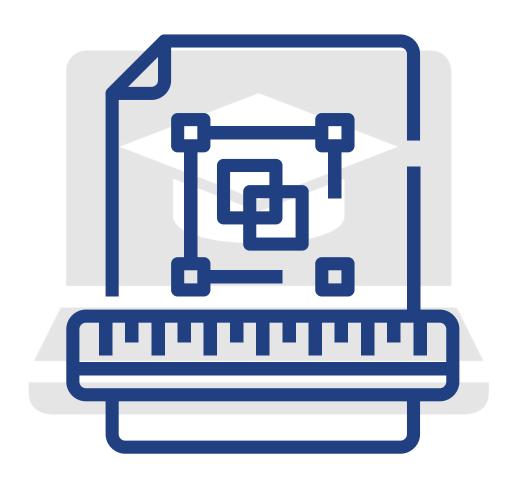


Plans & specifications

Teacher/Tutor resource



Unit Standard 22607 (v4), Level 2

Read and interpret plans, working drawings and specifications for BCATS projects 3 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
Alignment with other unit standards	
Examples of oral assessment questions	6
A consequent solved a	7
Assessment schedule	/

Teaching and assessment tips

Purpose

This unit standard credits a learner who is able to read and interpret plans, working drawings and specifications. This includes:

- → reading and interpreting different plans
- → identifying abbreviations, symbols and preliminary work and
- → determining the quality and types of materials required in undertaking a specific project.

The skills and knowledge required for this unit standard are best assessed using the Knowledge Assessment provided. Students will need to use the A3 sized plans and specifications to answer the questions in it. These can be found as a separate document on both www.bconstructive.org.nz and – for secondary school teachers only – on the myBCITO site.

If you need to gather further evidence it can be collected by observing the student read and interpret any number of given plans for their BCATS projects. There are oral questions included in this resource that may help you with this.

Note that there is little mentioned in the student resource regarding specifications. We highly recommend you contextualise the learning of these to one of your project plans.

Assessment

Assessment of this unit standard consists of:

→ completion of the Knowledge Assessment, supplemented by oral questions if needed.

Alignment with other unit standards

Developing programmes that integrate teaching and learning helps to provide students with meaningful and manageable learning opportunities.

The following unit standards are not an exhaustive list of which you could include in your programme and nor should one feel obligated to offer all as linked units. Other unit standards you include will depend on your overall programme of study and what best meets your learners' needs.

Level 2

24353: Demonstrate knowledge of and create sketches and drawings for BCATS projects

US 22607 provides students with knowledge they can then apply when creating the sketches and drawings required for US 24353.

24358: Plan and monitor the construction of a BCATS project and quality check the product:

Knowledge of how to read and interpret plans, working drawings, and specifications will help students to plan and monitor projects. This is especially so if the project is a timber-framed utility building or similar.

12936: Construct a non-consent timber framed utility building as a BCATS project

Knowledge of how to read and interpret plans, working drawings, and specifications will help students to calculate quantities and prepare an order for the materials needed for this project. It will also help them with following the plans to create a building that meets their client's needs and expectations.

Examples of oral assessment questions

1.	Name two types of pictorial drawings.			
	Isometric.			
	Oblíque.			
	Perspective.			
2.	What drawing method is used to produce a set of working drawings			
	Orthographic projection.			
3.	Name 3 of the views that make up an orthographic drawing.			
	Front.			
	Right side view.			
	Left side view.			
	Top view or plan.			
	Rear view.			
4.	What angle is used to draw an oblique drawing?			
	45°			
5.	Which method of projection is used to produce a set of working drawings?			
	Elevations and/or cross-sectional.			
6.	When a drawing of an object is to be produced showing it 5 times its normal size, what is the scale that would be used?			
	5:1			
7.	What legislative act governs all construction work in New Zealand?			
	The Building Act.			

Assessment Schedule

US 22607 (v4) - Read and interpret plans, working drawings and specifications for BCATS projects (Level 2, Credit 3)

Outcome 1	Read and interpret plans, working drawings and specifications for basic construction.	Assessment evidence and judgement
PC 1.1	Plans, working drawings and specifications are identified and described in terms of their types and uses.	Evidence gathered from Knowledge Assessment showing:plans, working drawings and specifications are identified and described correctly.
PC 1.2	Abbreviations and symbols are identified and interpreted in terms of their use in plans, specifications and working drawings.	Evidence gathered from Knowledge Assessment showing:abbreviations and symbols are identified and interpreted correctly.
PC 1.3	Any preliminary work is identified from plans, specifications and working aridence gathered from Knowledge Assessment showing: • any preliminary work is identified correctly.	Evidence gathered from Knowledge Assessment showing:any preliminary work is identified correctly.
PC 1.4	Quality and types of materials are determined from plans, working drawings and specifications.	Evidence gathered from Knowledge Assessment showing: