

U.S. Fire Administration / National Fire Academy

Coffee Break Training

Topic: Reading Sprinkler Deflectors

Learning objective: The student shall be able to explain the information embossed on a typical automatic sprinkler deflector.

Deflectors for automatic sprinklers contain a wealth of information about the sprinkler. This information helps the fire inspector assure that the correct sprinklers are being installed to match the project's design criteria.

- **R3516** is the Sprinkler Identification Number (SIN), a unique, alphanumeric code describing the manufacturer (in this case Reliable Automatic Sprinkler), the K factor, the sprinkler's application or use, and the sprinkler response characteristics. The SIN must be cross-referenced to manufacturer's literature to obtain the specific details.

- The manufacture date is **2004**.
- **RES 49, F1**, represents the sprinkler company's model number.
- **Res. Spkr.** indicates the sprinkler is suitable for residential applications.
- **K=4.9** is the sprinkler K factor, a mathematical coefficient of the discharge orifice. This information is used to determine water flow.
- The **cULus** symbol and control number (23S7) indicates the sprinkler has met Underwriters Laboratories listing criteria for Canada and the United States.
- **PEND** indicates the sprinkler's correct installation orientation (pendent).
- The glass bulb temperature rating is **155°F** (68°C).
- The sprinkler's United States Patent Number is **6,516,893**.

For additional information, refer to the UL Fire Protection Equipment Directory or go to www.ul.com.

