

**PNEG-218** 

# COR-LOK & CUT-LOK FLOORING INSTALLATION INSTRUCTIONS AND GRANDSTAND LAYOUT



*30' DIAMETER BINS* 

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GRAIN SYSTEMS, INC. Assumption, IL 62510 USA 217-226-4421

## COR-LOK & CUT-LOK FLOORING INSTALLATION INSTRUCTIONS AND GRANDSTAND LAYOUT

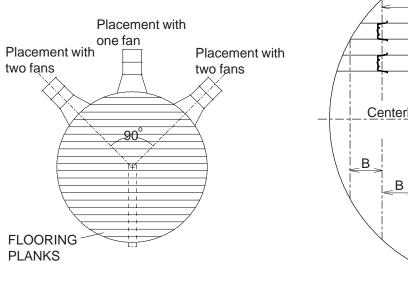
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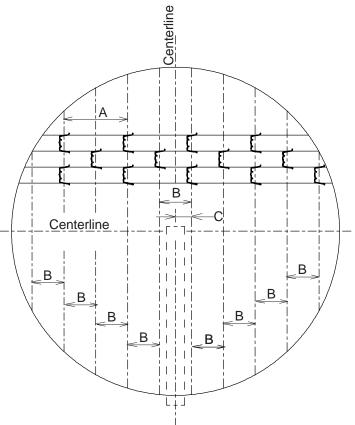
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#### FAN PLACEMENT DIAGRAM

For most uniform air flow the fan(s) should be located as shown below with respect to the unloading tube. The floor planks should lay perpendicular to the unloading tube.

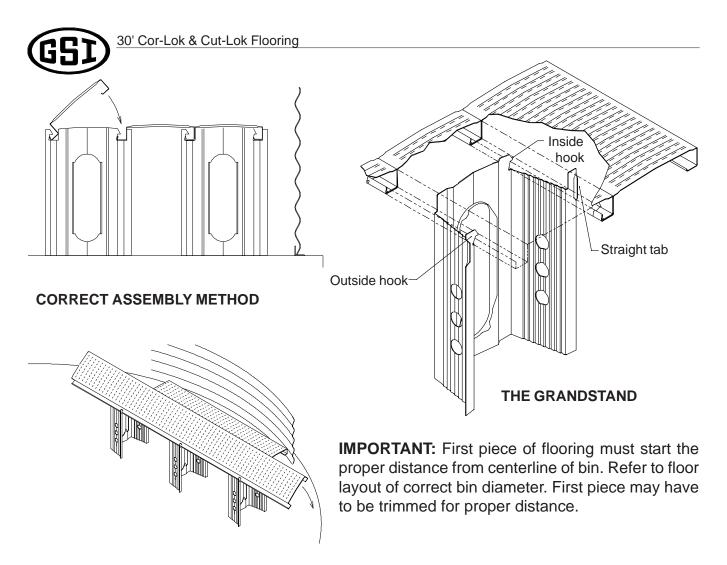




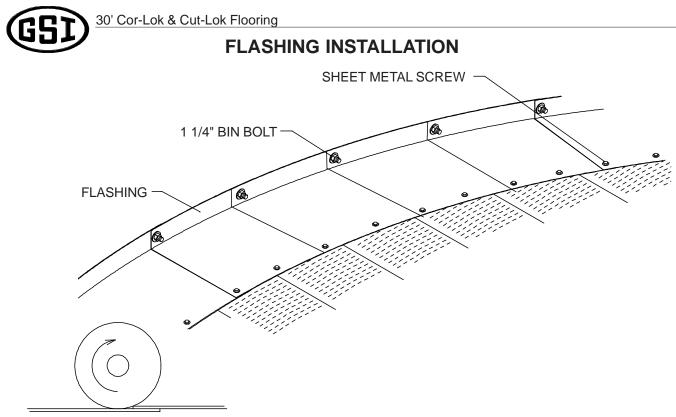
#### **GRAIN SYSTEMS RECOMMENDED METHOD FOR FULL FLOOR INSTALLATION**

This method should save floor construction time and eliminate problems of improper installation which could invalidate warranty. Dimension "A" is the leg to leg spacing along the centerline of a given plank. Dimension "B" is the amount of stagger between supports under adjacent planks and is half of "A". Dimension "C" is the distance from the center of unload auger to the nearest rows of supports and is half of "B". Dimensions "A", "B" and "C" are shown on the appropriate Grandstand layout for wall heights under 35 ft. For taller bins, Grandstand quantity as well as dimensions "A" and "B" are given on page #16 & #17.

- 1. Layout center-lines of tank being sure one centerline is in line with the direction of the flooring planks while the other center-line is perpendicular with the flooring planks.
- 2. Measure over "C" dimension from centerline that is perpendicular to the direction of the flooring planks. Do this at each end of the bin. Strike a chalk line here.
- 3. Measure over "B" dimension from the previously (chalked in step #2) and strike a chalk line here. Continue this procedures until the bin wall is reached in both directions.
- 4. When completed there should be a set of parallel lines "B" dimensions apart.



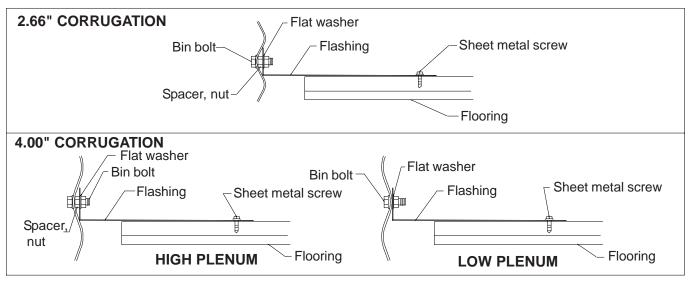
- 5. Start at bin wall with shortest floor piece. **POSITION SUPPORTS FOR THIS PIECE AS SHOWN ON SUPPORT LAYOUT FOR CORRECT BIN DIAMETER AND SUPPORT SPACING.** Be sure flat side of floor piece is facing bin wall and is at designated distance from the wall (The open channel edge of floor must be facing the center of the bin.)
- 6. **POSITION THE NEXT ROW OF SUPPORTS ACCORDING TO THE CHALK LINES** and support layout. The straight tab and inside hook should "snap" under the first (previous) floor piece. After the supports in the row are correctly positioned, install the next floor piece by hooking the open channel edge under the outside hooks of floor supports. Push down sharply on the outside edge floor piece until it snaps into the previous floor piece.
- 7. Continue this procedure for the rest of the floor.
- **NOTE:** Whenever there is more than B/3 inches of plank unsupported beside the bin wall there should be a support on that plank or a support on each of planks adjacent such that no more than B/3 inches is unsupported.



