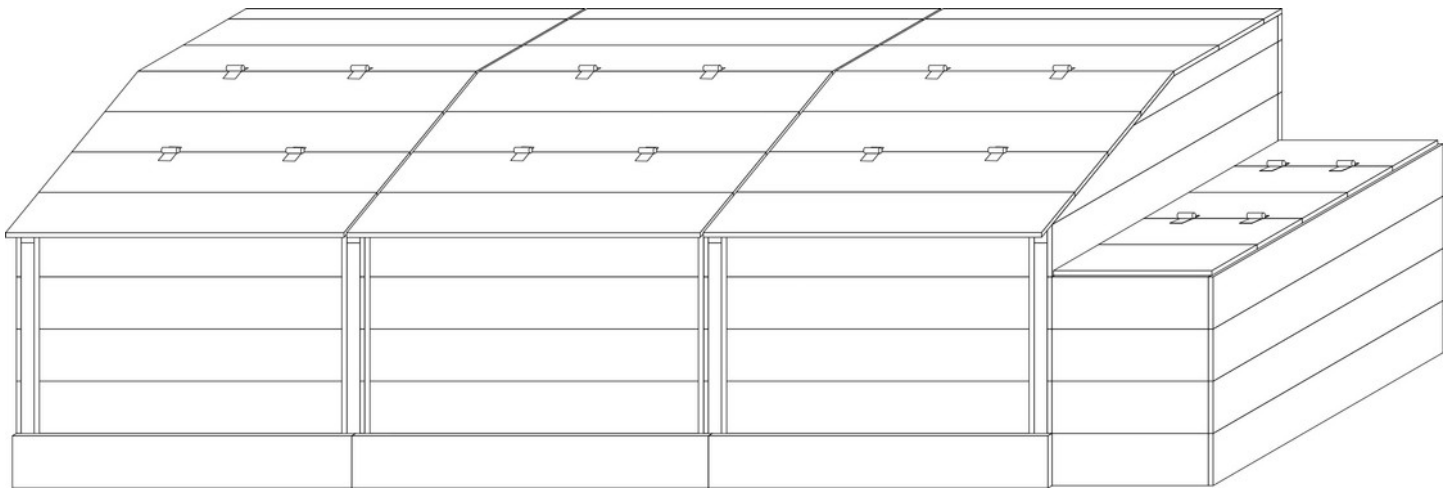


Shared composter

Version 0.1



For approximately 30, 45 and 60 households



Summary

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Earthwork

Width according to the number of users:

470 cm for 60 households

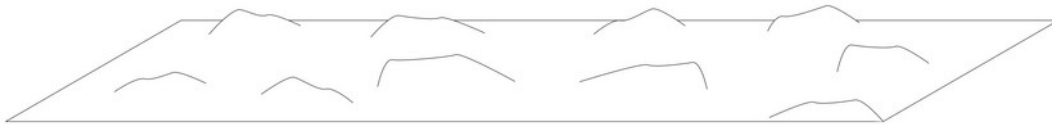
380 cm for 45 households

290 cm for 30 households

1



2



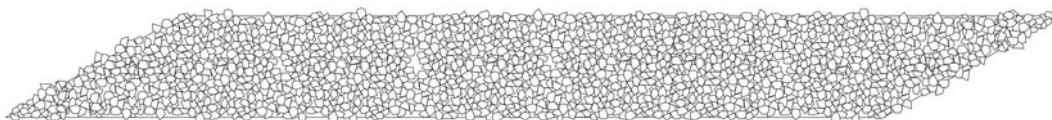
3



4



5



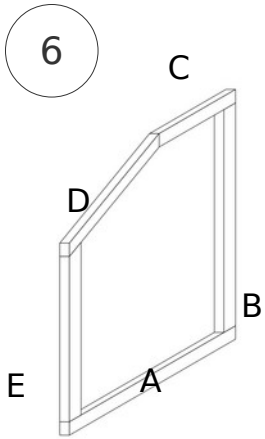
Pebbles: size between 2 and 10cm
Area: 5.20m²



The pebbles are the bottom of the composter. If they are greater than 4 cm, prefer flat pebbles to facilitate handling (rotation or recovery of the compost) later.

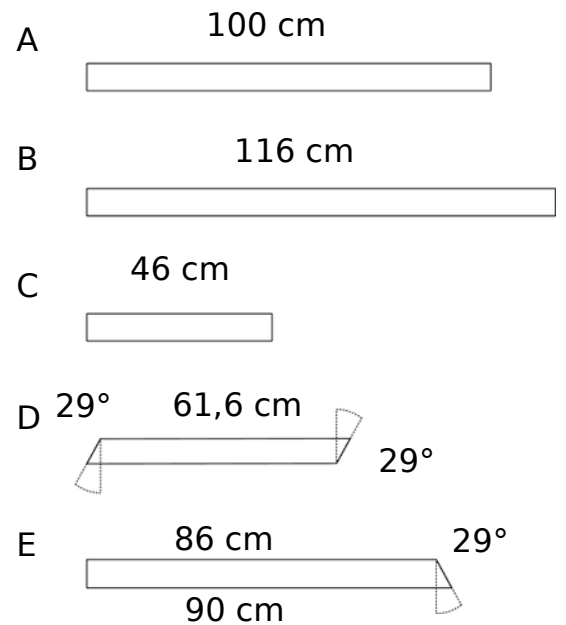
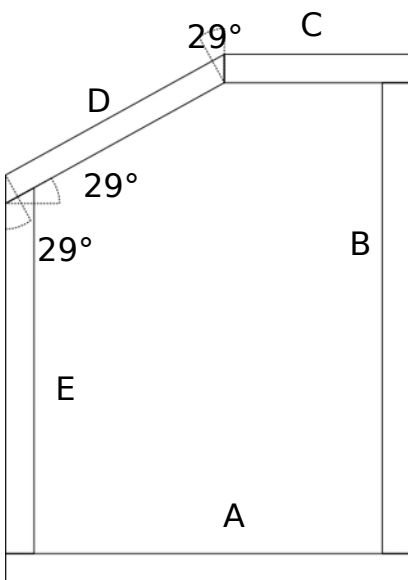
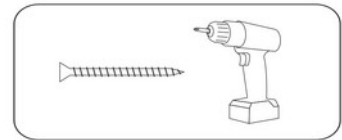
Liquid from the composted elements flows slightly, the earth can absorb this easily, unlike tar, concrete or rock. In the case of a tar, concrete or rocky area, it is necessary to ensure a sufficient supply of sawdust material to regulate the juices, in particular at the bottom of the bin. In the case where of hard ground, the earthwork is useless.

Uprights



x4

Screws 110 mm



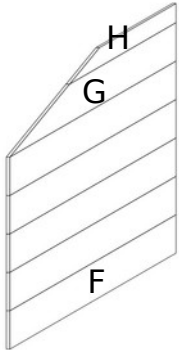
If you change the sizes of the section, be careful to take into account the difference in thicknesses (Total height in front: 1 m | Total height behind: 1.30 m | depth: 1 m).

