

Consolidated Edison Company of New York (Con Edison) Electric Service Requirements

Customers

Architects and Engineers

Electrical Contractors

City and County Building Inspectors

Revised May, 2017

2017 Edition

(Supersedes All Previous Editions and Revisions of Electric Blue Book)

The Customer Guide to Electric Service Installation is a Guide to Con Edison requirements and specifications for establishing electric service to **new** or **remodeled applicant installations.** In addition to the utility requirements, **local or state officials may stipulate additional provisions for the installation of equipment and materials** that are in their authorized areas of responsibility and jurisdiction. Should you have any questions regarding this guide, please contact your local Con Edison Customer Service Representative (see pg. 3). Consult your assigned Con Edison representative to ensure you are using the most current standards and specifications. Applicant electric service and meter installation arrangements are subject to Con Edison's review and approval. Applicants should submit a Work Request as soon in the planning process as possible.

This document and the information contained within is referenced and compliant with CI-700-1 and New York Public Service Law §65(15). Any changes or revisions to this document should be made with this in consideration.

DISCLAIMER: This is a guidance document for the convenience of the public. It does not substitute for any applicable laws, rules, codes or regulations, and information in it regarding procedures is subject to change without notice. It is the Licensed Electrical Contractor's responsibility to be aware of the code requirements for the area of the installation. Con Edison does not assume the obligation of enforcing State, City and Local Municipal code requirements.

A Customer Guide to Electric Service Installation

Accidents involving dig-ins to underground facilities occur every year. They can damage equipment, and more importantly, sometimes lead to serious injuries, even death. We want to reduce the number of accidents so we joined a One-Call-System designed to make it safer for you to dig and work near underground facilities. The customer shall immediately notify Con Edison of any suspected leakage or escape of gas by calling the company's toll-free hotline 1-800-75CONED or 1-800-752-6633.

It's the Law! Call before you dig!

Much of the Con Edison equipment that transmits and delivers energy is under the ground, including more than 4,300 miles of natural gas pipelines. We work diligently to keep our systems safe and our excellent safety record

demonstrates that commitment. New York State law requires anyone planning to dig or excavate to call a one-call center two to 10 days in advance. The one-call center will contact Con Edison on your behalf to obtain the necessary clearances, including the locations of all in-ground electrical and natural gas lines near your job site.



UNDERGROUND UTILITIES CALL CENTERS

NYC and WESTCHESTER: 811

NY Code 753 requires 2-10 working days notice.

ELECTRIC AND GAS EMERGENCIES CALL

1-800-75-CONED (800-752-6633)

HEARING IMPAIRED

Toll-free, teletype line (1-877-423-4372)
Billing and Service inquiries

We think you should know

At Consolidated Edison Co., when we say: "We're here to help," we mean it! Our responsibility is to provide our electric customers with safe, reliable and cost effective service. Con Edison operates one of the most complex electric power systems in the world. It is also the world's most reliable. Before you start planning your project, please visit https://www.coned.com/en/small-medium-size-businesses/building-project-center to create a Work Request using Con Edison's Project Center application. Approximately one week after Con Edison receives a work request from your licensed contractor, you will receive correspondence indicating the name and contact number of the representative handling your case. Please check this site before calling a representative. Our representatives are responsible for specific geographic territories, or districts. A list of area representatives can be found on-line at https://www.coned.com/en/small-medium-size-businesses/building-project-center/contact-us. We will be happy to provide you with information and assistance, as well as ways to save you energy and money.

Consolidated Edison Co. Inc

The Con Edison System

For more than 180 years, Consolidated Edison, Inc. has served the world's most dynamic and demanding marketplace – metropolitan New York while maintaining a safe and reliable electric supply to more than 3 million customers. We have employees on duty 24 hours a day, 365 days a year to ensure the safety and reliability of our system.

This guide is intended to protect the mutual interest of our electric customer and Con Edison. Close attention and adherence to our Electric Specifications will ensure timely and efficient installation of an electric service that meets your requirements.

This guide will be revised and/or amended as required in keeping with developments and progress in the electric industry. The latest revision of this handbook may be obtained at:

https://www.coned.com/en/small-medium-size-businesses/building-project-center/contractor-resources

	able of C	<u>Contents</u>	7
A.	Frequentl	ly Asked Questions	
В.	,	Request for Electric Service – "Our Service to You"	
C.	,	Vork Request Flow Process	
D.	Standard	Service Layouts	
Sec	ction I	General Information	26
		A. <u>Purpose</u>	
		B. <u>Scope</u>	
		C. <u>Application for Service</u>	
		D. <u>Contact Information</u>	
		E. Rates & Terms of Service	
		F. <u>Identification of Con Edison's Employees</u>	
		G. Access to Customer's Premises	
		H. <u>Customer Cooperation</u>	
		I. <u>Information Inquiries</u>	
		J. <u>Electric Service Layouts</u>	
		K. Company Specifications	
		L. <u>Responsibilities</u>	
		M. Wiring Adequacy and Load Balancing	
		N. <u>Codes</u>	
		O. <u>Approvals</u>	
		P. <u>Inspection</u>	
		Q. <u>Characteristics of Electric Service</u>	
		R. <u>High Tension Service</u>	
		S. <u>Temporary Service</u>	
		T. <u>Excess Distribution Facilities</u>	
		U. <u>Un-metered Connection (Flat)</u>	
		V. <u>Service Taps</u>	
		W. <u>Unauthorized Attachments to Poles</u>	
		X. <u>Submetering</u>	
		Y. <u>Distributed Generation</u>	
		Z. <u>Special Services at Cost</u>	
<u>Sec</u>	ction II	Electric Service Connections	33
		A. <u>General</u>	
		B. Extensions of Electric Distribution Lines	
		C. Space for Transformer Apparatus	
		D. Interior Distribution Installation	
		E. Replacement for Reinforcement of Rear Yard Services	
		F. Replacement for Reinforcement of Loop Service	
		G. Minimum Insulation Standards	

	Consolidated Edison Co. Inc	
Section III	Customer's Installation and Equipment	38
	A. Customer Wiring and Equipment	
	B. Adequacy of Installation	
	C. Customer's Repairs	
	D. Carrier Current Equipment	
	E. Motors and Miscellaneous Apparatus	
	F. Service Equipment	
	G. Grounding	
Section IV	Metering Installations	41
	A. <u>General</u>	
	B. Company Furnishes and Installs	
	C. Company Furnishes, Customer Installs	
	D. <u>Customer Furnishes, Customer Installs</u>	
	E. Meter Mountings	
	F. <u>Current Transformer Meters</u>	
	G. Outdoor Metering	
	H. Indoor Metering	
	I. Fire Alarm System Metering	
	J. <u>Location</u>	
	K. <u>Identification of Circuits</u>	
	L. <u>Seals</u>	
	M. Spacing Requirement between Gas and Electric Meters	
Section V	Customer Use of Generating Equipment	49
	A. General	
	B. Dispersed/Distributed Generation	
	C. Emergency Generating Facilities Used for Self-Supply	
	D. Emergency Generating Facilities Used on an Emergency Basis for Export	
	E. Standby Service	
Section VI	High Tension Service	52
Section VII	Approved Service Equipment	53
Reference		
<u>Material</u>	<u>Definitions</u>	72
	Electric Reference Specifications and Drawings	74
	Exhibit A – Submetering Requirements	79
	Exhibit B – Minimum Insulation Standard Waiver Request	81
	Exhibit C – Underground Electric Inspection Checklist	82
	Exhibit D – Overhead Electric Inspection Checklist	83
	Exhibit E – Ways to Pay Your Bill	84
	Revisions Log	85

Ouick Start

- A. Frequently Asked Questions
 - 1. Q How can this guide help me?
 - A This guide, entitled "Electric Service Customer Installation Guide" as a means of exchanging pertinent information between Consolidated Edison Co. (hereafter referred to as "Con Edison") and its customers, architects, electricians, engineers, builder, contractors and municipal inspectors.
 - 2. Q When should I apply for electric service?
 - A An application for new, additional or an alteration to an existing service should be made as far in advance as possible to ensure adequate time for engineering and construction details to be arranged.
 - 3. Q How do I initiate having electric service installed?
 - A Visit Con Edison's Project Center portal at https://www.coned.com/en/small-medium-size-businesses/building-project-center to submit a service request form
 - 4. Q When should I contact Dig Safe?
 - A By law excavators and contractors working in the five boroughs of New York City must contact New York **811**, at least 48 hours prior to beginning any mechanized digging or excavation work to ensure underground utility lines are marked. For safety reasons, homeowners are required to call as well. Markings are as follows:



- 5. Q How do I know if I am within safe working distance from overhead power lines?
 - A You cannot start work until Con Edison lets you know that it is safe to work in the area. The law requires a 10 foot minimum, known as the "danger zone." For more information, please visit https://www.coned.com/en/small-medium-size-businesses/building-project-center and click on "Safety around our facilities"
- 6. Q Where will my electric meter be located?
 - A Outdoor electric metering is a requirement on 1, 2 and 3 family homes

Consolidated Edison Co. Inc

B. Customer Request for Electric Service – "Our Service to You"

Customer requests for all new or additional electric service, as well as certain non-service work, will be through our web-site https://www.coned.com/en/small-medium-size-businesses/building-project-center Project Center. See Work Request Flow Process located on page 10.

Step 1 Opening a Work Request/Case

When you are ready to begin the process for a new electric service or for an electric service information ruling, please have a licensed professional installer as the referred contact agent for the work request/case.

- 1. Initiate Project Center by visiting https://www.coned.com/en/small-medium-size-businesses/building-project-center and e-file the work request (pg. 26)
- 2. Input the request by completing the load letter with further details about your new or additional electric loads
- 3. Energy Services will follow-up by sending an Acknowledgement Letter confirming your request for the referenced location and the assigned Case Number to track the progress of the request
- 4. Energy Services will arrange scheduled meetings with the customer/customer's agent to discuss the preliminary electric service layout while working with the customer to ensure the most economic means are addressed and that the project is satisfactory and installed with no delays to the service completion date (pg. 28)
- 5. The company will determine the Point of Entry (POE) to the building. A preferred POE will be an additional cost to the customer. The property line/building line and other easement concerns will be discussed in **Step 3**
- 6. Tracking the job progress can be done by a registered user (customer/contractor). The registered user can also quickly review the status of current cases, receive e-mail alerts when milestones are reached, or inquire the current status of the project.

Step 2 Electric Service Ruling

Con Edison Representative will initiate a Case Triage assessment to your job as follows:

- 1. Further review and analysis of the customer/contractor work requests
- 2. In the scenario that further analysis deems the existing electric service is not adequate, Energy Services will issue the necessary work orders to the construction department to excavate and install electric service lines according to approved engineering layouts
- 3. Customer and contractor will be issued with an approved service layouts with all current company specifications, meter drawings, outlining the company and customer responsibility
- 4. Electric Service Rulings, Layouts and Cost Estimates are valid for ninety (90) days from the date of issuance (**pg. 26**)

Step 3 Inspections & Electric Service Layout

Con Edison Representative, depending on the Case request type, may:

- 1. Conduct verification that the wall sleeve has been installed in the building point of entry
- 2. Discuss with the customer/contractor in obtaining the necessary city certificates related to the installation to avoid a delay in service completion (pg. 27)
- 3. Monitor the progress of work by customer/contractor through field visits and e-mail correspondences
- 4. Encourage customer to use Project Center to track their case and obtain status updates by contacting the assigned representative in order to avoid any company delays such that the customer service date can be met
- 5. Conduct site visits to verify the status of customer's project and discuss case details and/or specifications with the customer's contractor
- 6. Discuss the details of the Electric Service Layout, the drawing which includes a sketch and description of company construction work to be performed

Step 4 Construction of Electric Service Installation

Con Edison Representative reviewing the customer's project progress will determine when to release the requests to the appropriate groups for the construction of the facilities, who may include:

- 1. Construction Management oversees third party contractors working for Con Edison on the installation of company-owned facilities
- 2. Electric Construction installs company facilities such as mains and services
- 3. Customer Operations establishes customer account and associated rates, collects payment agreement for deposits
- 4. Customer must contact Energy Services Representative to schedule a final inspection (**pg. 79**) If your project requires any transformer vault installation, refer to page 34 Space for Transformer Apparatus, which also discusses the Developer Agreement option for vault construction.

Step 5 Final Inspection and Electric Meter Turn-On

The customer must contact the assigned Con Edison Energy Services Representative upon the completion of his/her work by submitting the Final Inspection Checklist to obtain a final inspection and the installation of an electric meter

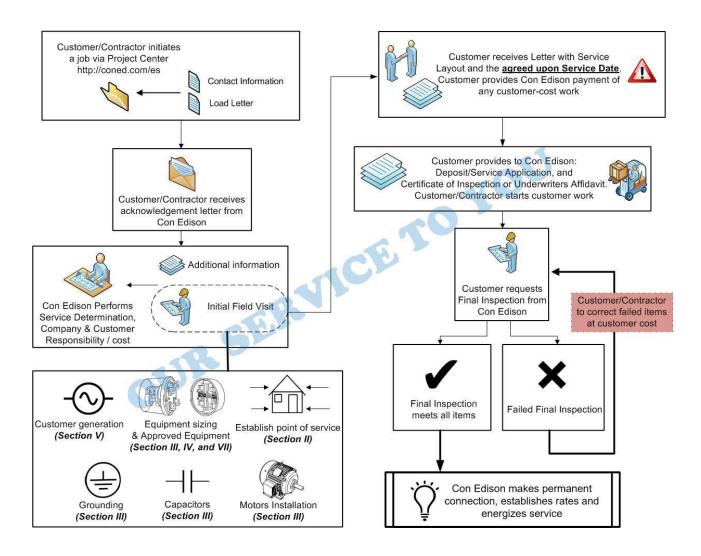
- 1. Work Order will be issued for an electric meter by Energy Services when a final inspection has been completed and passed with no deficiencies.
- 2. The electric meter is the property of Con Edison its size and type are selected based on the electric service ruling for residential and commercial dwellings
- 3. Con Edison Meter Department will deliver, set and turn on the electric service

Step 6 Validation Completed & Case Closeout

Energy Services Representative will:

- 1. Review the case work request, verify the accuracy of the customer's account and billing, as well the documentation of any revenue associated with the project. (pg. 27)
- 2. When all the case tasks have been verified, the case is closed out

C. Electric Service Work Request Process



D. Standard Service Layouts

The Standard Service Layouts found on the following pages, reflect generally accepted designs which may be used to plan work and prepare Contractor Work Requests. Please note that these layouts are supplied for reference purposes only. A Service Request or a Case must be initiated through Con Edison's Project Center before work is commenced to ensure the sizing and timely installation of the required electric

Consolidated Edison Co. Inc

service. Upon receipt of your Service Request, we will review the Standard Service Layout Plan selected, and return an approved copy of a Service Layout identifying the service characteristics and the point of service termination.

Standard Service Layouts for new 1, 2 and 3 family homes are found on pages 13 - 21, while layouts for new commercial buildings are shown on pages 22 - 24. These layouts may also be applicable to existing premises (1, 2 and 3 family homes, small commercial buildings, and multi-tenanted residential buildings) due to load growth which meet the following criteria:

- a. No change in the point of service termination or point of service entrance is required
- b. Existing service conduits are of an adequate size
- c. The new service will be single phase 3-wire 120/240 Volts; 3-wire 120/208 Volts; or 3 phase 4-wire 120/208 Volts.
- d. The service capacity for individual commercial customers is limited to 200 Amperes

Contractors are reminded that <u>FLAT CONNECTIONS ARE NOT PERMITTED</u> and when appropriate, meter change adapters shall be installed and the existing meter wired to the adapter. Con Edison will furnish meter adapters when requested by the contractors.

In areas where Con Edison supplies both gas and electric, it is the responsibility of the contractor to plan his work so that the company's gas and underground electric services may be installed in a common trench at the franchise area.

All work shall be done in accordance with Con Edison's requirements and the customer will obtain all necessary approvals from authorities having jurisdiction before service will be supplied. Con Edison required a minimum of 48 hours notice to arrange for the inspection of service conduits in a trench and for a final inspection.

In a new development, electric mains will not be installed prior to the installation of sewer and water mains. The roadway and the area between the property line and the curb line must be graded within 6-inches of final grade. Sidewalks should not be installed until after service cable or conduit installation by Con Edison is completed.

Con Edison will furnish service cables between customer's meter equipment and property line in accordance with established practice for one, two and three family-homes-installed and maintained by the company.

Individually prepared Service Layouts will continue to be provided by Con Edison for large commercial buildings and all other installations not covered by the Standard Service Layouts

The following code designations are found on the Standard Service Layouts:

C/L – Curb Line
P/L – Property Line
S/S – Service Switch
(alt/loc) – Alternate Location

Consolidated Edison Co. Inc

**GUIDELINES TO THE INSTALLATION OF ELECTRIC SERVICE LATERALS TO RESIDENTIAL DWELLINGS

Con Edison will supply a separate service lateral to each house in the following three instances:

- All <u>DETACHED</u> houses
- 1, 2, and 3 family <u>SEMI-ATTACHED</u> homes
- 1, 2, and 3 family <u>ATTACHED</u> homes

For all other circumstances, Con Edison will supply an individual service lateral from company facilities to the property line for each 2 hour rated firewall enclosure

NEW DETACHED HOME – ONE, TWO AND THREE FAMILY Not applicable if Building Line is 200 feet or further from the Property Line (Work By Customer)

UNDERGROUND SERVICE CHARACTERISTICS

1 Phase, 3-Wire, 120/240 Volts

or

1 Phase, 3-Wire, 120/208 Volts

Item	Description	Specification No.
1	National Electric Code (NEC) - Sized Conduit and Wires	
2	3-Wire Meter Equipment	MES-394
2	Service conduit – 2 inch minimum **	
3	**Unless Local Ordinance Does Not Require Conduit	
4	Approved connectors	<u>EO-5403</u>

LEGEND

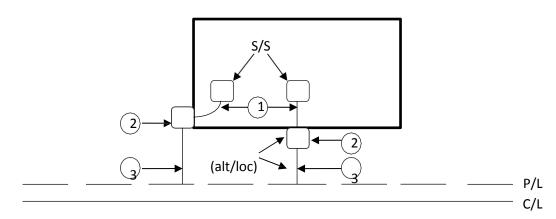
C/L - Curb Line

P/L - Property Line

S/S – Service Switch

(alt/loc) - Alternate Location

PLAN A - single meter



THE FINAL LIVE ELECTRIC SERVICE CONNECTION IS TO BE MADE BY THE CONTRACTOR.

AN APPROVED CONNECTOR MUST BE USED AND IS OBTAINED FROM LOCAL CON EDISON ENERGY SERVICES OFFICE

THERE IS NO CHARGE TO THE CUSTOMER OR CONTRACTOR FOR INSPECTION OF SERVICE

NEW DETACHED HOME – ONE, TWO AND THREE FAMILY Not applicable if Building Line is 200 feet or further from the Property Line (Work By Customer)

UNDERGROUND SERVICE CHARACTERISTICS

1 Phase, 3-Wire, 120/240 Volts

or

1 Phase, 3-Wire, 120/208 Volts

Item	Description	Specification No.
1	National Electric Code (NEC) - Sized Conduit and Wires	
2	3-Wire Meter Equipment	MES-394
3	Service conduit – 2 inch minimum **	
	**Unless Local Ordinance Does Not Require Conduit	
4	Approved connectors	<u>EO-5403</u>

LEGEND

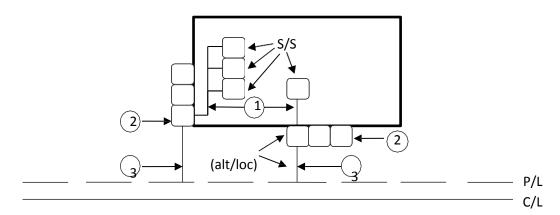
C/L - Curb Line

P/L - Property Line

S/S – Service Switch

(alt/loc) - Alternate Location

PLAN B – one common conduit for multiple meters



THE FINAL LIVE ELECTRIC SERVICE CONNECTION IS TO BE MADE BY THE CONTRACTOR.

AN APPROVED CONNECTOR MUST BE USED AND IS OBTAINED FROM LOCAL CON EDISON ENERGY SERVICES OFFICE

THERE IS NO CHARGE TO THE CUSTOMER OR CONTRACTOR FOR INSPECTION OF SERVICE

NEW DETACHED HOME – ONE, TWO AND THREE FAMILY Not applicable if Building Line is 200 feet or further from the Property Line (Work By Customer)

UNDERGROUND SERVICE CHARACTERISTICS

1 Phase, 3-Wire, 120/240 Volts

or

1 Phase, 3-Wire, 120/208 Volts

Item	Description	Specification No.
1	National Electric Code (NEC) - Sized Conduit and Wires	
2	3-Wire Meter Equipment	MES-394
2	Service conduit – 2 inch minimum **	
3	**Unless Local Ordinance Does Not Require Conduit	
4	Approved connectors	EO-5403

LEGEND

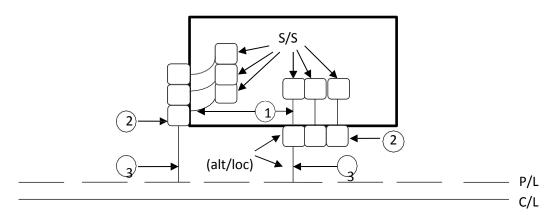
C/L - Curb Line

P/L - Property Line

S/S – Service Switch

(alt/loc) - Alternate Location

PLAN C – separate conduit for multiple meters



THE FINAL LIVE ELECTRIC SERVICE CONNECTION IS TO BE MADE BY THE CONTRACTOR.