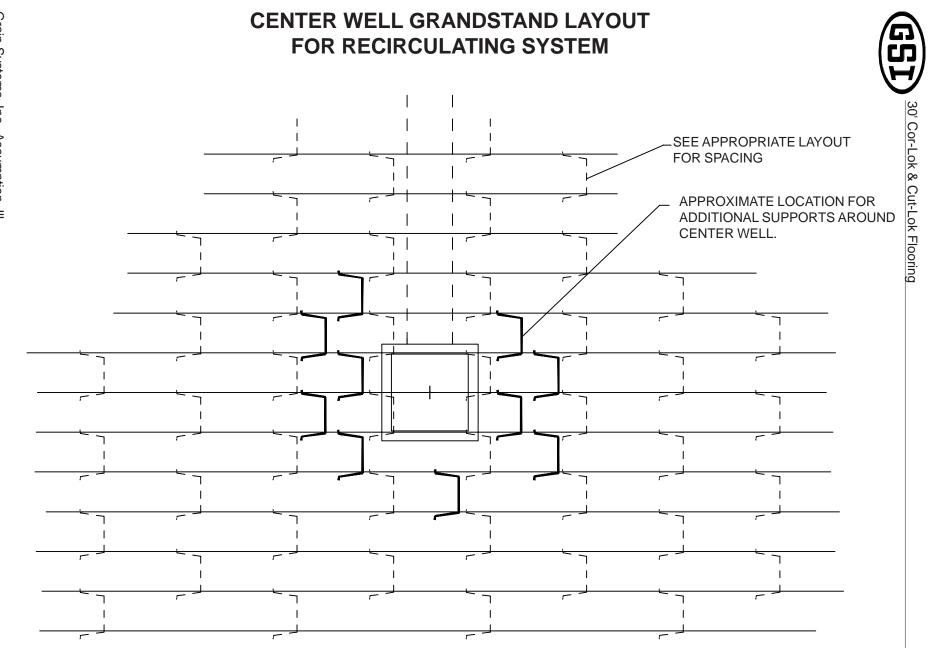
**GRAIN SYSTEMS FORMED FLASHING INSTALLATION** 

If bin sweep auger is to be used, overlap flashing such that rotation (usually clockwise) of the sweep will climb up on the next flashing section. This will prevent the rotating/slipping outer wheel of the sweep from catching on the flashing edges.

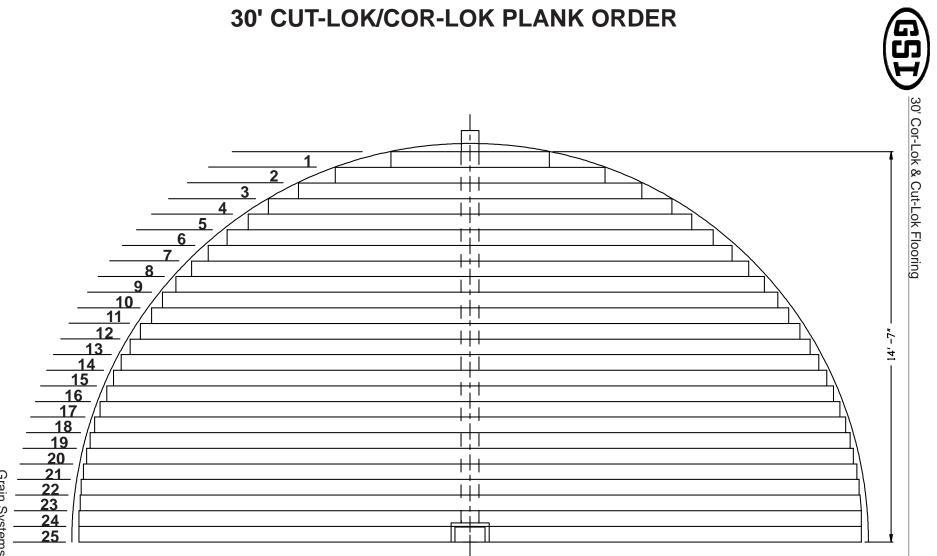
After the floor is in place, lay the flashing pieces on top of the floor place over the 1.1/4" bin bolts. See the details below to determine the correct sequence for placing the nuts and washers. Finger tighten the nuts. While holding flashing flat, fasten the flashing to the floor with sheet metal screws. Now tighten flashing nuts.



