

ESFR Pendent Sprinkler Accessories

IMPORTANT

Refer to Technical Data Sheet TFP2300 for warnings pertaining to regulatory and health information.

Always refer to Technical Data Sheet TFP700 for the "INSTALLER WARNING" that provides cautions with respect to handling and installation of sprinkler systems and components. Improper handling and installation can permanently damage a sprinkler system or its components and cause the sprinkler to fail to operate in a fire situation or cause it to operate prematurely.

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docs.jci.com/tycofire/esfr-pendent-sprinkler-accessories

General Description

The TYCO Model ES-1 and ES-2 Sprinkler Shields and Model EG-25 Sprinkler Guard are designed for use with the TYCO Model ESFR Pendent Sprinkler range. The sprinkler shield and guard assemblies are for sprinkler installation locations susceptible to mechanical or physical damage.

The sprinkler guard and shield applications are as follows:

- Pendent ESFR sprinklers located in areas not susceptible to the threat of mechanical or physical damage can

be equipped with Model ES-1 and ES-2 Sprinkler Shields for protection from water spray of higher elevation sprinklers. See Table A for sprinkler applications.

- The Model EG-25 Sprinkler Guard, shown in Figure 2, provides protection for TYCO Model ESFR-22 and ESFR-25 Pendent Sprinklers from mechanical and/or physical damage, for example, rack storage sprinkler installations.

The Models ES-1 and ES-2 Sprinkler Shields and Model EG-25 Sprinkler Guard are intended for use in fire sprinkler systems designed in accordance with the standard installation rules recognized by the applicable Listing agency.

NOTICE

The Models ES-1 and ES-2 Sprinkler Shields and Model EG-25 Sprinkler Guard described herein must be installed and maintained in compliance with this document and with the applicable standards of the NATIONAL FIRE PROTECTION ASSOCIATION (NFPA), in addition to the standards of any Authorities Having Jurisdiction. Failure to do so may impair the performance of these devices.

Owners are responsible for maintaining their fire protection system and devices in proper operating condition. The installing contractor or sprinkler manufacturer should be contacted with any questions.

Technical Data

Approvals

FM Approved

Note: See Table A for applicability

Finishes

Red painted, zinc coating and zinc chromate

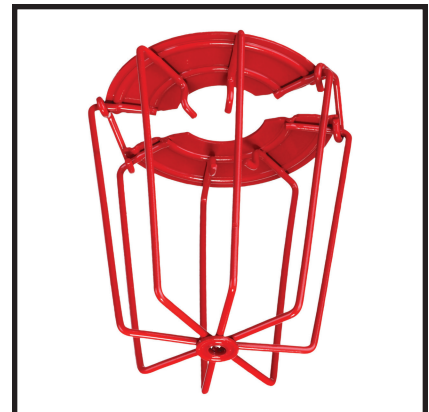
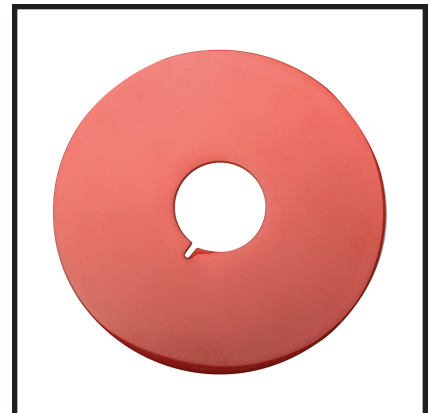
Physical Characteristics

Models ES-1 and ES-2 Sprinkler Shields:

- Stamped and formed carbon steel sheet

Model EG-25 Sprinkler Guard:

- Welded assembly fabricated from carbon steel



Design Criteria

In accordance with the requirements of the NFPA, sprinkler shields and guards shall be Listed. Sprinkler shields and guards are only Listed for use with sprinklers specified in Table A.

