11. Residence House entrance Upgrades for Card Access

SECTION 16110 – RACEWAYS

1.01 INSTALLATION REQUIREMENTS

A. Installation of Additional Raceways in Existing Buildings
   1. Installation of additional electrical, communications or data systems for the campus in general shall be performed using the guidelines established in this section. Restrictions placed on certain buildings for various reasons, such as the presence of friable asbestos products, may limit, or sometimes eliminate the ability to run new raceways concealed in the ceilings or walls. This requires the installation of some exposed raceways/conduits below the basement ceiling line in order to access various rooms. It has been the Campus policy to not allow exposed conduits or raceways in occupied areas unless no other practical solution is available. Thus, it is critical that the least obtrusive systems be employed and that they be installed in the most aesthetically pleasing manner possible.
   2. Every effort should be made to install raceways/conduits to new locations within walls by cutting small access holes, chasing through new flex and/or rigid conduit and patching the wall. Moldings and door casing may require removal and reinstallation.

B. Where surface mounting of electrical or communications cabling becomes necessary, there are several conditions which must be considered to avoid creating building code violations.
   1. Whenever there are fire rated walls, ceilings, or floors, any penetration of these must occur in an approved manner. Specific reference should be made to the latest adopted versions of the following codes:
      a. Uniform Building Code
      b. Uniform Fire Code
      c. National Fire Protection Association Recommendations, including National Electrical Code
   2. All penetrations through fire rated walls, ceilings and floors shall be made with a metallic raceway (conduit), and the perimeter of the penetration shall be sealed with a UL listed sealant. The sealant materials should be installed according to the manufacturer's recommendations and in accordance with their UL listing.
   3. Communications cabling shall be jacketed with a jacket material listed for the application, and shall be installed within a metallic raceway. There are also several plenum rated, "Teflon" jacketed cables UL listed for plenum installation without raceways.

C. Exposed Power and Communications Wiring Distribution
   1. Exposed wiremold installations in halls and entries will be acceptable only in situations where a concealed installation is impossible due to building constraints or restrictions.
   2. Wiring Distribution: Access to each door should be gained directly through the corridor wall or floor. Most locations will require access from basements below.
   4. In unfinished basements wiring shall be run in EMT:
   5. Plenum rated cabling shall be used where required by code.
   6. Routing of multiple exposed conduits should be clustered tightly together, rise or drop vertically to the nearest horizontal surface and run horizontally to the greatest extent possible.
   7. All exposed raceways/ conduits in finished spaces when applicable shall be painted to match the adjacent wall finishes.

D. All power conduits shall be a minimum of ¾” EMT.

END OF SECTION