFC-50	0.7	TL
							МС	12/2	0.7	AFC-50	14	AFC-50	0.7	IK
2	SMC902NI-14-12	4S Deep	1G ¾″	S	CSBI20-BI		MC	12/2	0.7	AFC-50	14	AFC-50	0.7	TC
							MC	12/2	0.7	AFC-50	12	AFC-50	0.7	TR



Typical Units - Technical Specifications

Project Timeline



Approval

The Electrical Contractor plays a key role in maintaining the project schedule. The shop drawings should be reviewed and approved as quickly as possible after the receipt of the initial design in order to keep the project on schedule.

A quick turn-around allows ample time for the balance of the "Project Time Line" to be completed.

The initial design should be reviewed closely for:

- Cable lengths
- Wall thickness
- Device type
- Overall layout

After reviewing the design, the Contractor should approve with changes or as shown and return the approvals to ACS/Uni-Fab.

Packaging

ACS/Uni-Fab makes every effort to reduce overall job cost. As a part of that effort, we will box and palletize your order by room number, area, section, like products, etc. to minimize sort time at the job-site. Each box contains a set of shop drawings allowing the electrician to quickly identify the placement of each device assembly.

Shipping

ACS/Uni-Fab contracts with a network of carriers. Should the Contractor request a carrier outside our contracts or special handling, additional freight costs may apply.





Mounting Brackets

Universal Bracket Features & Benefits

- Allows the use of 4" or 411/16" square junction box
- · Constructed of 20 gauge steel with a zinc plated finish
- · Allows you to mount on either side of framing stud
- Designed with built in standoffs for up to 6" wall depth
- Bracket stays secured to the J-box when mud ring is removed, making wiring terminations easier



4GB-000580

Universal Bracket

Part Number	Description
4GB-000580*	Universal mounting bracket
*Quick ship items - contact us for more information	

uick ship items - contact us for more informatior

Open Bracket Features & Benefits

- Allows the use of 4" square junction box
- · Constructed of 20 gauge steel with a zinc plated finish
- · Mounts stud to stud giving you the flexibility to specifically position your device
- Eliminates the need for standoffs
- · Gives you the flexibility to mount multiple device on the same bracket (Ideal for Power & Data)



MIN UFMB16

Open Bracket

Part Number	Description
MIN UFMB16*	16" Open mounting bracket
MIN UFMB24*	24" Open mounting bracket

*Quick ship items - contact us for more information



Device Protectors

Single/ Two Gang Device Protectors

Features and Benefits

- · Allows device to be installed before drywall
- · Device protector provides drywall installer an edge to cut around for rotor zip tool
- $\cdot\,$ New metal device protectors with foam backing keeps devices looking new during construction
- Reusable
- Sold in cartons of 100

Single Gang Device Protectors



Toggle Device PART# P-S Protector



Decora Device PART# P-BF Protector



Duplex Device PART# P-DF Protector

Two Gang Device Protectors



Toggle Device Angled PART# P-SA Protector



Decora Device Angled PART# P-BAF Protector



Duplex Device Angled PART# P-DAF Protector



Fully Engineered Systems

Now Available with Non-Metallic Building



Applications include wooden structures or areas where pipe or metal-clad cable is not a requirement. Installation drawings included with fully engineered systems







Pre-Wired Load Centers



Load centers are pre-wired from the circuit breaker out for branch wiring. Homeruns for each circuit are precut to length and terminated in panel. Conductors are labeled with circuit numbers for easy identification during installation. All cables come neatly coiled and zip-tied to the optional panel bracket.

Features and Benefits

- · Available in metallic or non-metallic cable
- · Cables pre-cut to length with circuit I.D.
- Built and labeled to project specifications and panel schedule
- Optional panel bracket sets panel flush with 5/8" sheetrock
- $\cdot\,$ Manufactured in a controlled factory environment
- UL Listed wiring assemblies (UL File No. 95149)
- · IBEW / USA



Non-Metallic Cable

Metallic Cable



atkore.com/acsunifab

Distribution Systems Technical Specifications

Distribution wiring for hotels, condos, dormitories, office & retail spaces, assisted living centers and health care settings.*

When distributing power for lighting and devices, it is necessary to bring circuits from the electric closet to a point on the floor. Rather than running each circuit individually, it is more economical to combine circuits. Home Run Cable® or Super Neutral®, unique types of MC Cable, allow the contractor to combine circuits. Standard, isolated grounds, additional or oversized neutrals, etc. can be consolidated into a single cable, allowing the contractor to greatly reduce labor hours. Each conductor is color coded and marked for identification.

