

PNEG-222

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



48' 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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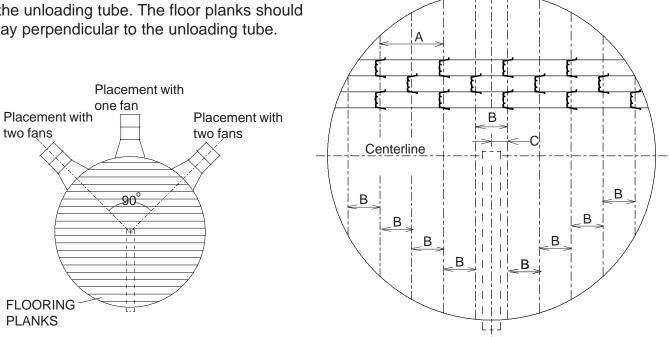
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SEE PAGES 19-20 FOR FLOOR SUPPORT REQUIREMENTS FOR BINS OVER 33' WALL HEIGHT



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.

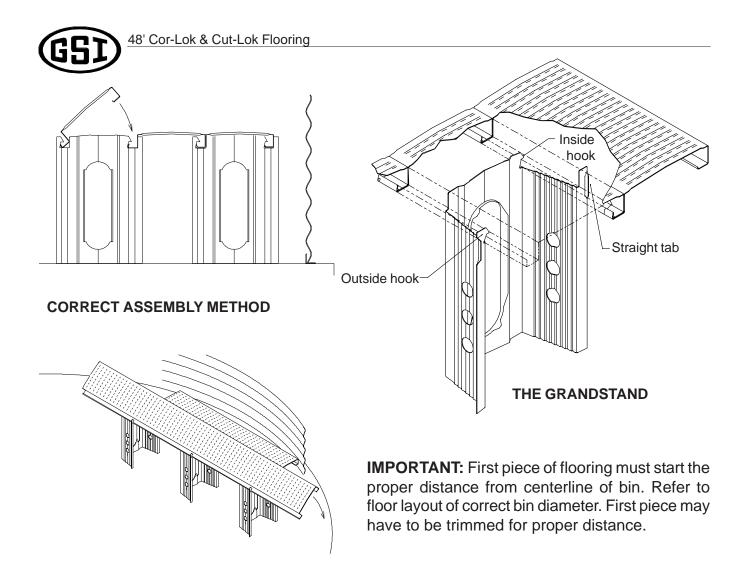


Centerline

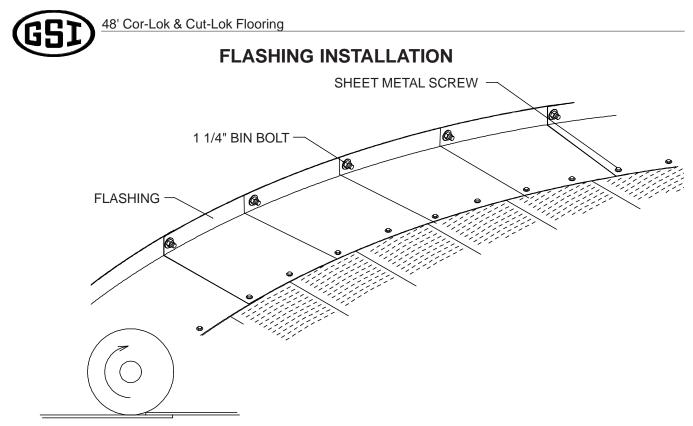
GRAIN SYSTEMS RECOMMENDED METHOD FOR FULL FLOOR INSTALLATION

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 #18 & #19.

- 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.



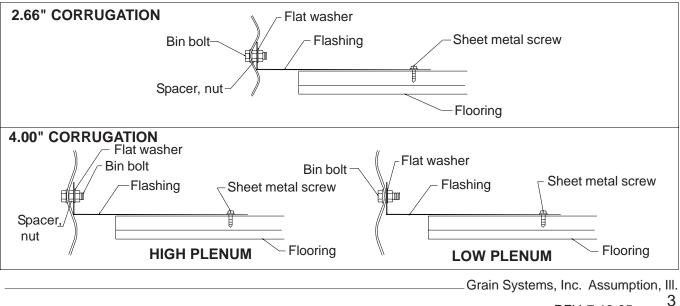
- 5. Start at bin wall with shortest floor piece. **POSITION SUPPORTS FOR THIS PIECE AS SHOWN ON SUPPORT LAYOUT FOR CORRECT BIN DIAMETER AND SUPPORT SPACING.** Be sure flat side of floor piece is facing bin wall and is at designated distance from the wall (The open channel edge of floor must be facing 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.

