

Job Record

Wireless Mesh Network

Field Installation Checklist

This document provides a checklist of the information required for a tekmar representative to assist with specifying and designing a wireless mesh network that supports wireless sensors and boiler controls. Complete all four sections. (For assistance with completing this form, contact Customer Support at 1-800-438-3903.)

Contractor Information

Company name _____ Contact email _____
 Contact name _____ Contact phone _____

Job Information

Purpose of installation _____
 Street address _____ City _____
 Floor size _____ Number of floors _____
 Number of dwellings/offices _____ Percentage reporting temperature _____
 Boiler location _____ Boiler type _____
 Number of boilers _____

Additional Supporting Information

Provide a building floor plan. (For retrofits where a floor plan is unavailable, you may submit a photo of the emergency evacuation map. Satellite imagery and the Google Maps™ Measure distance tool can also be used to determine approximate dimensions.)

Pinpoint locations of electrical outlets in common areas. (To support network layout planning, include locations such as hallways, locked closets.)

List building construction (number of floors) and material (such as glass, lumber, brick, concrete).

Spot physical obstacles (such as appliances, large furniture, interior metal structures).

Note the use of electronic devices at the site (such as Wi-Fi, Bluetooth, microwave).

Bill of Materials

Use the instructions below to identify the equipment required to build the wireless mesh network for your building. Then fill in the quantity of each product needed.

Smart Boiler Control 294	_____	Wireless Mesh Indoor Sensor 042	_____
Smart Boiler Expansion 294EXP	_____	Wireless Mesh Outdoor Sensor 043	_____
Smart Steam Control 289	_____	Mesh Network Extender 041	_____
Security Cover 041SC	_____		

Contact your local tekmar representative if you need assistance designing your wireless mesh network.

1. Calculate the number of Mesh Network Extender 041 and Wireless Mesh Indoor Sensor 042 required.

- Assume that one Mesh Network Extender 041 provides coverage for 8,000 sq ft.
- Confirm that electrical outlets are available to power the Mesh Network Extender 041. A site visit may be required.
- Consider the requirements of energy efficiency programs that offer rebates. For example, LL97 requires monitoring in 25% of apartments.

Example: 143 apartments --> $143 \times 0.25 = 35.75$ roll up --> = 36 units 042

142,000 sq ft --> $142000/8000 = 17.75$ roll up --> 18 units + 1 for mech room = 19 units 043

2. Select the correct smart control.

- Smart Steam Control 289 for steam applications (2 boilers max)
 - Pressure Sensor 089 is optional but strongly recommended, as it can significantly reduce installation and troubleshooting labor. By enabling the Nexa app to chart steam pressure, the sensor helps identify operational issues—such as blocked air vents—that are otherwise difficult to detect and can lead to substantial energy waste.
 - Check local rebate programs. Boiler Flue Sensor 069 may be required to qualify.
- Smart Boiler Control 294 (4 boilers; add 294EXP units in groups of 4, max 16)
- Wireless Mesh Outdoor Sensor 043 is optional but recommended to maximize energy savings through outdoor reset.

3. Secure energy use data from the previous year to enable year over year consumption comparisons.



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All specifications are subject to change without notice

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