It is necessary to put the screws flush. This can be done in several ways:

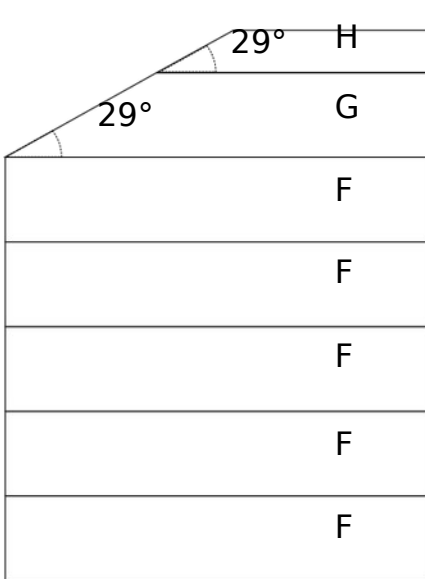
- naturally by pushing;
- with countersink for drill;
- or by drilling the width of the screw head over a few millimetres.

Walls

7



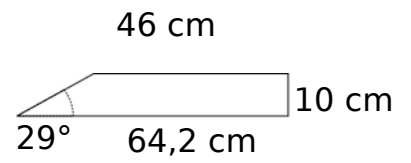
x4



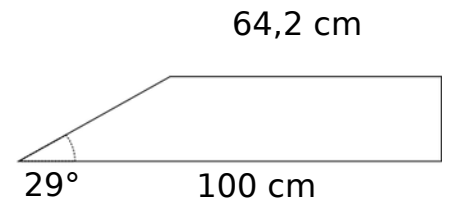
18 mm

20 cm

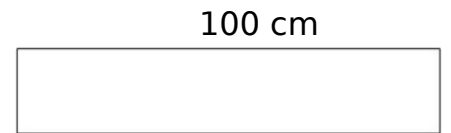
H



G



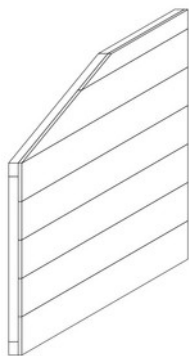
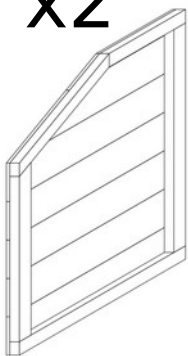
F



The panels are not attached to each other.

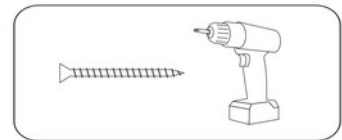
8

x2



x2

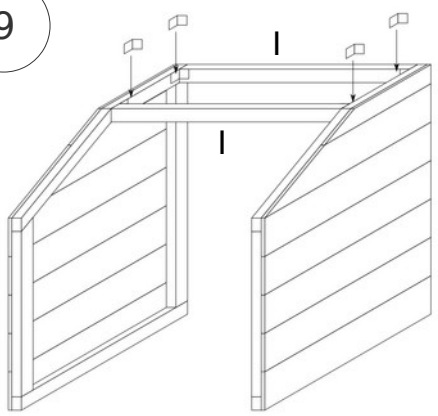
Vis 50 mm



The panels are screwed to the uprights.

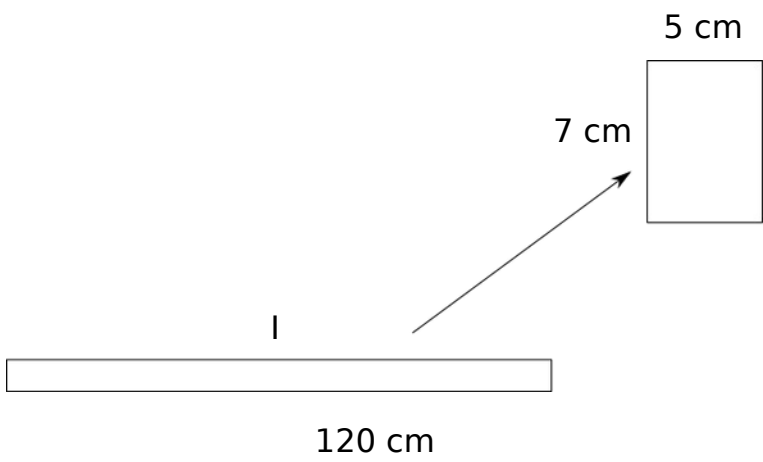
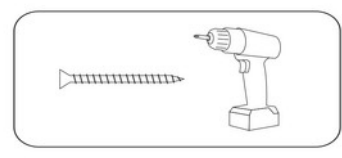
Ties

9



x2

Screws 35 mm



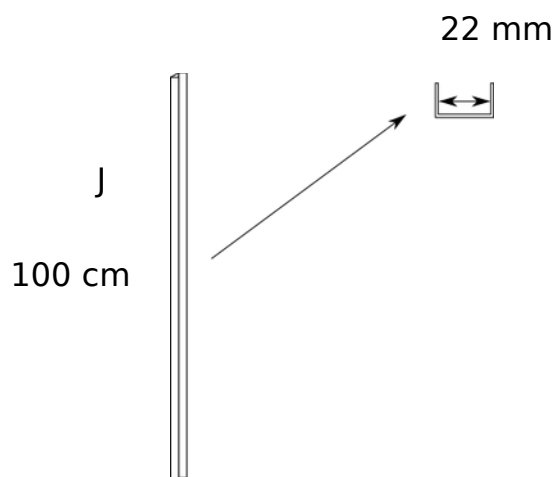
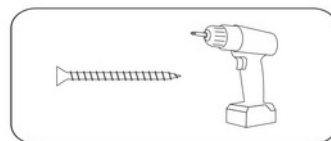
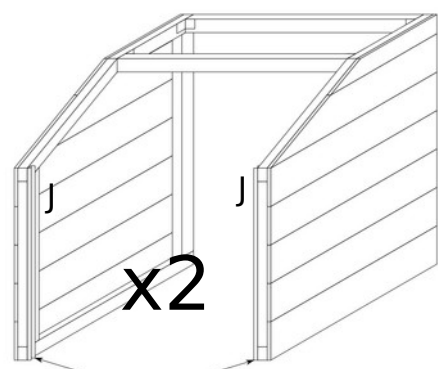
Brackets are added to fix the ties.

Length of I for:
60 household composter: 120 cm
45 household composter: 90 cm
30 household composter: 60 cm

Slides

10

Screws 35 mm



The slides will be used to slide the boards in front.

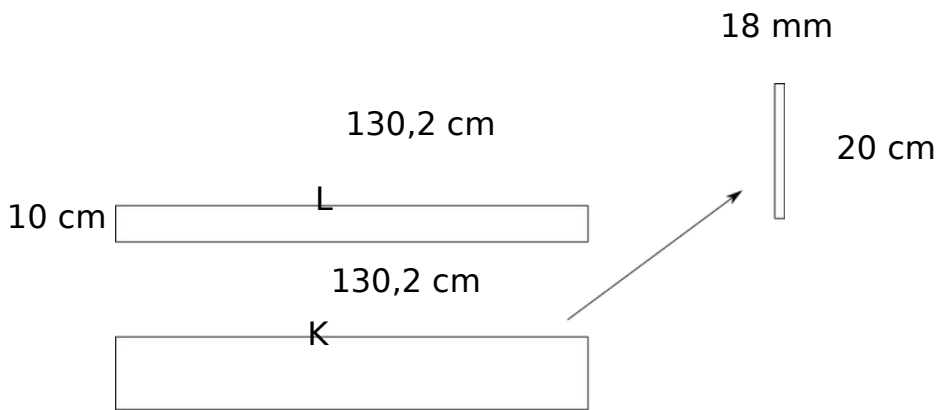
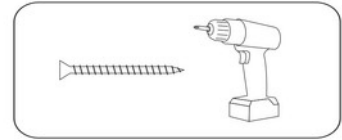
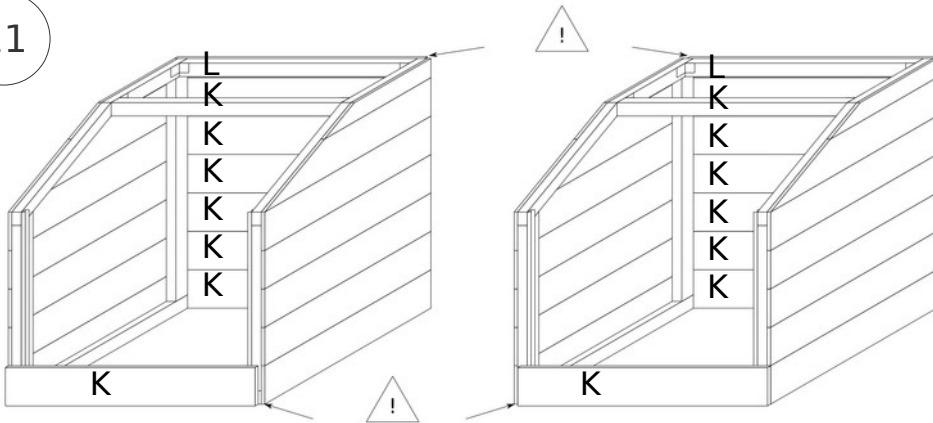
The boards can be removed simply for the rotation of the compost or its recovery.

