Lighting Design for the Living Room

Layered levels of lighting and fixture placement go a long way toward giving this space a whole new look

BY NANCY MCCOY





Add a new layer of light. *In a typical living room (photo above), table lamps and small down lights along the perimeter provide adequate light for most activities. However, the room becomes a more social space (photo right) when small halogen lights concealed in the ceiling cove are turned on.*

People are drawn to light like moths to a flame. Happily, the results are more beneficial for us. Lighting is a great way to make a home's spaces inviting, especially when applied to underused parts of the house, such as the living room. By including a number of lighting options in the living room, you can create shifts in mood and ambience; one living room can be the location for the family's favorite spot to throw a party, to play a board game or to watch a late-night movie together.

Layered lighting gives you options

Like other rooms, living rooms benefit from layers of light: a combination of ambient, task, decorative and accent lighting. When a combination of layers is used, the room becomes more comfortable, useful and interesting. Primary light sources in the living room are usually incandescent and halogen bulbs; unlike the more energy-efficient fluorescent lamps, incandescents are more versatile and are easily dimmed to create different moods.

The first layer is ambient light, which fills the room from nondirectional sources. Commonly a byproduct of other light layers, ambient light is soft, comfortable and free of shadow. Daylight from windows, wall sconces, a torchiere up light, a few table lamps or perime-



ter cove lights (photo above) are all sources of ambient light. Controlled with a dimmer, ambient light can be bright enough to read by or soft enough to encourage quiet conversation.

The second layer is accent lighting, important to a living room. A concentrated source that illuminates one object or group of objects, this layer creates the drama in a room. Whether strong accent lighting or a softer wall wash (top photo, p. 88), direct light tends to make the room feel larger. Accent lighting can be used to highlight art above a fireplace, illuminate a display cabinet or highlight the texture of an interior stone wall (drawing p. 87).

Keep the whole room in mind when choosing lights for any accent application; you don't want the big lights to overcome the smaller ones. Here, smaller is smarter. For ceiling heights in the 8-ft. and 9-ft. range, it's better to keep the diameter of the down lights to a minimum; 5-in. dia. recessed down lights are the preferred size. If you use low-voltage accent fixtures, use a 4-in. or 5-in. diameter, and shy away from 6-in. cans, which are too big and register in peripheral vision.

Task lighting, the third level, should be designed with particular activities in mind. Table lamps near a chair or recessed down lights grouped over a game table (top photo, p. 89) can provide adequate light. Remember

LAMPS AND FIXTURES: BASIC INGREDIENTS OF LAYERED LIGHT

Incandescent lamps (light bulbs) are available in four basic types: A-lamps, R-lamps, PAR-lamps and MR-lamps. The letter designation refers to the shape of the lamp and is usually followed by a number, which indicates its size in ⅛-in. increments. For example, an A19 lamp has a diameter of 2⅜ in.

A-LAMP



The A-lamp has the familiar shape associated with the words *light bulb*. A-lamps don't have a reflector and distribute uniform light in a general sphere.

R-LAMP



R-lamps have reflectors that cast a wide-pattern beam suited for a washing or grazing application.

PAR-LAMP



PAR (parabolic aluminized reflector) halogen lamps offer an intensified beam that bounces off the parabolic reflector and moves through the glass face.

MR-LAMP



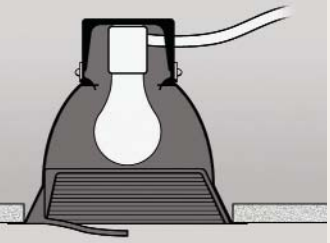
The MR (multifaceted reflector) halogen lamp is typically used in low-voltage applications. Like larger PAR-lamps, MRs are best used in accent lighting.