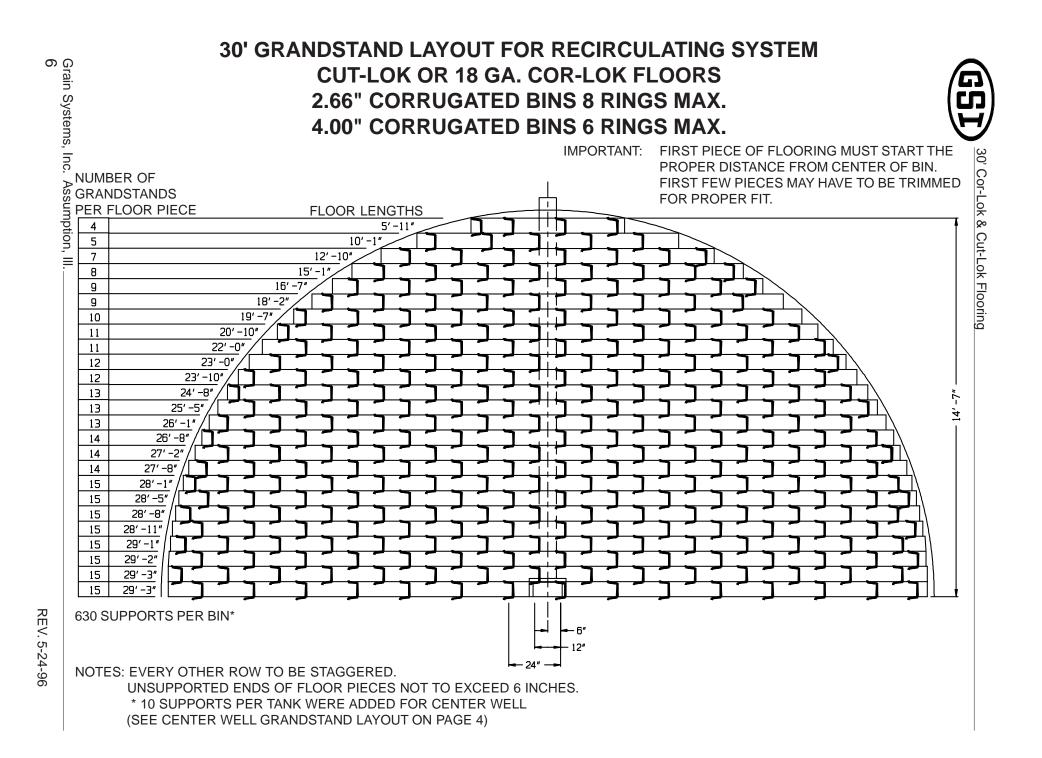
Grain Systems, Inc. Assumption, III.

