

CITY OF MILPITAS

Building & Safety Department
455 E. Calaveras Blvd.
Milpitas, CA 95035
408-586-3240

www.ci.milpitas.ca.gov



INTERIOR SIGN SUBMITTAL REQUIREMENTS

1. PERMIT INFORMATION:

- This permit includes the installation of interior tenant identification signs only. Permits for all other signs including exterior and exit signs must be obtained in person at the Permit Center, Building & Safety Department, 455 E. Calaveras Blvd.
- A Permit may be issued only to a State of California Licensed Contractor with the proper license classification or the Homeowner.
- If the work is performed by the Building Owner personally or by his/her workers and an inspection indicates the work cannot be completed satisfactorily, then a licensed contractor must perform the work.
- If the Building Owner hires workers, State Law requires the Owner to obtain Worker's Compensation Insurance. Proof of this insurance is required prior to inspection.

2. INSTALLATION REQUIREMENTS:

- All work must comply with the 2013 California Building Code (CBC), 2013 California Mechanical Code (CMC), 2013 California Electrical Code (CEC), 2013 California Energy Code and 2014 Milpitas Municipal Code (MMC).
- All signs installed inside a Mall shall comply with CBC Section 402.1 (see the attached drawing for detailed information).
- Light-transmitting plastic interior wall signs shall be limited to the following: [CBC Section 2611]
 - The sign shall not exceed 20 percent of the wall area.
 - The sign shall not exceed 24 square feet.
 - Edges and backs of the sign shall be fully encased in metal.

ENERGY REQUIREMENTS:

- Indoor and outdoor illuminated signs must comply with the following:
 - Signs must be automatically controlled so that they are turned off during daytime hours and during other times when they are not needed. The controls must be certified by the manufacturer to the Energy Commission and listed in the Energy Commission "Directory of Automatic Lighting Control Devices". These requirements include:
 - Automatic shutoff controls,
 - Dimming controls, and
 - Demand responsive controls for electronic message centers.
 - Electronic message centers (EMCs) with a new connected lighting greater than 15 kW must have a control capable of reducing the lighting power by at least 30 percent upon receiving demand response signal sent by the local utility.
 - Signs shall comply with either of the following energy requirements:
 - Watts Per Square Foot (for double-faced signs, only the area of one face is counted):
 - Internally illuminated sign – maximum 12 watts per square foot of sign area.
 - Externally illuminated sign – maximum 2.3 watts per square foot of sign area.

- Alternate Lighting Source requires that the sign be illuminated only with one or more of the following:
 1. High pressure sodium.
 2. Pulse start or ceramic metal halide lamps served by a ballast that has a minimum efficiency of 88 percent.
 3. Pulse start metal halide lamps that are 320 watts or smaller, are not 250 W or 175 W lamps, and are served by a ballast that has a minimum efficiency of 80 percent.
 4. Neon or cold cathode lamps with transformer or power supply efficiency greater than or equal to the following:
 - a. A minimum efficiency of 75 percent when the transformer or power supply rated output current is less than 50 mA, or
 - b. A minimum efficiency of 68 percent when the transformer or power supply rated output current is 50 mA or greater.
 5. Fluorescent lamps with a minimum color rendering index (CRI) of 80.
 6. Light emitting diodes (LEDs) with a power supply having an efficiency of 80 percent or greater.
 - a. Exception: Single voltage external power supplies that are designed to convert 120 volt AC input into lower voltage DC or AC output, and have a nameplate output power less than or equal to 250 watts, shall comply with the applicable requirements of the Appliance Efficiency Regulations (Title 20).
 7. Compact fluorescent lamps that do not contain a medium base socket.
 8. Electronic ballasts with a fundamental output frequency not less than 20 kHz.
 - Exceptions to the above:
 1. Unfiltered incandescent lamps that are not part of an electronic message center (EMC), an internally illuminated sign, or an externally illuminated sign.
 2. Exit signs. Exit signs shall meet the requirements of the Appliance Efficiency Regulations.
 3. Traffic signs. Traffic signs shall meet the requirements of the Appliance Efficiency Regulations.
- All mandatory measures must be listed on the plans.