The width of the slide is thus slightly larger than that of the boards (here 22 mm for 18 mm boards).

Front and rear walls

Screws 50 mm

11



Attention ! The left bin has the boards (front and back) fixed flush on the left, the right bin has the boards (front and back) fixed flush on the right.

On the other side than the flush one, they are fixed in the middle of the board (1.8 cm) and the upright (5 cm), i.e. 3.4 cm¹ of overhang which will be used to fix the front and rear parts to the center.

The front board is used, among other things, to maintain the same gap between the slides.

If you have long planks (4 m), it is possible to replace the K and L planks (and N and O, see step 14) with planks that are all the length (i.e. $2 \times 130.2 + 136,8 = 397.2$).

Length of L and K for:

60 household composter: 130.2 cm

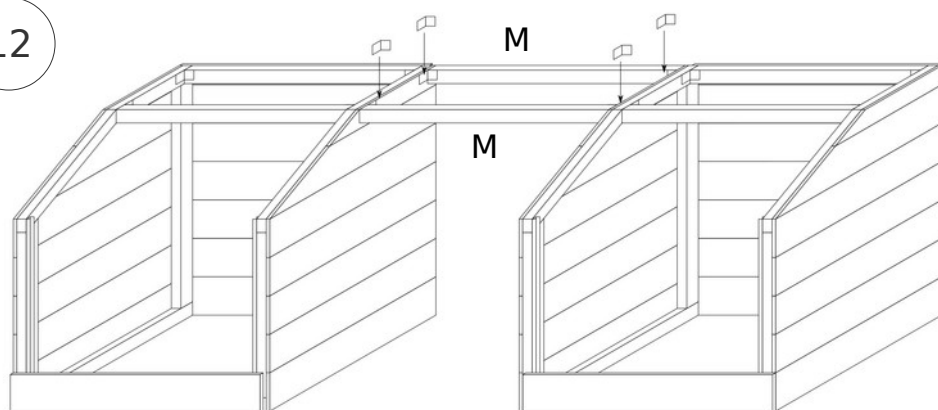
45 household composter: 100.2 cm

30 household composter: 70.2 cm

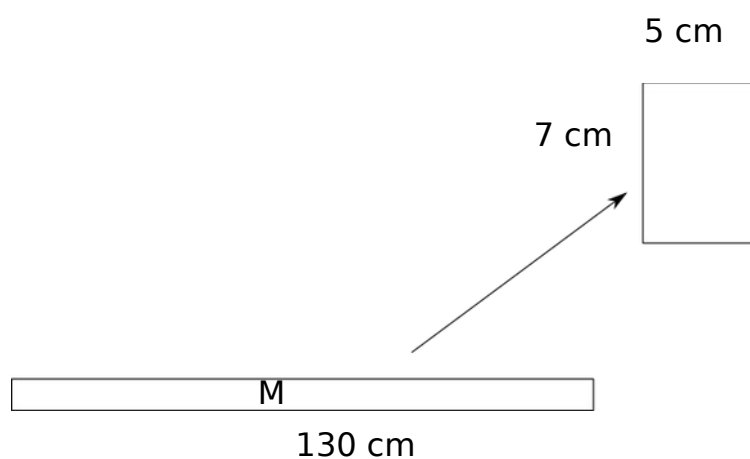
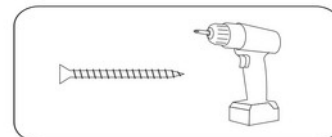
¹ $(5,0 + 1,8) / 2 = 3,4$ cm

Central ties

12



Screws 35 mm



Brackets are added to fix the ties.

Length of M for:

60 household composter: 130 cm

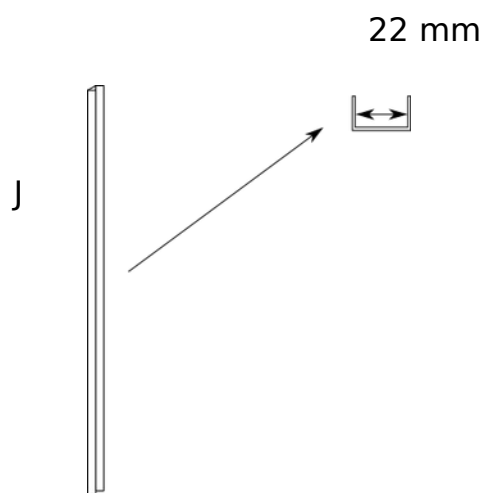
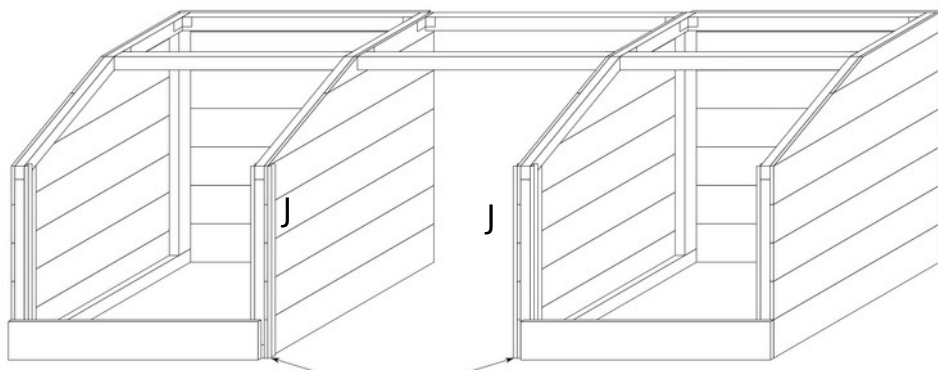
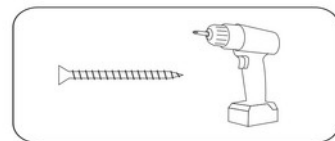
45 household composter: 100 cm

