



Register of Sprinkler Equipment

ISSUE 1 | REVISION 1



Contents

1. Introduction	3	› Globe Sprinkler Equipment for New Installations	12
2. Legislative and Standards Background.....	3	› Reliable Sprinkler Equipment for New Installations	14
3. Operation of the Register.....	3	› Tyco Sprinkler Equipment for New Installations	17
4. Subscriptions and Updates.....	4	› Victaulic Sprinkler Equipment for New Installations	22
5. Charges.....	4	› Viking Sprinkler Equipment for New Installations	23
6. Review	4		
7. Copyright.....	4		
8. Responsibility	4		
9. Disclaimer.....	4		
10. Listing procedures and administration of the Register.....	5		
› 10.1 Procedures for a manufacturer to obtain “listing” in the register	5		
› 10.2 Criteria for obtaining product listing in this Register	5		

The majority of equipment currently listed in this register are Sprinkler Heads.
Other equipment will appear on the list as issued.

1. Introduction

This Register of Certified Product (“Register”) lists Fire Sprinkler Products and Components that have been formally issued by Aon with a listing certificate, as complying with the requirements of NZS 4541 and/or NZS4515. Under the provisions of NZS4541 the Sprinkler System Certifier (SSC) is responsible for listing of product. Aon has been found competent by IANZ to operate as a SSC, as defined by NZS4541.

The listing is based upon evidence provided by the manufacturer, or their agent, that the product has been tested or analysed by a competent person or laboratory; and has been demonstrated to meet the minimum performance criteria.

Each listing details the basis on which that listing has been accepted. The listing certificate also includes any restrictions or warnings the SSC believes warranted. In some cases the SSC may restrict the listing to a narrower range than the manufacturer’s data would otherwise indicate; this may be due to more onerous criteria with the relevant New Zealand standard or reflect differences in New Zealand installation practices.

This Register is published by the Fire Protection Association (New Zealand) Incorporated (FPANZ), with Aon New Zealand undertaking responsibility for independent technical control of the Register.

This Register has been produced for reference by:

- › Territorial Authorities
- › Fire and Emergency NZ
- › Architects
- › Consultants
- › Designers
- › Installation, Maintenance and Testing Contractors
- › Building owners
- › Importers

- › Manufacturers
- › Accredited Inspection Bodies
- › Standards New Zealand

The Register is intended to be used for both new installations to the latest standards, and for the upgrade and extension of historic systems to prior versions of standards.

Given the multiplicity of manufacturers, import agents, and distributors the register is split into three sections; sprinkler heads, valves and miscellaneous.

2. Legislative and Standards Background

(NOTE: all clause numbers refer to NZS 4541:2013. The full provisions of the standard should be read in conjunction with the summary supplied below.)

The ‘Acceptable Solutions’ of the New Zealand Building Code (NZBC) Approved Documents call up NZS4515:2009 and NZS 4541:2013 for Fire Sprinkler Systems.

NZS 4541:2013 has specific requirements for fire sprinkler system equipment compliance. A summary of these requirements is as follows:

- › 110 (e) and (f) defines as part of the duties of the SSC the role of listing contractors and equipment.
- › 113 provides the formal evidence that the SSC shall site and review before listing any contractor. This clause also imposes an ongoing responsibility upon the listed contractor and notes the full listing is valid for 24 months.
- › 114 provides the formal evidence that the SSC shall site and review before listing any equipment.
- › 115 details the parameters by which a listing maybe withdrawn by the SSC.

Appendix C and F provide detail and guidance for the SSC and the listing applicant.

3. Operation of the Register

In order to maintain a consistent, workable, and readily accessible system, available to the whole industry, the FPANZ and Aon have agreed that:

- a) Aon (or their agreed nominee) shall provide independent technical review of applications for listing made by manufacturers, and shall maintain technical editorial control of the Register, subject to the guidelines and procedures specified below,
- b) Only certified products will be accepted for listing. Product certification will be achieved via an appraisal certificate from a recognised test laboratory or suitable evidence of overseas agency listing for all new product. Self certification may be acceptable for subsequent changes to listed product,
- c) FPANZ shall provide clerical/secretarial and publishing/subscription services to facilitate the widespread distribution and regular updates of the Register, and
- d) Manufacturers or suppliers shall make application for listing of products in the Register according to the procedures and criteria specified below.

Any equipment manufacturer or importer is eligible to apply for listing, subject to the procedures and criteria listed below.

Technical operation and publication of the Register is independent of the equipment manufacturers and importers.

In certain circumstances as detailed in clause 115 Aon may, at its sole discretion, withdraw a listing certificate. Should this arise the product will be deleted from this register.

4. Subscriptions and Updates

All enquiries regarding subscriptions and copyright shall be referred to:

Team@FPA
Fire Protection Association NZ Inc
Private Box 302372, North Harbour
Auckland 1330

Phone: (09) 414 4450
Email: info@fpanz.org

5. Charges

- Aon collects on behalf of FPA NZ the costs of publishing and updating the register. The fee is \$100 for the first item and \$50 for each additional item every time the applicant makes request for listing. If 3 items are submitted in March and another item in June the publication fees will be \$200 and \$100 respectively.

Charges will be made by Aon for technical assessment of applications for listing, and amendments to existing listings as follows:

- › Please refer to the current price schedule from Aon.
- › For certain products Aon can provide a quotation.
- › Should the specific technical assessment be outside of the competency of Aon a subject matter expert will require engagement by the listing applicant. The subject matter expert will need to agree the parameters of their enquiry with Aon. Subject to agreement by Aon the subject matter expert may not necessarily be independent of the applicant.
- › Where manufacturer site visits are required to inspect records or are otherwise considered necessary these will be at the discretion of the Aon, and this service will be charged at the current hourly rate of the independent technical advisor plus disbursements.

Note if an application is rejected for any reason, Aon reserves the right to charge additional fees (based on actual time and costs) for a reassessment

All charges are in New Zealand Dollars, are exclusive of GST, and are subject to change.

Aon's fee proposal is subject to their standard terms of business, which can be viewed [here](#). 

By accepting their fee proposal, applicants agree that their standard terms of business apply to the services Aon agree to provide from time to time.

6. Review

The status and ongoing competency of listed contractors is reviewed at no more than 24 month intervals. With respect to contractors who hold a provisional listing the review period is 12 months. Refer NZS4541 clause 113.

Aon may review the suitability of any listed product should they have reason for concern. Refer NZS4541 clause 115.

7. Copyright

Copyright of this Register is held by FPA NZ as publisher. All rights are reserved. The Register may not be copied or reproduced in any way, either in whole or in part, without the express permission of FPA NZ, obtained through the Chief Executive Officer.

Copyright of the listing certificates is held by Aon. These certificates may not be represented as anything other than demonstrating a product has been found to comply with the requirements of NZS4541 and NZS4515.

8. Responsibility

The individual manufacturers or suppliers are responsible for obtaining equipment listings and the accompanying supporting evidence. Aon is responsible for reviewing and issuing the listing.

9. Disclaimer

This Register details the listing status of products and components current at the time of issue. This listing status is subject to change without notice at any time.

Listing in this Register does not imply any warranty whatsoever by the publishers or their technical advisors as to the field performance of products, systems, or components listed.

Listing in this Register does not imply any warranty whatsoever by the publishers or their technical advisors against any defect or failure in service of products, systems, or components listed.

Listing in this Register does not imply any responsibility whatsoever by the publishers or their technical advisors in regards to patents or other features or conditions applying in respect of any products, systems, or components listed.

Neither the publishers nor their technical advisors, nor any of their officers or employees shall be liable to any person or company for anything contained or implied in, or omitted from, this Register or any update of any part of it.

In all cases the reader is referred to the manufactures published data sheets.

10. Listing procedures and administration of the Register

10.1 Procedures for a manufacturer to obtain “listing” in the Register

All enquiries for amendments, alterations and additions to listings shall be referred to Aon in the first instance:

Mr Stephen Ridder
Aon New Zealand
388 Blenheim Road, Upper Riccarton
Christchurch 8140

Telephone: (03) 345 9843

Email: nz.ssc@aon.com
and cc Stephen.ridder@aon.com

The Technical Manager at Aon, or his/her duly authorised delegate, is responsible for technical review of all applications made by manufacturers for listing of equipment and components.

Supporting documentation as applicable according to the criteria below shall accompany each application for listing.

Where the application for listing is not from the manufacturer then evidence of agency is required. This evidence of agency is to ensure the authenticity and completeness of the documentation supplied to the SSC. Therefore, listings are not granted to parallel importers due to the lack of agency.

Where confidential or sensitive data is provided to Aon please be sure to clearly indicate that the information is issued in confidence. Aon has clear policies regarding the confidentiality of customers data.

10.2 Criteria for obtaining product listing in this Register

10.2.1 Listing new products

For all products, the manufacturer or supplier shall complete and submit an Application for Listing form (Form 9) and submit to Aon with the following supporting evidence as applicable:

- Manufacturer’s datasheets and drawings.
- Manufacturer’s drawings.
- Manufacturer’s engineering calculations
- Copies of overseas approvals from recognized testing agencies such as FM, UL, or VdS.

