

BOARD of SUPERVISORS



City Hall  
1 Dr. Carlton B. Goodlett Place, Room 244  
San Francisco 94102-4689  
Tel. No. 554-5184  
Fax No. 554-5163  
TDD/TTY No. 554-5227

## MEMORANDUM

TO: Tom Hui, Director, Department of Building Inspection  
Sonya Harris, Secretary, Building Inspection Commission

FROM:  Alisa Somera, Legislative Deputy Director  
Land Use and Transportation Committee

DATE: November 3, 2017

SUBJECT: LEGISLATION INTRODUCED

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The Board of Supervisors' Land Use and Transportation Committee has received the following legislation, introduced by Supervisor Farrell on October 24, 2017:

**File No. 171139**

**Ordinance amending the Building Code to require new commercial buildings of 25,000 square feet or more and new residential buildings of three units or more to provide a dedicated telecommunications space in a centrally located place in the building and to install fiber-ready cabling that is connected to an approved telecommunications network; affirming the Planning Department's determination under the California Environmental Quality Act; making findings of local conditions under the California Health and Safety Code; and directing the Clerk of the Board of Supervisors to forward the legislation to the California Building Standards Commission as required by State law.**

The proposed ordinance is being transmitted pursuant to Charter, Section D3.750-5, for public hearing and recommendation. It is pending before the Land Use and Transportation Committee and will be scheduled for hearing upon receipt of your response.

Please forward me the Commission's recommendation and reports at the Board of Supervisors, City Hall, Room 244, 1 Dr. Carlton B. Goodlett Place, San Francisco, CA 94102 or by email at: [alisa.somera@sfgov.org](mailto:alisa.somera@sfgov.org).

c: William Strawn, Department of Building Inspection  
Carolyn Jayin, Department of Building Inspection

1 [Building Code - Dedicated Telecommunications Space; Fiber-Ready Cabling]

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3 **Ordinance amending the Building Code to require new commercial buildings of 25,000**  
4 **square feet or more and new residential buildings of three units or more to provide a**  
5 **dedicated telecommunications space in a centrally located place in the building and to**  
6 **install fiber-ready cabling that is connected to an approved telecommunications**  
7 **network; affirming the Planning Department's determination under the California**  
8 **Environmental Quality Act; making findings of local conditions under the California**  
9 **Health and Safety Code; and directing the Clerk of the Board of Supervisors to forward**  
10 **the legislation to the California Building Standards Commission as required by State**  
11 **law.**

12 **NOTE:** **Unchanged Code text and uncodified text** are in plain Arial font.  
13 **Additions to Codes** are in *single-underline italics Times New Roman font*.  
14 **Deletions to Codes** are in *strikethrough italics Times New Roman font*.  
15 **Board amendment additions** are in double-underlined Arial font.  
16 **Board amendment deletions** are in ~~strikethrough Arial font~~.  
17 **Asterisks (\* \* \* \*)** indicate the omission of unchanged Code  
18 subsections or parts of tables.

19 Be it ordained by the People of the City and County of San Francisco:

20 Section 1. General Findings.

21 (a) The Planning Department has determined that the actions contemplated in this  
22 ordinance comply with the California Environmental Quality Act (California Public Resources  
23 Code Sections 21000 et seq.). Said determination is on file with the Clerk of the Board of  
24 Supervisors in File No. \_\_\_\_\_ and is incorporated herein by reference. The Board affirms  
25 this determination.

1 (b) The Building Inspection Commission considered this ordinance on

2 \_\_\_\_\_, 2017 at a duly noticed public hearing, pursuant to Charter Section D3.750-5.

3 (c) In Section 709 of the California Public Utilities Code, the Legislature set forth its  
4 telecommunications policies for California. Among the eight policy goals listed was the  
5 Legislature's intent to:

6 (i) encourage the development and deployment of new technologies and the  
7 equitable provision of services in a way that efficiently meets consumer need and encourage  
8 the ubiquitous availability of a wide choice of state-of-the-art services; and

9 (ii) promote economic growth, job creation, and the substantial social  
10 benefits that will result from the rapid implementation of advanced information and  
11 communications technologies by adequate long-term investment in the necessary  
12 infrastructure.

13  
14 Section 2. Findings under California Health and Safety Code Sections 17958.7 and  
15 18941.5.

16 (a) Within the continental United States, the density of San Francisco is exceeded  
17 only by that of New York City. Because San Francisco is located at the tip of a peninsula and  
18 surrounded on three sides by water, space for growth is limited.

19 (b) The topography of San Francisco has led to development of a high density of  
20 buildings on small lots with many buildings built up to the property lines. Sidewalks are narrow  
21 and crowded, and space for utilities and other infrastructure is limited.