ESFR Sprinkler					Shield Model		Guard Model
Model	SIN	K-Factor gpm/psi ^{1/2} (Lpm/bar ^{1/2})	Thread Size in. NPT	Technical Data Sheet	ES-1	ES-2	EG-25
ESFR-14	TY6236	14.0 (201,6)	3/4	TFP319	1	—	—
ESFR-17	TY7223	16.8 (241,9)		TFP317	1	—	—
ESFR-17	TY7236	16.8 (241,9)		TFP322	1	—	—
ESFR-22	TY8223	22.4 (320)	1	TFP321	—	1	2
ESFR-25	TY9226	25.2 (362,9)		TFP312	—	1	1

NOTES
 1. FM Approved
 2. Compatible but not Listed or Approved

TABLE A
SPRINKLER SHIELD AND GUARD APPLICATIONS
LABORATORY LISTINGS AND APPROVALS

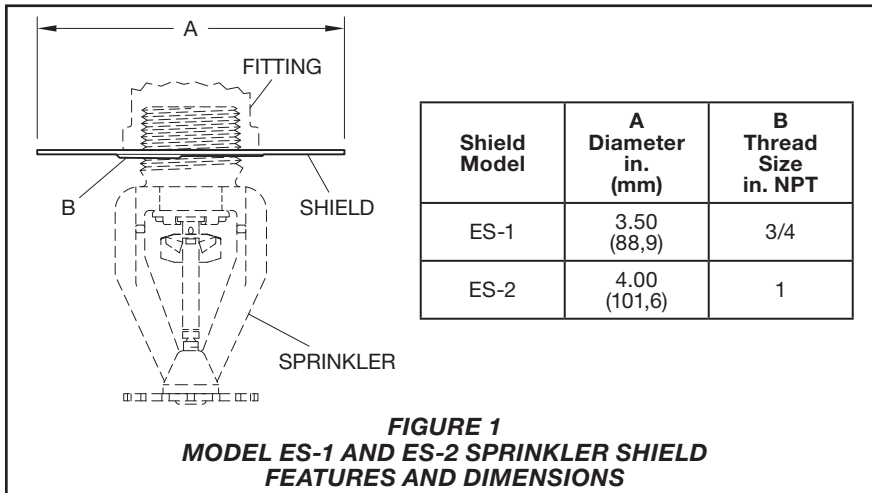


FIGURE 1
MODEL ES-1 AND ES-2 SPRINKLER SHIELD
FEATURES AND DIMENSIONS

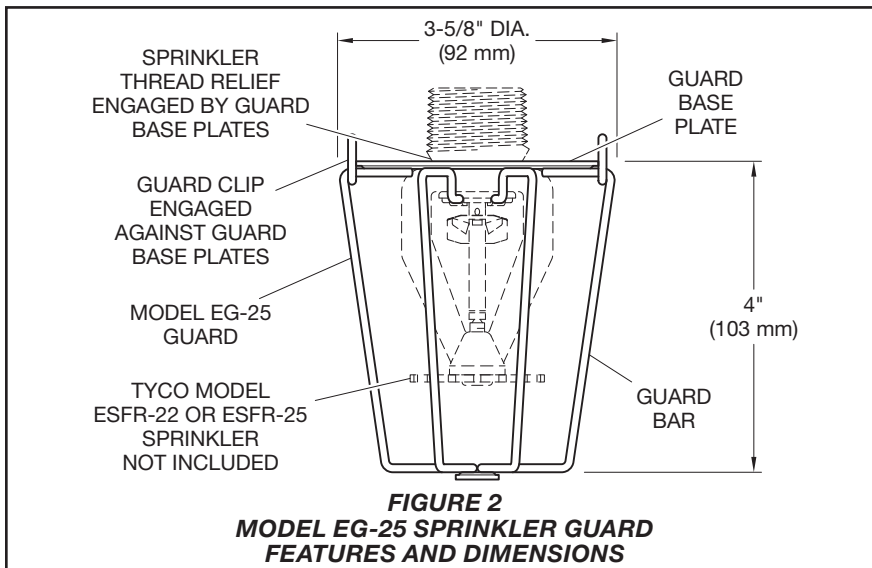


FIGURE 2
MODEL EG-25 SPRINKLER GUARD
FEATURES AND DIMENSIONS

Installation

The TYCO Model ES-1 and ES-2 Sprinkler Shields and Model EG-25 Sprinkler Guard must be installed onto TYCO ESFR Sprinklers in accordance with this section.

