

**ASSESSMENT MATERIAL**

Learning Unit 2

CONNECTORS AND ADHESIVES

UPWOOD

*Up-skilling construction workers in wood construction methods for energy-efficient buildings*

UPWOOD-PUU

*Rakennustyöläisten ammattitaito energiatehokkaiden rakennusten puurakentamisenmenetelmissä*

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# Frequently asked questions

Question: What does wood welding mean?

Answer: Welding wood is a method of replacing gluing.

Question: What adhesives are available for different structures or structural conditions?

Answer:

* **Weatherproof adhesives:** Adhesives must be more durable than wood in all conditions.
* **Moisture-resistant adhesives:** Adhesives are suitable for indoor use where the relative humidity may be quite high.
* **Adhesives for indoor use:** Adhesives do not withstand water soaking and will last for a limited time in humid conditions.

# Multiple choice questions

1. For gluing load-bearing structures, what type of adhesive is most suitable from given options below:
   1. natural glue
   2. resorcinol adhesives
   3. epoxy adhesives
2. Phenol adhesives are
   1. used in the plywood industry as a high frequency adhesive.
   2. suitable for indoor use as it do not withstand water soaking.
   3. classified into 4 main types, two- or one-component reaction adhesives, solvent adhesives and aqueous dispersion adhesives.
3. Cohesion means
   1. the internal strength of the adhesive and the adhesive joint.
   2. the process where the adhesive penetrates to pores of the wood.

# Case studies

## Case study 1

Name at least 5 different joining techniques. Describe both pros and cons of them. Do you notice some joining techniques used in your room’s window frames or furniture?

## Case study 2

Wood welding is alternative method where two pieces of wood can be joined without using glue. Describe the method of wood welding in words.