



*"Eddy's Boilerhouse News"*  
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NEWS LETTER ASME CSD-1 Controls and Safety Devices for Automatically Fired Boilers – series CSD-1 letter 1.

ASME CSD-1 has been adapted by many states and jurisdictions as the guide for boiler controls. Over the years many questions have risen about CSD-1. In this series I will try to answer some of those questions while working through the code itself.

ASME is the only organization that can give official interpretations of the code and so I do not speak for ASME. Local jurisdictions can also provide an explanation of how the code is applied in their sphere of authority. This is not written or even reviewed by ASME, this is simply a general understanding of the code throughout the industry.

CSD-1 Part CE Electrical states, "A disconnecting means capable of being locked ... shall be an integral part of the boiler or adjacent to it." This is fairly clear, an electrical disconnect must be installed at or near the boiler to disconnect all sources of power.

The most common questions that arise for this section of the code have to do with the emergency shutdown switch. The code states, "A manually operated remote shutdown switch off circuit breaker shall be located just outside the boiler room door and marked for easy identification." This is so that the boiler can be shut down in case of an emergency. This switch is to be capable of shutting down all the power to the burner controls. This is not like a disconnect switch which shuts down all power. These switches kill the power only to the burner controls.

The location of the emergency switch outside the boiler room may be a problem. The code states that if the switch could be tampered with, it may be located just inside the boiler room door.

Another question that is commonly asked has to do with having more than one door to the boiler room. In this case we need a switch at each exit. If you bought a two door model, then two switches must be installed. If you bought a four door model then four switches need to be installed. If you bought an eight door model then you need your head examined.

When there are two boilers in a boiler room, the question sometimes arises as to whether to install a switch for both boilers or should each boiler have its own switch. If both boilers are on one switch, in an emergency you would have to shut down both boilers. It doesn't give you the option of shutting down one boiler while leaving the other on line. It is best to have a switch for each boiler at each exit.

This part of the code requires proper wiring and grounding. The National Electrical Code NFPA 70 should be followed. With today's control systems proper grounding and wiring is critical. Proper wiring will save many late nights of troubleshooting.

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