

Timber Pro Documentation

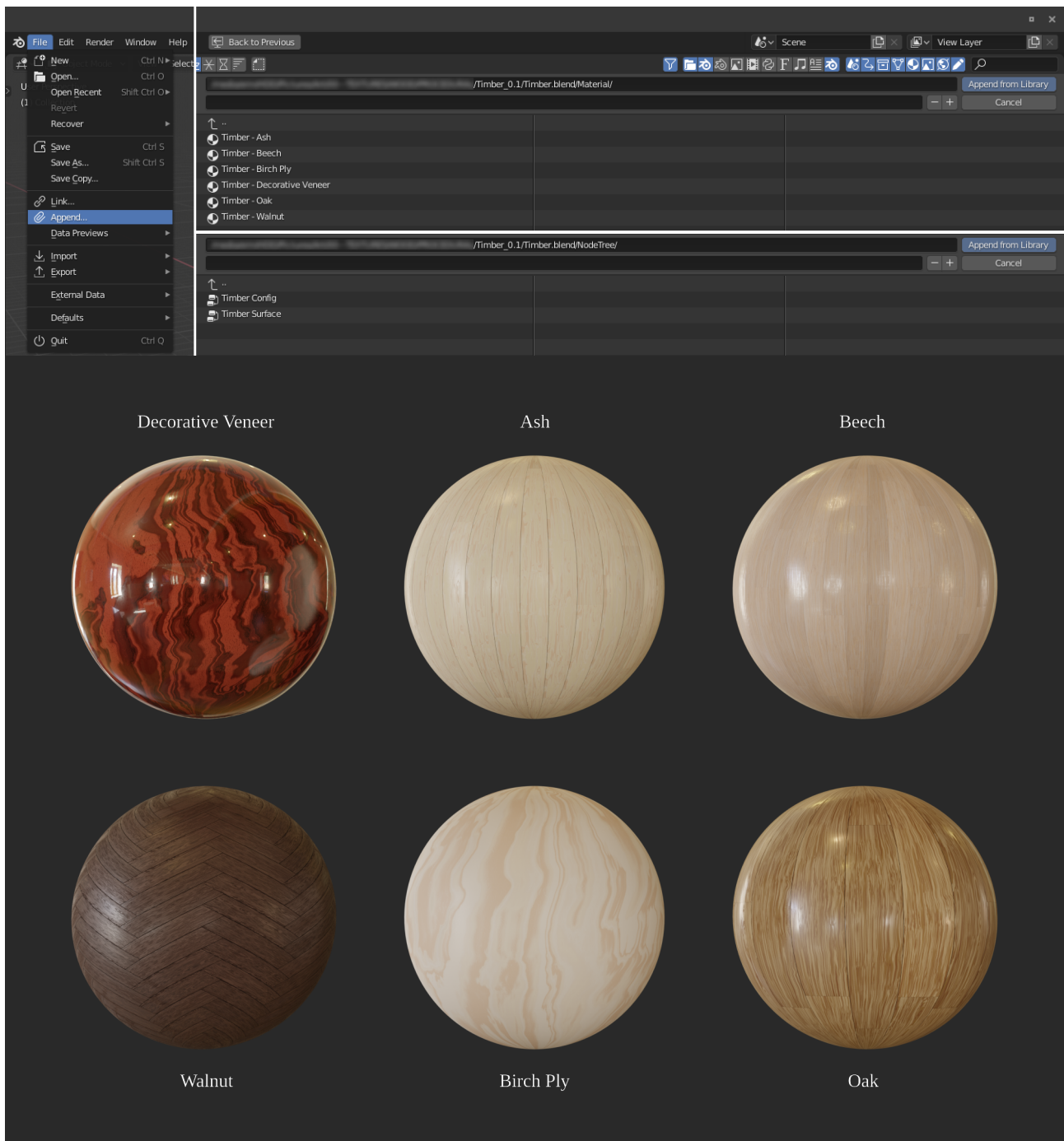
Timber Pro is a procedural wood material created using Blender's node system, which means that by changing a few parameters, you can totally change how the material looks. This pro version of Timber is only compatible with Cycles due to Eevee's node limit. If you are looking for an Eevee compatible version, please download Timber Lite.

To get the most out of Timber Pro:

Expand the .zip file into your material library.