AN APPROVED CONNECTOR MUST BE USED AND IS OBTAINED FROM LOCAL CON EDISON ENERGY SERVICES OFFICE

THERE IS NO CHARGE TO THE CUSTOMER OR CONTRACTOR FOR INSPECTION OF SERVICE

NEW DETACHED HOME – ONE, TWO AND THREE FAMILY Not applicable where Con Edison's service lateral exceeds 125 feet (Work By Customer)

OVERHEAD SERVICE CHARACTERISTICS

1 Phase, 3-Wire, 120/240 Volts

or

1 Phase, 3-Wire, 120/208 Volts

Item	Description	Specification No.
1	National Electric Code (NEC) - Sized Conduit and Wires	
2	3-Wire Meter Equipment	<u>MES-394</u>
2	Weatherhead and Standpipe	<u>EO-6218-B</u>
3		<u>EO-8746-B</u>
4	Approved connectors	EO-6218-B (Table 4)

LEGEND

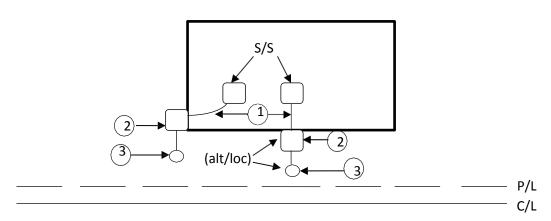
C/L - Curb Line

P/L - Property Line

S/S - Service Switch

(alt/loc) - Alternate Location

PLAN A



THE FINAL LIVE ELECTRIC SERVICE CONNECTION IS TO BE MADE BY THE CONTRACTOR.

AN APPROVED CONNECTOR MUST BE USED AND IS OBTAINED FROM LOCAL CON EDISON ENERGY SERVICES OFFICE

THERE IS NO CHARGE TO THE CUSTOMER OR CONTRACTOR FOR INSPECTION OF SERVICE

NEW SEMI-ATTACHED HOME – ONE FAMILY Not applicable if Building Line is 200 feet or further from the Property Line (Work By Customer)

UNDERGROUND SERVICE CHARACTERISTICS

1 Phase, 3-Wire, 120/240 Volts

or

1 Phase, 3-Wire, 120/208 Volts

Item	Description	Specification No.
1	National Electric Code (NEC) - Sized Conduit and Wires	
2	3-Wire Meter Equipment	MES -394
2	Service conduit – 2 inch minimum **	
3	**Unless Local Ordinance Does Not Require Conduit	
4	Approved connectors	EO-5403

LEGEND

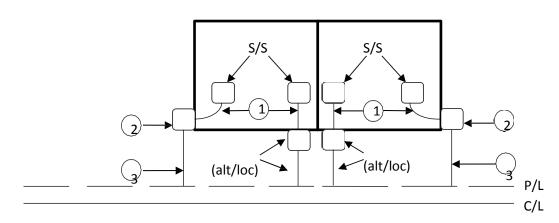
C/L - Curb Line

P/L - Property Line

S/S – Service Switch

(alt/loc) - Alternate Location

PLAN A



THE FINAL LIVE ELECTRIC SERVICE CONNECTION IS TO BE MADE BY CON EDISON.

THERE IS NO CHARGE TO THE CUSTOMER OR CONTRACTOR FOR INSPECTION OF SERVICE

NEW SEMI-ATTACHED HOME – ONE FAMILY Not applicable where Con Edison's service lateral exceeds 125 feet (Work By Customer)

OVERHEAD SERVICE CHARACTERISTICS

1 Phase, 3-Wire, 120/240 Volts

or

1 Phase, 3-Wire, 120/208 Volts

Item	Description	Specification No.
1	National Electric Code (NEC) - Sized Conduit and Wires	
2	3-Wire Meter Equipment	MES-394
2	Weatherhead and Standpipe	<u>EO-6218-B</u>
3		<u>EO-8746-B</u>
4	Approved connectors	EO-6218-B (Table 4)

LEGEND

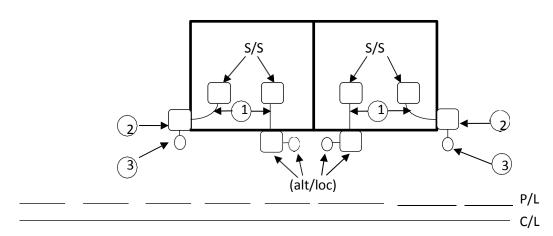
C/L - Curb Line

P/L - Property Line

S/S – Service Switch

(alt/loc) - Alternate Location

PLAN A



THE FINAL LIVE ELECTRIC SERVICE CONNECTION IS TO BE MADE BY THE CONTRACTOR.

AN APPROVED CONNECTOR MUST BE USED AND IS OBTAINED FROM LOCAL CON EDISON ENERGY SERVICES OFFICE

THERE IS NO CHARGE TO THE CUSTOMER OR CONTRACTOR FOR INSPECTION OF SERVICE

NEW ATTACHED/ROW HOMES – ONE FAMILY Not applicable if Building Line is 200 feet or further from the Property Line (Work By Customer)

UNDERGROUND SERVICE CHARACTERISTICS

1 Phase, 3-Wire, 120/240 Volts

or

1 Phase, 3-Wire, 120/208 Volts

Item	Description	Specification No.
1	National Electric Code (NEC) - Sized Conduit and Wires	
2	3-Wire Meter Equipment	MES-394
2	Service conduit – 2 inch minimum **	
3	**Unless Local Ordinance Does Not Require Conduit	
4	Approved connectors	EO-5403

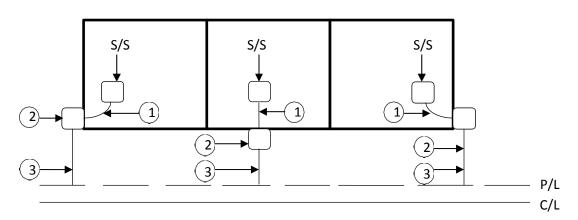
LEGEND

C/L - Curb Line

P/L - Property Line

S/S – Service Switch

PLAN A



THE FINAL LIVE ELECTRIC SERVICE CONNECTION IS TO BE MADE BY CON EDISON.

THERE IS NO CHARGE TO THE CUSTOMER OR CONTRACTOR FOR INSPECTION OF SERVICE

NEW ATTACHED/ROW HOMES – ONE FAMILY Not applicable where Con Edison's service lateral exceeds 125 feet (Work By Customer)

OVERHEAD SERVICE CHARACTERISTICS

1 Phase, 3-Wire, 120/240 Volts

or

1 Phase, 3-Wire, 120/208 Volts

Item	Description	Specification No.
1	National Electric Code (NEC) - Sized Conduit and Wires	
2	3-Wire Meter Equipment	MES-394
2	3 Weatherhead and Standpipe —	<u>EO-6218-B</u>
3		<u>EO-8746-B</u>
4	Approved connectors	EO-6218-B (Table 4)

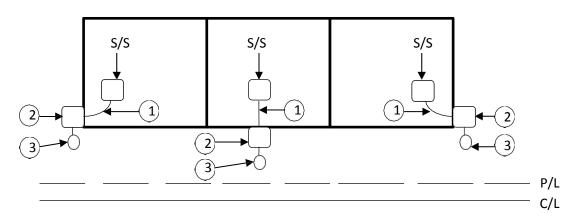
LEGEND

C/L - Curb Line

P/L - Property Line

S/S – Service Switch

PLAN A



THE FINAL LIVE ELECTRIC SERVICE CONNECTION IS TO BE MADE BY THE CONTRACTOR.

AN APPROVED CONNECTOR MUST BE USED AND IS OBTAINED FROM LOCAL CON EDISON ENERGY SERVICES OFFICE

THERE IS NO CHARGE TO THE CUSTOMER OR CONTRACTOR FOR INSPECTION OF SERVICE

NEW ATTACHED/ROW HOMES – ONE, TWO AND THREE FAMILY Not applicable where Con Edison's service lateral exceeds 125 feet (Work By Customer)

OVERHEAD SERVICE CHARACTERISTICS

1 Phase, 3-Wire, 120/240 Volts

or

1 Phase, 3-Wire, 120/208 Volts

Item	Description	Specification No.
1	National Electric Code (NEC) - Sized Conduit and Wires	
2	3-Wire Meter Equipment	MES-394
2	Weatherhead and Standpipe	<u>EO-6218-B</u>
3	weathernead and Standpipe	<u>EO-8746-B</u>
4	Approved connectors	EO-6218-B (Table 4)

LEGEND

C/L - Curb Line

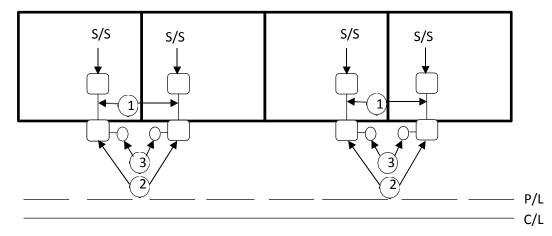
P/L - Property Line

S/S - Service Switch

Con Edison will supply a single service lateral to every 2 hour rated firewall enclosure. If a 2 hour firewall exists between every unit, shown

below, then a single service lateral will be supplied to every two footprint units.

PLAN A



THE FINAL LIVE ELECTRIC SERVICE CONNECTION IS TO BE MADE BY THE CONTRACTOR.

AN APPROVED CONNECTOR MUST BE USED AND IS OBTAINED FROM LOCAL CON EDISON ENERGY SERVICES OFFICE

THERE IS NO CHARGE TO THE CUSTOMER OR CONTRACTOR FOR INSPECTION OF SERVICE

NEW SMALL COMMERCIAL BUILDING Not applicable if Building Line is 200 feet or further from the Property Line (Work By Customer)

UNDERGROUND SERVICE CHARACTERISTICS

1 Phase, 3-Wire, 120/240 Volts or

1 Phase, 3-Wire, 120/208 Volts or

3 Phase, 4-Wire, 120/208 Volts

Item	m Description		Specification No.
1	National Electric Code (NEC) - Sized Conduit and Wires		
2	Motor Equipment	3-Wire Service	MES-394
	Meter Equipment Service Size for individual customer limited to 200 Amp		MES-395
		4- Wire Service	MES-194
3	Service conduit – 2 inch minimum ** **Unless Local Ordinance Does Not Require Conduit		
	REQUIRED IF Building Line is more than 5 ft from Property Line	Property Line Box	EO-6210-B
			EO-6208-C
4			EO-6209-C
4	Otherwise, if Building Line is within 5 ft from	Service End Box	EO-6211-C
	Property Line	Service Lilu Box	EO-6212-C
			EO-6214-C
			<u>EO-6215-B</u>
5	Approved connectors		EO-5403
P/L-	- Curb Line - Property Line - Service Switch PLAN A S/S 1	PLAN B S/S 1 2	
THE FINAL LIVE ELECTRIC SERVICE CONNECTION IS TO BE MADE BY CON EDISON. THERE IS NO CHARGE TO THE CUSTOMER OR CONTRACTOR FOR INSPECTION OF SERVICE			

NEW SMALL COMMERCIAL BUILDING Not applicable where Con Edison's service lateral exceeds 125 feet (Work By Customer)

OVERHEAD SERVICE CHARACTERISTICS

1 Phase, 3-Wire, 120/240 Volts

or

1 Phase, 3-Wire, 120/208 Volts

or

3 Phase, 4-Wire, 120/208 Volts

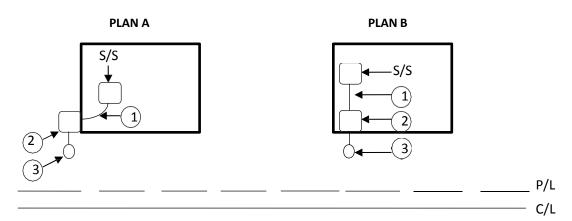
Item	Description		Specification No.
1	National Electric Code (NEC) - Sized Conduit and Wires		
2	Meter Equipment Service Size for individual customer limited to 200 Amp	3-Wire Service	MES-394
			MES-395
		4- Wire Service	MES-194
3	Weatherhead and Standpipe		EO-6218-B
			EO-8746-B
4	Approved connectors		EO-6218-B (Table 4)

LEGEND

C/L - Curb Line

P/L - Property Line

S/S - Service Switch



THE FINAL LIVE ELECTRIC SERVICE CONNECTION IS TO BE MADE BY CONTRACTOR.

AN APPROVED CONNECTOR MUST BE USED AND OBTAINED FROM LOCAL CON EDISON ENERGY SERVICES OFFICE.

THERE IS NO CHARGE TO THE CUSTOMER OR CONTRACTOR FOR INSPECTION OF SERVICE

NEW MULTI-TENANTED RESIDENTIAL BUILDING DIRECT METERED Not applicable where Con Edison's service lateral exceeds 125 feet (Work By Customer)

OVERHEAD SERVICE CHARACTERISTICS

1 Phase, 3-Wire, 120/240 Volts

or

1 Phase, 3-Wire, 120/208 Volts

or

3 Phase, 4-Wire, 120/208 Volts

Item	Description	Specification No.	
1	National Electric Code (NEC) - Sized Conduit and Wires		
2	Meter Equipment		
	 When there are more than six meters, the main service disconnect will be on the line side of the meter equipment 	MES-447	
	 Separate service switch(s) and appropriate meter equipment(s) may be required for owner and/or other non-residential load. 		
3	Weatherhead and Standpipe	<u>EO-6218-B</u>	
	weathernead and Standpipe	<u>EO-8746-B</u>	
4	Approved connectors	EO-6218-B (Table 4)	

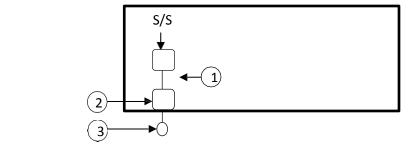
LEGEND

C/L - Curb Line

P/L - Property Line

S/S - Service Switch

PLAN A



THE FINAL LIVE ELECTRIC SERVICE CONNECTION IS TO BE MADE BY CONTRACTOR.

_ P/L - C/L

AN APPROVED CONNECTOR MUST BE USED AND OBTAINED FROM LOCAL CON EDISON ENERGY SERVICES OFFICE.

THERE IS NO CHARGE TO THE CUSTOMER OR CONTRACTOR FOR INSPECTION OF SERVICE

Consolidated Edison Co. Inc

Page intentionally left blank. Reserved for future use

Section I - General Information

A. <u>Purpose</u>

The information in this handbook provides a basic and uniform set of specifications and guidelines covering the installation of electric service for Con Edison's customers. The codes we have referenced and the information provided in this booklet in no sense relieves the customer of the responsibility to install customer equipment in accordance with the latest revisions of applicable governing codes that are listed in the Reference section. It is the Licensed Electrician Contractor's responsibility to be aware of the code requirements for the area of the installation. Any change or modification to our Electric Service Layout(s) or equipment type including location and point of entry (POE) requires advanced approval from Con Edison. Our Electric Specifications have been prepared to ensure compliance with all the various codes and safety requirements. Changing anything without prior approval from Con Edison, will result in the job not being accepted, requiring a contractor to make corrections, and causing potential delays. Corrections to point of entry and equipment configurations will incur an additional expense to the customer and/or licensed contractor. Altering an electric specification creates the potential for a code or safety violation. The customer should always feel free to consult a Company Representative regarding safe practices and practical applications of electric installation and equipment connection.

Representatives are available to discuss design details while in the planning stage



Con Edison does not assume the obligation of enforcing State, City and Local Municipal code requirements

B. Scope

The information and specifications found in this handbook cover conductors and equipment connecting the company's electric supply system to the customer's electrical distribution system, and other subjects associated with the supply of electricity which of mutual interest to the company, customer, architect, engineer and electrical contractor. This handbook is intended as a guideline and is not a complete set of rules governing the installation of electrical wiring and equipment.

C. <u>Application for Service</u>

Con Edison requires a company application for new or additional electric service requests. To ensure a timely service connection, your application should be submitted well in advance of the date service is required. All customers are required to consult with the company regarding service availability before the completion of plans, purchase any equipment and before any construction commences on a facility that you plan to connect to the company's electric distribution system. An application for new and additional electric service may be made through Con Edison's customer Project Center portal via the internet. The portal can be accessed through Con Edison's Energy Services Resource Web Site at https://www.coned.com/en/small-medium-size-businesses/building-project-center. Submitting an application for service using the Project Center application ensures an immediate response along with confirmation the application was received. The customer or his/her contractor must furnish Con Edison with information on the proposed electric service installation or any increase in the required electric load.



Con Edison Electric Service Layouts, Service Rulings and Cost Estimates are valid up to ninety-days (90) from the date of issuance



D. Contact Information

To contact a Con Edison Energy Services personnel about your specific job, please visit https://www.coned.com/en/small-medium-size-businesses/building-project-center- and click on "Energy Services Contacts".

E. Rates & Terms of Service

The rates and terms of service under which Con Edison provides electric service are set forth in the schedules (also referred to as "tariffs") filed with the New York State Public Service Commission ("NYS PSC"), which regulates the state's electric, gas and steam utilities, and approves their rates and terms of service. The Company's schedules on file with the NYS PSC – including current, pending and cancelled or superseded tariff leaves – can be found on the NYS PSC's website located at http://www.dps.ny.gov

The rates and terms of service shown on the Con Edison's website are provided for your convenience and do not replace or provide an authorized substitute for the official schedules (including the rates and terms of service) and the Statements of rate adjustments on file with the NYS PSC. The Company does not guarantee that the Summaries available on this website reflect the rates and adjustments contained on the Statements filed with the PYS PSC and in effect, or that the tariff leaves, Statements, and Summaries shown on this website reflect the most recent filings made with the NYS PSC.

Note: The leaves pages in tariffs found on the Company's website may have headers and footers that differ from the official leaves on file with the NYS PSC. THE NYS PSC marks its official leaves with receipt and actual effective date "stamps" and with information on cancelled or superseded leaves that may not be shown on the Company's leaves found at https://www.coned.com/en/accounts-billing/your-bill/public-service-commission-rates-tariffs

F. <u>Identification of Con Edison Employees</u>

In an effort to protect customers from unauthorized persons representing themselves as Con Edison company employees, each of our employees has an identification card that will be shown upon request.

G. Access to Customer's Premise

The Customer shall not permit anyone, except authorized employees of the Company, to the meters, equipment or any other property of the Company, and shall not interfere or permit interference with the same; and the Customer shall be responsible for their safe keeping on the Customer's premises. The Company's duly authorized representatives shall have the right of access to the premises of the Customer and to all of the Company's property thereon at all reasonable times for the purposes of reading and testing meters, inspecting equipment used in connection with its service, installing, inspecting, maintaining and replacing, where necessary, its load testing equipment, removing its property.

H. <u>Customer Cooperation</u>

It is the desire of Con Edison to provide and maintain dependable, safe and satisfactory electric service in a courteous and efficient manner. Cooperation from our customers and/or their agents is always necessary to ensure we can evaluate and process each electric service request in a timely manner.

I. <u>Information Inquiries</u>

Con Edison will assist the customer and/or his/her contractor with any questions or concerns regarding the physical application of our specification requirements. Company Service Representatives are available to receive inquiries and process requests for information regarding the application of these electric specifications.

J. <u>Electric Service Layouts</u>

Individual detailed Electric Service Layouts will be provided to the Customer's Contractor on all applications for electric service. A number of Standard Service Layouts are found in the Quick Start Section and reflect generally accepted designs which may be used to plan work, prepare Contractor Work Requests and reference the associated Electric Specifications required.

K. Company Specifications

Company specifications will be revised or amended as required by developments and progress of the industry to protect the mutual interests of the customer and Company, and is made available by visiting our website at https://www.coned.com/en/small-medium-size-businesses/building-project-center. It is the customer's responsibility to ensure that she/he is referencing and using the most current specifications.

L. <u>Responsibilities</u>

The Customer, his/her Agent and/or Contractor bears the responsibility of maintaining all customer wiring and associated equipment to be in a safe operating condition.

M. Wiring Adequacy and Load Balancing

Proper wiring adequacy and load balancing is the responsibility of the customer. The customer's Engineer or Licensed Electrical Contractor should assist the customer in determining that the electrical installation will have adequate capacity for future use and that the load is properly balanced for the customer's use.

N. Codes

Customer's wiring installations are to be made in accordance with, and approved by the authorities having jurisdiction, in addition to complying with Company specifications.

O. Approvals

In order to comply with the New York City Administrative Code and local municipal statutes, the customer's contractor will apply to the authorities having jurisdiction and obtain the appropriate certificate of inspection.

P. Inspection

The Company will inspect the wiring and equipment from the point of service termination to, and including, the service equipment and meter equipment for compliance with Company specifications.

Q. Characteristic of Electric Service

In every case, the customer should consult the Company as to the characteristics of service to be supplied to the Customer, before purchasing electrical equipment for any new installation or for additions to or replacements of existing installations or before moving electrical equipment to a new address. A written statement regarding the characteristics of the service to be supplied will be given by the Company to the Customer upon request.

