

Hand tools

Teacher/Tutor resource



Unit Standard 12927 (v5), Level 2

Demonstrate knowledge of, select, maintain, and use hand tools for BCATS projects **6** CREDITS



Building and Construction Industry Training Organisation (BCITO)

Level 5, 234 Wakefield Street PO Box 2615 Wellington 6140 0800 422 486 www.bcito.org.nz © 2020 BCITO

All rights reserved.

No part of this work may be reproduced, adapted, modified, copied or transmitted in any form or by any means, including by way of example only, written, graphic, electronic, mechanical, reprographic, photocopying, recording, taping or information retrieval systems, without the written permission of the publisher.

Table of contents

	Page
Teaching and assessment tips	4
Alignment with other unit standards	5
Assessment schedule	6

Teaching and assessment tips

Purpose

This unit standard credits learners who can identify, select, maintain and use hand tools for two BCATS projects.

The examples provided in the student resource cover a range of hand tools used for BCATS projects and within the building and construction industry. To include and describe every hand tool would make the student resource very long and tedious. Students are to take your guidance on identifying, selecting, maintaining, and using hand tools appropriate to the task.

Students need to:

- identify, describe, and select hand tools for their two BCATS projects
- safely and correctly use the hand tools
- care for and maintain the hand tools.

Unit Interpretation

The unit standard does not specify a minimum number of different hand tools that must be used for each project or collectively. This is to provide flexibility to choose as many hand tools as are appropriate for the two chosen projects.

Learning opportunities will be maximised by projects that require a number of different hand tools. It is highly recommended that this be taken into consideration when selecting projects. As a general guide, it is estimated that the two projects will require a minimum of eight different hand tools.

Photographic or other evidence to show that two BCATS projects have been completed must be attached to the Assessor Observation Sheet.

Assessment

Information to support assessment decisions should, wherever possible, be collected naturally as the BCATS project progresses.

Assessment of this unit standard consists of:

- → completion of the Knowledge Assessment Sheet and
- → completion of two BCATS projects and
- completion of the Assessor Observation Sheet.

Alignment with other unit standards

Developing programmes that integrate teaching and learning helps to provide students with meaningful and manageable learning opportunities. For example, completing two BCATS construction projects could allow students to complete this standard (12927) as well as 24350 and 24351.

Other standards that can be facilitated concurrently include:

12932: Construct timber garden furniture as BCATS projects

12933: Complete minor concrete works as a BCATS project

12935: Construct a spaced residential timber deck up to one metre high as

a BCATS project

12938: Lay paving blocks as a BCATS project

12939: Construct a basic retaining wall as a BCATS project

25921: Make a cupboard with a drawer as a BCATS project

The projects specified in the unit standards above would all be appropriate for students' hand tools projects.

22607: Read and interpret plans, working drawings and specifications for BCATS projects

Students need to select appropriate hand tools for their projects. Knowledge of how to read and interpret plans, working drawings, and specifications will help them determine which ones are needed.

24354: Demonstrate knowledge of health and safety legislation and apply safe working practices in the construction of a BCATS project

Using hand tools safely and being safe while they complete their projects can contribute to this unit standard's requirements to apply safe working practices. In addition, none of the project-specific unit standards can be achieved without applying safe working practices.

24350: Identify, select, maintain and use portable power tools for BCATS

projects

24351: Identify, select, maintain and use specified fixed machinery in the

construction of BCATS projects

Depending on the projects chosen, portable power tools and/or fixed machinery may be needed in addition to hand tools. While students may not necessarily complete the theory aspects of the above unit standards while focusing on their hand tools unit standard, they should be encouraged to document evidence of the tools and machinery they selected and used.

Assessment Schedule

US 12927 (v5) - Demonstrate knowledge of, select, maintain, and use hand tools for BCATS projects (Level 2, Credit 6)

Outcome 1	Demonstrate knowledge of and select hand tools for BCATS projects.	Assessment evidence and judgement
PC 1.1	The capabilities and limitations of hand tools for BCATS projects are identified.	Evidence gathered from the projects and correctly completed Knowledge Assessment Sheet showing:
		 identification of the capabilities and limitations of tools.
PC 1.2	Use of tools is described in terms of work operations to be completed.	Evidence gathered from the projects and correctly completed Knowledge Assessment Sheet showing:
		knowledge of appropriate use of tools.
PC 1.3	Safe use of each tool is described.	Evidence gathered from the projects and correctly completed Knowledge Assessment Sheet showing:
		safe use of tools was described.
PC 1.4	Tools are selected to meet identified job requirements.	Evidence gathered from the projects, Assessor Observation Sheet, and correctly completed Knowledge Assessment Sheet showing:
		tools appropriate for tasks were selected.
Outcome 2	Use hand tools for the construction of BCATS projects.	Assessment evidence and judgement
	Tools are used for two BCATS projects	
PC 2.1	Tools are used safely to complete work in accordance with job requirements, specific industry requirements and workplace practice.	Evidence gathered from the projects and Assessor Observation Sheet showing: • tools were used correctly and safely to complete the work.
PC 2.2	Tools are used in accordance with materials and construction process requirements.	
Outcome 3	Maintain hand tools used for BCATS projects.	Assessment evidence and judgement
	Tools used for two BCATS projects	
PC 3.1	Any cutting edges are ground and/or sharpened in accordance with manufacturers' instructions and work place practice.	Evidence gathered from the projects and Assessor Observation Sheet showing: • that knowledge of care and maintenance of tools were applied, including blunt cutting edges
PC 3.2	Tools are kept free of rust and dirt, and are stored and maintained in accordance with workplace practice.	were ground/sharpened and all tools were cleaned, stored and maintained correctly.
PC 3.3	Damaged, blunt or faulty tools are reported to supervisor in accordance with work- place practice.	Evidence gathered from Assessor Observation Sheet showing:
		 any damaged, blunt or faulty tools were reported to me.

6