



NYC Department of Buildings
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Patricia Lancaster, FAIA, Commissioner
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Report of Materials and Equipment Acceptance Division

Pursuant to Administrative Code Section 27-131, the following equipment or material has been found acceptable for use subject to the terms and conditions contained herein.

MEA 101-92-E Vol. 8

Manufacturer: Globe Fire Sprinkler Corporation, 4077 Airpark Drive, Standish, MI 48658.

Trade Name(s): Automatic Sprinkler for Fire Suppression.

Product: Automatic Sprinklers.

Pertinent Code Section(s): Reference Standard 17.

Prescribed Test(s): UL 199, UL 1626.

Laboratory: Underwriters Laboratories Inc.

Test Report(s): File EX1085, Project 04NK08277 issued May 27, 2004. EX 4258 issued August 19, 2002, revised November 10, 2003. UL File Ex 1085, Projects 98NK11745, 03NK15943, 05NK10800 issued April 7, 2000, revised July 6, 2005. File Ex1085, Projects 86NK12999, 87NK10483, 87NK10488, 88NK10269, 88NK15189, 88NK15747, 88NK26454, 88NK13958, 89NK5135, 89NK9866, 89NK13075, 89NK14217, 89NK2171, 90NK12038, 91NK12460, 91NK2913, 92NK29903, 03CA38222, 05CA04444, 92NK20285, 92NK29134, 94NK7484, 94NK16982, 94NK27302, 96NK32564, 96NK28280, 98NK4775, 98NK13190, 99NK41280, 00NK25692, 00NK24589, 01NK18860, 00NK37088, 01NK29238, 02NK16588, 03NK29494, 04NK24688, issued November 25, 1986, revised March 21, 2005.

Description –

The **Globe Model GL4747** Residential Adjustable Concealed Pendent Sprinkler have a low profile yet durable design that utilizes a 3mm frangible glass ampule as the thermosensitive element. They feature economy, aesthetics and low water flow with 1/2" of adjustment. The combination of the 3mm frangible glass ampule and specially designed deflector make the **Model GL4747** Residential Adjustable Concealed Pendent Sprinklers the ultimate in life safety and fire control.

Globe's Residential Adjustable Concealed Pendent Sprinkler consists of our pendent residential type sprinkler concealed from view by a 1" deep dome shaped ceiling plate. All that is seen at the ceiling is the 3 5/16" diameter ceiling plate color finished to match the specifier's exact requirements. The ceiling plate is soldered to the sprinkler's special upper support assembly in three places. Upon the application of sufficient heat, the plate falls to the floor exposing the residential pendent spray sprinkler. At the prescribed temperature the internal pressure within the ampule exceeds the strength of the glass causing the glass to shatter. This results in water discharge, which is distributed in an approved pattern.

TECHNICAL DATA

- See reverse side for Approvals and Specifications.
- Temperature Rating - 155°F (68°C).
- Water Working Pressure Rating - 175 psi (12 Bars).
- Factory tested hydrostatically to 500 psi (34 Bars).
- Maximum low temperature glass bulb rating is -67°F (-55°C).
- Frame - bronze ● Deflector – brass ● Screw - brass
- Bulb seat – copper ● Spring - nickel alloy. ● Seal – Teflon.
- Bulb - glass with alcohol based solution, 3mm size.
- Cover Plate - brass
- Upper Escutcheon Assembly – steel

● SPRINKLER TEMPERATURE RATING/CLASSIFICATION AND COLOR CODING

Classification	Available Sprinkler Temperatures		Bulb Color	N.F.P.A. Maximum Ceiling Temperature	
Ordinary	155°F	68°C	Red	100°F	38°C

SPECIFICATIONS AND APPROVALS

SIN Model	K-Factor	Thread Size	Length	155°F (68°C) Sprinkler with 135°F (97°) Plate
GL4147	4.1	½" NPT	3"	X
GL4747	4.7			

INSTALLATION DATA – CONCEALED PENDENT

GL4747	12' x 12'	13 G.P.M – 7.7 P.S.I
	14' x 14'	14 G.P.M – 8.9 P.S.I
	16' x 16'	14 G.P.M – 8.9 P.S.I
	18' x 18'	17 G.P.M – 13.1 P.S.I
	20' x 20'	20 G.P.M – 18.1 P.S.I

The **Globe Quick Response GL8114** Extended Coverage Horizontal Sidewall Adjustable Concealed Sprinklers for light hazard occupancies, have the lowest profile available for this type of sprinkler, providing an aesthetically pleasing design. They can be installed wherever standard extended coverage horizontal sidewall sprinklers are specified when allowed by the applicable standards, and in accordance with NFPA 13. The sprinkler has 1/2" of adjustment for ease of installation. All that is seen on the wall is a 3 1/4" diameter wall plate color finished to match the specifiers exact requirements. In addition to making the sprinkler much less noticeable, the wall plate assembly also provides protection for the sprinkler from flying or hanging objects.