Standard Service is derived directly from the standard system of distribution and comprises:

- Three phase, 4-wire, 120/208 volt service
- Single phase, 2-wire, 120 volt

Consolidated Edison Co. Inc

• Single phase, 3-wire, 120/208 volt service, comprising two conductors and the neutral of the three phase, four wire system

When warranted by the magnitude or location of the load, or other physical and economical conditions, three-phase, 4-wire, 265-460 volt service may be designated by Con Edison, subject to the customer's concurrence. Where such service is supplied to a new building, no service of other characteristics will thereafter be introduced into the building unless done for Con Edison purposes.

Con Edison reserves the right to discontinue service where equipment used by the customer results in objectionable effects upon, or interferes with the operations of Con Edison facilities or other customers.

R. High Tension Service

Each situation of high tension service presents an individual problem. Accordingly, it is important that the customer consult Con Edison before making plans for the use of high tension service. High tension service will be designated only where it is warranted by the magnitude and the location of the load or by other physical and economic conditions.

High tension service will not be supplied to customers for whom the Company designates secondary service from the Company's secondary mains.

For more information about high tension service, refer to Section VI – "High Tension Service" of this document.

S. <u>Temporary Service</u>

Where the use of service will be temporary, such as for entertainment, celebrations, fairs, construction purposes and any similar activity of a temporary nature and where the facilities installed will not be used for permanent supply, the customer will be required to pay in advance to Con Edison – a sum of money, as determined by Con Edison and endorsed upon the agreement for such service, which shall be the estimated non-recoverable cost of service installation and removal in addition to the energy used.

Service entrance, meter and other wiring on temporary installations are to be installed in the same manner as required for permanent installations. Inspections and approval by the authorities having jurisdiction is required prior to Con Edison making service connection.

T. <u>Excess Distribution Facilities</u>

Upon written application on the prescribed form, and subject to the terms and provision applicable thereto set forth in the current Rate Schedule, the company will provide at the customer's expense, distribution facilities in excess of those normally provided for the purpose of supplying equipment, the operation of which involves inrush current above the values otherwise allowed by the company, or for the purpose of providing a service lateral in addition to that otherwise provided for supply to the customer's premises.

U. Un-Metered Connection (Flat)

Unauthorized un-metered (flat) connections are prohibited. Repeated occurrences of the installation of unauthorized flat connections by a contractor will result in a termination of service and the issuance of a formal complaint to the appropriate authorities.

V. Service Taps

All connections between company wires and customer wires will be made with a Con Edison-approved connection device.

The customer shall provide and connect service cables to a suitable permanently attached Copper or Aluminum buss detail where there will be 3 or more sets of customer cables our of a service end box.

While the preferred place for service taps or additional meters is in the service end box, it is permissible for them to be made in the troughing between the service end box and the meter equipment, or on the line side of the service switch if the lugs are designed for double lugging.



However, the customer and contractor must be aware that all trough and service switch connections are subject to the approval of the authorities having jurisdiction and must meet the applicable code requirements.

In addition, the adequacy of Con Edison's service cables is determined up to the point of service termination and does NOT include the customer cables between the service end box and the taps for any additional meters in the troughing.

Service taps for additional meters MAY NOT be made in the metering equipment, including current transformer cabinets, or at other locations than the service end box or the service switch and troughing as mentioned above, unless authorized by a Company representative.

The unauthorized connection of Con Edison's electric service or any alteration thereof by anyone except those approved by Company-authorized personnel is **prohibited by the penal law and punishable as a**



misdemeanor and/or a felony, if done with the intent to injure or defraud. Violators of this rule will be prosecuted. The law provides that the user of such a connection is presumed to have made or consented to the unauthorized connection and is punishable therefore, unless proven to the contrary, as well as the party making the unlawful connection.

W. Unauthorized Attachment to Poles

Con Edison forbids the unauthorized attachment of any flags, banners, signs, clothes lines, antennas etc. to any of its poles. It forbids the use of its poles for placards or other advertising matter. Con Edison will remove any such unauthorized attachment without notice and may prosecute any such trespassing.

X. <u>Submetering</u>

Company supplies electric service to a single location, through a master-meter, at bulk rate. In turn, electricity is distributed to tenants through individual meters, owned and billed by the owner(s).

In all cases, the customer/contractor shall consult with the company regarding submetering. Refer to the Reference Material for a summary of the availability for the submetering option.

Y. Distributed Generation

Con Edison defines a distributed generation (DG) facility as a generally small (up to 20 MW) electric production facility that is dedicated to the support of nearby associated load. For greater efficiency and cost savings, combined heat and power (CHP) DG can produce heat as an energy product. DG can utilize both renewable (photovoltaic, wind, water, farm waste, etc.) and non-renewable energy sources (natural gas or other fossil fuels for conventional engines, turbines and fuel cells.) Regardless of the kind of DG

Consolidated Edison Co. Inc

electric output (AC or DC at various voltage levels), the DG must conform to company standards when connected to the utility's electric, gas or steam system.

The Company permits any customer to operate generating equipment in parallel with the company's electric system, provided there is no adverse effect on the company's other customers, equipment, or personnel, or the quality of service. Certain protective devices (relays, circuit breakers, etc.) when specified by the company, must be installed at all locations where the customer desires to operate generation in parallel with the company's system. Customers may also purchase natural gas or steam from the Company if required for operation of their DG.

For more information, refer to Section V – "Customer Use of Generating Equipment" and visit the online information available at https://www.coned.com/en/accounts-billing/your-bill/public-service-commission-rates-tariffs

Z. Special Services at Cost

Upon the request of a Customer or agent of the Customer, the Company will perform the following special services and charge the Customer or the Customer's upon the basis of cost to the Company as defined in "Definition of Cost":

- 1. Install temporary services
- 2. Change the point of service termination or location of the service lateral
- 3. Relocate Company-owned or jointly-owned pole, provided that the City, Town or Village will issue an order at the Customer's request to relocate any existing street lighting equipment
- 4. Make temporary changes to Company facilities to permit the moving of a building or equipment from one location to another
- 5. Temporarily relocate underground service to City-owned or Company-owned lamppost, traffic standard, or similar facilities
- 6. Relocate Company street facilities to accommodate Customers
- 7. Remove and relocate Company facilities when a street is to become private property
- 8. Install underground service from Company's overhead lines on the street
- 9. Provide kilowatt demand pulses for single and/or coincident demand meters
- 10. Inspect, maintain, repair and replace transformers and related service facilities for Customers receiving high tension service which is metered on the low tension side of the transformer
- 11. For a Customer served under Rider N, prepare emergency supply plan and storage facility; provide if requested, store, maintain and test the mobile generating equipment associated with the Rider N service; transport the generating equipment to the Customer's service address; and supply personnel and fuel to operate the generating equipment.

Consolidated Edison Co. Inc

- 12. Perform incidental environmental remediation work on Customer premises associated with the Company's performance of its transmission and distribution service obligations.
- 13. Interrupt or restore service to a Customer's premise to accommodate internal maintenance and/or repair activities, provided that the charge is not applicable when such service interruption or restoration is performed between 7 A.M. and 3 P.M., Monday through Friday, excluding holidays.
- 14. Perform engineering work when the Company must design non-standard specifications for structures to house the Company's transformers and associated equipment on the Customer's premises to address site-specific conditions
- 15. Expose the Customer property line splice box to determine the fault location of cable, when the fault is not located within a Company facility; provided, however, that there will be no charge for exposing the property line splice box to a 1, 2 or 3 family house

Definition of Cost

The cost to be charged for the furnishing of the special services listed in the "Special Services at Cost" consists of the following elements of cost where applicable

- a) Labor of the Company organization unit involved at average payroll rate plus related expenses and indirect costs. Overtime and Sunday rates will be charged where applicable
- b) Material at the average actual storeroom price plus 14.5% for handling costs (sales taxes to be added where applicable)
- c) Use of transportation vehicles at rates covering operation, maintenance, carrying charges, and taxes
- d) Contract work and sundry vendors' bills at invoice cost, including any taxes contained thereof
- e) Use of large tools and equipment at rates covering operation, maintenance, and carrying charges
- f) Corporate overhead for engineering, drafting, administration, and inspection at 20% of the foregoing items, provided, however, that when the labor cost for engineering and drafting is separately stated, corporate overhead for administration and inspection at 4%
- g) Salvage credit at storeroom price of materials reduced by salvaging cost, or at junk value
- h) Governmental permits or licenses necessary to perform the service
- i) Mobile generating equipment for service under Rider N at invoice cost, including any taxes contained therein, if purchased or at reproduction cost new less accrued depreciation if from on-hand equipment plus costs incurred in purchasing, including acceptance inspection and testing (sales taxes to be added where applicable)
- j) Fuel for mobile generating equipment operation at invoice cost, including any taxes contained therein
- k) Use of real property at a rate covering operation, maintenance, carrying charges and taxes

The above-described costs, where applicable, shall be increased to reflect the percentage increases in Rates and Charges, as per the current Electric Tariff.

Section II - Electric Service Connections

A. General

- Electric service will be supplied to a building or premises through a single service line, except where, for reasons of least cost to the Company, conditions on the Company's distribution system, improvement of service conditions, or magnitude of the Customer's load, the Company elects to install more than one service line.
- 2. Requests for additional service lines will be communicated to the assigned Company representative. Additional service must be pre-approved and are subject to Excess Distribution Facilities (EDF) charges to be paid by the customer. Excess facilities will be provided at the discretion of the Company.
- 3. The Company reserves the right to determine the location and the point of service termination of its service line.
- 4. Any change requested in the point of service termination or location of the service line and associated facilities requires the approval of the Company and will be made at the expense of the requesting customer, who shall pay the cost of such change in advance.
- 5. Any distribution, supply, or service line which the Company is required to install and has installed, or the customer has installed on the company's behalf, in whole or part, shall be maintained, repaired, and if necessary replaced, up to the service termination point.
- 6. When new lines are to be placed underground, all rights-of-way and easements are to be delivered to the company and grade such right-of-way to within six inches of final grade prior to the company installing its facilities.
- 7. The company's determination to designate overhead or underground service will be governed by the current Schedule for Electric Service on file with the New York State Public Service Commission.
- 8. The minimum service entrance and service equipment is three-wire, 100 ampere.

B. Extensions of Electric Distribution Lines

1. New Residential Subdivisions

To avoid misunderstanding, the customer must consult with the company before starting work as to: whether overhead or underground service is to be installed; the exact location of the point of service connection from existing company system to the property being developed; the point of service connection to each building within the subdivision.

Where new lines are to be placed underground, all rights of way and easements required to provide the service shall conform to municipal and company requirements as to surfacing and drainage and must be graded to within 6-inches of final grade prior to the company installing its facilities.

The company's determination as to overhead or underground service will be governed by the current Schedule for Electric Service on file with the New York State Public Service Commission

2. Overhead Service Connection

If the company designates overhead service, the company overhead service, the company will install its service conductors from its street system to the first point of attachment on or near the front face of the building or to the first intermediate supporting structure i.e., customer pole on the customer's property which, in such case, shall be the point of service termination. The company's service lateral will not exceed 125-feet in length.

The customer shall furnish, install and maintain, in accordance with the company's specifications, all supporting structures on the customer's premises and all service conductors and equipment beyond

Consolidated Edison Co. Inc

the first supporting structure, including the standpipe, weather head and service entrance conductors on the building.

3. Underground Service Connection

The company will install a service lateral from a street system to the property line or suitable subsidewalk space, which in such cases shall be the point of service termination. However in the case of new one, two or three family houses the company will install up to 100 feet of service lateral including the portion beyond the property line.

Residential 1, 2 and 3 family homes, where the property line and the building line are the same, the company will extend its service cable THROUGH A SWEEP, PROVIDED BY THE CUSTOMER ON THE OUTSIDE OF THE BUILDING TO A METER PAN. In such case this point must be the point of Con Edison's service termination.

For all commercial, industrial, and multiple occupancy buildings (except for semi-attached row houses containing four or more dwelling units) where the building is back of the property line, and if, in the company's judgment, the cost to the company of extending its service cables into the building is not materially more than the cost of terminating its service conduit and cables at the property line, and if the service cables can be installed in one continuous pull from the street, then the company may extend its service cables into the building.

a. Residential

In the instances of a 1, 2 or 3 family detached homes; two-1 family semiattached/row homes, the company will install an individual service lateral to each house terminating at the property line.

In all other instances the company will supply an individual service lateral from its street system to the property line for each 2 hour rated firewall enclosure. However, if a 2 hour rated firewall exists between every unit, then a single service lateral will be supplied to every 2 footprint units.

b. Non-Residential

For commercial and industrial buildings, where the distance from the property line to the point of service entrance at the building is greater than 5-feet or the overall length of a required splice box or manhole plus two feet, the company must terminate its service in a box or manhole to be installed by the customer adjacent to the property line. In such a case, this point must be the point of company service termination.

Where a property line splice box is designated, the construction must be according to <u>EO-6210-B</u>. Where a property line splice box is not designated, a service end box may be required and the construction will be according to <u>EO-6208-C</u>, <u>EO-6209-C</u>, <u>EO-6211-C</u>, <u>EO-6212-C</u>, <u>EO-6214-C</u>, and <u>EO-6215-B</u>.

The company will supply underground service cable to residential customers in one, two and three family houses, for installation by the customer from the property line to the customer's building when such building is initially connected for service or when converted from overhead to underground. All such service cable must be the property of the customer.

C. Space for Transformer Apparatus

Where the company considers transformers and associated equipment reasonably necessary for the adequate supply of service to a customer or customer's premises, the customer shall provide suitable

Consolidated Edison Co. Inc

space and reasonable access thereto, without rental charge. To facilitate access and ventilation, such space shall, wherever practicable, be adjacent to the property line and should be outside the building and immediately below street grade.

Where space for transformer and associated equipment is at or immediately below street grade and adjacent to the property line, the Company, at its expense, will construct the transformer enclosures abutting the property line and will assume any compensation payable by the Company to the municipal authorities for any necessary sub-sidewalk transformer vaults and splicing chambers, and the Company will furnish, install and maintain the transformer and associated equipment therein.

Whether you're constructing a new building or adding electric load to an existing one, Con Edison strongly encourages you to contact us early in the design process to discuss your transformer vault requirements. This step will help you to avoid unnecessary and costly design changes or delays that may result if these requirements are not incorporated into your final building design.

Typical transformer vault space requirements depend on the number of transformers required to supply electricity to your building. In addition, there may be an incremental customer cost to supply service at your requested point of entry. Your final service design will be developed after Con Edison receives your contractor work request and/ or load letter with details of your entire building's new or additional electrical requirements.

Where transformer vaults are to be installed, the point of company service termination must be indicated on the Space Allocation Drawing and on the Service Layout



Developer Agreements

To facilitate your building's construction activities and provide you with full control of your service installation, we encourage you to install the transformer vaults and associated facilities under a developer's agreement. This agreement will allow you to maintain control of the site and all construction logistics, thereby eliminating the

utility vaults from your critical path. Con Edison will reimburse you at standard company prices to perform this work. For additional information on Developer Agreements, contact your assigned Con Edison project manager.

This document, located at https://www.coned.com/-/media/files/coned/documents/small-medium-large-businesses/transformervaultplacement.pdf?la=en, contains information which will assist you in planning for your building's electric service configuration and installation of sidewalk transformer vaults.

D. Interior Distribution Installation

At the request of the customer, the Company's transformers and associated equipment may be by the Customer at one or more points in the building or premises on the same or different levels, provided that the entire service installation within the premises, including the installation of, and connections to the Company's transformers and associated equipment, or replacements thereof, is made at the customer's expense in accordance with the Company's specifications

E. Replacement for Reinforcement of Rear Yard Services

Upon customer's request for reinforcement of an existing rear yard service, the customer shall be required to provide the necessary service entrance facilities to receive service from the Company's

Consolidated Edison Co. Inc

street distribution system in the front, if a street distribution system in the front already exists. The rear yard system shall stay in use for the remaining customers.

- a) Supply a new service from the street facilities, providing the customer supplies service entrance facilities to the property line. The installation of the service equipment shall be in accordance with company specifications. Provisions must be made to maintain the service to the other customers on the rear yard pole line.
- b) Provide service from our rear yard facilities if they are adequate for the proposed additional load.

Standard Service Layouts are not applicable in this instance and the customer/contractor must consult the Company prior to commencing any work.

F. Replacement for Reinforcement of Loop Services

Upon customer's request for reinforcement, the Company may:

- a. Reinforce the existing main service from the street facility to the point of service termination, provided the conduit on customer's property is of proper size (minimum 1- ½ "diameter). Existing loop service to remaining customers shall be maintained as required; or
- b. If a reinforcement is required within the loop, the Company shall reinforce the existing loop. The Company shall bear the cost for residential customers in 1, 2 and 3 family homes only
- c. When a customer is remodeling his/her basement and relocation of conduit and cable that provides service to other customers on the loop is required, the conduit and cable to be used in the basement will be supplied and installed by the Company at customer expense.
- a) Supply a new service from the street facility, providing the customer supplies service entrance facilities to the property line. The installation of the service equipment shall be in accordance with Con Edison's specifications. Provisions shall be made to maintain the loop service to other customers.
- b) Reinforce the existing loop service provided the loop conduit is a minimum of 1½-inches in diameter.
- c) If the loop conduit is less than 1½-inches in diameter, the contractor has the option of either replacing the loop conduit with one that is 1½-inches in diameter or larger, or replacing the loop cables with the required size in the existing loop conduit. If the contractor elects to replace the conduit with the larger size, the company will then reinforce the cables in the new conduit.
- d) Back to back services will no longer be reinforced. In the event that a back to back service exists, the company will provide a separate service. The new service will be overhead (if available), or underground. However, the remaining loop service will remain.

Standard Service Layouts are not applicable in this instance and the customer/contractor must consult the Company prior to commencing any work.

G. Minimum Insulation Standards for Existing Dwellings Converting to Electric Heating

An existing dwelling will not be supplied electric service for the purpose of converting to electric space heating unless:

- a. The roof/ceiling has at least six inches of insulation or insulation with an R value of 19 or greater. In the case of a dwelling having a flat roof or having four or more stories, compliance with the roof insulation standard will not be required if four or more inches of insulation are already in place or if insulation can be installed only by means of cutting an opening in the roof.
- b. The dwelling has storm windows, or thermal windows with multiple glazing. In the case of a dwelling having six or more stories, storm windows will not be required as long as the Company

Consolidated Edison Co. Inc

certifies that the dwelling's windows are caulked and weatherstripped. This certification shall be made in writing to the Public Service Commission. A storm window will not be required on any window opening onto a fire escape.

c. The entrances have storm doors or thermal doors

Con Edison may waive the requirements where:

- The applicant for service can establish through two estimates, one of which may be a Company audit, that the purchase price and installation charge (excluding interest charges) will be greater than seven times the anticipated annual savings to be obtained (based on the present costs of the fuel currently used in the building)
- ii. The dwelling is a historical building
- iii. Other measures have been taken so that the overall heat loss for the building envelope does not exceed the total heat loss which would result from conformance with the minimum insulation standards. Such heat lost calculation must be certified by a licensed architect or engineer

Copies of waivers granted or denied by Con Edison shall be made available to the Public Service Commission. Applicants denied waivers shall be informed of their right to appeal that denial to the Public Service Commission.

Electric service will not be provided to any premises subject to this minimum installation standard until an executed Certificate of Compliance has been furnished to Con Edison. Con Edison's Certificate of Compliance form can be found in the Electric PSC Tariff – PSC 10 – General Rule 7.6.5 - Leaf 76

Waiver requests must be submitted to Con Edison using the Company's "Request for Waiver – Minimum Insulation Standard" available online, or also on Exhibit B

Section III - Customer's Installation and Equipment

A. <u>Customer Wiring and Equipment</u>

Wherever it is provided that the Customer shall perform any work or furnish or maintain any equipment or facilities, the Customer shall do the same or cause the same to be done at the Customer's expense.

The Company will determine the location, and specify the type and manner of installation and connection, of the service terminating equipment and of the metering equipment and will furnish this information to the Customer upon request. The Customer shall obtain this information as one of the first steps in planning the electrical installation.

All construction by the Customer from the point of service termination to and inclusive of the meter equipment shall be subject to approval by the Company.

The Customer shall furnish, install, and maintain all wiring and equipment, including standpipes, conduits, fittings, wires, cables, fuses, end boxes, service switch, meter equipment (except meters and metering transformers), and meter wiring, beginning with the point of service termination. The Customer shall furnish, install and maintain the facilities necessary to accept outdoor meter(s) wherever feasible when service is provided to a new one-, two-, or three-family home or when the service conduit to an existing one-, two- or three-family home must be replaced in response to a Customer's request for an upgraded service.

B. Adequacy and Safety of Installation

The Company shall not be required to supply electric service until the Customer's installation shall have been approved by the authorities having jurisdiction over the same; and the Company further reserves the right to withhold its service, or discontinue its service, whenever such installation or part thereof is deemed by the Company to be unsafe, inadequate or unsuitable for receiving the Company's service or to interfere with or impair the continuity or quality of the Company's service to the Customer or to others.

