

# Building trees (VIII)

## Higher, stronger... and simpler.

Text and pictures by Legotron

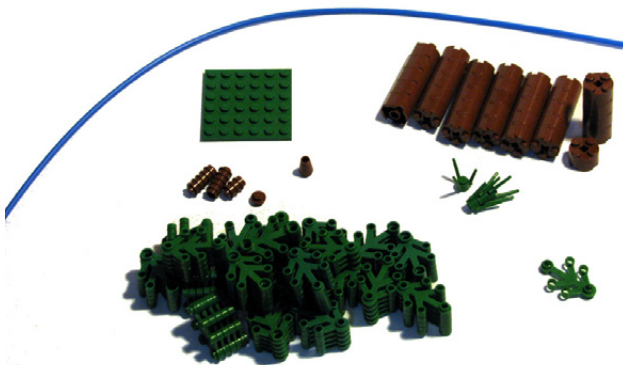
The article in this issue is a response to some requests relating to the construction of larger trees. In particular, there are several questions about the possibility of building trees that are more than 30 bricks high, strong enough not to come apart during construction and simple enough to build as many trees as needed to form forests.

With this in mind I started the design phase. The easiest thing was to choose the starting point, for which I chose the tallest tree in the collection, specifically the one shown in the second article in this series [1]. With the idea of building trees with a height of 35, 40 or more bricks, I used the same technique described in that article, but it was a fairly complex task, in which the tree suffered continuous breaks, and after much effort, it resulted in a 35 bricks high tree which was extremely fragile.

Since the look of the tree was quite good for the desired result, the only thing I had to do was find a different technique to build it. The internal system of bars to strengthen the trunk did not give the desired result because they are quite short and start and end of each new bar is a critical point where the trees tend to break. Therefore, I looked for an alternative that would replace the bars with another more adequate element that could be easily used, and the result was the tree of this article.

### Parts required

The parts list is very simple and requires very few types of parts. It is mainly based on the list of tree parts of the second article of this series. As usual, we use the naming criteria used by the Web Bricklink [2]:



40



For the base:

- 1 6x6 green plate.
- Three or four green flower plant stem to decorate the base.

For the trunk:

- 30-40 brown 2x2 round bricks.
- 12-15 brown 1x1 round plates.
- A brown 1x1 cone.
- A 3 mm D rigid hose at least 40 bricks in length, of any color.

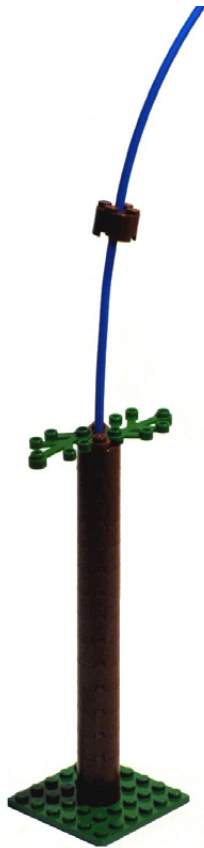
To make the branches:

- About 120 green 4x3 plant leaves.

### Construction

The key part in the construction is the 3mm D rigid hose. This piece is going to give the tree the necessary strength and will determine the height it can reach. Furthermore, the use of this piece will simplify the construction process significantly.

We begin by placing about 15 2x2 round bricks over the 3mm D rigid hose which form the lower trunk. We place them on the base and add a couple of 4x3 plant leaves and a pair of 1x1 round plates in the free stud on the last brick. These pieces, placed on the bricks, leave enough space in the center to pass the 3mm D rigid hose, so you can keep putting new bricks along the entire length of the hose. On each group of leaves and 1x1 round plates add a couple of 2x2 round bricks, and again put a new configuration of sheets and plates, if possible, in a different configuration from the last one. The space of two bricks is more than enough to allow proper handling of the branches; we can leave even more space to create parts of the tree without branches. This process is repeated until the desired height. Be careful when fitting the following bricks in order not to force the 3mm D rigid hose. It may bend. Leave fewer leaves and more 1x1 round plate at the bottom and in the upper stages of the trunk and place stages with four pieces of leaves in the central part of the trunk. Depending on the length of the 3mm D rigid hose we can build lower or higher trees. Crown the top of the trunk with a 2x2 round brick 2x2



and 1x1 cone, over which we will put a couple of 4x3 plant leaves. This simple process can be done in just 5 minutes, and with this we have completed the structure of the tree. Now you just need to add more 4x3 plant leaves to give it its final look.

This process can be done in several phases. In a first phase, starting from the bottom, you place two leaves forming 120-150 degrees, alternatively, at the end of each leaf, some in the bottom and others on top of the previous leaves. At each height leaves are positioned so they cover the holes in the lower altitudes. Once this phase is over, have a look at the general appearance of the tree and use the remaining 4x3 plant leaves to give the final touch. You might want to create greener areas and others with long branches trying to break the symmetry of the tree. Remember that it is desirable that the leaves aren't too far from the trunk, since handling these high trees can cause them to fall.

This simple tree, built on a height range of 35 to 40 bricks, allows us to make a small forest with a spectacular appearance. Also the same technique can be used for younger, smaller trees to be placed among the larger ones.

References:

[1] Hispabrick Magazine #003

[2] Portal selling unofficial LEGO® on the Internet: <http://www.bricklink.com>

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**Panzerbricks**

