

# How To Build A Biomass Composter Rotatable and Portable



Unloads into a wheelbarrow









Rotatable for easy aeration

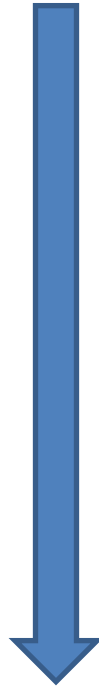


## Wheelbarrel for portability

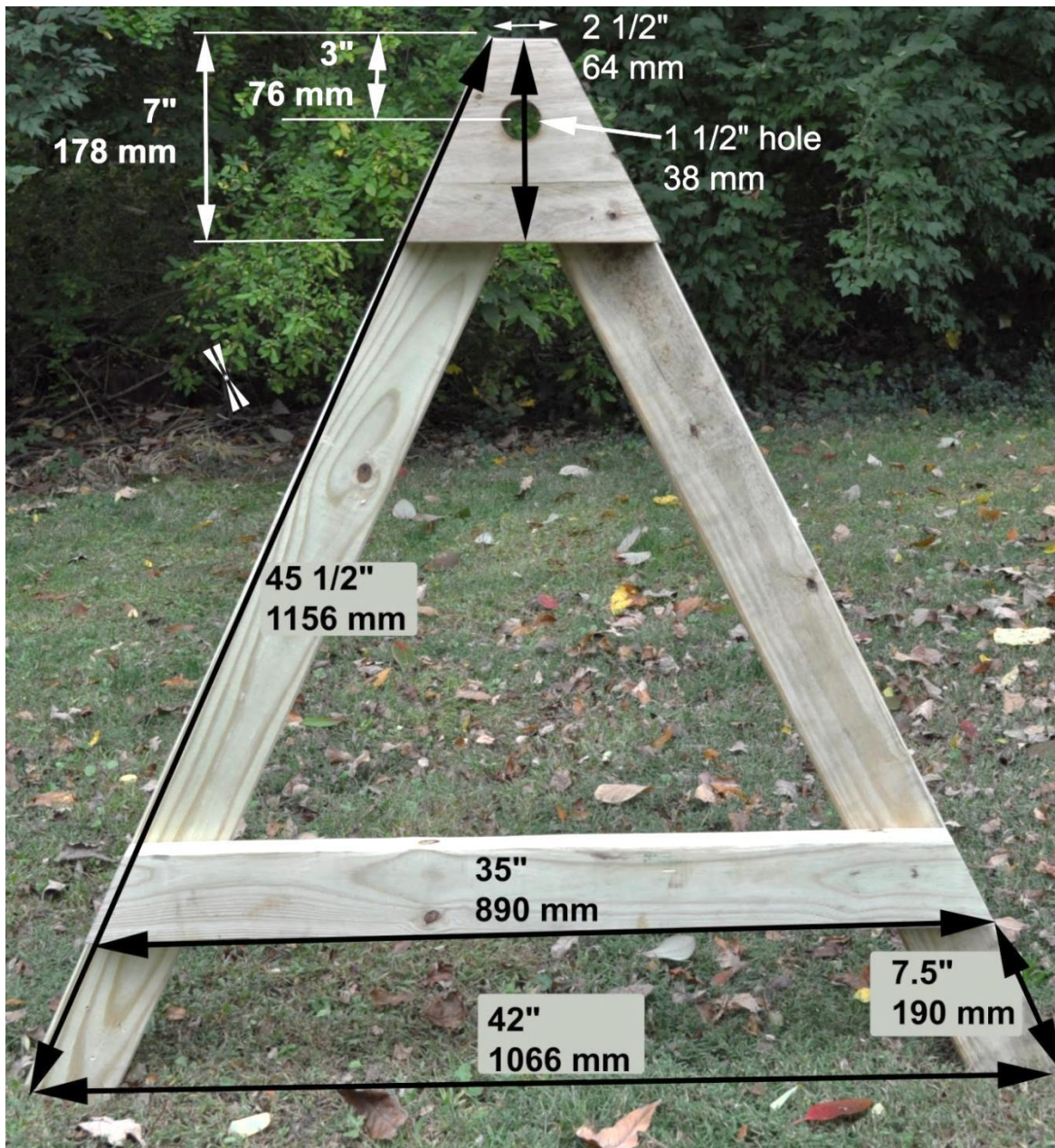
## Material List

Material	PCS	Description	Stock Size	Length	Comments
Barrel	1	Plastic or Metal	23" diameter 584 mm	Plastic 36 1/2" 927 mm Metal 34 3/4" 883 mm	All dimensions are based on these two sizes
Wood	6	Treated Lumber if outdoors	1 1/2" X 3 1/2" 38mm x 89mm	96" 2438 mm	
Wood	1	Treated Lumber if Outdoors	1 1/2" X 7" 38mm x 278 mm or use two 2 x 4's side-by-side	24" 610 mm	Apex Plate for A-Frame
Floor Flange	2	Galvanized Cast Iron	1" 25 mm		
Aluminum Plate	1	Support plate for floor flange	1/4 " thick	5" x 5"	
Pipe	2	Galvanized Cast Iron Nipple	1" 25 mm	4" 102 mm	Lid end support pipe
Pipe	2	Galvanized Cast Iron Nipple	1" 25 mm	5" 127 mm	Handle for barrel bottom end
pipe	1	Galvanized Cast Iron Nipple	1" 25 mm	6 152 mm	Handel
Pipe Elbows	2	Galvanized Cast Iron	1" 25 mm		Handle
