

Dining Rooms

These designs illustrate areas of the home containing a table used primarily for eating, although other tasks such as food preparation and doing homework may also be done at these tables. A dining room is often a separate room; a dinette may be part of a kitchen area or a separate alcove. Use these designs for any area of the home used for dining.

Where possible, locate the table near a window to take advantage of daylighting. The most important function in dining rooms is seeing what is on the table and the people around it, so supplement ambient light with a luminaire over or near the table. Consider using the wall washing technique if the table is against a wall and the wall is a light color. In small rooms, a single luminaire over the table often can provide task lighting for the table as well as ambient lighting. Use dimming where the table is used for different tasks such as dining and homework.

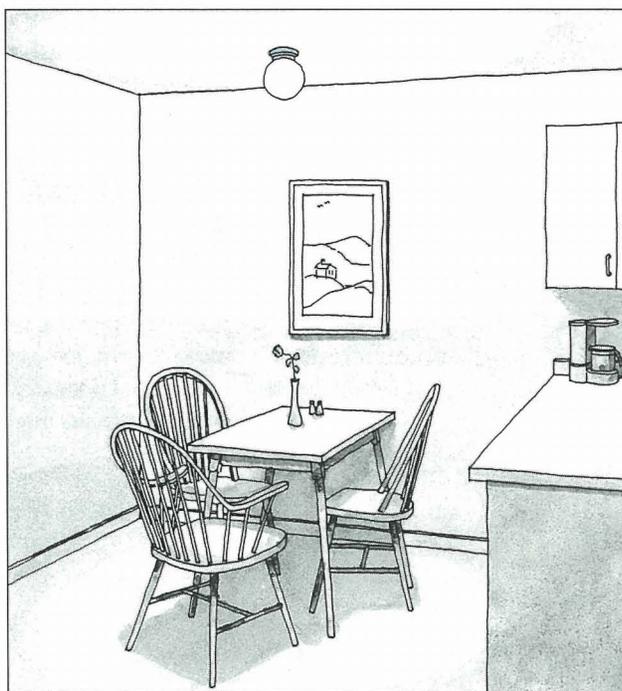
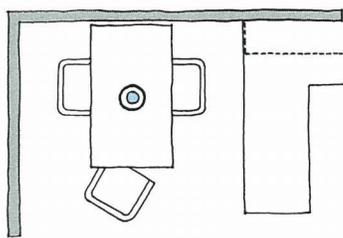
Small Dinette

Typical

One 100-watt incandescent A-lamp in a ceiling-mounted diffuser provides ambient lighting. The control is a wall-mounted switch.

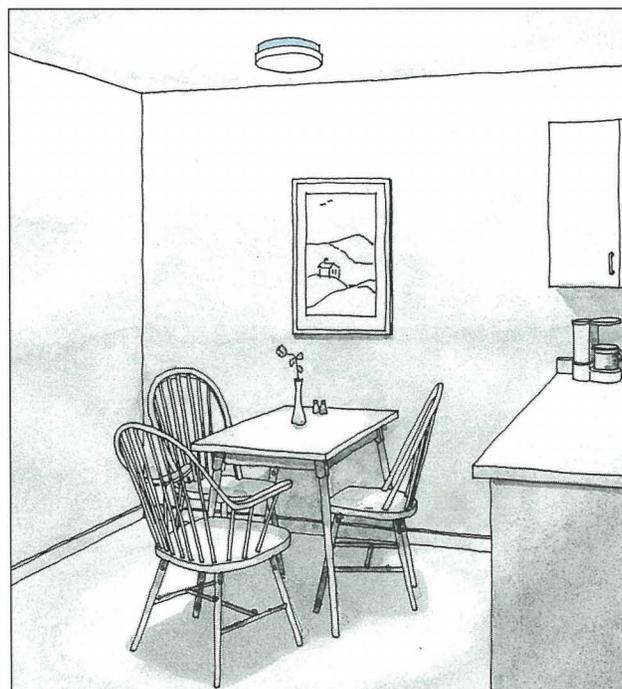
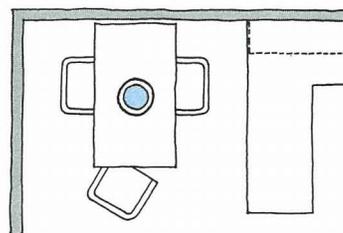
Replace lamps