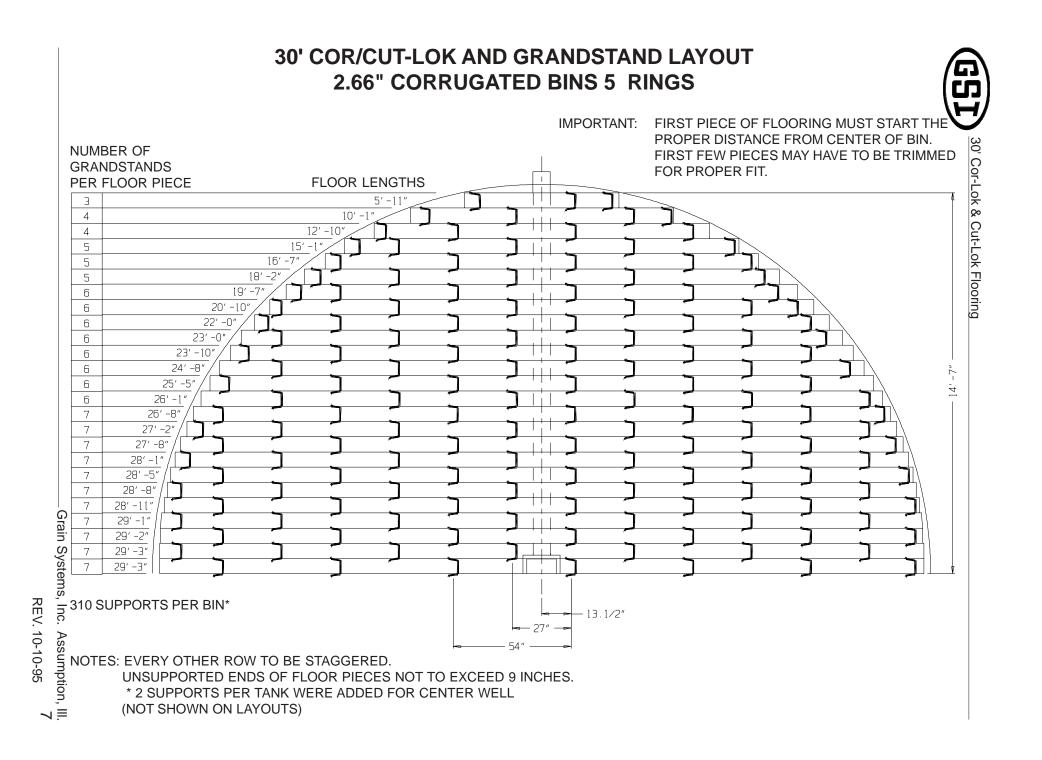


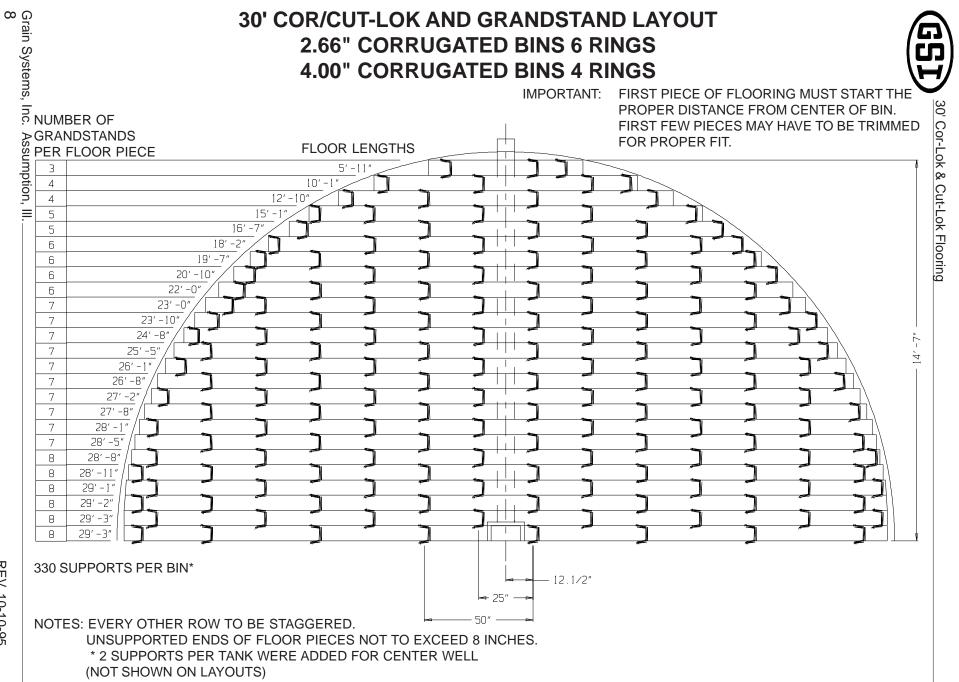
Grain Systems, Inc. Assumption, III 4

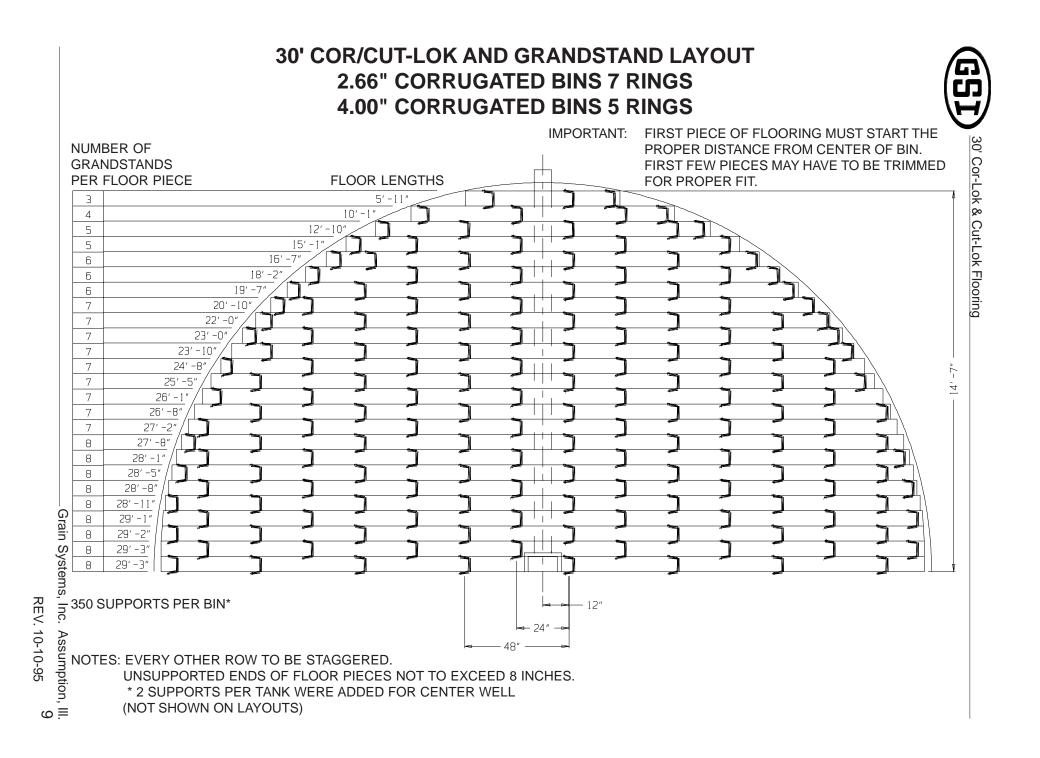


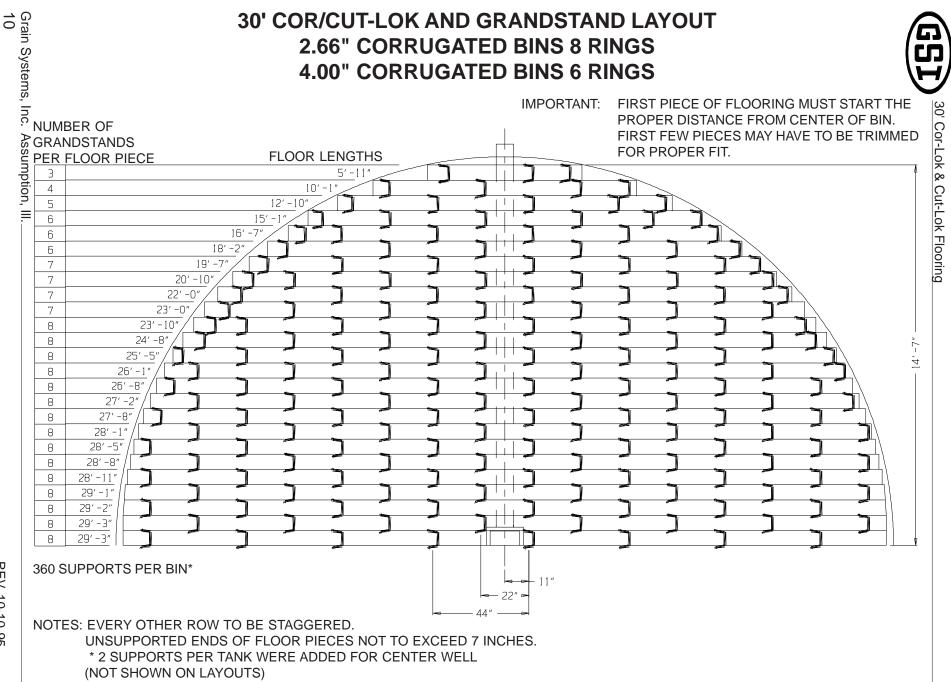
Grain Systems, Inc. Assumption, III. 5

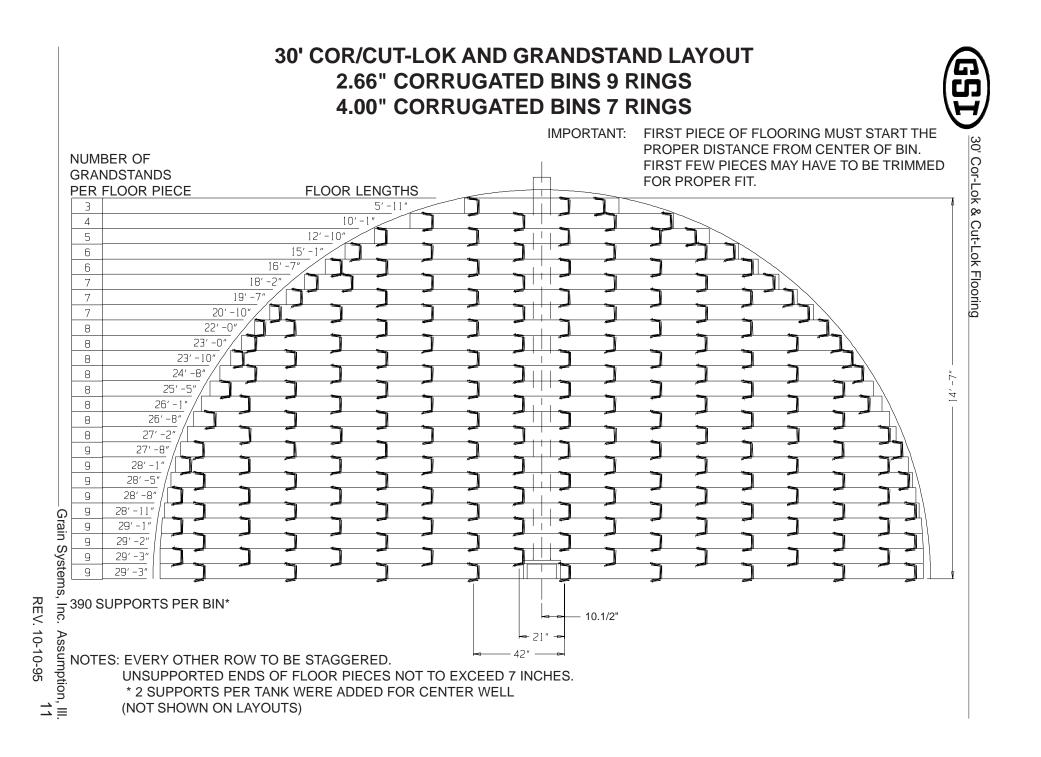


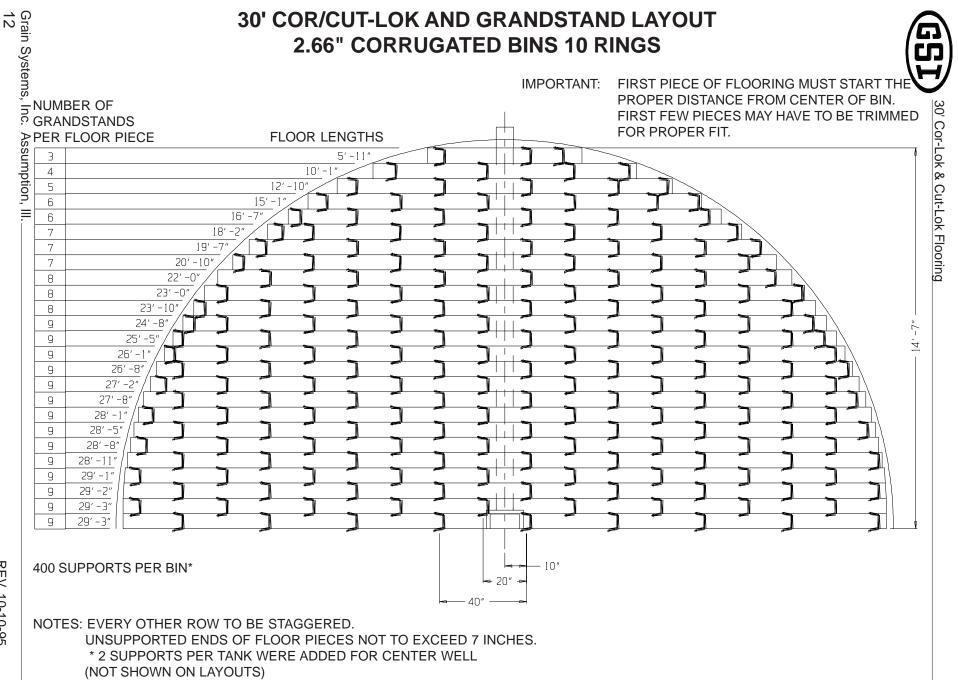


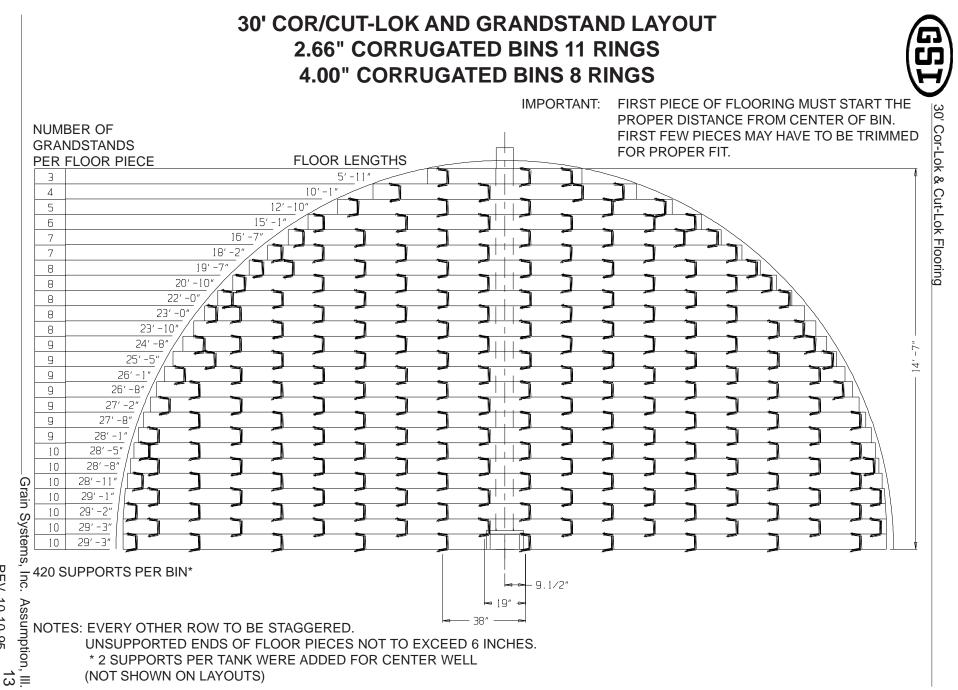


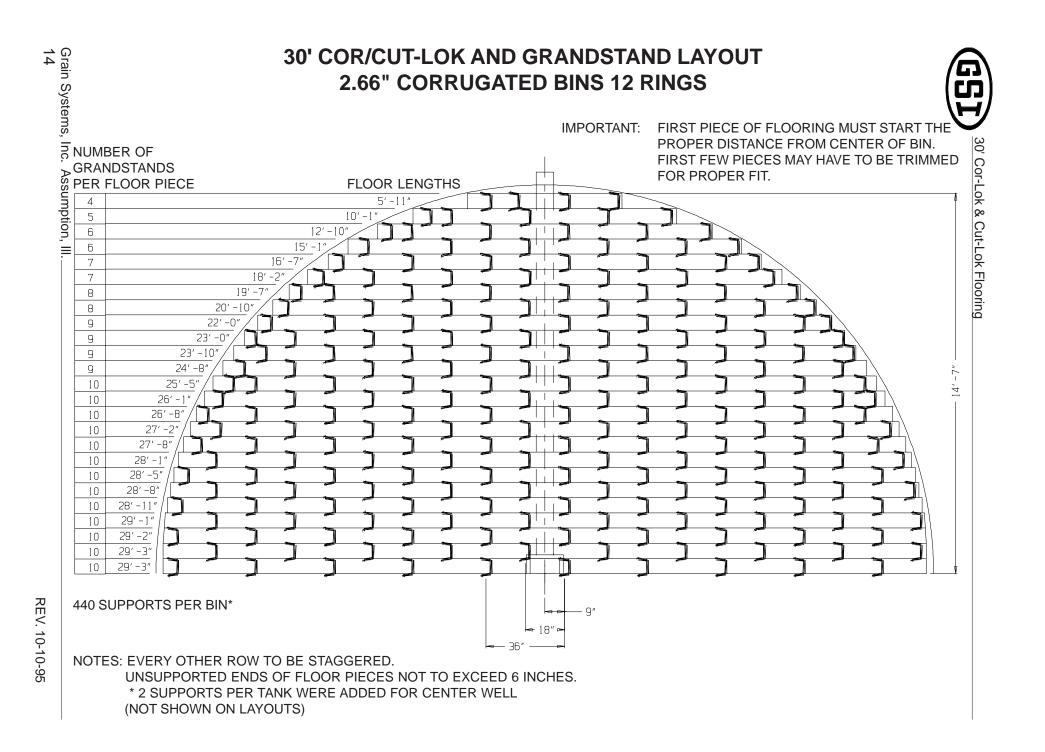


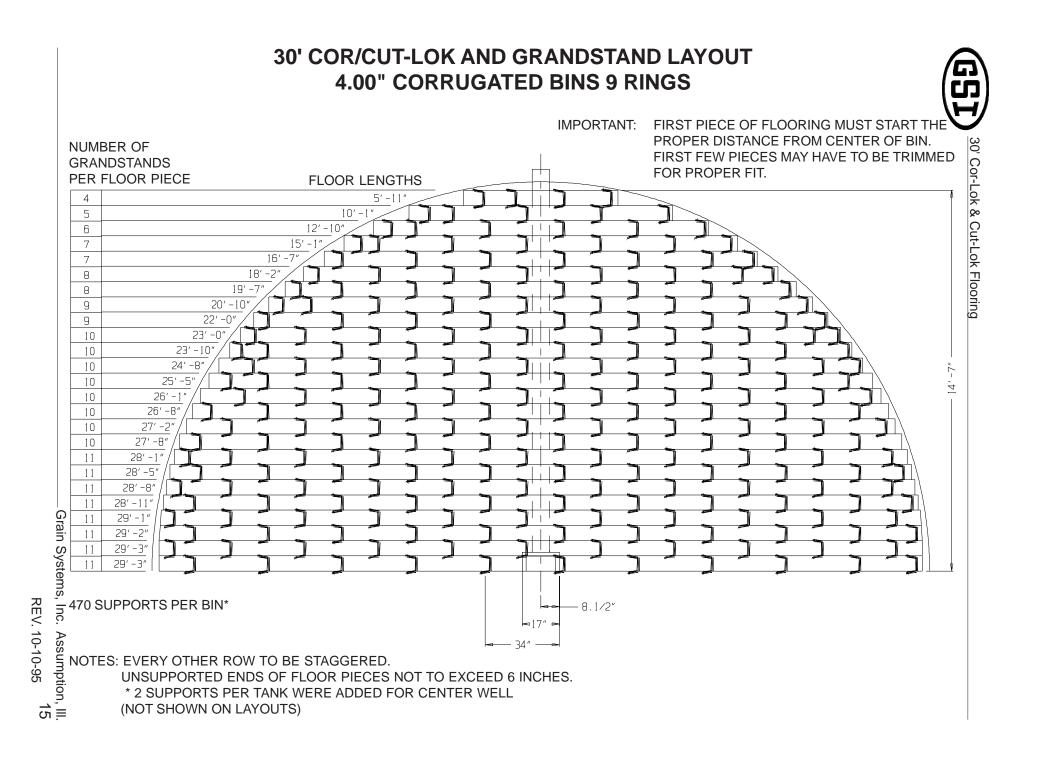














### FLOOR SUPPORT REQUIREMENTS FOR BINS OVER 33' WALL HEIGHT

				FULL F	LOOR S	UPPORT					E FLOOF	RING					
Rings	12	15	18	21	24	27	30	33	36	42	48	60	72	75	78	90	105
·····go			YLES O										<u> </u>				
	SIZES I			-													
3	54/27																
	60								ALL FL	OOR ST	YLES O	K FOR E	SIN SIZE	s			
4	54/27	58/29	SUPPO		CING				IN UPP	ER SHAI		EA.	I				
	60	80	SUPPO	RT QUA	NTITY												
5	54/27	58/29	54/27	52/26	56/28	54/27	54/27	50/25	50/25	50/25	48/24	46/23					
	60	80	120	160	200	250	310	390	470	640	870	1380					
6	54/27	54/27	54/27	52/26	52/26	48/24	50/25	50/25	48/24	46/23	46/23	44/22		Floor st	yles Lis	t	
