



PNEG-214

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



12'-18' DIAMETER BINS



PNEG-214

REVISED: 06-27-05



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

12'-18' Cor-Lok & Cut-Lok Flooring

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SEE PAGES 24-25 FOR 20 GA. FLOOR SUPPORT REQUIREMENTS AND PAGES 33-34 FOR 18 GA. FLOOR SUPPORT REQUIREMENTS.

SAFETY GUIDELINES

This manual contains information that is important for you, the owner/operator, to know and understand. This information relates to protecting **personal safety** and **preventing equipment problems**. It is the responsibility of the owner/operator to inform anyone operating or working in the area of this equipment of these safety guidelines. To help you recognize this information, we use the symbols that are defined below.

Please read the manual and pay attention to these sections. Failure to read this manual and its safety instructions is a misuse of the equipment and may lead to serious injury or death.



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.



DANGER indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.



WARNING indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.



CAUTION indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.

CAUTION

CAUTION used without the safety alert symbol indicates a potentially hazardous situation which, if not avoided, may result in property damage.

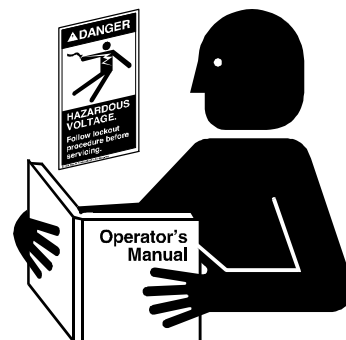
NOTE

NOTE indicates information about the equipment that you should pay special attention to.

FOLLOW SAFETY INSTRUCTIONS

Carefully read all safety messages in this manual and on your machine safety signs. Keep signs in good condition. Replace missing or damaged safety signs. Be sure new equipment components and repair parts include the current safety signs. Replacement safety signs are available from the manufacturer.

If you do not understand any part of this manual and need assistance, contact your dealer.



ROTATING FLIGHTING

This bin may be equipped with grain augers that can kill or dismember.

Keep clear of all augers and bin wells.

Never enter a bin unless all power is disconnected and locked out.

Failure to heed these warnings will result in serious injury or death.

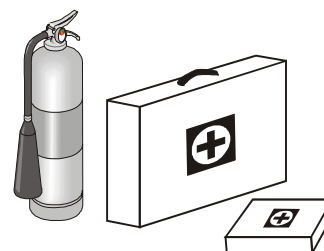


PREPARE FOR EMERGENCIES

Be prepared if fire starts.

Keep a first aid kit and fire extinguisher handy.

Keep emergency numbers for doctors, ambulance service, hospital, and fire department near your telephone.



WEAR PROTECTIVE CLOTHING

Wear close fitting clothing and safety equipment appropriate to the job.

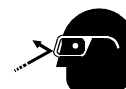
Safety glasses should be worn at all times to protect eyes from debris.

Wear gloves to protect your hands from sharp edges on plastic or steel parts.

A respirator may be needed to help prevent breathing potentially toxic fumes and dust.

Wear hard hat and steel toe boots to help protect your head and toes from falling debris.

Eye Protection



Gloves



Steel Toe Boots



Respirator

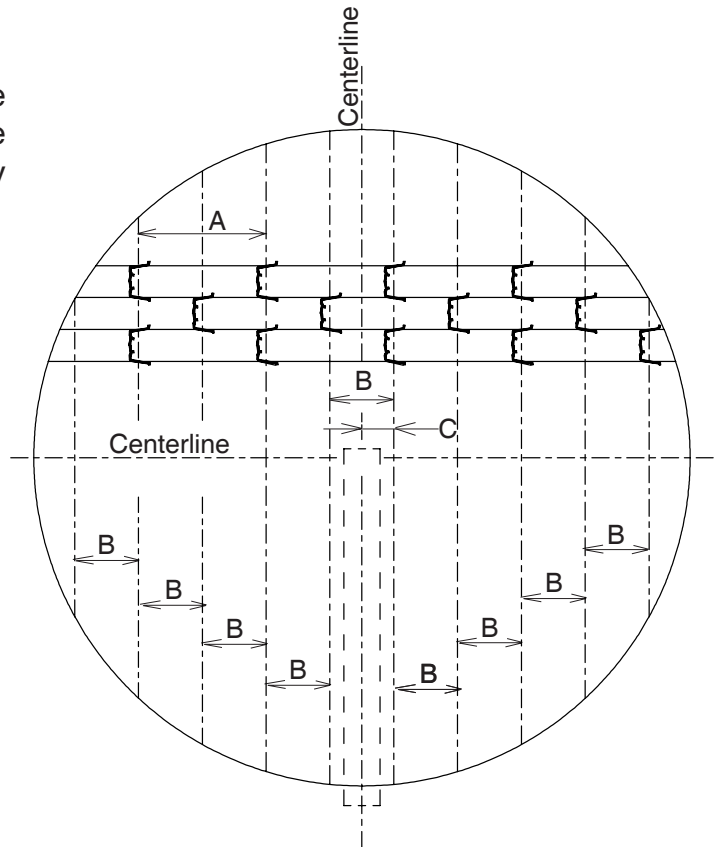
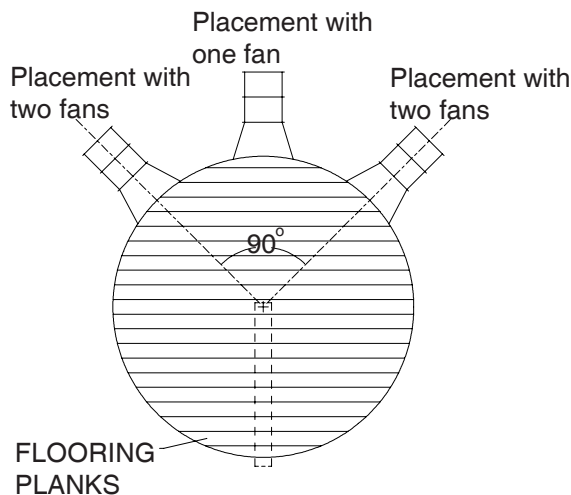


Hard Hat



FAN PLACEMENT DIAGRAM

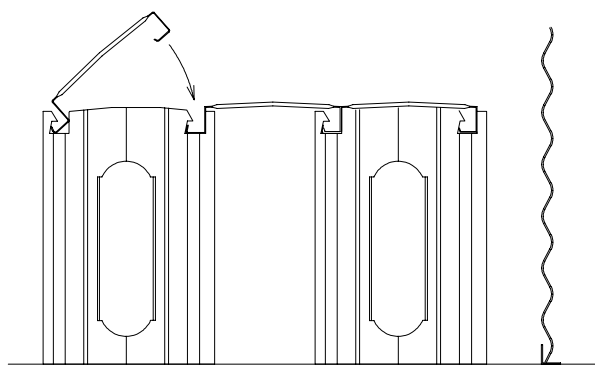
For most uniform air flow the fan(s) should be located as shown below with respect to the unloading tube. The floor planks should lay perpendicular to the unloading tube.



