

# Crafter-Based Item Sorting

## The main idea

crafter based item sorting works of a few specific crafting recipes. This opens the door to new items that we can sort automatically. And new ways to sort items and even a way to sort categories of items.

### nonstackable sorting

#### Item voider:

A system that crafts any items with durability with every inputed item. It will successfully craft if the two items match. And the output is sent directly back into the crafters second slot **this is important**

This works because you input two items and output one so we say the other was voided. It's used to sort items that normally can't like tridents from fishing rods in the example of a drowned farm. You void the fishing rods. or in a raid farm you can use multiple voiders to delete the armour and tools and be left with the totems.

#### Beds/shields

you can sort beds/shields using the crafter. This is because you can dye a bed and put banners on shields. These two items are sorted the same way but for this explanation we will talk about beds just note whenever dye is mentioned it's a banner.

similar to the item voider mentioned previously this needs a dye in the second slot of the crafter. It will attempt to craft everything that comes through the system but only beds will be dyed (note: boxes can be sorted this way too but there's much better ways to sort boxes). In the case of shields this is where it ends. There one small edge case if a shield with a banner already applied is inputed it will not be sorted. As of writing there's no other way to sort shields in vanilla without allays.

For beds however there's a similar issue but it can be solved. For this example let's say you have a white bed and the dye in the crafter is white, because you can't dye a white bed white it won't be sorted. However if you have another bed sorter attached to the output with a different dye like red it will dye that white bed red. This new red bed is sent back to the first bed sorter and it will be sorted because it's no longer white. this is a very complicated way to sort beds but like shields it's the only way.

## Category sorting

**note:** this way of sorting will not output what you input as you will see.

## stone types

you can sort all stone related blocks like cobblestone, stone bricks etc by converting them into mossy versions. This has very little use but it's very interesting that this is possible.

## Maps

maps are tricky to sort because they are a 64 stackable item but have unique properties that stop them from stacking with different maps. However you can use crafters to sort them by having an empty map in the second slot of the crafter. Actually storing the maps is the main problem with this.

## Unwaxed copper

**note:** this is completely useless but possible nonetheless

by combining honeycomb (in the second slot) with copper blocks you can sort waxed and unwaxed copper because you can't wax already waxed copper. However the output of the crafter is waxed copper and there is currently no way to automatically remove the wax. So there's literally no use case for this sorter.

## Written books

these Can be sorted using the copy mechanic that uses a book and quill to copy a written book. However you can't copy a book that has been copied two times and therefore can't be sorted this way