

Office Interior Design: Best Practices

With the renewed emphasis on the connection between productivity and the availability of daylight and views¹, architects are designing office buildings with high window-to-wall ratios. Unless the interior layout of the building is appropriately designed to properly utilize the daylight and views, however, the increased productivity from the windows can be lost.

This document discusses four best management practices² for successful interior furniture layout in offices. These practices can help to maximize the impact of daylight and views and increase occupant productivity and satisfaction.



With desks perpendicular to the windows, the sun does not cause reflected glare on computer screens or direct glare into the occupants' eyes²

1. Workstations should be positioned perpendicular to windows

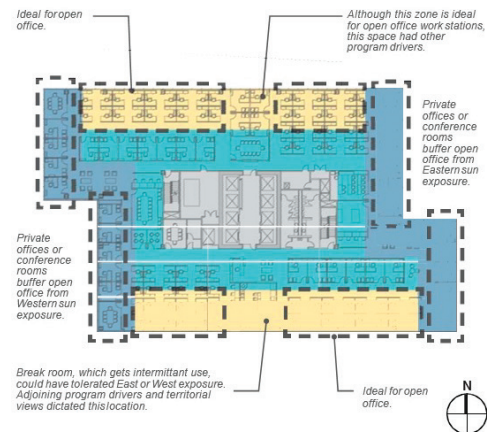
The optimal layout for views, daylight, and glare control is when workstations are positioned perpendicular to the windows. This minimizes the risk of the sun making computer monitors difficult to read due to either sunlight falling on the screen or due to high contrast between the monitor and a window behind it. It also reduces the potential for direct glare, which in some cases can cause safety and health issues when doing precision work³.



This open office floor plan has desks perpendicular to window wall to maximize occupant comfort and prevent glare²

2. Open offices should be zoned based on orientation

Glare is typically highest in the early morning and early evening when the sun is low in the sky⁴. In addition, open offices are typically occupied continuously for longer periods of time than closed offices. Where possible, zone open offices in the north and south perimeter areas to prevent excessive glare for occupants.



Best office space zoning based on orientation²

3. Appropriate materials and colors should be used to finish spaces

Daylighting and indirect lighting fixtures benefit from lightly colored interior surfaces that reflect light. An NREL report⁵ on high performance buildings recommends eliminating unfinished wood surfaces, rough surfaces, and exposed ductwork. The best daylighting results were seen in spaces with light-colored interiors, smooth surfaces, and finished ceilings. Cubicle walls, furniture, and carpeting should also have light colors and highly reflective surfaces. For light shelf finishes, it is recommended to use standard white paint or clear anodized finishes.



This high performance interior is designed to limit direct sun only to the transition/circulation space. Note the LRVs of the ceiling, walls and work surfaces - which help achieve maximum energy efficiency.

IA New York, Design by IA Interior Architects
Image courtesy of Adrian Wilson

4. Workstation panels should be appropriately designed

Choose workstation panels that are 42 inches or shorter, and provide panels that are parallel to the direction of the daylight distribution to ensure the maintenance of views. If taller panels are required for privacy or to create a sense of enclosure, orient these panels perpendicular to the perimeter glazing. 65 inch tall panels that are perpendicular to the direction of daylight distribution can enable privacy and allow for ample storage without compromising views or creating dark shadows.

¹Integrated Energy Systems: Productivity and Building Science". Report prepared for the California Energy Commission Public Interest Energy Research Program by the New Building Institute Inc., October 2003

²<http://www.advancedbuildings.net/files/advancebuildings/DaylightingGuideOfficeInteriors.pdf>

³<https://www.wbdg.org/resources/daylighting>

⁴<http://www.fsec.ucf.edu/en/consumer/buildings/homes/windows/shading.htm>

⁵<https://www.wbdg.org/resources/daylighting>