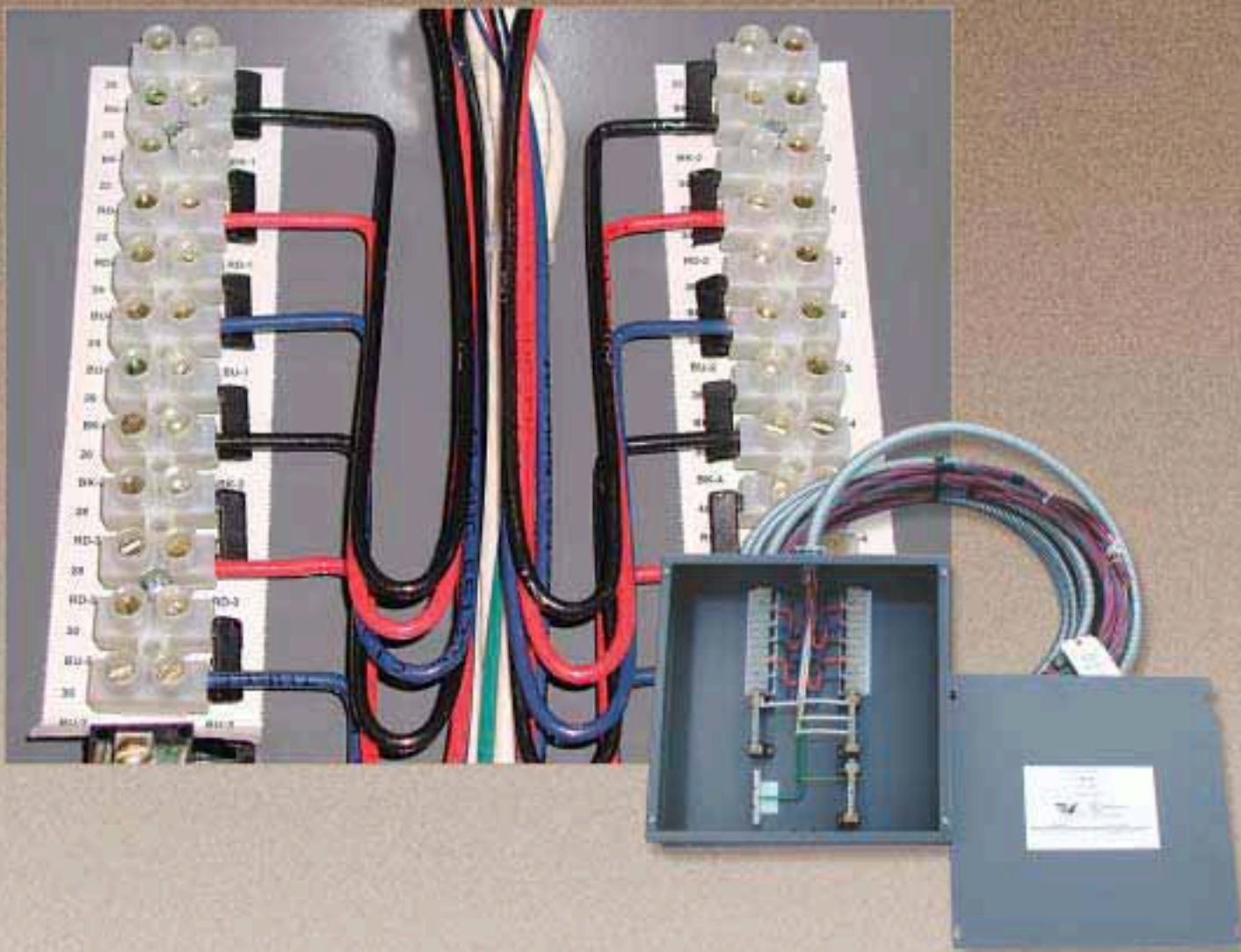


Branch Circuit Power - Distribution Systems



Distribution Systems - Master Terminal Box

Technical Specifications

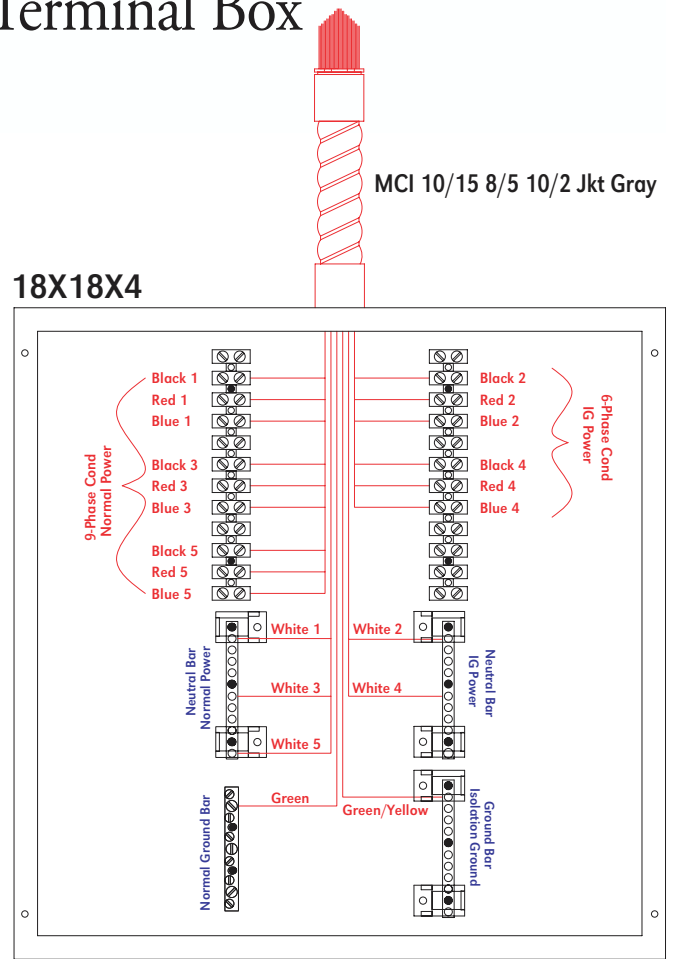
The Master Terminal Box (MTB) is utilized to distribute 20 to 50 AMP branch circuits from the panel to remote locations by means of multi-circuit Home Run® or Super Neutral® cable. The MTB provides detailed panel and circuit information as well as terminal-strip termination for up to 20 current carrying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

MTB's are 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:

- Isolated Ground Bar
- Neutral Bar
- Equipment Ground Bar
- Flush Covers
- Tamper-proof Screws



Weights, Measurements and Packaging

Size	Code	Phase/Color	Neutral	Ground	O.D.	Wt/M
MC IG™						
12/2 MC IG	1705 (80)	12-1 Black	12-1	12-2	0.530"	150
12/3 MC IG	1706 (80)	12-2 Black/Red	12-1	12-2	0.565"	180
Super Neutral®						
12/5 SN	2916	12-2 Black/Red	12-2	12-2	0.59"	335
12/7 SN	2911	12-3 Black/Red/Blue	12-3	12-2	0.635"	385
