### BOSSA NOVA DRUMS - INSTALLATION GUIDE

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MATERIALS							
ITEM	MATERIAL						
BODY/ POST EXTENSION	POWDER COATED STEEL						
HARDWARE	STAINLESS STEEL						
DRUMHEAD	SYNTHETIC/ PLASTIC						
PORTABLE BASE	HDPE						

#### **Pre-install Instructions**

Determine layout style and mark layout. The drums can be laid out in a variety of styles such as an arc, cluster, or straight-line. Mark the location of one drum. Measuring from this point, mark the locatrions of the other two drums. Note that drums must be installed at least 25" apart center to center to maintain a 9" distance between each drum to meet ASTM requirements for a designated play area. Drums must also be installed in-ground or have surface-mount hardware covered by surfacing to be ASTM compliant.

IN GROUND MOUNT								
ITEM NO.	PART NUMBER	DESCRIPTION	DRUM- LRG- MOSS- IG	DRUM- MED- MOSS- IG	DRUM- SML- MOSS- IG	DRUM- LRG- TAUPE- IG	DRUM- MED- TAUPE- IG	DRUM- SML- TAUPE- IG
1	DRUM-LRG-MOSS	BOSSA NOVA DRUM-LARGE-MOSS	1	-	-	-	-	-
2	DRUM-MED-MOSS	Bossa nova drum-medium-moss	-	1	-	-	-	-
3	DRUM-SML-MOSS	Bossa nova drum-small-moss	-	-	1	-	-	-
4	DRUM-LRG-TAUPE	BOSSA NOVA DRUM-LARGE-TAUPE	-	-	-	1	-	-
5	DRUM-MED-TAUPE	BOSSA NOVA DRUM-MEDIUM-TAUPE	-	-	-	-	1	-
6	DRUM-SML-TAUPE	BOSSA NOVA DRUM-SMALL-TAUPE	-	-	-	-	-	1
7	91845A031	3/8"-16 HEX NUT, SS	4	4	4	4	4	4
8	POST-STL-IG-EXT-FP	IN GROUND STEEL POST EXTENSION (POWDER-COATED)	1	1	1	1	1	1
9	92240A624	3/8"-16 HEX HEAD SCREW, 1"LG. SS	4	4	4	4	4	4
10	209728-12	LOCTITE HEAVY DUTY THREADLOCKER, 0.20Z, BLUE 242		1	1	1	1	1
		SURFACE MOUN	Γ					
ITEM NO.					DRUM- SML- MOSS- SM	DRUM- LRG- TAUPE- SM	DRUM- MED- TAUPE- SM	DRUM- SML- TAUPE- SM
1	DRUM-LRG-MOSS	BOSSA NOVA DRUM-LARGE-MOSS	1	-	-	-	-	-
2	DRUM-MED-MOSS	Bossa nova drum-medium-moss	-	1	-	-	-	-
3	DRUM-SML-MOSS	Bossa nova drum-small-moss	-	-	1	-	-	-
4	DRUM-LRG-TAUPE	BOSSA NOVA DRUM-LARGE-TAUPE	-	-	-	1	-	-
5	DRUM-MED-TAUPE	BOSSA NOVA DRUM-MEDIUM-TAUPE	-	-	-	-	1	-
6	DRUM-SML-TAUPE	BOSSA NOVA DRUM-SMALL-TAUPE	-	-	-	-	-	1
11	9267K43	35/64" HEX NUT CAP	4	4	4	4	4	4
12	POW 07315	3/8"-16 WEDGE EXPANSION ANCHOR, 3.75"LG. SS	4	4	4	4	4	4