	60	90	120	160	210	270	330	390	490	690	910	1430		In Orde	r of		
7	54/27	52/26	48/24	50/25	48/24	48/24	48/24	46/23	44/22	44/22	44/22	42/21	1	increas	ing Stre	ngth	
	60	100	140	170	220	270	350	420	520	730	930	1480		20 GA,	COR-LO	ĸ	
8	48/24	48/24	48/24	46/23	46/23	46/23	44/22	44/22	44/22	42/21	42/21	40/20	1	18 GA.	COR-LO	ĸ	
	70	100	140	180	230	280	360	430	520	750	980	1540		CUT-LC	Ж		
9	48/24	48/24	42/21	42/21	44/22	44/22	42/21	42/21	40/20	40/20	40/20	36/18					
	70	100	140	190	240	300	390	460			1020	1700					
10	42/21	42/21	42/21	42/21	42/21	42/21	40/20	40/20	38/19	38/19	36/18	34/17					
	80	110	140	190	250	310	400	480			1110			COR-LO			
11	42/21	42/21	42/21	42/21	40/20	40/20	38/19	36/18	36/18	34/17	34/17	32/16		D. OF RI		_	LE
	80	110	140	190	260	320	420	520		900	1160	1880		UNSHAD			
12	38/19	40/20	40/20	40/20	38/19	38/19	36/18	34/17	34/17	32/16	32/16	30/15	26/13	26/13	26/13	24/12	22/1
10	80	120	150	200	280	340	440	550		950	1230	1990	3300	3580	3870	5520	81
13	38/19	38/19	38/19	36/18	36/18	36/18	34/17	32/16	32/16	30/15	28/14	26/13	24/12	24/12	24/12	22/11	20/1
	80	120	170	220	290	360	470	600			1390	2300	3540	3840	4150	5960	88
