

STATE BUILDING CODE INTERPRETATION FORM	STATE BUILDING COMMISSION One Capitol Hill Providence, RI. 02908-5859 (401) 222-3033	Code Interpretation No. 2010-001 Code Section SBC 8-505.7 SBC 5-215.2 Date of Staff Preparation 2-17-2011
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<input type="checkbox"/> BUILDING CODE	<input type="checkbox"/> 1&2 FAMILY CODE	<input checked="" type="checkbox"/> ELECTRICAL CODE
<input type="checkbox"/> MECHANICAL CODE	<input type="checkbox"/> PLUMBING CODE	<input checked="" type="checkbox"/> ENERGY CODE
<input type="checkbox"/> ACCESSIBILITY CODE	<input type="checkbox"/> FUEL AND GAS CODE	<input type="checkbox"/> OTHER

QUESTION:
7 January, 2011

This inquiry also comes from:
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We have designed an electric service to a building of Use Group R-2, Boarding House (non-transient), where there is a single tenant (the Owner) with multiple residents where the Owner pays for all utilities. This is supportive housing where all residents must participate in the Program in order to live in one of the 19 studio apartments. The Program is to be run and administered in office space located in the basement level. Each studio is equipped with a full bathroom and a unit kitchenette that consists of an electric two-burner cook top, a 5.1 cubic foot refrigerator, a small sink, and a microwave oven.

The service disconnecting means is rated 225 Amperes- 120/208V - 3Phase - 4wire. This main service disconnecting means serves a Tenant Distribution Panel with (19) 40A-2P circuit breakers each feeding a studio apartment load center. The feeder conductors are rated 50 amperes to each studio apartment/dwelling unit Load Center Panel.

1. Is the separate feeder to each tenant load center in compliance with the RI Energy Code requiring "provisions" for metering each tenant separately because check metering can be added at any time to each of the tenant feeders at the tenant distribution panel or at the dwelling unit Load Center location?
2. Provided the load calculations for the apartments fall within the 50A conductors and the 40A circuit breaker, is there any code that would require the feeder/branch circuit conductors or the feeder circuit breaker be rated 60 amperes minimum?

RESPONSE: to item 1.....

RISBC-8 Energy Code Section 505 .7 Relative to Mandatory metering of individual dwelling unit tenant spaces.

Beginning at Section 505 General to determine scope and applicability of "Electrical Power and Lighting Systems" we find

505.1 General (Mandatory).

This section covers lighting system controls, the connection of ballasts, the maximum lighting power for interior applications and minimum acceptable lighting equipment for exterior applications.

Exception: *Lighting within dwelling units where 50 percent or more of the permanently installed interior light fixtures are fitted with high-efficacy lamps.*

This article by "**Exception:**" states that it applies only to facilities where less than "50 percent or more of the permanently installed interior light fixtures are fitted with high-efficacy lamps."

If your facility is equipped with 50% or more permanent fixtures fitted with "High Efficiency Lamps" the code section 505 in it's entirety is not applicable to the project. Therefore 505.7 would not apply.

Additional Information to Response 1 above.

For projects where the facility is not equipped with 50% or more permanent fixtures fitted with "High Efficiency Lamps" the code section 505.1 exception would not apply and therefore articles 505.1 through 505.7 in it's entirety is determined applicable.

505.7 Electrical energy consumption. (Mandatory).

"In buildings having individual dwelling units, provisions shall be made to determine the electrical energy consumed by each tenant by separately metering individual dwelling units."

The description of your occupancy including the 19 studio apartments ("Dwelling Units") used to house program participants does not set up a "Tenant / Landlord" condition where the occupants of the dwelling units would be considered "Tenants"

Tenant -noun -(reference dictionary)

1. **a person or group** that rents and occupies land, a house, an office, or the like, from another for a period of time; **lessee.**

2. Law . a person who holds or possesses for a time lands, tenements, or personality of another, **usually for rent.**

The participants of the program offered by the "Building Tenant" (Agency) would have the operational relationship best defined in the RISBC-1 Building Code as Non-Transient residents in care similar to the I-1 Halfway House / Boarding, but under less intense care and more independent living abilities, so as to permit the code to apply as R-2 Multifamily mixed, non separated use with Business and meeting space for the benefit of the residents. The relationship between Resident and Tenant is closest to the I-1 occupancy classification but reportedly without the "24 Hour Care", so although the relationship is similar the code application in SBC-1 is applied as R-2 . The Application of SBC-8 RI Energy Conservation Code 505.7 requires a Tenant Dwelling unit relationship which in this case does not exist.

Below code articles supplied for reference.

308.2 Group I-1.

This occupancy shall include buildings, structures or parts thereof housing more than 16 persons, on a 24-hour basis, who because of age, mental disability or other reasons, live in a supervised residential environment that provides personal care services. The occupants are capable of responding to an emergency situation without physical assistance from staff. This group shall include, but not be limited to, the following:

...Assisted living facilities - Halfway houses - Group homes- ...- Social rehabilitation facilities - Alcohol and drug centers .. A facility such as the above with five or fewer persons shall be classified as a Group R-3 or shall comply with the International Residential Code in accordance with Section 101.2. A facility such as above, housing at least six and not more than 16 persons, shall be classified as Group R-4.

"RESIDENTIAL CARE/ASSISTED LIVING FACILITIES. *A building or part thereof housing persons, on a 24-hour basis, who because of age, mental disability or other reasons, live in a supervised residential environment which provides personal care services. The occupants are capable of responding to an emergency situation without physical assistance from staff. This classification shall include, but not be limited to, the following: residential board and care facilities, assisted living facilities, halfway houses, group homes, congregate care facilities, social rehabilitation facilities, alcohol and drug abuse centers and convalescent facilities.*

RESPONSE: to item 2

RISBC-5 RI Electric Code Section 215.2(A)(1) **Article 125 Feeders / 215.2 Minimum Rating and Size.**

215.1 Scope. This article covers the installation requirements, over current protection requirements, minimum size, and ampacity of conductors for feeders supplying branch circuit loads.

215.2 Minimum Rating and Size.

(A) Feeders Not More Than 600 Volts.

(1) General. Feeder conductors shall have an ampacity not less than required to supply the load as calculated in Parts III, IV, and V of Article 220. The minimum feeder-circuit conductor size, before the application of any adjustment or correction factors, shall have an allowable ampacity not less than the non-continuous load plus 125 percent of the continuous load

The above code section regulates the **feeder** size based on calculated load per Parts III, IV, and V of **Article 220 "Branch-Circuit, Feeder, and Service Calculation .**

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DATE:

2-17-2011

