### 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 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	1
		SURFACE MOUN	Γ					
ITEM NO.			DRUM- LRG- MOSS- SM	DRUM- MED- MOSS- SM	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

**FREENOTES** 

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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		-	-	-	-	-
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	-	-	12	12
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

FREE NOTES

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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.

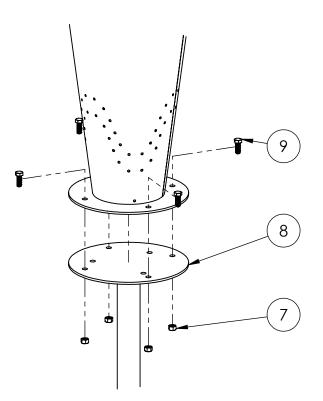
Step 2: Dig holes. After choosing your layout, excavate (3) 10" DIA holes 34" deep at the marked locations (1 hole per drum).

### 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.

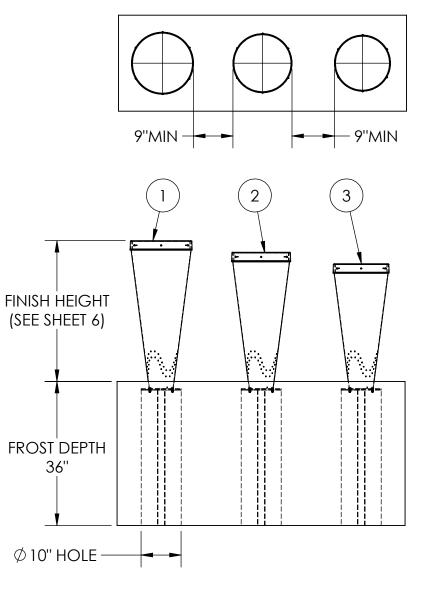
### Step 4: Pour Concrete

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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## SURFACE MOUNT INSTALLATION

### Step 1: Pour Slab

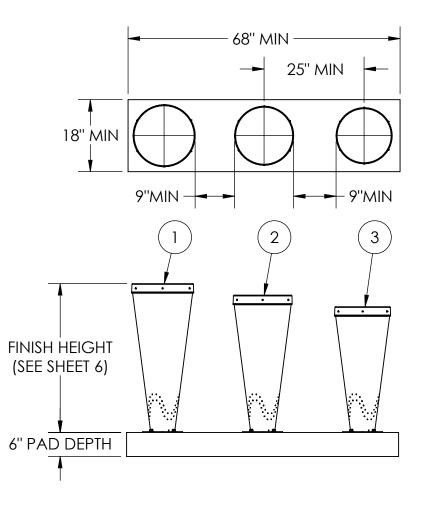
Pour a concrete slab atleast 18" long x 18" wide x 6" thick for each drum. A slab of 18" long x 68" wide x 6" deep can be used if drums are installed in a line. If using an existing slab, verify that the footing meets these dimensions. Make sure to verify the desired spacing between drums before pouring 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.

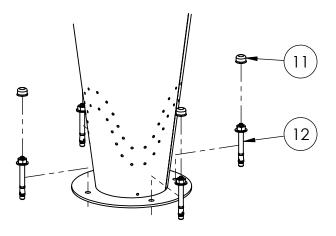
### <u>Step 2: Drill pilot holes.</u>

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.