14	34/17	34/17	34/17	34/17	34/17	34/17	32/16	30/15	30/15	28/14	26/13	24/12	22/11	22/11	22/11	20/10	18/9
	90	130	180	230	300	380	500	630			1480	2460	3820	4140	4480	6480	96
15	32/16	32/16	32/16	32/16	32/16	32/16	30/15	28/14	28/14	26/13	24/12	22/11	22/11	20/10	20/10	18/9	18/9
10	100	140	190	250	320	400	520	670	790	1140	1590	2650	3820	4500	4870	7120	968
16	30/15	30/15	30/15	30/15	28/14	28/14	28/14	28/14	26/13	24/12	22/11	20/10	20/10	20/10	18/9	18/9	16/8
47	100	150	210	260	360	450	550	670	840	1220	1710	2880		4500	5340	7120	1070
17	28/14	28/14	28/14	26/13	26/13	26/13	26/13	26/13	24/12	22/11	20/10	20/10	18/9	18/9	18/9	16/8	16/8
18	110	160	220	290 24/12	380	480	590	710			1860	2880	4550	4950	5340	7910	107
10	26/13	26/13	24/12		24/12	24/12	24/12	24/12	24/12	22/11	20/10	18/9	16/8	16/8	16/8	16/8	14/7
19	110	170	240	310	400	510	630	760	900		1860	3170	5060	5500	5940	7910	121
19		24/12 180	24/12 240	22/11	22/11	22/11 550	22/11 680	22/11 820	22/11 970	20/10 1430	18/9 2040	16/8 3520	16/8 5060	16/8 5500	16/8 5940	14/7 8920	14/7
20		22/11	240 22/11	340 22/11	440 22/11	22/11	20/10	20/10	20/10	20/10	2040	3520 16/8	14/7	5500 14/7	5940 14/7	0920 14/7	1214
