

# Technical Data Sheet: Sprinkler Escutcheons

## 1. DESCRIPTION

Minimax Fire Protection sprinkler escutcheons are ornamental plates used with 3/8" NPT (10 mm BSP)\*, 1/2" NPT (15 mm BSP)\*, and 3/4" NPT (20 mm BSP)\* frame-style pendent and sidewall\* sprinklers. The escutcheons are installed between the sprinklers and the ceiling or wall for a pleasing appearance. They are available with several finish options to meet design requirements.

Minimax Fire Protection recessed and adjustable escutcheons provide a low-profile decorative recessed sprinkler installation. The M1 Recessed Escutcheon may be recessed up to 5/8" (16 mm). The Model M6 Recessed Escutcheon allows horizontal sidewall sprinklers to be recessed up to 1/2" (13 mm). The two-piece design of Minimax Fire Protection's recessed and adjustable escutcheons allows installation and testing of the sprinklers prior to installing the ceiling or wall. Minimax Fire Protection's Model M1 and M6 Escutcheons feature a slip-on design, while the Model M2 and M3 escutcheons are threaded (outer cup threads onto the adapter).

The adjustable and recessed escutcheons are made to allow for minor adjustments due to pipe or ceiling pitch. These escutcheons can be removed and reinstalled, allowing access above removable ceiling panels for servicing building equipment without shutting down the sprinkler system and removing the sprinkler.

Minimax Fire Protection standard 1/8" (3 mm) style flat and 1" (25 mm) style raised surface-mounted escutcheons have a one-piece design.

\*Refer to the specific sprinkler technical data page for the escutcheon(s) listed and approved for use with the sprinkler.

## 2. LISTINGS AND APPROVALS

Refer to the specific sprinkler technical data pages for sprinkler listings and approvals. Sprinklers must be specifically listed and/or approved for recessed installation. When using Model M1, M2, M3, and M6 escutcheons for recessed applications, refer to technical data describing the sprinkler model to be used to verify whether the sprinkler is listed and/or approved for recessed installations. NOTE: The thread-on style Model M2 and M3 Recessed Escutcheons carry the same listings and approvals as the slip-on style Model M1 Recessed Escutcheons. Model M3 Recessed Escutcheon also meets IBC-ASCE/SEI 7 Codes for Seismic Areas C, D, and E.

### ⚠ WARNING

Minimax Fire Protection products are manufactured and tested to meet the rigid requirements of the approving agency. The sprinklers are designed to be installed in accordance with recognized installation standards. Deviation from the standards or any alteration to the sprinkler after it leaves the factory including, but not limited to: painting, plating, coating, or modification, may render the sprinkler inoperative and will nullify the approval and any guarantee made by Minimax Fire Protection.

### IMPORTANT

The current edition of NFPA 13 states: "Escutcheons used with recessed, flush-type, or concealed sprinklers shall be part of a listed sprinkler assembly." Minimax Fire Protection will not authorize the sale of unlisted recessed sprinkler assemblies nor assume any liability involving recessed sprinkler assemblies that are not considered cULus Listed, FM Approved, or in full compliance with NFPA requirements.

Listings and approvals vary, depending on the sprinkler model, temperature rating, finish, and occupancy classification.

Always refer to Bulletin Form No. FX\_091699 - Care and Handling of Sprinklers. Also refer to the appropriate sprinkler data page. Minimax Fire Protection sprinklers are designed to be installed in accordance with the latest edition of Minimax Fire Protection technical data, the latest standards of NFPA, FM Global or other similar organizations, and also with the provisions of governmental codes, ordinances, and standards whenever applicable. The use of certain types of sprinklers may be limited due to occupancy and hazard. Refer to the Authority Having Jurisdiction prior to installation.