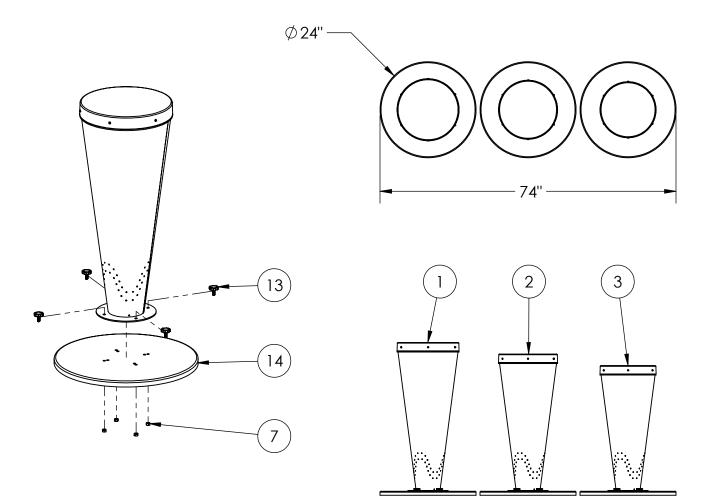
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## PORTABLE MOUNT INSTALLATION

### 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.





# SPECS, FINISH HEIGHT, AND REPLACEMENT PARTS

		WEIGH	its and dimensi	ONS							
		IN C	GROUND MOUN	Т							
	DRUM-L	rg-moss-ig / drum-lrg- taupe-ig	DRUM-MED-N T	ioss-ig / d Aupe-ig	RUM-MED-	DRUM	n-SML-MOS TAL	SS-IG / DRU IPE-IG	M-SML-		
FINISH HEIGHT (BOLT HEADS COVERED)		35.20		32.31			29.42				
DIAMETER		15.5		14.75			13.5				
WEIGHT		43		39		37					
PACKAGED WEIGHT		50		46			44				
		SL	JRFACE MOUNT								
	DRUM-L	rg-moss-sm / drum-lrg- taupe-sm	DRUM-LRG- DRUM-MED-MOSS-SM / DRUM-MED- TAUPE-SM DRUM-SML-MOSS-SM / TAUPE-SM					DRUM-SML-			
FINISH HEIGHT		37.20		34.31			31.42				
DIAMETER		15.5		14.75			1	3.5			
WEIGHT		42		38				36			
PACKAGED WEIGHT		49		45				43			
		PC	ORTABLE MOUNT								
	DRUM-	SET-MOSS-IG / DRUM-SET- TAUPE-IG	DRUM-SET-M	OSS-SM / D AUPE-SM	RUM-SET-	DRUI	DRUM-SET-MOSS-PM / DRUM-SET-				
FINISH HEIGHT		38.2	I.	AUPE-SM 35.31		TAUPE-PM 32.42					
DIAMETER		24		24			24				
WEIGHT		43		39		37					
PACKAGED WEIGHT		50		46			44				
			DRUM SETS								
DRUM-SET-MOSS-IG / DRUM-SET- TAUPE-IG			Drum-set-moss-sm / Drum-set- taupe-sm			DRUI	DRUM-SET-MOSS-PM / DRUM-SET- TAUPE-PM				
FINISH HEIGHT (LARGE DRUM)	H HEIGHT (LARGE DRUM)		37.20			38.2					
TOTAL WIDTH		64.75	64.75			74					
DEPTH		15.66	15.66			24					
WEIGHT		133		130		133					
PACKAGED WEIGHT		140		137		140					
		REPI	ACEMENT PA	RTS		- 1					
PART NUMBER		DESCRIPTION		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		BOSSA NOVA DRUM DRUMHEAD- SMALL-MOSS		-	-	1	-	-	-		
DRUM-DRUMHEAD-LRG-TAUPE		BOSSA NOVA DRUM DRUMHEAD- LARGE-TAUPE		-	-	-	1	-	-		
DRUM-DRUMHEAD-MED-TAUPE		BOSSA NOVA DRUM DRUMHEAD- MEDIUM-TAUPE		-	-	-	-	1	-		
DRUM-DRUMHEAD-SML-TAUPE		BOSSA NOVA DRUM DRUMHEAD- SMALL-TAUPE		-	-	-	-	-	1		
92970A203		TAMPER-RESISTANT ROUNDED HEAD DRILLING SCREWS		6	6	6	6	6	6		

FREE NOTES