

HFSR-146 Damper Building Product Information Sheet

Version 1.1 – Issued 20/09/24

Product

Product name	HFSR-146 Damper
Product type	Fire Damper
Product Identifiers	HFSR-146

Product description and intended use

- The HFSR-146 is a line of mechanical fire dampers designed for use within ventilation systems to maintain the integrity of a fire barrier. The HFSR-146 can offer a fire integrity rating of up to four hours. The HFSR-146 has no structural adequacy nor insulation ratings.
- HFS dampers are fabricated from galvanised steel blades, stainless steel side seals and within a galvanised steel frame.
- Each unit is fabricated to the required width and height dimensions for each job.
- Each damper comes factory fitted with a galvanised steel mounting sleeve and one set of retaining angles, a second set of retaining angles is supplied loose and must be used for installation on site.
- To ensure compliance the HFSR-146 must be installed exactly as per the tested and assessed details. If this is not possible then a fire engineer will be required to make an assessment as to whether the installation is an acceptable alternative solution.
- The basic construction of the HFSR-146 is consistent with the only difference being the voltage of the fitted actuator.
- The HFSR-146 must always be installed with the blades horizontal.
- Actuators are available in both 24V and 230V models.
- Note the HFSR-146 is currently being phased out and is being replaced with the [HFS](#).

Relevant NZBC clauses

- Clause B2 Durability: Performance B2.3.1 (c) 5 Years
- Clause C3 Fire Affecting Areas Beyond the Fire Source: Functional C3.1
- Clause C4 Movement to Place of Safety: Functional C4.2
- Clause H1 Energy Efficiency: Performance H1.3.6

Contributions to compliance with NZBC clauses

- **B2 1.3.1 (Table 1):** The lifespan of the HFSR-146 will vary based on the environment it is installed in. For a standard HVAC installation, the HFSR-146 would provide a durability of a minimum of 5 years. Excessively corrosive or harmful environments or exposure to fire, heat or water will reduce the lifespan of the HFSR-146.
- **C/AS2 2.3.13, C/AS2 4.16.12 (b):** The HFSR-146 does not have an insulation rating and only offers a fire integrity rating. Insulation ratings are not required for fire dampers given either:
 - Sprinklers are installed throughout the building in accordance with either NZS4541 or NZS4515, or
 - There is no combustible material placed closer than 300mm to the fire damper or the air duct.

- **C/AS2 4.7.4 (a, c):** Theatres with an occupant load of more than 1000 are required to include heat sensing devices within roof vents that are electronically interlocked with all fire dampers penetrating the proscenium wall. The HFSR-146 can be interlocked with heat sensing devices supplied by others.
- **C/AS2 4.11.4 (d):** Fire dampers serving ventilation ducts, which comply with the requirements for fire resisting closures, are an exception that is allowed within protected shafts. The HFSR-146, given that it is installed correctly, is suitable for use within a duct penetrating a protected shaft such as a lift shaft.
- **C/AS2 4.16.12 (a):** The HFSR-146 is compliant with AS1682.1:1990
- **C/AS2 4.16.12 (c):** The HFSR-146 must be installed as per installation details with either an access panel or otherwise access on one side of the damper.
- **H1:** When acting as a fire damper and installed in a commercial building the HFSR-146 must be designed to have a maximum pressure drop when fully open of 15 Pa.

Relevant standards

- HFSR-146 dampers are designed to and compliant with AS1668.1:1998, AS1682.1:1990.
- HFSR-146 dampers are tested to AS1530.4-1990
- HFSR-146 should be maintained to AS1851-2012.

Conditions and limitations of use

- The HFSR-146 should be specified by a suitably qualified mechanical or fire engineer based on the integrity requirements of the fire barrier.
- The HFSR-146 should be installed by a suitably qualified and trained tradesperson. Holyoake representatives are available to provide installation training upon request.
- The HFSR-146 must be installed exactly as per the tested or assessed detail or have its installation specifically signed off by a fire engineer.
- Penetrations through fire rated building elements with kitchen extract systems shall not have fire dampers installed as per AS1668.1-2015 section 3.3.3 (b) & (c). These openings must be protected from fire by other means.

Warnings and bans

The HFSR-146 is **not** subject to a warning or ban under section 26 of the Building Act 2004.

Installation details and product datasheet

The HFSR-146 product datasheet and installation details for multiple different wall or floor construction types can be found on our [website](#).

Maintenance requirements

The HFSR-146 should be inspected and subjected to a routine annual service according to AS1851-2012. Inspect 20% of the fire dampers in a building annually, such that at the end of the fifth year all dampers have been inspected. Where a significant number of dampers fail, are unable to close, corroded, or otherwise incapable of performing satisfactorily, all dampers shall be inspected within the next twelve-month period. A failure rate of 10% of the 20% annually tested shall be regarded as significant.

Manufacturer details

Manufacture location	New Zealand
Manufacturer legal and trading name	Price Holyoake (NZ) Ltd T/A Holyoake Air Management Solutions by Price
Manufacturer NZBN	9429048831215
Manufacturer website	Holyoake.com
Auckland address for service	67 Greenmount Drive, East Tamaki, Auckland 2013
Auckland office email	Auckland@holyoake.com
Auckland office phone number	(09) 274 4144
Wellington address for service	89 Main Road, Tawa, Wellington 5028
Wellington office email	Wellington@holyoake.com
Wellington office phone number	(04) 232 2722
Christchurch address for service	81 Treffers Road, Wigram, Christchurch 8042
Christchurch office email	Christchurch@holyoake.com
Christchurch office phone number	(03) 366 6545

Declaration

Price Holyoake (NZ) Ltd has provided this declaration to satisfy the provisions of Schedule 1(d) of the Building (Building Product Information Requirements) Regulations 2022.

Version History

Version number	Written by	Date issued	Changes from previous document
V1.0	ST	07/06/24	First issue
V1.1	ST	20/09/24	Updated Christchurch Address and website URL