## 3. TECHNICAL DATA

Specifications:

### A. Slip-on Style Model M1 Recessed Escutcheons

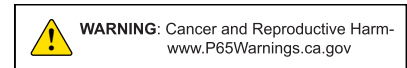
- Depth of Outer Cup: 1-1/16" (27 mm)
- Outside Diameter of Outer Cup: 3-1/16" (78 mm)
- Depth of Center Adapter Ring: 11/32" (9 mm) +/- 1/32" (1 mm)
- Adjustment Range: Flush to 5/8" (16 mm) recessed

**NOTE: Escutcheon adapter is stamped "Model M1".**

### B. Threaded Style Model M2 Recessed Escutcheons

- Depth of Outer Cup: 13/16" (21 mm)
- Outside Diameter of Outer Cup: 3-1/8" (80 mm)
- Depth of Center Adapter Ring: 21/32" (17 mm)
- Adjustment Range: 27/32" (21 mm) total adjustment with 1/2" (13 mm) maximum recess available.

**NOTE: Face of escutcheon adapter may extend up to 11/32" (9 mm) beyond edge of escutcheon cup.**



**C. Threaded Style Model M3 Recessed Escutcheons**

Depth of Outer Cup: 13/16" (21 mm)  
 Outside Diameter of Outer Cup: 5-1/8" (130 mm). (See Figure 4)  
 Depth of Center Adapter Ring: 21/32" (17 mm)  
 Adjustment Range: 27/32" (22 mm) total adjustment with 1/2" (13 mm) maximum recess available.  
**NOTE: Face of escutcheon adapter may extend up to 11/32" (9 mm) beyond edge of escutcheon cup.**

**D. Slip-on Style Model M6 Recessed Escutcheons (US Patent No. 8,376,060)**

Depth of Outer Cup: 1-1/16" (27 mm)  
 Outside Diameter of Outer Cup: 4" (102 mm)  
 Depth of Center Adapter Ring: 1-7/16" (37 mm)  
 Adjustment Range: Up to 5/8" (16 mm) total adjustment available for use with ceilings sloped up to 8/12 (33.7°). May be recessed up to 1/2" (13 mm), depending on degree of slope. NOTE: The face of escutcheon adapter may extend up to 1/2" (13 mm) beyond the edge of the escutcheon cup.  
**NOTE: Escutcheon adapter is stamped "Model M6".**

**E. Standard Flat Surface-Mounted Escutcheons**

Depth of Escutcheons: Flat: 1/8" (3 mm)

**Table 1 - Ordering Information**

**Instructions: Using the Base Part Number, add the suffix for the desired finish.**

**NOTE: SPRINKLERS ARE NOT INCLUDED AND MUST BE PURCHASED SEPARATELY.**

Base Part Number	Material	Style	Sprinkler Thread Size	Available Finishes	Outside Diameter
<b>Standard Flat and Raised Surface-Mounted Escutcheons</b>					
61391	Steel	Flat	1/2" (15 mm)	B, F	3-5/16" (84 mm)
61392	Steel	Flat	3/4" (20 mm)	F	3-5/16" (84 mm)
61393	Steel	Flat	1/2" (15 mm)	B, F, M/W, M/B	2-3/4" (70 mm)
61394	Steel	Flat	3/4" (20 mm)	B, F, M/W	2-3/4" (70 mm)
<b>M1 Slip-on Style Recessed Escutcheon Packages</b>					
61371	Steel	Recessed Slip-on	1/2" (15 mm)	B, F, M/W, M/B	3-1/16" (78 mm)
61372	Stainless Steel	Recessed Slip-on	1/2" (15 mm)	F, M/W, JN	3-1/16" (78 mm)
61379	Stainless Steel	Recessed Slip-on	3/4" (20 mm)	F, M/W, JN	3-1/16" (78 mm)
61378	Steel	Recessed Slip-on	3/4" (20 mm)	B, F, M/W, M/B	3-1/16" (78 mm)
<b>M2 Threaded Style Recessed Escutcheon Package</b>					
61373	Steel	Recessed Threaded	1/2" (15 mm)	F, M/W	3-1/8" (79 mm)
61380	Steel	Recessed Threaded	3/4" (20 mm)	F, M/W	3-1/8" (79 mm)
<b>M3 Threaded Style Recessed Escutcheon Packages</b>					
61374	Steel	Recessed Threaded	1/2" (15 mm)	F, M/W	5 -1/8" (130mm)
61381	Steel	Recessed Threaded	3/4" (20 mm)	F, M/W	5 -1/8" (130mm)
<b>M6 Recessed Escutcheon Package</b>					
61377	Steel	Recessed Slip-on	1/2" (15 mm)	B, F, M/W, M/B	4" (102 mm)
61383	Steel	Recessed Slip-on	3/4" (20 mm)	B, F, M/W, M/B	4" (102 mm)
<b>Available Finishes: B=Brass, F=Chrome, M/W=Painted White, M/B=Painted Black; JN=Electroless Nickel PTFE; Custom Colors available.</b>					