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Revised 10/4/2023

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		PORTABLE MOUN	Т					
ITEM NO.	PART NUMBER	DESCRIPTION	DRUM- LRG- MOSS- PM	DRUM- MED- MOSS- PM	DRUM- SML- MOSS- PM	DRUM- LRG- TAUPE- PM	DRUM- MED- TAUPE- PM	DRUM- SML- TAUPE- PM
1	DRUM-LRG-MOSS	BOSSA NOVA DRUM-LARGE-MOSS	1	-	-	-	-	-
2	DRUM-MED-MOSS	BOSSA NOVA DRUM-MEDIUM-MOSS	-	1	-	-	-	-
3	DRUM-SML-MOSS	Bossa nova drum-small-moss	-	-	1	-	-	-
4	DRUM-LRG-TAUPE	BOSSA NOVA DRUM-LARGE-TAUPE	-	-	-	1	-	-
5	DRUM-MED-TAUPE	BOSSA NOVA DRUM-MEDIUM-TAUPE	-	-	-	-	1	-
6	DRUM-SML-TAUPE	Bossa nova drum-small-taupe	-	-	-	-	-	1
13	91185A867	3/8"-16 THUMB SCREW, 1"LG. SS	4	4	4	4	4	4
14	PM-PS-24	UNIVERSAL PORTABLE MOUNT STAND - 24" OUTER DIAMETER	1	1	1	1	1	1
7	91845A031	3/8"-16 HEX NUT, SS	4	4	4	4	4	4
		DRUM SETS						
ITEM NO.	PART NUMBER	DESCRIPTION	DRUM- SET- MOSS- IG	DRUM- SET- TAUPE- IG	DRUM- SET- MOSS- SM	DRUM- SET- TAUPE- SM	DRUM- SET- MOSS- PM	DRUM- SET- TAUPE- PM
1	DRUM-LRG-MOSS	BOSSA NOVA DRUM-LARGE-MOSS	1	-	1	-	1	-
2	DRUM-MED-MOSS	BOSSA NOVA DRUM-MEDIUM-MOSS	1	-	1	-	1	-
3	DRUM-SML-MOSS	BOSSA NOVA DRUM-SMALL-MOSS	1	-	1	-	1	-
4	DRUM-LRG-TAUPE	BOSSA NOVA DRUM-LARGE-TAUPE	-	1	-	1	-	1
5	DRUM-MED-TAUPE	BOSSA NOVA DRUM-MEDIUM-TAUPE	-	1	-	1	-	1
6	DRUM-SML-TAUPE	BOSSA NOVA DRUM-SMALL-TAUPE	-	1	-	1	-	1
8	POST-STL-IG-EXT-FP	IN GROUND STEEL POST EXTENSION (POWDER-COATED)	3	3	-	-	-	-
9	92240A624	3/8"-16 HEX HEAD SCREW, 1"LG. SS	12	12	-	-	-	-
7	91845A031	3/8"-16 HEX NUT, SS	12	12	-	-	3	3
10	209728-12	LOCTITE HEAVY DUTY THREADLOCKER, 0.20Z, BLUE 242	3	3	-	-	-	-
11	9267K43	35/64" HEX NUT CAP	-	-	12	12	-	-
12	POW 07315	3/8"-16 WEDGE EXPANSION ANCHOR, 3.75"LG. SS	-	-	12	12	-	-
13	91185A867	3/8"-16 THUMB SCREW, 1"LG. SS	-	-	-	-	12	12
14	PM-PS-24	UNIVERSAL PORTABLE MOUNT STAND - 24" OUTER DIAMETER	-	-	-	-	3	3

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# IN GROUND INSTALLATION

### Step 1: Assemble Drums

After applying a few drops of threadlocking fluid to the ends of the bolt threads, use the 3/8" hex head bolts and 3/8" hex nuts to secure the post extensions to each drum.

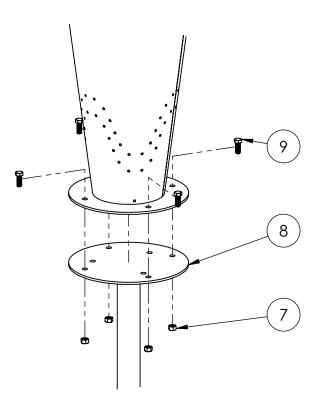
Step 2: Dig holes. After choosing your layout, excavate (3) 10" DIA holes 34" deep at the marked locations (1 hole per drum).