Contractors/Electricians are responsible for making the final electric service connection between Con Edison's service conductors and the customer's service entrance conductors using company approved connectors (see <u>EO-6218-B table 4 on sheet 6 of 7</u>) under the following:

- Con Edison's service conductors are 1/0 AL or smaller from pole line to point of attachment
- Work is performed on weatherhead and/or standpipe where Con Edison's service conductors from pole line to point of attachment remain unaltered
- Service connections at final termination point of alley taps or outdoor loops



The disconnection and final connection will be made by the licensed electrical contractor in the case of 1, 2 and 3 family homes that are presently served with overhead service.

In all other instances, the final connection for making the service alive shall be made only by the Company.

C. Customer's Repairs

All repairs to the Customer's installation and equipment shall be made by the Customer, and the Customer shall maintain the installation and equipment in the condition required by the authorities having jurisdiction and by the Company.

Consolidated Edison Co. Inc

D. Carrier Current Equipment

If a Customer uses the building wiring for a carrier current system for communication or signaling purposes, the Customer shall install suitable filter equipment or make other provisions approved by the Company to keep the Company's distribution facilities free from carrier currents produced by the equipment.

E. Motors and Miscellaneous Apparatus

Before installing motors or miscellaneous apparatus, the Customer shall consult the Company regarding the characteristics of the service to be supplied and the manner in which the equipment may be connected. It is important that the characteristics of motors, motor starting equipment, and miscellaneous apparatus, such as welders and X-rays particularly in the matter of inrush currents, shall be such as not to impair the quality of service rendered by the Company to any of its Customers.

Considerable latitude in the amount of inrush current is permissible under certain conditions and the Company will give a written expression of opinion to any Customer as to the acceptability of the Customer's proposed installation in this respect. The Company, however, shall not be understood at any time as giving any assurance or warranty, expressed or implied, that particular conditions may not later require change, unless inrush currents are within limits specified by the Company as acceptable in any case.

For welders, X-rays and other inherently single phase apparatus requiring inrush current in excess of the values allowed by the Company, the Customer shall provide rotating equipment for converting from three phase to single phase, or other equipment such as capacitors, to reduce inrush current to a value acceptable to the Company.

If miscellaneous appliances, such as furnaces, heaters and ranges, having 120 volt elements are supplied from 3 or 4 wire services, the elements should be so connected between the line wires and neutral that the operating current unbalance will be a minimum.

F. <u>Service Equipment</u>

Each service entrance is to be provided with disconnecting means and overcurrent protection. The service equipment may consist of one, but not more than six disconnects grouped at a readily accessible point near the entrance of the service conductors. Where more than six subdivisions of the service are desired, a main service disconnect is required and must be located before the meters.

The service equipment shall be installed in clean, dry, readily accessible location as near practical to the point of service termination. The depth of the working space in the direction of live parts shall not be less than 3 feet. When the nominal voltage to ground exceeds 151 Volts, the minimum clear distance can vary up to 4 feet as required by the National Electric Code (NEC), Article 110.

All service equipment shall be approved by the authorities having jurisdiction over the same. In addition, all service end boxes, current transformer cabinets and meter mounting equipment shall be approved by Con Edison. For installations of customer's service equipment having a total rating in excess of 800 Amperes, the customer shall submit drawings of the proposed service equipment to ascertain that it is in compliance with the company's requirements as to service end boxes and metering arrangements. A list of Con Edison's approved equipment is given in Section VII entitled "Approved Electric Service Equipment."

Consolidated Edison Co. Inc

Upon written request, the company will determine the short circuit current available from its system at the point of service termination.

Connections made ahead of the main service equipment for fire pumps, exit lights, control power for circuit breakers, etc., shall be provided with disconnecting means and overcurrent protection adequate for the connected load. Such connections shall be made only where specifically approved by the company and the authorities having jurisdiction and may require an additional meter.

The customer is to install service equipment which meets the following requirements:

- a. A voltage rating suitable to the service
- b. An ampere rating which is adequate for the initial and the anticipated future load current requirements. The device shall be capable of interrupting load current equal to its ampere rating
- c. A short circuit current interruption capability at values specified by the company.

It is recommended that any under voltage tripping devices required by the customer be arranged to trip individual feeder circuits rather than the main breaker.

G. Grounding



The authorities having jurisdiction in this area require that the ground conductor, the service neutral, and the metal housing of the service equipment shall be connected together at the service equipment.

In New York City

Where available, active electrically continuous metallic underground water piping shall be used as a ground and connected within the first 5-feet of the water service point of entry, regardless of the location of the water main valve

In Westchester County

In an industrial and commercial buildings or structures where conditions of maintenance and supervision ensure that only qualified persons service the installation, interior metal water piping located more than 5-feet from the point of entrance to the building shall be permitted



The grounding connection is part of the Electric Inspection Checklist. Con Edison representative will verify that the connection has been connected prior to energizing the service or setting the meter. **Gas service or fuel piping system cannot be used as a ground.**

Section IV - Metering Installation

A. General

Outdoor metering is required for all new service installations to one, two and three family detached, semidetached and row houses.

B. Company Furnishes and Installs

All electric service to a customer at a single location will be rendered through a single meter except as hereinafter provided. The company will furnish, install, connect and maintain such meter or meters as are necessary for metering electric energy and demand for Con Edison billing purposes

C. Company Furnishes, Customer Installs

Con Edison will furnish and the customer shall install and connect current transformer on initial installation and upon subsequent alteration to the main cable or bus circuit.

When meter change adapters are required, Con Edison will furnish and the customer will install.

D. <u>Customer Furnishes, Customer Installs</u>

The customer will furnish, install and maintain all wiring and equipment, including stand-pipes, conduits, fittings, wires, cables, fuses, end boxes, service switch, meter equipment (except meters and metering transformers) and meter wiring, beginning with the point of service termination.

All cabinets, conduit fittings and equipment enclosures containing un-metered conductors shall be made sealable before service will be energized.

The wiring to meter equipment shall not be enclosed in the same conduit or trough compartment as wiring leading from meter equipment. The customer will furnish and install meter wiring between metering transformers or meter equipment and the meters, but the company will make the final connection of such wiring to the meters. Where external demand metering devices are required in addition to the watt-hour meters, the Customer or the Customer's Meter Service Provider shall furnish, install, maintain, and remove, as necessary, meter equipment for such devices.

Please note:

To be billed for coincident maximum demand under the provisions of the current Tariff, the Customer shall: (a) Furnish and install all necessary conduit and wiring the between the watthour meters and associated metering devices or provide remote communications capability at each meter for connection either by the Company or the Customer's Meter Service Provider, and

(b) Maintain the impulse wiring connecting the meters and/or the remote communications equipment which permits the determination of coincident demand

When changing from sub-metering to direct tenant metering, all meter mountings whether for 2, 3, or 4-wire bottom-connected meters are to be replaced with approved watt-hour meter sockets.



Con Edison approved locking device hardware must be provided and installed by the factory or contractor on all metering equipment and service end line boxes designated to accept such services

E. Meter Mountings

1. Self-Contained Meters: 120/208 V or 120/240 V Services

- a) A 5-jaw meter socket is to be installed for 2 or 3-wire load wiring from the meter where the conductors do not exceed the sizes shown in Table I
- b) A 7-jaw meter socket is to be installed for 4-wire load wiring from the meter where the conductors do not exceed the sizes shown in Table I
- c) Where the socket meters are to be installed for commercial and industrial customers, the meter sockets are to be equipped with bypass facilities, with the exception of Temporary Services. The Temporary Service Customers will make the decision to install approved meter socket equipment with or without bypass facilities with their knowledge that non bypass equipped equipment will result in a service interruption when the meter is removed.

NOTE: Bypass facilities are not required for PL&P meter sockets in two and three family houses

d) Where socket meters are to be installed for residential customers, the meter sockets can be equipped with bypass facilities at the customer's request.

2. Meter Sockets Installations For Street Celebrations, Bazaars and Other Events Requiring Temporary Service

- a) A 5-jaw meter socket should be installed for 2 or 3-wire load wiring from the meter
- b) A 7-jaw meter socket should be installed for 4-wire load wiring from the meter

TABLE I
Socket-type Meter and Maximum Line and Load Conductor Sizes

Socket-type Meter	Maximum Size of Line Conductor	Maximum Size of Load Conductor	
Outdoor Trough Type	2/0 AWG	1/0 AWG	
5-jaw	*500 Kcmil	*4/0 AWG	
	3/0 AWG Copper Type RH	3/0 AWG Copper Type RH	
Outdoor-Indoor Box Type	or	or	
5-jaw or 7-jaw	3/0 AWG Copper Type R or T	3/0 AWG Copper Type R or T	
	or	or	
	250 Kcmil Aluminum	250 Kcmil Aluminum	

^{*}For residential use only

F. Current Transformer Meters

A current transformer meter mounting is to be installed for 4-wire loads for conductor sizes larger than the following:

- 3/0 AWG Copper Type RH
- 4/0 AWG Copper Type R or T
- 250 Kcmil Aluminum

The distance between a current transformer cabinet and the associated meter equipment shall not exceed 10 feet, without prior company approval. Meter wiring should not exceed 25-linear feet in length.

Current transformers are to be installed on the line side of the service disconnect where permitted by the Regulatory Authorities having jurisdiction. However, in the case of a 265/460 V service, there must be a means of disconnect on the line side of the CT meter, except as follows:

• On all 265/460 V installations, when a single customer is to be supplied by the service, we shall continue the practice of allowing the meter in front of the service switch.

Consolidated Edison Co. Inc

- On all 265/460 V installations with multiple customers, we will allow a meter in front of the switch in cases where the customer is obligated by law to install a fire pump or alarm system. On all other customers, a switch is to be installed in front of the meter.
- On all new 265/460 V installations, without a switch in front of the meter, the Energy Service personnel must issue a Work Authorization to Electric Meter and Test (M&T) to install a meter and wiring prior to energizing service.

Current Transformers Mounting Specifications are listed in the following tables, Table II and Table III

TABLE II

	Maximum Size and Number of Conductors	Current Transformer Specification No.
A. B.	1 or 2 - 500 Kcmil or smaller copper cables per phase, OR 1 or 2 - 750 Kcmil or smaller aluminum cables per phase.	MES 142
А. В. С.	Two cables per phase larger than 500 Kcmil copper or 750 Kcmil aluminum, or Three or four aluminum or copper cables per phase, or Where bus with a maximum current carrying capacity of 4-500 Kcmil copper or 4-750 Kcmil	MES 298
	aluminum cables is run in place of cables.	
	A capacity greater than 4-500 Kcmil copper or 4-750 Kcmil aluminum cables per phase A vault takeoff rated 1, 280 amperes or more to a single customer.	<u>MES 377</u>

For installation of Current Transformers with MES 142, MES 298 and MES 377 cabinets, the minimum height clearance shall be 2-feet-0-inches from the bottom CT, in the cabinet, to the floor. The maximum height clearance shall be 7-feet-0-inches from the top CT, in the cabinet, to the floor.

TABLE III

As of June 1, 2013 all new electric meter installations / upgrades must have socket meter equipment installed. As of June 1, 2013 A- base equipment listed below is for reference purposes only specific to equipment installed prior to June 1, 2013.

Trans A Cabinet for low voltage 200 Amp or 400 Amp service Maximum cable size 1 set of 600 Kcmil or 2 sets 4/0 AWG copper	MES 745
Trans. S Cabinet for low voltage - 200 Amp- 400 Amp service Maximum cable size 1 set of 600 Kcmil or 2 sets 4/0 AWG copper	MES 755
Trans. A Cabinet for low voltage 400 Amp to 800 Amp service Maximum cable size 2 sets of 600 Kcmil AWG copper	MES 750
Trans S Cabinet for low voltage 400 Amp to 800 Amp service Maximum cable size 2 sets of 600 Kcmil AWG copper	MES 757

G. Outdoor Metering

For outdoor metering (Self-Contained Meters), refer to MES 394 and Standard Service Layouts.

1. New Installations

Outdoor metering is required for all new 1, 2, and 3 family homes.

2. Relocation of Meters from Indoors

- a) When a customer on underground service desires that the electric meter be relocated from indoors to the outdoors, it is necessary to divert the existing service entrance conduit to the outside. The electric service will be diverted directly to the outdoor meter installation so that no un-metered service enters the building.
- b) When a customer on an overhead service desires that the electric meter be relocated from indoors to outdoors, it is necessary to relocate the point of service termination to the face of the building.
- c) On loop services there will be no relocation of meters outdoors.

3. Mandatory Relocation to Outdoor Meters



When an increase in load for a 1, 2 or 3 family home requires a change in the customer's service equipment which includes the installation of new service entrance pipe or standpipe, the metering equipment must be mounted outdoors at a location where the meters will be directly accessible for reading and testing.

4. Aesthetics

Although it is not mandatory, in the interest of aesthetics it is permitted for meter equipment and piping to be painted so as to blend in with the location on which it is being installed. Screening with shrubbery or fencing is also permitted as long as the meters are still accessible for meter reading and replacement, and also meeting all clearance requirements, see **Part J - Location** of this section for more details.

H. Indoor Metering

For Indoor Metering (Self-Contained Meters), refer to MES 395, 447,194 and Standard Service Layouts. Company meters are to be connected on the line side of all customers' energy-consuming devices. Requests for installation of such devices are to be made to Con Edison prior to installation.



When an increase in load for 1, 2 or 3 family homes requires a change in the customer's service equipment which includes the installation of new service entrance pipe or standpipe, the metering equipment must be mounted outdoors at a location where the meters will be directly accessible for reading and testing.

When the existing service disconnect for a 1, 2 or 3 family homes is on the load side of the meter socket and the installation of an additional meter socket(s) or replacement of an existing socket(s) necessitates the replacement of the existing disconnect, the meter sockets are then to be placed on the line side of the service disconnect.

I. Fire Alarm System Metering

When fire alarms are activated they must remain energized as long as there is utility electric power provided to a building including those times when main disconnect switches are opened for fire responses.

There are two (2) ways to meter the fire alarm while complying with the New York City Electrical Code:

1. If the building is master metered, that is, service enters the building and is metered before the main

Consolidated Edison Co. Inc

service switch, for example via a 377 cabinet, the fire alarm can be connected to the load side of the PL&P meter current transformers and ahead of the main service switch.

2. If a building has individual tenant meters the service enters the building and usually goes to a main service switch before going to the individual meters. This type of installation requires a separate meter installed ahead of the main disconnect switch feeding the fire alarm exclusively. Connecting the fire alarm to a meter after the switch would not meet the NYC Electrical Code.

Under both scenarios above the fire alarms will remain energized even if the main service switch is opened for the fire response.

For 120/208 or 120/240 volt services a socket type meter pan shall be installed on the line side of the main service switch for a two or three wire feed to the fire alarm system. The meter pan shall be marked "FIRE ALARM" in RED and the account set up in the owner's name.

For 265/460 volt services there will be a PL&P meter (377 cabinet) ahead of the main service switch. Fire alarms for these shall be on load side of the metering ct's and on the line side of the main service switch.

J. Location

Meter mounting equipment for all watt-hour meters and for demand meters shall be so located that the meters will be accessible for reading and testing, and shall be free from vibration and not exposed to mechanical injury.

Meter mounting equipment in a multiple dwelling (other than semi-attached or attached/row houses) or a commercial building shall be located in a public or common area, preferably in a public or common area, preferably in the basement or cellar, but the installation in public or common area on upper floors may be accepted and is subject to Con Edison's approvals.

Mounting equipment for watt-hour meters, demand meters, relays and instrument transformers shall not be installed in Class I "Hazardous Locations" as defined by the National Electrical Code (NEC) and the Electrical Code of the City of New York nor in any similar locations deemed hazardous by Con Edison or regulatory authorities having jurisdiction. **Note:** Class 1 Location is defined by the NEC as a location where flammable gases or vapors are or may be present in the air in quantities sufficient to produce explosive or ignitable mixtures.

Meter mounting equipment shall not be located over a doorway, on the wall of an elevator or dumbwaiter shaft, in a toilet, in a stairway, in a coal bin or directly under any steam, water or drain pipes. The indoor meter equipment shall not be located above or within 36-inches of any receptacle containing flammable gases or liquids. Outdoor commercial meter equipment **shall not be located** within 24-inches of any receptacle containing flammable gases or liquids.

Indoor meter equipment must have a horizontal minimum clearance of 36-inches of either side of a gas meter. Indoor meter equipment may not be placed under or above a gas meter.

Note:

If field conditions prevent the obtaining of the 3 foot required clearance, it is permissible to erect a barrier between the electric and gas meters provided all other normal clearances for gas and electric meter installations are met. The barrier should be a permanently fixed, fire resistant partition or wall such as 3/8-inch sheetrock on either side of a frame made from 2-inch x 3-inch lumber, extending from the floor

Consolidated Edison Co. Inc

to the ceiling and 24-inches out from the wall. Barriers of other materials may be accepted but must be submitted to the company for approval before erecting.

Outdoor meter equipment may be placed to within 12-inches of a gas meter. See page 48, "Spacing Requirements-Gas and Electric Meters/Outdoor and Indoor".

Meter equipment installed in any recess or enclosures shall comply with MES 528.

Meter mounting equipment shall be set plumb and level and shall be securely fastened in a manner acceptable to the company. It is recommended that bolts and expansion shield or anchors be used on brick, stone and concrete walls and toggle bolts be used on hollow tile, terra cotta and plaster walls. Con Edison will not accept nails, wood plugs, or dowels as a means of fastening equipment, cleats or backboards, and will only approve of installations completed in a manner acceptable to safe construction standards.

Indoor/outdoor installations of single meters or single horizontal (side-to-side) rows of meters, where practicable, shall be installed so the meter center line opening is 4 feet 6 inches minimum to 5 feet 6 inches maximum above finished grade level.

Indoor/outdoor installations of vertical meters (up and down) consisting of four or less meters, where practicable, shall be installed so the highest meter center line opening is 4 feet 6 inches minimum to 5 feet 6 inches maximum above finished grade level, as long as the lowest meter socket is not less than 2-feet minimum from meter center line opening to finished grade level.

Indoor/outdoor installations of vertical meters (up and down) consisting of five or six meters, shall be installed so the highest meter center line opening is 5 feet 6 inches minimum to 6 feet 6 inches maximum above finished grade level, as long as the lowest meter socket is not less than 2-feet minimum from meter center line opening to finished grade level.

The height of current transformer meters installed together with current transformer cabinets shall be determined in accordance with the current transformers height specifications. See MES <u>142</u>, <u>298</u>, <u>377</u>, <u>745</u>, <u>750</u>, <u>755</u> and <u>757</u>.

Meter mounting equipment in grouped installations shall be installed to provide a minimum distance of 10-inches between meter centers. A minimum distance of 6-inches is required between meter equipment. Horizontal rows of watt-hour meter sockets shall be mounted with a minimum vertical distance of 10-inches between centers and the space between rows shall be kept clear. A clear space of at least 3-inches is to be provided between horizontal rows of bottom-connected meter mountings.

A clear space of at least 6-inches shall be provided around single or grouped installations and there must be a clear space of at least 3-feet in front of all meters.

K. Identification of Circuits

The external demand meter location shall be selected so that pulse wiring requirements are at a minimum.

Consolidated Edison Co. Inc

When the power supply for other auxiliary devices is taken from one of the watt-hour meters in a coincident demand group, the auxiliary devices shall be located adjacent to that particular watt-hour meter. When that power supply is taken from the service disconnect the demand meter shall be located adjacent to the nearest watt-hour meter.

Where more than one meter is installed, the meter equipment and distribution panel shall be marked by the customer to indicate exactly the portion of the building supplied. The characters shall be permanent, legible and stenciled three-quarters of an inch to one and one-half inches in height.

All critical loads should be segregated and its switchgear marked to be identified as per NEC and the Regulatory Authorities Having Jurisdiction. This marking will expedite the restoration of service in the event of an emergency.

In multi-tenant buildings, the designation on each meter equipment shall be the same as the permanent designation of the apartment, store, office or loft, etc. which it serves.

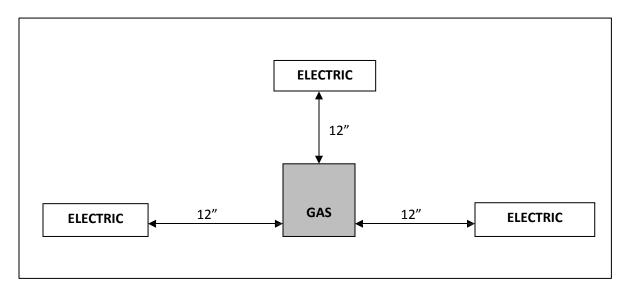
L. Seals



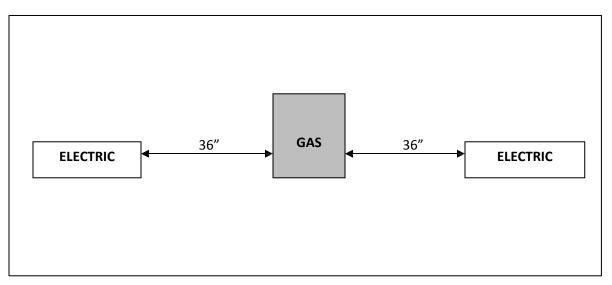
Con Edison will seal all meters, meter equipment and other enclosures on the line side of the meter. No person, except a duty authorized employee of Con Edison, will be permitted to break or replace a seal or to alter or change a meter or its connections or locations. Routine meter unlocking is to be requested via Project Center and scheduled through your assigned Con Edison commercial service representative (CSR).

