sec.5 Lighting

[A] Signage lighting

Signage can be lit with a variety of lights and fixtures, however lights should be selected to enhance the exterior appearance of the building and improve legibility of the sign. Linear lighting fixtures can be used for lighting up long narrow sections of wall sign. Goose neck lights can help create repetition and provide safety on large uninterrupted surfaces. Back-lit letters can provide a modern and bold illumination for signage.

Lamp types may vary, but color rendering should be in the traditional incandescent range of warm, consistent colors (2,000K-3,500K). Consistency among multiple properties in terms of warm color light can have a big impact on the nighttime character of a commercial corridor.

Avoid internally-lit plastic signage lighting. Lighting should only be lit from the exterior. For some storefronts, neon signs may be appropriate, however novelty fixtures (ex. Miller high-life, cigars, open, etc.) are discouraged.



Do use linear fixtures to light signs.



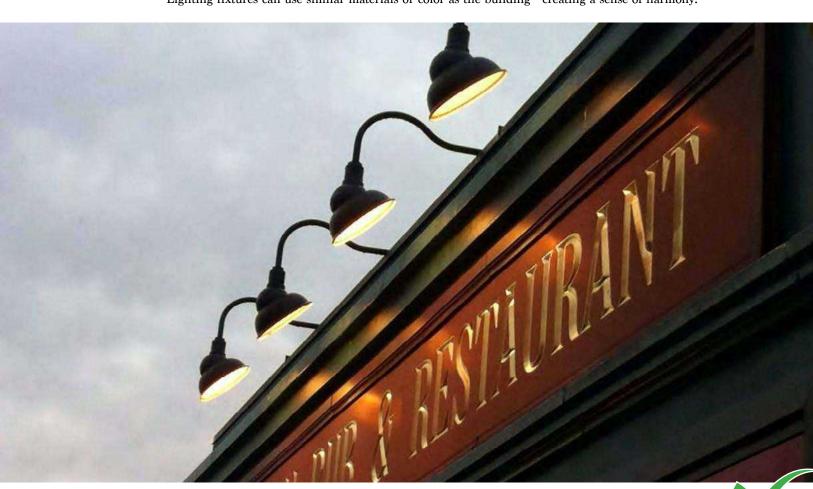
Do light up storefronts, window displays, entry vestibules, and signs at night for security and marketing.



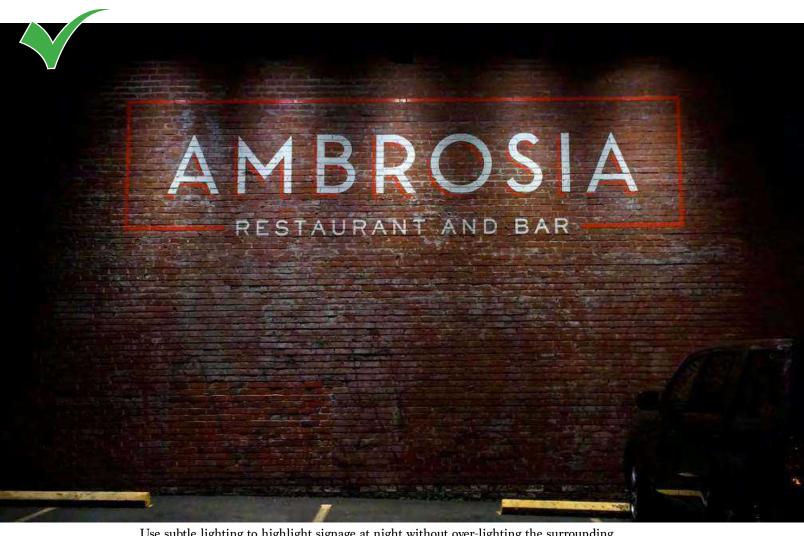
Avoid large internally lit surfaces.



Lighting fixtures can use similar materials or color as the building - creating a sense of harmony.



Ensure lighting fixtures provide an even spread of light onto the signboard.



Use subtle lighting to highlight signage at night without over-lighting the surrounding.



Use mounting arms to direct lights onto signage and avoid shining directly into the public right of way.



Neon is only allowed when restoring historic signs and should not be used for new signage.



Don't use lightbox style signage with interior fixtures.