10/7 SN	2912	10-3 Black/Red/Blue	10-3	10-2	0.72"	545
Super Neutral Oversized®						
12/6 SNO	2918	12-4 Black/Red/Blue/Pink	10-2	12-2	0.66"	435
10/4 SNO IG	2915	10-3 Black/Red/Blue	8-1	10-2	0.705"	476
10/7 SNO	2970	10-4 Black/Red/Blue/Pink	8-2	10-2	0.805"	640
10/8 SNO IG	2924	10-6 2 Sets Black/Red/Blue	8-2	10-2	1.035"	797
10/12 SNO IG	2991	10-9 3 Sets Black/Red/Blue	8-3	10-2	1.095"	1000
10/16 SNO IG	2992	10-12 4 Sets Black/Red/Blue	8-4	10-2	1.200"	1200
10/20 SNO IG	2993*	10-15 5 Sets Black/Red/Blue	8-5	10-2	1.295"	1512
Home Run®						
10/6 HR IG	1912 (80)	10-4 2 Sets Black/Red/Blue	10-2	10-2	0.705"	485
10/8 HR IG	1939 (80)	10-6 2 Sets Black/Red/Blue	10-2	10-2	0.785"	640
10/12 HR IG	1955 (80)	10-9 3 Sets Black/Red/Blue	10-3	10-2	0.875"	805
10/16 HR IG	1954 (80)	10-12 4 Sets Black/Red/Blue	10-4	10-2	1.005"	1005
10/20 HR IG*	1956 (80)	10-15 5 Sets Black/Red/Blue	10-5	10-2	1.170"	1265

* Non-stock Cable

Cables are prepared for final termination in electrical panel. The end of each cable is tagged with the appropriate panel and circuit numbers.

