

SECTION XVI

NEW YORK STATE RESIDENTIAL INSULATION STANDARDS

October 25, 1983
MDR/WRS
REVISION B 11/25/85

Application:

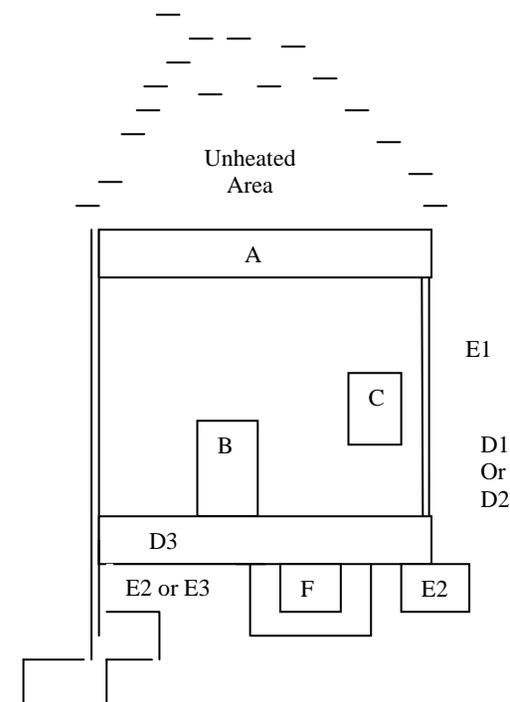
"Existing" – Requirement A, B, and C

These requirements apply to existing dwellings which are being converted to electric heat. See Items 2 and 3 under "New for exceptions.

"NEW" – Requirements A through F

- (1) New buildings.
- (2) Additions to existing buildings. Requirements D, E, and F do not have to be met for the existing portions of such buildings.
- (3) Renovations or alterations to existing buildings whenever the energy required for heating and cooling is materially increased. Requirements D, E, and F do not have to be met for the unchanged floors, walls, or ducts.

		Maximum U Value	Minimum R, Insulation Alone
"EXISTING"	A. Ceilings below unheated area (Note 1)	0.05*	19
	B. Doors – all to heated areas	0.40	--
	C. Windows – double or storm (Note 2)	0.69	--
	D. D.1. Perimeter of heated slab (Note 3)	--	6.3 New York City 7.0 Westchester.
"NEW" (Note 7)	D.2 Perimeter of unheated slab (Note 3)	--	5.0 All
	D.3 Floors above unheated area (Note 4)	0.08	11
	E. Walls		
	E.1 Above grade	0.08	--
	E.2 Below grade unheated area (Note 4)	--	5.0 (Note 5)
	E.3 Below grade heated area (Note 6)	--	5.0
	F. Ducts in unheated area		



- (Note 1) If a building has flat roof or is four or more stories, 4-inches or more of existing insulation is acceptable. Insulation requirement is waived if only access is by cutting an opening in the roof.
- (Note 2) Double or storm windows are not required for an existing building having 6 or more stories if windows are caulked and weather stripped to the company's satisfaction. A storm window is not required on any window opening onto a fire escape.
- (Note 3) Slab edge insulation shall extend down from the top of the slab for a minimum distance of 24-inches or downward to the bottom of the slab then horizontally beneath the slab for a minimum total distance of 24-inches.
- (Note 4) Conformance with either D. 3 or E. 2 is required.
- (Note 5) "R" includes thermal resistance of wall components.
- (Note 6) Heated basement/cellar walls below grade shall be insulated downward from grade to a minimum depth of 24-inches.
- (Note 7) Maximum glazing as percentage of total wall area:
- | | | |
|-----------------------------------|----------|--------------------------------|
| o 1 – family -----24% | Glazing: | Areas of windows and skylights |
| o other, 3 stories or less ---33% | | Including frames, measured |
| o other, over 3 stories ----42% | | From the finished opening |

* Maximum allowable under New York State Energy Conservation Construction Code is 0.08 for other than detached 1 and 2-family dwellings and all other residential buildings. Leaf 30-C of the Electric tariff calls for a maximum U of 0.05.

TYPICAL MATERIALS TO SATISFY INSULATION-ALONE "R" VALUES

	Building Section	Insulation-Along R Value	Typical Material and Thickness (Note 1)
A.	Ceilings	19	6-inches Glass fibers, mineral wool, or cellulose.
B.	Doors – Double (storm) or insulated	--	Will vary according to materials and construction used by manufacturer.
C.	Ducts	5	1-inch Polystyrene (extruded) 2-inches Glass fibers or mineral wool.
D.	Floors		
	D.1 Perimeter of heated slab	6.3 New York City	1¼-inches Polystyrene (extruded)
		7 Westchester	1½-inches Polystyrene (extruded)
	D.2 Perimeter of unheated slab	11	3½-inches Glass fibers or mineral wool
	D.3 Floors above unheated area		
E.	Walls		
	E.1 Above grade	11	2½-inches Glass fibers or mineral wool
	E.2 Below grade unheated area	5 (Note 2)	1-inch Polystyrene (extruded)
	E.3 Below grade heated glass	5	1-inch Polystyrene (molded)
F.	Windows – double glazed storm sash or insulated glass	--	Will vary according to materials and construction used by manufacturer.

(Note 1) Vapor barrier, weather stripping, and sill sealer should be used where applicable.

(Note 2) R includes thermal resistance of wall components.

LIPA Notice:

In an effort to assist electrical contractors with the completion of electric service installation, this notice is to remind all electrical contractors that the electric distribution system in the Rockaway Peninsula is owned and controlled by the Long Island Power Authority (LIPA). It is of utmost importance that contractors understand that some of LIPA's connection and meter requirements differ from those required for the Con Edison system. These differences are detailed in LIPA's Specifications and Requirements for Electric Installations, also known as the "Red Book's". Copies of the Red Book can be obtained by calling LIPA's Queens/Nassau Electric Design and Construction Department at 516-792-7122, or at their web address <http://www.lipower.org/> under the "Red Book Online Edition" icon.

For your convenience, the following illustrates the main differences between LIPA and Con Edison that lead to the most common violations as seen by LIPA inspectors. They are as follows:

1. All residential services shall require a lever operated, jaw release bypass meter pan. Check the LIPA web site's (www.lipower.org) Red Book section under the "Electric Meter Enclosure List" for the LIPA approved meter enclosures and accessories.
2. Meter enclosures and assemblies shall not be altered. Only factory supplied knockouts are permitted. Field made knockouts or any other field alterations will not be accepted.
3. Meter equipment shall not be utilized as a junction point or a splice point.
4. All new and upgraded electric service require the installation of a grounding conductor from the neutral block of the main switch to a supplemental ground, namely, one 5/8-inch x 8-foot copper weld, driven ground rod.
5. No electric meter enclosure shall be installed above the gas meter. A minimum horizontal separation of 1-foot-0" must be maintained between gas and electric service facilities.

Also, note that it is LIPA's policy that no service entrance is to be left unmetered. However for safety purposes, LIPA will allow an un-metered service to a service change where the existing meter is an A-Base (non-socket) meter with proper pre-authorization (LIPA "T" number). Do not wire the A-Base meter into the new socket type meter pan as it creates a hazard when LIPA's personnel attempt to install the new socket meter.

LIPA representatives are always available to resolve any questions that may arise regarding LIPA's rules for working with the electric distribution system. They can be reached at 516-792-7122 for any requests regarding electric service.