30 household composter: 70 cm

Central slides

13

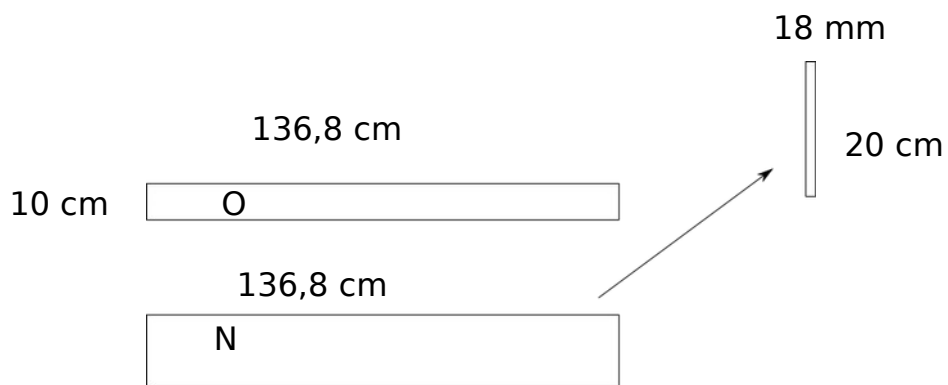
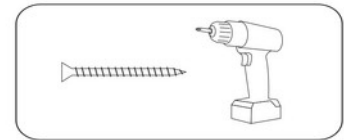
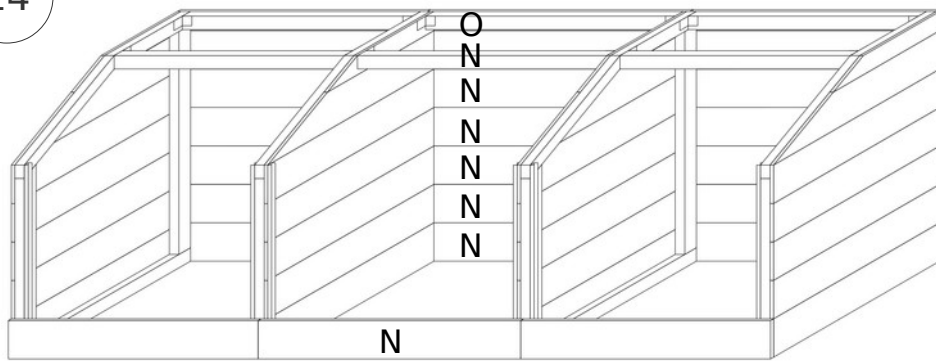
Screws 35 mm



Front and rear center walls

Screws 50 mm

14



Length of N and O for:

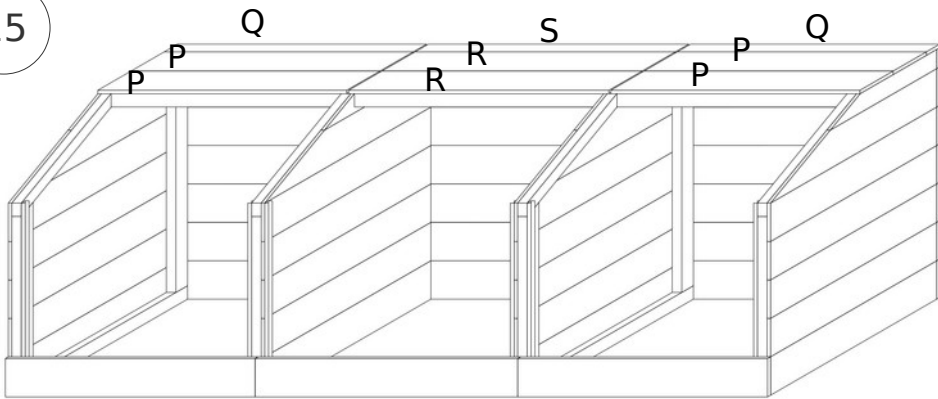
60 household composter: 136.8 cm

45 household composter: 106.8 cm

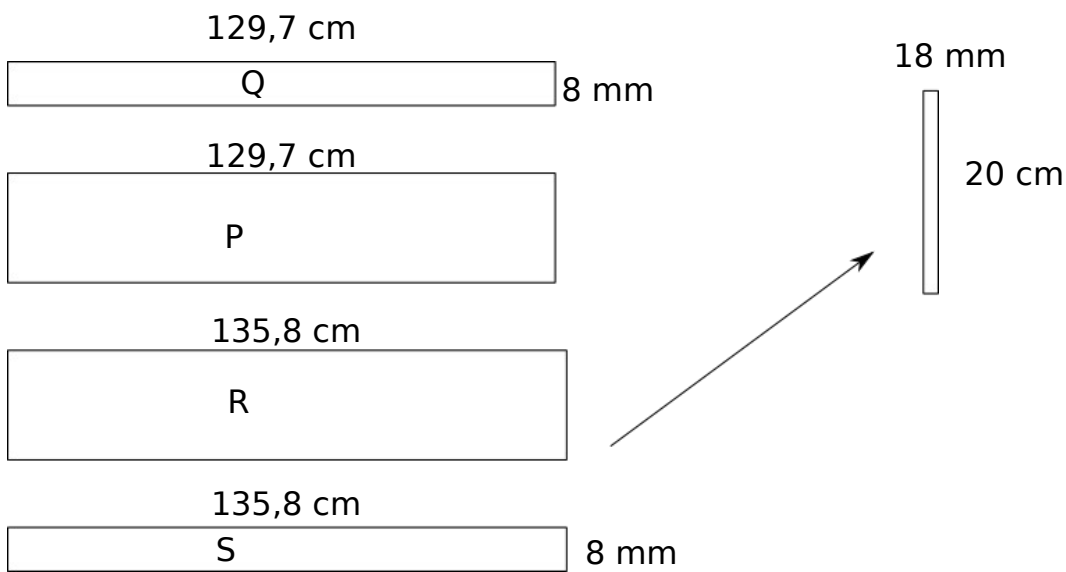
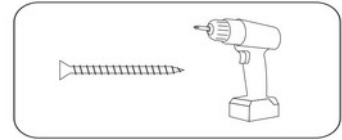
30 household composter: 76.8 cm

Fixed roofs

15



Screws 50 mm



The left and right roofs are flush with the sides.

The central roof has a space of 1 cm between itself and the others.

Length of Q,P,R and S for:

60 household composter: 129.7 cm for Q and P. 135.8 cm for R and S

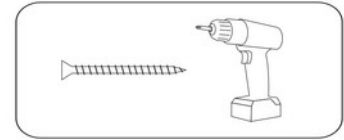
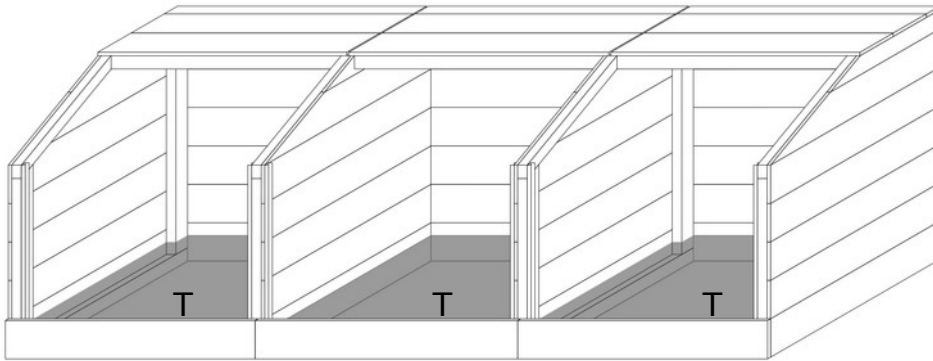
45 household composter: 99.7 cm for Q and P. 105.8 cm for R and S