Installing the Model ES-1 and ES-2 Sprinkler Shield

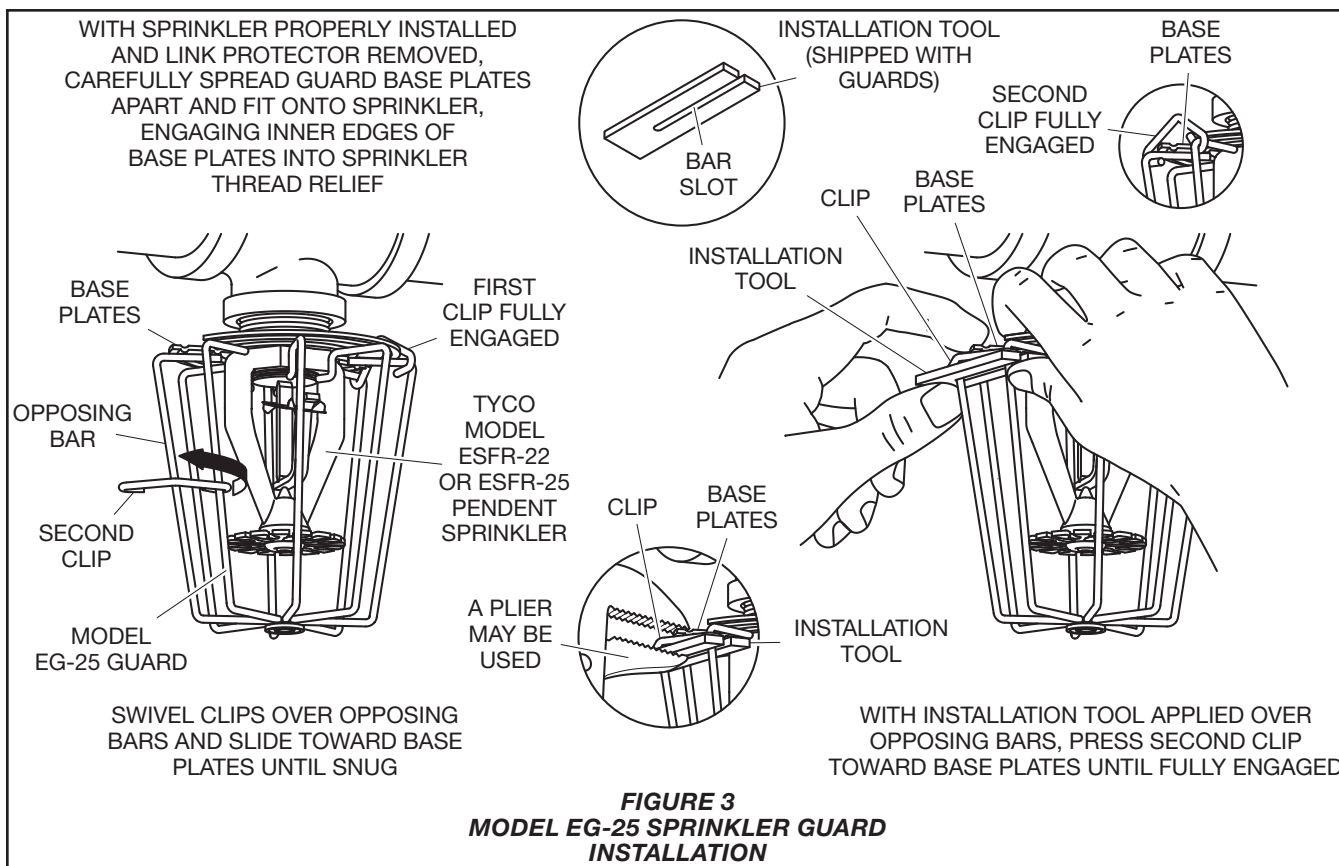
Note: TYCO ESFR Sprinklers must be installed in accordance with their respective Technical Data Sheet, see Table A.

