WBDG
WHOLE BUILDING DESIGN GUIDE

a program of the
National Institute of Building Sciences

(/index.php)

Office
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OVERVIEW

The Office space type refers to a variety of spaces including: meeting spaces integrated into the office environment, reception, office support spaces such as work rooms, storage rooms, file rooms, mail rooms, copier areas, service units/coffee bar, and coat storage integrated into the office environment, and telephone and communications equipment rooms located in tenant suites containing tenant equipment.

Spaces and features that may be classified as a separate space type or covered as a special feature include:

- Millwork other than service unit/coffee bar and coat storage
- Meeting spaces and conference rooms that include special lighting systems, acoustical treatment, moveable partitions, millwork, or A/V systems
- Secure storage, strong rooms, vaults, and hardened partitions located within the office suite
- Large filing, library, or storage areas with concentrated floor loads
- Enclosed spaces requiring acoustical separation higher than 40 STC, partitions to structure with acoustical insulation, and ductwork sound baffling
- Specialized window treatments (blackout shades, plantation shutters, motorized fabric draperies, etc.), interior windows, glass block partitions, and glazed doors
- Humidity, pathogenic, or hypoallergenic air treatment systems
- Upgrade or changes to standard items such as plaster or vaulted ceilings, specialty lighting, or upgraded ceiling tiles
- Private toilets, elevators, or staircases

Office space plans can be arranged in several scenarios, including: 100% closed office (fully closed), 80%-20% (open), 20%-80% (closed), and 100% open office (fully open). See also WBDG Office Building(office.php).

SPACE ATTRIBUTES

Over 50 percent of workers in the U.S. spend the workday in office buildings and spaces, and employers today are increasingly bearing the responsibility of providing a quality workspace. Thus the Office space type is typically a flexible(design_change.php) environment that integrates technology, comfort and safety, and energy efficiency to provide a productive, cost-effective(cost_effective.php), and aesthetically pleasing(aesthetics.php) working environment. Typical features of office space types include the list of applicable design objectives elements as outlined below. For a complete list and definitions of the design objectives within the context of whole building design, click on the titles below.

Functional / Operational(func_oper.php)
- *Integrated Technology:* Begin the design process with a thorough understanding of the technological requirements of the space, including anticipated future needs.
- *Occupancy:* Office space types fall into the B2 occupancy classification, with sprinklered construction. The GSA acoustical class is C1 for enclosed offices and Class C2 for open offices.

Productive(productive.php)
- *Flexibility:* The office space type is durable and adaptable, and will typically include features such as a raised floor system for the distribution of critical services (power, voice, data, and HVAC) and mobile workstations to accommodate changes in employee, equipment, and storage needs over time.

Secure / Safe(secure_safe.php)

- *Comfort and Safety:* The health(promote_health.php), safety(ensure_health.php), and comfort(provide_comfort.php) of employees is of paramount concern to employers. For this reason, the office space type should be designed with increased fresh air ventilation, the specification of non-toxic and low-polluting materials and indoor air quality monitoring. Non-quantifiable benefits such as access to windows and view, and opportunities for interaction should also be taken into account.

Sustainable(sustainable.php)

- *Energy Efficiency:* As energy costs increase with higher reliance on technology, strategies such as the specification of high-efficiency lighting and lighting controls; the application of daylighting; the use of occupancy sensors; and the installation of high-efficiency HVAC equipment should be considered. For more information, see Optimize Energy Use(minimize_consumption.php).

Example Programs

Two sample building programs and plans are provided, for 'fully closed' and 'fully open' offices. They include minor file and library reference areas, conference space, break space with service unit/coffee bar, and reception area.

"Fully" Closed Office

Description Tenant Occupiable Areas	Qty.	SF Each	Space Req'd.	Sum Actual SF	Tenant Usable Factor	Tenant USF
Office Spaces				12,170		
Enclosed Executive Offices	2	225	450			
Enclosed Large Offices	52	150	7,800			
Enclosed Small Offices	26	120	3,120			
Open Large Office	0	140	0			
Open Small Office	0	100	0			
Open Workstations	9	80	720			
Reception Desk	1	80	80			
Support Spaces				3,134		
Reception Seating	1	200	200			
"Unimproved" Conference Large	1	600	600			
Conference Small	3	150	450			
Informal Breakout Centers	0	80	0			
Printer/Copier/Fax Center	3	60	180			
Break Room Service Unit	1	340	340			
Information Reference Centers	2	150	300			
Supply Room	4	40	160			
Work Room	1	200	200			
File Area	2	144	288			
Documents Room	1	240	240			

Server Room	1	176	176			
Tenant Suite			15,304	15,304	1.35	20,592

"Fully" Open Office

Description Tenant Occupiable Areas	Qty.	SF Each	Space Req'd.	Sum Actual SF	Tenant Usable Factor	Tenant USF
Office Spaces				10,600		
Enclosed Executive Offices	0	180	0			
Enclosed Large Offices	0	150	0			
Enclosed Small Offices	0	120	0			
Open Large Office	4	180	720			
Open Small Office	15	120	1,800			
Open Workstations	100	80	8,000			
Reception Desk	1	80	80			
Support Spaces	30%			4,614		
Reception Seating	1	120	120			
"Unimproved" Conference Large	1	600	600			
Conference Small	5	150	750			
Informal Breakout Centers	12	80	960			
Printer/Copier/Fax Center	3	80	240			
Break Room Service Unit	1	340	340			
Information Reference Centers	3	180	540			
Supply Center	4	40	160			
Work Center	1	200	200			
File Area	2	144	288			
Documents Room	1	240	240			
Server Room	1	176	176			
Tenant Suite			15,214	15,214	1.35	20,572

Example Plans

The following are representative of typical tenant plans for enclosed and open offices.