□ **ENERGY FORMS:**

- Required forms may be accessed through this link: <http://energydesignresources.com/resources/software-tools/t24-forms-ace.aspx>

□ When signs identify permanent rooms and spaces of a building, they shall comply with Sections 11B-703.1, 11B-703.2, 11B-703.3 and 11B-703.5 as following: [CBC 11B-216.2]

- **Finish and contrast.** Characters, symbols and their background shall have a non glare finish. Characters and symbols shall contrast with their background, either light on a dark background or dark on a light background. (CBC 11B-703.5.1)
- **Proportions.** Characters on signs shall be selected from fonts that have a width-to-height ratio of between 3:5 (60 percent) and 1: 1 (100 percent) measured by the width of the uppercase letter "O" and height of the uppercase letter "I", and a stroke width-to-height ratio of between 1:5 (20 percent) and 1:10 (10 percent) measured by the width and height of the uppercase letter "I" (CBC 11B-703.2.4).
- **Character Height.** Minimum character height shall comply with Table 11B-703.5.5. The minimum height is measured using an uppercase letter "I". Lowercase characters are permitted. Viewing distance shall be measured as the horizontal distance between the character and an obstruction preventing further approach towards the sign. (CBC 11B-703.5.5)

- **Raised characters and pictorial symbol signs.** When raised characters are required or when pictorial symbols (pictograms) are used on such signs, they shall conform to the following requirements: (CBC 11B-703.2 & CBC 11B-703.6)
 - **Character type.** Characters on signs shall be raised 1/32 inch minimum and shall be sans serif uppercase characters. Characters shall not be italic, oblique, script, highly decorative, or of other unusual forms. (CBC11B-703.2.1, CBC11B-703.2.2 & CBC11B-703.2.3)
 - **Character height.** Raised characters shall be a minimum of 5/8 inch and a maximum of 2 inches high. (CBC11B-703.2.5)
 - **Pictorial symbol signs (pictograms).** Pictorial symbol signs (pictograms) shall be accompanied by the verbal description placed directly below the pictogram. The outside dimension of the pictogram field shall be a minimum of 6 inches in height. Characters and Braille shall not be located in the pictogram field. (CBC11B-703.6.1 and CBC11B-703.6.3)
 - **Character placement.** Characters and Braille shall be in a horizontal format. Braille shall be placed a minimum of 3/8 inch and a maximum of 1/2 inch directly below the tactile characters; flush left or centered. When tactile text is multi-lined, all Braille shall be placed together below all lines of tactile text. (CBC11B-703.2.9 and CBC11B-703.3.2)
 - **Braille.** Contracted Grade 2 Braille shall be used wherever Braille is required in other portions of these standards. Dots shall be 1/10 inch on center in each cell with 2/10 inch space between cells, measured from the second column of dots in the first cell to the first column of dots in the second cell. Dots shall be raised a minimum of 1/40 inch above the background. Braille dots shall be domed or rounded. (CBC11B-703.3.3)
 - **Mounting location and height.** Where permanent identification signs are provided for rooms and spaces, Braille signs shall be installed on the wall adjacent to the latch side of the door. When a tactile sign is provided at the double doors with one active leaf, the sign shall be located on the inactive leaf. Where there is no wall space on the latch side, including at double leaf doors, signs shall be placed on the nearest adjacent wall, preferably on the right. (CBC 11B-703.4.2)
 - Where permanent identification signage is provided for rooms and spaces Braille signs shall be located on the approach side of the door as one enters the room or space. Signs that identify exits shall be located on the approach side of the door as one exits the room or space.
 - Tactile characters on signs shall be located 48 inches minimum above the finish floor or ground surface, measured from the baseline of the lowest Braille cells and 60 inches maximum above the finish floor or ground surface, measured from the baseline of the highest line of raised characters. Mounting location shall be determined so that a person may approach within 3 inches of signage without encountering protruding objects or standing within the swing of a door. (CBC 11B-703.4.1)
- When signs direct to or give information about permanent rooms and functional spaces of a building, they shall comply with the following: [CBC 11B.216.3 and CBC 11B-703.5]
- **Finish and contrast.** Characters, symbols and their background shall have a non glare finish. Characters and symbols shall contrast with their background, either light on a dark background or dark on a light background. (CBC 11B-703.5.1)
 - **Proportions.** Characters on signs shall be selected from fonts where the width of the uppercase letter “O” is 60 percent minimum and 110 percent maximum of the height of the uppercase letter “I”. Stroke thickness of the uppercase letter “I” shall be 15 percent maximum of the height of the character. (CBC 11B-703.2.4 and CBC 11B-703.2.6).
 - **Character Height.** Minimum character height shall comply with Table 11B-703.5.5. Viewing distance shall be measured as the horizontal distance between the character and an obstruction preventing further approach towards the sign. Character height shall be based on the uppercase letter “I”. (CBC 11B-703.5.5)
- Refer to CBC Section 11B-703.7.2.6 for additional requirements applicable to sanitary facility signage.

