Rapid Seal Adapter (RSA) Fittings
Sprinkler Installation and Gasket Replacement

IMPORTANT
Refer to Technical Data Sheet IFP2030 for warnings pertaining to regulatory and health information.

General Description

Rapid Seal Adapter (RSA) Fittings are intended for use in fire protection sprinkler systems comprised of IPEX BlazeMaster® pipe and fittings. A gasket housed within the fitting eliminates the need to apply sealant to sprinkler threads and reduces the effort necessary to complete a leak-free installation.

These installation instructions do not take the place of nor do they eliminate the need for the installer to fully read and understand the complete Technical Manual and individual product technical data sheets. Current documentation can be obtained by contacting IPEX or visiting www.ipexna.com.

Technical Data

Approvals
UL and C-UL Listed
FM Approved
LPCB Certified
NSF-pw Certified

Maximum Working Pressure
175 psi (12,1 bar)

Pipe Thread Connection
1/2 in. NPS

Physical Characteristics
Housing. . . . . BlazeMaster CPVC Compound
Cap . . . . . BlazeMaster CPVC Compound
Gasket. . . . . Polyurethane

Installation

The IPEX Rapid Seal Adapter Fittings must be installed in accordance with this section.

Installing a Sprinkler in an RSA Adapter Fitting

Install a sprinkler in an RSA adapter fitting in accordance with the following procedure.

Refer to individual sprinkler data sheets for additional information including required sprinkler wrenches.

Note: In systems featuring RSA adapter fittings and where hydrostatic testing is required by the Authority Having Jurisdiction prior to sprinkler installation, sprinkler adapter outlets may be plugged with RSA system test plugs during testing. Remove the plugs and replace with sprinklers after successful testing.

CAUTION

Do not apply thread sealant or TEFLON thread tape on sprinklers intended to be installed in RSA Fittings. Thread Sealant or TEFLON tape may not allow the sprinkler to seat properly and cause leakage and/or equipment failure.

Step 1. Ensure the sprinkler threads are clean and do not have thread sealant such as tape or paste applied. Avoidng cross-threading, gently thread the sprinkler into the fitting and hand-tighten until the sprinkler makes contact with the gasket.

Do not over-torque sprinklers when wrench-tightening with the manufacturer required sprinkler wrench. Over-torquing may result in equipment damage.

For recessed applications do not attempt to compensate for insufficient sprinkler depth within the Escutcheon Plate by under- or over-tightening the sprinkler. Re-adjust the sprinkler fitting position to suit.

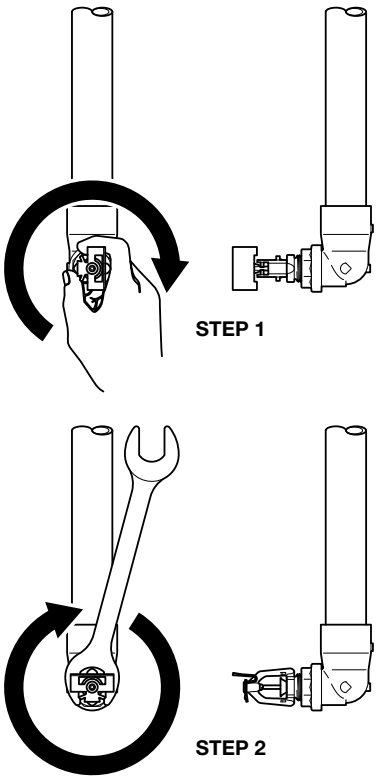
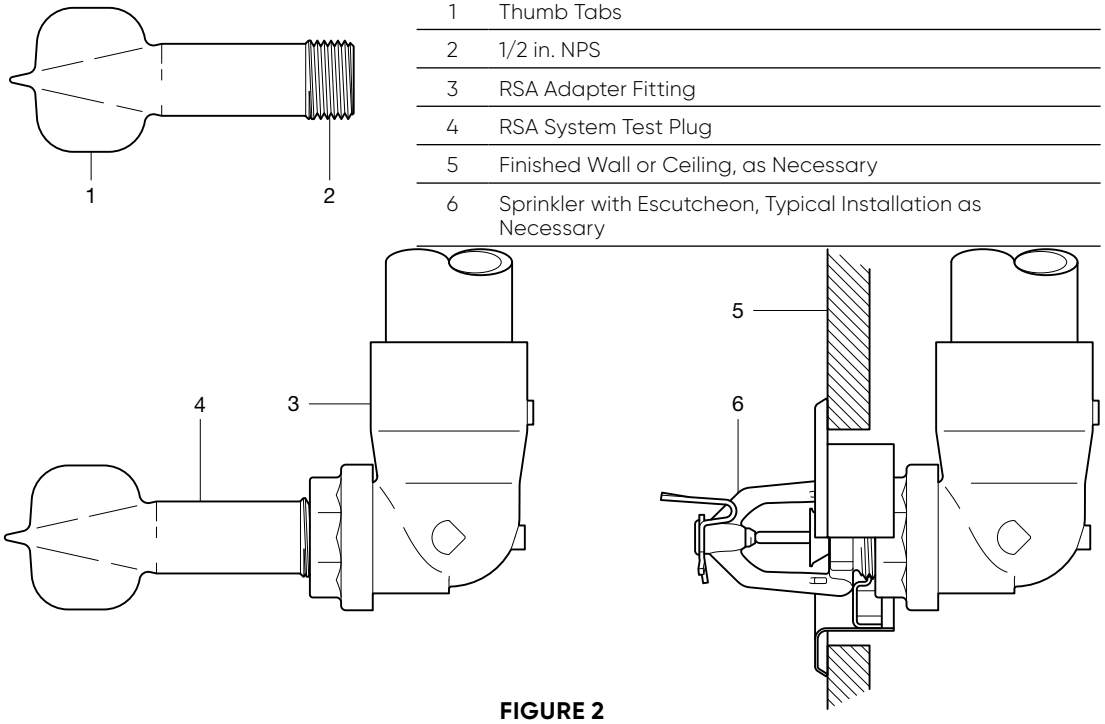