When a product has not been subjected to testing by an overseas agency the following supporting evidence will be required as applicable. Before beginning this process it is best to call Aon to discuss so as to ensure any engineering assessments or laboratory testing is appropriate.

- Assessment in person by an Aon technical member;
OR
- Design review calculations by a CpEng;
OR
- Test reports from a recognized laboratory;
OR
- Detailed review by a subject matter expert;
OR
- Another method as agreed between the applicant and Aon.

Please note it is not required in every instance that the CpEng or testing laboratory is independent from the manufacturer.

When a review or testing will be complex, agreement with Aon of the terms of the review or testing should be sought first.

10.2.2 Amendments/Upgrades to existing listed products

By way of cover email from the manufacturer, or supplier, which explains the change(s) and supported with revised manufacturers’ datasheets and updated foreign approvals or engineering assessments shall be supplied to Aon for review.

Where the change is minor or determined to be inconsequential the listing certificate may not require amendment.

Where the change is more than minor or seeks to increase the scope of the listing the listing certificate will be undated and reissued.

Form of the Register

The Register shall be organised in two separate sections:

SECTION A

Sprinkler Equipment Listings for New Installations and compliant with the latest standard (currently NZS 4512:2010)

SECTION B

Historical Sprinkler Equipment Listings (items compliant with earlier version of standards), listed for maintenance and upgrade purposes

Each section shall be alphabetically organised by manufacturer, with two sub-sections per manufacturer:

- › Sprinkler Equipment Listings
- › Compatibility Details for Listed Equipment

For consistency and ease of use Sprinkler Equipment Listing details shall be presented in a standardised format as follows:

In separate columns for:

- › Brand
- › Model
- › Description
- › Standard and version/date – Section A only
- › Means code (as below) – Section A only
- › Listing Number

And in separate sub-sections for different equipment types:

- › Panels
- › Heat Detectors
- › Smoke and other Fire Detectors
- › Alerting Devices
- › Brigade Interface Equipment
- › Ancillary Products
- › Sprinkler Fire Brigade Signalling Equipment

The Section A Equipment Listing shall state for each item the standard and version/date to which the item conforms, and shall provide a code or codes to identify the means by which it achieved that compliance.

Viz:

A = Laboratory appraisal certificate

D = Manufacturer's declaration

C = Overseas agency listing

(more than one code may apply to any individual item)

Whenever the standard applicable to listing in Section A becomes superseded (i.e. is no longer acceptable under the relevant legislation), all affected equipment listed in Section A shall automatically be earmarked for moving to Section B. Each manufacturer shall then be required to make appropriate declarations and/or applications against the revised/replacement standard to retain Section A status for this equipment.

The Compatibility Details for Listed Equipment sub-sections shall give compatibility details as supplied by each manufacturer. A disclaimer in each Compatibility Details section shall state that these details are published as supplied by the manufacturer in accordance with the definition of manufacturer in NZS 4512:2010 clause 104, that they have not been independently checked and that the manufacturer is wholly responsible for the accuracy and completeness of the content.

For consistency and ease of use Compatibility Details shall be presented in a standardised format as follows:

In separate columns for:

- › Brand
- › Model
- › Type Description
- › Maximum Number per zone
- › Notes
- › Listing Number (of the compatible device)

And in separate sub-sections for each:

- › Panel and/or zone input card/device

Listing all devices that are compatible with that panel or zone input card/device.

Compatibility Details for obsolete detectors and equipment shall be permitted for the purposes of maintenance and service of the large installed base of systems to previous standards. If there is no current listing number for such devices, then "obsolete – ref only" shall appear in the "notes" column.

<Company Letterhead>

<Date>

<Addressed to FPANZ>

REGISTER OF Sprinkler EQUIPMENT – NEW/AMENDED LISTING

Having examined the documentation provided by the manufacturer/importer, on behalf of Fire Protection Inspection Services Limited I confirm that the following product(s) may be listed in section A of the Register.

Name of Manufacturer/Importer:

Equipment Type Section:

Brand:

Model:

Description:

Standard and version/date:

Means Code(s):

Listing Number:

<repeat the above as necessary>

Yours faithfully

<Name of duly authorised signatory>

<Title>

A copy of the current Register listing is to be sent by FPANZ to each manufacturer annually to obtain administrative revalidation of their listing and contact details, and to ensure that the manufacturer is still trading.

Each manufacturer shall be required to respond on official letterhead according to the following form:

REVALIDATION OF LISTING IN REGISTER OF Sprinkler EQUIPMENT

I, on behalf of _____(name of Company)
confirm
that since the date of initial listing, or since the date of the last revalidation
whichever is most recent, there have been [no changes / the attached changes –
delete one] made to our listings in the Register of Sprinkler Equipment.

I attach a copy of our current register Equipment and Compatibility listings, signed
on the front page and initialled on all other pages.

(Where there have been any changes to products, these must be marked-up, and
summarised in an attached schedule. Suitable documentation and/or declarations
will also need to be submitted with this form to enable continued Equipment Listing
of the changed items.)

Yours faithfully
Name of Company

Name of duly authorised signatory
Title

The following Declaration of Compliance is required to be completed for all submissions. Except where expressly permitted below, no modification or variation to this Declaration will be accepted.

The wording shall be reproduced on official company/organisation letterhead with the appropriate details inserted [Where indicated thus]. Where alternatives are provided – viz manufacturer/importer, I/we etc., one alternative may be deleted as applicable.

COMPANY LETTERHEAD

Date

Address

Team@FPA
 Fire Protection Association NZ Inc
 Private Box 302372, North Harbour
 North Shore City 0751

Declaration of Compliance

On behalf of [Name of company] (**Company**), I confirm as follows:

1. This Declaration of Compliance (**Declaration**) is made in respect of the product or products set out under Item 1 of the attached Schedule (**Product**) [manufactured/imported – delete one, as applicable] by the Company and which are currently listed in the Register of Sprinkler Equipment (**Register**).
2. The Product [complies/conditionally complies – delete one, as applicable] with the requirements of the applicable standard or standards set out under Item 2 of the Schedule (**Standard**).
3. To the extent that the Product is conditionally compliant with the Standard, the conditions and/or limitations (if any) that apply are set out under Item 3 of the Schedule.
4. The design modifications (if any) that have been made to the Product are set out under Item 4 of the Schedule.
5. Details of the appraisal testing (if any) that has been carried out on the Product to assess compliance with the Standards, following manufacture or following any modifications carried out to the Product, are set out under Item 5 of the Schedule.

6. Details of the additional appraisal testing (if any) that has been carried out on the Product in support of this Declaration are set out under Item 6 of the Schedule.
7. Details of the appraisal testing (if any) that is proposed to be carried out are set out under Item 7 of the Schedule.
8. In support of this Declaration, the documents set out under Item 8 of the Schedule are attached hereto.
9. The Company undertakes to maintain a technical file containing all material relevant to this Declaration that is in existence as at the date of this Declaration, or which comes into existence following the making of this Declaration.
10. The Company undertakes to make all necessary modifications to the Product, either in production or in the field, as may be required as a result of any non conformance with the Standards that may be identified following the making of this Declaration.
11. The Company acknowledges that the making of this Declaration is a condition the Product being listed, or continuing to be listed in the Register.
12. The Company agrees and acknowledges that:
 - (a) the FPANZ gives no warranty in respect of the Product; and
 - (b) the FPANZ, its officers, employees, contractors or agents shall not in any way be liable or responsible, whether to the Company or to third parties for the performance of the Product.

Yours faithfully
 Name of Company

 Name of duly authorised signatory Title

SCHEDULE

1. *Product:*
2. *Applicable Standard (usually NZS 4512:2010):*
3. *Conditions or Limitations that apply:*
4. *Modifications:*
5. *Appraisal testing following manufacture/modification* [Give full details of what testing has been carried out and by whom]:
6. *Additional appraisal testing on the Product in support of Declaration of Compliance* [Give full details of what testing has been carried out and by whom]:
7. *Proposed appraisal testing* [Give full details of what testing is proposed to be carried out and by whom, when it will be carried out and the purpose for it]:
8. *Attached documents* [Reference and include original laboratory appraisal report, internal test report(s), and/or other applicable documentation]:
9. ISO 9001 Certification and Scope documents

<Signature>

<Date>

<Company>

Sprinkler Equipment



- › **Globe**
Sprinkler Equipment for New Installations 12
- › **Reliable**
Sprinkler Equipment for New Installations 14
- › **Tyco**
Sprinkler Equipment for New Installations 17
- › **Victaulic**
Sprinkler Equipment for New Installations 22
- › **Viking**
Sprinkler Equipment for New Installations 23

GLOBE
 Manufacturer Code: GLO

This section contains Sprinkler Equipment suitable for new installations and compliant with the latest standards.