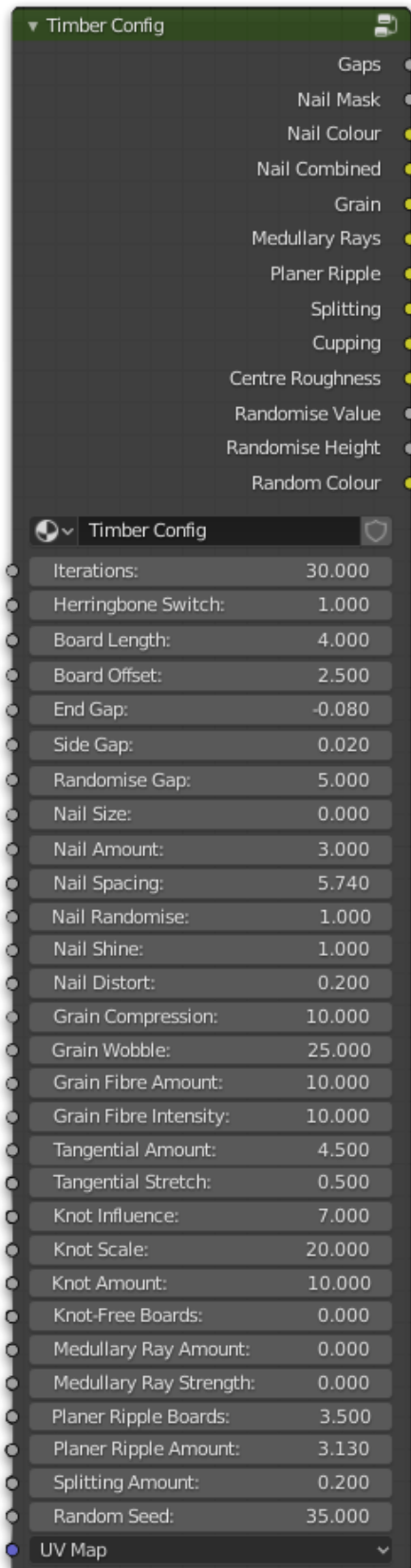
To add the full Timber material to your scene, go *File > Append*, and then navigate to the *Timber.blend* file, enter the *Material* subsection and choose from the material presets you'll find there. Then click *Append from Library*.

To add only the individual node groups, go to *File > Append*, and then navigate to the *Timber.blend* file, enter the *NodeTree* subsection and choose the two node groups from there – *Timber Config* and *Timber Surface*.



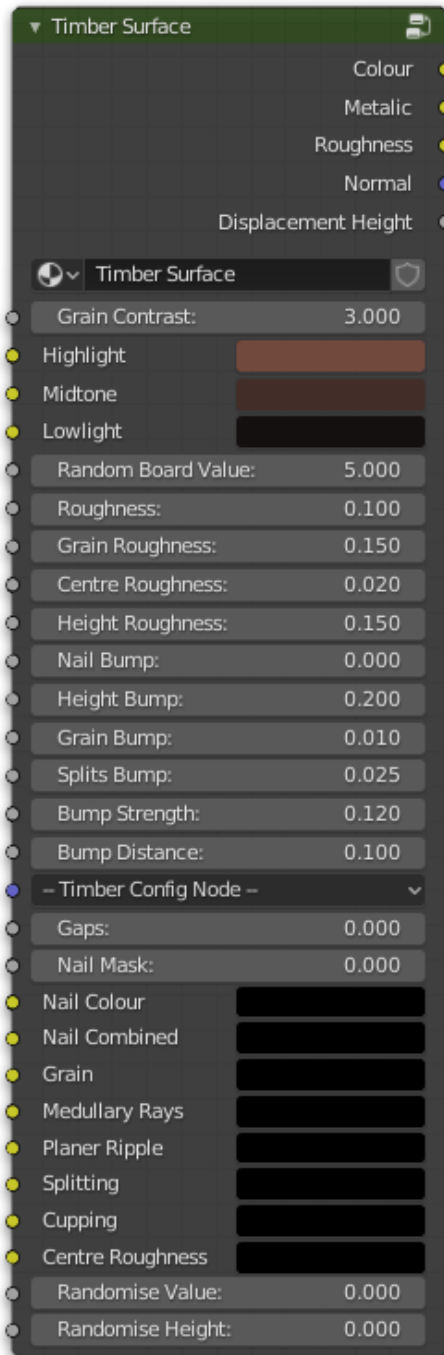
A Brief Overview:

Timber is a fairly advanced procedural material and as such it requires a fair few parameters to control the appearance of the material. For the most part the names of these align with both wood conventions and modelling conventions. The *Timber Config* node has been designed so that a viewer node can be attached to the outputs and Eevee will display the material in Look Dev mode. This allows for quick feedback about how you've set out board lengths / grain design etc.



These top sockets can be connected directly to the corresponding sockets on the *Timber Surface* node. Each one contains information needed for the overall material but individually can be helpful to check how things will effect overall composition, for example the nail settings or how much planer ripple etc. Random colour just helps visualise layout.