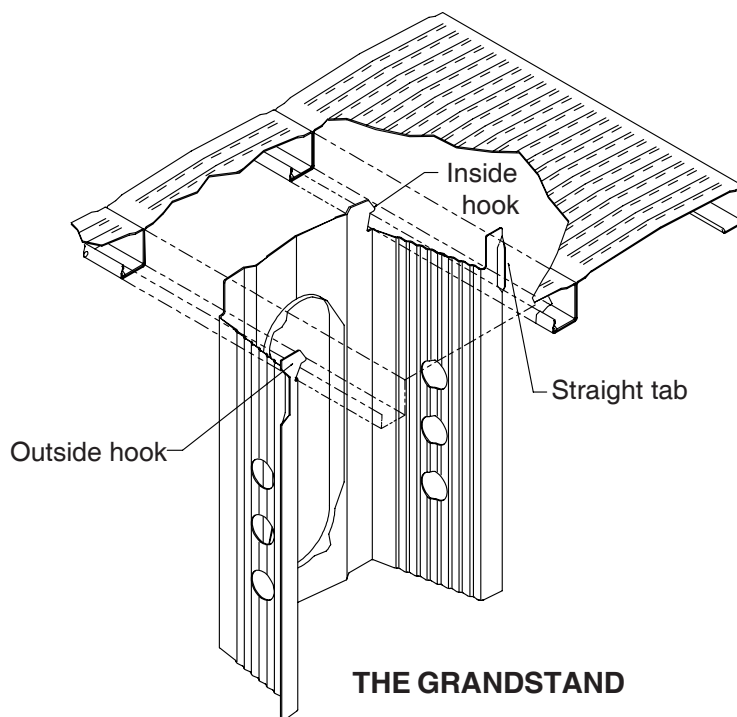
GRAIN SYSTEMS RECOMMENDED METHOD FOR FULL FLOOR INSTALLATION

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 pages #24 & #25 for 20 Ga. and pages #33 & #34 for 18 Ga. **Grandstands are manufactured in both 20 gage and 18 gage material. The grandstand will be marked with an "18" or "20" stamp to indicate the grandstand gage.**

1. Determine gage of grandstand on site. If an improper gage is present, please contact your dealer or GSI.
2. 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.
3. 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.
4. 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.



CORRECT ASSEMBLY METHOD



THE GRANDSTAND

NOTE: Reference the following page to determine the gage of the grandstands.

IMPORTANT: First piece of flooring must start the proper distance from centerline of bin. Refer to floor layout of correct bin diameter. First piece may have to be trimmed for proper distance.

5. When completed there should be a set of parallel lines "B" dimensions apart.
6. 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.)
7. **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.
8. Continue this procedure for the rest of the floor.

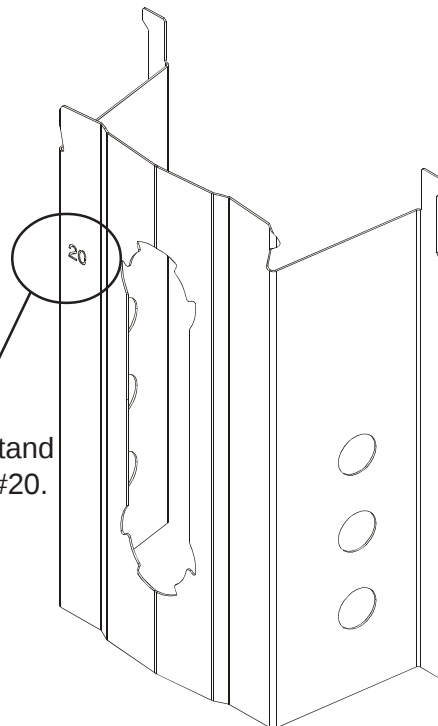
NOTE: Whenever there is more than B/3 inches of plank unsupported beside the bin wall there should be a support on that plank or a support on each of planks adjacent such that no more than B/3 inches is unsupported.

GRANDSTAND IDENTIFICATION

20 Gage Grandstand Identification

20 GAGE		
GAGE	Plenum Clearance	Grandstand Color Code
20	11-7/8"	Blue
20	14-3/8"	White
20	17-3/16"	Yellow

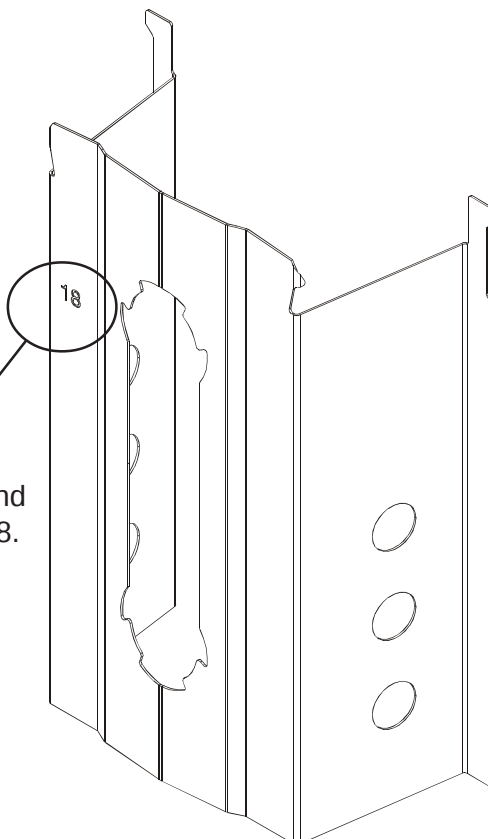
20 Gage Grandstand
Stamped with a #20.



