| Title | Form and install flashings for metal roof and wall cladding | | |
|-------|---|---------|----|
| Level | 4 | Credits | 25 |

| Purpose | This unit standard is intended for use in the training and assessment of people carrying out metal roof and wall cladding installation and covers forming and installation of flashings for metal roof and wall cladding. |
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| | People credited with this unit standard are able to form and install: specialised metal flashings; penetration flashings for drainage outlets; and flashing intersections, corners, and terminations. |

| Classification | Plumbing, Gasfitting and Drainlaying > Roofing |
|----------------|--|
| | |

| Available grade | Achieved | |
|-----------------|----------|--|
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Guidance Information

1 This unit standard has been developed for learning and assessment on-job.

2 References

Construction Contracts Act 2002; Historic Places Act 1993; Local Government Act 2002; Building Act 2004 and associated regulations; Health and Safety at Work Act 2015: Resource Management Act 1991; Acceptable Solutions and Verification Methods for New Zealand Building Code Clause E2 External Moisture; New Zealand Metal Roof and Wall Cladding Code of Practice; Licensed Building Practitioner Scheme – Understanding the Regulatory Environment Booklet - available at: http://www.business.govt.nz/lbp/the-board/gettinglicensed/applying-for-licensing; NZS 3604:2011 Timber-framed buildings: NZS 3902:2004 Housing, alterations and small buildings contract; NZS 4121:2001, Design for access and mobility: Buildings and associated facilities; New Zealand Building Code Hand Book – available at: http://www.building.govt.nz/building-code-compliance/building-code-andhandbooks/building-code-handbook: and all subsequent amendments and replacements.

3 This unit standard applies to both new roof and re-roofing installations.

- 4 Range
 - a Candidates must refer to current legislation and Standards during assessment.
 - b Demonstration of safe working practices are essential components of assessment of this unit standard.
 - c All activities and evidence presented for all outcomes and performance criteria in this unit standard must be in accordance with:
 - i legislation;
 - ii policies and procedures;
 - iii ethical codes;
 - iv Standards may include but are not limited to those cited in the New Zealand Building Code Hand Book;
 - v applicable site, enterprise, and industry practice; and,
 - vi manufacturers' instructions, specifications, and data sheets.

Outcomes and performance criteria

Outcome 1

Form and install specialised metal flashings.

Range one expansion flashing; one unsealed lapped flashing, one vertical wall flashing; one horizontal wall flashing; any two of – head, sill and jamb flashing, capping internal barge; any two of – barge, apron, ridge, parapet, saddle.

Performance criteria

- 1.1 Select flashing type to meet job specification.
 - Range dimensions, folding angles, coding, length and number, meet cover requirements, colour.
- 1.2 Make and record flashing measurements.

Range measurements, folding limits, setting out.

1.3 Check pre-fabricated metal flashings to ensure that they meet job specifications.

Range dimensions, folding angles, coding, length and number, meet cover requirements, colour.

- 1.4 Mark, fold, and cut flashings.
- 1.5 Prepare for installation of flashings.
 - Range organisation, selection of tools and equipment, preparation of surfaces, pre-fitting.

1.6 Fix flashing.

Range may include sealing.

1.7 Confirm flashing provides protection from water ingress, vermin, and bird intrusion.

Outcome 2

Form and install penetration flashings for drainage outlets.

Range watershed, tray, tapered, soaker, diverter, cricket.

Performance criteria

- 2.1 Check roof catchment area and profile design and confirm they are suitable in accordance with job specifications.
- 2.2 Make measurements for penetration flashings and record.
- 2.3 Mark, fold, and cut penetration flashings.
- 2.4 Prepare for installation.

Range organisation, selection of tools and equipment, preparation of surfaces, pre-fitting.

2.5 Fix flashing.

Range may include sealing.

2.6 Confirm flashing provides protection from water ingress, vermin, and bird intrusion.

Outcome 3

Form and install flashing intersections, corners, and terminations.

Range evidence is required for three of the following intersection types – valley gutters, ridge hip intersections, barge-ridge intersections, apron and parapet capping, apron and ridge, saddle flashing.

Performance criteria

3.1 Prepare for the installation of flashing intersections, corners, and terminations.

Range organisation, selection of tools and equipment, preparation of surfaces.

3.2 Mark, fold, and cut flashings.

3.3 Fix flashings.

Range may include sealing, fixing, rivets.

- 3.4 Confirm flashing provides protection from water ingress, vermin, and bird intrusion.
- 3.5 Correct any defects.
- 3.6 Remove surplus material including swarf and leave roof and site in a tidy and safe condition that allows any further work to be carried out safely.

This unit standard is expiring. Assessment against the standard must take place by the last date for assessment set out below.

Status information and last date for assessment for superseded versions

| Process | Version | Date | Last Date for Assessment |
|--------------|---------|------------------|--------------------------|
| Registration | 1 | 23 January 2009 | 31 December 2020 |
| Review | 2 | 16 March 2017 | 31 December 2027 |
| Revision | 3 | 20 July 2017 | 31 December 2027 |
| Rollover | 4 | 25 August 2022 | 31 December 2027 |
| Review | 5 | 28 November 2024 | 31 December 2027 |

Consent and Moderation Requirements (CMR) reference0003This CMR can be accessed at http://www.nzga.govt.nz/framework/search/index.do.