Branch Circuit Power Systems - Distribution

Technical Specifications

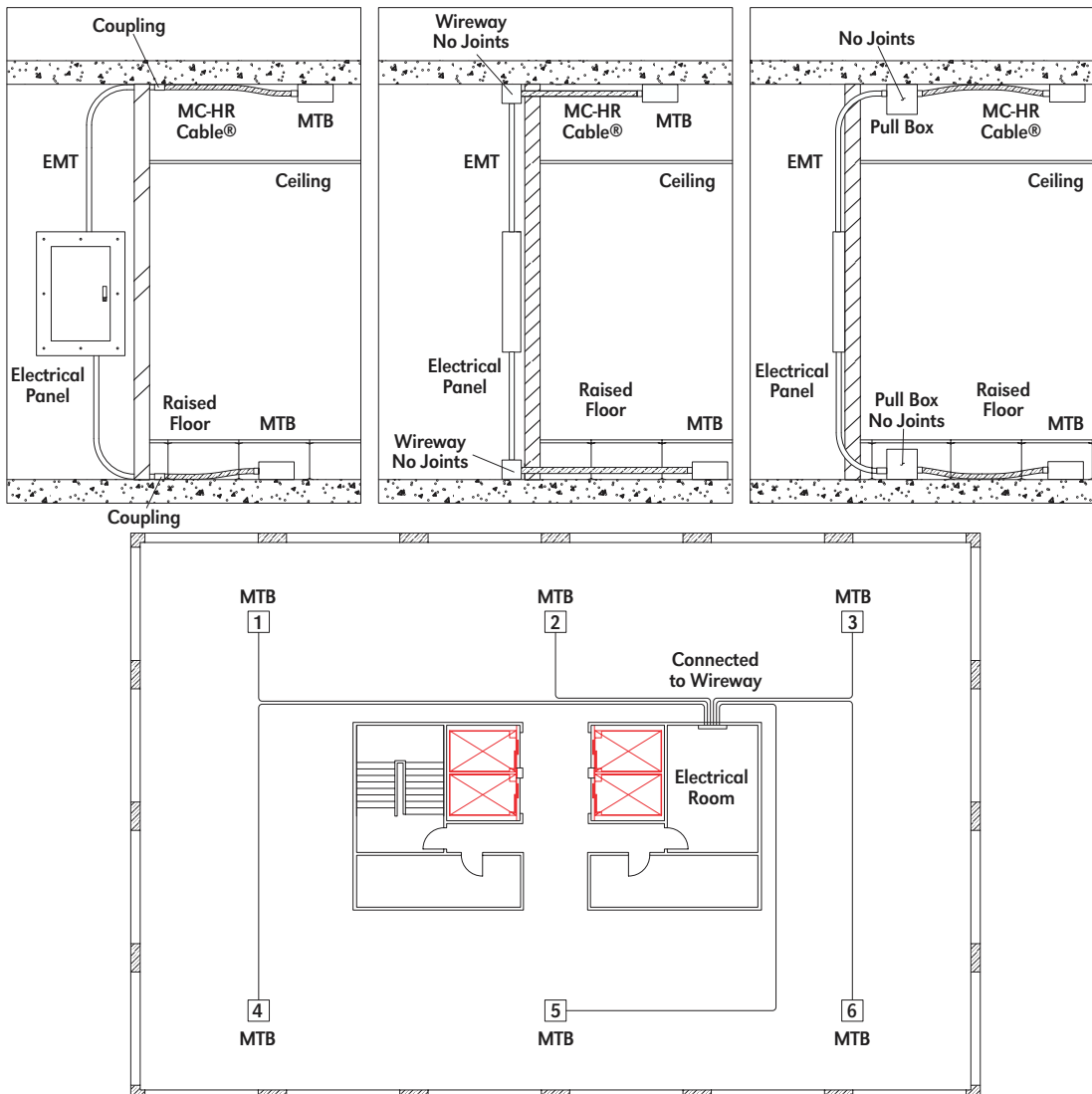
Distribution wiring for hotels, condos, dormitories, office & retail spaces, assisted living centers and health care settings.*

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.