Because of their specialized reflectors and various glass configurations, both PAR and MR lamps are available in four beam spreads: narrow spot, spot, narrow flood and flood. —*N. M.*

Three basic cans

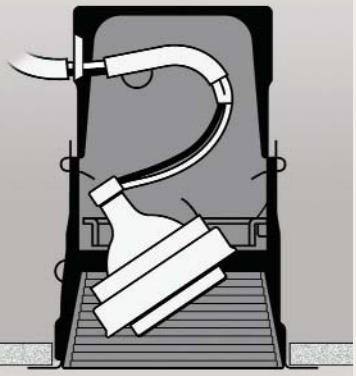
Fixed down light

Available in diameters that range from 3½ in. to 7½ in., down lights can accept trims and lamps to address general lighting needs.



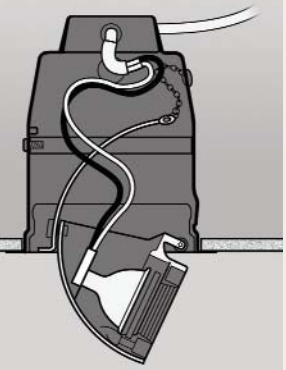
Adjustable down light

Typically adjustable to a maximum of 30° from vertical, these fixtures allow beams to be carefully aimed for accurate accent, wall-washing or grazing applications.



Elbow down light

A specialized fixture used with MR-lamps, the elbow can be adjusted to about 70° from vertical. They are most useful when installed in angled ceilings.



Trim options

Down lights are supplied with various trim options that affect the characteristics of the light. Reflectors and baffles control the reflective quality of the light source, while other trims direct or shade the light source.

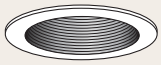
Slot aperture
Adjustable, small, concentrated beam.



Eyelid
Reduces glare; spot-lighting or wall-washing.



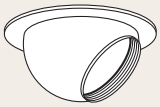
Black step baffle
Absorbs stray light at the ceiling.



Gold specular
Adds warmth to light.

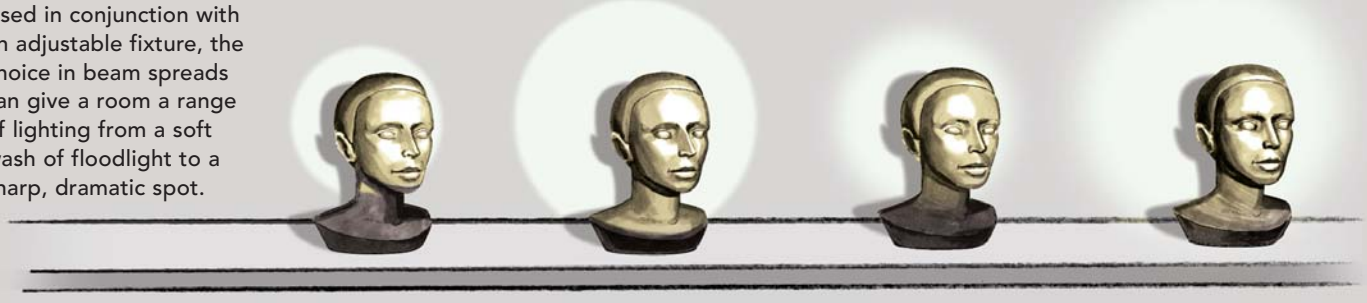


Eyeball
Used with MR/PAR spots, adjustable to 45°.



Beam-spread choices allow flexible lighting

Used in conjunction with an adjustable fixture, the choice in beam spreads can give a room a range of lighting from a soft wash of floodlight to a sharp, dramatic spot.



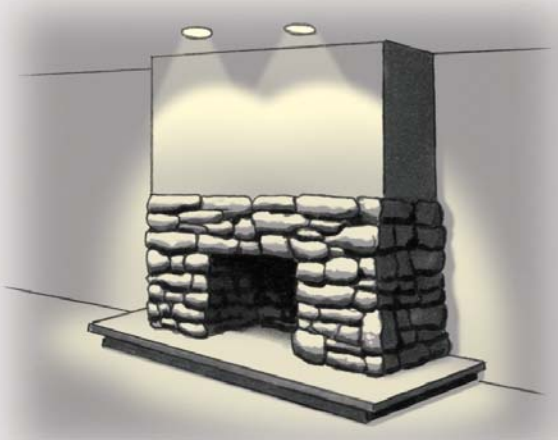
Narrow spot | Spot | Narrow flood | Flood

Drawings: Mark Hannon

VARY THE MIX OF FIXTURE AND PLACEMENT TO SUIT THE ROOM

Highlight a fireplace's stonework

Adjustable down lights with black step baffles use MR- or PAR-lamps to graze the surface.





