4077 Airpark Dr. Standish, MI 48658 • 989-846-4583 • www.globesprinkler.com
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LOW FLOW SPECIFIC APPLICATION ATTIC PROTECTION SCHEME

GENERAL DESCRIPTION

The Globe Low Flow Specific Application Attic Protection Scheme has undergone full scale fire testing with Underwriters Laboratories and is Listed to be utilized per NFPA 13 in conformance with the New Technology and Equivalency Sections as well as the Special Sprinkler Section.

The Globe Low Flow Specific Application Attic Protection Scheme has been engineered to consider all construction conditions typically found in the attic built environment. The scheme utilizes a unique strategy with two distinct types of special sprinklers. The positioning and use of these sprinklers in conjunction with each other, and their complimentary effects on fire control has been carefully considered for sloped attic spaces, with exposed upper structural members creating “channels” as well as with upper roof surfaces without channels (i.e. non-combustibe insulation filled channels creating a flat sloped surface). Consequently, the required number of sprinklers to calculate and system demand is drastically reduced from that seen with standard protection schemes or even the more recent Special Application schemes.

The Globe Low Flow Specific Application Attic Protection Scheme utilizes two specially listed sprinklers, each with a fixed flow and pressure requirement. The "Area/Density" allowances of NFPA 13 do not apply and reductions in flow cannot be taken for reduced spacing. Moreover, as a fixed flow and pressure sprinkler which has been full scale fire tested in its intended installed environment, the slope ceiling penalty of "Area/Density" sprinklers per the prescriptive requirements of NFPA 13 does not apply. The Globe Specific Application scheme is based on full scale fire testing resulting in anticipated Heat Affected Zones of Protection

The Globe Low Flow Attic Protection Scheme requires identifying any of four separate “spaces” within an attic; “Ridgeline”; “Downslope”; “Lower Hip” and “Upper Hip”. See FIGURE 1.

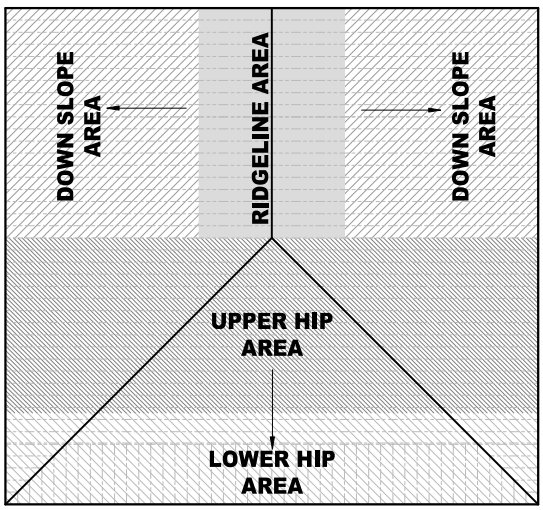
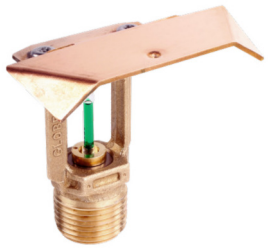


FIGURE 1: ATTIC AREA OF PROTECTION

MODEL GL-SS/RE
GL5620



MODEL GL-SS/DS
GL5621

***Multiple Patents Pending**

SYSTEM CRITERIA

SLOPE
- 3:12 up to and including 6:12

SPAN
- 1 Branchline up to 24 ft
- 3 Branchlines up to 72 ft

TOTAL SYSTEM DEMAND
- See Hydraulic Calculation section for details

ATTIC CEILING CONFIGURATION
- Exposed Upper Structural Members
- Non-Combustible Insulation Filled Channels Flat Sloped Upper Surfaces

AREA OF USE

LIGHT HAZARD CONCEALED ATTIC SPACES:

RIDGELINE

Sprinkler Model: GL-SS/RE • K-Factor: 5.6
• Temperature: 200° F

DOWNSLOPE

Sprinkler Model: GL-SS/DS • K-Factor: 5.6
• Temperature: 200° F
Sprinkler Model: GL-SS/RE • K-Factor: 5.6
• Temperature: 200° F

EAVE

Sprinkler Model: GL-SS/RE • K-Factor: 5.6
• Temperature: 200° F

HIP

Sprinkler Model: GL-SS/RE • K-Factor: 5.6
• Temperature: 200° F

NOTE:
Users should refer to Globe’s web site (www.globesprinkler.com) to assure that the most recent technical literature is being utilized.

TECHNICAL DATA

Approvals
- cULus

Maximum Working Pressure
- 175 psi (12 bar)
- Factory tested to 500 psi (34 bar)

Minimum Low Temperature
- -40°F (-40°C)

Minimum Operating Pressure
- 12.8 psi (0.88 bar)

Temperature Rating
- 200°F (93.3°C)

Response Type
- Quick Response

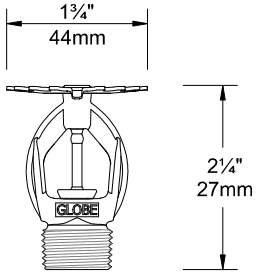


FIGURE 2: MODEL GL-SS/RE GL5620

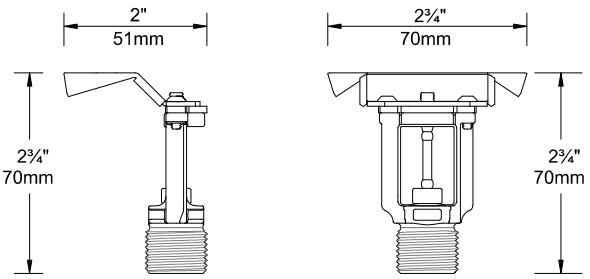
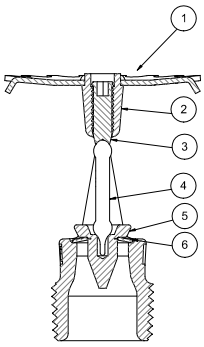


FIGURE 3: MODEL GL-SS/DS GL5621



ITEM NO.	DESCRIPTION	MATERIAL
1	DEFLECTOR	Bronze
2	FRAME	Brass
3	COMPRESSION SCREW	Brass
4	BULB	Glass 3mm diameter
5	BULB SEAT	Bronze
6	BULB SEAT GASKET	Teflon
7	BELLEVILLE SPRING	Steel

FIGURE 4: MODEL GL-SS/RE GL5620 MATERIALS OF CONSTRUCTION

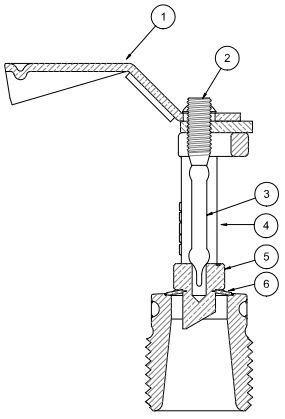


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FIGURE 5: MODEL GL-SS/DS GL5621 MATERIALS OF CONSTRUCTION