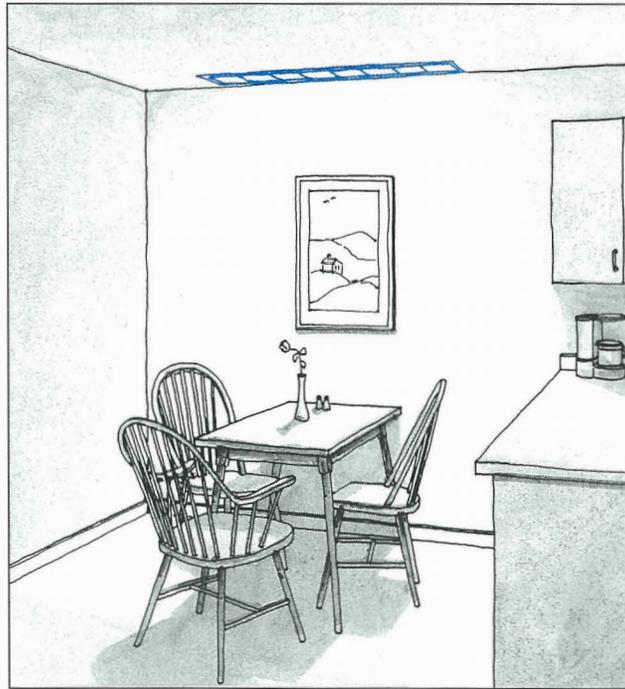
If a lower light output is acceptable, replace the A-lamp with a 75-watt halogen A-lamp.



Replace luminaires

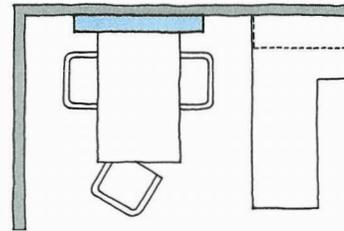
Install a simple ceiling-mounted diffuser containing a magnetically ballasted 32-watt, 12-inch circline RE730 fluorescent lamp controlled by a wall-mounted switch. Optionally, consider a more sophisticated luminaire that is suspended close to the ceiling and offers better control of glare.





Remodel or new construction

A soffit provides ambient lighting with light output equal to or higher than the typical design. The soffit contains one 32-watt, 4-foot T8 RE830 linear fluorescent lamp with one magnetic ballast, controlled by a wall-mounted switch.



Note that this design drastically changes the distribution of light in the room; the light is reflected off the wall and ceiling rather than being directed down onto the center of the table. The walls must be painted a light color to ensure high reflectance.

Annual Operating Cost at \$0.10 per kWh



For all of the lamps, assume 3 hours of use per day and 2 hours per start.

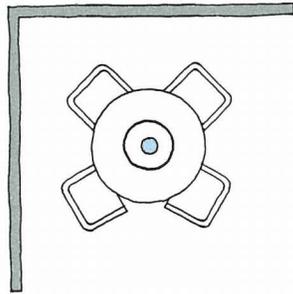
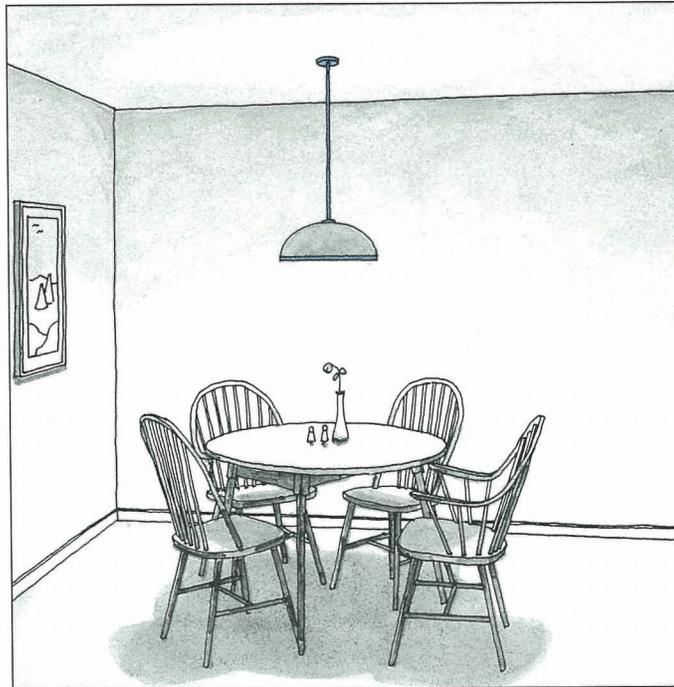
Medium Dinette