3½-in. to 5-in. adjustable down light



MR/PAR



Black step baffle

Art on display

An elbow fixture with an MR16 lamp can effectively light an area from mantel to ceiling with a concentrated beam.





Elbow fixture



MR16

Watching television

Perimeter down lights provide dimmable ambient light necessary for comfortable viewing.





Adjustable down light



MR16



Slot aperture

Entertaining a crowd

Down lights spaced across the ceiling illuminate the room with bright, even light. Gold trims highlight the warm color of the woodwork and cabinetry.





5-in. down light



PAR30/A19



Gold specular

Wall-washing on a large scale

To light the wall effectively from floor to ceiling, down lights with broader distribution lamps are spaced evenly in the ceiling. Eyelids help to conceal the fixture.





Adjustable down light



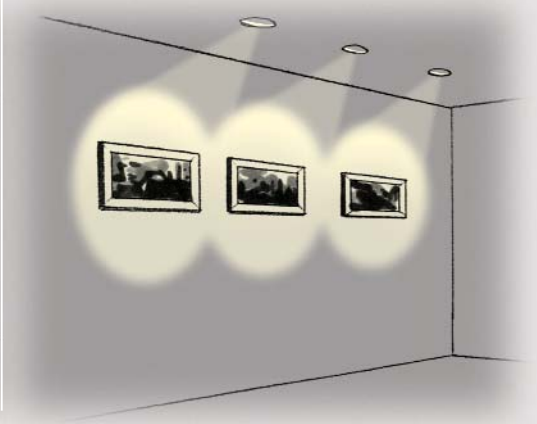
R30



Eyelid

Narrowing the focus

To create a scalloped pattern of light across a narrower band of wall, lamps with a concentrated beam are used. Fixture placement and angle determine the amount of scalloping.