The heart of Globe's **Model GL Series** sprinkler proven actuating assembly is a hermetically sealed frangible glass ampule that contains a precisely measured amount of fluid. At the rated temperature the internal pressure within the ampule exceeds the strength of the glass causing the glass to shatter. This results in water discharge, which is distributed in an approved pattern. The wall plate is soldered to the sprinkler's special upper support assembly in three places. Upon the application of sufficient heat, the plate falls to the floor exposing the quick response sprinkler.

TECHNICAL DATA

- See reverse side for Approvals and Specifications.
- Temperature Ratings - 135°F (57°C). Sprinkler, 135°F (57°C) Cover Plate
- Water Working Pressure Rating - 175 psi (12 Bars).
- Factory tested hydrostatically to 500 psi (34 Bars).
- Maximum low temperature glass bulb rating is -67°F (-55°C).
- Frame - bronze • Deflector – brass • Screw - brass
- Bulb seat – copper • Spring - nickel alloy. • Seal – Teflon.
- Bulb - glass with alcohol based solution, 3mm size.
- Cover Plate - brass
- Upper Escutcheon Assembly – steel

• SPRINKLER TEMPERATURE RATING/CLASSIFICATION AND COLOR CODING

Classification	Available Sprinkler Temperatures		Bulb Color	N.F.P.A. Maximum Ceiling Temperature	
Ordinary	135°F	57°C	Orange	100°F	38°C

SPECIFICATIONS

Nominal "K" Factor	Thread Size
8.1	3/4" NPT

APPROVALS

Style	SIN Model	K Factor	135°F (57°C) with Plate 135°F (57°C)
Concealed Sidewall	GL8114	8.1	x

U.L. LISTING DESIGN – USE REQUIREMENTS FOR LIGHT HAZARDS

Model No.	K-Factor	Temp.	Ceiling to Deflector Distance	Width of Coverage	Length of Coverage	Min. Pressure P.S.I.	Flow in G.P.M.
*GL8114	8.1	135°F/ 57°C	4" to 6"	16'	22'	19.8	36
				16'	24'	23.2	39
			6" to 12"	16'	22'	24.4	40
				4" to 12"	18'	20'	19.8
			18'		22'	24.4	40

The **Globe Millennium TM GL Series** Quick Response Concealed Pendent Sprinkler (Model/ SIN GIS609) is a small 2.5mm glass bulb operated, decorative style sprinkler utilizing a flat cover plate to conceal the sprinkler, providing a smooth ceiling appearance. The cover plate can be provided in various finishes to enhance aesthetics. The sprinkler is intended to be installed in accordance with the standard spacing rules and density requirements of NFPA 13.

The complete unit consists of a two part assembly that allows the sprinkler portion to be installed and tested prior to the ceiling being finished. The sprinkler is provided with a protective cap that does not need to be removed prior to installation and it should remain on the sprinkler until the cover plate assembly is ready to be installed. When the ceiling is finished, the "push on-screw off" designed cover plate assembly is easily installed, with 1/2" of adjustment to ensure a proper fit.

Operation of the sprinkler occurs when heat build up causes the solder that holds the cover plate to the support shell to melt allowing the cover plate to fall clear. Continued heat build up causes the 2.5mm glass bulb to burst allowing the deflector / seal assembly to drop down and distribute water in an approved pattern to extinguish or control the fire.

TECHNICAL DATA

- See reverse side for Approvals and Specifications.
- Temperature Ratings - 135°F (57°C) Sprinkler, 135°F (57°C) Cover Plate
 155°F (68°C) Sprinkler, 135°F (57°C) Cover Plate
 175°F (79°C) Sprinkler, 155°F (68°C) Cover Plate
 200°F (93°C) Sprinkler, 155°F (68°C) Cover Plate
- Water Working Pressure Rating - 175 psi (12 Bars).
- Factory tested hydrostatically to 500 psi (34 Bars).
- Maximum low temperature glass bulb rating is -67°F (-55°C).
- Body - bronze ● Deflector – bronze ● Splitter - brass
- Belleville Spring – beryllium nickel ● Teflon gasket – Teflon
- Drop pin – Bronze ● Lever arm - bronze ● Load bar – bronze
- Cover plate – brass ● Load screw – stainless steel
- Bulb - glass with alcohol based solution, 2.5mm size.
- Dust cover – nylon ● Pin cover - nylon

