

Guidance on Electrical Meter Placement in a Designated Flood Zone

The New Jersey Board of Public Utilities (BPU), Department of Community Affairs (DCA), Jersey Central Power and Light Company (JCP&L), Public Service Gas and Electric Company (PSEG), and Atlantic City Electric Company (ACE) have been working together to provide guidance to homeowners whose residences are in a designated flood zone requiring that all electrical systems be installed above the base flood elevation (BFE).

Because there are challenges for line, meter service personnel and meter readers when an electrical meter is installed above the standard height, to ensure that utility line, meter readers and meter service personnel are able to access and maintain the meter safely, permanent, fixed stairs and a landing must be provided for any meter socket located greater than 6' above grade. To ensure that the meter readers and service personnel are able to work on the panel, an adequately sized work area must be provided. It has been determined that a work area that is a minimum of 42 inches wide by 48 inches deep centered on the meter meets this requirement.

To ease the impact of providing the stairs and a landing with the work area specified in this guidance, the electric meter will be allowed to be located where fixed outside stairs have been constructed, including stairs that lead to a landing on a porch or deck serving either a front or rear entrance of the dwelling, as determined by the homeowner and the utility company working together. If the homeowner, working with the utility representative, determines that the meter is to be installed on the side of the residence or on a part of the building that is not served by stairs, then stairs that comply with the requirements of the Uniform Construction Code (UCC) with a landing that meets the size of the work area designated in this guidance will be required to be constructed and maintained. The stairs and the landing, including the specified work area, must be maintained in good and sound condition and may not be removed. Either the removal or failure to maintain the stairs, landing, and work area that provide access to the electrical meter could result in discontinuance of electrical service.

Building Requirements: The construction of the stairs and landing are subject to the UCC. The stairs and landing must comply with the International Residential Code (IRC), for detached one- and two-family dwellings and attached single-family townhouses and must conform to the International Building Code (IBC) for all other occupancies as follows:

If the landing is to be used only for meter access and does not exceed 42 inches by 48 inches, it may be supported by pier foundations. Piles are not required in Coastal A or V zones. In these circumstances, the deck may not be connected to the main structure; it must be free standing. The piers must extend below the frost line of the locality (typically 30 inches to 36 inches). All wood used in the support structure must be pressure preservative treated or naturally durable. All materials must be flood resistant.

For detached one- and two-family dwellings and attached single-family townhouses, the minimum tread depth is 9 inches and the maximum riser height is 8 inches. For all other buildings, the minimum tread depth is 11 inches and the maximum riser height is 7 inches.

When the landing is more than 30 inches from the adjoining grade, guardrails that are not less than 36 inches in height are required. The stair must have a handrail on at least one side and must be mounted between 30 and 38 inches in height. The stair must be a minimum of 36 inches in width.

Electrical Requirements: The installation is subject to the UCC and must comply with applicable requirements of the National Electrical Code (NEC), which is adopted as the electrical subcode.

There have been questions about whether an additional disconnect would be required when a meter is mounted so that a porch or platform provides the required work area. In the NEC, which is adopted as the electrical subcode of the UCC, Article 230.70(A)(1) allows a disconnect to be either outside or inside at the nearest point of entrance of the conductors. This means that if the existing service panel remains where it is and the meter is moved, the conductors from the meter to the panel would not require a disconnect switch if they are run on the outside of the structure.

If the homeowner should prefer that the cables not be visible, a disconnect switch would be required after the meter at a readily accessible location either outside or inside where the conductors enter the structure. This would allow the conductors to be run inside the dwelling; they could either be concealed or exposed to the existing panel. In addition, the bonding and grounding would be required to be updated or extended, because the existing service panel would become a subpanel, so that the new disconnect would become the main service disconnect.

Questions may be addressed to:

BPU: customer.assistance@bpu.state.nj.us or (800) 624-0241

DCA: Code Assistance Unit at codeassist@dca.nj.gov or (609) 984-7609

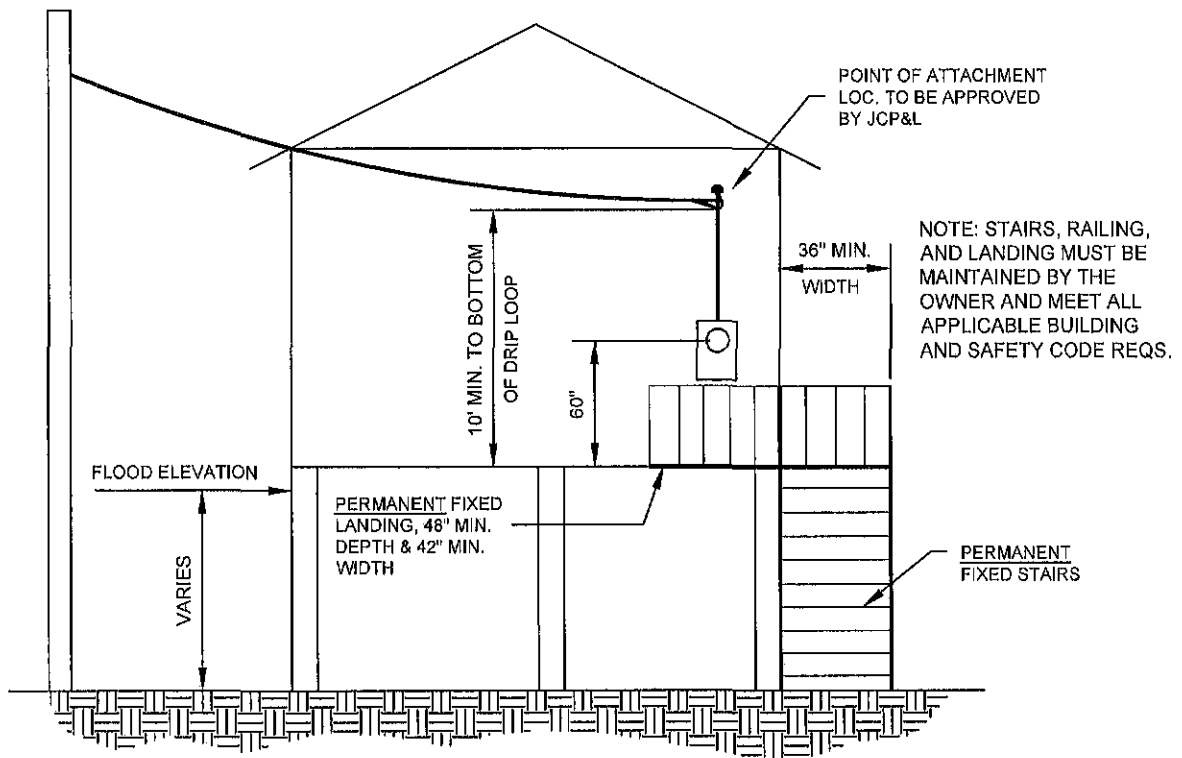
ACE: <https://www.atlanticcityelectric.com/forms/ace/other/contactus.aspx> or at (800) 642-3780

JCP&L: https://www.firstenergycorp.com/content/fecorp/corporate/contact_us.html or (800) 662-3115

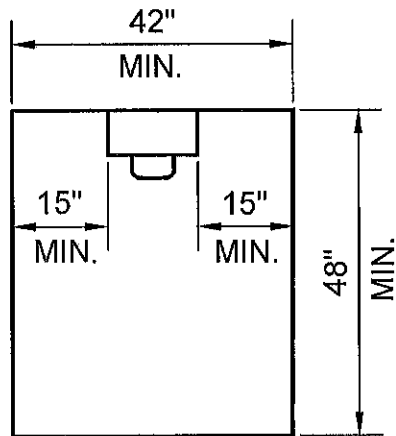
**** NOTE: ALL ELECTRICAL DEVICES INCLUDING THE METER PAN MUST BE INSTALLED AT OR ABOVE THE DESIGN FLOOD ELEVATION.**

TYPICALLY THIS WILL BE BASE FLOOD ELEVATION PLUS ONE FOOT.

OVERHEAD SERVICE



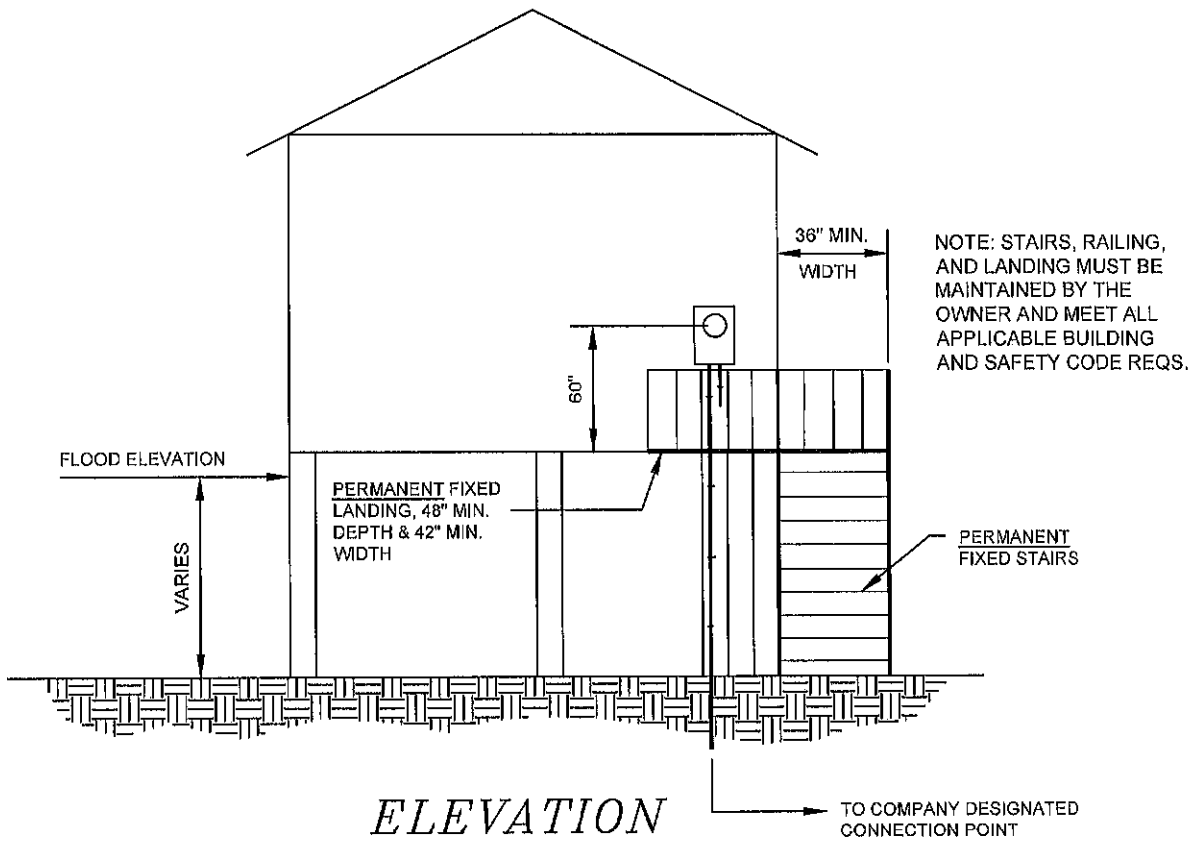
ELEVATION



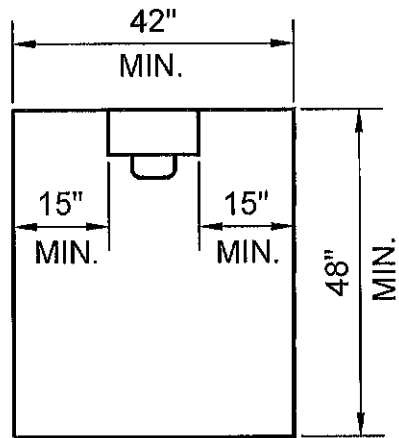
LANDING PLAN
(MINIMUM CLEARANCES)

Jersey Central Power & Light <i>A FirstEnergy Company</i>		Red Bank, NJ	
METER LANDING DETAIL FEMA FLOOD ZONES - NJ COASTAL AREAS OVERHEAD CONSTRUCTION			
DRAWN FCB	REVISION 4 10/21/14	APPROVED	DATE WORK ORDER NO.
SCALE NTS		DWG. NO. A97768-S SH.2_of.2	

UNDERGROUNDS SERVICE



NOTE: STAIRS, RAILING, AND LANDING MUST BE MAINTAINED BY THE OWNER AND MEET ALL APPLICABLE BUILDING AND SAFETY CODE REQS.



LANDING PLAN
(MINIMUM CLEARANCES)

Jersey Central Power & Light <small>A FirstEnergy Company</small>		Red Bank, NJ	
METER LANDING DETAIL FEMA FLOOD ZONES - NJ COASTAL AREAS UNDERGROUND CONSTRUCTION			
DRAWN FCB	REVISION 4 10/21/14	APPROVED	DATE WORK ORDER NO.
SCALE NTS		DWG. NO. A97768-S SH.1_of_2	