#### Step 3: Place Drums

With two people, place each drum into its hole and verify the finish height of each drum. Adjust the hole depth if necessary to achieve the proper finish height. See sheet 6 for finish height recommendations.

### Step 4: Pour Concrete

Pour concrete around the post extension within the hole and check that the drums are level. Leave concrete to set according to the concrete manufacturer's recommendations. If necessary, brace each drum to hold it level during the curing process. Approximatly (9) 80lb bags of concrete will be needed for a full set, (3) bags per drum.



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**FINISH HEIGHT** 

(SEE SHEET 6)

FROST DEPTH 36"

Revised 10/4/2023

25" MIN

### SURFACE MOUNT INSTALLATION

### <u>Step 1: Pour Slab</u>

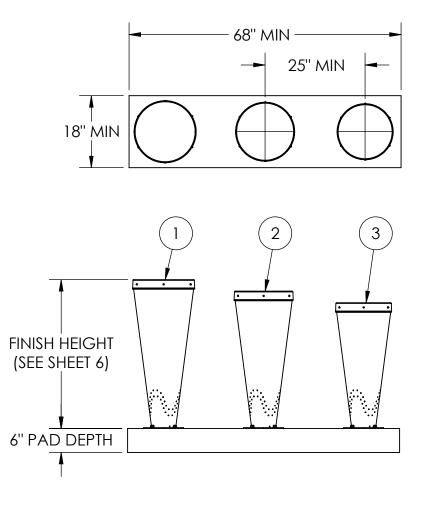
Pour a concrete slab atleast 18" long x 18" wide x 6" thick for each drum. A slab of 18" long x 68" wide x 6" deep can be used if drums are installed in a line. If using an existing slab, verify that the footing meets these dimensions. Make sure to verify the desired spacing between drums before pouring concrete. Verify that there is atleast 9" of space between each drum (atleast 25" apart center to center) if installed in a designated play area. Allow concrete to cure according to the manufacurer's recommendations.

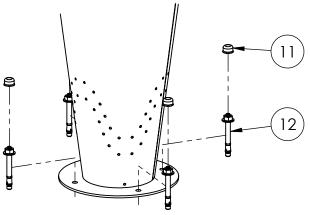
### <u>Step 2: Drill pilot holes.</u>

With two people, place each drum individually over the marked locations. Verify that there is atleast 9" of space between each drum (atleast 25" apart center to center) if installed in a designated play area. Mark the locations of the mounting holes at the base of each drum. Set drums aside. Using a hammer or rotary drill and masonry bit, drill 3/4" holes 4" deep into the concrete at the marked locations.

### Step 3: Secure drums.

Place the drums back over the pilot holes. If the concrete pad is at an angle, steel washers can be used as shims to adjust the levelness of each drum. Insert archor bolts through the base of each drum and into the pilot holes. Position the anchor nuts so that they are flush with the top of the bolts. Pound the anchor bolts into the holes until the anchor washers are flush with the drum base. Tighten the archor bolts until they are snug. Cover the bolt heads with the caps.





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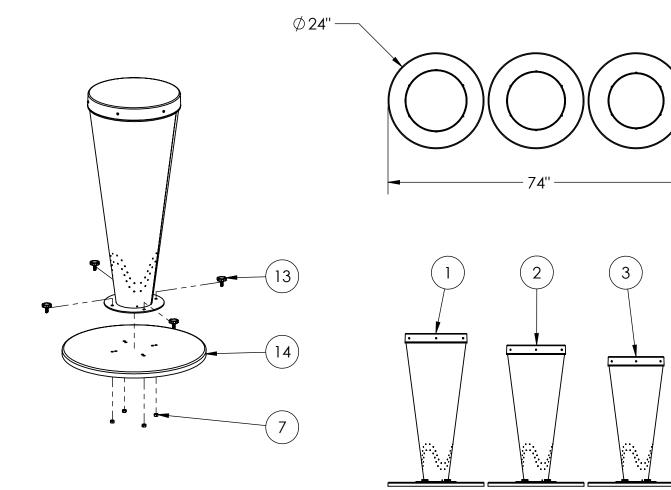
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# PORTABLE MOUNT INSTALLATION

#### Step 1: Attach Drums to Bases

Using the provided hardware, secure each of the drums to the portable mount bases. Note that portable mount drums should not be placed in the designated play area, as this will fail to meet compliance standards.