22 (c) The combination of San Francisco's unique topography, historic pattern of  
23 development, existing built environment, limited space for utilities and infrastructure, and a  
24 population density that creates a high demand for services requires San Francisco to make  
25 the most efficient use of the available public space and to provide for the use of rapidly-

1 evolving telecommunications technology in the City by requiring the owners of certain newly-  
2 constructed buildings to provide dedicated space for telecommunications technology within  
3 their buildings and enable its integration into the system within the City's spacial constraints.  
4

5 Section 3. The Building Code is hereby amended by revising Section 106A.3.2 and  
6 adding Section 2703, to read as follows:

7 **SECTION 106A – PERMITS**

8 \* \* \* \*

9 **106A.3.2 Submittal documents.** Plans, specifications, engineering calculations, diagrams,  
10 soil investigation reports, special inspection and structural observation programs and other  
11 data shall constitute the submittal documents for a permit. When such plans are not prepared  
12 by an architect, land surveyor, or an engineer, the Building Official may require the applicant  
13 submitting such plans or other data to demonstrate that state law does not require that the  
14 plans be prepared by a licensed architect, land surveyor, or engineer. The Building Official  
15 may require plans, computations and specifications to be prepared and designed by an  
16 engineer or architect licensed by the state to practice as such even if not required by State  
17 law. Materials submitted by a licensed architect, land surveyor, or engineer must be signed  
18 and sealed with an original signature on the first sheet of each set of documents, and  
19 facsimile stamps plus the required registration seal of the architect, land surveyor, or engineer  
20 on the balance of the sheets. Plans for the construction of new buildings subject to Section 2703 of  
21 this Code shall show where the required dedicated and centrally-located telecommunications space  
22 will be located and telecommunications facilities installed.

23 Two complete sets of plans and specifications and three copies of the soil investigation  
24 report (when required) shall be submitted. Additional complete sets of plans and specifications  
25

1 may be required for special permit processing services that may be offered by the City and  
2 County of San Francisco.

3 **EXCEPTIONS:**

4 1. The requirements for plans or specifications may be waived by the Building  
5 Official, provided that the nature and extent of the proposed construction can be clearly  
6 described in writing, and such a description is filed with the application.

7 \* \* \* \*

8 **CHAPTER 27**

9 **ELECTRICAL**

10 Add the following section.

11 **SECTION 2703**

12 **PREMISES-POWERED BROADBAND COMMUNICATIONS SYSTEMS**

13 **2703.1 Purpose and Intent.**

14 *Because of San Francisco's historic pattern of development with a high density of buildings on*  
15 *small lots, many buildings built up to the property lines, and narrow crowded sidewalks, space for*  
16 *utilities and other infrastructure is limited. This Section 2703 is intended to make the most efficient use*  
17 *of the available public space and provide for the use of state-of-the-art telecommunications technology*  
18 *in the City by requiring the owners of certain newly-constructed buildings to provide dedicated space*  
19 *for telecommunications within their buildings and enable its integration into the system within the*  
20 *City's spacial constraints.*

21 **2703.2 Scope. This Section 2703 shall apply to the following newly-constructed buildings:**

22 *1. Buildings classified in Chapter 3 of this Code as Group B (Business) or Group M*  
23 *(Mercantile) that are 25,000 gross square feet or more; and*

1           2. Buildings classified in Chapter 3 of this Code as Group R-2 (Residential), defined as  
2 buildings containing sleeping units or more than two dwelling units, where the occupants are primarily  
3 permanent in nature.

4 **2703.3 Dedicated telecommunications space and pathway.** Each building subject to this Section 2703  
5 shall provide a dedicated telecommunications space which provides for telecom service providers to  
6 come into the building and install their systems.

7           **2703.3.1 Dedicated space requirements.** The dedicated telecommunications space required by  
8 this Section 2703 shall comply with the following:

9           1. The space must be in a central building location. In buildings with a Group B (Business) or  
10 Group M (Mercantile) occupancy, the space (also known as a collocation room) shall be located either  
11 immediately adjacent or otherwise in very close proximity to the main building telecommunications or  
12 utility room.

13           2. The space shall be generally clean and dry, and protected from harsh environments such as  
14 extremes of cold and heat.

15           3. It shall provide a dedicated high-quality power source, protected from surges and spikes,  
16 that complies with Article 840 of the California Electrical Code and have an HVAC system able to  
17 offset the expected heat load.

18           4. The space shall be large enough to store a distribution box that connects the premise's  
19 communications wiring system to the Optical Network Terminal (ONT) point. "ONT" shall have the  
20 meaning set forth in Section 840.2 of the California Electrical Code.

21           5. There shall be sufficient conduit space, including vertical space, provided within the building  
22 to interconnect the space with the rest of the building.

23           6. For buildings with a standby generator, an allowance of standby power shall be provided  
24 that is sufficient to serve the electrical requirements of the space in cases where the Building Official  
25 finds it in compliance with applicable codes.