Pipe Caps	2	Galvanized Cast Iron	1" 25 mm		Handle and Lid-end pipe
PVC	1	Sleeve for handle over the 1" pipe	1 1/4" Sked 40	4 3/4" 121 mm	
Hinge	2	Door Hinge	3 1/2"		
Door Clasp	2	Zink Plated Latch Post Safety Hasp	3 1/2" 90 mm		
Bolts, Nuts & Washers	6	Roundhead Zink Plated	10-24	3/4" 19 mm	To secure plastic lip to door

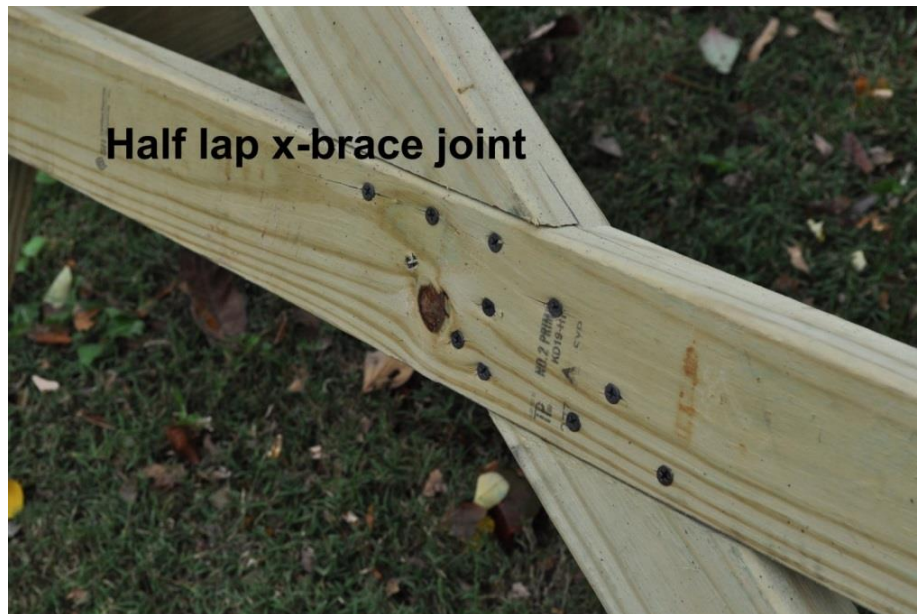
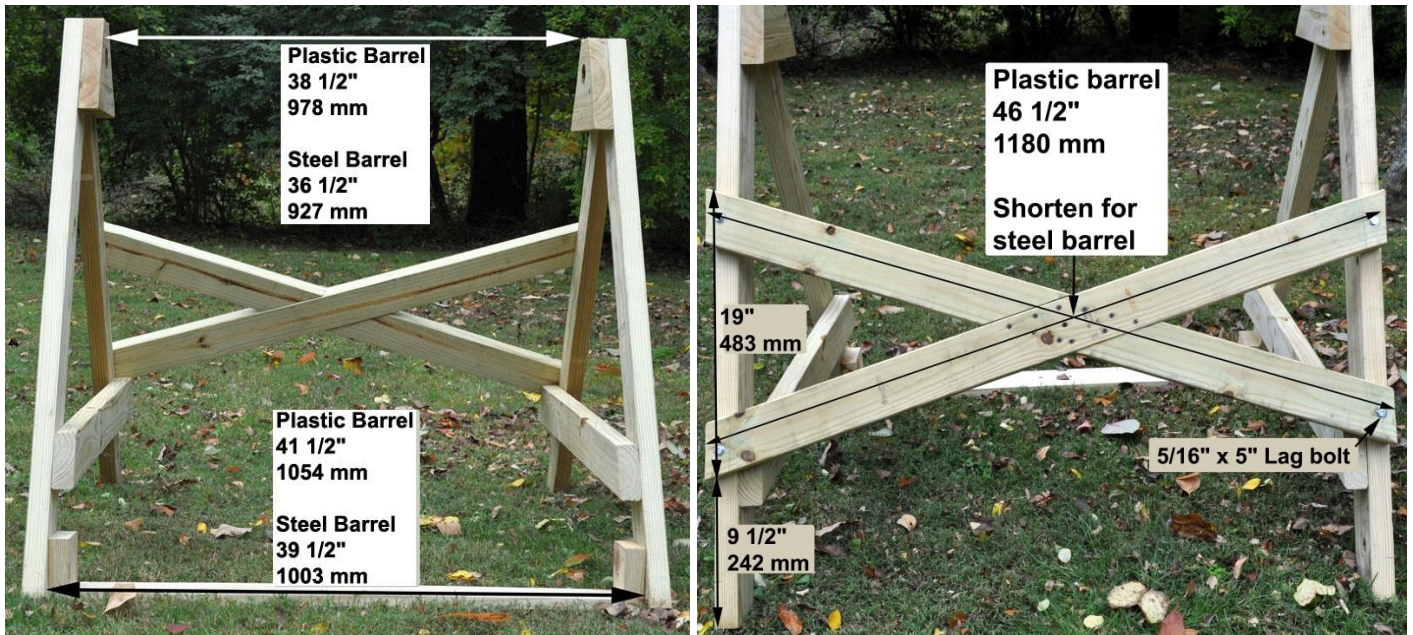
Bolts, Nuts & Washers	18	Hex Head Zink Plated	1/4"- 20	3/4" 19 mm	Door hinge and door clasp (female half only)
Bolts, Nuts & Washers	16	Hex Head Zink Plated	1/4"- 20	1" 25 mm	To secure flanges
Bolts, Nuts & Washers	8	Flathead Zink Plated To secure male half of latch post safety hasp	10-24	3/4" 19 mm	
Eye-Bolt	1		1/4"- 20	1" 25 mm	To secure door latch
Snap Hook	1	. Nickel-Plated Steel Round Swivel Eye Bolt Snap Hook	3 1/2" x 5/8" 90 mm x 16 mm	3 1/2" 90 mm	 Door Latch
Lag Bolts & Washers	4	Zink Plated	5/16" 8 mm	5" 127 mm	To secure X-Brace
Deck Screws	About 50		# 10	2 1/2" 64 mm	
Plastic Lip	1	Scrap plastic	1" wide x 1/8" thick 25 mm x 3 mm	10 1/2" 267 mm	Door lip



