**Material Standards:**

- A. Slip-on Style Model M1 Recessed Escutcheons:** Cold Rolled Steel UNS-G10080 or Stainless Steel UNS-S30400
- B. Threaded Style Model M2 and M3 Recessed Escutcheons:** 24 ga. (1 mm) thick 1010-1018 mild steel
- C. Model M6 Recessed Escutcheons:** Cold Rolled Steel UNS-G10080
- D. Expansion Plate (optional):** Cold Rolled Steel UNS-G10080
- E. Standard Flat Surface-Mounted Escutcheons:** Cold Rolled Steel UNS-G10080.

**4. INSTALLATION**

- A. If the proposed installation of Model M1, M2, M3, or M6 Escutcheons requires recessing any of the heat-sensitive operating element, some Authorities Having Jurisdiction may limit the use, depending on the occupancy classification. Refer to the Authority Having Jurisdiction prior to installation. The use of quick response sprinklers may also be limited due to occupancy and hazard. Refer to the Authority Having Jurisdiction prior to installation.**
- B. All escutcheon styles are made to thread onto the sprinkler head prior to installing the sprinkler into the fitting. The escutcheon must be attached to the sprinkler prior to applying pipe-joint compound or PTFE tape to the sprinkler threads. NOTE: Sprinklers with protective caps or bulb shields must be contained within the caps or shields before applying pipe-joint compound or tape.**
- C. Refer to the appropriate sprinkler technical data page for additional warnings and installation instructions and then install the escutcheons according to the following sequence.**

**D. Model M1, M2, M3, and M6 Recessed Escutcheons:**

(Refer to Figures 2-5.)

1. Install all piping and cut the sprinkler nipple so that the reducing coupling is at the desired location and centered in a minimum 2-5/16" (59 mm) to a maximum 2-1/2" (64 mm) diameter opening in the ceiling or wall for Model M1 or M2, 2-5/16" (59 mm) to 4-1/2" (115mm) for Model M3, or 2-5/8" (66 mm) to 3-3/4" (95 mm) for Model M6 Escutcheons.
2. Secure the escutcheon adapter onto the sprinkler by hand turning the adapter clockwise onto the sprinkler threads. The face of the adapter should rest on the shoulder of the sprinkler wrench boss.
3. Apply a small amount of pipe-joint compound or PTFE tape to the external threads of the sprinkler only, taking care not to allow a build-up of compound in the sprinkler inlet.  
**NOTE: Sprinklers with protective caps or bulb shields must be contained within the caps or shields before applying pipe-joint compound or tape.**
4. Install the sprinkler into the coupling using the special recessed sprinkler wrench only, taking care not to over-tighten or damage the sprinkler operating parts. DO NOT use the escutcheon, sprinkler deflector, or fusible element to start or thread the sprinkler into a fitting.
5. Test the system as required and repair all leaks. If a thread leak occurs, normally the unit must be removed, new pipe-joint compound or PTFE tape applied, and then reinstalled. This is due to the fact that when the joint seal leaks, the sealing compound or tape is washed out of the joint.
6. Remove plastic protective sprinkler caps and bulb shields AFTER the wall or ceiling finish work is completed where the sprinkler is installed and there no longer is a potential for mechanical damage to the sprinkler operating elements. To remove the bulb shields, simply pull the ends of the shields apart where they are snapped together. To remove caps from frame style sprinklers, turn the caps slightly and pull them off the sprinklers. **SPRINKLER CAPS AND BULB SHIELDS MUST BE REMOVED FROM SPRINKLERS BEFORE PLACING THE SYSTEM IN SERVICE!** Retain a protective cap in the spare sprinkler cabinet.
7. After installing the ceiling or wall with the required opening size, press on or thread on (depends on the style of escutcheon used) the outer escutcheon cup until the flanges touch the surface of the ceiling or wall.

