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Electrical and Data in Office Panels

One of the major benefits of a sophisticated office panel system is the ability to bring electrical power, telephone lines and data communications to every workstation in a convenient, organized and safe manner. The days of running telephone wires and extension cords along the floor are over forever. Outlined below are some of the capabilities of office panels—select the one's that meet the needs of each department in your office and you are on your way to having furniture power.

Office Panel Electrical & Data Cable Pathways

Raceway – The major feature used to carry electrical and data cables in most office panels is the raceway. Usually from 4" to 6" high, this runs along the bottom, middle or sometimes top of a panel. Raceways are usually rated with the quantity of cables that they can accommodate.

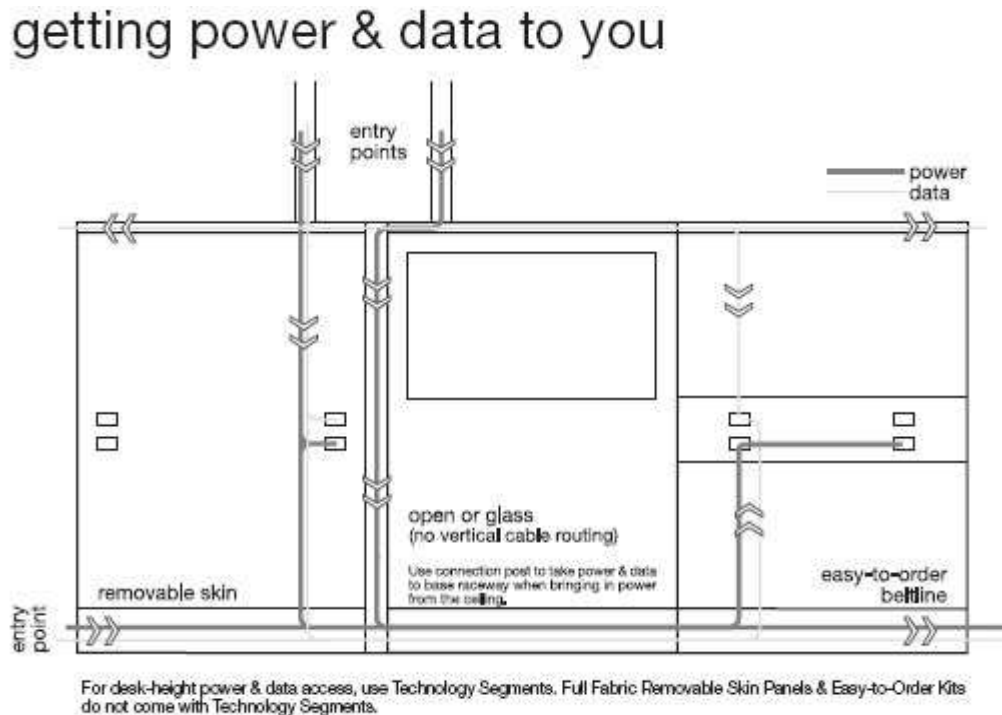
Deskheight Access – Sometimes you might want access to electrical outlets or data ports at the level of the worksurface to allow for plugging in items without going under the desk. This is especially handy for plugging in phone chargers, or for workers temporarily occupying an office and attaching their laptop power cord and network cable. Some panels will allow you to run the electrical system to the panel above the deskheight to install an electrical outlet and data jacks. As an alternative, accessories are available to attach to your worksurface that go through the worksurface and plug in to the raceway at the bottom of the office panel..

Top channel – Some office panels have a top channel to run data and electrical cables. Some organizations require running data cables in a different part of the panel than the electrical (at the bottom). Often it is easier to run cables and access the top channel. By removing the top caps you can achieve "lay in" cabling without having to thread cables. This allows for easy reconfiguration or rerouting of data cables.

Open bottom – Sometimes you don't need to run electrical cables at all, instead you can order a panel with the open bottom (no material below 30") so that you can access the wall outlets for electrical power, and also heat and air conditioning. .