30 household composter: 69.7 cm for Q and P. 75.8 cm for R and S

Anti-rodent wire

16

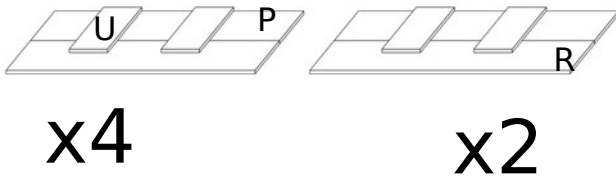
Screws 35 mm



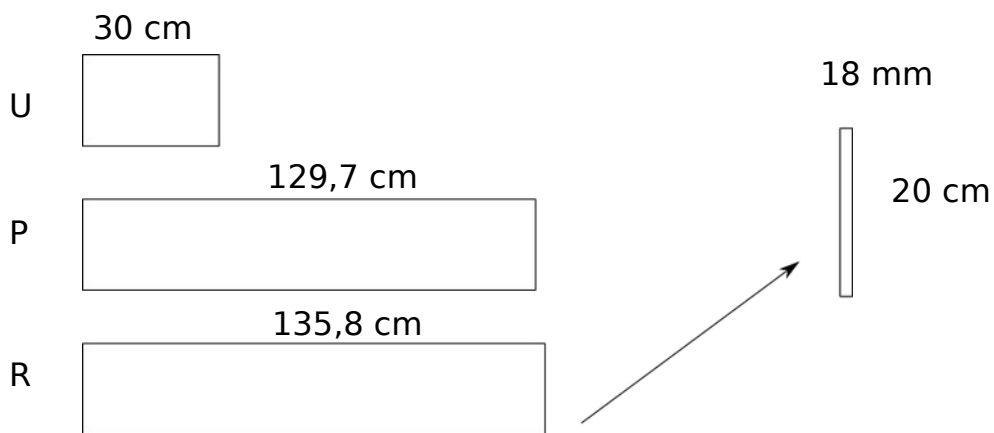
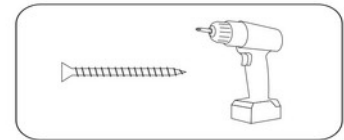
We can cover the bottom of the bins with a wire against rodents in prevention.
(3 times 1.5 m by 1.2 m)

Mobile roofs

17



Screws 35 mm



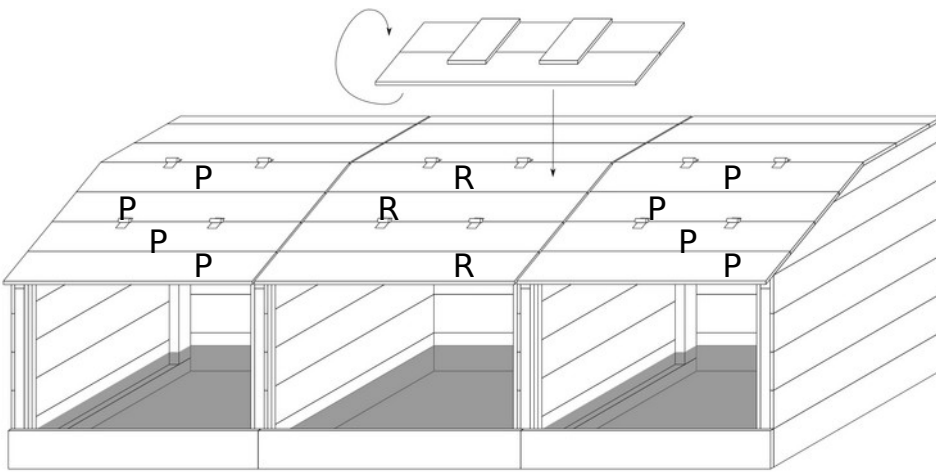
The U plates for connecting the pieces are fixed flush to one of the sides.

Length of P and R for:

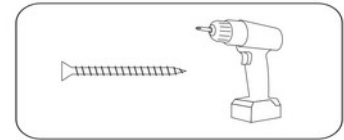
60 household composter: 129.7 cm for D. 135.8 cm for R

45 household composter: 99.7 cm for D. 105.8 cm for R

30 household composter: 69.7 cm for D. 75.8 cm for R



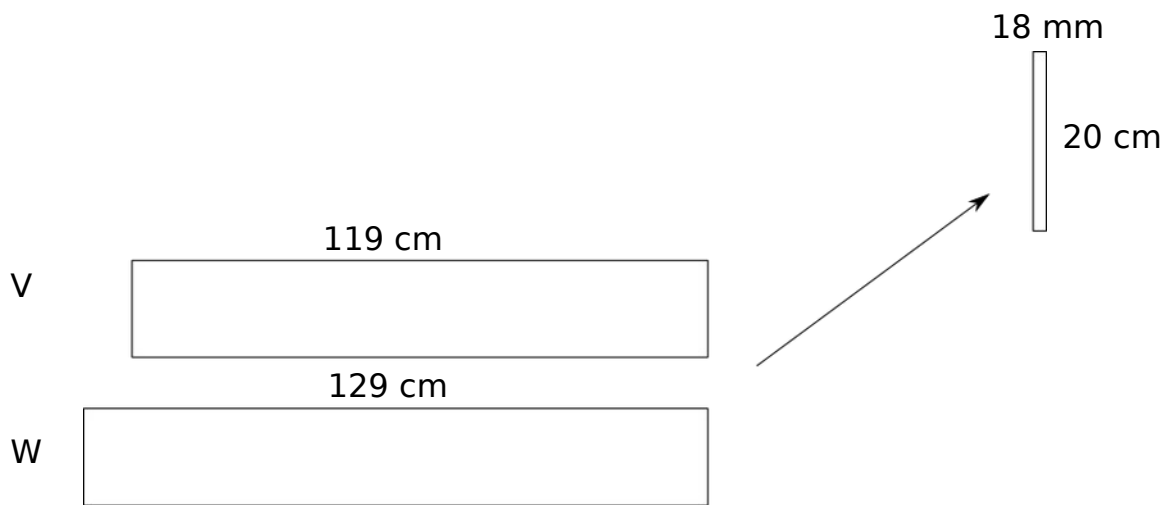
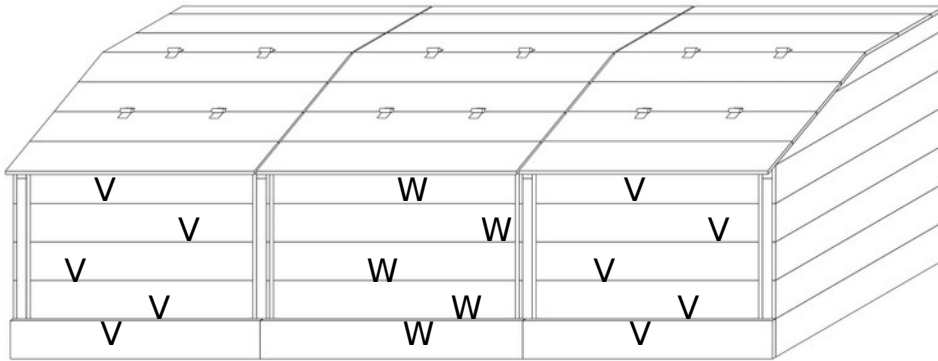
Screws 35 mm



Having 2 series of hinges on each roof, allows to open all or part of the mobile roof.
The hinges are screwed into the U boards.

Movable boards

18



The boards go in the slides and are not fixed (a board is hidden at the bottom, behind the front wall of the bins).

If the boards are too wide for the slides, it is possible to reduce their widths at the ends with a belt sander or a router.