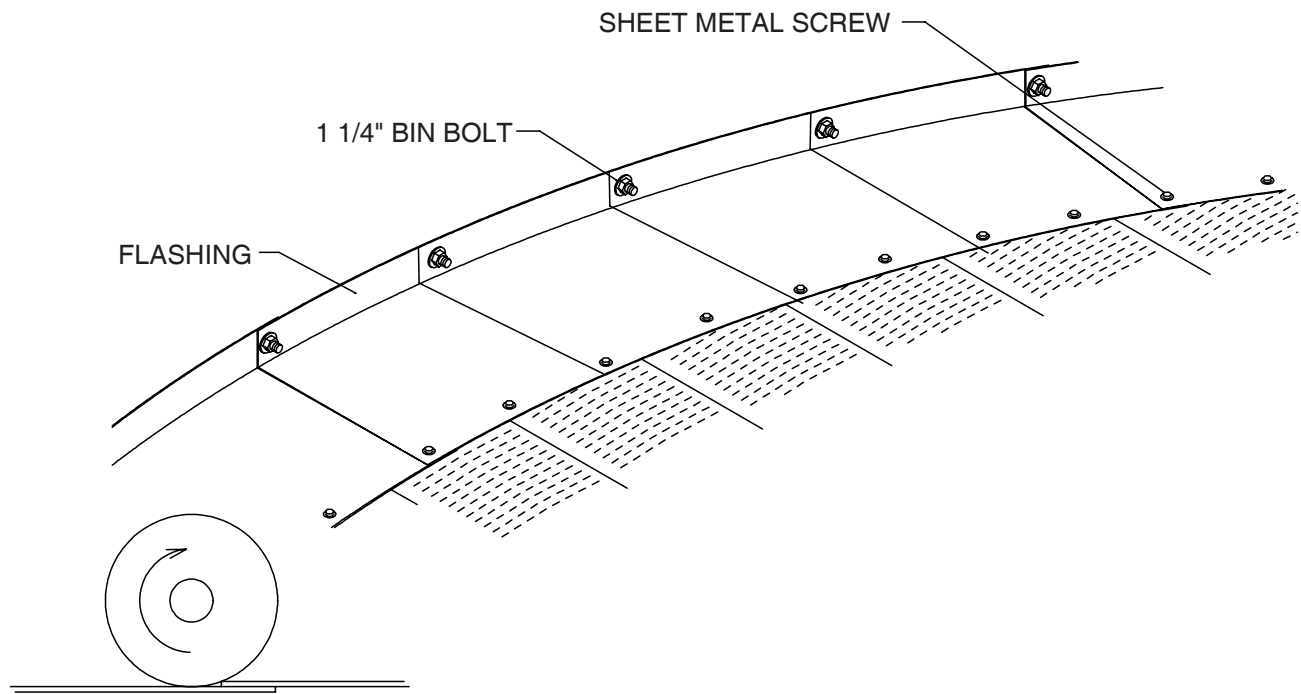
18 Gage Grandstand Identification

18 GAGE		
GAGE	Plenum Clearance	Grandstand Color Code
18	11-7/8"	Green
18	14-3/8"	Black
18	17-3/16"	Purple

18 Gage Grandstand
Stamped with a #18.



FLASHING INSTALLATION

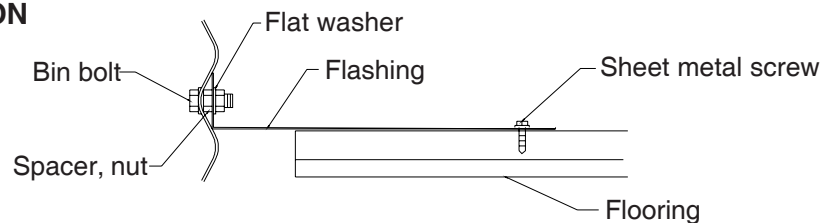


GRAIN SYSTEMS FORMED FLASHING INSTALLATION

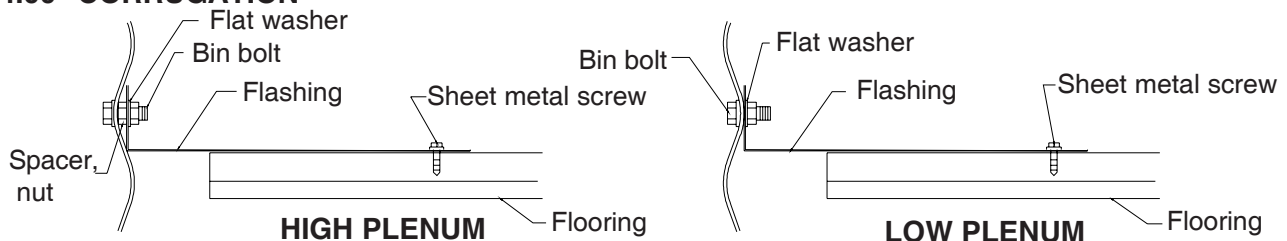
If bin sweep auger is to be used, overlap flashing such that rotation (usually clockwise) of the sweep will climb up on the next flashing section. This will prevent the rotating/slipping outer wheel of the sweep from catching on the flashing edges. ***All GSI power sweeps and carry in sweeps manufactured after April 2002 run clockwise.***

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.

