8.4: UMHHC - ELECTRICAL PML

The Electrical Trades Preferred Manufacturers List identifies manufacturers that are known to produce good quality products, meet specification and schedule requirements, provide technical support, and provide service after the sales. This List is intended to regulate product quality, standardize electrical designs, and simplify maintenance activities. It is not intended to limit competition. It is not all inclusive. It is a list of manufacturers whose products are well known to the University due to their frequent and successful use.

This List shall be used by A/E’s when selecting manufacturers for specification in electrical designs. A/E’S shall specify only the listed manufacturers that meet their project’s requirements, and should specify a minimum of three manufacturers whenever possible. A/E’s may, when needed, specify manufacturers not on this List to satisfy project requirements, BUT ONLY AFTER OBTAINING UNIVERSITY APPROVAL IN ADVANCE.

This List shall NOT be used by Contractors to justify making substitutions for products specified in the construction documents. CONTRACTORS SHALL QUOTE AND PROVIDE THE PRODUCTS SPECIFIED IN THE CONSTRUCTION DOCUMENTS. The only exception to this rule are Owner’s Option(s), submitted with the bid, that are accepted by the University AT THE TIME OF BID ACCEPTANCE – all in accordance with the project's standard general conditions.

THIS LIST DOES NOT APPLY to purchases by the University Plant Department of replacement electrical products required to match or maintain existing installations.

Item groupings proceeded by an asterisk (*) are variances from or additions to the CAMPUS ELECTRICAL PML. This list is revised as needed. Before using it, check the UMHHC – FPD Website for the latest revision.

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260513-H – SUPPLEMENTAL MEDIUM, LOW AND CONTROL CABLES (16120-H)

Cables (Medium Voltage)
- General
- Kerite
- Okonite
- Prysmian
- Rockbestos-Surprenant
- Service Wire
- Southwire
- United Copper Industries

Cables and Wire (600 Volts)
- Aetna Wire & Cable
- American Insulated Wire
- Cerro Wire
- Encore
- Prysmian
- Rockbestos-Surprenant
- Service Wire
- Southwire
- United Copper Industries

MC Cables (600 Volts)
- AFC
- Encore
- Belden
- Coleman
- Raychem
- 3M Co.

260526-H – SUPPLEMENTAL GROUNDING AND BONDING FOR ELECTRICAL (16450-H)

Ground Connections
- Burndy Hyground (Proper dies must be used)
- Cadweld
- Thermoweld
- Thomas & Betts Blackburn (Above grade only)

260533-H – SUPPLEMENTAL ELECTRICAL MATERIALS AND METHODS (16050-H)

Cable Trays - Center Spline and Wall Mount Types (Use only where ladder and wire basket tray cannot be used, and only with ITCS (Campus) or MCIT (UMHHC) approval)
- B-Line
- Mono-Systems
- Thomas & Betts
- Wiremold
- B-Line
- Chalfant
- Cablofil EZTray
- Mono-Systems

Cable Trays – Wire Basket Type (Use only with ITCS (Campus) or MCIT (UMHHC) approval)
- B-Line
- Chalfant
- Cablofil EZTray
- Mono-Systems

Conduits, Raceways and Accessories
- EMT, liquid-tight flexible metallic conduit, and/or non-liquid-tight flexible metallic conduit/raceway; plus associated accessories, fittings, junction and pull boxes, and related products
- Products of all manufacturers are acceptable as long as they are electro-galvanized steel, have a smooth interior, and are labeled for the application.

Husky
- Mono-Systems
- Thomas & Betts
Rigid (galvanized metal), and IMC (intermediate metal) conduits/raceway, plus associated accessories, fittings, junction and pull boxes, and related products
- Products of all manufacturers are acceptable, as long as they are hot-dipped galvanized steel inside and out, have a smooth interior, and are labeled for the application. Boxes shall be cast, not formed. IMC may only be used when tools specifically designed for IMC are used.

PVC conduit/raceway (Type DB, Schedule 40, and Schedule 80, plus associated accessories, fittings, junction and pull boxes, and related products
- Products of all manufacturers are acceptable as long as they are sunlight resistant, and labeled for the application. Products from manufacturers making both the conduit and the fittings are preferred whenever possible.

