

HFS Damper Building Product Information Sheet

Version 1.0 – Issued 07/06/24

Product

Product name	HFS Damper
Product type	Fire Damper, Smoke Damper, Fire-Smoke Damper, Smoke Exhaust Damper
Product Identifiers	HFS F/S/FS/SE

Product description and intended use

- The HFS is a line of mechanical fire, smoke, fire-smoke or smoke exhaust dampers designed for use within ventilation systems to maintain the integrity of a fire barrier. The HFS can offer a fire integrity rating of up to four hours. The HFS can also maintain smoke integrity of up to four hours with a smoke leakage below 56l/s/m². The HFS has no structural adequacy nor insulation ratings.
- HFS dampers are fabricated from galvanised steel blades and stainless steel side seals 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 HFS 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 HFS is consistent throughout each sub model with slight design variations depending on whether it is acting as a fire, smoke, fire-smoke or smoke exhaust damper.
- The HFS must always be installed with the blades horizontal.
- Actuators are available in both 24V and 230V models.

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:** The lifespan of the HFS will vary based on the environment it is installed in. For a standard HVAC installation, the HFS 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 HFS.
- **C/AS2 2.3.13, C 4.16.12 (b):** The HFS 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 HFS model 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 HFS, 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 HFS is compliant with both AS1682.1 and AS1682.2.
- **C/AS2 4.16.12 (c):** The HFS must be installed as per installation details with either an access panel or otherwise access on one side of the damper.
- **C/AS2 4.16.13:** Where evacuation is delayed, ventilation ducts that pass through a fire separation to a place of safety within the building must be provided with a smoke damper.
- **C/AS2 4.16.14:** The HFS acting as a smoke or fire and smoke damper complies with AS1682.1 and AS1682.2 and can be actuated on alarm activation.
- **H1:** When acting as a fire damper and installed in a commercial building the HFS must be designed to have a maximum pressure drop when fully open of 15 Pa.

Relevant standards

- HFS dampers are designed to and compliant with AS1668.1, AS1682.1 and AS1682.2.
- HFS dampers are tested to AS1530.4-2014 and AS1530.7-2007.
- HFS should be maintained to AS1851-2012.

Conditions and limitations of use

- The HFS should be specified by a suitably qualified mechanical or fire engineer based on the integrity requirements of the fire barrier.
- The HFS should be installed by a suitably qualified and trained tradesperson. Holyoake representatives are available to provide installation training upon request.
- The HFS 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 HFS is **not** subject to a warning or ban under section 26 of the Building Act 2004.

Installation details and product datasheet

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

Maintenance requirements

The HFS 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
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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