



**NOTES**

1. BUILDING LEVEL NETWORK. DEFINED AS A NETWORK OF NATIVE ETHERNET SDC CONTROLLERS IN A BUILDING CONTROLLING MAJOR HVAC EQUIPMENT SUCH AS AIR HANDLING UNITS, HEATING SYSTEMS, COOLING SYSTEMS ETC. THESE PANELS SHALL COMMUNICATE NATIVELY WITH EACH OTHER TO SHARE DATA WITHOUT THE NEED FOR INTERFACING WITH A SERVER FOR THE PURPOSES OF HANDLING LOCAL BUILDING CONTROLS.  
  
AS MANY PRIMARY SDC CONTROLLERS WILL BE INSTALLED AS REQUIRED FOR THE CONTROL OF SYSTEMS AS PER PROJECT SPECIFICATIONS AND DOCUMENTS. IN ADDITION THE NUMBER OF CONTROLLERS AND SYSTEM LAYOUT SHALL MEET ALL LEED PROJECT REQUIREMENTS FOR REPORTING.  
  
TWO 10/100 ETHERNET NETWORK JACKS SHALL BE INSTALLED AT EACH LOCATION OF A PRIMARY SDC CONTROLLER FOR THE PURPOSE OF CONNECTING THE PRIMARY CONTROLLER AND THE ADDITIONAL JACK FOR THE PURPOSE OF A LOCAL PROGRAMMER/OPERATOR LAPTOP INTERFACE TO THE SYSTEM FOR THE PURPOSE OF COMMISSIONING AND TROUBLESHOOTING.
2. FLOOR LEVEL NETWORKS SHALL BE A RS-485 TWISTED PAIR SHIELDED NETWORK USING EITHER AN APPROVED VENDOR SPECIFIC PROPRIETARY PROTOCOL OR BACNET MSTP (MASTER/SLAVE TOKEN PASSING) PROTOCOL. THE NUMBER OF FLOOR LEVEL NETWORKS AND NUMBER OF NODES SHALL NOT EXCEED VENDOR SPECIFIC REQUIREMENTS FOR THEIR SYSTEMS. THE NUMBER OF FLOOR LEVEL NETWORKS MAY BE INFLUENCED BY LEED REQUIREMENTS AND SHOULD BE CONSIDERED WHEN DESIGNING THE NETWORK LAYOUT.
3. APPLICATION SPECIFIC DEVICES ARE TYPICALLY VARIABLE AIR VOLUME TERMINAL BOXES (VAV), FAN COIL UNITS (FCU), CABINET UNIT HEATERS (CUH), FIN TUBE RADIATION (FTR), OR SECONDARY SDC CONTROLLERS SUPPORTED OFF THE FLOOR LEVEL NETWORK COMMUNICATION BUS.
4. EACH SDC AND ASD CONTROLLER SHALL PROVIDE A PROGRAMMING / OPERATOR INTERFACE PORT FOR THE LOCAL CONNECTION OF A LAPTOP SERVICE TOOL TO ALLOW FIELD PROGRAMMING OR OPERATION OF THE SYSTEMS LOCALLY BY AN OPERATOR OR PROGRAMMER.

**TYPICAL BAS (BUILDING AUTOMATION SYSTEM) NETWORK ARCHITECTURE**