Length of V and W for:

60 household composter: 119 cm for V. 129 cm for W

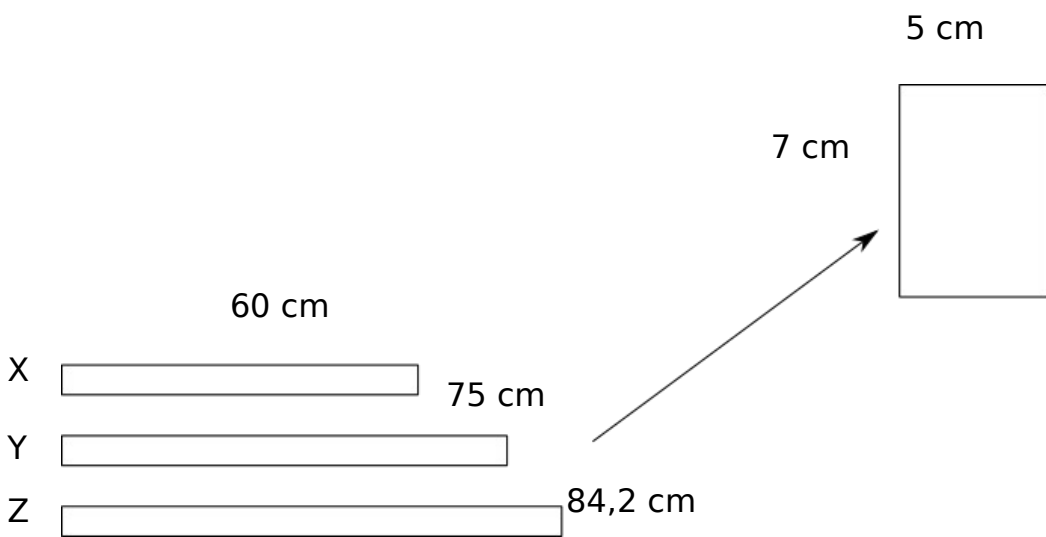
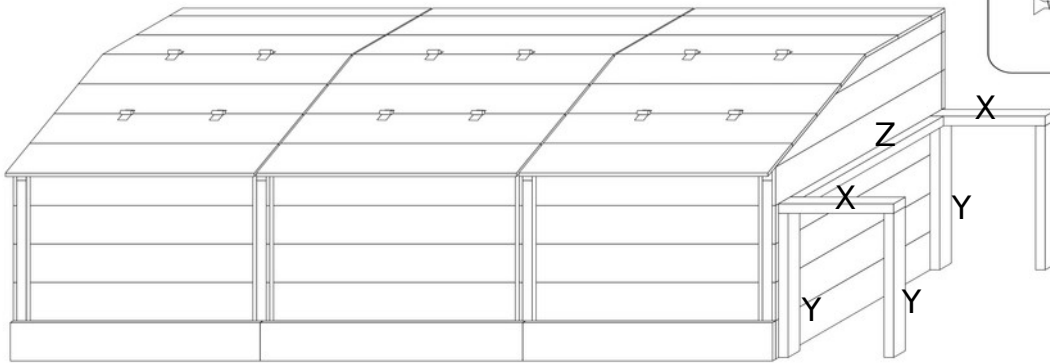
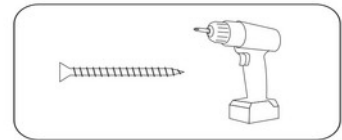
45 household composter: 89 cm for V. 99 cm for W

30 household composter: 59 cm for V. 69 cm for W

Uprights and ties : sawdust bin

19

Screws 110 mm



The uprights are fixed flush with the boards F to leave space for the walls.

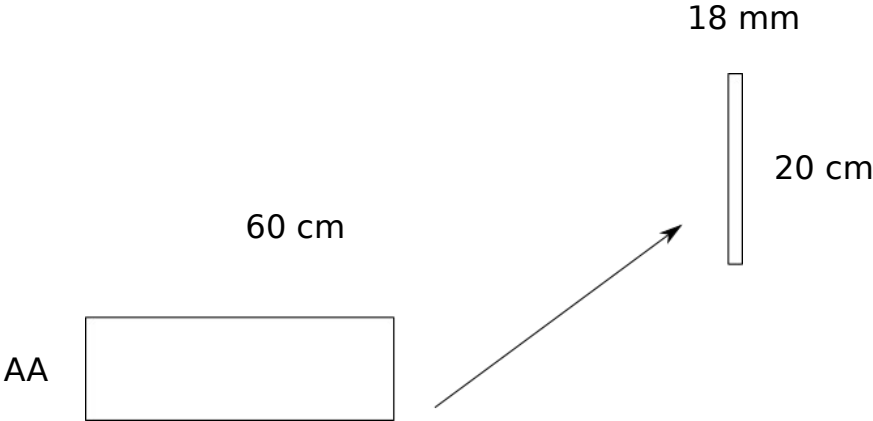
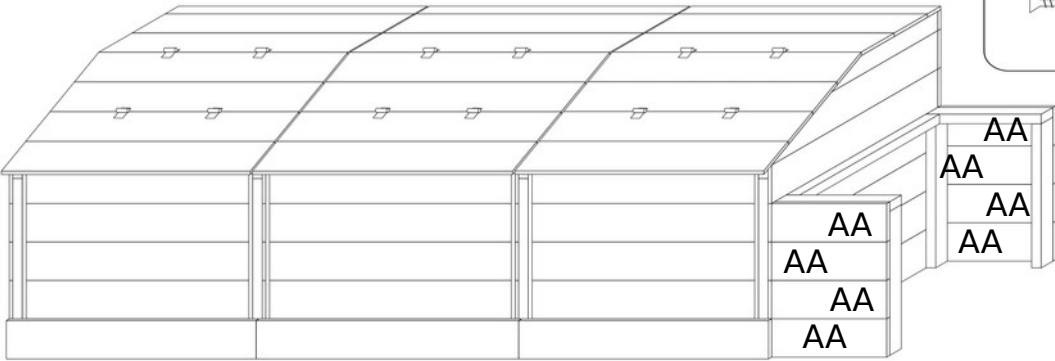
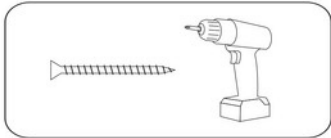
The height is 80 cm.

The ties therefore have visible sides of 5 cm.