M. Spacing Requirements between Gas and Electric Meters

OUTDOOR



INDOOR



Section V - Customer Use of Generating Equipment

A. General

All customer-generating equipment connected to the Company's system must conform to company standards, as well as all in accordance with all design, manufacturing, installation, testing and operating standards of the industry, including ANSI, IEEE, NEC, NESC, OSHA, UL, NEMA and any applicable municipal, local, city or federal rules, regulations or ordinance codes, unless otherwise specified.

The Company reserves the right to decline requests from generators to interconnect to the distribution network system when the Company deems it necessary to protect its system, facilities or other customer. In addition, New York State maintains a cap on the amount of net metered capacity installed in Con Edison territory; as such, interconnections will be made on a first-come, first-served basis.

B. <u>Dispersed/Distributed Generation</u>

Con Edison defines a Distributed Generation (DG) facility as a small electric production facility (up to 20 MW) that is generally dedicated to the support of on-site electrical load, and in some cases can provide thermal load to the customer, as well.

DG facilities can utilize both renewable sources such as solar, wind, water power and farm waste, as well as non-renewable energy sources such as natural gas or other fossil fuels for conventional engines, turbines and fuel cells. Each technology has its own unique characteristics, and no one technology can address all customer needs equally well, so the Company urges customers to understand the DG technology solution being provided prior to committing to the installation of a DG facility.

Typically, DG facilities are installed on a portion of the existing electric service on the customer side of the meter; no DG facilities will be connected to temporary electric services. Con Edison permits any customer to operate DG facilities in parallel with the Company's electric system provided there is no adverse effect on other customers, equipment, personnel or quality of service. Protective devices such as relays, circuit breakers, etc. will be specified by the Company and must be installed at all locations of parallel interconnection with the Company's system. In some cases, the DG facility requested by the customer will require additional service upgrades or special equipment configurations to meet the Company's standards for service. Any service upgrade or interconnection costs due to DG installation are the customer's responsibility, and shall be paid in advance of construction or testing.

The general requirements for electrical service to dispersed generation customer is found in <u>EO-2115</u>. <u>Please note this specification is currently under review and revision.</u>

Following a technical review of the feasibility of the project, the Company may identify that a Coordinated Electric System Review (CESIR) is required. The CESIR determines the impact of the customer's DG facility on the Company system, and reveals any necessary changes or required upgrades to the Company system in order for the facility to safely interconnect. After determining that a CESIR is required, the Company will notify the customer of the estimated cost to perform the CESIR. The Company will not proceed with the CESIR until the customer commits to the study through payment of the costs of the CESIR, or by submitting a formal letter stating the customer's intent to pay. The specific costs for which the customer is responsible and the timing of the payment are described in the current Tariff.

Consolidated Edison Co. Inc

Any DG facilities with a capacity of 2MW or less must comply with the process and standards contained in the New York State Standardized Interconnection Requirements and Application Process (SIR), found in Electric PSC Tariff 10 – Addenda – SIR.

In addition to submitting an application for service, all applicants requesting electric Standby Service and/or Buy-back Service or Net Metering must also complete and submit the "Addendum to Application for Service" found in <u>Electric PSC Tariff 10 – Application Form G.</u>

More information on Distributed Generation is available at https://www.coned.com/en/accounts-billing/your-bill/public-service-commission-rates-tariffs

C. <u>Emergency Generating Facilities Used for Self-Supply</u>

The use of emergency generating equipment at the premises for self-supply will be permitted as follows:

- By affected customers for the duration of an interruption of the Company's service or a Company announced voltage reduction
- When generating equipment is operated at the direction of the NYISO under NYISO Installed Capacity procedures for Special Case Resources (SCR) or NYISO procedures for Emergency Demand Response (EDRP)
- Or at the direction of the Company under Rider O and T

Unless the customer is also authorized to export the generated electricity, the customer's wiring and switching equipment shall be so arranged as to prevent parallel operation of the emergency generator with the Company's electrical system or feedback into the Company's lines.

The specification outlining the requirements of customer's emergency generator is found in <u>EO-2113:</u> <u>Transfer of Load from Company's Supply to Customer's Emergency Generator.</u>

Before such emergency equipment is installed, the Customer shall submit to the Company for its approval:

- 1. A wiring diagram showing how the emergency generator would be connected to the building wiring including the switching arrangements to prevent parallel operation; and
- A statement in writing signed by the customer to the effect that the emergency facilities will be
 used only during an interruption of the Company's electricity service or a Company announced
 voltage reduction and for necessary testing purposes or when generating equipment is operated
 at the direction of the NYISO under NYISO SCR or EDRP procedures or at the direction of the
 Company under Rider O and T.

In addition, the wiring diagram submittal of major project applicants of 100 kW generator size and greater must be signed off by the Professional Engineer (P.E. Stamp)

D. Generating Facilities Used on an Emergency Basis for Export

The use of generating facilities at the premises for delivery to the Company's primary distribution feeder will be permitted on an emergency basis as follows:

- When generating equipment is operated at the direction of the NYISO under NYISO Installed Capacity procedures for Special Case Resources (SCR) or NYISO procedures for Emergency Demand Response (EDRP)
- At the direction of the Company under Rider O and T

Consolidated Edison Co. Inc

Delivery to the Company's secondary networks is prohibited. A customer may not deliver to the Company's primary distribution feeder while it is receiving electric energy delivered by the Company.

A customer who falls under this category must comply with all the provisions of SC-11: Buy-Back Service, including the Interconnection Charge and Determination of Demand, including establishing contractor demand and installation of appropriate metering to measure the energy delivered to the Company's system. Further, such Customer will pay any costs associated with reinforcing the distribution system and/or adding facilities as may be required for load delivery.

The amount of purchased power and energy may be limited by the Company, where technical considerations dictate that such actions are necessary.

E. Standby Service

"Standby Service" means the delivery of power and energy:

- a) To replace and/or supplement the power and energy ordinarily generated at a Customer's premises by means of a private generating facility on the premises, or
- b) For station use by a customer that is a wholesale generator. "Station use" includes power and energy used by the Customer at its premises in connection with its generating facility
 - i. During periods when such needs are not served by the generator and/or
 - ii. To restart the generator after an outage

Where a portion of the customer's needs at its premises in connection with its generating facility are not self-served, those needs will be considered to be part of "station use" if the usage is not served under a separately-metered account.

"Standby Service" excludes the use of generation for the following purposes:

- a) Export under Buy-back Service (SC 11)
- b) Net metering under Rider R
- c) Emergency generation used for self-supply
- d) Export of generation on an emergency basis

To receive Standby Service, the generator may be connected either for:

- a) Parallel operation with the Company's service
- b) Isolated operation with standby service provided by the Company by means of a double-throw switch

Customers who take Standby Service are subject to all terms and conditions set forth in <u>Electric PSC Tariff</u> 10 – General Rule 20. Certain customers with DG facilities that are considered "Designated Technologies" are exempt from Standby Rates, as well as some customers whose generator or load profile meet certain criteria. See Section 20.3 of General Rule 20 for more information.

Consolidated Edison Co. Inc

Section VI - High Tension Service

High tension service may be designated by the Company for service when warranted by the magnitude or location of the load, or other physical conditions, or when it would result in the least cost to the Company.

Con Edison provides service to high tension service customers at a nominal voltage of 4kV, 13kV, 27kV or 33 kV depending location. To achieve this, the Company extends 4kV, 13kV, 27 kV or 33 kV feeders to a manhole at the customer property line (or to a pole at the customer property line).

The company works with the customer to select a convenient position for the property line manhole to minimize the amount of street construction needed to extend the primary feeder to the customer. Where the Customer prefers another location, they are usually required to pay the difference in cost.

The Company owns and maintains its feeders up to the property line manhole and the customer will design, install, own and operate all equipment from the property line termination point (manhole or splice chamber), including cables, circuit breakers, transformers, and associated equipment. While the customer owns the substation, Con Edison evaluates the design and construction of the substation to ensure that they will not have an adverse impact on the electric distribution system. Con Edison's contribution to the project is primarily the performance of design reviews and the extension of its feeders to the customer premises.

Experience has shown that High Tension projects may take up to three years or more to be completed, depending on the complexity of the customer's design. Early submission and close coordination with Con Edison are critical to ensure the customer's and Con Edison's negotiated service date is met.

High tension service will not be supplied to customers for whom the company designates secondary service from the company's secondary mains.

Con Edison's specification <u>EO-2022 – General Specification for High Tension Service</u> details the areas responsibility for ownership, construction, alteration, operation and maintenance of equipment. In addition, also refer to MES-350 for high tension metering installation requirements. The company's detailed engineering requirements for the high tension service are given in the supplemental site-specific Technical Specification. The **General** and the **Technical Specifications**, with the appropriate support documents, comprise the Company's requirements for the Customer to obtain High Tension service. To be considered for High Tension service, which is a non-standard service, the customer must agree to all of the requirements contained herein.

An information guide has been prepared by the company for customers who are planning to install high tension substations and <u>is available on Con Edison's website</u>.

Section VII - Approved Electric Service Equipment

The equipment listed on the following pages is approved for use in connection with service installations in the territory supplied by Con Edison. By testing or approving equipment, Con Edison gives no warranty, expressed or implied, of the adequacy, safety, or other characteristics of any equipment, wiring, or devices, and assumes no responsibility with respect thereto.

As of June 1, 2013 all new electric meter installations / upgrades must have socket meter equipment installed. As of June 1, 2013 A- base equipment listed in Section VII is for reference purposes only specific to equipment installed prior to June 1, 2013.

Table	Description			
	Contents	53 (5/13)		
	Contents - continued	54 (5/13)		
I	Service End Boxes for Underground Service	55 (5/13)		
II	Outdoor/Indoor Box-Type Meter Sockets	56 (2/15)		
II-cont'd	Outdoor/Indoor Box-Type Meter Sockets	57 (2/15)		
II-cont'd	Outdoor/Indoor Box-Type Meter Sockets			
II-cont'd	Outdoor/Indoor Box-Type Meter Sockets			
III	Blank Cover Plate for Use with Watt-Hour Meter Sockets			
IV-A	Indoor Vertical Trough Meter Stacks— Not Bussed			
IV-B	Indoor Vertical Trough Meter Stacks — Bussed (5 & 7-jaw)			
IV-B	Indoor Vertical Trough Meter Stacks & T.B.s — Bussed (5 –jaw)			
IV-B	Indoor/Outdoor Vertical Meter Stacks – Bussed (5-jaw)			
IV-C	Indoor Horizontal Trough Meter Stacks — Not Bussed	64 (12/11)		
IV-D	Indoor Horizontal Trough Meter Stacks — Bussed			

Consolidated Edison Co. Inc

The equipment listed on the following pages is approved for use in connection with service installations in the territory supplied by Con Edison. By testing or approving equipment, Con Edison gives no warranty, expressed or implied, of the adequacy, safety, or other characteristics of any equipment, wiring, or devices, and assumes no responsibility with respect thereto.

As of June 1, 2013 all new electric meter installations / upgrades must have socket meter equipment installed. As of June 1, 2013 A- base equipment listed in Section VII is for reference purposes only specific to equipment installed prior to June 1, 2013.

Table	Description			
V-A	Outdoor/ Indoor Horizontal Trough Meter Stacks — Not Bussed	65 (2/15)		
V-B	Outdoor/ Indoor Horizontal Trough Meter Stacks — Bussed	65 (2/15)		
V-C	Outdoor/ Indoor Vertical Trough Meter Stacks — Bussed	66 (5/13)		
V-D	Outdoor/ Indoor Vertical Modular Meter Stacks — Bussed	67 (6/08)		
VI	Meter Mounting for External Demand Meters			
VII	** FOR REFERENCE ONLY ** Meter & Test Switch for Bottom-Connected Watt-Hour Meters HT and Non-standard 3-Wire Single Phase and Network Services			
VIIA	Meter and Test Switch enclosure for S-based CT-rated meters 3-Ph, 4-W Y, 3-ph 3-W Delta and 1-Ph 3-W Services			
VIII	Current Transformer Cabinets MES-142			
IX	Trans-S Enclosure for Current Transformers and CT Socket Meter 4-Wire Wye and Single Phase Service (2)			
Х	** FOR REFERENCE ONLY ** Trans-A Enclosure for Current Transformers and CT Bottom-Connected Meter Non Standard CT and 3-Wire Service			
ΧI	** FOR REFERENCE ONLY ** Trans-A Enclosure for Current Transformers and Bottom-Connected Meter for 3-W Residential Use (Westchester Use) 71 (5/13)			

Table IService End Boxes for Underground Service

	CATALOG NUMBERS For Indoor Use (For Outdoor Use See Note 1)					
Manufacturer	10" x 10" x 5"	12" x 12" x 8"	24" x 12" x 8"	30" x 18" x 12"		
	10 × 10 × 3	12 X 12 X 0	21 X12 X0	30 X 10 X 12		
Superior Electrical Enclosure, Inc. dba Delta Standard Products	D-205	D-220	D-215	D-484		
Navtech, Inc	N-205	N-220	N-215	N-484		
Murray Electric Products	SEB 1010					
Electrotech Service Equipment Corp.				ES 484*		
Milbank	SA-10105-SC1-SP1		SA-24128- SC1-SP1	SA-301812- SC1-SP1		

^{*} Knock Outs provided per contractor instructions.

Con Edison will provide information on service end boxes for larger installations.

For outdoor use, Catalog Number will be preceded by "RT" (Rain tight) for example RTD-205

Table II **Outdoor/Indoor Box-Type Watt-hour Meter Sockets for AC Meters**

Water floar Weter Sources for Ne Weter's								
			CATALOG	NUMBER				
		3-Wire 120/208	Volts	120/240 volts	4-Wire 120/208 Volts			
Manufacturer	Amp		5-Jaw		7-Jaw			
	Rating	Top Entry		Bottom Entry	Top or Bottom Entry			
		With or Without Hub	1-1/4" Fixed Hub	Closure Plate or Solid End wall	Closure Plate			
		Without Ry-Pass Facilitie	Without By-Pass Facilities Residential Use Only					

EATON, Cutter-Hammer, Eaton/Cutler-Hammer			Without by a don't			
Talon 100 UAT121 - 0BOC UAT121 - PBCO Midwest-GE See Note 1 125 U-RS101B(or T)-CRMEP U-RS101B(or T)-CRMEP Milbank 125 Note 2 7490 U-RS212B(or T)-CRMEP Murray 100 SN 152 CX SN 152 CC SN 152 C SE 750CR Electric Products 200 SS 152 CX MS-1G-100 NavTech 125 MS-1G-100 MS-1G-100 Siemens 100 WSN 152 CX WSN 152 C WSE 750 CR Siemens 100 SUAT121 - 0BCO SUAT121 - PBCO Siemens 100 WSS 152 CX WSS 152 C Square D 125 U-RS101B(or T)-CR-SQD U-RS101B(or T)-CR-SQD	Cutler- Hammer, Eaton/Cutler-	125	U-RS101B(or T)-CR-CH		U-RS101B(or T)-CR-CH	
Talon	See Note 1	200	U-RS202B(or T)-CR-CH		U-RS212B(or T)-CR-CH	
Midwest-GE See Note 1 125 U-RS101B(or T)-CRMEP U-RS101B(or T)-CRMEP Milbank 125 Note 2 7490 T490 Murray 100 SN 152 CX SN 152 CC SN 152 C SE 750CR Murray Electric 200 SS 152 CX SS 152 C SE 750CR NavTech 125 MS-1G-100 MS-1G-100 NavTech 125 MS-1G-100 SUAT121 – PBCO Siemens 100 SUAT121 – BBCO SUAT121 – BBCO Siemens 200 WSS 152 CX WSS 152 C Square D 125 U-RS101B(or T)-CR-SQD U-RS101B(or T)-CR-SQD	Talon	100	UAT121 - 0BOC		UAT121 - PBCO	
See Note 1 200 U-RS202B(or T)-CRMEP U-RS212B(or T)-CRMEP Milbank 125 Note 2 7490 7490 Murray 200 U4518 U4518 Murray Electric 100 SN 152 CX SN 152 CC SN 152 C SE 750CR NavTech 125 MS-1G-100 MS-1G-100 NavTech 125 MSN 152 CX WSN 152 C WSE 750 CR Siemens 100 SUAT121 – 08CO SUAT121 – PBCO Siemens 100 SUAT121 – BBCO SUAT121 – BBCO Siemens 100 SUAT327 - 0MCO SUAT427 - PMCO Square D 125 U-RS101B(or T)-CR-SQD U-RS101B(or T)-CR-SQD		200	UAT327 - 0MCO		UAT427 - PMCO	
Milbank 125 Note 2 7490 7490 Murray Electric Products 100 SN 152 CX SN 152 CC SN 152 C SE 750CR NavTech 125 MS-1G-100 MS-1G-100 MS-1G-100 Siemens 100 WSN 152 CX WSN 152 C WSE 750 CR Siemens 100 SUAT121 – 0BCO SUAT121 – PBCO Siemens 100 SUAT121 – BBCO SUAT121 – BBCO Siemens 100 SUAT327 – 0MCO SUAT427 – PMCO Square D 125 U-RS101B(or T)-CR-SQD U-RS101B(or T)-CR-SQD	Midwest-GE	125	U-RS101B(or T)-CRMEP		U-RS101B(or T)-CRMEP	
Milbank Note 2 7490 7490 200 U4518 U4518 Murray 100 SN 152 CX SN 152 CC SN 152 C SE 750CR Products 200 SS 152 CX SS 152 C NavTech 125 MS-1G-100 MS-1G-100 Siemens 100 WSN 152 CX SUAT121 - PBCO Siemens 100 SUAT121 - BBCO SUAT121 - BBCO 200 WSS 152 CX WSS 152 C 200 SUAT327 - 0MCO SUAT427 - PMCO Square D 125 U-RS101B(or T)-CR-SQD U-RS101B(or T)-CR-SQD	See Note 1	200	U-RS202B(or T)-CRMEP		U-RS212B(or T)-CRMEP	
Murray Electric 100 SN 152 CX SN 152 CC SN 152 C SE 750CR Products 200 SS 152 CX SS 152 C NavTech 125 MS-1G-100 MS-1G-100 NavTech 100 WSN 152 CX WSN 152 C WSE 750 CR 100 SUAT121 – 0BCO SUAT121 – PBCO Siemens 100 SUAT121 – BBCO SUAT121 – BBCO 200 WSS 152 CX WSS 152 C 200 SUAT327 - 0MCO SUAT427 - PMCO Square D 125 U-RS101B(or T)-CR-SQD U-RS101B(or T)-CR-SQD	Milbank		7490		7490	
Electric Products 200 SS 152 CX SS 152 C NavTech 125 MS-1G-100 MS-1G-100 NavTech 125 MS-1G-100 WSR 152 C WSE 750 CR 100 SUAT121 – 0BCO SUAT121 – PBCO 100 SUAT121 – BBCO SUAT121 – BBCO 200 WSS 152 CX WSS 152 C 200 SUAT327 - 0MCO SUAT427 - PMCO Square D 125 U-RS101B(or T)-CR-SQD U-RS101B(or T)-CR-SQD		200	U4518		U4518	
NavTech 125 MS-1G-100 MS-1G-100 Interest of the state of th	·	100	100 SN 152 CX SN 152 CC		SN 152 C	SE 750CR
100	Products	200	SS 152 CX		SS 152 C	
Siemens 100 SUAT121 – 0BCO SUAT121 – PBCO 200 WSS 152 CX WSS 152 C 200 SUAT327 - 0MCO SUAT427 - PMCO Square D 125 U-RS101B(or T)-CR-SQD U-RS101B(or T)-CR-SQD	NavTech	125	MS-1G-100		MS-1G-100	
Siemens 100 SUAT121 – BBCO SUAT121 – BBCO 200 WSS 152 CX WSS 152 C 200 SUAT327 - 0MCO SUAT427 - PMCO Square D 125 U-RS101B(or T)-CR-SQD U-RS101B(or T)-CR-SQD		100	WSN 152 CX		WSN 152 C	WSE 750 CR
200 WSS 152 CX WSS 152 C 200 SUAT327 - 0MCO SUAT427 - PMCO Square D 125 U-RS101B(or T)-CR-SQD U-RS101B(or T)-CR-SQD		100				
200 SUAT327 - OMCO SUAT427 - PMCO Square D 125 U-RS101B(or T)-CR-SQD U-RS101B(or T)-CR-SQD	Siemens	100	SUAT121 – BBCO		SUAT121 – BBCO	
Square D 125 U-RS101B(or T)-CR-SQD U-RS101B(or T)-CR-SQD		200	WSS 152 CX		WSS 152 C	
		200	SUAT327 - 0MCO		SUAT427 - PMCO	
	Square D	125	U-RS101B(or T)-CR-SQD		U-RS101B(or T)-CR-SQD	
See Note 1 200 U-RS202B(or T)-CR- SQD U-RS212B(or T)-CR-SQD	See Note 1	200	U-RS202B(or T)-CR- SQD			

Note 1: B stands for Small NEMA hub opening (3/4" through 2 ½").

T in place of B stands for Large NEMA hub opening (2 ½" through 4").

B or T can be replaced with C or U indicating a hub cover plate factory installed.

Suffix MEP may be replaced by GE

Note 2: Order Kit, Catalog No. **K5709** to convert a **7490** to an insulated neutral.

Table II (Continued...)

Outdoor-Indoor Box-Type. Watt-hour Meter Sockets for AC Meters

h							
				CATALOG	NUMBERS		
		3 Wire	120/208	120/240 Volts	4-Wire	120/208 or	120/240 Volts
			or				
			5-Jaw			7-Jaw *	
Manufact	Amps	Тор	Entry	Bottom Entry	Тор	Entry	Bottom Entry
urer							
		With or	1-1/4"	Closure Plate	With	With	Closure Plate
		Without	Fixed	or Solid	2-1/2" Hub	3" Hub	or Solid
		Hub	Hub	Endwall			Endwall

With Lever By-Pass Facilities

l		•					
EATON, Cutler- Hammer, Eaton/Cut ler- Hammer See Note 1	200	UG- H4213B(or T)-CCGCH UG- E4213B(or T)- CCGCH		UG-H4213B(or T)- CCGCH UG-E4213B(or T)- CCGCH	U-H7213B(or T)- CCG-CH U-E7213B(or T)- CCG-CH	U-H7213B(or T)- CCG-CH U-E7213B(or T)- CCG-CH	U-H7213B(or T)- CCG-CH U-E7213B(or T)- CCG-CH
Talon	200	40405-02CO	40405- 02CO Hub	40405-02CO	40407-02CO Hub H38600-2		40407-02CO
Midwest -GE See Note 1 +	200	UG- H4213B(or T)CCG-MEP		UG-H4213B(or T)CCGMEP	U-H7213B(or T)- CCGMEP	U-H7213B(or T)- CCGMEP	U-H7213B(or T)- CCGMEP
Milbank ++	200	U3042		U3042	U1854 Hub A7518	U1854 Hub A8110	U1854
Murray Electrical Products **	200	RH 173 CRF RH 173 CR RH173CRJ		RH 173 CRF RH 173 CR RH173CRJ	RH 173 GRF RH 173 GR RH173GRJ Hub RX 250		RH 173 GRF RH 173 GR RH173GRJ
Siemens #	200	S40405-02CO	S40405- 02CO Hub EC38597	S40405-02CO	S40407-02CO Hub EC38600		S40407-02CO
Square D See Note 1 +	200	UG- H4213B(or T)CCGSQD		UG-H4213B(or T)CCGSQD	U-H7213B(or T)- CCGSQD	U-H7213B(or T)- CCGSQD	U-H7213B(or T)- CCGSQD

Note 1:

B stands for Small NEMA hub opening (3/4" through 21/2").

T in place of B stands for Large NEMA hub opening (2 %" through 4")

B or T can be replaced with C or U indicating a hub cover plate factory installed.

Suffix MEP may be replaced by GE

These sockets are approved for outdoor or indoor installation. See Table III for Blank Cover Plates. All 7-Jaw sockets are to be supplied with Ekstrom Ind Inc, Catalog No. 1-6002 blank cover plate.

Table II (Continued)

Explanatory Notes Continued from page 56

- * All 7-Jaw sockets have bonded neutrals and can only be used on line side of service disconnect for 120/208-volt or 120/240-volt but cannot be used on 265/460 volt installations.
- ** Order Kit, **Catalog No. RX 085NK** to convert any RH 173 socket to an insulated neutral for use on all 120/208 volt and any 120/240 volt installations on the load side of the service disconnect.
- + Order Kit,
 Catalog No. **ARP00759-CH** to convert any UG-H4213B(or T)-CC-CH or U-H7213B(or T)-CC-CH,
 Catalog No. **ARP00759-MEP** to convert any UG-H4213B(or T)-CC-MEP or U-H7213B(or T)-CC-MEP,
 Catalog No. **ARP00759-SQD** to convert any UG-H4213B(or T)-CC-SQD or U-H7213B(or T)-CC-SQD to an insulated neutral.
- ++ Order Kit, Catalog No. K1047 to convert any U3042 or U1854 to an insulated neutral.
- # Order Kit, **Catalog No. 64690-1** to convert any S40405-02CO or S40407-02CO to an insulated neutral.
- ## Order Kit, Catalog No. 64690-1 to convert any 40405-02CO or 40407-02CO to an insulated neutral.
- +++ Order Kit, **Catalog No. 64690-1** to convert any RH 173 CRJ or RH 173 GRJ to an insulated neutral.

Table II (continued...)

Outdoor-Indoor Box Type Watt-hour Meter Sockets for AC Meters

		Catalog Numbers
		3-wire 120/208 or 120/240 volts
N.Afo atuuruu	Americano Dotino	5-Jaw
Manufacturer	Ampere-Rating	Top or Bottom Entry

With Horn By-Pass Facilities

Millbank 100 U4467 *

SUITABLE FOR LOCATIONS WITH SPACE LIMITATIONS OR NO LOAD GROWTH ANTICIPATED. OTHERWISE, STANDARD 200A LEVER BY-PASS SOCKET SHOULD BE USED.

^{*} Order Kit Number K4474 to convert to an insulated neutral.

Table III Blank Cover Plate for Use with Watt-hour Meter Sockets						
Manufacturer	Material	Catalog Number				
Thomas & Betts	Cardboard	SS – 3				
(AKA Anchor)	Plastic	GC – 2				
Murray Floatrical Draducts	Cardboard	SX – 025 M				
Murray Electrical Products	Plastic	SX – 087 M				
Ekstrom Industries, Inc	Plastic	1-6002, 1-6003				
General Electric Co	Glass	680 X 31				
TALON	Plastic	109968				
Milbank	Cardboard	Z 701168-FO				
IVIIIDarik	Plastic	6003, 6116				
Square D	Plastic	29007				

Table IV – A
Indoor Vertical Trough Meter Stacks - Not Bussed

5-Jaw Watt-hour Meter Sockets for AC Meters

	Americ Dos	Catalog Number						
Manufacturer Amps Per		No. of Meter Positions in Trough Section						
	Position	1	2	3	4	5	6	

NO EQUIPMENT OF THIS TYPE IS APPROVED AT THIS TIME

Table IV - B

Indoor Vertical Trough Meter Stacks -- Bussed 5 and 7-Jaw Socket Meter Stacks (Single and Three phase

5 and 7-Jaw Socket Meter Stacks (Single and Three phase)									
	Max	Cont	Position			Catalog	Number		
Manufacturer	Amps	Amps	of			No. of Met	er Positions		
	per Pos	per Pos	Line Bus	1	2	3	4	5	6
Without Bypass SINGLE PHASE 5-Jaw Residential Use Only									
Siemens	125	100	bottom		UVS 210	UVS 310 UVS 311B	UVS 410 UVS 411B	UVS 510 UVS 511B	
Siemens See Note 2	125	100	Left		(W)MN 22125J	(W)MN 32125J	(W)MN 42125J	(W)MN 52125J	(W)MN 62125J
Siemens See Note 2	225	180	Left		(W)MN 22225J	(W)MN 32225J	(W)MN 42225J	(W)MN 52225J	(W)MN 62225J
Superior Electrical Enclosure, Inc. dba Delta Standard Products	200 **	160	bottom		2MVB	3MVB	4MVB		
MAC Power Products	150 **	80	bottom		MTB2	MTB3	MTB4	MTB5	МТВ6
SQUARE D	125	100	Top bottom			EZM313 125M10	EZM314 125M10	EZM315 125M10	EZM316 125M10
	With Lev	er Bypass	THREE PHA	ASE 5-Jaw 3	Фln / 1ФО	ut Residentia	al and Commo	ercial Use	<u> </u>
SQUARE D	225	180	Middle		EZML 312225	EZML 313225	EZML 314225		
Siemens See Note 2	225	180	Left	(W)ML 11225RJ	(W)ML2 1225RJ	(W)ML 31225RJ	(W)ML 41225RJ		
EATON, Cutler-Hammer, Eaton/Cutler- Hammer	225	200	Middle	35MM 120R12 NY	35MM 220R12 NY	35MM 320R12 NY	35MM 420R12 NY		
With I	ever Bypa	ss THREE	PHASE 7-Ja	w 3Фln / 3	ΦOut Resid	dential and C	ommercial U	se	
SQUARE D	225	180	Middle	EZML 331225	EZML 332225	EZML 333225	EZML 334225		
Siemens See Note 2	225	180	Left	(W)ML 13225RJ	(W)ML 23225RJ	(W)ML 33225RJ	(W)ML 43225RJ		
EATON, Cutler-Hammer, Eaton/Cutler- Hammer	225	200	Middle	37MM 120R12 NY	37MM 220R12 NY	37MM 320R12 NY	37MM 420R12 NY		

Consolidated Edison Co. Inc

See Table III for Blank Cover Plates

For outdoor installations use rain tight accessories as shown in manufacturer's catalog.

- * Order Cat. No. UX001 WL (Fifth Jaw Assembly) and Cat. No. SX005M (Sealing Ring) for each meter position.
- ** Prefabricated bus connections. See manufacturer's catalog.
- + Upper right position provided with blank position and cover.

Note 2: W prefix denotes outdoor NEMA 3R enclosure

Table IV - B (cont'd)

Indoor/Outdoor Vertical Main Terminal Box - Bussed (middle)

Square D	EATON, Cutler-Hammer, Eaton/Cutler-Hammer	SIEMENS	Rating
EZM3400TBCU	3MTB400RC	WTBN3400CU	400A
EZM3600TBCU	3MTB600RC	WTBN3600CU	600A
EZM3800TBCU	3MTB800RC	WTBN3800CU	800A
EZM31600TBCU			1600A

Note 1: All Terminal Boxes are NEMA-3R. CU or C suffix denotes copper bus. Leave out to specify Aluminum bus.

Indoor/Outdoor Vertical Main Fused Switch / Terminal Box combination - Bussed (middle)

Catalog Number						
Square D	SIEMENS	Rating				
120/208 Volts						
EZM3400FS	NONE	NONE	400A			
EZM3600FSX*	NONE	NONE	600A			
EZM3800FSX*	NONE	NONE	800A			

^{*}X denotes either T for top or B for bottom

Table IV – B (Continued) Indoor Vertical Trough Meter Stacks – Bussed (middle)

5-Jaw Watt-hour Meter Stacks for AC Meters 3ΦIn / 1ΦOut

Main	Continuous	No. of	Phase	Catalog Number	
Bus Rating [Amps]	Amp Rating per position	positions X = 2 through 5	Balancing	EATON, Cutler-Hammer, Eaton/Cutler-Hammer	General Electric
800	125	Х	AB	3MMX12C2AB	TMP8X12AB
800	125	Х	AC	3MMX12C2AC	TMP8X12AC
800	125	Х	ВС	3MMX12C2BC	TMP8X12BC

Indoor/Outdoor Vertical Meter Stacks - Bussed (middle)

5-Jaw Watt-hour Meter Stacks with lever bypass for AC Meters $3\Phi In / 1\Phi Out$

Main	Continuous	No. of positions		Catalog Number			
Bus Rating [Amps]	Amp Rating per position	X = 2 through	Phase Balancing	SIEMENS	EATON, Cutler-Hammer, Eaton/Cutler-Hammer	General Electric	
				See Note 1			
800	125	Χ	AB		3MMX12RC2AB	TMP8X12RAB	
800	125	Х	AC		3MMX12RC2AC	TMP8X12RAC	
800	125	Χ	ВС		3MMX12RC2BC	TMP8X12RBC	
1200	225	Х	AB	(W)MLX2AB225RJ			
1200	225	Χ	ВС	(W)MLX2BC225RJ			
1200	225	Χ	AC	(W)MLX2CA225RJ			

Notes:

- EATON, Cutler-Hammer, Eaton/Cutler-Hammer provides 4-gang stacks with 1 blank. For that type, "4" is added to the catalog number of four-gang units; for example: 3MM412C2AB4
- GE, SIEMENS and EATON, Cutler-Hammer, Eaton/Cutler-Hammer provide outdoor NEMA-3R versions for *Westchester* use only. "R" is added to the middle of catalog number for GE and CH; for example: 3MM312**R**C2AB. For SIEMENS, add W prefix for outdoor 3R enclosure.

Phase Balancing for SIEMENS, CH and GE units: one of every three stacks should be phased AB, one of every three phased BC, and one of every three phased AC.

Note 1: W prefix denotes outdoor NEMA 3R enclosure

Table IV – C

Indoor Horizontal Trough Meter Sockets -- Not Bussed

5-Jaw Watt-hour Meter Stacks for AC Meters

	Amperes	peres Catalog Number							
Manufacturer	Per		No. of Meter	Positions in Tro	ositions in Trough Section				
	Position	1	2	3	4	5	6		
	Without By-Pass Facilities - Residential Use Only								
Murray Electrical Products	100	SC 150 C	SC 250 C	SC 350 C	*	*	*		
Siemens	100	WSC 150 C	WSC 250 C	WSC 350 C	*	*	*		

See Table III for blank cover plates.

Maximum line wire size 250 MCM.

Table IV – D
Indoor Horizontal Trough Meter Stacks – Bussed
For 5-Jaw socket-based meters

	Amperes	Catalog Number							
Manufacturer	Per	No. of Meter Positions in Trough Section							
	Position	2	3	4	5	6			
Without By-Pass Facilities – Residential Use Only									
Superior Electrical	125	HM 1020	HM 1030	HM 1040	HM 1050				
Enclosure, Inc. dba Delta Standard Products	100					HM 1060			

See Table III for blank cover plates.

Maximum line wire size 250 MCM.

^{*} Four, five and six gang troughs can be assembled from one, two and three position units.

Table V – A: Outdoor/ Indoor Horizontal Trough Meter Stacks Not Bussed 5 Jaw Watt-hour Meter Sockets for AC Meters						
		Hub Location	Catalog Number			
Manufacturer	Amperes Per Position		No. of Meter Positions in Trough Section			
	1 031(1011		2	3		
NO EQUIPMENT OF THIS TYPE IS APPROVED AT THIS TIME						

Table V- B: Outdoor/ Indoor Horizontal Trough Meter Stacks – Bussed

5 Jaw Watt-hour Meter Sockets for AC Meters

	Amp	Line Load	Catalog Number					
Manufactur er	per	Hub Location	Wire	Wire	No.	of Meter Positio	ns in Trough Sec	tion
	Pos		Size	Size	2	3	4	5

Without By-Pass Facilities - Residential Use Only

EATON, Cutler-	100	Trough Center	250 MCM	#2/0	U-2R1121B-CR- CH	U-3R1121B- CR-CH	U-4R1121B- CR-CH	U-5R1121B-CR- CH
Hammer, Eaton/Cutler- Hammer +	200	Trough Center	500 MCM	250 MCM	U-2R2352T-CR- CH	U-3R2352T- CR-CH	U-4R2352T- CR-CH	
Talon	200	Trough Center	500 MCM	250 MCM	UA2327-XMCO	UA3327-XMCO	UA4728-YMCO	
Midwest-GE	100	Trough Center	250 MCM	#2/0	U-2R1121B- CRMEP	U-3R1121B- CRMEP	U-4R1121B- CRMEP	U-5R1121B- CRMEP
+	200	Trough Center	500 MCM	250 MCM	U-2R2352T- CRMEP	U-3R2352T- CRMEP	U-4R2352T- CRMEP	
Milbank +	125	Trough Center	350 MCM	#2/0	U3522	U5713	U5714	U5715
Murray Electric	100 *	Hub Right/ Closure Plate-Left	250 MCM	#1/0	SN 251 CR	SN 351 CR	SN 451 CR	SN 551 CR
Products	200 +	Trough Center	500 MCM	250 MCM	SS251CR	SS351CR	SS451CR	
Siemens	100 *	Hub Right/ Closure Plate-Left	250 MCM	#1/0	WSN 251CR	WSN 351 CR	WSN 451 CR	WSN 551 CR
	200 +	Trough Center	500 MCM	250 MCM	SUA2327- XMCO	SUA3327- XMCO	SUA4728- YMCO	
Saucaro D.	100	Trough Center	250 MCM	#2/0	U-2R1121B- CRSQD	U-3R1121B- CRSQD	U-4R1121B- CRSQD	U-5R1121B- CRSQD
Square D +	200	Trough Center	500 MCM	250 MCM	U-2R2352T- CRSQD	U-3R2352T- CRSQD	U-4R2352T- CRSQD	

See Table III for Blank Cover Plates.

When a hub is required for overhead service, specify hub size desired.

- + Suitable for bottom or top entry. In Midwest stacks, MEP suffix may be replaced by GE.
- Suitable for bottom or top entry Hub and Closure Plate provided.

Table V- C Outdoor/Indoor Vertical Trough-Type Meter Stacks -- Bussed

5-Jaw Watt-hour Meter Sockets for AC Meters

	Amp		Line	Load		C	Catalog Number	
Manufacturer	Per	Hub Location	Wire	Wire		No. of Meter	Positions in Tro	ugh Section
	Pos	Location	Size	Size	1	2	3	4

Without By-Pass Facilities - Residential Use Only

EATON, Cutler- Hammer, Eaton/Cutler- Hammer See Note 1	125	Center	350MCM	#2/0	 U-2V1031B (or T)-CR-CH	U-3V1031B (or T)-CR-CH	
Talon	125	Center	350MCM	#2/0	 UA2B21-0MCO	UA3B21- OMCO	
Midwest - GE See Note 1	125	Center	350MCM	#2/0	 U-2V1031B (or T)-CR-MEP	U-3V1031B (or T)-CR-MEP	
Milbank	100	Left/ Center	250 MCM	#2/0	 U4382	U4383	
Murray	125	Center	350MCM	#2/0	 SN205CX	SN305CX	
Siemens	125	Center	350MCM	#2/0	 SUA2B21- 0MCO	SUA3B21- 0MCO	
Square D See Note 1	125	Center	350MCM	#2/0	 U-2V1031B (or T)-CR-SQD	U-3V1031B (or T)-CR-SQD	

Note 1: B stands for Small NEMA hub opening (3/4" through 2½").

T in place of B stands for Large NEMA hub opening (2½" through 4").

B or T can be replaced with C or U indicating a hub cover plate factory installed.

In Midwest stacks, MEP may be replaced by GE.

See Table III for Blank Cover Plates.

When a hub is required for overhead service, specify hub size desired.

Table V-D Outdoor Indoor Vertical Modular Type Meter Stacks -- Bussed 5-Jaw Meter Sockets

	Amps	Pos of	Catalog Number				
Manufacturer	Per	Line	Single Module - Number of Meter Positions in Module				
	Pos	Bus	1	2	3	4	5

Without By-Pass Facilities -- Residential Use Only

Murray **			*	*	
Elec Products	125	Center	 UM229 RS	UM339 RS	

	Amps	Pos of	Catalog Number				
Manufacturer	Per	Line	Double Modules - Number of Meter Positions in Module				
	Pos	Bus	4	5+	6	7	8

Without By-Pass Facilities -- Residential Use Only

Murray **			*	*	*	
Elec Products	125	Center	UM449 RS	UM549 RS	UM649 RS	

See Table III for Blank Cover Plates

For outdoor installations use rain-tight accessories as shown in manufacturer's catalog.

- * Order Cat. No. UX001 WL (Fifth Jaw Assembly) and Cat. No. SX005M (Sealing Ring) for each meter position.
- ** Prefabricated bus connections. See manufacturer's catalog.
- + Upper right position provided with blank position and cover.

Table VI

Meter Mounting for External Demand Metering Devices (SMDs)

		Catalog Number					
Manufacturer	2-4 f	eeders	5 – 7 feeders				
	MES-108A	MES-104	MES-105	MES-104A			
Superior Electrical Enclosure, Inc. dba Delta Standard Products	MP-108A	MP-104	MP-105	MP-104A			
MAC Power Corp		PD-104	PD-105	PD-104A			
Metropolitan Electric Mfg		104	105				

Table VII

*** FOR REFERENCE ONLY TO EXISTING INSTALLATIONS ***

*** FOR NEW INSTALLATIONS USE TABLES VII-A & IX ***

Meter and Test Switch enclosure for A-based (Bottom Connected) Meters
High Tension and Non-Standard CT Services
Single Phase, 3-Wire Network and Delta Services

	Catalog Number			
Manufacturer	120/208 or 120/240 Volts	265/460 Volts		
Superior Electrical Enclosure, Inc. dba Delta Standard Products	M A -10P-3CE-L	MA-10P-3CE-H		
Electrotech Service Equipment Corp	ES 10	ES 410		
MAC Power Corp	P-10	P-410		
Metropolitan Electric Mfg	100-1	100-1H		
Navtech, Inc.	RT-10P-240	RT-10PA-480		

NOTE: All 3-Phase, 4-Wire Wye Low Tension CT services, use Table VIIA

Table VII-A

Meter and Test Switch enclosure for S-based CT-rated meters 3-Phase, 4-W Y, 3-W Delta and 1-Ph 3-W Services

	Catalog N	lumber
Manufacturer	120/208 or 120/240 Volts	265/460 Volts
Superior Electrical Enclosure, Inc. dba Delta Standard Products	MS10P-3CE-L MS-7P-1CE-L	MS10P-3CE-H MS-7P-1CE-H
Milbank	UC-4718	UC-4660
Navtech Inc.	MS10P-208 MS7P-240	MS10P-480
ElectroTech	EMS208-10P	EMS480-10P
SIEMENS / TALON	9837-0969 – SW 20A 8T FW ST 9837-0970 - SW 20A 13T FW ST	9837-0971 - SW 20A 13T FW ST

Table VIII

Current Transformer Cabinets (Engineering Specification MES-142)

	Catalog Number				
Manufacturer	27" × 36" Cabinets	27" × 44" Cabinets			
Superior Electrical Enclosure, Inc. dba Delta Standard Products	4 CT	6 CT / 8 CT			
Electrotech Service Equipment Corp.	ES 142 H4 ES 142 V4 ES 142 C4 ₍₁₎	ES 142 H8 ES 142 V8 ES 142 C8 ₍₁₎			
MAC Power Corp.	400 CT	800 CT			
Metropolitan Electric Mfg. Co.	TC 4	TC 6			
Navtech Electrical Enclosures Inc.	CT 36	CT 44			

1) Combination Unit (CT and Switch)

Note: The Company will provide information for larger Installations AND Bus mountings.