See Figure 1 for sprinkler shield features, dimensions and installation details.

Step A. With the stamped markings facing toward the deflector, thread the Shield onto the sprinkler threads to the end nearest the frame arms.

Step B. Install the sprinkler into the sprinkler fitting in accordance with the applicable sprinkler technical data sheet, see Table A.

Step C. Rotate the Shield clockwise until flush against the face of the sprinkler fitting.



Installing the Model EG-25 Sprinkler Guard

Note: The Model ESFR-22 Sprinkler must be installed in accordance with Technical Data Sheet TFP321 and Model ESFR-25 Sprinkler must be installed in accordance with Technical Data Sheet TFP312 before installing the Model EG-25 Sprinkler Guard.

See Figure 2 for guard features and dimensions and Figure 3 for installation details.

Step 1. With the clips loose, carefully spread the two halves of the sprinkler guard apart so the bars pass by the sprinkler deflector and the base plates pass by the sprinkler thread relief from the side.

Step 2. Position the guard on center relative to the sprinkler, engaging the base plates evenly onto the sprinkler thread relief. Align the guard base plate gaps parallel with the sprinkler frame arms.

Step 3. Swivel the first clip to engage the open end onto the opposing bar and slide toward the base plates until fully seated against the base plates

Step 4. Swivel the second clip to engage the open end onto the opposing bar and slide toward the base plates until fully seated against the base plates.

Note: The Installation Tool shown in Figure 2 may be used as an aid when sliding and seating the clips. Pliers may be used in addition to the Installation Tool to facilitate seating the clips.

NOTICE

To complete the installation, the clips must seat against the base to be fully seated.

Care and Maintenance

The TYCO Model ES-1 and ES-2 Sprinkler Shields and Model EG-25 Sprinkler Guard do not require any regularly scheduled maintenance; however, proper installation of the sprinkler shield or guard should be verified during the annual visual inspection of the sprinkler.

NOTICE

Before closing a fire protection system main control valve for maintenance work on the fire protection system that it controls, obtain permission to shut down the affected fire protection system from the proper authorities and notify all personnel who may be affected by this action.

Sprinkler shields and guards found to be damaged or visibly deformed must be replaced.

Responsibility lies with sprinkler owners for the inspection, testing, and maintenance of their fire protection system and devices in compliance with this document, as well as with the applicable standards of the NFPA (for example, NFPA 25), in addition to the standards of any other authorities having jurisdiction. Contact the installing contractor or sprinkler manufacturer regarding any questions.

Automatic sprinkler systems are recommended to be inspected, tested, and maintained by a qualified Inspection Service in accordance with local requirements and/or national codes.

Owners must assure that the sprinklers are not used for the hanging of any objects and are only cleaned by means of gently dusting with a feather-duster. Otherwise, non-operation in the event of a fire or inadvertent operation may result.

Limited Warranty

For warranty terms and conditions, visit www.tyco-fire.com.

Ordering Procedure

Contact your local distributor for availability. When placing an order, indicate the full product name and Part Number (P/N).

Model ES-1 and ES-2 Sprinkler Shields

Specify: Model (specify ES-1 or ES-2) Sprinkler Shield, (specify finish), P/N (specify):

ES-1

Red Painted58-000-1-003
Zinc Coating.58-000-1-002

ES-2

Red Painted58-000-1-006
Zinc Coating.58-000-1-005

Model EG-25 Sprinkler Guard

Specify: Model EG-25 Sprinkler Guard, (specify finish), P/N (specify):

Red Painted56-939-1-025
Zinc Chromate.56-939-9-025

Additional Guard Installation Tools

Specify: Guard Installation Tool, P/N 56-000-8-597

Note: *The Model EG-25 Sprinkler Guard Installation Tool is included with orders in original carton quantities.*