

**TECHNICAL DATA****SPRINKLER DISTRIBUTION PATTERNS**

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**SPRINKLER DISTRIBUTION PATTERNS**

There are many types and styles of sprinklers on the market today that are approved by at least one recognized testing agency. After approval for fire protection purposes, the sprinklers are constantly monitored by the testing agency to assure conformance with their design and construction standards. In developing these standards, the testing agencies have considered the many variables that affect fire protection design. Consideration is given to the recognized installation rules, water penetration of the fire plume, cooling effect, sensitivity, and many other concerns that affect the performance of sprinklers, depending upon the fire hazards and available water supplies. These standards mandate minimum and maximum distribution patterns that all sprinklers must meet, depending upon the style and intended use of the sprinkler.

The approved sprinkler must be installed in accordance with the national fire codes and standards, local and national building codes and standards, and/or other recognized sprinkler installation rules. These rules are considered minimum requirements for fire control. Any deviation that would weaken the minimum requirements would automatically void all listings, approvals, and warranties on the sprinkler.

Viking Technical Data may be found on  
The Viking Corporation's Web site at  
<http://www.vikinggroupinc.com>.  
The Web site may include a more recent  
edition of this Technical Data Page.

Water spray distribution patterns for many of Viking's sprinklers are available on The Viking Corporation's Web site at [www.vikingcorp.com](http://www.vikingcorp.com). Because it is impossible to design adequate fire protection based on sprinkler distribution alone, The Viking Corporation does not provide water spray patterns for standard sprinklers. Those desiring information relative to distribution patterns are directed to the applicable testing agency standards, such as Underwriter's Laboratory, UL 199, Standard for Safety on Automatic Sprinklers for Fire Protection Service. Unique sprinkler system designs that cannot be done in accordance with recognized installation rules must be engineered by experienced personnel who are totally familiar with the equipment approval standards, installation rules, and fire testing. In many cases, full-scale fire testing of the proposed installation must be done to assure adequate fire protection.

**IMPORTANT: Always refer to Bulletin Form No. F\_091699 - Care and Handling of Sprinklers and the appropriate sprinkler general care, installation, and maintenance guide. Viking sprinklers are to be installed in accordance with the latest edition of Viking technical data, the appropriate standards of NFPA, FM Global, LPCB, APSAD, VdS or other similar organizations, and also with the provisions of governmental codes, ordinances, and standards, whenever applicable. The sprinkler technical data page contains installation requirements specific for the sprinkler model selected. The use of certain types of sprinklers may be limited due to occupancy and hazard. Refer to the Authority Having Jurisdiction prior to installation.**

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