**NOTE: If the optional escutcheon expansion plate is used, first slide it onto the escutcheon cup. The flange on the expansion plate should touch the surface of the ceiling or wall.**

Maximum Recess:

- Model M1: 5/8" (16 mm).
- Model M2 and M3: 1/2" (13 mm).

**NOTE: Note: The face of the escutcheon adapter may extend up to 11/32" (9 mm) beyond edge of escutcheon cup, resulting in 27/32" (21 mm) total adjustment range.**

**NOTE: Note: The face of the escutcheon adapter may extend up to 1/4" (6 mm) beyond the edge of the escutcheon cup, resulting in 1/2" (13 mm) total adjustment range.**

- Model M6: 1/2" (13 mm).

DO NOT modify the unit. If necessary, re-cut the sprinkler drop nipple as required.

**E. Standard Flat and Raised Surface-Mounted Escutcheons:**

1. Install all piping and cut the sprinkler nipple so that the reducing coupling is at the desired location and centered in a maximum 2-1/2" (64 mm) diameter opening in the ceiling or wall.
2. Secure the escutcheon onto the sprinkler by hand turning the escutcheon clockwise onto the sprinkler threads. (The convex surface of the escutcheon must face toward the deflector of the sprinkler.)
3. Apply a small amount of pipe-joint compound or PTFE tape to the external threads of the sprinkler only, taking care not to allow a build-up of compound in the sprinkler inlet. NOTE: Sprinklers with protective caps or bulb shields must be contained within the caps or shields before applying pipe-joint compound or tape.
4. Install the sprinkler into the coupling using the special sprinkler wrench only, taking care not to over-tighten or damage the

sprinkler operating parts. DO NOT use the escutcheon, sprinkler deflector, or fusible element to start or thread the sprinkler into a fitting.

5. After installation, the entire sprinkler system must be tested. The test must be conducted to comply with the installation standards. Make sure the sprinkler is properly tightened. If a thread leak occurs, normally the unit must be removed, new pipe-joint compound or tape applied, and then reinstalled. This is due to the fact that when the joint seal leaks, the sealing compound or tape is washed out of the joint.
6. Remove plastic protective sprinkler caps and bulb shields AFTER the wall or ceiling finish work is completed where the sprinkler is installed and there no longer is a potential for mechanical damage to the sprinkler operating elements. To remove the bulb shields, simply pull the ends of the shields apart where they are snapped together. To remove caps from frame style sprinklers, turn the caps slightly and pull them off the sprinklers. **SPRINKLER CAPS AND BULB SHIELDS MUST BE REMOVED FROM SPRINKLERS BEFORE PLACING THE SYSTEM IN SERVICE.** Retain a protective cap in the spare sprinkler cabinet.  
DO NOT modify the unit. If necessary, re-cut the sprinkler drop nipple as required.

**F. Disassembly:**

The outer cups of the adjustable and recessed escutcheons can be removed and reinstalled without removing the sprinklers to allow access above the ceiling or to replace it, if necessary.

1. For slip-on style Model M1 or M6 Recessed Escutcheons remove the outer cup simply by pulling it outward and away from the wall or ceiling.
2. For threaded style Model M2 and M3 Recessed Escutcheons, turn the outer cup counterclockwise to unthread it from the adapter.

**NOTE: If it is necessary to remove the entire unit, the system must be removed from service. Refer to maintenance instructions on the appropriate sprinkler technical data page and follow all warnings and instructions.**

**5. OPERATION**

Refer to the applicable sprinkler's technical data page.