 $\label{eq:signage} \mbox{Signage must utilize exterior lighting - such as this halo-lit sign} \\ \mbox{mounted to an existing masonry wall.}$



Internally lit lettering is discouraged.





Do not use exposed LED strips to avoid harsh, unfocused lighting conditions.

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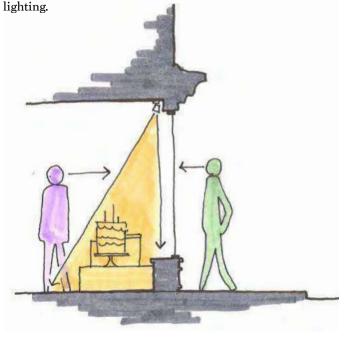
[B] Interior display lights

Interior storefront display lighting is an integral part of the entry experience of customers into a business - highlighting products and displays for people looking into the window as well as for shoppers already within. Good lighting has been shown to increase sales, and it helps to put your business in the best light possible.

Use interior display lighting for storefront windows and exterior entry lighting for security. A well-lit clear view in and out of a commercial space enhances safety, as well as providing visual interest during night time hours. Displays also act as product placement on main street, and a creative use of a display window can make a positive impact to the experience of pedestrians.

For both cost effectiveness and ease of reconfiguring, LED track lighting should be installed in interior display windows. Tracks should be continuous along the length of the storefront - mounted as closely as possible to the window as possible.

Lighting can be overwhelming for store owners, and the following guide will define some common lighting terms and help you to make more informed decisions about your



To avoid unnecessary glare conditions for shoppers in and outside, display lighting should always be aimed downwards and away from the window.

Lighting Color

Kelvin is a unit of measurement that refers to how "warm or cool" lighting is. In a retail setting, you want your lighting to be between **2,700K - 3,000K**

Color Rendering Index (CRI) refers to how true the colors of objects under a light will appear. This is important in retail as often items are selected for color or appearance. It's suggested to use bulbs with a CRI rating of 90 or greater.

Lighting output

For LED bulbs, **Lumens** is used to indicate the volume of light being emitted from a particular source. Before LEDs were common, watts were used to define the power output of lights. The following chart will help with any conversions:

100 watts = 1600 lumens (16-18w) 75 watts = 1100 lumens (13w) 60 watts = 800 lumens (9-10w) 40 watts = 450 lumns (6w)

Beam Spread

The size and shape of the light coming from a bulb is known as the "spread." It's typically expressed using an angle, or with descriptors such as "flood" or "spot." Similarly to increasing the flow rate on a garden hose, beam spread works in the same fashion. Depending on the distance of the light source from the object, different beam spreads may be desirable to highlight products or displays.

Style/Diameter

For commercial usage, PAR (Parabolic anondized reflector) styled lighting is the most appropriate. Typically, these lights have flat fronts - and domed or frosted lenses should be avoided. The numbers behind the PAR designation refer to the diameter of the lense. Bigger numbers have larger lenses.

High Ceilings: PAR30 -PAR38

Low Ceilings: PAR20 Close to products: MR16



MR16 LED

Great for close applications and illuminating individual products or areas.



PAR30 LED

Better for larger surface areas or displays requiring a large volume of light.



Gimbal Ring

Typically used for PAR30 or larger sized bulbs, these make great high ceiling lights for large display areas needing a high volume of light.



Flat back and cubed

These lights are optimized for MR16 style lights for individual product lighting. They often come with a small transformer either built into the lighting mount or at the rail.



Single Socket

Good for PAR30 - PAR20 bulbs, these tend to be somewhat less expensive and the bulb remains exposed. Good as ceiling lighting.



Flat and domed back cans

Also good for PAR30 - PAR20 bulbs, these cans hide the entire bulb and can provide a sleek and minimal appearance. Also good as ceiling lighting.



Wall Washers

Great for illuminating large areas like menu boards.

A TRANSPARENT, WELL ILLUMINATED STOREFRONT INVITES PEOPLE IN TO EXPLORE AND LOOK FOR PRODUCTS FROM THE INSIDE AND OUT!



Lighting in the 3000K range provides a warm, cozy glow when used during the evening.



Storefront displays should be dynamic - changing based on specials, sales, holidays, and seasons.



Interior track lighting can make dynamic display windows when illuminated during the evening hours.