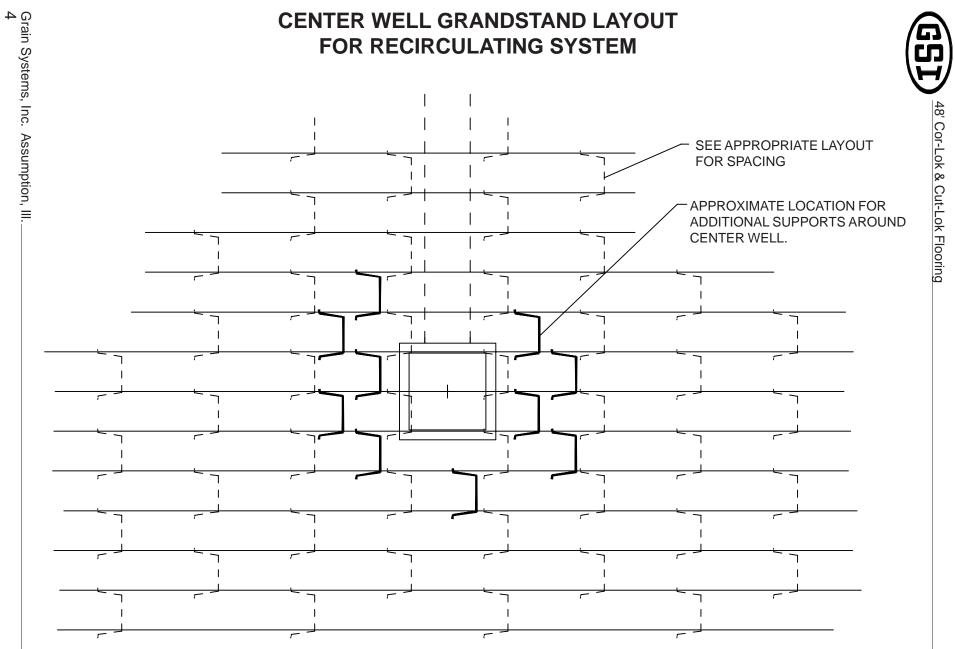


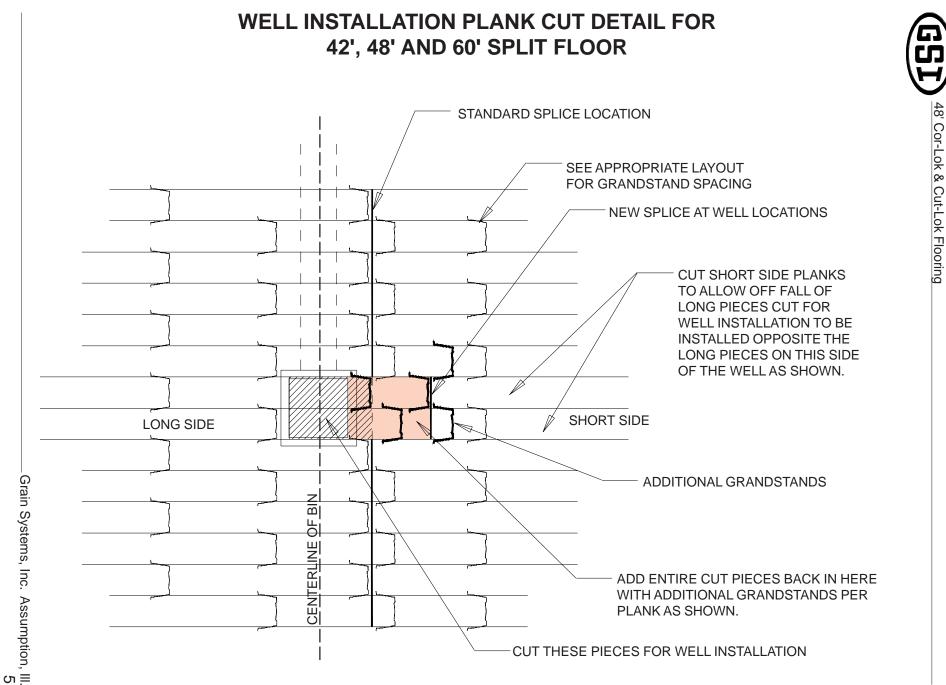
GRAIN SYSTEMS FORMED FLASHING INSTALLATION

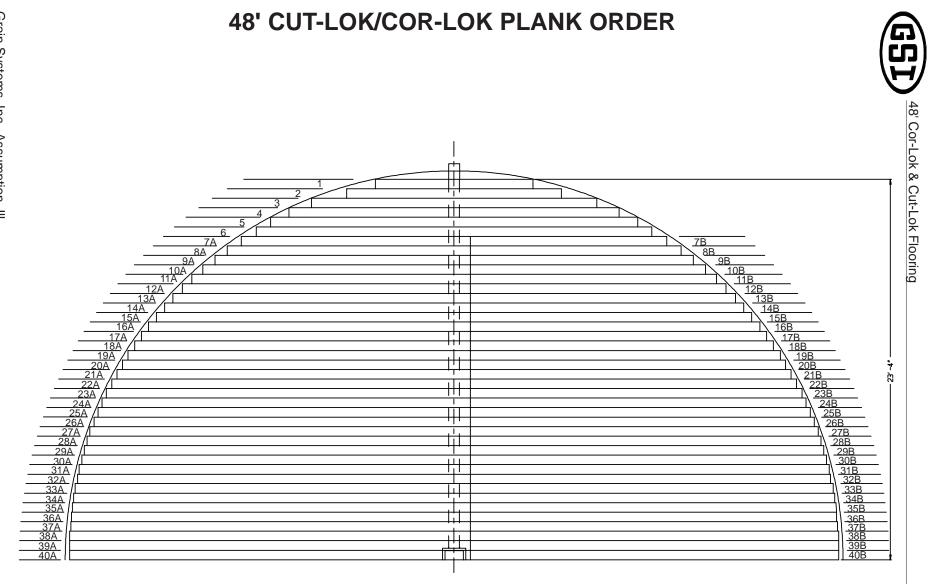
If bin sweep auger is to be used, overlap flashing such that rotation (usually clockwise) of the sweep will climb up on the next flashing section. This will prevent the rotating/slipping outer wheel of the sweep from catching on the flashing edges.

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.