Typical

A 75-watt incandescent A-lamp in the suspended downlight provides both ambient lighting and lighting for the table. A wall-mounted switch controls the luminaire.

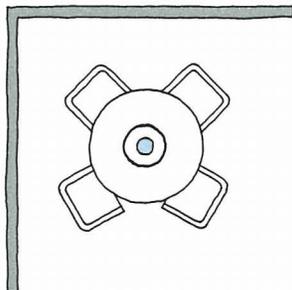
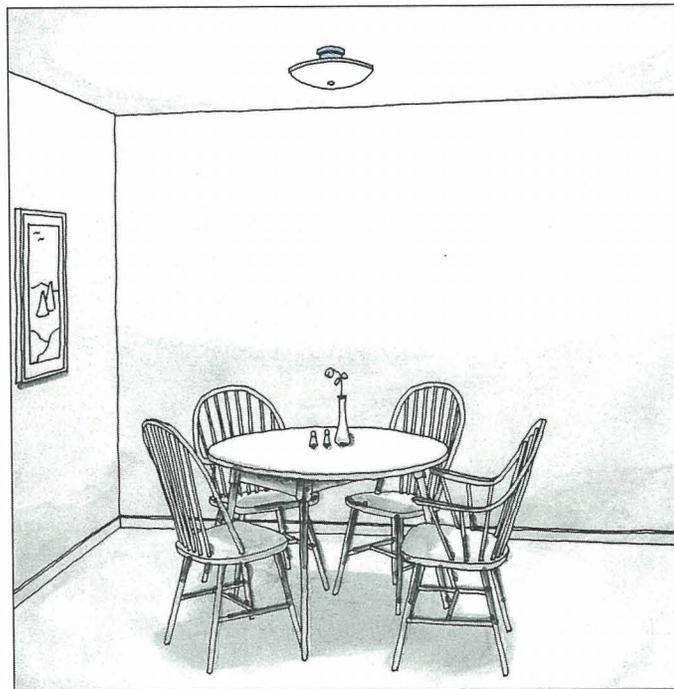
Replace lamps

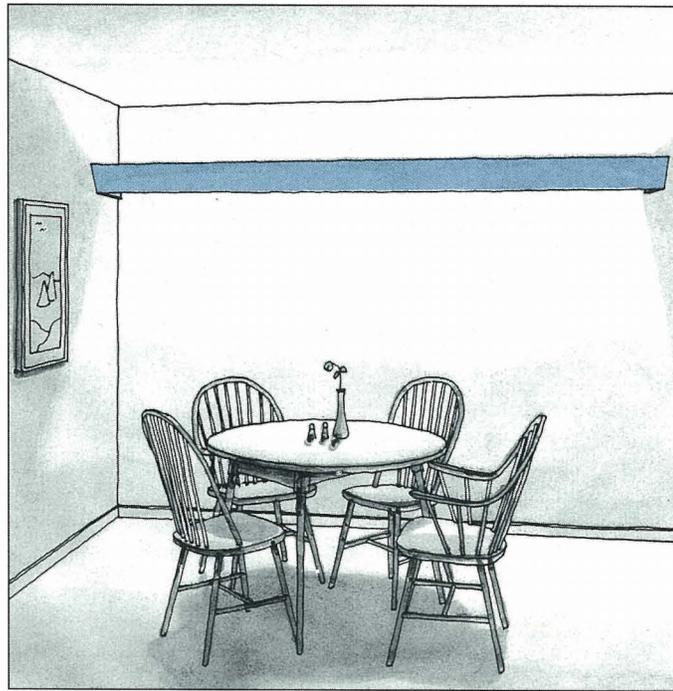
If a slightly lower light output is acceptable, replace the A-lamp with either a 60-watt halogen A-lamp or with an electronically ballasted 18-watt globe screwbase compact fluorescent lamp. For the latter option, remove any diffusing lens or globe from the luminaire.



