

40807 Install building control systems

Kaupae Level	4
Whiwhinga Credit	5
Whāinga Purpose	<p>This skill standard is for people intending to complete qualifications and credentials in the carpentry trades.</p> <p>People with this skill standard have the skills to install building control systems.</p> <p>This skill standard may contribute to New Zealand qualifications designed for construction trades.</p>

Hua o te ako me Paearu aromatawai | Learning outcomes and assessment criteria

Hua o te ako Learning outcomes	Paearu aromatawai Assessment criteria
1. Install building control systems.	a. The types of sound control systems are determined, including their properties and components.
	b. The types of fire barrier systems are determined, including their properties and components.
	c. The types of moisture barrier systems are determined, including their properties and components.
	d. Regulatory and compliance requirements for control systems are identified.
	e. Installation requirements for control systems are identified.
	f. Control systems are prepared for installation to reflect plans and specifications.
	g. Control systems are installed to meet regulatory requirements and reflect manufacturer's specifications.

Pārongo aromatawai me te taumata paearu | Assessment information and grade criteria

Assessment specifications:

To achieve this standard the candidate must be capable of installing two different types of building control systems to industry standards.

Control systems can include sound, fire and moisture control systems that are used in residential construction that complies with the requirements of New Zealand building codes and standards.

Industry standards must reflect industry best practice, workplace procedures, and be within acceptable tolerances as defined in New Zealand codes, standards and regulations.

Plans and specifications can include working drawings, plan specifications, manufacturer specifications, installation instructions, work, demolition and project plans.

This standard must be assessed in the workplace.

Evidence for this standard must be:

- to current and relevant Legislation, Standards, and Codes (including safety),
- in an environmentally sustainable manner,
- within an acceptable timeframe,
- in different and unfamiliar contexts,
- with acceptable behaviours.

Ngā momo whiwhinga | Grades available

Achieved

Ihirangi waitohu | Indicative content

Material types and properties

- Insulation: materials, R-values, mass, and absorption.
- Interior linings: plasterboard, and acoustic panels.
- Doors/windows: Sound and fire-resistant features of solid core doors and double-glazed windows.
- Double stud walls: Impact on sound transmission.
- Mass/stiffness, sound insulation.
- Sound absorption, acoustic properties.

Sound wave theory and STC ratings

- Sound waves: How sound is generated and travels.
- STC Ratings: Interpreting sound transmission class for acoustic performance.
- ITC Ratings: Impact insulation class for impact noise control.

Identifying weak spots

- Areas where noise and fire transmission can occur (gaps, joints).
- Control systems, sealing gaps and reinforcing materials.

Managing control systems

- Increasing mass, reducing stiffness, absorption, decoupling.

Fire resistance and passive systems

- Passive fire walls and fire seals.
- Fire doors.

Calculations and standards

- Calculations for achieving desired sound performance through material choice and construction.
- R Ratings.

Fixing, insulation, and sealants

- Installation process, correct fixing and placement.
- Sealants/adhesives.

Rauemi | Resources

Programme Guidance information available from qualifications@waihangaararau.nz.

Pārongo Whakaū Kouna | Quality assurance information

Ngā rōpū whakatau-paerewa Standard Setting Body	Waihanga Ara Rau Construction and Infrastructure Workforce Development Council
Whakaritenga Rārangi Paetae Aromatawai DASS classification	Planning and Construction > Construction Trades > Carpentry
Ko te tohutoro ki ngā Whakaritenga i te Whakamanatanga me te Whakaōritenga CMR	0120

Hātepe Process	Putanga Version	Rā whakaputa Review Date	Rā whakamutunga mō te aromatawai Last date for assessment
Rēhitatanga Registration	1	28 August 2025	N/A
Kōrero whakakapinga Replacement information	N/A		
Rā arotake Planned review date	31 December 2030		

Please contact Waihanga Ara Rau Construction and Infrastructure Workforce Development Council at qualifications@waihangaararau.nz to suggest changes to the content of this skill standard.