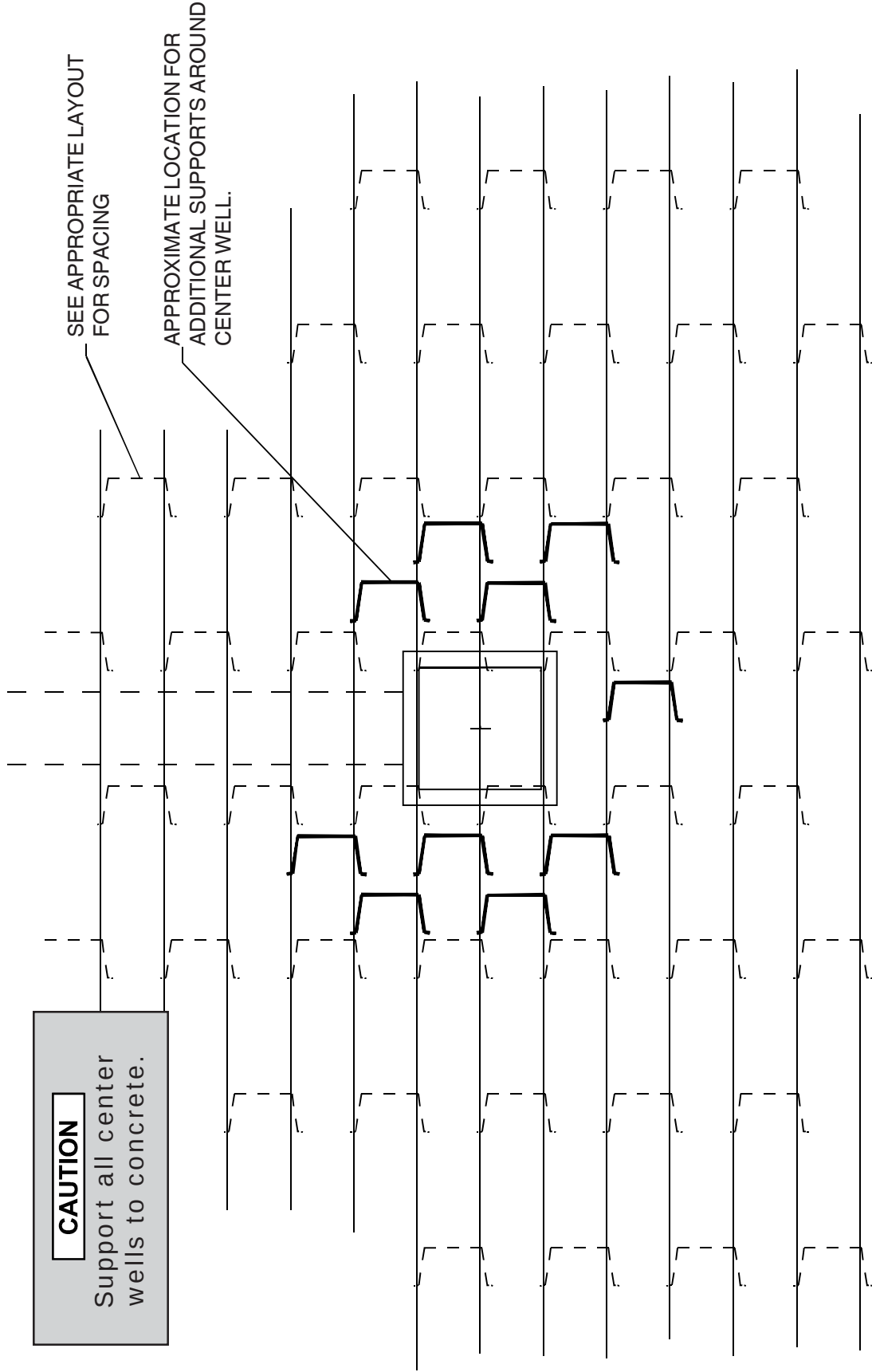
2.66" CORRUGATION



4.00" CORRUGATION

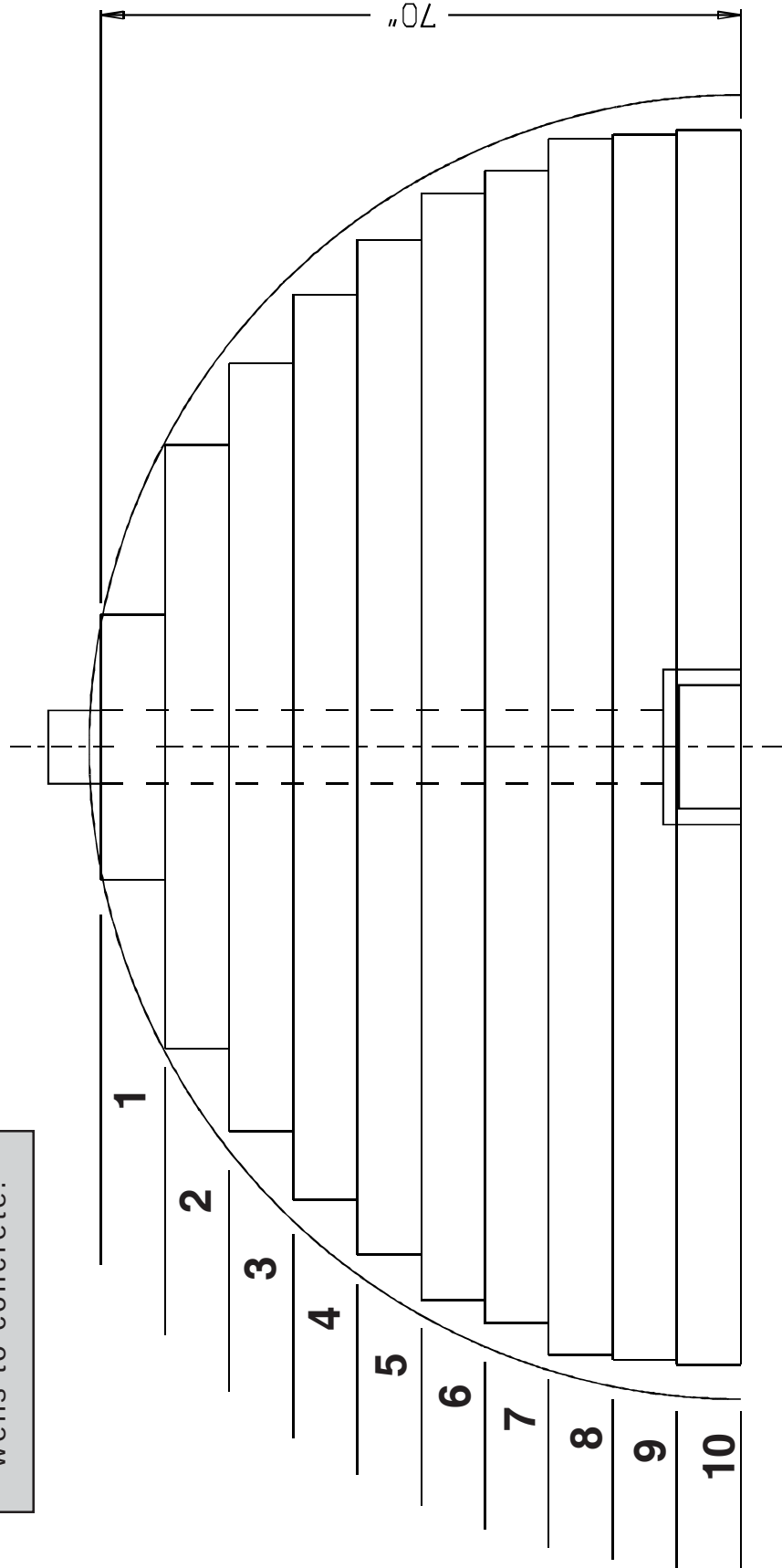


**CENTER WELL GRANDSTAND LAYOUT
FOR RECIRCULATING SYSTEM**



12' CUT-LOK/COR-LOK PLANK ORDER

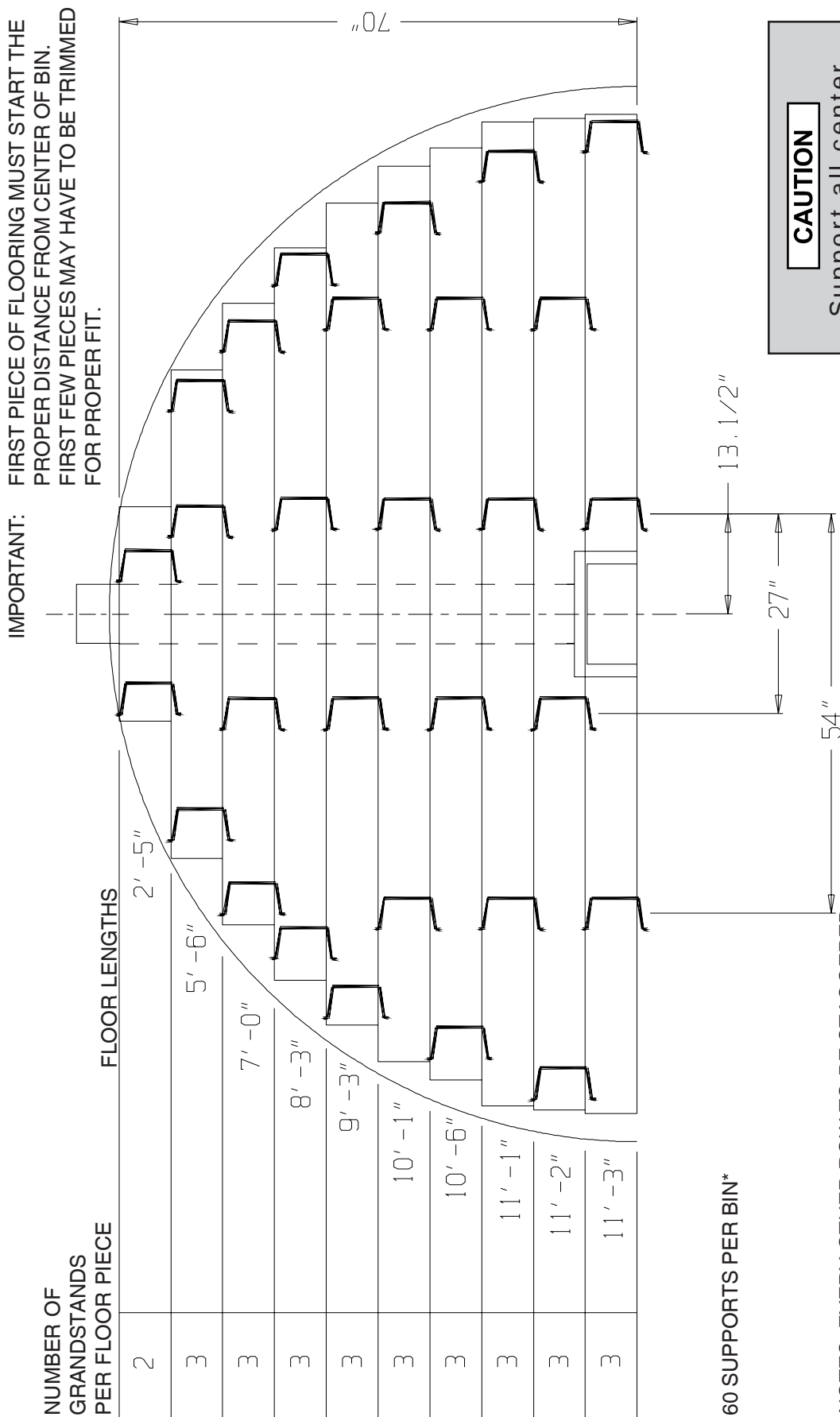