Connect from the Office Panel to the Building Power and Data Networks

All electrical and data systems will require connection to the building's infrastructure at some point. You will need a licensed electrician to accomplish this and your office furniture dealer can coordinate the location and timing of this step. Through the design process you will have a few options to consider but your dealer will need to work with the architect or building management to determine the location of furniture power.



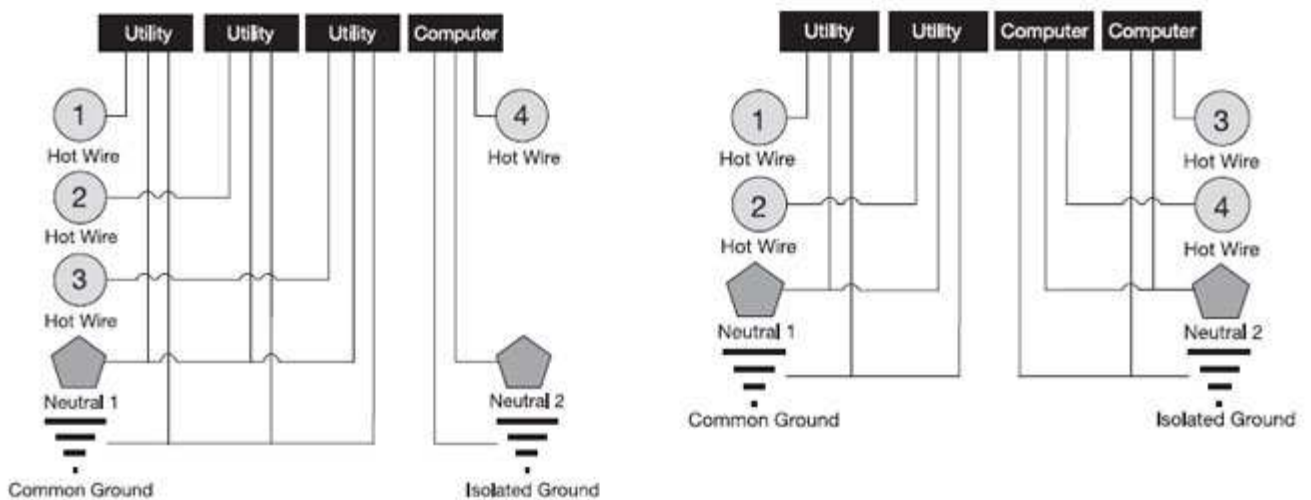
Power Pole – A power pole connects from the ceiling to the top of the panel and carries both electrical and data. Due to limited capacities of some poles you will likely need multiple poles for large installations. The poles are matched to your system and cut to the right length on site by your installer.

Wall Harness/ Direct Connect – If your run of cubicles is against a wall at some point you can connect with a wall harness. This is often preferred because it avoids the distraction of power poles above the panels.

Electrical Systems

Panel systems manufacturers incorporate an electrical system of their design or from an outside vendor in their panels. Make sure that the system has a Underwriters Laboratory (UL) listing because this insures compliance with safety regulations. However, some variations may exist in the local authority of electrical code standards. Your dealer or architect is responsible for confirming code standard compliance in these locations before specification and ordering.

An example of an electrical system is the Byrne 4-circuit/8-wire modular power distribution system. The standard power configuration provides three utility circuits, which share a common Neutral and Ground, plus an isolated/ dedicated fourth circuit, with an independent Neutral and Ground often used for computers or sensitive electrical equipment. As an option, the system can also provide 2 utility circuits + 2 isolated circuits. Most electrical power distribution systems provide access to multiple electrical outlets and circuits within the same office panel. You will need to work with your dealer to determine the locations, quantities and circuits of the duplex outlets and to determine the requirements (if any) for isolated/dedicated circuits.



For more helpful information on planning for your office space you can visit the Maxon Furniture website www.maxonfurniture.com