

Teacher's guide: Construction Drawing

Theme

- Design for Disassembly
- Idea Development
- Sketch and Construction Drawing

Recommended Duration in Hours

- 180 min

WOOD



Introduction

In this course, the apprentice will create construction drawings focusing on design for disassembly. The drawings will be used later in module 2.4.2, where the apprentice will build a mock-up based on the drawing material.

The apprentice is introduced to design for disassembly with wood. Various examples are presented as inspiration, showcasing possibilities and case examples. Overall, these examples are intended to provide the apprentice with an introduction to the topic in relation to their field and an understanding of what makes a wood construction separable and reusable in the long run.

Preparation

- Teacher's Role:
- The teacher must explain the purpose.
- The teacher must explain the task.
- The teacher should collaborate with the students during the exercise and assist with drawing.
- The teacher should evaluate and provide feedback to the students.

Participant's Role:

- The apprentice must listen and understand the task.
- The apprentice should seek information about details for design for disassembly.
- The apprentice must create sketches and construction drawings for the later practical task 2.4.2.
- The apprentice should receive feedback from the instructor.

Learning Objectives:

- The apprentice can assess whether a discipline-specific construction is 'designed for disassembly'.



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- The apprentice can design wood constructions so that particularly exposed construction parts can be 'easily' replaced (sacrificial wood).
- The apprentice can demonstrate how constructions can be carried out to minimize waste.

Content and Purpose

The apprentice constructs drawings for a mock-up, illustrating various discipline-specific junction solutions designed for disassembly.

Proposed Teaching Plan

Teacher's Presentation (10 min.)

- Presentation of the learning element.
- Watch video 2.3.1 – Design for disassembly.

Individual Work (10 min.)

- The apprentice reflects on situations from their daily life where materials and constructions are difficult to separate.
- Share and discuss experiences and proposed solutions in class.

Group Work (2 hours)

- The group investigates and proposes 3 sketch ideas for constructions or building components that can be separated and reused.
- The group selects one sketch idea to work on.
- The group creates final construction drawings to be used in module 2.4.2.

Presentation and Conclusion (30 min.)

- Present your final idea and drawings to the class and the instructor.
- Evaluate the module in class and suggest improvements.

Differentiation

For challenged apprentices, the teacher finds examples that the student can work with. More independent apprentices can be challenged on the scope and detailing of the task. The number of drawings and solutions can vary from group to group.

Feedback and Evaluation

The teacher provides feedback during the process and during the task summary.