CAUTION
Support all center
wells to concrete.



12' COR/CUT-LOK AND 20 GAGE GRANDSTAND LAYOUT

2.66" CORRUGATED BINS 3-7 RINGS

4.00" CORRUGATED BINS 3-5 RINGS



CAUTION

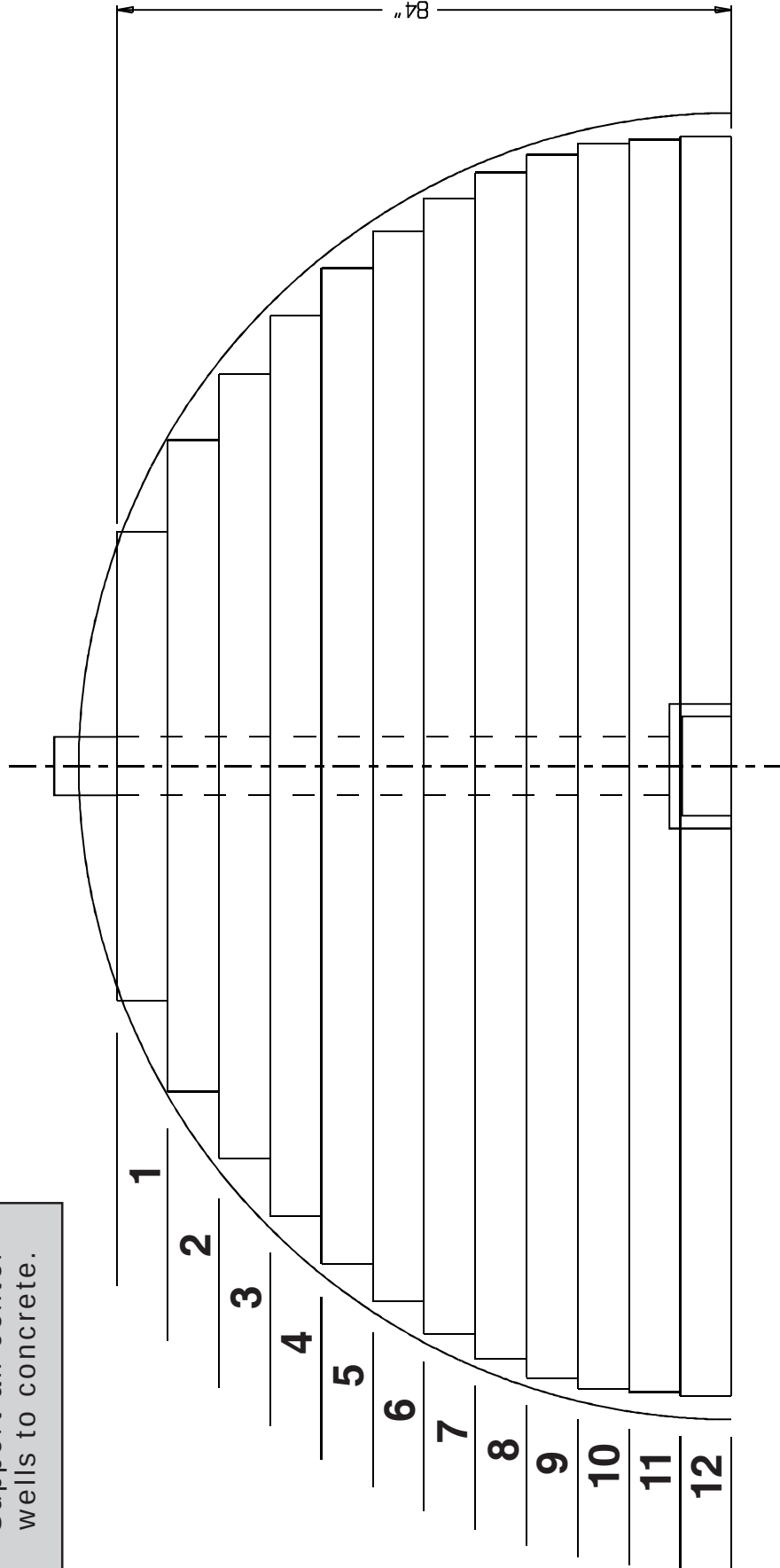
Support all center wells to concrete.