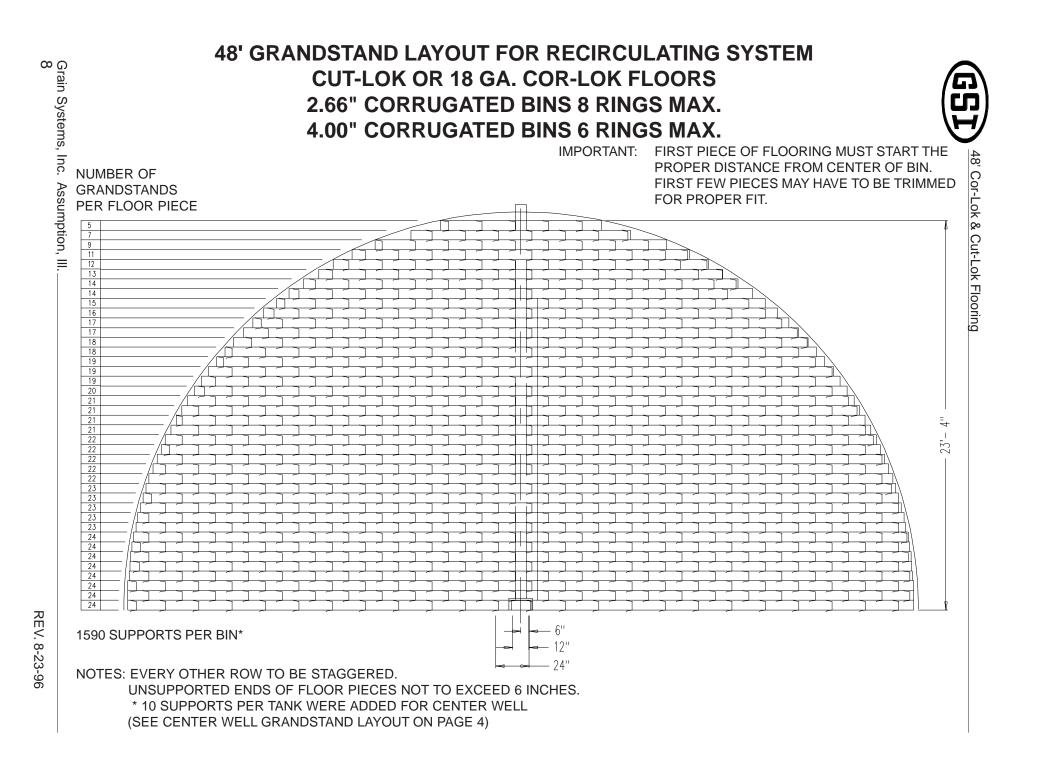
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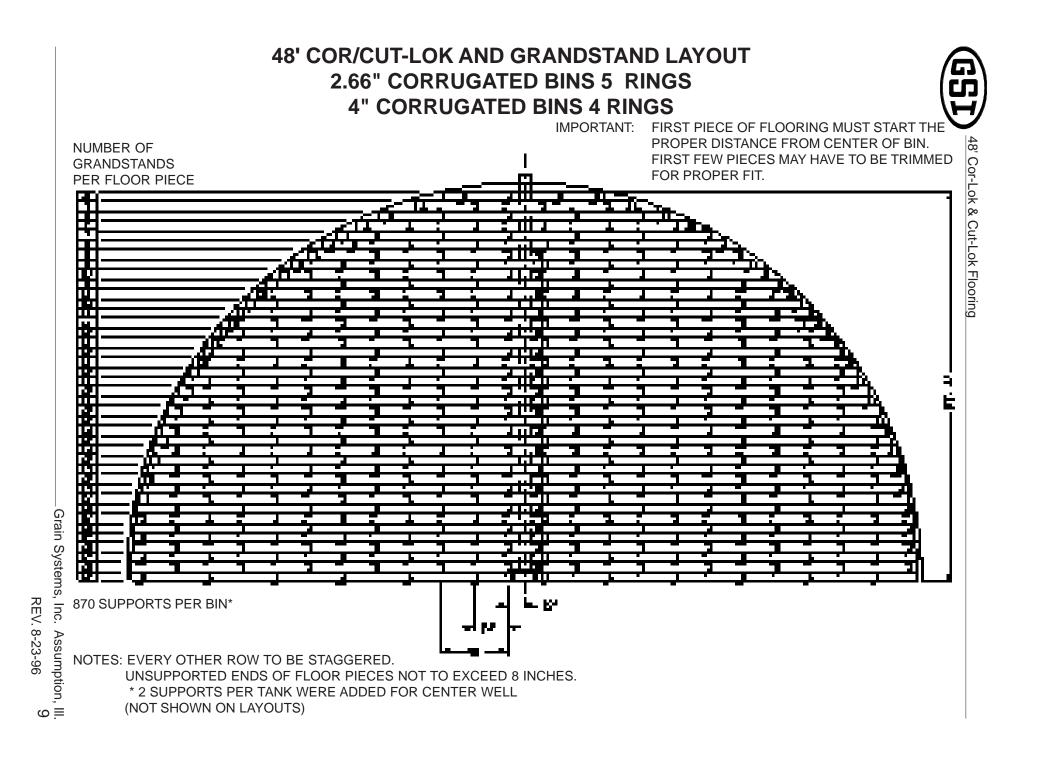
THE FOLLOWING PLANK LENGTHS START AT THE SIDEWALL AND WORK TOWARDS THE CENTER OF THE BIN. REFERENCE GRANDSTAND LAYOUT PAGES FOR FLOOR DRAWING.