Listing No.	Manufacturer	SIN No.	Model/Designation	Type	Response	Thread (mm)	K Factor (L/min & kPa)	Special Conditions
SP-114	Globe	GL8109	Model GL8109 ECLH Sprinkler	Extended coverage Light hazard Sprinkler	See certificate	20	11.5	Use manufacturer's spanners and listed recessed eschutcheons.
SP-115	Globe	GL5679	GL Dry Pendent Sprinkl	Dry Sprinkler	Standard	25	8	Use manufacturer's spanners and listed recessed eschutcheons.
SP-116	Globe	GL8179	GL Dry Pendent Sprinkl	Dry Sprinkler	Standard	25	11.5	Use manufacturer's spanners and listed recessed eschutcheons.
SP-117	Globe	GL5653	GL5653 Inch Cocealer Sprinkler	Pendent Spray Sprinkler	Standard	15	8	Use manufacturer's spanners
SP-118	Globe	GL1160	GL1150 Extra Large Orifice pendent Spray Sprinkler	Pendent Spray Sprinkler	Standard	20	16.6	Use manufacturer's spanners
SP-119	Globe	GL5668	GL Conventional Sprinkler	Conventional Sprinkler	Standard	15	8	Use manufacturer's spanners
SP-120	Globe	GL8169	GL Conventional Sprinkler	Conventional Sprinkler	Standard	20	11.5	Use manufacturer's spanners
SP-121	Globe	GL5624	GL Conventional Sprinkler	Conventional Sprinkler	Quick	15	8	Use manufacturer's spanners
SP-122	Globe	GL8125	GL Conventional Sprinkler	Conventional Sprinkler	Quick	20	11.5	Use manufacturer's spanners
SP-123	Globe	GL5601	GL Pendent Spray Sprinkler	Spray Pendent Sprinkler	Quick	15	8	Use manufacturer's spanners and listed recessed eschutcheons.
SP-124	Globe	GL8106	GL Pendent Spray Sprinkler	Spray Pendent Sprinkler	Quick	20	111.5	Use manufacturer's spanners and listed recessed eschutcheons.
SP-125	Globe	GL5615	GL Upright Spray Sprinkler	Spray Upright Sprinkler	Quick	15	8	Use manufacturer's spanners
SP-126	Globe	GL8118	GL Upright Spray Sprinkler	Spray Upright Sprinkler	Quick	20	11.5	Use manufacturer's spanners
SP-127	Globe	GL5626	GL Vertical Sidewall Sprinkler	Vertical Sidewall Sprinkler	Quick	15	8	Use manufacturer's spanners
SP-128	Globe	GL5632	GL Horizontal Sidewall Sprinkler	Horizontal Sidewall Sprinkler	Quick	15	8	Use manufacturer's spanners and listed recessed eschutcheons.
SP-129	Globe	GL5651	GL Pendent Spray Sprinkler	Spray Pendent Sprinkler	Standard	15	8	Use manufacturer's spanners and listed recessed eschutcheons.
SP-130	Globe	GL8156	GL Pendent Spray Sprinkler	Spray Pendent Sprinkler	Standard	20	111.5	Use manufacturer's spanners and listed recessed eschutcheons.
SP-131	Globe	GL5661	GL Upright Spray Sprinkler	Spray Upright Sprinkler	Standard	15	8	Use manufacturer's spanners
SP-132	Globe	GL8164	GL Upright Spray Sprinkler	Spray Upright Sprinkler	Standard	20	11.5	Use manufacturer's spanners
SP-133	Globe	GL5675	GL Vertical Sidewall Sprinkler	Vertical Sidewall Sprinkler	Standard	15	8	Use manufacturer's spanners
SP-133	Globe	GL5675	GL Vertical Sidewall Sprinkler	Vertical Sidewall Sprinkler	Standard	15	8	Use manufacturer's spanners
SP-134	Globe	GL5670	GL Horizontal Sidewall Sprinkler	Horizontal Sidewall Sprinkler	Standard	15	8	Use manufacturer's spanners and listed recessed eschutcheons.

Listing No.	Manufacturer	SIN No.	Model/Designation	Type	Response	Thread (mm)	K Factor (L/min & kPa)	Special Conditions
SP-170	Globe	GL1167	GL1167 ELO Sprinkler	Upright Spray Sprinkler	Standard	20	16.6	Use manufacturer's spanners.
SP-171	Globe	GL1123	GL1123 ELO Sprinkler	Upright Spray Sprinkler	Quick	20	16.6	Use manufacturer's spanners.
SP-172	Globe	GL4906	GL Residential Inch Concealer Sprinkler	Residential Sprinkler	Residential	15	6.8	Use manufacturer's spanners.
SP-173	Globe	GL4231	GL 4231 Residential HSW Sprinkler	Horizontal Sidewall Residential Sprinkler	Residential	15	5.9	Use manufacturer's spanners and listed recessed eschutcheons.
SP-174	Globe	GL4248	Model GL4248 Millennium Flush Pendent Residential Sprinkler	Pendent Residential Sprinkler	Residential	15	5.8	Use manufacturer's spanners.
SP-175	Globe	GL4110	Model GL4110 Pendent Residential Sprinkler	Pendent Residential Sprinkler	Residential	15	5.8	Use manufacturer's spanners and listed recessed eschutcheons.
SP-176	Globe	GL4910	Model GL4910 Pendent Residential Sprinkler	Pendent Residential Sprinkler	Residential	15	6.8	Use manufacturer's spanners and listed recessed eschutcheons.

RELIABLE

Manufacturer Code: REL

This section contains Sprinkler Equipment suitable for new installations and compliant with the latest standards.

Listing No.	Manufacturer	SIN No.	Model/Designation	Type	Response	Thread (mm)	K Factor (L/min & kPa)	Special Conditions
SP-89	Reliable	R5314	F3 Dry Pendent Sprinkler	Dry Pendent Sprinkler	Standard	15	8	Use manufacturer's spanner. Limitations on use of semi-recessed and concealed heads with pressurised ceiling spaces. Comply with manufacturer's recommendations for length above ceiling.
SP-90	Reliable	R5334	F3 Dry Horizontal Sidewall Sprinkler	Dry Horizontal Sidewall Sprinkler	Standard	15	8	Use manufacturer's spanner. Comply with manufacturer's recommendations for length above ceiling.
SP-91	Reliable	R3625	F1FR SSU Sprinkler	Spray Upright Sprinkler	Quick	15	8	Use manufacturer's spanners and listed recessed eschutcheons.
SP-92	Reliable	R3615	F1FR SSP Sprinkler	Spray Pendent Sprnkler	Quick	15	8	Use manufacturer's spanners and listed recessed eschutcheons.
SP-93	Reliable	R3622	F1FR SSU Sprinkler	Spray Upright Sprinkler	Quick	20	11.5	Use manufacturer's spanners and listed recessed eschutcheons.
SP-94	Reliable	R3612	F1FR SSP Sprinkler	Spray Pendent Sprnkler	Quick	20	11.5	Use manufacturer's spanners and listed recessed eschutcheons.
SP-95	Reliable	R3675	F1FR C/UP Sprinkler	Conventional Sprinkler	Quick	15	8	Use manufacturer's spanners and listed recessed eschutcheons.
SP-96	Reliable	R3672	F1FR C/UP Sprinkler	Conventional Sprinkler	Quick	20	11.5	Use manufacturer's spanners and listed recessed eschutcheons.
SP-97	Reliable	R3685	F1FR VSW Sprinkler	Vertical Sidewall Sprinkler	Quick	15	8	Use manufacturer's spanners and listed recessed eschutcheons.
SP-98	Reliable	R3635	F1FR HSW Sprinkler	Horizontal Sidewaal Sprinkler	Quick	15	8	Use manufacturer's spanners and listed recessed eschutcheons.
SP-99	Reliable	RA0612	RFC43 Concealed Residential sprinkler	Concealed Residential Sprinkler	Residential	15	6.1	
SP-100	Reliable	RA0616	RFC 49 Concealed Residential Sprinkler	Concealed Residential Sprinkler	Residential	15	7.1	
SP-101	Reliable	RA0914	RFC56 Concealed Residential Sprinkler	Concealed Residential Sprinkler	Residential	15	8	
SP-102	Reliable	R3511	F1 Res 30 Sprinkler	Pendent Residential Sprinkler	Residential	15	4.4	Use manufacturer's spanners and listed recessed eschutcheons. Listing includes use of model CCP cover plates and eschutcheons
SP-103	Reliable	R3516	F1 Res 49 Sprinkler	Pendent Residential Sprinkler	Residential	15	7.1	Use manufacturer's spanners and listed recessed eschutcheons. Listing includes use of model CCP cover plates and eschutcheons
SP-104	Reliable	R3513	F1 Res 58 Sprinkler	Pendent Residential Sprinkler	Residential	15	8.4	Use manufacturer's spanners and listed recessed eschutcheons. Listing includes use of model CCP cover plates and eschutcheons
SP-105	Reliable	R7618	F1 Res 76 Sprinkler	Pendent Residential Sprinkler	Residential	20	10.9	Use manufacturer's spanners and listed recessed eschutcheons. Listing includes use of model CCP cover plates and eschutcheons
SP-106	Reliable	R3531	F1 Res 44 HSW Sprinkler	Horizontal Sidewall Residential Sprinkler	Residential	15	6.3	Use manufacturer's spanners and listed recessed eschutcheons. Listing includes use of model SWC cover plates and eschutcheons
SP-107	Reliable	R3533	F1 Res 58 HSW Sprinkler	Horizontal Sidewall Residential Sprinkler	Residential	15	8.3	Use manufacturer's spanners and listed recessed eschutcheons.
SP-108	Reliable	R3538	F1 Res 40 HSW Sprinkler	Horizontal Sidewall Residential Sprinkler	Residential	15	5.7	Use manufacturer's spanners and listed recessed eschutcheons.