● SPRINKLER TEMPERATURE RATING/CLASSIFICATION and COLOR CODING

Classification	Available Sprinkler Temperatures		Bulb Color	N.F.P.A. Maximum Ceiling Temperature	
	135°F/155°F	57°C/68°C		100°F	38°C
Ordinary			Orange/Red		
Intermediate	175°F/200°F	79°C/93°C	Yellow/Green	150°F	66°C

SPECIFICATIONS

Nominal "K" Factor	Thread Size	Length
5.6	1/2" NPT	2 1/2"

APPROVALS

Style	SIN Model	K Factor	135°F (57°C)	155°F (68°C)	175°F (79°C)	200°F (93°C)
			with Plate	with Plate	with Plate	with Plate
Concealed Pendent	GL5609	5.6	135°F (57°C)	135°F (57°C)	155°F (68°C)	155°F (68°C)
			x	x	x	x

The **Globe Millennium TM GL Series** Quick Response Pendent Sprinkler is a low profile, aesthetically pleasing, flush mounted sprinkler that utilizes a 2.5mm frangible glass ampule as its thermosensitive element.

The combination of the 2.5mm frangible glass ampule and specially designed deflector make the **Millennium TM** Quick Response Sprinkler the ultimate in life safety and fire control. It has met the strict requirements of Underwriters Laboratories Inc. as described in the Standard for Automatic Sprinklers for Fire Protection Service, UL 199, and should be installed in accordance with National Fire Protection Association Standard NFPA 13, and under the direction of approving authorities having jurisdiction.

The heart of **Globe's Millennium TM GL Series** Sprinkler's actuating assembly is a hermetically sealed frangible glass ampule that contains a precisely measured amount of fluid. When heat is absorbed, the liquid within the bulb expands increasing the internal pressure. At the prescribed temperature, the internal pressure within the ampule exceeds the strength of the glass, causing the ampule to rupture. The levers that had been held in position by the bulb now collapse inward allowing the deflector and Teflon coated belleville washer seal to move downward to the full-operating position, and results in water discharged in a required and approved distribution pattern.

TECHNICAL DATA

- See reverse side for Approvals and Specifications.
- Temperature Ratings - 135°F (57°C), 155°F (68°C), 175°F (79°C), 200°F (93°C).
- Water Working Pressure Rating - 175 psi (12 Bars).
- Factory tested hydrostatically to 500 psi (34 Bars).
- Maximum low temperature glass bulb rating is -67°F (-55°C).
- Body - bronze ● Deflector – bronze ● Splitter - brass
- Belleville Spring – beryllium nickel ● Teflon gasket – Teflon
- Drop pin – Bronze ● Lever arm - bronze ● Load bar – bronze
- Ceiling cover – brass ● Load screw – stainless steel
- Bulb - glass with alcohol based solution, 2.5mm size.
- Escutcheon – steel ● Escutcheon ring - brass
- Dust cover – nylon ● Pin cover - nylon

● SPRINKLER TEMPERATURE RATING/CLASSIFICATION and COLOR CODING

Classification	Available Sprinkler Temperatures		Bulb Color	N.F.P.A. Maximum Ceiling Temperature	
Ordinary	135°F/155°F	57°C/68°C	Orange/Red	100°F	38°C
Intermediate	175°F/200°F	79°C/93°C	Yellow/Green	150°F	66°C

SPECIFICATIONS

Nominal “K” Factor	Thread Size	Length
5.6	1/2” NPT	2 ½”

APPROVALS

Style	SIN Model	K Factor	135°F (57°C)	155°F (68°C)	175°F (79°C)	200°F (93°C)
Flush Pendent	GL5650	5.6	x	x	x	x

Pursuant to "Promulgation of the Rules relating to Material and Equipment Application Procedures" dated November 5, 1992, the Bureau of Fire Prevention has no objections letter dated November 4, 2005, F.P. Index No. 0508022B.

Terms and Conditions - That the above units be accepted on condition that:

1. Installation, testing, maintenance procedures and use shall comply with RS-17 of the Building Code and all applicable New York City codes, rules, regulations and maintenance requirements.
2. Underwriters Laboratories Inc.'s listing requirements, and limitations, shall be complied with.
3. Manufacturer's installation, maintenance procedures and limitations shall be complied with.
4. Maximum coverage area for each sprinkler head shall comply with the New York City Building Code.
5. The model numbers of the products indicated above are the only models that have been reviewed with this application. While the application may include additional models, this Department recommends that such additional models be denied acceptance because no updated testing laboratory report was submitted for review.

All shipments and deliveries of such equipment shall be provided with a metal tag suitably placed, certifying that the equipment shipped or delivered is equivalent to that tested and accepted for use, as provided for in Section 27-131 of the Building Code.

Final Acceptance April 3, 2006
Examined by Donald [Signature]