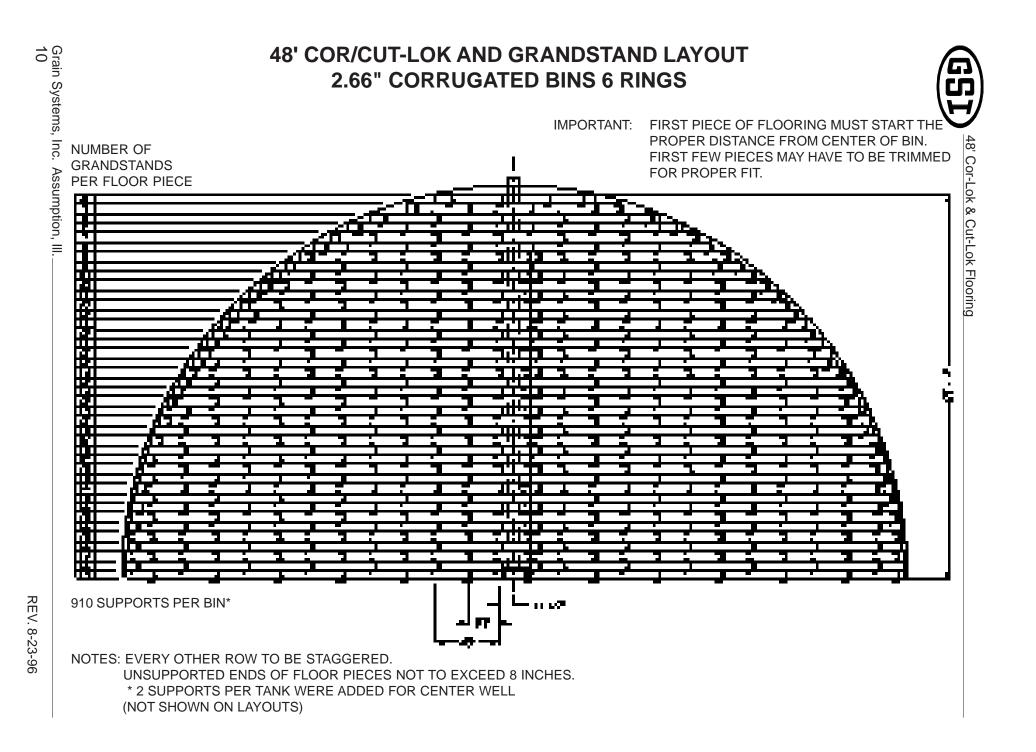
Revised Plank Lengths as of December 1, 1996

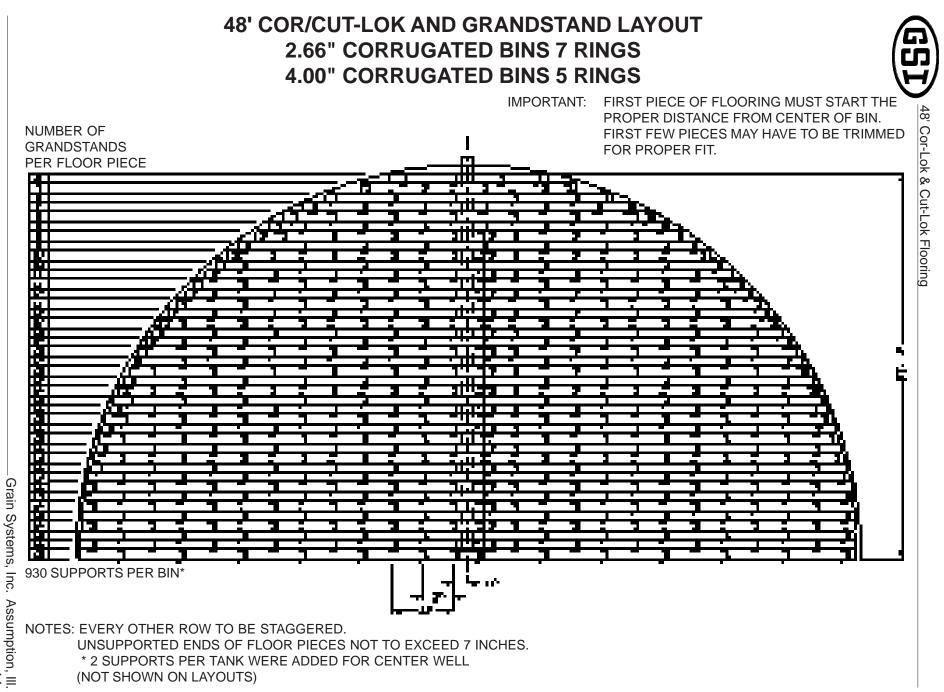
	juis as c	Decem
	9'-8"	
	13'-2"	
	17'-6"	
	20'-3"	
	22'-6"	
	24'-3"	
14'-1"		12'-0"
14'-11"		12'-11"
15'-8"		13'-8"
16'-5"		14'-5"
17'-1"		15'-1"
17'-8"		15'-8"
18'-3"		16'-3"
18'-9"		16'-9"
19'-3"		17'-3"
19'-9"		17'-9"
20'-2"		18'-2"
20'-7"		18'-7"
21'-0"		19'-0"
21'-4"		19'-4"
21'-8"		19'-8"
22'-0"		20'-0"
22'-4"		20'-4"
22'-7"		20'-7"
22'-10"		20'-10"
23'-1"		21'-1"
23'-4"		21'-4"
23'-6"		21'-6"
23'-8"		21'-8"
23'-10"		21'-10"
24'-0"		22'-0"
24'-1"		22'-1"
24'-3" 24'-4" 24'-5"		22'-3"
24'-4"		22'-3" 22'-4"
24'-5"		22'-5"
24'-5.1/2"		22'-5.1/2"
24'-6"		22'-6"
24'-7"		22'-7"
24'-7"		22'-7"
24'-7"		22'-7"