Listing No.	Manufacturer	SIN No.	Model/Designation	Type	Response	Thread (mm)	K Factor (L/min & kPa)	Special Conditions
SP-109	Reliable	R5525	F1-300 SSU Sprinkler	Spray Upright Sprinkler	Standard	15	8	Use manufacturer's spanners.
SP-110	Reliable	R5522	F1-300 SSU Sprinkler	Spray Upright Sprinkler	Standard	20	11.5	Use manufacturer's spanners.
SP-111	Reliable	R5515	F1-300 SSP Sprinkler	Spray Pendent Sprnkler	Standard	15	8	Use manufacturer's spanners and listed recessed eschutcheons.
SP-112	Reliable	R5512	F1-300 SSP Sprinkler	Spray Pendent Sprnkler	Standard	20	11.5	Use manufacturer's spanners and listed recessed eschutcheons.
SP-113	Reliable	RA1314	F1 56 Sprinkler	Spray Pendent Sprnkler	Standard	15	8	Use manufacturer's spanners and listed recessed eschutcheons.
SP-135	Reliable	R7711	HL22 Spesific Application Early Response Fast Response Sprinkler	Special Application Sprinkler - ESFR	Fast	25	32	Use manufacturer's spanners. Sprinkler not FM approved Installation criteria as described in Bulletin 177 may differ from Suppression Mode Sprinkler installation criteria detailed in NZS4541
SP-136	Reliable	R5415	G4A Quick Resposne Concealed Sprinkler	Spray Pendent Sprnkler	Quick	15	8	Use manufacturer's spanners. Not to be used with positively pressurised ceiling spaces
SP-142	Reliable	R1722	F1 20mm Standard Response Upright Sprinkler	Spray Upright Sprinkler	Standard	20	11.5	Use manufacturer's spanners.
SP-143	Reliable	R1712	F1 20mm Standard Response Pendent Sprinkler	Spray Pendent Sprinkler	Standard	20	11.5	Use manufacturer's spanners.
SP-144	Reliable	R1742	F1 20mm Standard Response Extended Coverage Sprinkler	Conventional Sprinkler	Standard	20	11.5	Use manufacturer's spanners.
SP-145	Reliable	R1772	F1 20mm Standard Response Conventional Sprinkler	Extended Coverage Light Hazard Sprinkler	Standard	20	11.5	Use manufacturer's spanners.
SP-158	Reliable	R2215	Model G4FR Concealed with dust tight cover plate	Concealed Pendent Sprinkler	Standard	15	8	Use manufacturer's spanners.
SP-158	Reliable	R2215	Model G4FR Concealed with dust tight cover plate	Concealed Pendent Sprinkler	Standard	15	8	Use manufacturer's spanners.
SP-159	Reliable	RA1414	Model F1FR Quick Response Pendent Intermediate Level Sprinkler	Pendent Intermediate Level Sprinkler	Quick	15	8	Use manufacturer's spanners.
SP-160	Reliable	R3612	Model F1FR Quick Response Upright Intermediate Level Sprinkler	Pendent Intermediate Level Sprinkler	Quick	20	11.5	Use manufacturer's spanners.
SP-161	Reliable	RA3195	Model F1FR Quick Response Upright Intermediate Level Sprinkler	Upright Intermediate Level Sprinkler	Quick	15	8	Use manufacturer's spanners.
SP-162	Reliable	R7022	Model F1FR Quick Response Upright Intermediate Level Sprinkler	Upright Intermediate Level Sprinkler	Quick	20	11.5	Use manufacturer's spanners.
SP-163	Reliable	RA1314	Model F1 Standard Response Pendent Intermediate Level Sprinkler	Pendent Intermediate Level Sprinkler	Standard	15	8	Use manufacturer's spanners.
SP-164	Reliable	R1712	Model F1 Standard Response Pendent Intermediate Level Sprinkler	Pendent Intermediate Level Sprinkler	Standard	20	11.5	Use manufacturer's spanners.
SP-165	Reliable	RA3125	Model F1 Standard Response Upright Intermediate Level Sprinkler	Upright Intermediate Level Sprinkler	Standard	15	8	Use manufacturer's spanners.

Listing No.	Manufacturer	SIN No.	Model/Designation	Type	Response	Thread (mm)	K Factor (L/min & kPa)	Special Conditions
SP-166	Reliable	R7092	Model F1 Standard Response Upright Intermediate Level Sprinkler	Upright Intermediate Level Sprinkler	Standard	20	11.5	Use manufacturer's spanners.
SP-167	Reliable	RA1011	K-22 Model HL-22 ESFR Sprinkler	Suppression Mode Sprinkler	Quick	25	32	Use manufacturer's spanners.
SP-168	Reliable	RA1914	Model JL-17 ESFR Sprinkler	Suppression Mode Sprinkler	Quick	20	24	Use manufacturer's spanners.
SP-169	Reliable	RA1812	Model JL-14 ESFR Sprinkler	Suppression Mode Sprinkler	Quick	20	14	Use manufacturer's spanners.
SP-177	Reliable	R7216	Model J112 Pendent Sprinkler	Extended Coverage, Light Hazard and Ordinary Hazard Pendent Sprinkler	See listing	20	16	Use manufacturer's spanners and listed recessed eschutcheons.
SP-178	Reliable	R7326	Model J112 Upright Sprinkler	Extended Coverage, Light Hazard and Ordinary Hazard Upright Sprinkler	See listing	20	16	Use manufacturer's spanners.
SP-179	Reliable	R4613	Model G VELO Pendent Sprinkler	Spray Pendent Sprinkler (LO)	Standard	20	20	Use manufacturer's spanners.
SP-180	Reliable	R2921	Model G XLO Upright Sprinkler	Spray Upright Sprinkler (LO)	Standard	20	16	Use manufacturer's spanners.
SP-187	Reliable	RA0842	Model N252 EC Pendent Extended Covberage Area/Density Sprinkler	ECHH Pendent Sprinkler	Quick	25	36.3	Use manufacturer's spanners and listed recessed eschutcheons.
SP-188	Reliable	RA1124	Model J168 Standard Response Upright Sprinkler	Upright Spray Sprinkler	Standard	20	24.2	Use manufacturer's spanners.
SP-190	Reliable	R6932	MBEC-14 ECOH/EC HSW Sprinkler	Special Application HSW Sprinkler	Standard	20	20	Approved under clause 401.1. Must strictly comply wuith manufacturer's design and installation criteria.
SP-269	Reliable	RA5814	Reliable LT56	Hallway/Corridor - Special Sprinkler	Quick	15	8	Use manufacturer's spanners
SP-270	Reliable	RA5914	Reliable LT56-300	Hallway/Corridor - Special Sprinkler	Quick	15	8	Use manufacturer's spanners
SP271	Reliable	RA5994	Reliable LT56C	Hallway/Corridor - Special Sprinkler	Quick	15	8	Use manufacturer's spanners
SP-272	Reliable	RA0912	Reliable N25 ESFR	Storage	Quick	25	36	Use manufacturer's spanners
SP-273	Reliable	RA3411, RA3413, RA3415, RA4014, RA3412	Reliable G5-56	Concealed sprinkler	Quick	15	8	Use manufacturer's spanners
SP-274	Reliable	RA0212	Reliable FAFR-NF	Concealed MRI sprinkler	Quick	15	8	Use manufacturer's spanners
SP-275	Reliable	RA3226, RA3216	Reliable GL112	Stoarge and inrack	Quick	20	16	Use manufacturer's spanners
SP-276	Reliable	RA5035	Reliable G6-56	Concealed	Quick	15	8	Use manufacturer's spanners

TYCO

Manufacturer Code: TYC

This section contains Sprinkler Equipment suitable for new installations and compliant with the latest standards.