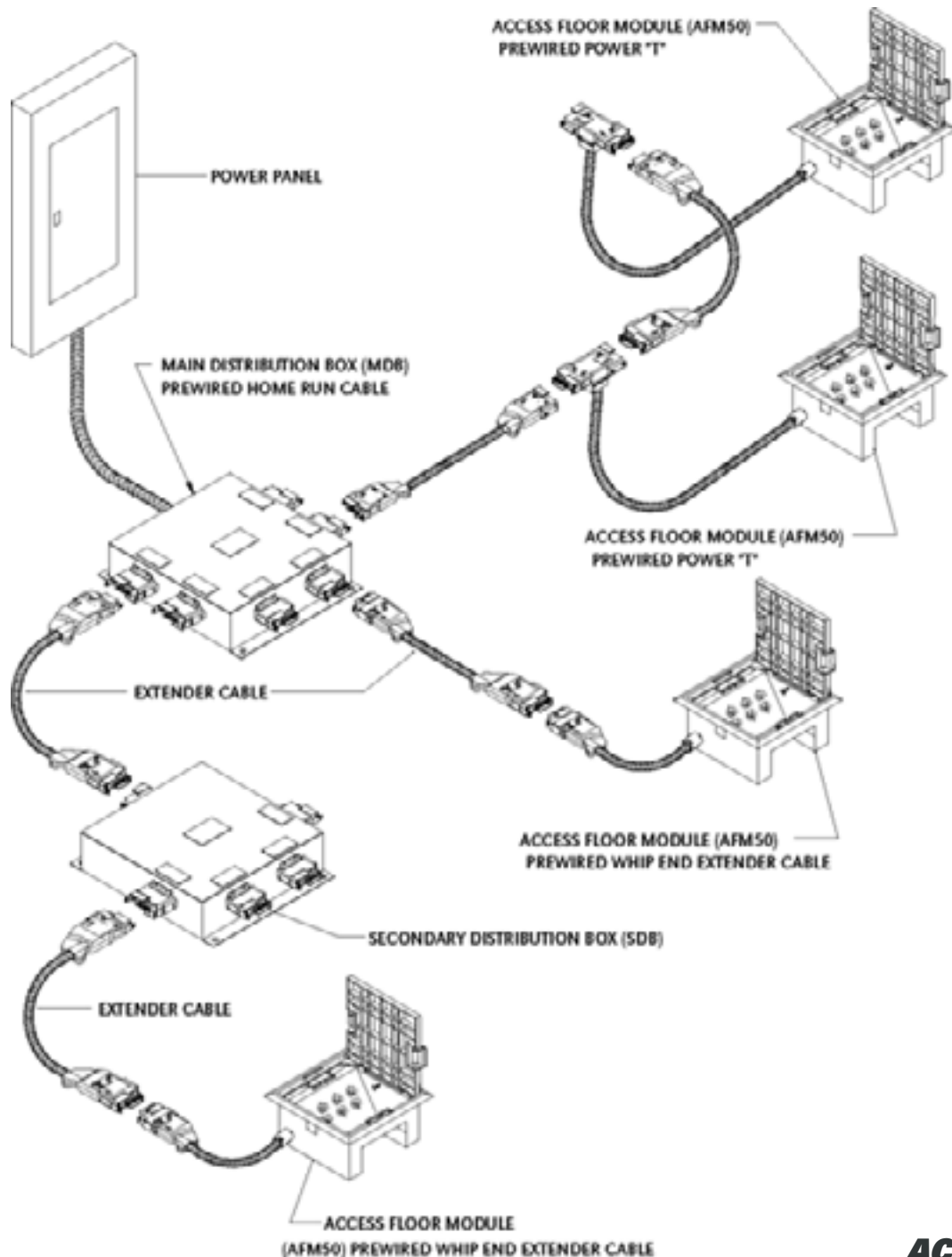
The MTB can be factory assembled with the Home Run Cable® or shipped separately, depending on job conditions. Each MTB has identified terminal strips for ease of wiring now and in the future. There is no more uncertainty as to what panel or circuit is being worked on. MTBs can be designed to meet any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



Master Distribution Box Technical Specifications

The ACS/Uni-Fab Master Distribution Box (MDB) is the modular version of the Master Terminal Box (MTB). The installer refers to CAD drawings developed by the ACS/Uni-Fab engineering staff, which allow him to lay out components and snap them together quickly and economically. This provides a reliable installation with maximum flexibility to accomplish future moves, adds, and changes. Total installed cost is lower than with traditional wiring methods – the higher the labor rates, the greater the savings.

