Question 1: Is a listed safety shutoff valve with proof-of-closure switch compliant with NFPA 86 when the proof-of-closure switch is enclosed under a cover plate affixed with standard head screws?

Answer: Yes.

Question 2: Is a listed safety shutoff valve with proof-of-closure switch compliant with NFPA 86 when its proof-of-closure switch is capable of being replaced in the field?

Answer: Yes.

Committee Statement: Some safety shutoff valves required by NFPA 86 are to include proof-of-closure switches. The definition of “Proof-of-Closure Switch” includes “non-field adjustable” as one characteristic of the switch. Some listed safety shutoff valves have proof-of-closure switches that can be accessed by removing a cover plate affixed with standard head screws. Some “listed” safety shutoff valves have proof-of-closure switches that can be replaced and adjusted as part of field servicing activities. In each case, the proof-of-closure switch is not accessible to an operator for field adjustment, but the proof-of-closure switch can be accessed by deliberate disassembly of the valve for service activity. In accordance with the standard, all safety devices require periodic testing and maintenance in accordance with published manufacturer’s instructions.
Reference: 6.2
F.I. 90-1

Background: Consider gas-fired batch ovens that are representative of those used in the automotive refinishing industry. These ovens typically contain flammable and combustible liquids and flammable vapors, are without recirculation of air (the supply air is exhausted), and have relatively low operating temperatures [maximum operating temperatures limited to approximately 176°F (80°C)].

Question 1: For an indirect-fired burner, are explosion vents required?
Answer: Yes.

Question 2: For a direct-fired burner, are explosion vents required?
Answer: Yes.

Question 3: If explosion vents are required, is the preferred ratio 1:15?
Answer: Yes.