ADMINISTRATIVE BULLETIN

NO. AB-060

DATE : January 7, 2004 (Updated 1/1/11 for California Electrical Code references)

SUBJECT : Fire and Life Safety

TITLE : **Information Technology Rooms; Definition and Requirements**

PURPOSE : The purpose of this Bulletin is to provide guidelines for determining what constitutes an Information Technology Room per SF Electrical Code and what requirements apply to such Information Technology Rooms.

REFERENCE : San Francisco Electrical Code, 2010, Article 645
NFPA 75, 1995 Edition, Chapter 1

DISCUSSION : Because of the need to comply with specific building, mechanical and electrical code requirements, there is a need to clearly define when Information Technology Rooms are created. Such Information Technology Rooms may be created by being so defined on plans and permits, by the general nature of their construction, by the installation of certain types of equipment, or by the use of various electrical installation and connection methods. When Information Technology Rooms are created, specific construction requirements become applicable, particularly regarding wiring methods, fire-resistive construction, and HVAC controls.

An Information Technology Room, also known as an Electronic Computer Data Processing Room, is created by the installation of electronic equipment and wiring that does not conform to the standard requirements of Chapter 3, Wiring Methods and Materials, and Chapter 4, Equipment for General Use, of the 2010 San Francisco Electrical Code. Installation of power cord wiring in under-floor also generally creates an Information Technology Room.

In general, the installation of computer equipment that is directly connected to the premises wiring system, or that is connected to the premises wiring system receptacle outlets by cord-and-plug wiring with a cord not exceeding six feet in length, does not create an Information Technology Room.

An IT Room is created if, by the nature of its design and/or by the method of installation, utilization equipment requires power cord wiring in excess of six feet in length. An Information Technology Room is created when freestanding equipment racks containing electrical utilization equipment are not provided with outlets installed using Chapter 3 wiring methods. One cord and plug connected relocatable power tap, surge suppressor, uninterrupted power supply, or similar equipment used in accordance with the terms of its listing may be installed between a premises wiring system receptacle and the utilization equipment.

When an Information Technology Room is created, the following requirements apply:

- An emergency power shut-off switch shall be provided that shuts off all data processing and HVAC equipment, disconnects UPS (Uninterruptible Power Supply Systems) having a capacity of 750 volt-amperes or more, and shuts required fire/smoke dampers. California Electrical Code 645.4(1)

- Fire/smoke dampers shall isolate the portion of the HVAC system serving the Information Technology Room. California Electrical Code 645.4(2)

- The Information Technology Room shall be separated from other areas by at least one-hour fire-rated construction with protected openings. California Electrical Code 645.4(5)

Conforming Information Technology Rooms are permitted to have wiring installed in the following manner:

- Cord-and-plug connection of equipment using power cords greater than 6 is permitted when protected from physical damage as required by California Electrical Code 645.5(D).

- Interconnection of power units using cord wiring, when the equipment is listed for such use, is permitted. California Electrical Code 645.5(C)

- Cord wiring and listed data processing cables are permitted under raised floor areas. California Electrical Code 645.5(D)

- Wiring and equipment listed for use as part of Information Technology equipment need not be secured in place. California Electrical Code 645.5(E)

Procedure for Plan Check and Inspection of Information Technology Rooms:

It is the responsibility of a permit applicant to identify any area that will be classified as an Information Technology Room under this bulletin, and to properly detail and construct all required fire separation assemblies, HVAC controls and other features. Department of Building Inspection staff are available through the pre-application and pre-addendum plan review procedure (see AB-028) and during the plan review process to assist in determining if Information Technology Rooms are being created and to assist in determining necessary construction requirements. Detailed compliance information should be provided in the submittal documents and will then appear in the approved construction documents.

If, during the course of building, electrical or other inspection, it is determined that work underway has created an Information Technology Room without that room having been detailed in the approved construction documents, an additional permit detailing compliance will be required per SFBC 106A.4.7 or the construction shall be altered so that the area no longer constitutes an Information Technology Room.

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Vivian L. Day, C.B.O. Date
Director
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Approved by the Building Inspection Commission on January 7, 2004