FIGURE 1
RAPID SEAL ADAPTER FITTINGS SPRINKLER INSTALLATION



Item	Description
1	Thumb Tabs
2	1/2 in. NPS
3	RSA Adapter Fitting
4	RSA System Test Plug
5	Finished Wall or Ceiling, as Necessary
6	Sprinkler with Escutcheon, Typical Installation as Necessary

FIGURE 2
RAPID SEAL ADAPTER SYSTEM TEST PLUG

Step 2. Orient the sprinkler as needed by applying the manufacturer specified sprinkler wrench to the sprinkler wrench flats and tighten up to an additional full turn, or by applying up to a maximum torque of 7 lb-ft (9,5 N·m).

Installing an RSA System Test Plug in an RSA Adapter Fitting

Install an RSA adapter fitting system test plug in an RSA adapter fitting in accordance with the following procedure. See Figure 2 for reference.

Step 1. Ensure the plug and fitting threads are clean with no thread sealant such as tape or paste applied. Avoiding cross-threading, gently thread the plug into the fitting and hand-tighten until the plug end makes contact with the fitting gasket.

Step 2. Hand-tighten the plug a further 1 turn maximum to compress the fitting gasket and ensure a leak-tight seal.

Step 3. Conduct the system pressure test as necessary in accordance with Technical Manual Installation Instructions and Technical Handbook TM-2000.

Step 4. Remove plug only after successful completion of the system pressure test.

Step 5. Install or finish the wall or ceiling as necessary.

Step 6. Install the sprinkler as necessary.

Care and Maintenance

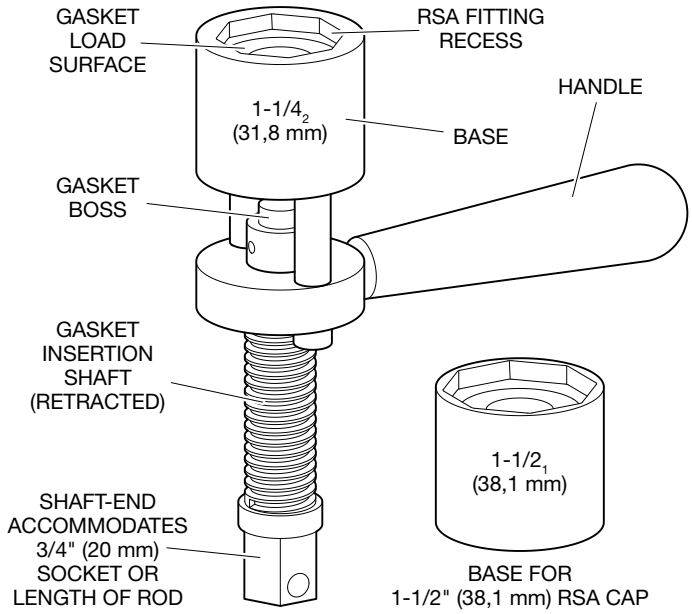
The IPEX Rapid Seal Adapter Fittings must be maintained and serviced in accordance with this section.