- ♦ *Iterations* – The number of boards wide the texture is
- ♦ *Herringbone Switch* – 0 = straight lay, 1 = herringbone. (NB. Nails **will not** appear on a herringbone patter)
- ♦ *Board Length* – The length of the boards in multiples of their width
- ♦ *End Gap* – The space at the end of boards
- ♦ *Side Gap* – The space to the sides of boards
- ♦ *Randomise Gap* – Adds a random value per board to its gaps
- ♦ *Nail Size* – The overall size of the nail heads
- ♦ *Nail Amount* – The number of nails across each board
- ♦ *Nail Spacing* – The distance between nails longitudinally
- ♦ *Nail Randomise* – Randomises the y-coordinate of the nails per board row
- ♦ *Nail Shine* – Controls the roughness of the nails
- ♦ *Nail Distort* – Creates variations in the shape and position of the nail heads
- ♦ *Grain Compression* – Controls the lateral compression of the grain
- ♦ *Grain Wobble* – Controls the straightness of the grain
- ♦ *Grain Fibre Amount* – Controls the amount (dissolve) of minor grain
- ♦ *Grain Fibre Intensity* – Controls the opacity of the minor grain
- ♦ *Tangential Amount* – Sets the amount of boards with tangential vs quarter-sawn grain patterns (10 = All tangential, 0 = none)
- ♦ *Tangential Stretch* – Controls the grain compression/stretch of all tangential boards
- ♦ *Knot Influence* – Controls how much knots effect the grain
- ♦ *Knot Scale* – Controls the scale of the knot pattern (larger number = more, smaller knots)
- ♦ *Knot Amount* – Controls the distortion of grain. Use with *Influence* for fine tuning
- ♦ *Knot-Free Boards* – Sets the amount of boards that do not have knots (10 = all clean, 0 = all knots)
- ♦ *Medullary Ray Amount* – Sets the amount of boards with Medullary Rays (10 = all, 0 = none) (Only appropriate for Oak)
- ♦ *Medullary Ray Strength* – Sets the opacity of the rays
- ♦ *Planer Ripple Boards* – Sets how many boards have planer ripple
- ♦ *Planer Ripple Amount* – Controls the amount that the effected boards are covered in ripple.
- ♦ *Splitting Amount* – Controls how much the boards are effected by longitudinal splitting (doesn't appear on tangential boards due to stretching artefacts)
- ♦ *Random Seed* – Randomises arrangement and grain features
- ♦ *UV Map* – Input for a UV Map



This *Timber Surface* node will only output a flat magenta colour if viewed with Eevee so ensure cycles is the active render engine.

These top sockets output to the corresponding nodes of a Principled BSDF node. The *Displacement Height* socket is optional and can be plugged into the height socket of a Displacement node if you want the cupping and ripple information to displace the surface.

- ♦ *Grain Contrast* – Controls the contrast of the grain down to -1 where no grain will show
- ♦ *Highlight, Midtone, Lowlight* – These 3 control the colour of their corresponding value bands
- ♦ *Random Board Value* – Applies a random value to each board to add colour variation
- ♦ *Roughness* – Controls base roughness
- ♦ *Grain Roughness* – Adds roughness depending on the grain
- ♦ *Centre Roughness* – Adds roughness to the centre of each board
- ♦ *Height Roughness* – Adds roughness biased to high points
- ♦ *Nail Bump* – Sets the effect of the nails on the bump map
- ♦ *Height Bump* – Sets the effect of height (cupping + ripple) on the bump map
- ♦ *Grain Bump* – Sets the effect of grain on the bump map
- ♦ *Splits Bump* – Sets the effect of splitting on the bump map
- ♦ *Bump Strength* – The overall bump strength
- ♦ *Bump Distance* – The overall bump distance
- ♦ *- Timber Config Node -* – This is a **/spacer/**, don't plug anything in here

The sockets from here down should be connected from the *Timber Config* node

If you find any issues with the node setup or you're interested in creating your own and would like some tips or feedback, feel free to send me a message on reddit (u/ErinIsOkay) or on Instagram (@e.r.i.n.d.a.l.e) and I'll do what I can!

A Baking Guide:

Baking is only possible with Cycles and in Blender it's very slow. These tips will speed you up from the default settings by 10-20 times (still slow, but useable).

Once you have the material set as you want it, add an *Image Texture* node to the node graph. This node should not be plugged into anything.

Create a new map and name it appropriately (diffuse / roughness / normal etc) and choose the size of the texture.

With the Cycles render engine selected, on the render tab, scroll down to *Bake*. From the drop down, select the map that you're wanting to bake. If you're doing a diffuse map, select only colour, not direct or indirect (they will bake in lighting / shadows to the map).

Under *Performance* > *Tiles*, put the dimensions of the image map you're baking.

Under *Sampling*, set the *Render Samples* to 16 (we're not baking in light and shadows so this low is fine)

Open the image texture in the UV window to ensure it's selected, make sure the *Image Texture* node is active in the node graph and finally, make sure the object is active in the 3D viewport.

Click Bake in the render panel.

Once it's finished, the image will appear in the UV editor and you can use this instead of the Timber nodes.

The texture does not save by default so be sure to go Image > Save As from the UV Editor.