20		190	260	340	440	550	740	890	1060	1430	2040	3520	5710	6200	6710	8920	139
21	CUT-LC			20/10	20/10	20/10	20/10	20/10	20/10	1430	16/8	14/7	14/7	14/7	14/7	12/6	12/0
21	Dia. and	-		370	470	600	740	890		1570	2270	3970	5710	6200	6710	10280	139
22	Rings is		om	18/9	18/9	18/9	18/9	18/9	18/9	18/9	16/8	14/7	12/6	12/6	12/6	10260	100
	shaded			400	520	660	810	970	1160	1570	2270	3970	6580	7140	7730	10280	
23	Snaueu	a: 503.		18/9	18/9	16/8	16/8	16/8	16/8	16/8	16/8	14/7	12/6	12/6	12/6	.0200	l
25				400			900								7730		
24				16/8	16/8	16/8	16/8	16/8	16/8	16/8	14/7	12/6	12/6	12/6		l	
- ·				450	580		900										
25				14/7	14/7	14/7	14/7	14/7	1230	14/7	14/7	12/6	0000		l		
				500			1010				2560		Corruge	ated floors	and		
26						14/7	14/7	14/7	1430	1300	14/7			il support			
						820	1010	1220			2560			dia. and		as	
27						12/6	12/6	12/6	12/6	1300	12/6	12/6		tom unsh		•	
<u>~</u> ,						950	1160				2950	4570					
28						12/6	12/6	12/6	12/6	12/6	12/6		1				
25						950	1160	1410									
29						12/6	12/6	12/6	12/6	SUPPO							
23						950	1160			SUPPO							
30	* When	ueina F	1-2102 2		3102-6 (3								1				