Listing No.	Manufacturer	SIN No.	Model/Designation	Type	Response	Thread (mm)	K Factor (L/min & kPa)	Special Conditions
TY-01.1	Tyco	TY3251	TY-B Spray Sprinkler	Spray Pendent	Standard	15	8	Use manufacturer's wrenches
TY-01.2	Tyco	TY3151	TY-B Spray Sprinkler	Spray Upright	Standard	15	8	Use manufacturer's wrenches
TY-01.3	Tyco	TH4251	TY-B Spray Sprinkler	Spray Pendent	Standard	20	11.5	Use manufacturer's wrenches
TY-01.4	Tyco	TY4151	TY-B Spray Sprinkler	Spray Upright	Standard	20	11.5	Use manufacturer's wrenches
TY-01.5	Tyco	TY4851	TY-B Spray Sprinkler	Spray Upright - Special Application	Standard	15	11.5	Use manufacturer's wrenches. For use in retrofit applications only
TY-01.6	Tyco	TY1231	TY-B Spray Sprinkler	Spray Pendent - Special Application	Standard	15	11.5	Use manufacturer's wrenches. For use in retrofit applications only
TY-01.7	Tyco	TY4951	TY-B Spray Sprinkler	Spray Upright - Special Application	Standard	15	4	Use manufacturer's wrenches
TY-01.8	Tyco	TY1131	TY-B Spray Sprinkler	Spray Pendent - Special Application	Standard	15	4	Use manufacturer's wrenches
TY-02.1	Tyco	TY3131	TY-FRB Spray Sprinkler	Spray Upright	Quick	15	8	Use manufacturer's wrenches
TY-02.2	Tyco	TY3231	TY-FRB Spray Sprinkler	Spray Pendent	Quick	15	8	Use manufacturer's wrenches
TY-02.3	Tyco	TY4231	TY-FRB Spray Sprinkler	Spray Pendnet	Quick	20	11.5	Use manufacturer's wrenches
TY-02.4	Tyco	TY4131	TY-FRB Spray Sprinkler	Spray Upright	Quick	20	11.5	Use manufacturer's wrenches
TY-02.5	Tyco	TY4831	TY-FRB Spray Sprinkler	Spray Upright - Special Application	Quick	15	20	Use manufacturer's wrenches For use in retrofit applications only
TY-02.6	Tyco	TY4931	TY-FRB Spray Sprinkler	Spray Pendent - Special Application	Quick	15	20	Use manufacturer's wrenches. For use in retrofit applications only
TY-02.7	Tyco	TY1131	TY-FRB Spray Sprinkler	Spray Upright - Special Application	Quick	15	4	Use manufacturer's wrenches
TY-02.8	Tyco	TY1231	TY-FRB Spray Sprinkler	Spray Pendent - Special Application	Quick	15	4	Use manufacturer's wrenches
TY-02.9	Tyco		TY-FRB Spray Sprinkler	Spray Pendent - Special Application	Quick	15	6	Use manufacturer's wrenches
TY-02.5	Tyco	TY4831	TY-FRB Spray Sprinkler	Spray Upright - Special Application	Quick	15	20	Use manufacturer's wrenches For use in retrofit applications only
TY-02.6	Tyco	TY4931	TY-FRB Spray Sprinkler	Spray Pendent - Special Application	Quick	15	20	Use manufacturer's wrenches. For use in retrofit applications only
TY-02.7	Tyco	TY1131	TY-FRB Spray Sprinkler	Spray Upright - Special Application	Quick	15	4	Use manufacturer's wrenches
TY-02.8	Tyco	TY1231	TY-FRB Spray Sprinkler	Spray Pendent - Special Application	Quick	15	4	Use manufacturer's wrenches
TY-02.9	Tyco		TY-FRB Spray Sprinkler	Spray Pendent - Special Application	Quick	15	6	Use manufacturer's wrenches
TY-02.10	Tyco	TY2231	TY-FRB Spray Sprinkler	Spray Upright - Special Application	Quick	15	6	Use manufacturer's wrenches
TY-03.1	Tyco	TY3551	RF-11 Concealed Sprinkler	Spray Pendnet Sprinkler	Quick	15	8	Use manufacturer's wrenches
TY-02.10	Tyco	TY2231	TY-FRB Spray Sprinkler	Spray Upright - Special Application	Quick	15	6	Use manufacturer's wrenches
TY-03.1	Tyco	TY3551	RF-11 Concealed Sprinkler	Spray Pendnet Sprinkler	Quick	15	8	Use manufacturer's wrenches
TY-03.2	Tyco	TY3531	RF-11 Concealed Sprinkler	Spray Pendnet Sprinkler	Standard	15	8	Use manufacturer's wrenches

Listing No.	Manufacturer	SIN No.	Model/Designation	Type	Response	Thread (mm)	K Factor (L/min & kPa)	Special Conditions
TY-04.1	Tyco	TY3388	WS Horizontal Window Sprinkler	Special Application Sprinkler - Window Drencher	Fast	15	8	Use manufacturer's wrenches
TY-04.2	Tyco	TY3488	WS Pendent Window Sprinkler	Special Application Sprinkler - Window Drencher	Fast	15	8	Use manufacturer's wrenches
TY-05.1	Tyco	TY3255	DS-1 Dry Sprinkler	Dry SSP Sprinkler	Standard	25	8	Use manufacturer's wrenches. Comply with manufacturer's requirements for minimum lengths. Use with DSB-2 boot or equivalent seal
TY-05.2	Tyco	TY3155	DS-1 Dry Sprinkler	Dry SSU Sprinkler	Standard	25	8	Use manufacturer's wrenches. Comply with manufacturer's requirements for minimum lengths. Use with DSB-2 boot or equivalent seal
TY-05.3	Tyco	TY3355	DS-1 Dry Sprinkler	Dry HSW Sprinkler	Standard	25	8	Use manufacturer's wrenches. Comply with manufacturer's requirements for minimum lengths. Use with DSB-2 boot or equivalent seal
TY-06.1	Tyco	TY3235	DS-1 Dry Sprinkler	Dry SSP Sprinkler	Quick	25	8	Use manufacturer's wrenches. Comply with manufacturer's requirements for minimum lengths. Use with DSB-2 boot or equivalent seal
TY-06.2	Tyco	TY3135	DS-1 Dry Sprinkler	Dry SSU Sprinkler	Quick	25	8	Use manufacturer's wrenches. Comply with manufacturer's requirements for minimum lengths. Use with DSB-2 boot or equivalent seal
TY-06.3	Tyco	TY3335	DS-1 Dry Sprinkler	Dry HSW Sprinkler	Quick	25	8	Use manufacturer's wrenches. Comply with manufacturer's requirements for minimum lengths. Use with DSB-2 boot or equivalent seal
TY-07.1	Tyco	TY3358	DS1 Extended Coverage HSW Dry Sprinkler	Dry EC HSW Sprinkler	Standard	25	8	Use manufacturer's wrenches. Comply with manufacturer's requirements for minimum lengths. Use with DSB-2 boot or equivalent seal
TY-07.2	Tyco	TY3338	DS1 Extended Coverage HSW Dry Sprinkler	Dry EC HSW Sprinkler	Quick	25	8	Use manufacturer's wrenches. Comply with manufacturer's requirements for minimum lengths. Use with DSB-2 boot or equivalent seal
TY-08	Tyco	TY7226	ESFR17 Sprinkler	Suppression Mode Sprinkler	Fast	20	24.2	Use manufacturer's wrenches
TY-09.1	Tyco	TY5111	ELO-231 Sprinkler	Large Orifice SSU Sprinkler	Standard	20	16.1	Use manufacturer's wrenches
TY-09.2	Tyco	TY5211	ELO-231 Sprinkler	Large Orifice SSP Sprinkler	Standard	20	16.1	Use manufacturer's wrenches
TY-09.3	Tyco	TY5811	ELO-231 Sprinkler	Large Orifice SSP Sprinkler	Standard	15	16.1	Use manufacturer's wrenches. For use in retrofit applications only
TY-10	Tyco	TY5238	DS-2 EC Dry Sprinkler	Dry EC Pendent Sprinkler	See data sheet	25	See data sheet	Use manufacturer's wrenches. Comply with manufacturer's requirements for minimum lengths. Use with DSB-2 boot or equivalent seal. Refer manufacturer's data sheet for K factor as a function of length
TY-11.1	Tyco	TY7151	Model K17-231 Sprinkler	Large Orifice SSU Sprinkler	Standard	20	24.2	Use manufacturer's wrenches
TY-11.2	Tyco	TY7251	Model K17-231 Sprinkler	Large Orifice SSP Sprinkler	Standard	20	24.2	Use manufacturer's wrenches
TY-12.1	Tyco	TY5151	ELO-231 B Sprinkler	Spray Upright Sprinkler	Standard	20	16.1	Use manufacturer's wrenches
TY-12.2	Tyco	TY5251	ELO-231 B Sprinkler	Spray Pendent Sprinkler	Standard	20	16.1	Use manufacturer's wrenches