Factory prepared Home Run® or Super Neutral® Cable combined with master and secondary terminal boxes, create a distribution system which is not only cost-effective, but also extremely user friendly. Home Run Cable® or Super Neutral® come cut to length with one end prepared for panel installation and the other end prepared for the MTB.

The MTB can be factory assembled with the Home Run Cable® or shipped separately, depending on job conditions. Each MTB has identified terminal strips for ease of wiring now and in the future. There is no more uncertainty as to what panel or circuit is being worked on. MTBs can be designed to meet any number of applications – under raised floors, in ceilings, in furniture or consoles.

*Except on emergency circuits in health care settings.





Branch Circuit Power Systems

(MTB) Main Terminal Box



12 x 12 x 4 Box Shown

Features and Benefits

- Available in four stock sizes: 8 x 8 x 4, 12 x 12 x 4, 18 x 18 x 4, 20 x 20 x 4
- With: Insolated Ground Bar, Neutral Bar, Equipment Ground Bar, Flush Covers
- With or Without Home Run®

Description

The Main Terminal Box (MTB) is utilized to distribute 20 to 50 AMP branch circuits from the panel to remote locations by means of multi-circuit Home Run® or Super Neutral® cable. The MTB provides detailed panel and circuit information as well as terminal-strip termination for up to 16 current carrying conductors (12 phase and 4 neutral). Provides the contractor greater cable management by running multiple Hotel, Motel and Dorm Rooms back to the panel. This greatly reduces congestion in the electric closet.



18 x 18 x 4 MTB



Audio Visual Boxes

Audio Visual Boxes Technical Specifications

Audio Visual Boxes for stadiums, arenas and convention centers

Description

ACS/Uni-Fab's Audio-Visual boxes are specifically designed for the Audio -Visual Industry

- · 22" wide enclosures accommodate 19" EIA rack panels
- · All rails are machined with the EIA universal spacing holes
- Cable Pass Throughs (CPT) with Neoprene Seals are available for cable entry
- Boxes are available in stainless steel with #3 brushed finish or beige textured paint
- 16 gauge stainless steel is used on boxes under 24" in any dimension
- 14 gauge stainless steel is used on boxes over 24" in any dimension
- Flush mounted enclosures have NEMA 1 door
- Recessed and surface mounted enclosures have NEMA 3 door
- Not UL listed for wet locations
- · Material: 304 Stainless or Cold Rolled Steel
- \cdot "S", "F" and "PM" come standard with drip shield
- $\cdot\,$ "FM" and "FM/RD" not recommended for use in wet areas
- 1/4 turn latches standard, locking cylinders available
- Universal Rack Rails w/10-32 tapped holes spacing .625-.625-.500", 1.75" = 1 RU - The bottom two RU's can be field adjusted to a 45° angle
- Gaskets and Cable Pass Through seals are closed cell
 Neoprene rubber

Cable Pass Through







PBK- Painted Black

- F– Fully Recessed
- FM– Flush Mounted
- S- Surface/Semi-flush Mounted P- Pedestal Mount

SD FULLY RECESSED

36





Standard Part Number

Mounting Plates

Cable Pass Through

Pad Lock Attachment

Recessed Door

Stainless Steel

Drip Shield

Door Lock

Strain Relief

Split Door

No Door

EIA Rack Rails

H/W/D

MP-

RP-

Size-

CPT-

DS-

DL-

SR-

SD-

PLA-

RD-

ND-

SS-

AV-RP-20/16/08-CPT-DS-SS-S



Audio Visual Boxes



Notes





Notes









Allied Tube & Conduit A FC Cable Systems Heritage Plastics Marco Unistrut Unistrut Construction Cii Calpipe Security Calbrite Calbond US Tray Flexicon Power-Strut Calconduit Razor Ribbon United Poly Systems Vergokan Columbia-MBF Cope Four Star Industries Eastern Wire + Conduit ACS/Uni-Fab Sasco Strut Kaf-Tech Northwest Polymers Cascade Poly Pipe + Conduit FRE Composites Queen City Plastics

Atkore

260 Duchaine Blvd New Bedford, MA 02745

Toll Free / 800-757-6996 **Fax** / 508-998-1131

atkore.com/acsunifab

Want to join a company that helps you build the mindset, skill set and tool set for success? Visit us at atkore.com/careers