3. INSPECTION PROCEDURES

- One final inspection is required for signs unless some of the work will be covered up and not accessible to the inspector. An additional inspection is required prior to any work is concealed. For each inspection, the Permit Card and the Approved Job Copy of the Drawings (if any) must be presented to the inspector. Permits expire 180 days after issuance or last inspection passed, whichever is the latest.

4. QUESTIONS:

- If you have any questions regarding your project contact the Building & Safety Department at (408) 586-3240.

2013 CALIFORNIA BUILDING CODE

INTERIOR MALL SIGNS.

402.6.4 Plastic signs. Plastic signs affixed to the storefront of any tenant space facing the mall shall be limited as specified in Sections 402.6.4.1 through 402.6.4.5

402.6.4.1 Area. Plastic signs shall not exceed 20 percent of the wall area facing the mall.

402.6.4.2 Height and width. Plastic signs shall not exceed a height of 36 inches, except that if the sign is vertical, the height shall not exceed 96 inches and the width shall not exceed 36 inches.

402.6.4.3 Location. Plastic signs shall be located a minimum distance of 18 inches from adjacent tenants.

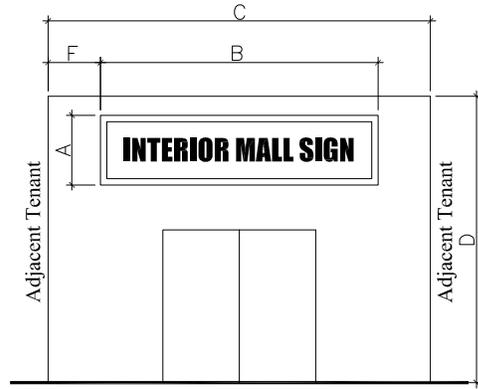
402.6.4.4 Plastics other than foam plastics. Plastics other than foam plastics used in signs shall be light-transmitting plastics complying with Section 2606.4 or shall have a self-ignition temperature of 650°F (343°C) or greater when tested in accordance with ASTM D 1929, and *flame spread index* not greater than 75 and *smoke-developed index* not greater than 450 when tested in the manner intended for use in accordance with ASTM E 84 or UL 723 or meet the acceptance criteria of Section 803.1.2.1 when tested in accordance with NFPA 286.

402.6.4.4.1 Encasement. Edges and backs of plastic signs in the mall shall be fully encased in metal.

402.6.4.5 Foam plastics. Foam plastics used in signs shall have flame-retardant characteristics such that the sign has a maximum heat-release rate of 150 kilowatts when tested in accordance with UL 1975 or when tested in accordance with NFPA 289 using the 20 kW ignition source, and the foam plastics shall have the physical characteristics specified in this section. Foam plastics used in signs installed in accordance with Section 402.6.4 shall not be required to comply with the flame spread and smoke-developed indices specified in Section 2603.3.

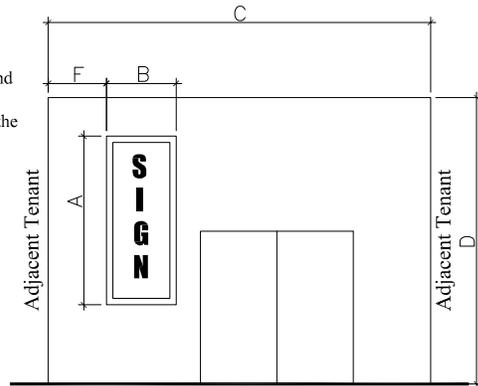
402.6.4.5.1 Density. The minimum density of foam plastics used in signs shall not be less than 20 pounds per cubic foot (pcf) (320 kg/m3).

402.6.4.5.2 Thickness. The thickness of foam plastic signs shall not be greater than 1/2 inch.



A = HORIZONTAL SIGN HEIGHT MAXIMUM 36"
 B = HORIZONTAL SIGN WIDTH
 C = STORE FRONT WALL WIDTH
 D = STORE FRONT WALL HEIGHT
 F = MINIMUM 18"

LAYOUT "A"
 HORIZONTAL SIGN



A = VERTICAL SIGN HEIGHT MAXIMUM 96"
 B = VERTICAL SIGN WIDTH MAXIMUM 36"
 C = STORE FRONT WALL WIDTH
 D = STORE FRONT WALL HEIGHT
 F = MINIMUM 18"

$A \times B < [(C \times D) \times 20] / 100$

LAYOUT "B"
 VERTICAL SIGN

REV.	DATE	BY:	SCALE: N.T.S
			DATE: OCT. 2014
			DRAWN BY: BK.

City of Milpitas
 Building & Safety Department
 INTERIOR MALL SIGNS.

SHEET
1
 OF 1 SHEETS