Grain Systems, Inc. Assumption, III. 7

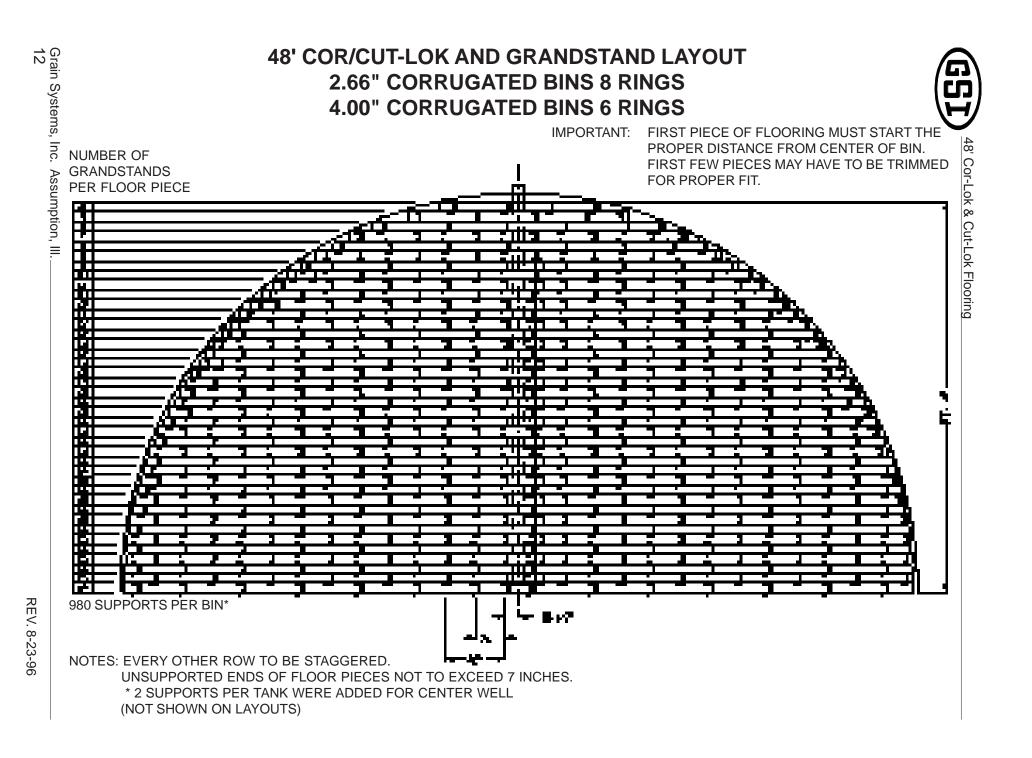


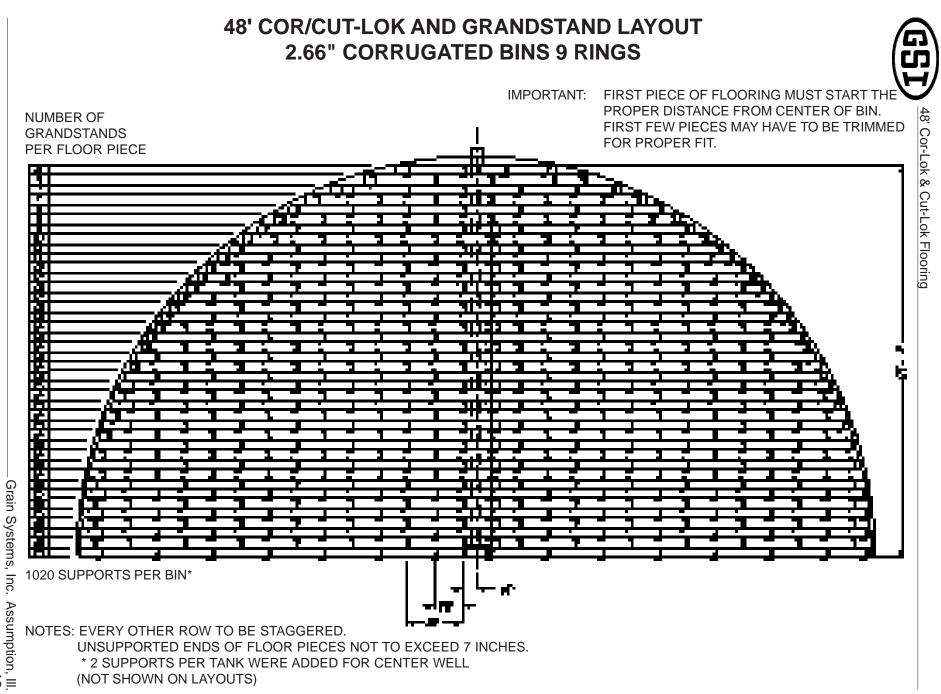




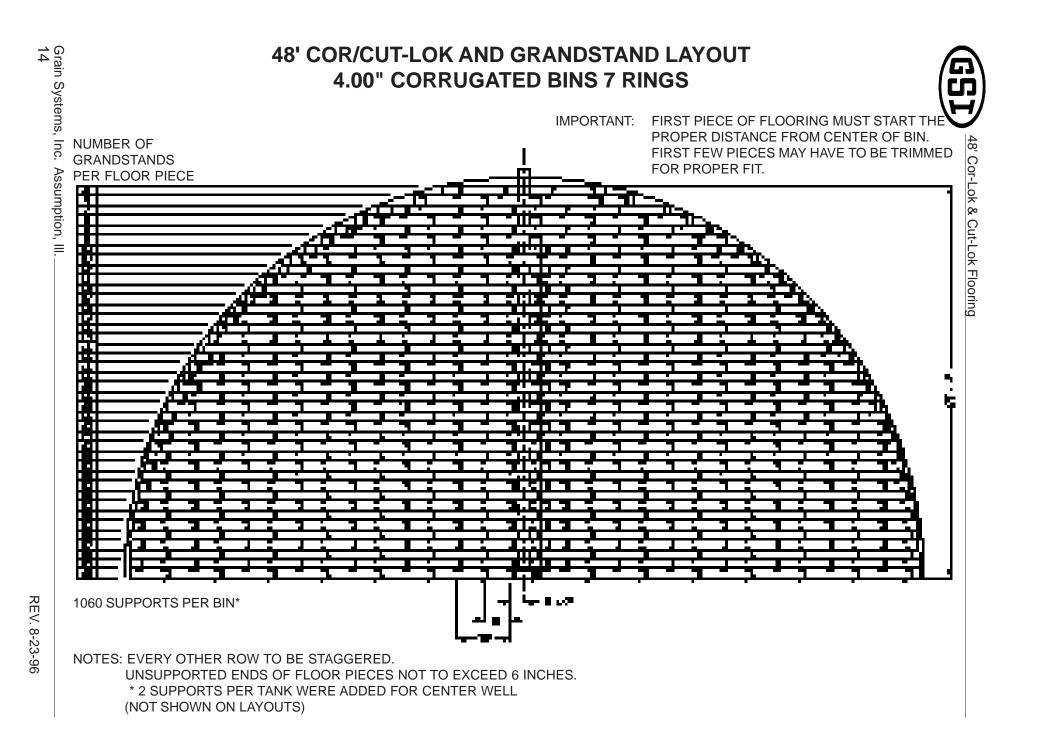


