16995-H: UNIVERSITY OF MICHIGAN HEALTH SYTEMS PREFERRED MANUFACTURERS LIST

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 Plan 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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SECTION 16050 - BASIC ELECTRICAL MATERIALS AND METHODS

Cable Trays - Center Spline and Wall Mount Types (Use only where ladder and wire basket tray can not be used, and only with ITCS (Campus) or MCIT (UMHHC) approval)

- B-Line
- Mono-Systems
- Thomas & Betts
- Wiremold

Cable Trays - Ladder Type

- B-Line
- Chalfant
- Cope
- Globetray (GS Metals)

Husky

- Mono-Systems
- Thomas & Betts

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.

- 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
- Hubbell
- Woodhead

Electrical Enclosures

- Carlon (For use with PVC raceways)
- Hammond
- Hoffman
- Park Metal
- Rittal

**Fire Stop Compounds**
- D. Fire Protection Systems
- Flame Safe
- Hilti
- Nelson
- STI SpecSeal
- 3M Company

**Structural Support Materials**
- B-Line
- Hilti
- Powerstrut
- Unistrut

**Surface and Underfloor Wireways**
- Carlon
- Hubbell
- Mono-Systems
- Panduit
- Walker (Wiremold)
- Wiremold

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**SECTION 16110 - UNDERGROUND SERVICES**

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

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**SECTION 16120 - CABLES AND WIRES**

**Cables (Medium Voltage)**
- General
- Kerite
- Okonite
- Prysmian

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

**MC Cables (600 Volts)**
- AFC
- Encore
- Rockbestos-Surprenannt
- Service Wire
- Southwire
- United Copper Industries

2-Hour Fire Rated Cables (600 Volts)
- Lifeline by Drake USA
- VITALink by Rockbestos-Surprenant

Control Cables and Wire
- Belden
- Coleman

Cable Splices for Medium Voltage Cable
- Raychem

Cable Terminations for Medium Voltage Cable
- Raychem
- 3M Co.

SECTION 16140 - WIRING DEVICES

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
• Pass & Seymour

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

SECTION 16231 - ENGINE-GENERATOR SYSTEMS

*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)
• Russellelectric

*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

Russelectric
Russelectric Master/Paralleling Control
Russelectric Automatic Transfer Switch
Eaton or Siemens Switchgear
Cummins, Kohler or Caterpillar generator

SECTION 16265 - STORED ENERGY EMERGENCY LIGHTING AND POWER SYSTEMS

Batteries
- C & D Technologies
- Chloride Plante
- Enersys
- Johnson Controls

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

Uninterruptible Power Supply Systems (Battery type)
- A.P.C.
- Best (Individual small load units only)
- Controlled Power
- MGE
- Liebert

Rotary UPS Systems
- Piller
- Power Systems and Controls
- Designed Power Solutions International (DPSI) (Smaller applications only)
- Pentadyne (Smaller applications only)
- Active Power (Smaller applications only)

SECTION 16310 - UNIT SUBSTATIONS

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
- 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

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
Ann Arbor, MI 48103
SECTION 16400 - SERVICE AND DISTRIBUTION

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

**SECTION 16450 - GROUNDING**

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

**SECTION 16480 - MOTOR CONTROLS**

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

**Motor Controls (MCC’s, Starters, Contactors, Disc. Switches and Control Devices)**
- Allen-Bradley
- Eaton/Cutler-Hammer
- General Electric
- Siemens
- Square D

**Motor Starters (Electronic Soft Starter Type)**
- Allen-Bradley
- Eaton/Cutler-Hammer
SECTION 16511 & 16521 - INTERIOR & EXTERIOR LIGHTING

Ballasts (Electronic Compact Fluorescent)
- Advance Smart Mate
- Aculite
- Lightolier
- Lutron
- Prescolite

Ballasts (Electronic Rapid Start T-8 Fluorescent)
- Advance Optanium
- Bodine (For emergency lighting only)
- Osram/Sylvania Quicktronic Professional
- Universal AccuStart

Ballasts (Electronic Dimming T-8 Fluorescent)
- Advance Mark X (5% dimming type)
- Lightolier (1% dimming type)
- Lutron Hi-Lume (1% dimming type)
- Lutron ECO-10 (10% dimming type)
- Osram/Sylvania (10% dimming type)

Emergency Power Ballasts (Electronic Rapid Start T-8 Fluorescent)
- 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

Sprecher & Schuh
- 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
- Cooper (Metalux)
- Hubbell
- Keene
- Peerless

**Lighting Fixtures**
- Best
- Crouse-Hinds
- Day-Brite
- Fail-safe
- General Electric Lumark
- Holophane
- Hubbell
- Kenall
- Lightolier
- Lithonia

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

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

**Lighting Fixtures (Outdoor Pedestrian Area with poles by fixture supplier)**
- Lumec
Photoelectric Lighting Controls
- Crouse-Hinds
- Holophane
- Hubbell
- Intermatic
- Sensor Switch
- Tork

SECTION 16670 - LIGHTNING PROTECTION

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

SECTION 16720 - FIRE ALARM SYSTEMS

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)

*SECTION 16724, 16725, 16727 - SECURITY SYSTEMS

Closed Circuit TV Systems
- Diamond Electric
- Panasonic
- Sensormatic
- Vicon Industries

Security Systems
- ADT Security Systems
- Faraday
- Radionics (For small systems only)
- Simplex Time Recorder

*Digital Video Recorders
- Ionit
- Dedicated Micros

*Keyed Bypass Switch w/Bond Sensor, Door Status Switch
- Duprin Chexit Series
- Locknetics 101 Series

*Security Card Readers
- HID Mini Prox
- Software House RM Series

*Security Door Electric Strike
- Von Duprin Model 6000 Series
- Folger Adams 300 Series
- H.E.S. 1000 Series
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

SECTION 16731 - CLOCKS AND CLOCK SYSTEMS

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

Clocks (Battery Powered)
- Edwards
- Franklin
- Howard Miller

SECTION 16740 - TELECOMMUNICATIONS/DATA SYSTEMS

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)
**SECTION 16760 - SPECIAL COMMUNICATIONS SYSTEMS**

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
- Card Cage – SL-1000-P64-1
- Inter-processor SL-1000-IPU

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

Wireless Microphone Systems
- Shure

**SECTION 16761 - NURSE CALL**

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

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

**SECTION 16856 - ELECTRIC HEATING CABLES**

Electric Heat Tracing Cables
- Raychem
- Raychem Chemelex
- Thermon

**SECTION 16950 - ELECTRICAL ACCEPTANCE TESTS**

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)

Testing Services
- Bisbee Infrared Services (Penny Wilson, Phone: 517-787-4620)
- Northern Electrical Testing (Lyle Detterman, Phone: 248-689-8980)
- Utilities Instrumentation Services (David Wheeler, Phone: 734-482-1450)
Circuit Breaker Repair, Retrofits, and Modifications

- Manufacturer Authorized Service Agency
- Northern Electric Testing (Lyle Detterman, Phone: 248-689-8980)