**6. INSPECTIONS, TESTS, AND MAINTENANCE**

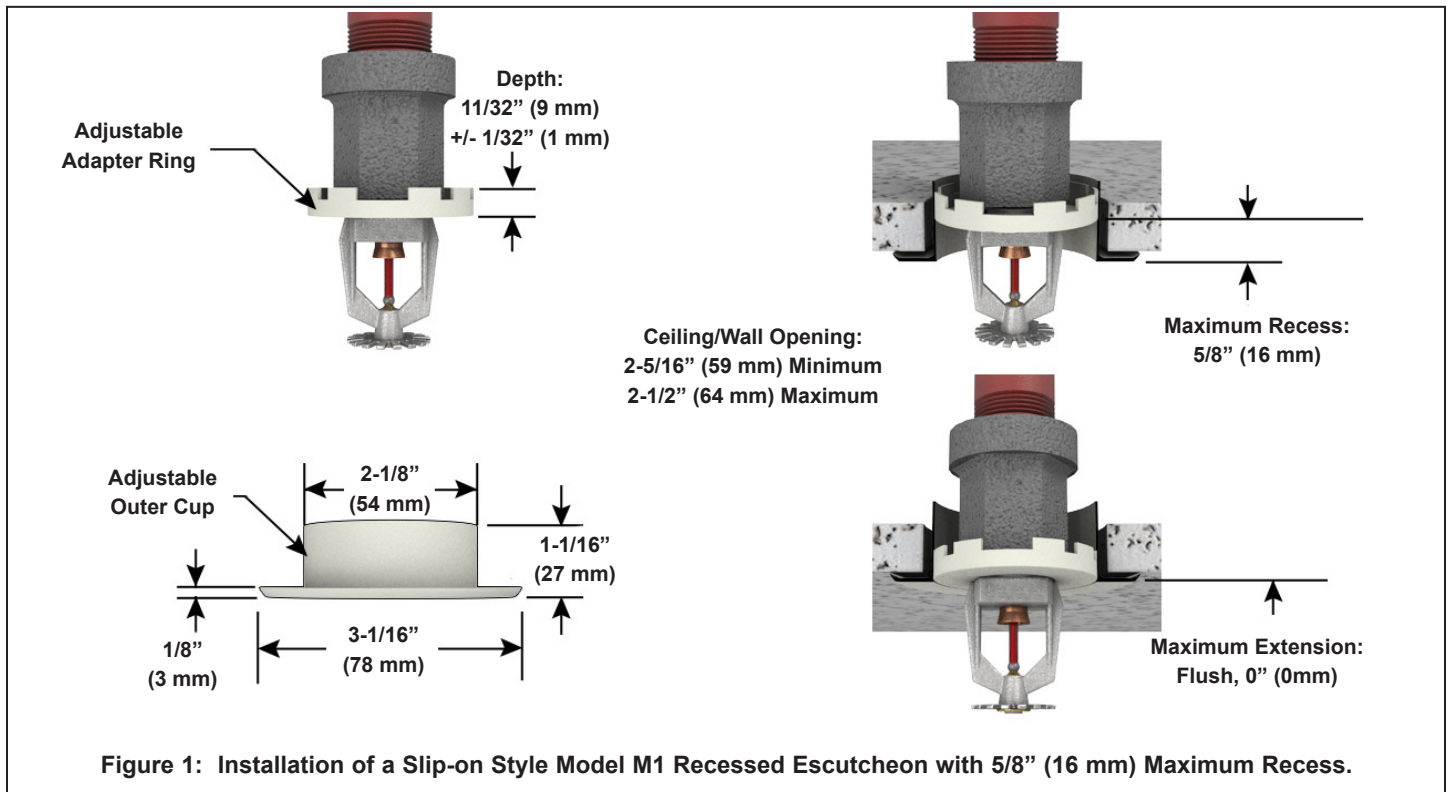
Refer to NFPA 25 for Inspection, Testing and Maintenance requirements.

**7. AVAILABILITY**

Minimax Fire Protection sprinklers and escutcheons are available through a network of domestic and international distributors. See The Minimax Fire Protection web site for the closest distributor or contact Minimax Fire Protection.

**8. GUARANTEE**

For details of warranty, refer to the current list price schedule or contact us directly.



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