

CATEGORIES - SERIES "B"

INTERIOR MATRIX - BUILDING USE SPECIFIC

The building system generally included in the Interior Matrix are:

- 5.1 Internals Vertical
- 5.2 Internals Horizontal
- 5.3 Special Finishes
- 5.4 Interiors
- 6.0 Building Specialties
- 7.0 Equipment
- 8.0 Special Construction
- 10.1 Plumbing & Fire Protection
- 10.2 HVAC
- 11.0 Electrical

The last three building systems require risers when the configuration is multi-story and for that reason they appear in both the Series A and B categories.

VOICE AND DATA COMMUNICATIONS

The provisions for voice and data communications throughout the specifications include the following items. The risers (back bone) elements are included in the structure matrix. The outlets and cable connection to the risers are included in the Interiors Matrix. The installation to be in accordance with EIA, TIA Standards.

Structure Matrix (Series A):

- Entrance to building 4-4" conduits from main entrance terminal room to 5' line outside.
- Utility closets stacked above main entrance terminal room with 2-4" empty sleeves (fire stopped).
- Copper cable riser sized for # of outlets on each floor. Separate jacket for voice riser and for data riser (Spare capacity for risers needs to be considered).
- Fiber riser 12 multi mode fibers to each floor, 6 single mode fibers to each floor.
- Coax broad band riser to each floor (where coax outlets are specified).

Interior Matrix (Series B):

- Dual jack with 1" conduit to accessible ceiling space.
- Category 5 cable from jack to utility closet terminal block 4 pair voice, 4 pair data for each dual jack (2 cables separate jackets).
- Cable above accessible ceiling to run in cable tray or an approved hanger.
- Coax broad band from outlet to riser in utility closet.

Fiber is not distributed to outlets in interior matrix. In special uses where fiber is required for research or graphics intensive applications it must be considered separately.

Service Facilities

Service facilities such as preparation space, storage, and the like are often required for all educational spaces. The specifications for such spaces should be the same as the space served by the facility. As an example the specification for service facility for a physics laboratory should be considered the same as the laboratory itself. Likewise the specification service facility for a classroom space or a multi media classroom should be the same as the classroom or multi media classroom which it serves.

Laboratories and Demonstration Classrooms

Utilities for laboratories fall generally into two types which have been designated type A and type B. The terms wet and dry have previously been applied to these two types.

Type A laboratories and Demonstration Classrooms are those used for Chemistry, Life Science, Biology, Zoology, Earth Sciences and all of their subdivisions. The unique features which are more specifically mentioned in the specifications include distribution of various gasses, compressed air, special treated or ultra pure water, and other fluids as well as provision for acid waste and fume exhaust. The emphasis in Type A laboratories is on chemicals but not to the exclusion of electrical utilities.

Type B laboratories are those used for Physics, Mechanics, Electrical and Electronic Sciences and all of their subdivisions. The unique features include distribution of special power, conditioned power, various voltages and signals and may include DC power. Special electromagnetic or radio frequency shielding falls into this type of facility. Normal water and waste would also be included.

Type C Laboratories are those concerned with the technical aspects of computers, electronics etc., areas for computer experimentation.