PART 1 - GENERAL

1.01 SCOPE

A. Control Voltages in this section are defined as system voltages above 0V and less than 150V.

B. Control Voltage cables shall be plenum rated and installed in non-flexible raceway or cable tray.

1. Flexible raceway systems permitted only in lengths of six feet or less.

2. Any deviation requires approval from the WSU Project Manager and Engineering Services.

PART 2 - PRODUCTS

2.01 PATHWAYS

A. When open cabling is required and approved by WSU Engineering Services, the following are acceptable means of support:

1. NRTL labeled for support of respective open cabling.

2. Support brackets with cable tie slots for fastening cable ties to brackets.

3. Lacing bars, spools, straps, J-hooks, and D-rings.

2.02 BOXES:

A. Outlet boxes shall be no smaller than 2” wide, 3” high and 2-1/2” deep.

2.03 BACKBOARDS

A. All backboards shall be fire-retardant treated plywood or equivalent.

2.04 RS-232 CABLE

A. Plenum-Rated Cable: Type CMP

1. Paired, two pairs, No. 22 AWG, stranded (7x30) tinned copper conductors.

2. Plastic insulation.

3. Individual aluminum foil polyester tape shielded pairs with 100 percent shield coverage.

5. Pairs are cabled on common axis with No. 24 AWG, stranded (7x32) tinned-copper drain wire.

6. Cabling shall meet the equipment manufacturer’s specifications.

2.05 RS-485 CABLE

A. Plenum rated cable: Type CMP
   1. Paired, two pairs, No. 22 AWG, stranded (7x30) tinned-copper conductors.
   2. Fluorinated ethylene propylene insulation.
   3. Unshielded.
   4. Fluorinated ethylene propylene jacket.
   5. Cabling shall meet the equipment manufacturer’s specifications.

2.06 CONTROL CABLE

A. Plenum rated, paired cable: Type CMP
   1. One pair, twisted, No. 18 AWG, stranded (19x30) tinned-copper conductors.
   2. Fluorinated ethylene propylene insulation.
   3. Unshielded.
   5. Cabling shall meet the equipment manufacturer’s specifications.

PART 3 - EXECUTION

3.01 TERMINATIONS AND SPLICES

A. All control cable terminations and splices shall be enclosed.

END OF SECTION