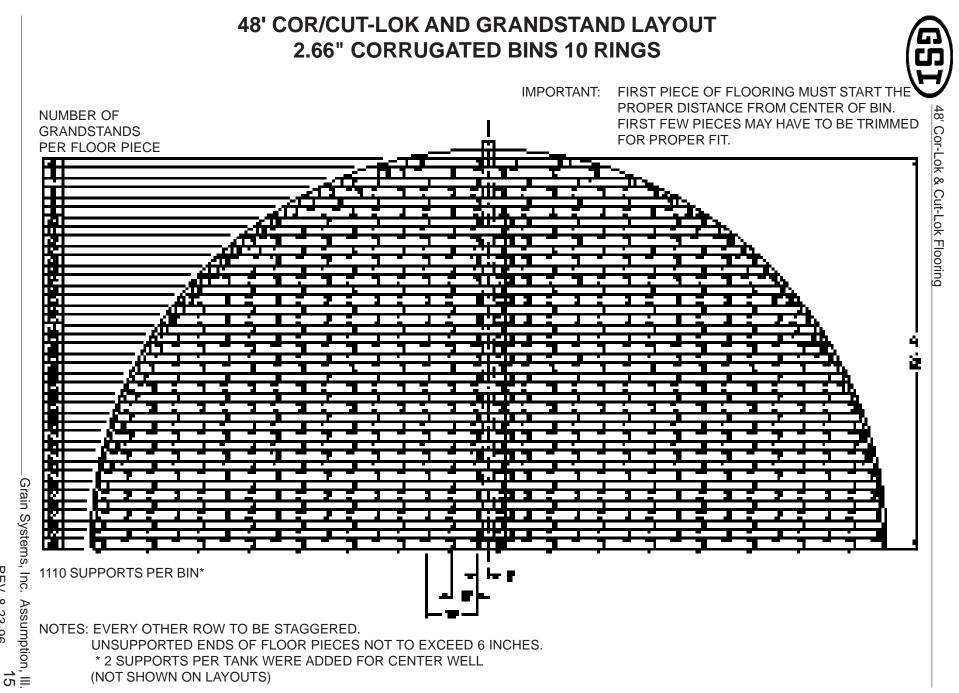
rain Systems, Inc. Assumption, III REV. 8-23-96



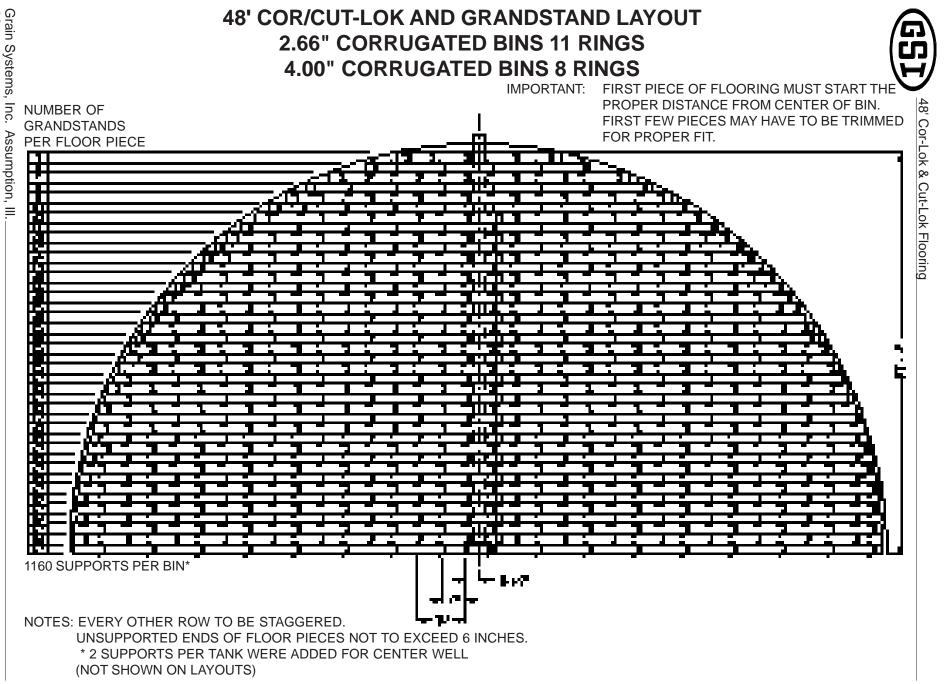


REV. 8-23-96 Assumption, III.

