

Building Trees (III)

A single tree can represent a focal point in a diorama, therefore it should be appealing or spectacular to attract the viewer's attention

Text & Pictures by Legotron

What seems to stand out from a good LEGO® tree is its greenery, and consequently the amount of green pieces used to give shape and build the foliage. But charming trees with interesting trunks and branches can be built without having to resort to saturating them with green leaves.

This new building technique we are going to see is going to be used for representing deciduous trees, those trees which lose their foliage for the winter, like elms, ash trees, poplars etc. This will allow us to exhibit trees with or without leaves, depending on the way we want them to look. Therefore we will have to emphasize the construction of the trunk and branches.

Due to the big diversity of trees, with their different shapes and branch disposition and all, we will build a medium sized tree of around 20 bricks high (without the leaves). For this kind of constructions, it is really important to have a good supply of brown bricks, slopes, plates and hinge plates. You don't need to always start building with brown, as you can combine the pieces with dark grey/dark bluish grey, dark brown, dark tan and reddish brown. In our case we will build the tree just using the stock of available brown pieces.

Necessary pieces.

The pieces that are going to be used for the construction, named according to the denomination given at Bricklink[1], are the following:

For the base:

- A Green 6x6 plate.
- 3 or 4 Green plant flower stems for decoration

For the trunk (assuming the tree's height is about 20 bricks):

- About 5 Brown Brick 1x1.
- About 5 Brown Brick 1x2.
- 2 to 5 Brown Bric 2x2.

- 2 to 5 Brown Corner Brick 2x2.
- About 15 Brown Plate 1x2, Corner 1x2 and 1x3, for the secondary branches.
- About 15 Brown Plate 1x4, 1x6 and 1x8, for the main branches.
- A few Brown Plate 2x2 to secure the trunk.
- About 15 Brown Plate 1x2 Locking with 1 finger on end, and Hinge Plate 1x2 Locking with 1 finger on side, for the branch connections.
- About 15 Brown Hinge Plate 1x2 Locking with 2 fingers on end, for the branch connections.
- Half a dozen Brown Slope 33° 3x1, 45° 2x1, and 75° 2x1x3, for connecting the trunk and the roots.

For the branches:

- 3 to 5 Green Plant leaves 5x6.
- 40 to 50 Green Plant leaves 4x3.

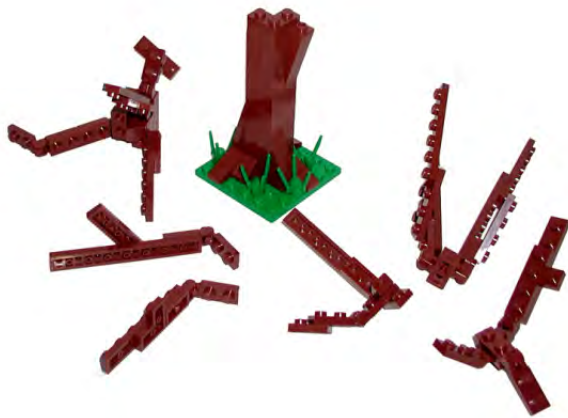
How to build

We will start building the base with the 6x6 plate, on which we will put the different slopes to simulate roots that pop out of the ground. It is recommended to spread the different slopes in different directions to get a more realistic result.

After that we will keep building the trunk with the available bricks until reaching the level of the highest slope, on which we will put a few 2x2 plates to secure the trunk.

From there we can start playing with the shape of





Different stages during construction



the trunk using bricks and inverted slopes in order to prevent the trunk from looking completely straight, until we reach a height of around 8 to 10 bricks, where we will once again secure the trunk with 2x2 plates.

This is where we will start building the main branches. It is important to have a solid base that doesn't break when we start connecting them. In this step, we will start building the branches with the different hinge plates. But before putting them on the tree, it is recommended that you build the main branches connecting 2 hinges. If we start putting the hinges directly on the tree, it is very likely it will break before you can finish the whole thing. So it is convenient to connect the joints with the longer plates (which correspond to the main branches) before setting them on the tree.

Once we have around 10 branches, we can start putting them on the trunk we built, alternating them with different bricks to give the whole thing a less uniform shape. The direction of the joints can be changed in order to give it the look we want.

After putting together everything we built so far, we can carry on with the secondary branches, which will be built connecting small plates to the main branches. At this point, we can start adjusting the angle of the hinges to find the shape we want for the top of the tree, but always carefully, since these changes can make the tree collapse!

Once we are done connecting the last branches, we

will have a tree without leaves, that could perfectly be used in a winter diorama.

For building the foliage, we should start filling the branches with plant leaves 4x3 and plant leaves 5x4, starting from the inside towards the outside so that the leaves we place don't get in our way and we won't end up knocking them off as we put on more. In this case, since the tree has a smaller density of leaves, we should try to cover the branches as much as we can in order to have the least amount of visible brown bits, especially on the tips of the branches.

As a final touch, we could cover many of the leaves with Tan, Dark Tan, or Brown plate round 1x1 to simulate the autumn and the colors of the leaves during that season.

References:

[1] Bricklink: Unofficial website for selling and buying LEGO® pieces - <http://www.bricklink.com> ■