NOTES: EVERY OTHER ROW TO BE STAGGERED.
UNSUPPORTED ENDS OF FLOOR PIECES NOT TO EXCEED 9 INCHES.
* 2 SUPPORTS PER TANK WERE ADDED FOR CENTER WELL (NOT SHOWN ON LAYOUTS)

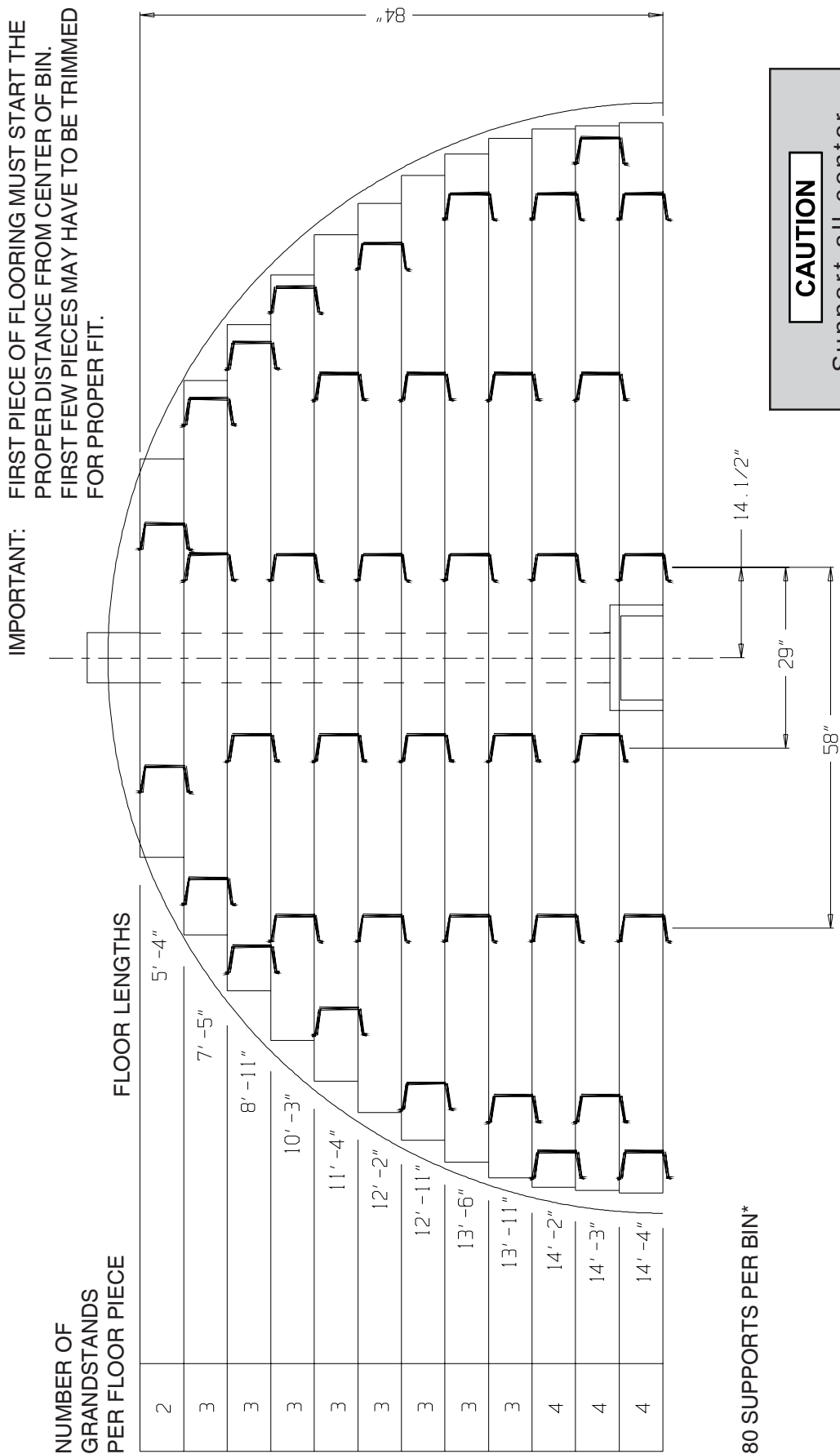
15' CUT-LOK/COR-LOK PLANK ORDER

CAUTION

Support all center wells to concrete.



