

Title	Demonstrate knowledge of the fundamentals of passive fire protection systems		
Level	3	Credits	4

Purpose	<p>This unit standard covers the underpinning knowledge of passive fire protection (PFP) systems in buildings.</p> <p>People credited with this unit standard are able to demonstrate knowledge of: the Fire Cells and Fire Resistance Ratings (FRR), the passive fire systems and associated products, smoke separations, standards and approvals required for Passive Fire Protection products, obligations and responsibilities when penetrating/altering/disturbing passive fire protection systems.</p>
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Classification	Mechanical Engineering > Passive Fire Protection
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Available grade	Achieved
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Explanatory notes

1 References

Building Act 2004 and associated Regulations.

Department of Building and Housing. *Compliance Document for New Zealand Building Code, Clauses C1 to C6 (Fire Safety)*, which are available at <http://www.building.govt.nz/compliance-documents>.

Ministry of Business, Innovation and Employment (MBIE). *Compliance Schedule Handbook*, which is available at:

<http://www.building.govt.nz/UserFiles/File/Publications/Building/Compliance-documents/Compliance-schedule-handbook-amendment-3.pdf> .

Ministry of Business, Innovation and Employment (MBIE) *New Zealand Building Code Handbook*, which is available at:

<http://www.building.govt.nz/UserFiles/File/Publications/Building/Compliance-documents/building-code-handbook-3rd-edition-amendment-13.pdf>.

2 Definition

Passive fire protection (PFP) is an integral part of the three components of structural fire protection and fire safety (ie Fire Resistance Rating (FRR)) in a building. PFP attempts to contain fires or slow the spread by compartmentalising the building and through the use of fire resistant walls, floors, doors, ceilings, and roofs.

3 Assessment

Use of training manuals, reference texts and literature, standards, manufacturers' data, and codes of practice and regulations listed in the references is encouraged during assessment.

Outcomes and evidence requirements

Outcome 1

Demonstrate knowledge of the Fire Cells and Fire Resistance Ratings (FRR).

Evidence requirements

- 1.1 Passive fire protection and its purpose is defined.
- 1.2 The meaning of Fire Resistance Rating (FRR) is explained in relation to fire cells in accordance with the New Zealand Building Code.
- 1.3 Fire cells are described in relation to the New Zealand Building Code and clauses C1 to C6.
- 1.4 Source of FRR information is explained.

Outcome 2

Demonstrate knowledge of the passive fire systems and associated products.

Evidence requirements

- 2.1 The various components that collectively make up a passive fire protection systems that must be approved and tested as a complete system is stated.
- 2.2 The various passive fire products that form parts of a system that must be approved and tested as a complete system is stated.

Range includes but not limited to: wraps, collars, windows, doors, sealants, mortar, surface finishes.
- 2.3 The limitations of products that form parts of a system are described.

Range includes but not limited to temporary solutions such as pillows.

Outcome 3

Demonstrate knowledge of smoke separations.

Evidence requirements

- 3.1 Approved materials and products required to achieve a smoke separation as required by the Building Code are described.

Outcome 4

Demonstrate knowledge of standards and approvals required for Passive Fire Protection products.

Evidence requirements

- 4.1 Sources of information for passive fire protection product approvals are listed.
- Range includes but not limited to NZ Building Code and recognised International Standards.

Outcome 5

Demonstrate knowledge of the obligations and responsibilities when penetrating/altering/disturbing passive fire protection systems.

Evidence requirements

- 5.1 The fire FRR and/or smoke rating of the passive fire system are determined.
- 5.2 Approved products to use for reinstatement of FRR and/or smoke rating are identified.
- 5.3 Reporting, notifying, and documenting procedures are described according to NZ Building Code.

Planned review date	31 December 2020
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Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	15 October 2015	N/A

Consent and Moderation Requirements (CMR) reference	0013
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This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

Please note

Providers must be granted consent to assess against standards (accredited) by NZQA, before they can report credits from assessment against unit standards or deliver courses of study leading to that assessment.

Industry Training Organisations must be granted consent to assess against standards by NZQA before they can register credits from assessment against unit standards.

Providers and Industry Training Organisations, which have been granted consent and which are assessing against unit standards must engage with the moderation system that applies to those standards.

Requirements for consent to assess and an outline of the moderation system that applies to this standard are outlined in the Consent and Moderation Requirements (CMRs). The CMR also includes useful information about special requirements for organisations wishing to develop education and training programmes, such as minimum qualifications for tutors and assessors, and special resource requirements.

Comments on this unit standard

Please contact Competenz qualifications@competenz.org.nz if you wish to suggest changes to the content of this unit standard.