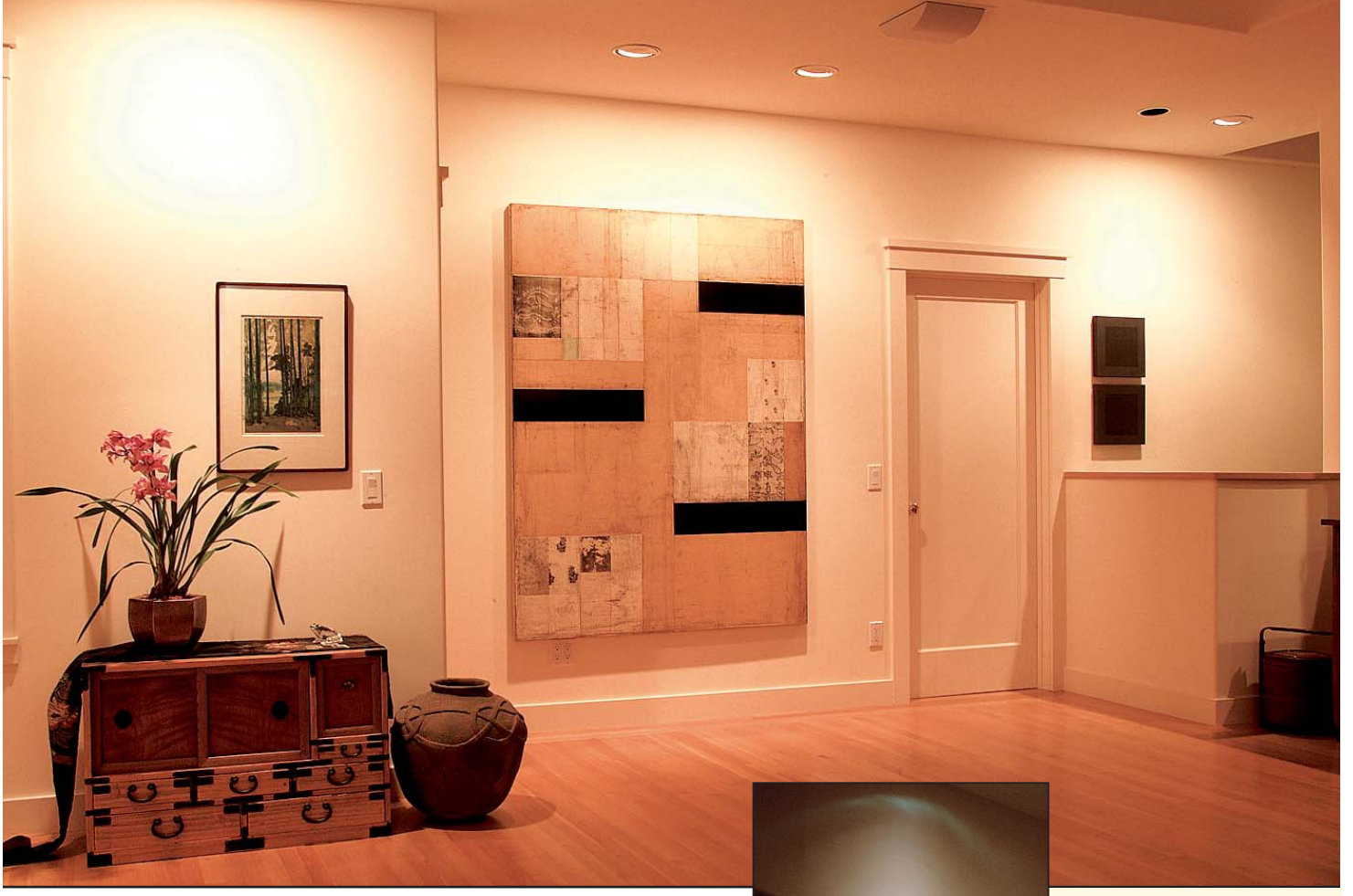
Adjustable down light



PAR30/spot MR16



Black step baffle





Illuminate art with a flood or a splash. *Washing a wall (photo above) from floor to ceiling not only puts art in a good light, it also makes the room feel bigger. A single spotlight (photo left) makes a more dramatic statement.*

that as people age, their eyes require more light to see, especially for reading.

The fourth level is decorative lighting; the fixture itself attracts attention and can be as simple as a single-candle brass wall sconce or as ornate as a crystal chandelier. These fixtures are often used with a dimmer and should not be used alone to light a room. Think of them as the jewelry, not the outfit.

Wall-washing: accent lighting on a large scale

Flooding a wall with down lights is called wall-washing. This technique can be used to illuminate a large piece of art or a group of photographs (photo above). Eyelid-style recessed down lights (sidebar p. 86) work well and are typically installed 30 in. from the wall and 30 in. apart. This 1:1 spacing ratio is important for even illumination across a wall. Wall-wash fixtures use A-lamp or R-lamps (sidebar p. 86); both distribute an even, soft light, the quality of light desired for wall-washing. No PAR lamps: They're too harsh.

Highlighting texture with grazing

If a brick wall or stone fireplace is the room's focal point, it should be grazed with light that illuminates the textured surface. Simple recessed down lights are installed 4 in. to 8 in. from the wall, spaced 12 in. to 24 in. apart for the width of the space to be lighted. Fixtures spaced 12 in. apart create shallow scallops at the top of the wall; 24-in. spacing makes deeper scallops. It's entirely a matter of preference.