Front and rear walls : sawdust bin

20

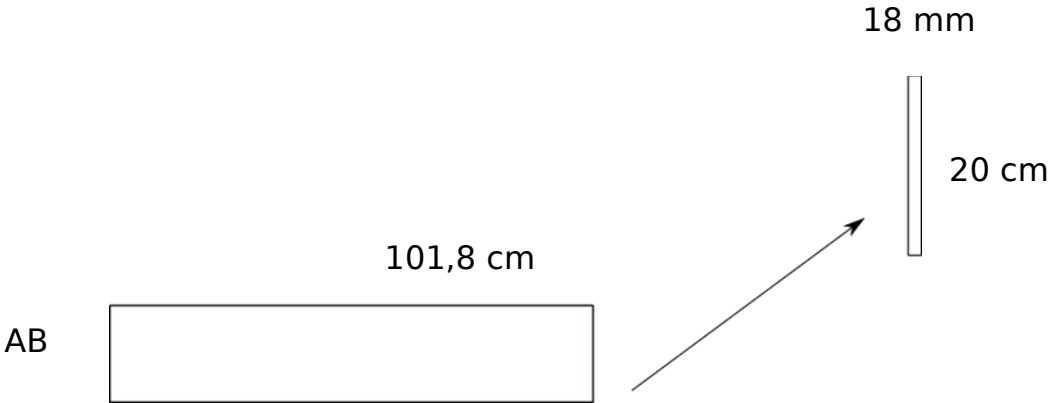
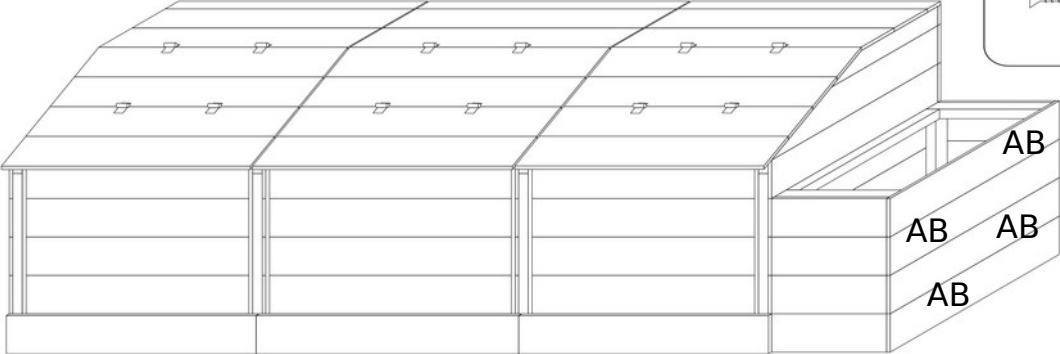
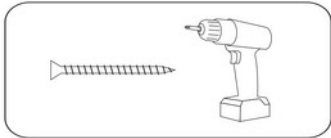
Screws 50 mm



Side walls : sawdust bin

21

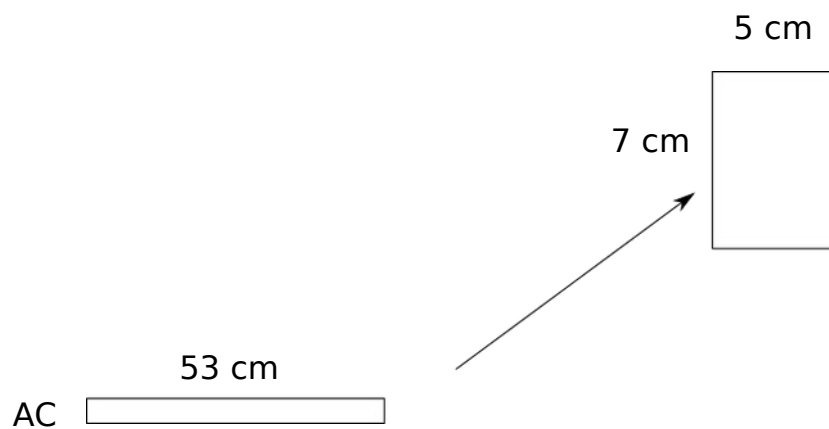
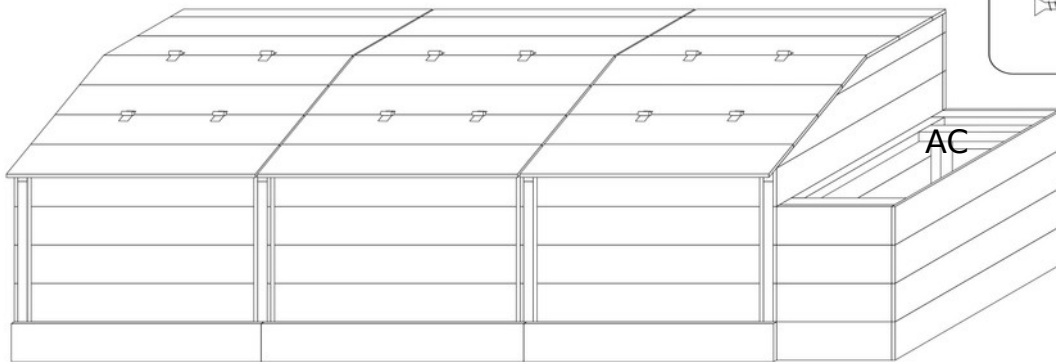
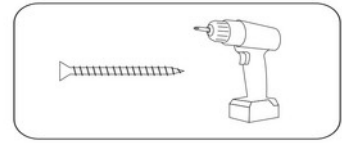
Screws 50 mm



Fixed roof support tie : sawdust bin

22

Screws 110 mm



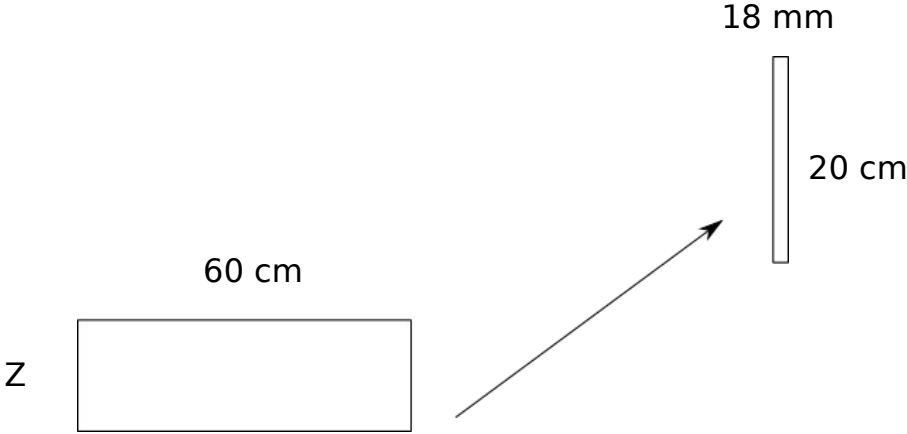
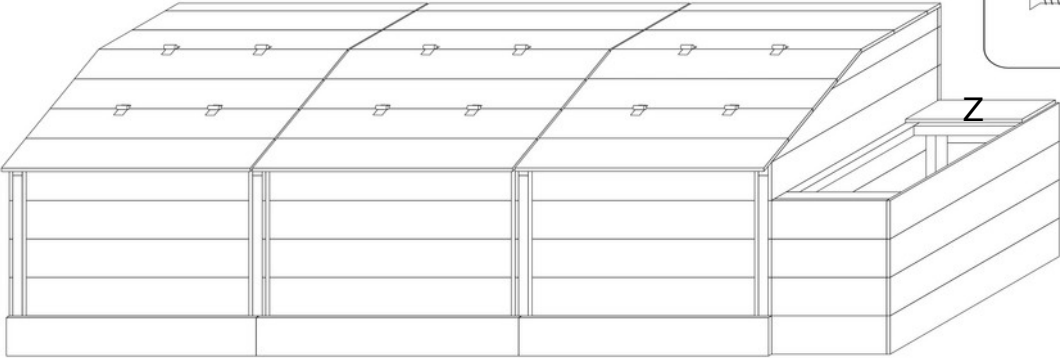
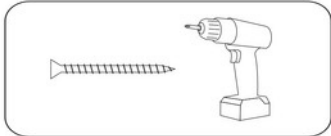
The tie AC is fixed by the right wall of the right bin (from the inside of the right bin) and by the right wall of the sawdust bin.

The tie AC is fixed 15 cm from the tie of the bottom of the sawdust bin.

