Greenstar Floor Standing Condensing Boiler
Case Study

Background
Bosch Greenstar Floor Standing (FS) gas condensing boiler is designed to provide comfortable heating and domestic hot water for a townhouse, condo, apartment or single family home, from 57 up to 151 MBH, when a wall-mounted boiler is not appropriate, such as when replacing a floor boiler.

The first two North American installations of this modern, efficient (95% AFUE) gas condensing boiler were accomplished in separate homes in Vermont and New Hampshire in the Northeast U.S.

Benefits and Conclusion
Each of these varied installations provide valuable feedback from the two Accredited Bosch Contractors. In summary, Greenstar Floor Standing boiler simplifies the installation of a high efficiency condensing boiler...from footprint to piping to venting options, resulting in lower overall installed cost.

Greenstar FS Condensing Gas Boiler
First Installations In New Hampshire & Vermont

The 95% AFUE Greenstar FS series is designed to upgrade cast iron floor boilers to an ultra-high efficiency condensing boiler

- Ease of Installation - fits in same footprint as an existing floor boiler
- Easy and Fast Replacement - no added cost to build a wall
- Trouble Free Set up - low loss header pre-piped “under-the-hood” -- pipes just like the existing boiler
- Multiple Venting Options include 2” polypropylene (PP), flexible PP chimney liner, concentric PP kit, PVC or CPVC
- Simplified control, no programming required - optional controls available
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New Hampshire - This 2,000 sq ft single family home in southern New Hampshire utilizes an existing forced air heating system. The homeowner upgraded to hydronic heat using Buderus panel radiators and a new Greenstar FS combi boiler to provide comfort heating and on-demand hot water.

Installer Jason Wetherbee commented, "I've installed a lot of Buderus oil-fired floor boilers, but this is the first Greenstar installation. I'm impressed with how compact and relatively easy to place it is. The integrated low-loss header is pre-piped so there's no need for primary/secondary piping, and venting is simplified with polypropylene, PVC or CPVC."

Project Goals - New Hampshire:
- Higher efficiency heating system
- New installation - upgrade from forced air to hydronic system
- Bosch Greenstar FS Combi 151, Buderus radiators, Bosch Smart Thermostat
- Jason Wetherbee LLC Plumbing & Heating
- Wilton, New Hampshire
- ABC Installer Jason Wetherbee LLC, Wilton, NH

Vermont - The original heating unit was a 120 MBH cast iron LP fired boiler about 20 years old.

Danny O'Neal, President of O'Neal Mechanical of Williston, Vermont installed the new Greenstar FS heat-only boiler. There are three heating zones in the 1800 sq ft home - one radiant and two baseboard zones. Domestic hot water is provided with Buderus S32 indirect tank.

“This is a great boiler, piping and wiring connections are convenient,” noted O'Neal.

Project Goals - Vermont:
- More efficient heating system
- Upgrade 20-year-old LP gas boiler to Greenstar FS Heat Only model
- Bosch Greenstar FS KBR 28-3 Heat Only With Buderus S32 tank

Old gas-fired conventional floor boiler shown at left. Greenstar FS KBR 28-3 heat only condensing gas boiler (right) provides heating to three zones with indirect tank for DHW; unit is vented with 3 in. PVC and provided with outside combustion air

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Accredited Bosch Contractor
Jason Wetherbee (left) and homeowner James Middleton with newly commissioned Greenstar FS combi boiler installation in James’ New Hampshire home (unit appearance may vary from current production models)