



Unit 18B

The Circular Economy in the Construction Sector

Refurbishment and Repair

1 Introduction

Unit 18B provides resources for vocational trainers seeking to incorporate the circular economy into their courses in the Construction sector, focusing on saving waste and resources when refurbishing/repairing existing buildings. This unit explores the importance of understanding how refurbishment and repair can showcase circular economy principles by keeping the value of materials within the economic cycle.

2 Learning Outcomes

Knowledge	To understand why refurbishment is a sustainable option.
Skills	To be able to deploy refurbishment and repair practices.
Competencies	To determine the benefits of refurbishment and repair.
EQF Level	This material is mainly suited to EQF level 4-5.

3 Lesson Plan

Method	Description	Suggested duration in minutes (total minutes)
Brainstorming session	Brainstorming where you as a trainer write down definitions, notions and connotations ought to be used for future discussions and references. You can continue the brainstorming session with the following questions if needed:	15



	<ul style="list-style-type: none"> Discuss the role of refurbishment/repair within the construction industry in relation to the circular economy principles. Introduce the concept of a building's layers in terms of their different life spans and replacement costs. Try to apply the concept to the building where you currently are with your students. 	
Presentation by trainer using PPT	Overview	30
	Unit Learning Objectives	
	Refurbishment and Repair	
	Building Layers	
	Discussion	
	Case Study: Angel Building	
	Case Study: Triodos Bank, Driebergen	
	Case Study: Upcycle studios	
	Case Study: Grand Parc apartment blocks	
Small repair projects		
Assessment	Quiz	15

4 Quiz

- 1. Layers of the building have the same life span.**

Answer: False.

- 2. Who can consider the structural design of a building from the perspective of extending a building's life:**

Answer: Designers or engineers

- 3. While implementing small repair projects:**

Answer: reusable materials should be identified and recovered