Table IX

Trans-S Enclosure for Current Transformers and CT Socket Meter for Three Phase 4-Wire WYE and Single Phase Service (Residential and Commercial)

	Amps Rating	Catalog Number		
Manufacturer		Three Phase 120 / 208 Volts	Three Phase 265 / 460 Volts *	Single Phase 120/240V or Network 120/208V
Superior Electrical Enclosure, Inc. dba Delta Standard Products Δ	200 – 400	4CTS-3CE-L R4CTS-3CE-L (2)	4CTS-3CE-H R4CTS-3CE-H (2)	4CTS-1CE-L R4CTS-1CE-L
	400 – 800	8CTS-3CE-L R8CTS-3CE-L (2)	8CTS-3CE-H R8CTS-3CE-H ₍₂₎	8CTS-1CE-L R8CTS-1CE-L
	400 400 600 600 800 800	4CTS-3CESW-L (1)(5) 4CTS-3CESWB-L (4)(5) 6CTS-3CESW-L (1)(5) 6CTS-3CESWB-L (4)(5) 8CTS-3CESWB-L (4)(5)	4CTS-3CESW-H (1)(5) 4CTS-3CESWB-H (4)(5) 6CTS-3CESW-H (1)(5) 6CTS-3CESWB-H (4)(5) 8CTS-3CESWB-H (4)(5))	
Navtech Inc. Δ	400	TS-400-208 TS/SW-400-240T (1)(5) TS/SW-400-240B (4)(5)	TS-400-480 TS/SW-400-480T ₍₁₎₍₅₎ TS/SW-400-480B ₍₄₎₍₅₎	TS - 400 - 240
	600	TS/SW-600-240T (1)(5) TS/SW-600-240B (4)(5)	TS/SW-600-480T ₍₁₎₍₅₎ TS/SW-600-480B ₍₄₎₍₅₎	
	800	TS-800-208 TS/SW-800-240T (1)(5) TS/SW-800-240B (4)(5)	TS-800-480 TS/SW-800-480T ₍₁₎₍₅₎ TS/SW-800-480B ₍₄₎₍₅₎	TS - 800 - 240
Milbank	400	U4808	U4807	
	800	U4810	U4809	
Electrotech Service Equipment Corp.	400	ETSSW-240T-4 ₍₅₎ ETSSW-240B-4 ₍₅₎ ETS-208-4 ₍₅₎	ETSSW-480T-4 ₍₅₎ ETSSW-480B-4 ₍₅₎ ETS-480-4 ₍₅₎	
	600	ETSSW-240T-6 ₍₅₎ ETSSW-240B-6 ₍₅₎	ETSSW-480T-6 ₍₅₎ ETSSW-480B-6 ₍₅₎	
	800	ETSSW-240T-8 ₍₅₎ ETSSW-240B-8 ₍₅₎ ETS-208-8 ₍₅₎	ETSSW-480T-8 ₍₅₎ ETSSW-480B-8 ₍₅₎ ETS-480-8 ₍₅₎	

^{*} Enclosure shall be mounted on load side of a disconnect switch.

⁽¹⁾ Combination Unit (CT, meter socket enclosure and fused switch) – service entry: LineTop

⁽⁴⁾ Combination Unit (CT, meter socket enclosure and fused switch) – service entry: Line Bottom

⁽²⁾ Remote meter enclosure is required.

⁽⁵⁾ Nema 1 rated cabinet "For Indoor Use Only"

 $[\]Delta$ Add **-SS** at the end of the catalog number for **S**tainless **S**teel version.

Table X

*** FOR REFERENCE ONLY TO EXISTING INSTALLATIONS *** *** FOR NEW INSTALLATIONS USE TABLES VII-A & IX ***

Trans-A Enclosures for Current Transformers and Bottom Connected Meter for Nonstandard CT Services and 3-Wire Residential Use

	Ampere Rating	Catalog Number	
Manufacturer		120/208 or 120/240Volts	265 / 460 Volts *
	200-400	4CT-3CE-L	4CT-3CE-H
Superior Electrical		R4CT-3CE-L (2)	R4CT-3CEL-H ₍₂₎
Enclosure, Inc. dba Delta Standard		MA10P-3CE-L (3)	MA10P-3CE-H (3)
Products	400-800	8CT-3CE-L	8CT-3CE-H
		R8CT-3CE-L (2)	R8CT-3CE-H (2)
Navtech, Inc.	200-400	TA-400-208	
	400-800	TA-800-208	

- * Enclosure shall be mounted on load side of a disconnect switch
- (2) Remote meter enclosure required
- (3) Remote meter enclosure

Table XI

*** FOR REFERENCE ONLY TO EXISTING INSTALLATIONS *** *** FOR NEW INSTALLATIONS USE TABLES VII-A & IX ***

Trans-A Enclosure for Current Transformers and Bottom-Connected Meter for 3-W Residential Use in Westchester (reference to <u>existing installations only</u>)

Manufacturer	Ampere Rating	Catalog Number
Thomas & Betts (aka Anchor)	400	100213-CE-HLO

To be supplied without current transformer. To be supplied with 7-Pole Test Switch (States Co. Catalog # 20-K-07-AW or approved equivalent).

Reference Material

DEFINITIONS

AUTHORITIES

The municipal authorities, and any other agencies legally authorities, and any other agencies legally authorized to regulate or inspect the customer's installation or equipment.

BUILDING

A structure which stands alone or is cut off from adjoining structures by fire walls.

COMPANY

Consolidated Edison Inc. its subsidiaries and our agents

CONTRACTOR

An individual, or group of individuals licensed by the authorities having jurisdiction, retained by the customer to perform electrical work.

COST OR EXPENSE

The cost of all materials and equipment, labor and other defined charges applicable thereto, plus a reasonable percentage of engineering, purchasing, the use of construction equipment and other costs of a general character, involved in connection with the work to be performed.

CUSTOMER(S)

A present customer or an applicant for Con Edison electric services.

FOOTPRINT UNIT

The parcel of land directly beneath a structure or unit, having the same perimeter dimensions as the structure or unit.

GROUND

A conducting connection, between an electrical circuit or equipment and earth, or some conducting body which serves in place of the earth, excluding the gas service pipe.

LINE

A system of poles, wires and fixtures, or the equivalent ducts, conduits, cables, etc. used for general distribution of electricity.

POINT OF SERVICE TERMINATION

The point at which the company terminates its service lateral and the customer's wiring begins.

SERVICE CONNECTION

Connectors attaching the company's conductors to the customer's wiring.

Consolidated Edison Co. Inc

SERVICE DROP

The overhead service conductors installed by the company between the company pole or other aerial support and the first point of attachment to the building or intermediate support.

SERVICE ENTRANCE

That part of the customer's installation from the point of attachment or termination of the service lateral to and including the service equipment on the customer's premises.

SERVICE ENTRANCE CONDUCTORS

The service conductors or cable which extends from the point of attachment or termination of the service lateral to the terminals of the service equipment.

SERVICE EQUIPMENT

All equipment from the point of service termination, to and including, the metering equipment and the means of disconnect

SERVICE LATERAL

A system of company owned conductors and/or equipment for delivering electricity from the company's distribution system to the wiring system of a building or premises.

SET OF CONDUCTORS

A set of conductors is defined as one (1) conductor per phase plus a neutral conductor.

TEMPORARY SERVICE

Service to be used for a limited time for construction, exhibits, decorative or other purposes.

WIRE SIZE

Where stated, the size is in terms of both American Wire Gauge and Thousand Circular Mil (AWG/Kcmil) sizes and applies to copper conductors. Where the company will accept the use of aluminum conductors, a size must be selected having equivalent conductivity to the stated copper conductor.

Electric Reference Specifications and Drawings

Spec No. or Dwg No	Title	Rev. Date
	SERVICE END BOXES	
EO-6217-C	Sealing Service Cable and Conduit	Aug-2014
EO-6208-C	Customers Electric Service Installation: Buildings with Basements at Property Line Indoor Metering	May-2004
EO-6209-C	Customers Electric Service Installation: Buildings with Basements Back of Property Line, Without Property Line Box Indoor Metering	May-2004
EO-6210-B	Property Line Splice Box Requirements for Building Back of Property Line	Feb-1997
EO-6211-C	Customers Electric Service Installation: Buildings Without Basements at Property Line Indoor Metering	May-2004
EO-6212-C	Customers Electric Service Installation: Buildings Without Basements Back of Property Line, Without Property Line Box Indoor Metering	May-2004
EO-6214-C	Customers Electric Service Installation: Buildings with Sub-sidewalk Space Outside of Property Line Indoor Metering	May-2004
EO-6215-B	Customers Electric Service Installation: Building with or without basement, Back of Property Line, Without Property Line Box Outdoor Metering	May-2004
MES 205	Service End Box for Indoor or Outdoor Locations 10" x 10" x 5"	Mar-1993
MES 215	Service End Box for Indoor or Outdoor Locations 24" x 12" x 8"	May-2016
MES 400	Service End Box for Co-occupied Service Pipe 12" x 12" x 8"	May-2016
MES 484	Service End Box for Indoor or Outdoor Locations 30" x 18" x 12"	Oct-1988
EO-9525-B	Customer's 120/208 Volt Electric Service Space Requirements for Company Cables in Service End Boxes 1-500 KCMIL Copper Con Edison Cables Per Phase	Apr-2007
EO-9072-B	Customer's 120/208 Volt Electric Service Space Requirements for Company Cables in Service End Boxes Max 2-500 KCMIL Copper Con Edison Cables Per Phase	Apr-2007
EO-9073-B	Customer's 120/208 Volt Electric Service Space Requirements for Company Cables in Service End Boxes Max 3-500 KCMIL Copper Con Edison Cables Per Phase	Apr-2007
348209	Customer's 265/460V Electric Service Space Requirements for Company Cables in Service End Boxes 1-500 KCMIL CU Con Edison Cables Per Phase	Apr-2007
348210	Customer's 265/460V Electric Service Space Requirements for Company Cables in Service End Boxes Max 2-500 KCMIL CU Con Ed Cables Per Phase	Apr-2007
348211	Customer's 265/460V Electric Service Space Requirements for Company Cables in Service End Boxes Max 3-500 KCMIL CU Con Ed Cables Per Phase	Apr-2007
	UNDERGROUND RESIDENTIAL DISTRIBUTION	
EO-14221-C	Splicing and Installation Direct Buried Service Cables	Feb-2005
EO-16833-B	Installation of Underground AC Service Lateral and External Loop Service to 1, 2 or 3 Family Semi-detached or Row Homes	Sep-2000
EO-16696-D	Clearance for Planting Around Transformer Pads	Nov-1999
EO-5403	Underground Copper and Aluminum Service Connection	Mar-2016

OVERHEAD SERVICE CONNECTIONS			
<u>EO-6218-B</u>	Customer's Electric Overhead Service Conductors	Feb-2017	
EO-100186	Non-tension Overhead Connectors for Aluminum or Copper Secondary Conductors	May-2007	
EO-8746-B	Customer's Electric Services Overhead Services to Pipe Masts and Clearances	Aug-2015	
EO-16883-B	Customer's Property Pole for Low Tension Service	Sep-2015	
<u>324862</u>	Temporary Service for Maximum Span of 75 Feet on Same Side of Street	Feb-2016	
EO-4647-C	Overhead Distribution Clearances	Dec-2016	
	METERING		
MES-528	Space Requirements for Metering Closet	Jul-2003	
MES-394	Outdoor Watt-hour Meter Sockets	Jul-2003	
MES-395	Watt-hour Meter Sockets on Line Side of Service Disconnects	Aug-2009	
MES-447	Watt-hour Meter Sockets on Load Side of Meter Disconnects	Jul-2003	
MES-194	Self-contained Three-phase, Four Wire Watt-hour Meter	Dec-2014	
310491 aka MES-745	Trans "A" Cabinet for Low Voltage 200 Amp or 400 Amp Service	Sep-1999	
313067 aka MES-750	Trans "A" Cabinet for Low Voltage 400 Amp or 800 Amp Service	Sep-1999	
321388 aka MES-755	Trans "S" Cabinet for Low Voltage 200 Amp or 400 Amp Service 3 Phase 4 Wire Service	May-2016	
321389 aka MES-757	Trans "S" Cabinet for Low Voltage 400 Amp or 800 Amp Service 3 Phase 4 Wire Service	May-2016	
EO-6817-C aka MES-195	Wiring Diagram – 200 to 800 Amp, Bar-Type Current Transformer	May-2016	
314156 aka MES-751	Form 9S Meter Socket Enclosure	Dec-1999	
MES-142	Current Transformer Cabinet – Not more than 2 sets of 500 MCM Cu, or 750 MCM Al Cables per phase	May-2016	
EO-8608-B aka MES-298	Current Transformer Cabinet – Three or Four Sets of 500 MCM Cu, or 750 MCM Al Cables per phase or Smaller	May-2004	
EO-8413-D aka MES 377	Current Transformer Cabinet – Capacity Greater Than 4-600 MCM Cu or 4-750 Al Cables Per Phase	Mar-2016	
EO-15934-B aka MES-104A	Mounting Equipment 24" x 27" for demand metering devices revenue metering	Apr-2016	
EO-16701-B aka MES-105	Service Equipment for Mounting Three Metering Devices	Apr-1986	
EO-16697-B aka MES-108	Service Equipment for Mounting One Metering Device	June-2016	
EO-16589-B aka MES-108-A	Mounting Equipment 14"x25½" for Demand Metering Devices – W/ Fuse Block	Jun-1985	
EO-11263-B aka MES-151	Mounting Equipment for Indicating or Cumulative Demand Meter Equipment	Jan-1985	
EO-507256	Underground Electric A.C. Service to Pedestal	Nov-2015	

PROPERTY LINE BOX CONFIGURATION			
EO-16736-B	Customer Property Line Box Precast Concrete 2 'x 1'-8" x 2'	May-1986	
EO-9700-C	Distribution Box Type B 3-6 for Field Construction 3'-6" x 2'-9" x 2'	Sep-1974	
EO-10265-B	Customer Property Line Box Precast Concrete 3'-6" x 2'-9" x 2'	Sep-1992	
EO-10266-B	Customer Property Line Box Precast Concrete 3'-6" x 2'-7" x 2' – Slotted	Sep-1992	
EO-10262-C	Customer Property Line Box Field Constructed 4'-6" x 3'-6" x 4'	Oct-1999	
EO-10263-B	Customer Property Line Box Precast Concrete 4'-6" x 3'-6" x 3'-11"	Feb-1993	
EO-10264-B	Customer Property Line Box Precase Concrete 4'-6" x 3'-6" x 4' — Slotted	Aug-1992	
EO-10321-B	Chimneys, Collars and Grading Blocks for Manholes & Vaults Construction and Installation	Oct-1997	
EO-14819-C	Field Constructed Shallow Distribution Box Type "TS"	Jul-1987	
EO-13331-B	Distribution Box Type DB-6 6' x 4' x 5' HR	Dec-2016	
341185	Cable Manhole Type M11-6 11'-6" x 4'-6" x 6'-6" Precast Concrete	Oct-2009	
EO-11924-B	Customer's Property Line Cable Manhole Field Constructed 11'-6" x 4'-6" x 6'	Jan-1970	
	PROPERTY LINE BOX - Cable Arrangements		
EO-11626-B	120/208V; Company: 2 Sets of 4-500 KCMIL CU, Customer: 3 sets of 4-500 KCMIL CU	Sep-1990	
EO-12809-B	120/208V; Company: 2 Sets of 8-4/O KCMIL CU, Customer: 3 sets of 4-350 KCMIL AL	May-2017	
EO-11693-B	120/208V; Company: 4 Sets of 4-500 KCMIL CU, Customer: 6 sets of 4-500 KCMIL CU	Apr-1985	
EO-12791-B	120/208V; Company: 4 Sets of 8-4/O AWG CU, Customer: 6 sets of 8-350 KCMIL CU	May-2017	
EO-12466-B	120/208V; Company: 8 Sets of 4-500 KCMIL CU, Customer: 10 sets of 4-500 KCMIL CU	Apr-1985	
EO-14608-B	120/208V; Company: 8 Sets of 4-500 KCMIL CU, Customer: 10 sets of 4-750 KCMIL CU	Apr-1985	
EO-11041-B	120/208V; Company: 12 Sets of 4-500 KCMIL CU, Customer: 15 sets of 4-500 KCMIL CU	Apr-1985	
EO-11934-B	120/208V; Company: 16 Sets of 4-500 KCMIL CU, Customer: 20 sets of 4-500 KCMIL CU	Apr-1985	
EO-12810-B	120/208V; Company: 12 Sets of 4-500 KCMIL CU, Customer: 15 sets of 4-750 KCMIL AL	May-2017	
EO-12811-B	120/208V; Company: 16 Sets of 4-500 KCMIL CU, Customer: 20 sets of 4-750 KCMIL AL	May-2017	
EO-12893-B	265/460V; Company: 6 Sets of 4-500 KCMIL CU, Customer: 12 sets of 4-500 KCMIL CU	Apr-1985	
EO-12908-B	265/460V; Company: 8 Sets of 4-500 KCMIL CU, Customer: 16 sets of 4-500 KCMIL CU	Apr-1985	
383330	Outline of Copper Low Profile 7 Way 500kcmil Crab Joint – 6 Legs Limited, 1 Leg Not Limited With Pigtails 120/208 Volt	July-2013	

	HIGH TENSION SERVICE	
EO-2022	General Specification for High Tension Service	Dec-2009
MES-350	High Tension Metering Installations General Requirements	Jun-2016
EO-13079-C	Neon Tube Indicator (Bus Installation)	Jul-2009
EO-13782-C	Low Voltage Phasing Facilities for 3 Phase, 4 wire 2400/4150 Volt Feeders Using 2 Potential Transformers and 3 Current Transformers (Schematic Connections)	Jan-2017
EO-16885-C aka MES-732	Wiring Diagram for 200 Amps Trans-A Cabinet for Residential Use in Westchester Only	Dec-1990
EO-16664-B aka MES-712	Panel Detail And Assembly Network Low Tension Auxiliary Available	Jan-1999
EO-16666-B aka MES-712-A	Panel Wiring Diagram Network Low Tension Auxiliary Available	Jan-1999
EO-16665-B aka MES-713	Panel Detail and Assembly Radial Low Tension Auxiliary Available	Jan-1999
EO-16667-B aka MES-713-A	Panel Wiring Diagram Radial Low Tension Auxiliary Available	Jan-1999
EO-16715-B aka MES-731-A	Wiring Diagram for Metering High Tension Services Billing Recorder (SPB) (DSU) (SMD)	Jan-1999
	MISCELLANEOUS	
<u>EO-14</u>	Specification for Cross-Linked Polyethylene Insulated Cables 5000 to 35000 Volts	Dec-1990
EO-17	Purchase and Test Specification for Ethylene Propylene Rubber Insulated Cables 5000 to 35000 Volts	Dec-2014
<u>EO-18</u>	Purchase and Test Specification for Insulated Network and Control Cables 600 Volts	Oct-2014
EO-1007	Membrane Method of Waterproofing Electrical Distribution Structures	Dec-2013
EO-1124	Vault Enclosures Chain-Link Type Fence and Accessories	Nov-2013
EO-1191	Painting of 460 Volt Network Protector Compartments Within Buildings	Jan-1990
EO-2018	Grounding of Metal Enclosures for Distribution Transformers	Nov-2009
EO-2032	Design Criteria for Ventilation of Transformer Vaults and Network Protector Compartments	Dec-2016
EO-2055	A.C. Services	Dec-2014
EO-2065	Low Tension A.C. Service Voltage Limits	Oct-2015
EO-2079	Design of 265/460 Volt Network Installations	Dec-2014
EO-2080	Design of 120/208 Volt Network Installations	Dec-2014
EO-2113	Transfer of Load from Company's Supply to Customer's Emergency Generators	Dec-2012
EO-2115	Handbook of General Requirements for Electrical Service to Dispersed Generation Customers	Mar-2006
EO-3551-C	Location of Risers on Poles	Jan-2013
<u>EO-4082</u>	Operation and Maintenance of Conduit System, Cables and Equipment on Private Property Low-Tension Metered Installations	May-1998
EO-4379	Performance Specification for Polyethylene (HDPE) Conduits	Dec-2012
EO-5015	Purchase Requirement for Three Phase, Oil Filled, Metal Enclosed, Pad-Mounted Transformers	Aug-2015
EO-5023	Requirements for Construction of 265/460 Volt Network Installation	Mar-2003

