



Wireless Mesh Network (AES) Installation Inspection Checklist

All AES radio transmitters shall be installed and inspected according to NFPA 70, NFPA 72, WAC, manufacturer requirements/recommendations, and Snohomish County Guidelines.

Request for inspection is required within 24 hours of energizing the AES radio.

A current Routing Table showing the NetCon, Link Layer, and Signal Strength (minimum 2 "Good" paths with a minimum NetCon of 5 or less) is to be provided to the Fire Inspector at time of final inspection.

- The AES Radio is mounted near the FACP in a temperature controlled environment. If it is mounted on the interior side of an exterior metal, concrete, or block wall it is mounted on an insulating board to prevent direct contact with moisture or temperature extremes. Alternate locations, if approved by the fire marshal may require the AES Radio to be located inside a lockable NEMA 4X enclosure with smoke detector and thermostatically controlled heater.
- AES routing table shows a minimum of two (2) "good" paths with a net-con of 0-5 *prior* to connecting to FACP.
- AES is protected by a smoke detector.
- A/C transformer to AES is protected inside a secured transformer enclosure.
- The A/C transformer is one of the following 3 models; AMSECO model XF1640, Elk Products model TRG1640, or MG Electronics model MGT1640.
- Wires from A/C transformer enclosure to AES enclosure are in conduit.
- AES is powered via dedicated A/C circuit or shared with a dedicated circuit to FACP.
- A/C breaker to AES circuit is labeled and provided with a lock-on device.
- All exposed wiring below seven feet (7') AFF is protected in conduit.
- Coaxial cable outside the AES enclosure is installed in conduit.
- Exterior antennas are protected by a lightning arrester. Arrester is located a minimum 6' from AES radio and grounded to earth with a minimum 6 AWG copper wire.
- All bends in the coaxial cable outside of the AES enclosure (if applicable) have a minimum six inch (6") radius.
- AES *AND* IntelliPro Fire or FireTap (if installed) is locally supervised at the protected premises (both audibly and visibly) in an approved manner for antenna cut, low battery, communication troubles, and charger fault as a separate zone or address on the FACP. (J4 outputs)
- General alarm (zone 1), general trouble (zone 2), and supervisory (zone 3) outputs from the FACP are connected to supervised input zones on the AES.
- AES programming: Trouble Pkt is set to "Y", zone inputs in use are set to "F" w/ EOLs.
- All zones, signals, or addresses capable of being transmitted by the FACP are transmitted to the central station. This may require an IntelliPro Fire or FireTap.

To prevent a re-inspection fee, please verify the AES Radio installation meets the above requirements and the system has been pre-tested with verification of proper signal transmission to the central station.

Fire Alarm Installer Signature _____ **DATE** _____
NICET CERTIFICATION # _____ **LEVEL OF CERTIFICATION** _____
SITE ADDRESS _____ **PERMIT #** _____