North Collier Fire Control and Rescue District
Authority Having Jurisdiction (AHJ) Guidelines for Successful Review or Inspection

Article Number	FAL 20-05
Effective Date	February 1, 2020
Subject	Circuit Designation for Campus-Style Installation Systems/Buildings
Objective	To Require Class X Interconnection Pathways in Campus-Style Fire Alarm Systems/Buildings When Specified in Lieu of Individual Fire Alarm Systems and Monitoring for Each Building

BACKGROUND

Campus-style fire alarm system/building interconnections inherently include relatively long wire lays with little to no physical protection. This inherent exposure necessitates a circuit pathway designation that maintains operational performance.

Class X circuit pathways require a redundant pathway, are more reliable and remains operational up to and beyond a single open and/or a single ground fault, single short-circuit, and these conditions annunciate as trouble signals for repair.

POLICY/PROCEDURE

Class X pathway interconnections shall be required in campus-style fire alarm systems/buildings. Otherwise, an individual panel with its own individual off-premises monitoring shall be required at each building.

There will be no exception for the use of Class B wiring.

Conventional fire alarm systems may be used and there will be no requirement for "Loop Isolation Modules" when the following conditions are met:

1. Individual circuits are used to monitor each type of initiating device (i.e. flow switch, manual pull-stations, smoke detectors, heat detectors, and tamper switches);
2. All wiring between buildings shall be Class X;
3. Appropriate wire and surge protection is used;
4. Each building is monitored for Alarm, Supervisory, and Trouble;
5. Master panel has the capability of transmitting each building's initiating device types separately to the off-site monitoring station;
6. Separate raceways are provided between each building and the master panel; and

7. Audio/visual appliances will be activated individually at the building of alarm initiation.

CODE REFERENCES

NFPA 72 (12.2.5.2; 12.3, A.12.3, A.12.3.1; 12.3.6; 23.8.2.1; 26.2.6 ref. 10.18.5.3)