Grain Systems, Inc. Assumption, III.\_\_\_\_



### FLOOR SUPPORT REQUIREMENTS FOR BINS OVER 33' WALL HEIGHT

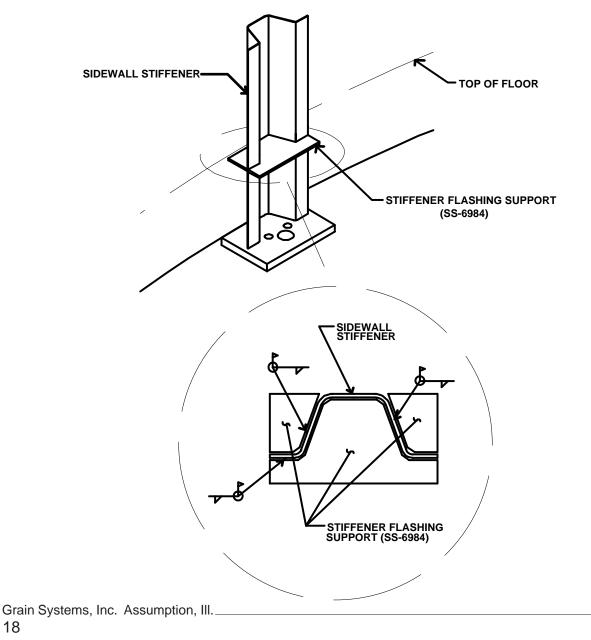
					4.0	0" CORR	UGATIO	N						
Rings	12	15	18	21	24	27	30	33	36	42	48			
	ALL FLO	OR STY	LES OK F	OR BIN										
	SIZES IN	UPPER	SHADED	AREA.										
3	54/27	58/29	54/27	52/26	56/28	54/27	SUPPOR	T SPACI	NG					
	60	80	120 160 2			250	SUPPOR		ΤΙΤΥ			All Floor Styles OK		
4	54/27	54/27	54/27	52/26	52/26	48/24	50/25	50/25	50/25	46/23	48/24	For Bin Sizes in		
	60	90	120	160	210	270	330	390	470	690	870	Upper Shaded Area.		
5	54/27	52/26	48/24	50/25	48/24	48/24	48/24	46/23	44/22	46/23	44/22			
	60	100	140	170	220	270	350	420	520	690	930	Floor Styles List		
6	48/24	48/24	48/24	46/23	46/23	44/22	44/22	44/22	44/22	42/21	42/21	in order of		
	70	100	140	180	230	300		430	520	750	980	Increasing Strength		
7	42/21	42/21	42/21	42/21	42/21	42/21	42/21	40/20	40/20	38/19	38/19	20 GA. COR-LOK		
_	80	110	140	190	250	310		480	560	820	1060	18 GA. COR-LOK		
8	42/21	42/21	42/21	42/21	40/20	40/20	38/19	36/18	36/18	34/17	34/17	CUT-LOK		
0	80	110	140	190	260	320		520	620	900	1160			
9	38/19	40/20	38/19	38/19	38/19	36/18	34/17	34/17	32/16	32/16		18 Ga. COR-LOK or s		
10	80	120	170	220	280	350		550	690	950		stronger if Dia. and No		
10			34/17	34/17	34/17	34/17	32/16	32/16	30/15	30/15		of Rings is in middle		
11			180	230	300	380		600	750	1010		unshaded area.		
11			32/16	32/16	32/16	32/16	30/15	30/15	28/14	26/13	24/12			
12			190 28/14	250	320 28/14	400		630	790 26/13	1140 <b>24/12</b>		CUT-LOK only if Dia. and No. of Rings is in		
12			28/14 210	28/14 280	28/14 360	28/14 450	28/14 550	28/14 670	26/13 840	24/12 1220		bottom shaded area.		

\* When using FL-3102-3 or FL-3102-6 (3",6") Grandstand, increase the listed quantities by 33% (std. quantity x 1.33).

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## STIFFENER FLASHING SUPPORT INSTRUCTIONS FOR INTERNAL UNIVERSAL STIFFENERS

- INSTALL THE FLOOR AND SUPPORT SYSTEM, CUTTING THE FLOOR TO GO AROUND THE 1). INTERNAL STIFFENERS AS REQUIRED.
- BREAK THE STIFFENER FLASHING SUPPORT (SS-6984) INTO IT'S THREE COMPONENTS. 2).
- LAY THE FLASHING SUPPORTS ON TOP OF THE FLOORING AND WELD THE FLASHING 3). SUPPORTS TO THE STIFFENER AS CLOSE AS POSSIBLE. FASTEN THE FLASHING TO THE WALL, FLASHING SUPPORT, AND FLOOR SEAL ALL SPACES BY WELDING OR CAULKING.
- PAINT ALL WELDS WITH GOOD QUALITY ZINC RICH PAINT. 4).
- 5). STIFFENER FLASHING SUPPORTS (SS-6984) MUST BE ORDERED SEPARATELY FROM THE STANDARD FLOOR AND FLASHING.



## Major Changes from the last printing Are Listed Below:

Revised Format (Added Text Top & Bottom)

Added Cor-Lok/Cut-Lok Plank Order



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