1           **2703.3.2 Mixed occupancy buildings.** In mixed occupancy buildings, the owner has the option  
2 of providing one dedicated space that serves the entire building or a separate dedicated space for each  
3 occupancy that is within the scope of this Section 2703.

4           **2703.4 Commercially Reasonable Fiber-Ready Work.** Each building subject to this Section 2703  
5 shall provide Fiber-to-the-Premises and an Optical Network Terminal connected to an approved  
6 telecommunications network that complies with Article 840 of the California Electrical Code. “Fiber-  
7 to-the-Premises” shall have the meaning set forth in Section 840.2 of the California Electrical Code.

8           **2703.5. Approval of alternative designs and other methods of compliance.** Telecommunications  
9 technology is constantly changing and evolving, and the requirements of this Section 2703 are not  
10 intended to prevent the accommodation of future improvements or developments. The Building Official  
11 may approve an alternative design or other method of compliance with the purpose and intent of this  
12 Section 2703 pursuant to his authority in Section 104A.2.8 of this Code.

13           **2703.6. Performance-based design and minimum capacity criteria.** The Building Official, in  
14 consultation with experts in the field of telecommunications technology, is authorized to develop  
15 performance-based design and minimum capacity criteria to achieve the objectives of Sections 2703.3  
16 and 2703.4 above in lieu of the specific requirements set forth.

17           **2703.7. Administrative Bulletin.** The Department shall publish in an Administrative Bulletin any  
18 generally applicable alternative designs and methods of compliance approved pursuant to Section  
19 2703.5 and any performance-based design and minimum capacity criteria developed pursuant to  
20 Section 2703.6.

21  
22           Section 4. Effective Date. This ordinance shall become effective 30 days after  
23 enactment. Enactment occurs when the Mayor signs the ordinance, the Mayor returns the  
24 ordinance unsigned or does not sign the ordinance within ten days of receiving it, or the Board  
25 of Supervisors overrides the Mayor’s veto of the ordinance.

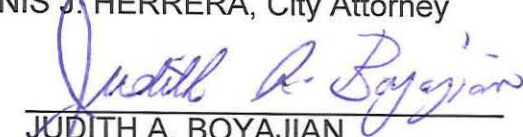


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Section 5. Directions to the Clerk. The Clerk of the Board of Supervisors is hereby directed to forward a copy of this ordinance to the California Building Standards Commission upon final passage.

APPROVED AS TO FORM:  
DENNIS J. HERRERA, City Attorney

By:

  
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JUDITH A. BOYAJIAN  
Deputy City Attorney  
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## LEGISLATIVE DIGEST

[Building Code - Dedicated Telecommunications Space; Fiber-Ready Cabling]

**Ordinance amending the Building Code to require new commercial buildings of 25,000 square feet or more and new residential buildings of three units or more to provide a dedicated telecommunications space in a centrally located place in the building and to install fiber-ready cabling that is connected to an approved telecommunications network; affirming the Planning Department's determination under the California Environmental Quality Act; making findings of local conditions under the California Health and Safety Code; and directing the Clerk of the Board of Supervisors to forward the legislation to the California Building Standards Commission as required by State law.**

### Existing Law

There is no existing law being amended.

### Amendments to Current Law

The ordinance adds a new section to Chapter 27 of the Building Code, which deals with electrical components, equipment, and systems. It requires all new Business or Mercantile buildings that are 25,000 gross square feet or more and all new Residential buildings of three or more units to provide a dedicated telecommunications space in a central building location which meets specified minimum requirements and provides for telecommunication service providers to install their systems in the building. Buildings subject to the ordinance must also provide fiber to the premises and optical network terminals connected to an approved telecom network.

To enable the City to respond to the constantly-changing and evolving technology in the telecommunications industry, the Building Official is authorized to approve alternative designs and other methods of compliance consistent with the ordinance's purpose and intent. In consultation with experts in the field, the Building Official may also develop performance-based design and minimum capacity criteria in lieu of the specific requirements set forth. Generally applicable alternative designs and methods of compliance, and any performance-based design and minimum capacity criteria, must be published in an Administrative Bulletin.

### Background Information

In Section 709 of the California Public Utilities Code, the State Legislature stated several telecommunications policies for California. Among the eight policy goals listed was the Legislature's intent to (1) encourage the development and deployment of new technologies and the equitable provision of services in a way that efficiently meets consumer need, (2) encourage the availability of a wide choice of state-of-the-art services, (3) and promote

economic growth, job creation, and the substantial social benefits that will result from the rapid implementation of advanced information and communications technologies by adequate long-term investment in the necessary infrastructure. This legislation furthers the State's stated legislative intent as well as similar public policy objectives of the City.

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