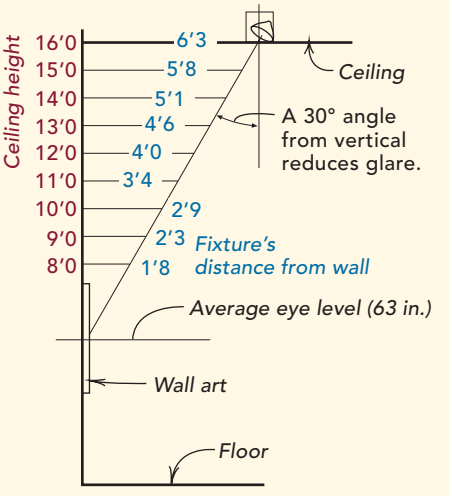
You also can use grazing to light a glossy material such as marble and avoid reflections of the light fixtures on the surface. Additionally, I use black baffles (sidebar p. 86) and deeply recessed lamps to avoid reflections.

Although a great decorative technique, grazing also can highlight a wall's imperfections, such as a poor taping job, so plan carefully before you install.

Displaying art in the best light

To light artwork effectively, the accent light should be brighter than the ambient and decorative layers. The best method is to use a spot lamp with a narrow beam spread, which creates the intensity to draw attention to the

Fixture locations for wall art



piece (photo facing page). Down-light fixtures that work in this situation include small slot apertures, eyelid or eyeball trims with low-voltage MR16 lamps or line-voltage (120v) 5-in. dia. fixtures with PAR30 lamps.

In this situation, fixture placement is critical because art is typically lighted squarely on center, usually not from above. As most adjustable down lights have a maximum tilt of 30° from vertical, the wall height of the art, the ceiling height and the fixture's angle determine the best fixture position (chart, facing page). Recessed eyeballs, elbow or track fixtures have a greater range of motion and can be used in more-demanding situations. Track- or cable-lighting systems (bottom photo) follow the same rules of thumb for mounting distances. A scale drawing or a job-site mock-up can guarantee the desired results.

Don't turn off the light when watching television at night

It's not a good idea to watch television in a dark room: Your eyes tire as they adjust between the brightness of the TV and the darkness of the room. Instead, raise the ambient or accent layer in the room to create a little brightness (photo center right). A table lamp next to your seat can provide the task lighting needed to operate the remote control.

An entertainment center requires its own lighting. Usually, cabinetry should be lighted from above by a grazing down light such as an MR16, PAR20 or PAR30 that's centered on closed doors or shelving. Grazing is better than wall-washing because it cuts down on glare from shiny finishes. It's a good idea to have these fixtures on a separate switch so that they can be turned off when someone is watching TV. They also can be turned on as task lights when you're programming the VCR or loading a DVD. □

Nancy McCoy is a lighting designer in Mill Valley, CA. Photos by Charles Bickford, except where noted.

LIGHTING OPTIONS CREATE AMBIENCE



You have to see your opponent's eyes. *Fitted with gold specular trims, 5-in. dia. down lights provide good task lighting over the coffee table as well as ambient light throughout the room; A19 or PAR30 lamps give a wide dispersion of light.*



Couch potatoes need light, too. *To minimize eye strain, it's a good idea to raise the ambient-light level so that the television isn't the only source of light. Small down lights grazing the cabinet doors serve as task lights for the entertainment center.*



Newer designs coming down the track. *In some renovations where it's difficult to retrofit recessed down lights, track lights make a good substitution. Recently introduced, flexible-cable track lights allow greater choice in fixture placement.*

WEB SOURCES OF LIGHTING INFORMATION

LIGHTSEARCH
WWW.LIGHTSEARCH.COM
Search engine for manufacturer and product links, many of which include online catalogs and design info.

LIGHTING RESEARCH CENTER
WWW.LRC.RPI.EDU
Based at Rensselaer Polytechnic Institute, this site offers design ideas and information about new technology.

THE ENERGY STAR PROGRAM
WWW.ENERGYSTAR.GOV
Energy-resource awareness, sponsored by the U. S. Department of Energy.

Bottom photo this page: Muffy Kibbey