Replace luminaires

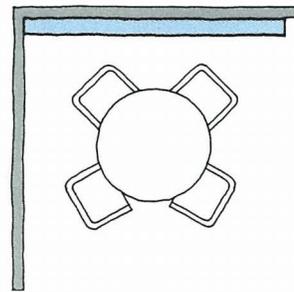
Replace the existing luminaire with a ceiling-mounted diffuser containing two 13-watt compact fluorescent twin-tube lamps and one magnetic ballast. Retain the wall-mounted switch.



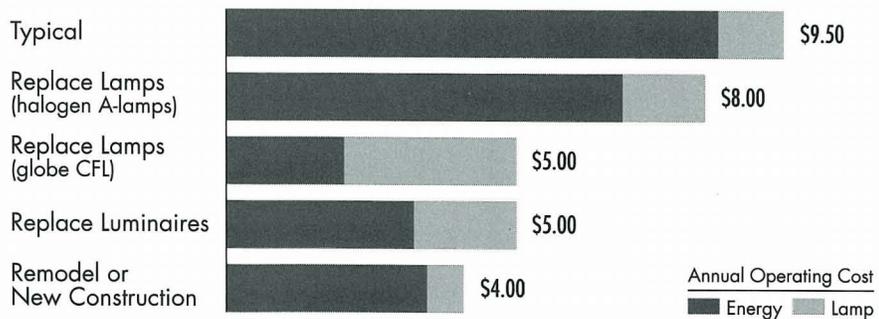


Remodel or new construction

Install a valance for both wall washing and ambient lighting. This design offers greater light output because the valance contains two 32-watt, 4-foot T8 RE730 linear fluorescent lamps with one electronic ballast. The luminaire is controlled by a wall-mounted switch.



Annual Operating Cost at \$0.10 per kWh



CFL = compact fluorescent lamp
For all of the lamps, assume 3 hours of use per day and 2 hours per start.

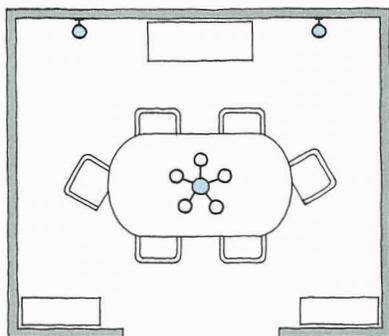
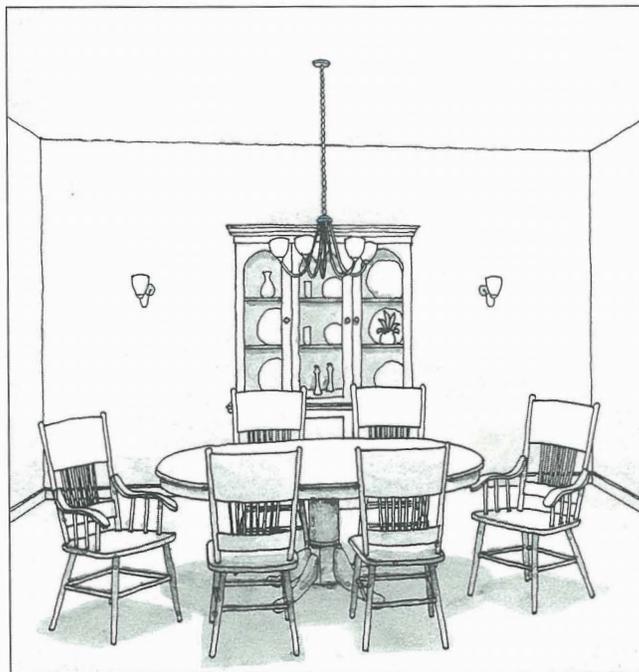
Dining Room

Typical

A chandelier containing five 60-watt incandescent A-lamps illuminates the table and provides ambient lighting. It is controlled by a wall-mounted switch, as are two sconces that also provide ambient lighting. Each sconce also contains one 60-watt incandescent A-lamp.