The MDB is fed by Home Run[®], Super Neutral[®], MC I.G. or standard cables. MDBs are used to distribute 20 Amp 120/208-volt branch circuit power through modular extender cables and related whip end extender cables. MDBs are available in Single Port General Purpose (GP), Isolated Ground (IG) or Double Port both GP and IG. MDBs are available in 6-port, 9-port, or 12-port versions. We recommend consulting the ACS/Uni-Fab Engineering Group before designing a wiring scheme as use of standard configurations reduces cost and lead times. Custom circuitry and port configurations are available.



Master Distribution Box Technical Specifications



The MDB distributes 20 Amp 120/208-volt branch circuit power through single head (5-pin) and double-head (10-pin) modular Extender Cables, which come with a variety of circuit configurations and lengths. Extender Cables feed the Secondary Distribution Box (SDB) or run directly to the Access Floor Module (AFm), furniture, etc. The AFm is the most common workstation distribution point. Alternates to the AFm include convenience power outlets, furniture feeds or various furniture-mounted devices.

Cost Advantage

Due to their “plug and play” nature, ACS/Uni-Fab modular wiring systems reduce installation costs by dramatically decreasing time spent on the job. The savings can be as much as 30% over conventional wiring methods.



Flexibility Advantage

With conventional hardwired systems, a change in office layout frequently means replacing wire from the workstation all the way back to the electrical closet. With the ACS/Uni-Fab modular wiring system, the only wiring affected is the segment from the SDB or MDB to the workstation. The plug-in connectors on the power cables allow for the easy movement of components. 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. While such changes take place, nearby operations continue uninterrupted.



Construction

All distribution boxes, connector housings and latching strikes are made of steel, not plastic. Connector pins and sleeves are made from highly conductive tinned copper alloys and are encased in GE Lexan. The plastic is keyed and color-coded to prevent mismatching of system voltages and uses. Each power assembly is factory tested prior to shipment, assuring the product’s quality and reliability.

UL Listing

ACS/Uni-Fab power systems are designed for installation in compliance with the National Electric Code, Section 604, Manufactured Wiring Systems and are UL Listed.



Master Distribution Box Technical Specifications



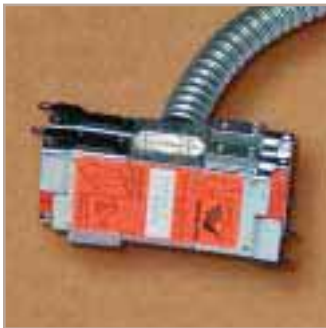
Master Distribution Box

The MDB is the heart of the modular wiring system. It provides power to both the SDB and AFm via extender cables. MDBs are available in 6, 9, or 12 port General Purpose (GP) or Isolated Ground (IG) single or double port configurations. Single ports can be configured for General Purpose or Isolated Ground Power. Home Run®, Super Neutral® or MC IG cable can be pre-wired to the MDB. The cable length is determined by the distance between the designated area to the electrical panel or junction box location.



Secondary Distribution Box

The SDB receives power from the MDB via an Extender Cable and provides a central power distribution point to feed General Purpose (GP) branch and/or Isolated Ground circuits to the AFm through Extender Cables. The SDB comes standard in 3, 4 or 6 single or double port configurations. SDBs allow for equipment to be moved or disconnected without interrupting power to other users.



Power 'T'

AFms equipped with Power 'T's are an alternative to SDBs. Through a series of extender whips, one MDB port can feed up to 3 AFms equipped with Power 'T's. While Power 'T's are more cost effective than SDBs, minimal power interruption will occur for "downstream" users when moving work stations.



Power Extender Cables

Extender Cables are used to interface with MDBs and SDBs to feed the AFms and to provide an extension in the event of increased length requirements. They are available in single and double port configuration for the distribution of General Purpose (GP), Isolated Ground (IG) or combination of GP/IG Branch Circuit Power Systems. Extender Cables make the connection between the MDB and SDB and from the SDB to the Power 'T' or Whip-End Extender Cable. They can also make a direct connection from the MDB to the point of use.

Whip-End extender cables are designed to interface with the Access Floor Module and/or to energize other electrical equipment. It is available in both single port and double port configurations to facilitate General Purpose (GP), Isolated Ground (IG) or combination GP/IG Branch Circuit requirements.

Power Extender Cables are manufactured from MC Cable consisting of 90 C insulated #12 AWG solid copper conductors (with optional #10 AWG neutral) and rated for use on 20 amp 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.



Home Run Cable®

Home Run Cable® is a metal clad cable with a variety of configurations to choose from including Super Neutral®, individual neutrals, isolated ground or general purpose conductors. All conductors are UL Listed. Rated 600V. Type THHN. Copper Wires.