Fixed roof : sawdust bin

23

Screws 50 mm

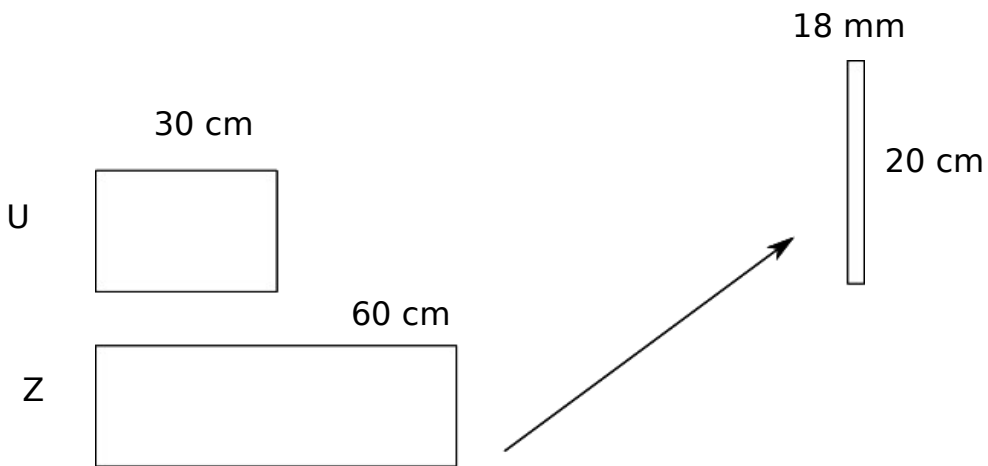
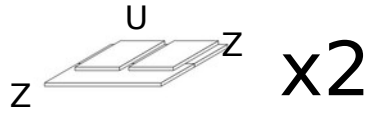
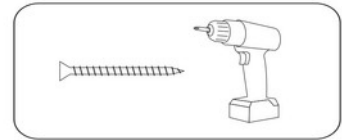


Leave a slight overhang (1 cm) between the board Z and the right wall of the right bin of the composter.

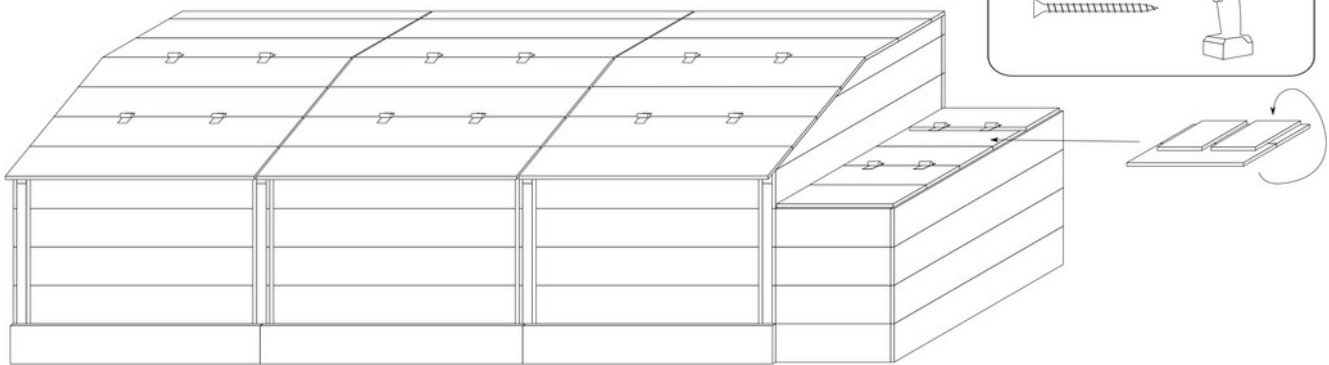
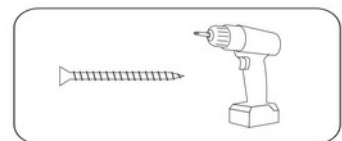
Movable roof : sawdust bin

24

Screws 35 mm



Vis 20 mm



Leave a slight overhang (1 cm) between the mobile planks of the sawdust bin and the right wall of the right bin of the composter to avoid friction.

Material summary

Pebbles

Pebbles: size between 2 and 10 cm for an area of 5.20 m².

If they are greater than 4 cm, prefer flat pebbles to facilitate handling later.

Slides

6 slides of one meter (inside 22 mm).

Anti-rodent wire

T: 3 anti-rodent wires of 1.5 m by 1.2 m.

Screws

Wood screws 35 mm, 50 mm and 110 mm.

35mm: about 250.

50mm: about 400.

110mm: about 50.

To avoid splitting, there are anti-split screws (or you can drill before screwing)

Brackets

J: 12 brackets (about 5 cm wide)

Hinges

16 hinges (about 10 cm wide and 5 cm deep)

Material

- Shovel
- Rake
- Rammer
- Spirit level
- Jigsaw
- Screwdriver

Wood

The wood is a class 3 untreated wood made to be outdoors.

Identification	Cross-sections	Lenght	Quantity	
A	7 cm x 5 cm	100 cm	4	
B		116 cm	4	
C		46 cm	4	
D		61.6 cm (pay attention to the angles at the 2 ends, see step 6)	4	
E		90 cm (pay attention to the angle at one end, see step 6)	4	
I		120 cm (for 60 households), 90 cm (for 45 households), 60 cm (for 30 households)	4	
M		130 cm (for 60 households), 100 cm (for 45 households), 70 cm (for 30 households)	2	
X		60 cm	2	
Y		75 cm	4	
Z		84.2 cm	1	
AC		53 cm	1	
F		1,8 cm x 20 cm	100 cm	20
G			100 cm (pay attention to the angle at one end, see step 7)	4
K	130.2 cm (for 60 households), 100.2 cm (for 45 households), 70.2 cm (for 30 households)		14	
N	136.8 cm (for 60 households), 106.8 cm (for 45 households), 76.8 cm (for 30 households)		7	
P	129.7 cm (for 60 households), 99.7 cm (for 45 households), 69.7 cm (for 30 households)		12	
R	135.8 cm (for 60 households), 105.8 cm (for 45 households), 75.8 cm (for 30 households)		6	
U	30 cm		16	
V	119 cm (for 60 households), 89 cm (for 45 households), 59 cm (for 30 households)		10	
W	129 cm (for 60 households), 99 cm (for 45 households), 59 cm (for 30 households)		5	
AA	60 cm		13	
AB	101.8 cm		4	
H	1,8 cm x 10 cm		64.2 cm (pay attention to the angle at one end, see step 7)	4
L			130.2 cm (for 60 households), 100.2 cm (for 45 households), 70.2 cm (for 30 households)	2
O		136.8 cm (for 60 households), 106.8 cm (for 45 households), 76.8 cm (for 30 households)	1	
Q		129.7 cm	2	
S		135.8 cm (for 60 households), 105.8 cm (for 45 households), 75.8 cm (for 30 households)	1	

Indicative prices

In France, the total cost of the materials is approximately €900, up to €1,300 depending on the choice.

Pebbles

Crushed marble gravel for 5.20 m²: €120

Wood (calculation for 60 households)

- Section 5cm x 7cm | 33.6 linear m (2.4 m poles, includes 15% wasted scrap): €120
- Section 1.8cm x 20cm | 130 linear meters (includes 15% lost scrap): €380

Slides

U-shaped aluminum profile: €40

Anti-rodent wires

50 €

Screws

115 €

Brackets

15 €

Hinges

50 €

Questions ?

If you have any questions, find us on <https://www.seedtohumus.org> and ask them in the article dedicated to the collective composter.