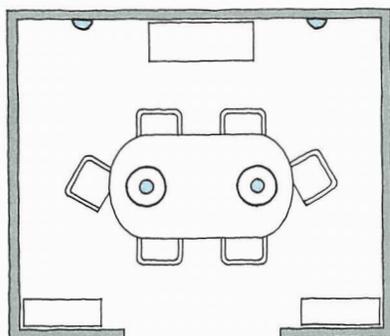
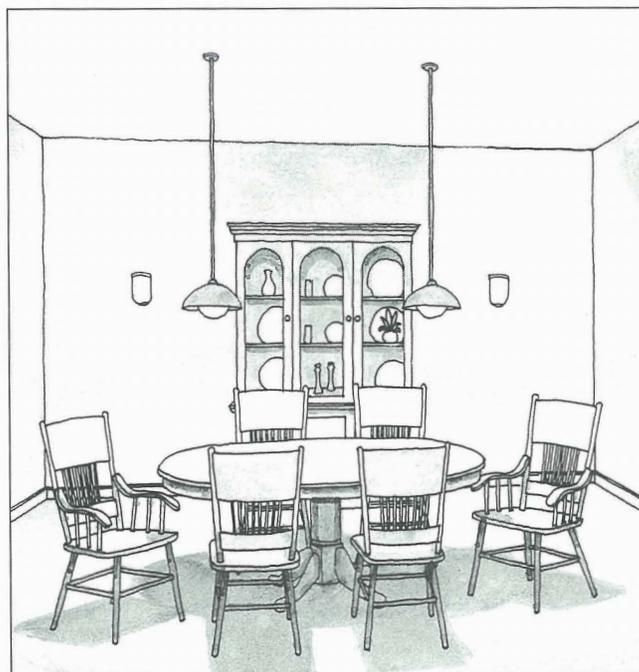
Replace lamps

Replace the A-lamps with 52-watt halogen A-lamps. Consider installing a dimmer to vary the light output.



Remodel or new construction

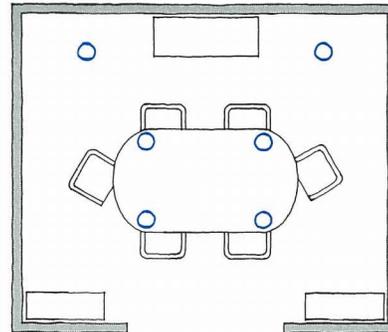
If lower light output is acceptable, install sconces that each contain one 13-watt compact fluorescent twin-tube lamp and one magnetic ballast. Replace the chandelier with two suspended downlights, each containing two 13-watt compact fluorescent twin-tube lamps and one magnetic ballast. Two luminaires are needed to provide even light distribution on the table. One wall-mounted switch controls both suspended luminaires; another switch controls the sconces.





Remodel or new construction

Replace the sconces with two recessed accent luminaires, each containing one 50-watt halogen PAR30 lamp. Replace the chandelier with four recessed downlights with louvers to control glare; each downlight contains two 13-watt compact fluorescent twin-tube lamps and one magnetic ballast. Separate wall-mounted switches control the downlights and the recessed accent luminaires.



Annual Operating Cost at \$0.10 per kWh



* Sconces and two suspended luminaires ** PAR30, compact fluorescent twin-tube
 For the lamps in the sconces and recessed accent luminaires, assume 1 hour of use per day and 1 hour per start. For the lamps in the chandelier, the suspended luminaires, and the recessed luminaires over the table, assume 3 hours of use per day and 2 hours per start.