BCATS
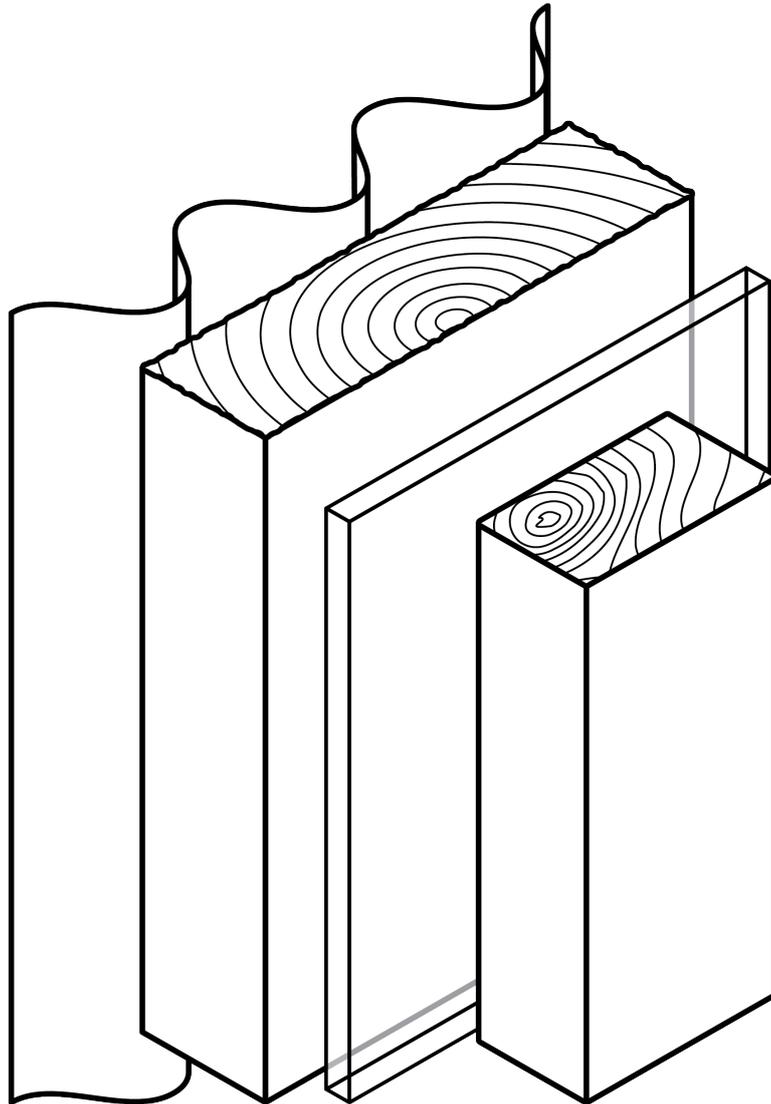
BUILDING, CONSTRUCTION AND ALLIED TRADES SKILLS

Working with materials

Assessment resource

Level 3

Skill Standard 40570 (v1)

Select and use materials for a BCATS project

Learner name: _____

BCATS project: _____

BCITO
He Hunga Hanga Mātou
building people

Assessment: Working with materials

Learner instructions

This assessment is about working with a range of materials for a BCATS project.

You need to show you can do these things without being prompted:

> Select ideal materials for the project based on their features and uses.

> Use precise techniques to work safely with materials and skilfully minimise waste.

Over the page, you will see what you need to do for this assessment.

Your teacher will observe you using the materials for your project.
They will provide comments in this assessment resource as evidence to support their observations.

You will need to provide the following evidence to support this. Submit it using myBCITO or the process at your school/organisation.

A completed *Material selection* worksheet (pgs. 3 – 5 in this assessment resource).

A completed *Project plan* template, including your notes on how you dealt with any wastage.

Completed *Progress record* templates, including the materials you worked with and your safe practices.
(in the Level 3: Project diary)

Use the assessment checklist in this resource to keep track of the evidence you have collected.

The grade you are awarded will be based on your ability to skilfully and thoughtfully select and use materials.

Worksheet: Material selection

For this assessment activity, you need to carefully select the best materials for your project and justify your choices. It is an open book activity.

Being able to choose the right materials is an important skill in the BCATS workplace.

Have a look at your project brief and then fill in the table below.

- List the materials you will use for your project.
- List features of each material that make it ideal for your project.
- List other materials you could have used, reasons why they were suitable, and why you didn't choose them for this project.

An example answer has been given.

Material you will use	Features of the material that make it ideal for your project (e.g. timber treatments, strength, ease of handling, visual appeal)	Other materials you could have used, why they were suitable, and why you didn't choose them
Example: *High-density polyethylene (HDPE)*	*Using it as the main material for children's playground equipment. It is non-toxic and smooth, reducing the risk of injury when children play on it. It is also resistant to corrosion and exposure to UV so it is ideal for the outdoor setting. HDPE is easy to work with and recyclable.*	*• Timber – structurally lasts many years in an outdoor setting, but less durable and could give children splinters.* *• Metal – also very strong and resistant to wear in the outdoors, but gets hot in the sun so it could burn playground users.* *• Plastic-coated steel – definitely a strong and durable material, but it is more expensive and heavier than HDPE.*

Worksheet: Material selection

Material you will use	Features of the material that make it ideal for your project (e.g. timber treatments, strength, ease of handling, visual appeal)	Other materials you could have used, why they were suitable, and why you didn't choose them

Worksheet: Material selection

Material you will use	Features of the material that make it ideal for your project (e.g. timber treatments, strength, ease of handling, visual appeal)	Other materials you could have used, why they were suitable, and why you didn't choose them

Use materials

You need to show you can do these things for your project without being prompted.

- Accurately measure, cut, and handle your chosen materials using safe practices at all times.

- Make full use of the materials and demonstrate your range of strategies to minimise waste.

👁 👁 Your teacher will observe you using and handling the materials for your project.

Below is the other evidence you need to collect during your practical work. You should work with your teacher to make sure you've provided everything needed.

A completed *Project plan* template, including your notes on how you dealt with any wastage.

Completed *Progress record* templates, including the materials you worked with and your safe practices.

Assessment checklist: Working with materials

To be completed by the learner and the teacher.

Assessment activity	Evidence needed	Date all evidence collected (Learner to complete)	Teacher sign-off
Select materials	A completed *Material selection* worksheet.		
Use materials	A completed *Project plan* template, including your notes on how you dealt with any wastage. Completed *Progress record* templates.		
Note: A copy of the project brief must also be included in your overall portfolio of evidence.			

Assessment activity	Evidence needed	Date all evidence collected	Teacher sign-off

Teacher observation: Working with materials

Learner name: _____ Project: _____

Teacher instructions

Below are criteria for the available grades.

Not Achieved	Achieved	Merit	Excellence
Materials are not used appropriately for a BCATS project.	Work with materials for a BCATS project.	Efficiently work with materials for a BCATS project.	Skilfully work with materials for a BCATS project.

👁 👁 **Provide comments on the learner's ability to meet the following assessment criteria, considering everything you observed throughout the project.**

Materials are chosen for the project, considering features and uses when compared with other options.	
Materials are used safely for the project with minimal wastage.	

Grade awarded: Working with materials

Teacher instructions

After considering all the evidence collected, enter the grade you will award for Skill Standard 40570, with comments that explain your decision.

Final grade		Date	
Justification for final grade (Provide overall comments, considering all evidence collected)			

Teacher and learner sign-off

		Date
Learner signature (Grade received and accepted)		
Teacher sign-off	Name: _____ Signature: _____	