15' COR/CUT-LOK AND 20 GAGE GRANDSTAND LAYOUT
2.66" CORRUGATED BINS 4 & 5 RINGS
4.00" CORRUGATED BINS 3 RINGS



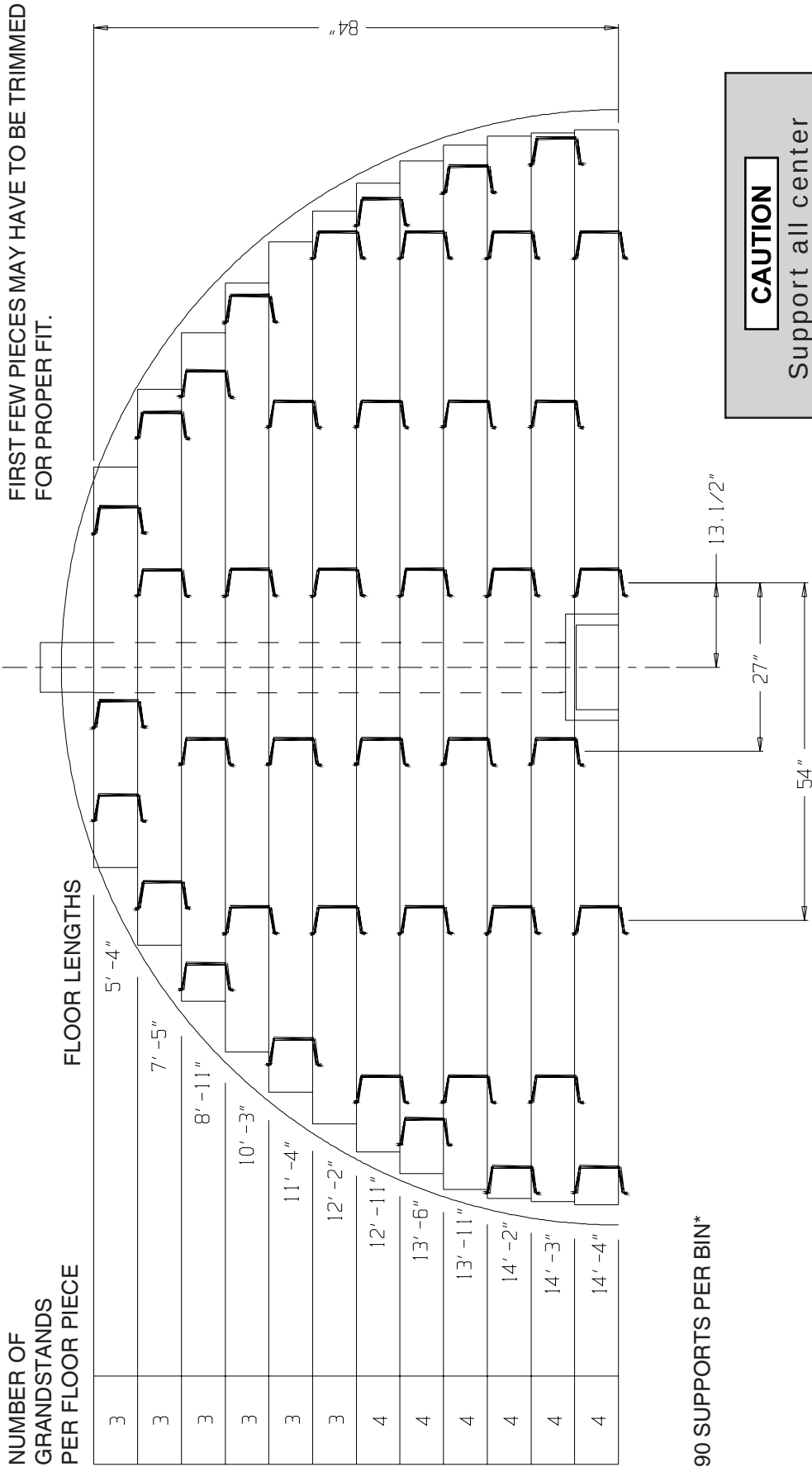
NOTES: EVERY OTHER ROW TO BE STAGGERED.
UNSUPPORTED ENDS OF FLOOR PIECES NOT TO EXCEED 9 INCHES.
* 2 SUPPORTS PER TANK WERE ADDED FOR CENTER WELL (NOT SHOWN ON LAYOUTS)

15' COR/CUT-LOK AND 20 GAGE GRANDSTAND LAYOUT

2.66" CORRUGATED BINS 6 RINGS

4.00" CORRUGATED BINS 4 RINGS

IMPORTANT: FIRST PIECE OF FLOORING MUST START THE PROPER DISTANCE FROM CENTER OF BIN.
FIRST FEW PIECES MAY HAVE TO BE TRIMMED FOR PROPER FIT.



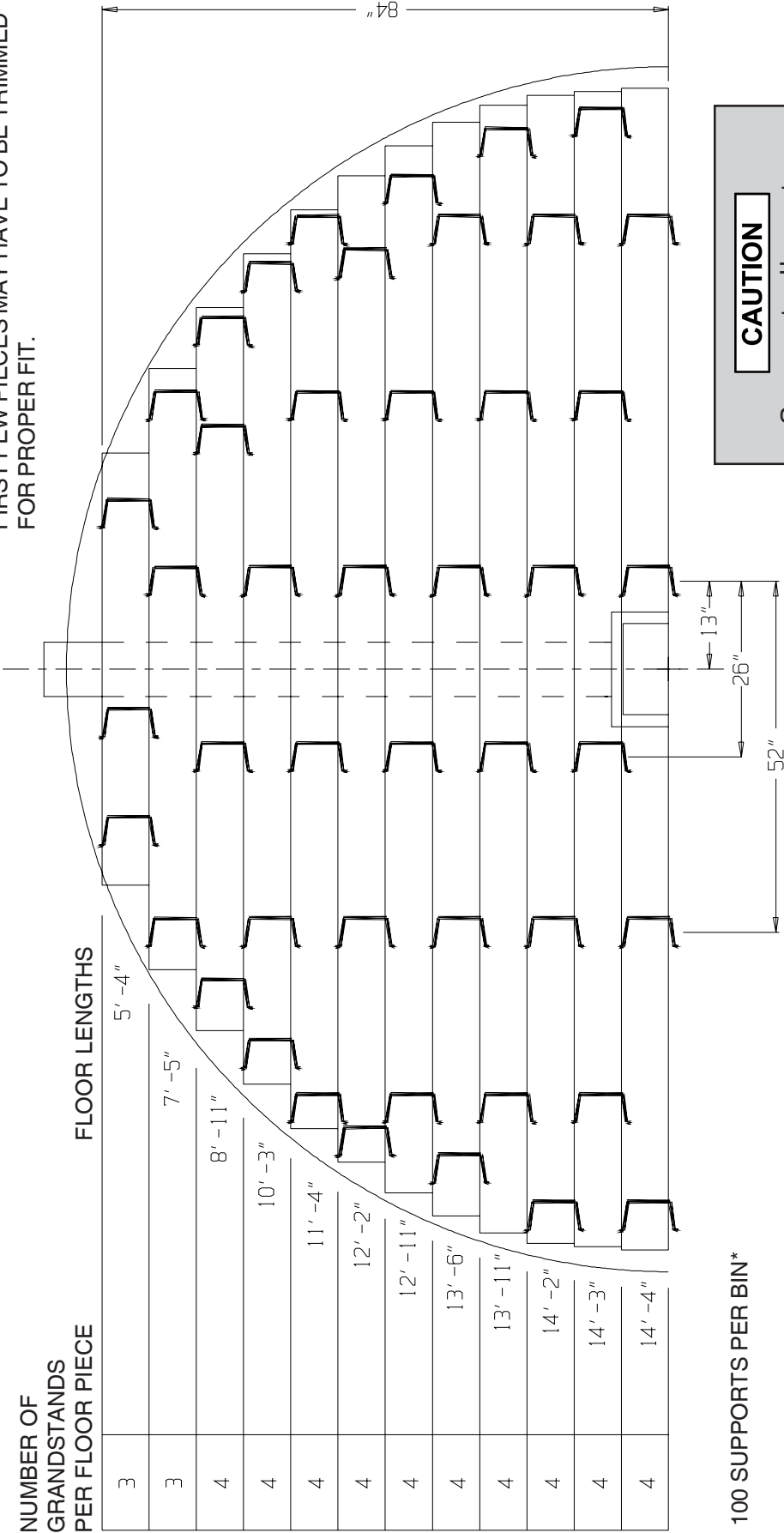
NOTES: EVERY OTHER ROW TO BE STAGGERED.
UNSUPPORTED ENDS OF FLOOR PIECES NOT TO EXCEED 9 INCHES.
* 2 SUPPORTS PER TANK WERE ADDED FOR CENTER WELL
(NOT SHOWN ON LAYOUTS)