Listing No.	Manufacturer	SIN No.	Model/Designation	Type	Response	Thread (mm)	K Factor (L/min & kPa)	Special Conditions
TY-12.3	Tyco	TY5851	ELO-231 B Sprinkler	Spray Upright Sprinkler	Standard	15	16.1	Use manufacturer's wrenches. For use in retrofit applications only
TY-13	Tyco	TY9128	EC-25 Sprinkler	Extended Coverage Area Density Sprinkler	Fast	25	36.3	Use manufacturer's wrenches
TY-14	Tyco	TY3232	EC-5 Sprinkler	Extended Coverage Light Hazard sprinkler	Quick	15	8	Use manufacturer's wrenches. See Data Sheet Table B for Quick Response Listing Criteria
TY-15	Tyco	TY7228	EC-17 Sprinkler	Extended Coverage Area Density Sprinkler	Fast	20	24.2	Use manufacturer's wrenches. See Data Sheet for maximum allowable spacing
TY-16	Tyco	TY2234	LF-II Residential Pendent Sprinkler	Pendent Residential Sprinkler	Residential	15mm	7.06	Use Manufacturer's wrenches. For NZS4541 application, a minimum density of 4.1mm/min is required in addition to Listing Criteria provided in Manufacturer's data sheet, and Manufacturer's Installation Guide TFP490
TY-17	Tyco	TY4324	LF-II Residential NFPA13 Optimized Pendent and Cocealed Sprinkler	Pendent Residential Sprinkler	Residential	20	9.94	Use Manufacturer's wrenches. For NZS4541 application, a minimum density of 4.1mm/min is required in addition to Listing Criteria provided in Manufacturer's data sheet, and Manufacturer's Installation Guide TFP491
TY-18	Tyco	TY1334	LF-II Residential Horizontal Sprinkler	Horizontal Residential Sprinkler	Residential	15	6.05	Use Manufacturer's wrenches. For NZS4541 application, a minimum density of 4.1mm/min is required in addition to Listing Criteria provided in Manufacturer's data sheet, and Manufacturer's Installation Guide TFP492
TY-19	Tyco	TY3334	LF-II Residential Horizontal Sprinkler, NFPA13 Optimized	Horizontal Residential Sprinkler	Residential	15	8.06	Use Manufacturer's wrenches. For NZS4541 application, a minimum density of 4.1mm/min is required in addition to Listing Criteria provided in Manufacturer's data sheet, and Manufacturer's Installation Guide TFP493
TY-20	Tyco	TY4334	LF-II Residential Horizontal Sprinkler, NFPA13 Optimized	Horizontal Residential Sprinkler	Residential	15	8.35	Use Manufacturer's wrenches. For NZS4541 application, a minimum density of 4.1mm/min is required in addition to Listing Criteria provided in Manufacturer's data sheet, and Manufacturer's Installation Guide TFP494
TY-21	Tyco	TY2284	LF-II Flush Residential Sprinkler	Pendent Residential Sprinkler	Residential	15	6.05	Use Manufacturer's wrenches. For NZS4541 application, a minimum density of 4.1mm/min is required in addition to Listing Criteria provided in Manufacturer's data sheet, and Manufacturer's Installation Guide TFP495
TY-22	Tyco	TY2384	LF-II Flush Horizontal Residential Sprinkler	Horizontal Residential Sprinkler	Residential	15	6.05	Use Manufacturer's wrenches. For NZS4541 application, a minimum density of 4.1mm/min is required in addition to Listing Criteria provided in Manufacturer's data sheet, and Manufacturer's Installation Guide TFP496
TY-23	Tyco	TY2596	LF-II Residential Concealed Flat Plate Sprinkler	Pendent Residential Sprinkler	Residential	15	6.05	Use Manufacturer's wrenches. For NZS4541 application, a minimum density of 4.1mm/min is required in addition to Listing Criteria provided in Manufacturer's data sheet, and Manufacturer's Installation Guide TFP497
TY-24	Tyco	TY3596	LF-II Residential Concealed Flat Plate Sprinkler	Pendent Residential Sprinkler	Residential	15	7.06	Use Manufacturer's wrenches. For NZS4541 application, a minimum density of 4.1mm/min is required in addition to Listing Criteria provided in Manufacturer's data sheet, and Manufacturer's Installation Guide TFP498
TY-25	Tyco	TY7126	ESFR K17 Upright Sprinkler	Upright Suppression Mode Sprinkler	Fast	20	24.2	Use manufacturer's wrenches
TY-26.1	Tyco	TY3555	Series DS-C Concealed Dry Sprinkler	Pednet Dry Sprinkler	Standard	25	8	Use manufacturer's wrenches Not for use in Freezer or Coolstore environments Use with DSB-2 boot or equivalent seal

Listing No.	Manufacturer	SIN No.	Model/Designation	Type	Response	Thread (mm)	K Factor (L/min & kPa)	Special Conditions
TY-26.2	Tyco	TY3535	Series DS-C Concealed Dry Sprinkler	Pednet Dry Sprinkler	Quick	25	8	Use manufacturer's wrenches Not for use in Freezer or Coolstore environments Use with DSB-2 boot or equivalent seal
TY-27	Tyco	TY3302	Series EC-5 Extended Coverage Horizontal Sidewall Sprinklers	Extended Coverage Light Hazard Sidewall Sprinkler	See data sheet	15	8	Use manufacturer's wrenches See Data Sheet for design requirements
TY-35	Tyco	TY7152	Ultra K17	Specific Application Control Mode Sprinkler	Standard	20	24.2	Use manufacturer's wrenches
TY36.1	Tyco	TY5332	Model SW-20 ECOH-HSW Sprinkler	Extended Coverage Sidewall Sprinkler	Standard	20	16.1	Use manufacturer's wrenches See Data Sheet for design criteria
TY36.2	Tyco	TY5337	Model SW-24 ECOH-HSW Sprinkler	Extended Coverage Sidewall Sprinkler	Standard	20	16.1	Use manufacturer's wrenches See Data Sheet for design criteria
TY37	Tyco	TY3532	RFII Concealed Extended Coverage Pendnet Sprinkler	ECLH Sprinkler	Quick	15	8	Use manufacturer's wrenches
TY38.1	Tyco	TY3332	TY-FRB EC HSW LH Sprinkler	ECLH HSW Sprinkler	See data sheet	15	5.6	Use manufacturer's wrenches See Data Sheet for design criteria
TY38.2	Tyco	TY4332	TY-FRB EC HSW LH Sprinkler	ECLH HSW Sprinkler	See data sheet	20	11.5	Use manufacturer's wrenches See Data Sheet for design criteria
TY39	Tyco	TY5339	DS-3 Dry HSW ECOH Sprinkler	ECOH HSW Dry Sprinkler	Standard	25	See Datasheet	Use manufacturer's wrenches Comply with manufacturer's requirements for minimum lengths Use with DSB-2 boot or equivalent seal
TY41.1	Tyco	TY5131	ELO-231FRB Sprinkler	Spray Upright Sprinkler	Quick	20	16.1	Use manufacturer's wrenches
TY41.2	Tyco	TY5231	ELO-231FRB Sprinkler	Spray Upright Sprinkler	Quick	20	16.1	Use manufacturer's wrenches
TY42.1	Tyco	TY5255	DS-2 Dry Sprinkler	Dry Pendent Large Orifice Sprinkler	Standard	25	See datasheet	Use manufacturer's wrenches Comply with manufacturer's requirements for minimum lengths Use with DSB-2 boot or equivalent seal Refer manufacturer's data sheet for K factor as a function of length
TY42.2	Tyco	TY5235	DS-2 QR Dry Sprinkler	Dry Pendent Large Orifice Sprinkler	Quick	25	See datasheet	Use manufacturer's wrenches Comply with manufacturer's requirements for minimum lengths Use with DSB-2 boot or equivalent seal Refer manufacturer's data sheet for K factor as a function of length
TY-43 Rev B	Tyco	TY3281	Raven Pendent Institutional Sprinkler	Spray Pendent Sprinkler	Quick	15	8	Use W-Type 25 Wrench
TY-44 Rev B	Tyco	TY3381	Raven Horizontal Sidewall Institutional Sprinkler	Horizontal Sidewall Sprinkler	Quick	15	8	Use W-Type 25 Wrench
TY-45 Rev B	Tyco	TY3282	Raven Extended Coverage Pendent Institutional Sprinkler	Extended Coverage Light Hazard Pendent Sprinkler	Quick	15	8	Use W-Type 25 Wrench
TY-46 Rev B	Tyco	TY3382	Raven Extended Coverage Horizontal Sidewall Institutional Sprinkler	Extended Coverage Light Hazard Horizontal Sidewall Sprinkler	Quick	15	8	Use W-Type 25 Wrench
TY55	Tyco	TN-17	TN-17	Tunnel deluge nozzle		20	24	Tunnel systems only
TY56	Tyco	TN-25	TN-25	Tunnel deluge nozzle		25	360	Tunnel systems only

Listing No.	Manufacturer	SIN No.	Model/Designation	Type	Response	Thread (mm)	K Factor (L/min & kPa)	Special Conditions
TY57	Tyco	F822-834	Mulsifyre F822-F834	High velcotiy spray nozzles		20	29-73	Mainline strainers required
TY58	Tyco	D3	D3 Protectospray	Medium velocity spray nozzle		15	17-103	Mainline strainers required. Ice build up inspections
TY59	Tyco	HV	High Velocity spray nozzles	High velcotiy spray nozzles		25/32	23-92	Main line strainers are required.
TY60	Tyco	TY1362	Raven qr ec HSW	Institutional quick response extended coverage horizontal sidewall	Quick	15	8	
TY61	Tyco	TY1381	Raven qr hsw	Institutional quick response horizontal sidewall	Quick	15	8	
TY62	Tyco	TY1282	Raven qr ec pendent	Institutional extended coverage quick response pendent	Quick	15	8	
TY63	Tyco	TY1281	Raven QR pendent	Institutional quick response pendent	Quick	15	8	
TY64	Tyco	TY9226	Storage mode	Fast response pendent	Quick	25	36	
TY65	Tyco	TY7229	Storage mode dry barallel	Dry fast response pendent	Quick	32	24	
TY66	Tyco	TY7223	Storage mode pendent	Fast response pendent	Quick	20	24	
TY67	Tyco	TY313	Upright QR	Upright quick response	Quick	15	8	
TY68	Tyco	TY315	Upright	Upright		15	8	
TY69	Tyco	TY323	Pendent QR	Pendent quick repsonse	Quick	15	8	
TY70	Tyco	TY325	Pendent	Pendent		15	8	
SP-191	Tyco	TY365	TY-B Conventional Sprinkler	Conventional Sprinkler	Standard	15	8	Use manufacturer's spanners.
SP-192	Tyco	TY363	TY-FRB Conventional Sprinkler	Conventional Sprinkler	Quick	15	8	Use manufacturer's spanners.
SP-193	Tyco	TY313	TY-FRB Upright Sprinkler	Upright Spray Sprinkler	Quick	15	8	Use manufacturer's spanners.
SP-194	Tyco	TY323	TY-FRB Pendent Sprinkler	Pendent Spray Sprinkler	Quick	15	8	Use manufacturer's spanners and listed recessed eschutcheons.
SP-195	Tyco	TY315	TY-F Upright Sprinkler	Upright Spray Sprinkler	Standard	15	8	Use manufacturer's spanners.
SP-196	Tyco	TY315	TY-F Pendent Sprinkler	Pendent Spray Sprinkler	Standard	15	8	Use manufacturer's spanners and listed recessed eschutcheons.

