# SECTION 27 0540 - COMMUNICATIONS RACEWAYS WITHIN FURNITURE PARTITIONS.

# PART 1 – INTRODUCTION AND PURPOSE

1.01 The standard Herman-Miller Action Office partition furniture specified for purchase by The University of Toledo under the State Purchasing Agreement does not include the installation of a power data/telecommunication barrier in the bottom of the panel base.

A. The specified basic partition panel configuration includes prewired four (4) circuit, 8-wire power distribution with two (2) receptacle locations per side in a panel base raceway.

B. Data cable raceway space is provided below the power distribution.

C. The panel base raceway has available as an option, a metal barrier to separate sensitive data transmission cables from the electrical components.

D. Section 27 1500 requires the utilization of a grounded shielding barrier between power and telecommunications pathways.

PART 2 – CORRECTIVE IMPLEMENTATION

2.01 To order the Action Office partition furniture with the optional cable/energy barrier for installation in the base, two (2) possible methods are proposed by the furniture vendor:

A. Solution #1: Order base option "L" on panels which will provide four (4) circuit power distribution with two (2) receptacle locations per side per panel and the cable/energy barrier.

1. The cable/energy barrier is factory installed in the panel.

2. This option does not have communication ports located on either side of the base hinged cover. Communication ports will have to be field cut into the base cover during installation by the partition furniture vendor/installer.

3. Item part number utilizing this solution would appear thus: Example: A1120.67 48 L HFHF 7K08 (height, width, base, finish and fabric).

B. Solution #2: Order base option "G" on panels which will provide four (4) circuit power distribution with two (2) receptacle locations per side per panel and one (1) communication port location per side per panel.

1. This option does not include the cable/energy barrier being factory installed. The cable/energy barrier will have to be field installed by the partition furniture vendor/installer during the installation of the panels.

2. Item part numbers to order cable/energy barriers under this solution are: Example: A1380.XX, where "XX" indicates panel width (i.e. 12, 18, 24, 30, 36, 42, 48 and 60"). Quantity requirement based upon one (1) each per panel per size.

C. Panel Connectors: Panel connectors require the installation of the optional connector cable/energy barriers.

1. Order option part number A1381.X, where "X" indicates the connector configuration (i.e. 1 = 2-way, 2 = spacer, 3 = 3-way 4 = 4-way).

2. Connector barriers are always field installed by the partition furniture vendor/installer during installation of the panels.

PART 3 – ADDITIONAL CABLE MANAGEMENT REQUIREMENTS

3.01 Additional cable management requirements per Section 27 1500:

A. ~~"~~It shall be the responsibility of the Architect and the furniture partition manufacturer to assure that the furniture partitions meet all requirements of the cabling system which shall include but not be limited to the following:

1. Adequate separation with shielding between power and data/ communication pathways.

2. Adequate cable routing pathways and space for the intended application, based upon recognized industry standards.

3. Provides for minimum cable bending radius for the intended application (1-1/2" min. radius nominal U.N.O.).

4. Provides adequate back wiring space behind outlets for the intended application, based upon recognized industry standards. Back wiring space should not intrude into cable routing space.

5. Provide vertical, as well as horizontal cable routing paths through the partition panels, providing for universal outlet location capability (Associate does not recommend data/communication outlets be located flush in the partition base kick-panel, due to high exposure to damage)."

B. It is recommended that the Architect and the Owner give due consideration to additional cable management options offered by the manufacturer for the Herman Miller Action Office partition furniture to meet the requirements noted above.

C. Additional cable management options include the following:

1. Vertical Cable Management Panel – carries communication cables vertically from the base to the work surface and other custom locations.

2. Vertical Cable Management Panel – carries power cables vertically from the base to the work surface, separated from the data cables.

3. Top Channel Panel – carries communications horizontally between adjacent equal height panels.

4. External Cable Management Trough – Carries cables and wires horizontally beneath the work surface.

END OF SECTION 27 0540