	MISCELLANEOUS	
EO-5051	Design and Construction of 265/460 Volt Transformer Vault and Network Compartments by Contractors	Mar-2010
EO-5132	Sump Pumps for Underground Transformer Vaults	Jul-2007
EO-6229	Requirements for Installation of Single and Three-Phase Padmounted Transformers	Oct-2014
EO-6242	Guide for the Installation of an Oil-Filled Padmount Transformer Near a Building Doorway and/or Windowed Wall	Sep-1992
EO-12464-C	Multiple 500 kVA Transformer Installations with CV 8-6 Crab Joint Vault	Mar-1984
EO-12912-B	Transformer Vault Type V13-6 Installation	Jun-2011
EO-13073-B	Vault Type BV7-8 Installation	Jun-1999
EO-13109-B	Vault Type V15-6 Precast Concrete	Nov-1986
EO-13124-B	Multiple V13-6 Vaults and BV7-8 Bus Vault for 500 or 1000 kVA 208 Volt Transformers (Gratings at Curb or Building Line)	Mar-2011
EO-13848-B	Double Bus Vault Type BV 13-2 with Separate and Integral Floor Installation 13'-2" x 5'-6" x 8' hr	Jun-1999
EO-13895-B	Multiple V13-6 Vaults and BV13-2 Bus Vault for 500 or 1000 kVA 208 Volt Transformers (Gratings at Curb or Building Line)	Mar-2011
EO-100628	Purchase Recommendation for Fiberglass Reinforced Epoxy Conduits and Fittings	Oct-2007
EO-16889	Wiring Diagram for Metering 27Kv & 33Kv 3 Phase Service	May-1999
EO-16890	Wiring Diagram for Metering 13Kv 3 Phase Service	July-2003
EO-2034	Electric & Gas Service to D.C. Railroad Properties	Oct-1995
EO-2468	M 11-6 11'6"x4'6"x6'6"	Oct-2000
EO-3299	Phasing Facilities for 3 phase 3 wire High Tension Services	July-2009
EO-3477	Phasing Facilities for 3 phase 4 wire High Tension Services 2400v/4150v 3 Potential Transformers	Jan-2017
EO-4019	High Potting 4Kv-33Kv Feeders	Dec-2015
EO-4035	Operation & Maintenance of High Tension Equipment on Customer's Premises	Oct-2006
EO-6025	Application of Arc and Arc/Fire Resistant Cable Wraps to Distribution Cable	June-2008
EO-6224	Installation of URD Cable in Conduit or DBC & Joint Trenching	Dec-2005
MES-166	Wiring Diagram for 2400/4150v 3 Phase Service with 2 Potential Transformers & 3 Current Transformers	July-2001
<u>367892</u>	Underground and Overhead Supply to Street Furniture	Nov-2016

Summary of Requirements for Submetering

EXHIBIT A

Type of	Now Directly	Now Master	New or
Customer	Metered	Metered	Renovated
RENTAL	NOT AVAILABLE	PSC Approval	PSC Approval
(Private or		Required	Required
governmental)		(1) (2) (3) (4)	(1) (2) (3) (4)
		(5) (6) (7) (8)	(5) (6) (7)
COOPERATIVE OR	Customer	New or renovated	PSC Approval
CONDOMINIUM	Certification to	building unoccupied at	Required (12) (13)
ALL tenants are or will	Company Required (9)	time of submetering	and Customer
be shareholders or	(10)	request PSC Approval	Certification to
unit-owners		Required (12) (13)	company Required (10)
		Building occupied by	
		one or more	
		shareholders or unit	
		owners but no rental	
		tenants at time of	
		submetering request	
		Customer Certification	
		to company Required	
COOREDATIVE OR	Customan	(10) (11)	NOT
COOPERATIVE OR	Customer Certification to	Customer Certification to Company Required	Available
CONDOMINIUM	Company Required (9)	(10) (11) and either	Available
One or more tenants	(10) and either (14) or	(14) or PSC Approval	
are not shareholders	PSC Approval Required	Required (15)	
or unit-owners	(15)	neganea (13)	
CAMPGROUNDS	NOT	Available	Available
TRAILER PARKS OR	AVAILABLE		
MARINAS			
COMMERCIAL	PSC Approval Required	Available	Available

^() Refer to additional "Submetering Requirements" on Page 77. Certification forms are available from your Energy Services representative.

SUBMETERING REQUIREMENTS

- (1) A statement substantiating the economic advantages of submetering over direct utility metering.
- (2) A description of the type of submetering system to be installed and validation of its reliability and accuracy.
- (3) The method and basis for calculating rates to tenants, which shall include a maximum rate provision (rate cap) preventing charges to tenants form exceeding the company's tariff residential rate for direct metered service to such tenants.
- (4) Complaint procedures and tenant protections consistent with the Home Energy Fair Practices Act (HEFPA) (Public Service Law, Section 31-50; 16 NYCRR, Parts 11 and 12).
- (5) A procedure for notifying in writing all tenants of the proposal to submeter. The notification shall include a summary of the information provided to the Commission under subparagraphs (1) through (4) above an invitation to comment to the Commission. The notification shall prominently display the address and telephone number of the nearest Commission Consumer Services Division Office.
- (6) A demonstration that an enforcement mechanism is available to the tenants to ensure that their rights are protected under the law. (For government entities, the entity or another government agency may enforce the submetering provisions.)
- (7) Certification that the method of the rate calculation, the rate caps, complaint procedures, tenant protections, and the enforcement mechanism shall be incorporated in plain language into all leases governing submetering premises.
- (8) A description of an appropriate rent reduction formula that accurately reflects the overall reduction in its total electric costs resulting from conversion to submetering.
- (9) The prospective submeter shall certify to the company that 70% of the shareholders voted in favor of the submetering proposal.
- (10) The prospective submetering shall certify to the company that the shareholder approved submetering proposal includes a rate cap at the company's tariff rate for directly metered service to such tenants, and grievance procedures as provided in paragraphs (3) and (4) above; provided, however, that any excess revenues resulting from charges to tenants which exceed the company's billings to the submeter are used for purposes of energy conservation.
- (11) The prospective submeter shall certify to the company that a majority of the shareholders voted in favor of the submetering proposal.
- (12) Verification that the submetering building will be a cooperative or condominium.
- (13) Certification that the submeter will provide a rate cap, grievance procedures, and tenant protections from terminations as provided in paragraph (3), (4), (6) and (7), above; which cap, procedures, and protections shall continue until control of the building is assumed by the appropriate cooperative or condominium Board. Upon transfer of control, the Board will certify that the Board will submeter electricity according to a plan that satisfies the conditions set forth in paragraph 10.
- (14) The prospective submeterer shall certify to the company that all non-shareholder tenants have approved a plan that meets the conditions of paragraph (10).
- Where one or more non-shareholder tenants refuse to agree to the plan proposed by the submeterer, submetering to such tenants shall be permitted only upon approval by the New York Public Service Commission of an application by the submeterer meeting the conditions set forth in paragraphs (1) (7).

EXHIBIT B

REQUEST FOR WAIVER MINIMUM INSULATION STANDARD

As the	own	er of the existing				
		1 Family Residence		2 Family Res	idence	
		3 Family Residence		4 Family Res	idence	
4t						
		(Locatio	on)			
Conve	rting	waiver from Con Edison of the Minimum to Gas or Electric Space Heating issued by ng reason(s):				
		Compliance with the standards will result (Two estimates are attached)	in a p	ayback period	of greater than seven ye	ears.
		The dwelling is a historical building.				
		The overall heat loss of the building does refrom conformance with the Minimum Inst (An engineering certification is attached.)			l heat loss which would r	esult
		(Signature of Owner)		_	(Date)	
		(Address)				
	Rec	eived by Consolidated Edison Company o	f Nev	v York, Inc.		
				(Name ar	nd Title of Representativ	ve)
					(Date)	

EXHIBIT C

Request for an Underground Electric Inspection Checklist

(Interim o	orFinal Ins	pection Requested)		
Job Address:	Borough:	Case ID#:		
Contractor Name & Signature:		Phone Num:		
Dates: Scanned/Uploaded:	Inspection Requested:	Confirmed Appt:		
Interim or final inspections will not be perform				

Interim or final inspections will not be performed prior to issuance of a Service Layout (2-80). Upon receipt of the Service Layout, if new duct is required, complete the interim items first and immediately notify Con Edison. Con Edison requires a minimum of 30-days to plan and install facilities in the street. Additionally, Con Edison's service work is generally completed within 10-days of installation of facilities in the street, receipt of "Certificates" and passing Final Inspection. Please indicate "Y" in the applicable box for completed items and "N/A" where items do not apply.

	Contractor		CE ection
Action Description	Completed	<u>0K</u>	N/A
Sweep/Sleeve Installed and Grouted Flush			
Property line Box Installed			
Curbs, Water and Sewer Installed w/site at Final Grade			
Current Transformers Installed			
City/UW Certificate Issued (#)			
Approved Metering Equipment Installed			
Meter Pan Bonded, Installed and Wired to Specification			
Equipment installed to Specification and Part Supplied marked			
Main Disconnect Switch Installed			
Water Pipe Ground Installed (within 5 feet of the water service point of entry. Westchester has no constraint on ground location on water service for industrial or commercial application.)			
Driven Ground Installed			
End-line Box Installed to Specification			
Copper Detail, Crabs and Ring Bus Installed to Specification			
Customer Service/Gap Cables Installed			
CT Coils and 10-point Wiring Installed to Specification			
PLEASE REFER TO THE OVERHEAD INSPECTION CHECKLIST			
	Sweep/Sleeve Installed and Grouted Flush Property line Box Installed Curbs, Water and Sewer Installed w/site at Final Grade Current Transformers Installed City/UW Certificate Issued (#) Approved Metering Equipment Installed Meter Pan Bonded, Installed and Wired to Specification Equipment installed to Specification and Part Supplied marked Main Disconnect Switch Installed Water Pipe Ground Installed (within 5 feet of the water service point of entry. Westchester has no constraint on ground location on water service for industrial or commercial application.) Driven Ground Installed End-line Box Installed to Specification Copper Detail, Crabs and Ring Bus Installed to Specification Customer Service/Gap Cables Installed CT Coils and 10-point Wiring Installed to Specification	Action Description Sweep/Sleeve Installed and Grouted Flush Property line Box Installed Curbs, Water and Sewer Installed w/site at Final Grade Current Transformers Installed City/UW Certificate Issued (#) Approved Metering Equipment Installed Meter Pan Bonded, Installed and Wired to Specification Equipment installed to Specification and Part Supplied marked Main Disconnect Switch Installed Water Pipe Ground Installed (within 5 feet of the water service point of entry. Westchester has no constraint on ground location on water service for industrial or commercial application.) Driven Ground Installed End-line Box Installed to Specification Customer Service/Gap Cables Installed CT Coils and 10-point Wiring Installed to Specification	Action Description Sweep/Sleeve Installed and Grouted Flush Property line Box Installed Curbs, Water and Sewer Installed w/site at Final Grade Current Transformers Installed City/UW Certificate Issued (#) Approved Metering Equipment Installed Meter Pan Bonded, Installed and Wired to Specification Equipment installed to Specification and Part Supplied marked Main Disconnect Switch Installed Water Pipe Ground Installed (within 5 feet of the water service point of entry. Westchester has no constraint on ground location on water service for industrial or commercial application.) Driven Ground Installed End-line Box Installed to Specification Copper Detail, Crabs and Ring Bus Installed to Specification Customer Service/Gap Cables Installed CT Coils and 10-point Wiring Installed to Specification

Effective November 2013, failed inspections will result in a \$188, plus taxes, service charge to you. Using this checklist can help avoid inspections and delays in service work. We will work with you to help ensure that your job(s) go smoothly and are satisfactorily coordinated with our activities.

Please scan and upload this document into your case via Project Center at https://apps.coned.com/esweb/login.aspx

As of September 2013 we will no longer be accepting documents via fax

Request for an Overhead Electrical Inspection Checklist

ConEdison

EXHIBIT D

Rev 01/2017

	_Interim or Final	Inspection Requested)			
Job Address:	Borough:	Case ID#:			
Contractor Name & Signature: Dates: Scanned/Uploaded:		Phone Number:			
Dates: Scanned/Uploaded:	Inspection Requested	: Confirmed A	ppt:	_	
**** Please SCAN AND	UPLOAD this document into	your case via PROJECT C	ENTER ****		
Interim or final inspections will not be perform					5
required, complete the interimitems first and facilities in the street. Additionally, Con Edison		The same is a second se			int of
"Certificate" and passing Final Inspection. Plea		AND DESCRIPTION OF THE PROPERTY OF THE PROPERT			ipt oi
· · · · · · · · · · · · · · · · · · ·			Contractor		pection
	Final General		Completed	OK	N/A
1. City/UW Certificate Issued (#)					
2. Is the meter pan bonded, installed and wire	d to specification?		1		
3. Is the meter pan an approved model?					
4. Is the meter pan installed between 4.5' and					
5. Is there sufficient clearance between the ele		48 for Spacing			
Requirements between electric and gas me		a matar nanc3			
 If there are multiple meters, are the part sup If there are provisions for a locking device, h 					7
lock?	as the contractor histalied the h	naware to accept the			
8. Is there a main disconnect switch installed?					
9. Is the water pipe ground installed within 5 fo	eet of the water service point of	entry? (Westchester			
has no constraint on ground location on wat					
10. Is the driven ground installed?		300000000000000000000000000000000000000			
11. Are the roof, balconies, porches, etc		ors and attachment located			
readily accessible to pedestrians?		ce of 10' vertical and 3' from			
"Readily Accessible" for the purpose of		easured from the highest			
this checklist is commonly defined as	point of the roof, balcons B. If NO, submit photo				
having a slope/grade of ≤ 45° and extending more than 1.5′ from the	demonstrating a pi				
structure	or request an inspe	The state of the s			
12. Is a customer property line pole installed?			 		
13. Is the standpipe and mast height installed					
14. Is the permanent connection made, as per	Specification EO-6218-B note 11	?			5
15. If there is an existing service, did the contra	ctor make the final connections	using approved Con			
Edison connectors, all without taping? (See	table 4 of EO-6218-B latest revis	ion)			
16. Is there a proper weatherhead and is it faci		1111 2			
17. Is the attachment point the correct type for					
(new/existing premises per EO-6218-B pag		isian3			-
 Does the point of attachment comply with Is the point of attachment at the proper he 					
Westchester where the service crosses spa					
20. Is the point of attachment in the proper pla					
weatherhead wherever practical, but no me					
21. Does the location of the point of attachme					
3" from the edge of a building or rain gutte	r down spout? (EO-6218-B Page	5)			
22. Are the point of attachment and the weath					
pipe? Service wires & drip loops are not pe					
23. Are the service connections directly access	ible by a 40' or smaller ladder pla	aced on grade level?			
(EO-6218-B Page 7 Construction Note 8)	more than 60" from doors nors	nes fire escanes and	_	- 1	
24. Is the attachment and conductors installed more than 60" from doors, porches, fire escapes, and similar locations that can be accessed through a doorway, window, ramp, stairway, or permanent					
ladder? (EO-4647-C Page 3 Note 3).					
25. If a secondary riser is to be installed, is the	riser installed on the preferred s	ide of opposite to the			
direction of incoming traffic?					
26. Is the point of attachment at a minimum of					
Effective November 2013, failed inspections will result in a \$188, plus taxes, service charge to you. Using this checklist can help inspections and					

 $avoid\ delays\ in\ service\ work.\ We\ will\ work\ with\ you\ to\ help\ ensure\ that\ our\ job(s)\ go\ smoothly\ and\ are\ satisfactorily\ coordinated\ with\ our\ activities.$

Ways to Pay Your Bill

EXHIBIT E

Our fast, efficient and convenient payment options make it easy for you to do business with us. In addition to the listed options below, visit https://www.coned.com/en/accounts-billing/payment-options to see which option works for you.

In Person

Customer Service Walk-In Centers are open Monday through Friday from 8:30 a.m. to 5:00 p.m. These locations accept Exact Payments only.

- **Bronx**: 1775 Grand Concourse Between 174th & 175th Street
- Brooklyn: One Metrotech Center at National Grid at Jay Street
- Manhattan: 122 East 124th Street at Park Avenue
- Queens: 89-67 162nd Street at National Grid office
- Staten Island: 1140 Richmond Terrace corner of Bard Avenue
- **Westchester :** 1 Bogopa Plaza, Mt. Vernon at Food Bazaar Supermarket corner of E. 3rd St and S. 3rd Ave

You can also pay your bill, at no charge, through an Authorized Payment agent. For nearest location, visit https://www.coned.com/en/accounts-billing/payment-options

e*bill: Good for you, good for the environment!

e*bill is a free and easy way to receive, view, and pay your Con Edison bill online while protecting the environment. More than a million customers now pay or receive their energy bills electronically — saving more than 112,000 pounds of paper and more than 1,300 trees, and preventing the release of more than 6,300 pounds of greenhouse gases each year.

Use the <u>green calculator</u> to see how receiving and paying your bill electronically helps reduce your carbon footprint.

Consolidated Edison Co. Inc



Direct Payment

With nothing to mail, no checks to write, and no stamps to buy, Con Edison's Direct Payment Plan saves you time and money. It's easy, simple, free, and convenient.



Pay-by-Internet

If you have a bank account and access to the Internet, you can use the Pay-by-Internet program. The program is a secure and free way to transmit payment directly from your account.

Consolidated Edison Co. Inc

REVISIONS LOG

Date	Page	Item
Aug-2014	73	Updated MES-377
Feb-2015	42	Updated E.1.c
Feb-2015	55,56, 60, 61, 63, 64	Updated Manufacturer name:
		Eaton, Cutler-Hammer,
		Eaton/Cutler-Hammer
Feb-2015	60	Updated Catalog #'s,
		added Eaton, Cutler-Hammer,
		Eaton/Cutler-Hammer for With
		Level Bypass single phase 5-jaw
		and three phase 7-jaw
Feb-2015	69	Updated Table IX
Feb-2015	73-77	Updated referenced specs
Mar-2015	61, 62	Updated Table IV-B
Mar-2015	63	Inserted Table IV-B:
		Indoor/Outdoor Vertical Meter
		Stacks – Bussed (5-jaw)
Mar-2015	69	Updated Table VIIA
May-2015	5, 6	Inserted clickable bookmarks in
,	,	the Table of Content
May-2015	25	Removed page
·		 see Overhead checklist
May-2015	38	Revised disconnect & reconnect
·		practice for 1,2,3 family home
		currently served with overhead
		service
May-2015	75	Uploaded revision MES-194
May-2015	83	Inserted Overhead Checklist
July-2015	78	Updated the specifications
July-2015	61	Added square D meter stack
,		EZM316 125M10
August-2015	82,83	Updated inspection checklists
August-2015	75	Updated EO-507256
August-2015	75,77	Updated EO-5015; EO-6218-B
	,	and EO-8746-B
September-2015	77, 75	Updated EO-2032 + EO-16883-B
September-2015	76, 77	Added specs 383330 and
·	,	EO-4379
October-2015	62	Updated Table IV – Added fused
		switch / Terminal box

November-2015	2	Add CEO Certification disclaimer
November-2015	75	Updated EO-4647-C
December-2015	78	Updated EO-4019
February-2016	77	Added EO-1007
February-2016	75	Updated 324862
March-2016	74	Updated EO-5403
March-2016	44	Renamed "Location" to part J
March-2016	75	Updated MES-377
April-2016	75	Updated EO-15934-B
May-2016	63	Updated Table IV – B
		Trough and Vertical Meter Stacks
June-2016	75	Updated EO-16697-B
June-2016	74	Updated MES-215 & MES-400
June-2016	75	Updated MES-195 & MES-142
June-2016	75	Updated 321388 & 321389
June-2016	78	Updated MES-350
July-2016	63	Updated catalog numbers for
		vertical meter stacks
September-2016	62	Updated catalog numbers for
		vertical terminal box
September-2016	56	Updated catalog number for
	22	Milbank meter socket
January-2017	62	Updated terminal box tables
January-2017	84	Updated overhead checklist
January-2017	77	Updated EO-2032
January-2017	75	Updated EO-4647-C
January-2017	78	Added 367892
February-2017	78	Updated EO-3477
February-2017	77	Updated EO-13782-C
February-2017	76	Updated EO-13331-B
March-2017	75	Updated EO-6218-B
May-2017	76	Updated EO-12811-B, EO-12810-B, EO-12809-B & EO-12791-B
May-2017	56, 57, 65, 66	Updated Midwest suffix to include GE
May-2017	50	Removed Rider's S and U. Added Rider T.

If you damage or pull a gas facility or SMELL GAS Call us immediately 1-800-75CONED once safely away from the leak.

And then:

- Keep all persons away from the area
- Follow directions from Emergency responders who arrive on-site.

Do not do anything to create a spark that could cause an explosion, such as:

- Light a match
- Turn appliance or lights on or off (including flashlights)
- Use a telephone or cell phone
- Ring a doorbell
- Start a car