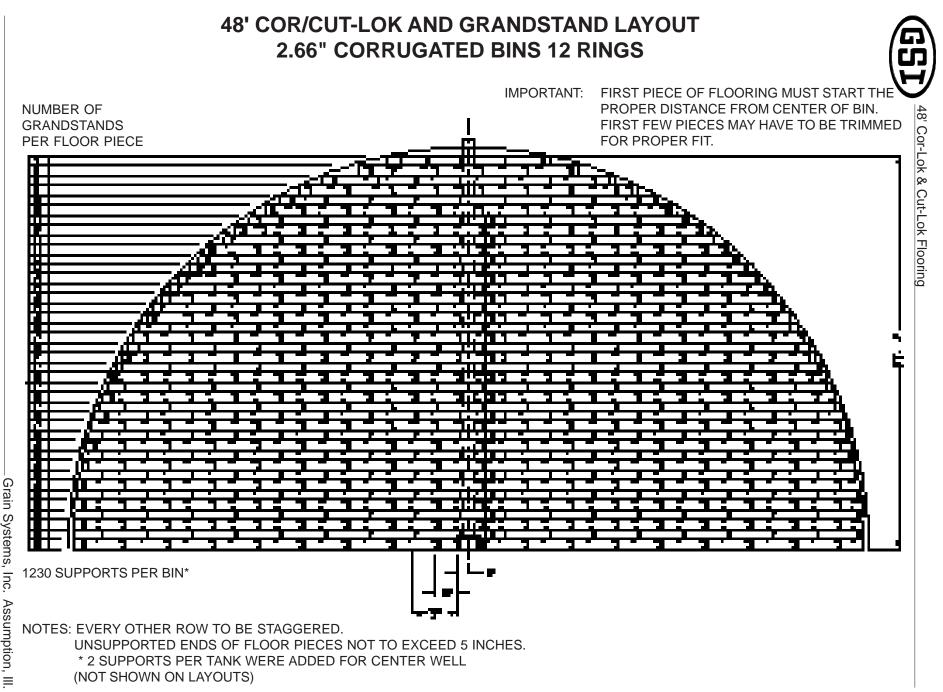




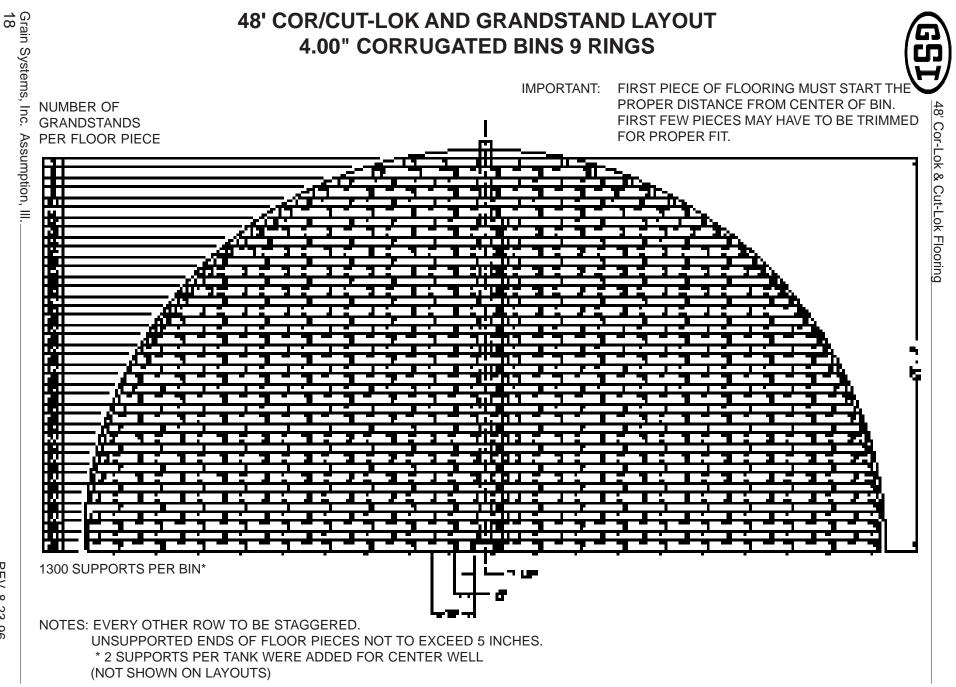
REV. 8-23-96



Grain Systems, 16



Systems, Inc. REV. 8-23-96 Assumption, III.



