



U2 – Infill and Prefab

<p><b>Objectives:</b></p> <p><b>Trainees ...</b></p> <ul style="list-style-type: none"> <li>• know about the structural properties of wood and how to calculate the dimensions of posts and beams</li> <li>• know about the methods of diagonal bracing (against shear forces)</li> <li>• can read a structural engineering calculation</li> </ul> <p><b>Methods:</b></p> <ul style="list-style-type: none"> <li>• Lecture/Talk</li> <li>• Explanations</li> <li>• Practice</li> <li>•</li> </ul>		<p><b>Trainer:</b></p> <p><b>Place:</b> Classroom</p> <p><b>Duration:</b> 4 hours</p> <p><b>Equipment</b> Pen and paper Beamer Computer with planning-programme</p>
<p><b>T H E O R Y</b></p>	<ul style="list-style-type: none"> <li>• Basics of structural engineering</li> <li>• Calculation of dimensions for loadbearing building-parts</li> <li>• Materials for structural bracing and planking</li> </ul>	<p><b>Documents:</b></p> <p><b>Trainer sheet</b> T1</p> <p><b>Info sheet</b> I1 Structural engineering I2 Calculation of dimensions I3 Materials</p> <p><b>Text sheet</b> X1</p> <p>Slide show <b>Evaluation</b> Multiple choice</p>
<p><b>P R A C T I C E</b></p>	<p><b>Task</b></p> <ul style="list-style-type: none"> <li>• Conversion of a preliminary planning or a plan for a building permit into detailed construction design on computer or paper</li> </ul>	
<p><b>Organisation</b></p> <ul style="list-style-type: none"> <li>• Prepare a preliminary plan for an average sized straw bale house,</li> <li>• prepare some open-source programs for 3D-planning, calculation (schedule of services), CAD</li> </ul>		