Fiberglass Reinforced Epoxy (FRE) conduit/raceways, accessories, fittings, and related products
- FRE
- Champion

*Cord Reels
- Appleton

**260543 – UNDERGROUND ELECTRICAL SERVICES (16110)**

Underground Junction & Pull Boxes
- CDR Systems
- Carson-Brooks
- Quazite

**260800-H – SUPPLEMENTAL ELECTRICAL ACCEPTANCE TESTS (16950-H)**

Nationally Recognized Testing Laboratories Services
- CSA
- ETL (William Good at Inchcape Testing Services, Phone: 734-761-1772)
- MET Laboratories (Walt Stoddard, Phone: 517-542-3020)
- UL (Northbrook, IL)
- Northern Electrical Testing (Lyle Detterman, Phone: 248-689-8980)
- Utilities Instrumentation Services (David Wheeler, Phone: 734-482-1450)

Testing Services
- Bisbee Infrared Services (Penny Wilson, Phone: 517-787-4620)
- Northern Electric Testing (Lyle Detterman, Phone: 248-689-8980)
Non-Current Limiting Fuses (Primary)
- S & C Type SM-5SS (With high interrupting capacity adapter)
- Eaton/Cutler-Hammer Type RBA-400 (With high interrupting capacity adapter)

Current Limiting Fuses (Primary)
- Ferraz-Shawmut, Type CL-14
- Eaton/Cutler-Hammer Type CLE
- General Electric Type EJO

KWHR/Demand Meters
- Power Measurement Limited (PML) 7330 ION (With options per Master Spec 16313)

15 kV Fused and Unfused Primary Switches (5kV rated switches may only be used for 5 kV (4,160 volt) class motors)
- Eaton/Cutler-Hammer
- Powercon
- Square D

15kV Metal Clad Switchgear and/or Circuit Breakers (5kv rated circuit breakers may only be used for 5 kV (4,160 volt) class motors)
- Eaton/Cutler-Hammer
- General Electric

Addresses of above Assemblers

Controlled Power Corporation
295 Wetmore Ave SE
Massillon, OH 44646
Phone: (800) 321-0414
Fax: (330) 834-3201

Eaton/Cutler-Hammer
Service Electric Supply Co.
15424 Oakwood Drive
Romulus, MI 48174
Phone: (734) 229-9100
Fax: (734) 229-9101

Electrical Product Sales
Dick Stone
Phone: (248) 583-6100

General Electric, McNaughton-McKay Electric Co.
4670 Runway Blvd
Ann Arbor, MI 48108
Phone: (734) 327-6251
Fax: (734) 327-6285

Olsun Electrics, C/O HEK Inc.
6083 Lafayette

Square D

Circuit Breakers for 600-volt Class

Secondary Switchgears and Switchboards
- Asea Brown Boveri
- Eaton/Cutler-Hammer
- General Electric
- Square D

Transformers
- Asea Brown Boveri
- Eaton/Cutler-Hammer
- General Electric
- MGM
- Olsun
- Square D

Substation Assemblers (Using components from Preferred Manufacturers only)
- Controlled Power Corporation
- Eaton/Cutler-Hammer
- Electrical Product Sales
- General Electric
- Park Metal
- Powercon
- Pederson Power Products
- Square D

Ann Arbor, MI 48103
Phone: (734) 995-0900

Park Metal
19197 Sherwood Street
Detroit, MI 48234
Phone: (313) 366-2200
Fax: (313) 366-1540

Powercon/Woodlyn Sales
9357 General Drive - Suite 102
Plymouth, MI 48170
Phone: (734) 453-2754
Fax: (734) 453-2759

Pederson Power Products
1521 Eden Gardens Drive
Fenton, MI 48430
Phone: (810) 750-3032
Fax: (810) 750-9557

Square D, Madison Electric Co.
3900 Jackson Rd
Ann Arbor, MI 48106
Phone: (734) 665-6131
Fax: (734) 665-9239
262000 – LOW VOLTAGE ELECTRICAL DISTRIBUTION (16400)

Bus Ducts
- Eaton/Cutler-Hammer
- General Electric
- Siemens
- Square D

Fuses (600 Volts and Below)
- Bussmann
- Ferraz-Shawmut
- Littelfuse

*Surge Protective Devices (TVSS)
- Current Technology
- Eaton/Cutler-Hammer-Tycor
- Intermatic (For protection of individual loads and receptacle panels only)
- Leviton (For protection of individual loads and receptacle panels only)
- Liebert

Switchboards, Panelboards and Circuit Breakers
- Eaton/Cutler-Hammer (Only with U of M Lugs - confirm on shop drawings)
- General Electric
- Industrial Electrical Manufacturing (For custom and retrofit applications only)
- Siemens
- Square D

Time Switches
- Intermatic
- Paragon
- Sangamo
- Tork

*Transformers (600 Volts, Small Dry Type)
- Acme
- Eaton/Cutler-Hammer
- General Electric
- Hammond Power Systems
- Hevi-Duty
- Siemens
- Square D

Transformers (Liquid Filled, or Dry Pad-Mounted Type)
- Eaton/Cutler-Hammer
- General Electric
- Olsun Electric
- Pennsylvania
- Pioneer

262726-H – SUPPLEMENTAL WIRING DEVICES (16140-H)