REV. 8-23-96



FLOOR SUPPORT REQUIREMENTS FOR BINS OVER 33' WALL HEIGHT

Rings	12	15	18	21	24	27	30	33	GATION 36	42	48	60	72	75	78	90	105
lings			YLES O			21	00	00	00	72	-10	00	12	10	70	50	100
			R SHADI	-													
3	54/27																
	60								ALL FL	OOR ST	YLES O	K FOR E	SIN SIZE	S			
4	54/27		SUPPO	-					IN UPPI	ER SHAI	DED ARI	EA.					
_	60		SUPPO														
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					
6	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			yles Lis	t	
7	60 54/27	90 52/26	120 48/24	160 50/25	210 48/24	270 48/24	330 48/24	390 46/23	490 44/22	690 44/22	910 44/22	1430 42/21		In Orde	r of ing Stre	nath	
'	54/27 60	52/26	40/24	50/25 170	46/24	40/24	40/24	40/23	44/22 520	44/22	44/22 930	1480			COR-LO		
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			COR-LO		
0	70/24	100	140	180	230	280	360	430	520	750	980	1540		CUT-LC			
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	560	790	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	1				
	80	110	140	190	250	310	400	480	600	820	1110	1780				-LOK IF	
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				IN MIDD	LE
10	80	110	140	190	260	320	420	520	620	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/
12	80	120	150	200	280	340	440	550	660	950	1230	1990	3300	3580	3870	5520	81
13	38/19	38/19	38/19	36/18	36/18 290	36/18	34/17 470	32/16 600	32/16 710	30/15	28/14	26/13	24/12 3540	24/12 3840	24/12 4150	22/11 5960	20/
14	80 34/17	120 34/17	170 34/17	220 34/17	290 34/17	360 34/17	32/16	30/15	30/15	1010 28/14	1390 26/13	2300 24/12	22/11	22/11	4150 22/11	20/10	88 18/
14	34/17 90	130	34/17 180	230	34/17	34/17	500	630	30/15 750		1480	24/12	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	2400	22/11	20/10	20/10	18/9	18/
10	100	140	190	250	320	400	520	670	790	1140	1590	2650	3820	4500	4870	7120	96
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/
-	100	150	210	260	360	450	550	670	840	1220	1710	2880	4150	4500	5340	7120	107
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/
	110	160	220	290	380	480	590	710	900	1320	1860	2880	4550	4950	5340	7910	107
18	26/13	26/13	24/12	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/
	110	170	240	310	400	510	630	760	900	1320	1860	3170	5060	5500	5940	7910	121
19		24/12	24/12	22/11	22/11	22/11	22/11	22/11	22/11	20/10	18/9	16/8	16/8	16/8	16/8	14/7	14/
00		180	240	340	440	550	680	820	970	1430	2040	3520	5060	5500	5940	8920	121
20		22/11	22/11	22/11	22/11	22/11	20/10	20/10	20/10	20/10	18/9	16/8	14/7	14/7	14/7	14/7	12/
21	CUT-LC	190	260	340	440	550	740	890	1060	1430	2040	3520	5710	6200	6710	8920	139
21	Dia. and		T	20/10 370	20/10 470	20/10 600	20/10 740	20/10 890	20/10 1060	18/9 1570	16/8 2270	14/7 3970	14/7 5710	14/7 6200	14/7 6710	12/6 10280	12 139
22	Rings is		om	18/9	470 18/9	18/9	18/9	18/9	18/9	18/9	16/8	14/7	12/6	12/6	12/6	10260	100
22	shaded		0111	400	520	660	810	970	1160	1570	2270	3970	6580	7140	7730	10280	
23	0.1.4.0.4			18/9	18/9	16/8	16/8	16/8	16/8	16/8	16/8	14/7	12/6	12/6	12/6		
-				400	520		900					3970	6580	7140	7730		
24				16/8	16/8	16/8	16/8	16/8	16/8	16/8	14/7	12/6	12/6	12/6			
				450	580	730	900	1080	1290	1740	2560	4570	6580	7140			
25				14/7	14/7	14/7	14/7	14/7	14/7	14/7	14/7	12/6			-		
00				500	650		1010		1450		2560		Ŭ,	ted floors			
26						14/7	14/7	14/7	14/7	14/7	14/7	12/6		I support			
27						820	1010	1220	1450	1960	2560			dia. and		-	
27						12/6	12/6	12/6	12/6	12/6	12/6	12/6	is in bot	tom unsł	aded are	eas.	
28						950	1160		1670	2260	2950	4570	1				
20						12/6	12/6	12/6	12/6	12/6 2260	12/6						
29						950 12/6	1160 12/6	1410 12/6	1670 12/6	SUPPO							
20						950				SUPPO	-						
30	* 14/1		0400.0		400.0 (0)					listed qu							



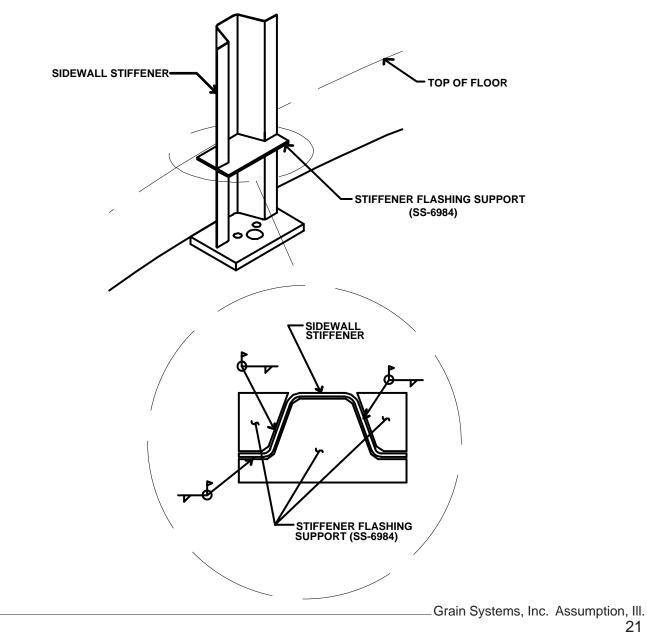
FLOOR SUPPORT REQUIREMENTS FOR BINS OVER 33' WALL HEIGHT

			FULL FL	OOR SU			ED FOR		YPE FLC	ORING		
					4.0	0" CORF	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	RT SPACI	NG			
	60	80	120	160	200		SUPPOR					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		390	470	690		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		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
1	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
	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
40	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
44			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	
10			190	250	320	400		630	790	1140		CUT-LOK only if Dia.
12			28/14	28/14	28/14	28/14	28/14	28/14	26/13	24/12		and No. of Rings is in
			210	280	360	450	550	670	840	1220	1710	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).

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).
- STIFFENER FLASHING SUPPORTS (SS-6984) MUST BE ORDERED SEPARATELY FROM THE 5). 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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