Revised 10/4/2023

# SPECS, FINISH HEIGHT, AND REPLACEMENT PARTS

		WEIGH	its and dimens	ions						
		IN C	GROUND MOUN	1T						
	DRUM-L	RG-MOSS-IG / DRUM-LRG- TAUPE-IG	DRUM-MED-N	10SS-IG / D TAUPE-IG	RUM-MED-	DRUI	M-SML-MO TAI	SS-IG / DRL JPE-IG	JM-SML-	
FINISH HEIGHT (BOLT HEADS COVERED)		35.20		32.31			29.42			
DIAMETER		15.5		14.75			13.5			
WEIGHT PACKAGED WEIGHT		-		-			-			
			JRFACE MOUNT							
	DRUM-L	RG-MOSS-SM / DRUM-LRG- TAUPE-SM	DRUM-MED-N		RUM-MED	- DRUM		SS-SM / DRU	JM-SML-	
FINISH HEIGHT		37.20		34.31				1.42		
DIAMETER		15.5		14.75				13.5		
WEIGHT		-		-				-		
PACKAGED WEIGHT		-		-				-		
		PC	ORTABLE MOUN	ſ						
	DRUM-	SET-MOSS-IG / DRUM-SET-	DRUM-SET-M	IOSS-SM / D	RUM-SET-	DRU	M-SET-MOS	S-PM / DRU	JM-SET-	
FINISH HEIGHT		TAUPE-IG 38.2		AUPE-SM 35.31				<u>IPE-PM</u> 2.42		
DIAMETER		24		24				24		
WEIGHT		-		-				-		
PACKAGED WEIGHT		-		-				-		
			DRUM SETS							
	DRUM-	SET-MOSS-IG / DRUM-SET- TAUPE-IG	DRUM-SET-N	DRUM-SET-MOSS-SM / DRUM-SET- TAUPE-SM			DRUM-SET-MOSS-PM / DRUM-SET- TAUPE-PM			
FINISH HEIGHT (LARGE DRUM)		35.20		37.20			38.2			
TOTAL WIDTH	64.75		64.75					74		
DEPTH		15.66		15.66			24			
WEIGHT		-		-			-			
PACKAGED WEIGHT		-		-				-		
		REPL	ACEMENT PA	RTS						
PART NUMBER		DESCRIPTIO	N	DRUM- LRG- MOSS	DRUM- MED- MOSS	DRUM- SML- MOSS	DRUM- TAUPE- LRG	DRUM- TAUPE- MED	DRUM- TAUPE- SML	
DRUM-DRUMHEAD-LRG-/	MOSS	BOSSA NOVA DRUM DRUMHEAD- LARGE-MOSS		1	-	-	-	-	-	
DRUM-DRUMHEAD-MED-	MOSS	BOSSA NOVA DRUM DRUMHEAD- MEDIUM-MOSS		-	1	-	-	-	-	
DRUM-DRUMHEAD-SML-MOSS BOS		BOSSA NOVA DRUM DRUMHEAD- SMALL-MOSS		-	-	1	-	-	-	
DRUM-DRUMHEAD-LRG-	TAUPE	BOSSA NOVA DRUM D LARGE-TAUF		-	-	-	1	-	-	
DRUM-DRUMHEAD-MED-	AD-MED-TAUPE BOSSA NOVA DRUM E MEDIUM-TAU			-	-	-	-	1	-	
DRUM-DRUMHEAD-SML-1	UM-DRUMHEAD-SML-TAUPE BOSSA NOVA DRUM DRUMHEAD- SMALL-TAUPE			-	-	-	-	-	1	
92970A203		TAMPER-RESISTANT ROL DRILLING SCRE		6	6	6	6 6 6 6			

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