Dimmer Switches
- Leviton (Incandescent type only)
- Lithonia (Incandescent and fluorescent types)
- Lutron (Incandescent and fluorescent types)

Occupancy Sensors
- Sensor Switch
- Watt Stopper

Pin & Sleeve Connectors
- Crouse-Hinds
- Hubbell
- Killark
- Leviton
- Pass & Seymour
- Mono-Systems

Power Poles
- Hubbell
- Steelcase
- Wiremold

120-volt, 20-ampere Receptacles (GFCI, Hospital Grade, TVSS & Child Resistant)
- Bryant
- Cooper (Arrow Hart)
- Cooper (Eagle)
- Hubbell
- Leviton
- Pass & Seymour

120-volt, 20-ampere Receptacles and Plugs
- Bryant
- Arrow Hart (Cooper)
- Eagle (Cooper)
- Hubbell
- Leviton
- Pass & Seymour

**Special Power Receptacles and Plugs**
- Bryant
- Arrow Hart (Cooper)
- Eagle (Cooper)
- Hubbell
- Leviton

**120/277 Volt, 20-Ampere Light Switches**
- Bryant
- Arrow Hart (Cooper)
- Eagle (Cooper)
- Hubbell
- Leviton
- Pass & Seymour

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**262900-H – SUPPLEMENTAL MOTOR CONTROLS (16480-H)**

**Capacitors for Power Factor Correction**
- Aerovox
- Eaton/Cutler-Hammer
- General Electric
- Siemens
- Square D

**Motor Starters (Electronic Soft Starter Type)**
- Allen-Bradley
- Eaton/Cutler-Hammer
- Sprecher & Schuh

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**262940-H – SUPPLEMENTAL HEATING CABLES AND MATS (16850-H)**

**Electric Heat Tracing Cables**
- Raychem
- Raychem Chemelex
- Thermon

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**263000-H – SUPPLEMENTAL ENGINE-GENERATOR SYSTEMS (16231-H)**

**Diesel Fired Engine-Generator Sets**
- Caterpillar
- Cummins
- Kohler

**Natural Gas Fired Engine-Generator Sets**
*Only those which require inlet gas pressures of 14 inches of water column or less*
- Caterpillar (No components from Olympian)
- Cummins
- Kohler

**Automatic and Manual Transfer Switches**
- ASCO (Liebert)
- Cummins
- Eaton/Cutler-Hammer
- GE Zenith Controls (Open transition only)

**Paralleling Generation Systems**

**Caterpillar**
- Caterpillar PowerLynk Master/Paralleling Control
- Eaton/C-H Automatic Transfer Switch
- Eaton Switchgear
- Caterpillar Generator

**Zenith/General Electric**
- Zenith Master/Paralleling Control
- Zenith Automatic Transfer Switch
- General Electric Switchgear
- Cummins, Kohler or Caterpillar Generator

**Russellelectric**
- Russelectric Master/Paralleling Control
- Russelectric Automatic Transfer Switch
Eaton or Siemens Switchgear

Cummins, Kohler or Caterpillar generator

263353-H – SUPPLEMENTAL CENTRAL UPS SYSTEMS (16265-H)

Batteries
- C & D Technologies
- Chloride Plante
- Enersys
- Johnson Controls
- A.P.C.
- Best (Individual small load units only)
- Controlled Power
- MGE
- Liebert

Battery Chargers
- LaMarche
- SCI
- Enersys
- C & D Technologies
- Hi-Tran
- LaMarche
- SCI
- Enersys
- C & D Technologies
- Hi-Tran

Uninterruptible Power Supply Systems
(Battery type)

264100 – LIGHTNING PROTECTION (16670)

Lightning Protection Services
- Guardian Equipment (Philip Youtsey, Phone: 734.421.5800)
- ERICO USA 34600 Solon Road Phone: 440.248.0100, Fax: 440.248.0723

265100-H – SUPPLEMENTAL INTERIOR LIGHTING (16511-H)

Ballasts (Electronic Compact Fluorescent)
- Advance Smart Mate
- Aculite
- Lightolier
- Lutron
- Prescolite
- Bodine (For emergency lighting only)
- Lithonia

Ballasts (H.I.D.)
- Advance
- MagneTek
- Universal
- Valmont

Dimming Systems
- AMX
- E.T.C.
- Lithonia
- Lutron
- Strand (Stage lighting only)
- Leviton (Small single room systems only)

Emergency Lights
- Chloride
- Dual-Lite
- Emergi-Lite
- Exide Lightguard
- Lightalarms
- Lithonia
- Sure-Lites

**Exit Signs (LED)**
- Chloride
- Dual-Lite
- Emergi-Lite
- Exide Lightguard
- Lightalarms
- Lithonia
- Morlite (High abuse areas)
- Prescolite
- Sure-Lites