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 decision.

After placing a fire protection system in service, notify the proper authorities and advise those responsible for monitoring proprietary and/or central station alarms.

The owner is responsible 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 NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) such as NFPA 25, in addition to the standards of any authority having jurisdiction. Contact the installing contractor or product manufacturer with any questions. Any impairments must be immediately corrected.

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.



Notes:
1. 1-1/2 in. (38,1 mm) base used to replace gaskets in Version 1 adapters
2. 1-1/4 in. (31,8 mm) base used to replace gaskets in Version 2 adapters

FIGURE 3
RAPID SEAL GASKET REPLACEMENT TOOL

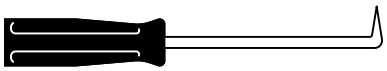


FIGURE 4
RAPID SEAL GASKET REMOVAL PICK

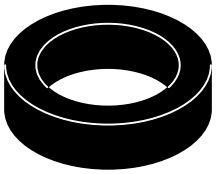


FIGURE 5
RAPID SEAL REPLACEMENT GASKET

Replacing a Gasket in a RSA Fitting

NOTICE

Gasket Replacement and its asso-cated tools were not evaluated as part of the UL Listing program.

In the event that a sprinkler, installed in an RSA fitting longer than six months, is removed due to damage or activation, the RSA fitting or the RSA fitting gasket must be replaced.

Step 1. Remove the sprinkler from the RSA fitting.

CAUTION

Use caution when removing the gasket to avoid damaging the adapter threads. Failure to do so may result in equipment damage or failure.

Step 2. Use the rapid seal gasket removal pick as shown in Figure 4 to carefully remove the gasket from the RSA fitting. Discard the old gasket.

Step 3. Verify that the RSA fitting port is clean and free of all debris, chips, or burrs. Failure to do so may result in equipment damage or failure.

Step 4. Ensure the tool base socket is the correct size, 1 1/4 in. (31,8 mm) or 1 1/2 in. (38,1 mm), for the RSA fitting.

Note: To change the base socket, remove two socket head cap screws using a 3/16 in. (4,5 mm) hex key wrench.

Step 5. Rotate the rapid seal gasket replacement tool insertion shaft, as shown in Figure 3, counter-clockwise until fully retracted. Place the rapid seal replacement gasket, as shown in Figure 5, onto the shaft end boss and rotate the shaft clockwise until the gasket is flush with the surface of the base recess.

Step 6. Holding the rapid seal gasket replacement tool base recess shown in Figure 3 firmly against the face of the RSA fitting, rotate the insertion shaft until fully engaged. Remove the rapid seal gasket replacement tool from the RSA and verify that the gasket is evenly seated and fully installed in the RSA fitting port.

Step 7. Install the replacement sprinkler in accordance with the Installing a Sprinkler in an RSA Fitting section in this data sheet.

Ordering Procedure

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

Rapid Seal Adapter

Specify: Rapid Seal CPVC Sprinkler Adapter, (specify type), (specify size, Inch Slip x NPS), P/N (specify):

Female
3/4 (DN20) x 1/2 . . . . . 048211*
1 (DN25) x 1/2. 048212

Spigot
3/4 (DN20) x 1/2 048213
1 (DN25) x 1/2. . . . . 048211*

90° Elbow
3/4 (DN20) x 1/2 048215
1 (DN25) x 1/2. 048214

Tee
3/4 (DN20) x 3/4 (DN20) x 1/2 048216
1 (DN25) x 1 (DN25) x 1/2 048217

Back to Back Tee
1 (DN25) x 1/2 x 1/2:
3.65 in. (92,6 mm) E-to-E 048219
3.90 in. (99,1 mm) E-to-E. 048218

Back to Back Cross
1 (DN25) x 1 (DN25) x 1/2 x 1/2:
3.60 in. (91,4 mm) E-to-E 048220
3.85 in. (97,8 mm) E-to-E 048221

* Part number 048211 is a dual purpose fitting, usable as either a 3/4 in. (DN20) female adapter or a 1 in. (DN25) spigot adapter.

Replacement Tools and Gasket

Specify: Rapid Seal (specify product), P/N (specify):

Rapid Seal Gasket Replacement Tool 074297
Rapid Seal Gasket Removal Pick 074294
Rapid Seal Replacement Gasket (Qty 10) . . 074295

Rapid Seal Adapter Fitting System Test Plug

Specify: Rapid Seal Adapter System Test Plug, P/N 048224

IPEX
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