Dual baffles located 90° from the door opening

The internal baffle is optional but will assure a good stir on each turn



Barrel Bottom End

1" x 5" galvanized cast iron nipples

1" elbows

6" nipple with PVC sleeve

End Cap

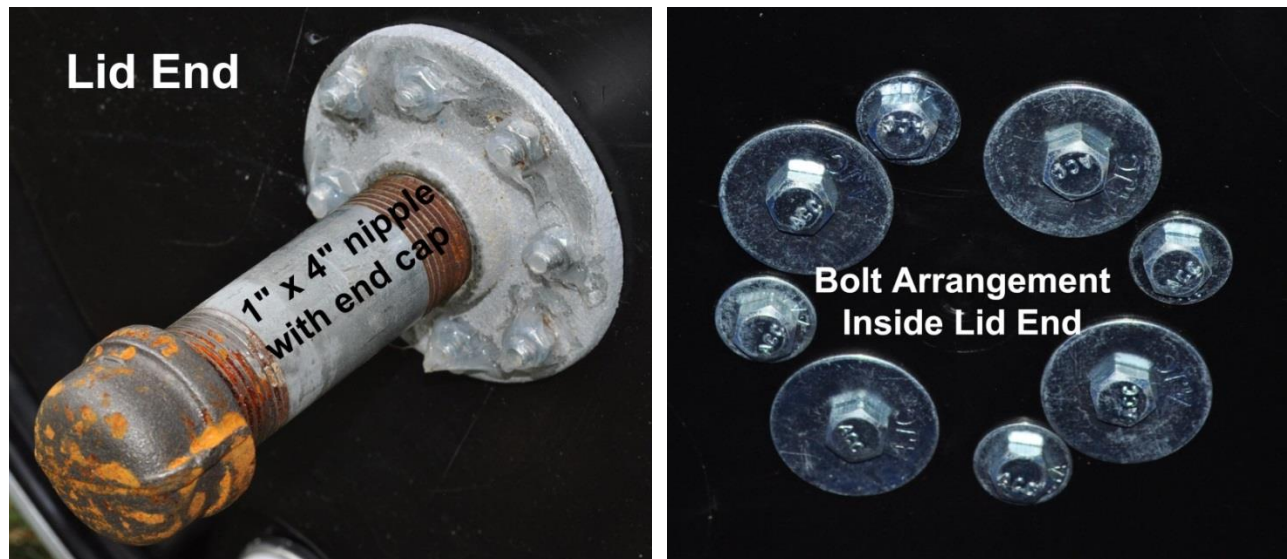
1/4", 6 mm aluminum base plate prevents cast iron flange from breaking on the curved end surface

1", 25 mm galvanized cast iron floor flange

Bolt arrangement inside bottom end

Protective covering makes removal easy





Covering exposed bolt and nuts makes removal easy at a later time.



The **end** cap is not absolutely necessary but it makes a nice safety catch.





Installing the drum on the A-frame in this position can easily be done by one person.





It is important to install the barrel in the A-frame so the door tilts up for unloading.



Should the need arise to move a loaded composter two people can easily lower the unit to the ground to be wheelbarreled to the new location.