**Lamps**
- General Electric Ecolux
- Philips Alto
- Osram/Sylvania Ecologic
- Venture (H.I.D. only)

**Lighting Fixtures (Fluorescent)**
- Alkco
- Columbia
- Day-Brite
- Holophane
- Kirlin
- Lithonia

**Lighting Fixtures (Compact Fluorescent and Incandescent)**
- Globe
- Halo
- Kirlin
- Lithonia
- Prescolite
- Quality r

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**265600 – EXTERIOR LIGHTING (16521)**

**Lighting Fixtures (Outdoor Parking Lot and Roadway with poles by fixture supplier)**
- Gardco
- Holophane
- Lithonia Hi-Tek
- McGraw-Edison
- Sterner
- Wide-Lite

**Photoelectric Lighting Controls**
- Crouse-Hinds
- Holophane
- Hubbell
- Intermatic
- Sensor Switch
- Tork

**Lighting Fixtures (Outdoor Pedestrian Area with poles by fixture supplier)**

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**272000-H – SUPPLEMENTAL VOICE AND DATA COMMUNICATIONS (16740-H)**

**Cable Trays – Wire Basket Type and Ladder Rack Material**
- B-Line
- CPI (Chatsworth)
- Cablofil EZTray

**Equipment Racks, Horizontal and Vertical Wire Management**
- CPI (Chatsworth)
- Hoffman

**Grounding and Bonding Components (TMGB, TMB, Busbars)**
- Panduit
- Hubbell

**Fire Stop Compounds**
- Hilti
- 3M

**Telecommunications Voice/Data Cables (Low Voltage)**
• Berk-Tek
• CommScope (SYSTIMAX, Andrew, Uniprise)

Copper Modular Connectors (Jacks)
• Hubbell
• Leviton
• CommScope (SYSTIMAX, Andrew, Uniprise)

Copper Modular Faceplates
• Hubbell
• Leviton
• CommScope (SYSTIMAX, Andrew, Uniprise)

Copper Patch Cords
• Hubbell
• CommScope (SYSTIMAX, Andrew, Uniprise)

Copper Hardware (Termination Blocks and Labels)
• SIEMON
• Hubbell

Copper Patch Panels
• Hubbell
• Leviton
• CommScope (SYSTIMAX, Andrew, Uniprise)

Faceplates
• Hubbell
• Leviton
• CommScope (SYSTIMAX, Andrew, Uniprise)

Fiber-optic Cable
• Corning
• CommScope (SYSTIMAX, Andrew, Uniprise)

Fiber-optic Connectors and Hardware
• Corning
• CommScope (SYSTIMAX, Andrew, Uniprise)

*273523-H – SUPPLEMENTAL EMERGENCY TWO-WAY COMMUNICATION (16760-H)

Infrared Hearing Assistance Systems
• Phonic Ear (for classroom applications)
• Sound Associates (for auditorium and theater applications)

*Public Announcement and Sound Systems
• Local Intercoms
• I-Comm Systems

Building Wide Intercoms
• Westcom
• Stations – SLO-1000
• Line Cards – SL-1000-L8

Outpatient and Leased Facilities
• Aiphone Communications Systems
• Atlas/Soundolier
• Dukane
• Rauland-Borg

Wireless Microphone Systems
• Shure

*275223-H – NURSE CALL SYSTEMS (16761-H)

Nurse Call System – Voice/Visual
• Rauland Borg Responder IV

Nurse Call System-Tone/Visual
• Rauland Borg Series Responder 4000

275313-H – SUPPLEMENTAL CLOCK SYSTEMS (16730-H)

Central Clock Systems
• Primex (GPS synchronous wireless)
• Simplex Time Recorder (through Simplex/Grinnell)

Clocks (Battery Powered)
• Edwards
• Franklin
### Security Systems
- Simplex Grinnell Tyco Fire and Security
- Cabling Concepts Premise Control
- Siemens Building Technologies
- Peripheral Vision

### Security Door Electronic Locksets
- Von Duprin Model 6000 Series
- Folger Adams 300 Series
- H.E.S. 1000 Series

### Security Door Hinge Contacts
- Hager Hinge Co.
- McKinney CS
- Select Hinge Co.

### Security Door Release Hardware
- Sargent Panic Hardware
- Von Duprin Chexit

### Security Door Motion Detectors
- BEA
- Detection System Model DS-150
- Dexter Research Center

### Security Locks
- Von Duprin Dynamag 1200
- Sherlock 1500
- Lochnetic 39D or 394-O Series
- Locknetics 5000 Series

### Security System and Components
- American Dynamics

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### Fire Alarm Systems
- Edwards (GE) (through Riverside Fire and Security)
- Honeywell (UM Hospitals only)

- Simplex Time Recorder (through Simplex/Grinnell)
- Vesda (For smoke sampling systems only)