VICTAULIC

Manufacturer Code: VIC

This section contains Sprinkler Equipment suitable for new installations and compliant with the latest standards.

Listing No.	Manufacturer	SIN No.	Model/Designation	Type	Response	Thread (mm)	K Factor (L/min & kPa)	Special Conditions
V-1	Victaulic	V2703	V27 Spray Sprinkler	Spray Upright	Standard	15	8	Use manufacturer's spanners and listed recessed eschutcheons. Maximum working pressure 17.2 bar
V-2	Victaulic	V2704	V27 Spray Sprinkler	Spray Upright	Quick	15	8	Use manufacturer's spanners and listed recessed eschutcheons. Maximum working pressure 17.2 bar
V-3	Victaulic	V2707	V27 Spray Sprinkler	Spray Pendent	Standard	15	8	Use manufacturer's spanners and listed recessed eschutcheons. Maximum working pressure 17.2 bar
V-4	Victaulic	V2708	V27 Spray Sprinkler	Spray Pendent	Quick	15	8	Use manufacturer's spanners and listed recessed eschutcheons. Maximum working pressure 17.2 bar
V-5	Victaulic	V2736	V2736 Concealed Residential Sprinkler	Concealed Residential	Residential	15	7.1	Use manufacturer's wrenches
V-6	Victaulic	V3806	V3806 Concealed Residential Sprinkler	Concealed Residential	Residential	15	8.1	Use manufacturer's wrenches
V-7	Victaulic	V4402	V4402 Suppression Mode Sprinkler	Suppression Mode Sprinkler	Fast	20	20	Use manufacturer's wrenches. Not FM Approved. Care required to ensure that correct design criteria and applications used.
V-8	Victaulic	V4404	V4404 Suppression Mode Sprinkler	Suppression Mode Sprinkler	Fast	20	24.3	Use manufacturer's wrenches. Design and install in accordance with FM Global Engineering Bulletin 07-08
V-11	Victaulic	V4601	LP-46 Low Pressure Storage Sprinkler	CMSA Sprinkler	Standard	25	36.8	Use manufacturer's wrenches. Not FM Approved. Care required to ensure that correct design criteria and applications used.
V-12	Victaulic	V4702	V47	Storage Sprinkler	Quick	20	24	Use Manufacturers wrench
SP-141	Victaulic	V4603	LP-46 Upright Low Pressure Storage Sprinkler	Upright Spray Storage Sprinkler	Standard	25	36.8	Use manufacturer's spanners.

VIKING

Manufacturer Code: VIK

This section contains Sprinkler Equipment suitable for new installations and compliant with the latest standards.

Listing No.	Manufacturer	SIN No.	Model/Designation	Type	Response	Thread (mm)	K Factor (L/min & kPa)	Special Conditions
SP-01	Viking	VK108	Fusible Link Sprinkler	Spray Upright	Standard	15	8	Use Listed Spanners and eschutcheons as described in data sheet
SP-02	Viking	VK110	Fusible Link Sprinkler	Spray Pendant	Standard	15	8	Use Listed Spanners and eschutcheons as described in data sheet
SP-03	Viking	VK204	Fusible Link Sprinkler	Spray Upright	Standard	20	11.5	Use Listed Spanners and eschutcheons as described in data sheet
SP-04	Viking	VK206	Fusible Link Sprinkler	Spray Pendant	Standard	20	11.5	Use Listed Spanners and eschutcheons as described in data sheet
SP-189	Viking	VK-501	Dry Pendant Sprinkler	Pendant Suppression Mode Sprinkler	Fast	Refer DS	20	Refer Viking Data Sheet
SP-197	Viking	VK-506	Viking K32 Pendant ESFR Sprinkler	Pendant QR Storage Sprinkler	Quick	25	32	Use manufacturer's spanners.
SP-198	Viking	VK504	Viking K24 Dry ESFR Sprinkler	Pendant QR Dry Storage Sprinkler	Quick		24	Use manufacturer's spanners.
SP-199	Viking	VK500	Viking K20 Pendant ESFR Sprinkler	Pendant QR Storage Sprinkler	Quick	20	20	Use manufacturer's spanners.
SP-200	Viking	VK502	Viking K20 Dry ESFR Sprinkler	Pendant QR Dry Storage Sprinkler	Quick		20	Use manufacturer's spanners.
SP-201	Viking	VK503	Viking K24 Pendant Storage Sprinkler	Pendant QR Storage Sprinkler	Quick	25	24	Use manufacturer's spanners.
SP-202	Viking	VK510	Viking K36 Pendant ESFR Sprinkler	Pendant ESFR Storage Sprinkler	Quick	25	36	Use manufacturer's spanners
SP-203	Viking	VK520	Viking K20 Upright ESFR Sprinkler	Upright ESFR Storage Sprinkler	Quick	20	20	Use manufacturer's spanners
SP-204	Viking	VK530	Viking K16 Upright ELO Sprinkler	Upright ELO Storage Sprinkler	Standard	20	16	Use manufacturer's spanners
SP-205	Viking	VK531	Viking K16 Upright QR ELO Sprinkler	Upright ELO Storage Sprinkler	Quick	20	16	Use manufacturer's spanners
SP-207	Viking	VK536	Viking K16 Pendant ELO Sprinkler	Pendant ELO Storage Sprinkler	Standard	20	16	Use manufacturer's spanners
SP-208	Viking	VK540	Viking K16 Upright CMSA Sprinkler	Upright CMSA Storage Sprinkler	Standard	15 or 20	16	Use manufacturer's spanners
SP-209	Viking	VK580	Viking K24 Upright Sprinkler	Upright Storage Sprinkler	Standard	20	16	Use manufacturer's spanners
SP-210	Viking	VK592	Viking K28 Pendant CMSA Sprinkler	Pendant CMSA Storage Sprinkler	Standard	25	28	Use manufacturer's spanners

Listing No.	Manufacturer	SIN No.	Model/Designation	Type	Response	Thread (mm)	K Factor (L/min & kPa)	Special Conditions
SP-211	Viking	VK595	Viking K36 Upright Sprinkler	Upright Extended Coverage Storage Sprinkler	Standard	25	36	Use manufacturer's spanners
SP-212	Viking	VK377	Viking K16 Pendent ELO Sprinkler	Pendent ELO Storage Sprinkler	Quick	20	16	Use manufacturer's spanners
SP-214	Viking	VK430	Viking K6 Pendent Sprinkler	Pendent Residential Sprinkler	Quick	15	6	Use manufacturer's spanners. Refer data sheet
SP-215	Viking	VK457	Viking K7 Concealed Pendent Sprinkler	Concealed Pendent Residential Sprinkler	Standard	15	7	Use manufacturer's spanners. Refer data sheet
SP-217	Viking	VK460	Viking K8 Horizontal Sidewall Sprinkler	Horizontal Sidewall Residential Sprinkler	Standard	15	8	Use manufacturer's spanners. Refer data sheet
SP-218	Viking	VK466	Viking K7.4 Pendent Sprinkler	Pendent Residential Sprinkler	Quick	15	7.4	Use manufacturer's spanners. Refer data sheet
SP-219	Viking	VK467	Viking K7 Upright Sprinkler	Upright Residential Sprinkler	Standard	15	7	Use manufacturer's spanners. Refer data sheet
SP-220	Viking	VK468	Viking K7 Pendent Sprinkler	Pendent Residential Sprinkler	Standard	15	7	Use manufacturer's spanners. Refer data sheet
SP-221	Viking	VK470	Viking K4 Pendent Sprinkler	Pendent Residential Sprinkler	Standard	15	4	Use manufacturer's spanners. Refer data sheet
SP-222	Viking	VK472	Viking K8 Pendent Sprinkler	Pendent Residential Sprinkler	Standard	15	8	Use manufacturer's spanners. Refer data sheet
SP-223	Viking	VK474	Viking K8 Concealed Pendent Sprinkler	Concealed Pendent Residential Sprinkler	Quick	15	8	Use manufacturer's spanners. Refer data sheet
SP-224	Viking	VK476	Viking K7 Flush Pendent Sprinkler	Flush Pendent Residential Sprinkler	Standard	15	7	Use manufacturer's spanners. Refer data sheet
SP-225	Viking	VK480	Viking K5.7 Concealed Horizontal Sidewall Sprinkler	Concealed Horizontal Sidewall Residential Sprinkler	Standard	15	5.7	Use manufacturer's spanners. Refer data sheet
SP-226	Viking	VK484	Viking K5.7 Horizontal Sidewall Sprinkler	Horizontal Sidewall Residential Sprinkler	Standard	15	5.7	Use manufacturer's spanners. Refer data sheet
SP-227	Viking	VK486	Viking K5.7 Horizontal Sidewall Sprinkler	Horizontal Sidewall Residential Sprinkler	Standard	15	5.7	Use manufacturer's spanners. Refer data sheet
SP-228	Viking	VK488	Viking K4 Concealed Pendent Sprinkler	Concealed Pendent Residential Sprinkler	Standard	15	4	Use manufacturer's spanners. Refer data sheet
SP-229	Viking	VK104	Viking K8 Horizontal Sidewall Sprinkler	Horizontal Sidewall Special Sprinkler	Standard	15	8	Use manufacturer's spanners
SP-230	Viking	VK106	Viking K8 Vertical Sidewall Sprinkler	Vertical Sidewall Special Sprinkler	Standard	15	8	Use manufacturer's spanners
SP-231	Viking	VK305	Viking K8 Horizontal Sidewall Sprinkler	Horizontal Sidewall Special Sprinkler	Quick	15	8	Use manufacturer's spanners
SP-231	Viking	VK305	Viking K8 Horizontal Sidewall Sprinkler	Horizontal Sidewall Special Sprinkler	Quick	15	8	Use manufacturer's spanners
SP-232	Viking	VK306	Viking K8 Vertical Sidewall Sprinkler	Vertical Sidewall Special Sprinkler	Quick	15	8	Use manufacturer's spanners
SP-235	Viking	VK900	Viking K5.7 Upright Sprinkler	Upright Specific Application Sprinkler	Quick	15	5.7	Use manufacturer's spanners
SP-237	Viking	VK410	Viking K8 Flush Pendent QREC Sprinkler	Flush Pendent Institutional Sprinkler	Quick	15	8	Use manufacturer's spanners
SP-238	Viking	VK412	Viking K8 Flush Horizontal Sidewall Sprinkler	Flush Horizontal Sidewall Institutional Sprinkler	Quick	15	8	Use manufacturer's spanners
SP-239	Viking	VK462	Viking K8 Cleanroom Sprinkler Cover Assembly	Cleanroom Sprinkler Cover Assembly	Quick	15	8	Use manufacturer's spanners

Listing No.	Manufacturer	SIN No.	Model/Designation	Type	Response	Thread (mm)	K Factor (L/min & kPa)	Special Conditions
SP-238	Viking	VK412	Viking K8 Flush Horizontal Sidewall Sprinkler	Flush Horizontal Sidewall Institutional Sprinkler	Quick	15	8	Use manufacturer's spanners
SP-239	Viking	VK462	Viking K8 Cleanroom Sprinkler Cover Assembly	Cleanroom Sprinkler Cover Assembly	Quick	15	8	Use manufacturer's spanners
SP-240	Viking	VK464	Viking K11.5 Cleanroom Sprinkler Cover Assembly	Cleanroom Sprinkler Cover Assembly	Standard	20	11.5	Use manufacturer's spanners
SP-241	Viking	VK532	Viking K16 Upright ELO Sprinkler	Upright ELO Commercial Extended Coverage Sprinkler	Standard and Quick	20	16	Use manufacturer's spanners
SP-242	Viking	VK534	Viking K16 Pendent ELO Sprinkler	Pendent ELO Commercial Extended Coverage Sprinkler	Standard and Quick	20	16	Use manufacturer's spanners
SP-243	Viking	VK538	Viking K16 Concealed Pendent OH-ELO Sprinkler	Concealed Pendent ELO Commercial Extended Coverage Sprinkler	Standard and Quick	20	16	Use manufacturer's spanners
SP-244	Viking	VK570	Viking K20 Upright OH Sprinkler	Upright Commercial Extended Coverage Sprinkler	Standard and Quick	20	20	Use manufacturer's spanners
SP-245	Viking	VK572	Viking K20 Pendent OH Sprinkler	Pendent Commercial Extended Coverage Sprinkler	Standard and Quick	20	20	Use manufacturer's spanners
SP-246	Viking	VK600	Viking K11.5 Pendent Sprinkler	Pendent Light Hazard Commercial Extended Coverage Sprinkler	Standard and Quick	15	11.5	Use manufacturer's spanners
SP-247	Viking	VK602	Viking K8 Pendent Sprinkler	Pendent Light Hazard Commercial Extended Coverage Sprinkler	Standard and Quick	20	8	Use manufacturer's spanners
SP-248	Viking	VK604	Viking K8 Pendent Sprinkler	Pendent Light Hazard Commercial Extended Coverage Sprinkler	Standard and Quick	15	8	Use manufacturer's spanners
SP-249	Viking	VK605	Viking K8 Horizontal Sidewall Sprinkler	Horizontal Sidewall Light Hazard Commercial Extended Coverage Sprinkler	Standard and Quick	15	8	Use manufacturer's spanners
SP-250	Viking	VK606	Viking K11.5 Horizontal Sidewall Sprinkler	Horizontal Sidewall Light Hazard Commercial Extended Coverage Sprinkler	Quick	20	11.5	Use manufacturer's spanners
SP-251	Viking	VK608	Viking K16 Pendent ELO Sprinkler	Pendent Light Hazard Commercial Extended Coverage Sprinkler	Standard and Quick	20	16	Use manufacturer's spanners
SP-255	Viking	VK630	Viking K11.5 Horizontal Sidewall Sprinkler	Horizontal Sidewall Commercial Extended Coverage Sprinkler	Quick	20	11.5	Use manufacturer's spanners
SP-256	Viking	VK632	Viking K8 Concealed Pendent Sprinkler	Concealed Pendent Light Hazard Commercial Extended Coverage Sprinkler	Quick	15	8	Use manufacturer's spanners
SP-257	Viking	VK634	Viking K11.5 Concealed Pendent Sprinkler	Concealed Pendent Light Hazard Commercial Extended Coverage Sprinkler	Quick	20	11.5	Use manufacturer's spanners
SP-258	Viking	VK636	Viking K16 Concealed Pendent ELO Sprinkler	Concealed Pendent Light Hazard ELO Commercial Extended Coverage Sprinkler	Quick	20	16	Use manufacturer's spanners
SP-259	Viking	VK638	Viking K11.5 Horizontal Sidewall Sprinkler	Horizontal Sidewall Commercial Extended Coverage Sprinkler	Quick	20	11.5	Use manufacturer's spanners
SP-260	Viking	VK680	Viking K11.5 Concealed Horizontal Sidewall Sprinkler	Concealed Horizontal Sidewall Light Hazard Commercial Extended Coverage Sprinkler	Quick	20	11.5	Use manufacturer's spanners

Listing No.	Manufacturer	SIN No.	Model/Designation	Type	Response	Thread (mm)	K Factor (L/min & kPa)	Special Conditions
SP-260	Viking	VK680	Viking K11.5 Concealed Horizontal Sidewall Sprinkler	Concealed Horizontal Sidewall Light Hazard Commercial Extended Coverage Sprinkler	Quick	20	11.5	Use manufacturer's spanners
SP-261	Viking	VK100	Viking K8 Upright Sprinkler	Upright Standard Orifice Sprinkler	Standard	15	8	Use manufacturer's spanners
SP-262	Viking	VK200	Viking K11.5 Upright Sprinkler	Upright Large Orifice Sprinkler	Standard	15 / 20	11.5	Use manufacturer's spanners
SP-263	Viking	VK102	Viking K8 Pendent Sprinkler	Pendent Standard Orifice Sprinkler	Standard	15	8	Use manufacturer's spanners
SP-264	Viking	VK202	Viking K11.5 Pendent Sprinkler	Pendent Large Orifice Sprinkler	Standard	15 / 20	11.5	Use manufacturer's spanners
SP-265	Viking	VK300	Viking K8 Upright Sprinkler	Upright Standard Orifice Sprinkler	Quick	15	8	Use manufacturer's spanners
SP-266	Viking	VK350	Viking K11.5 Upright Sprinkler	Upright Large Orifice Sprinkler	Quick	20 / 15	11.5	Use manufacturer's spanners
SP-267	Viking	VK302	Viking K8 Pendent Sprinkler	Pendent Standard Orifice Sprinkler	Quick	15	8	Use manufacturer's spanners
SP-268	Viking	VK352	Viking K11.5 Pendent Sprinkler	Pendent Large Orifice Sprinkler	Quick	20 / 15	11.5	Use manufacturer's spanners