15' COR/CUT-LOK AND 20 GAGE GRANDSTAND LAYOUT

2.66" CORRUGATED BINS 7 RINGS

4.00" CORRUGATED BINS 5 RINGS

IMPORTANT: FIRST PIECE OF FLOORING MUST START THE PROPER DISTANCE FROM CENTER OF BIN.
FIRST FEW PIECES MAY HAVE TO BE TRIMMED FOR PROPER FIT.

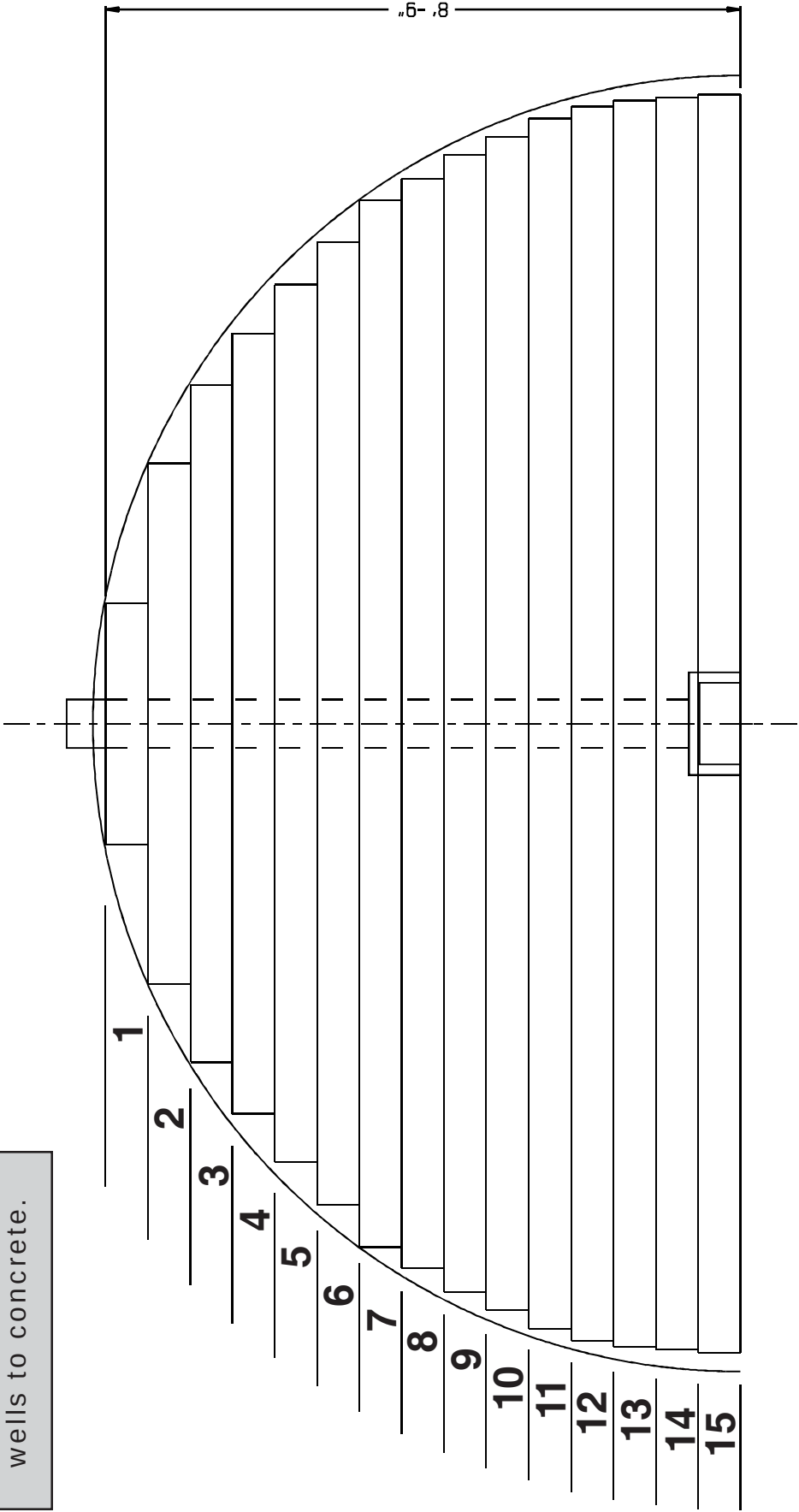


CAUTION
Support all center wells to concrete.

NOTES: EVERY OTHER ROW TO BE STAGGERED.
UNSUPPORTED ENDS OF FLOOR PIECES NOT TO EXCEED 9 INCHES.
* 2 SUPPORTS PER TANK WERE ADDED FOR CENTER WELL (NOT SHOWN ON LAYOUTS)

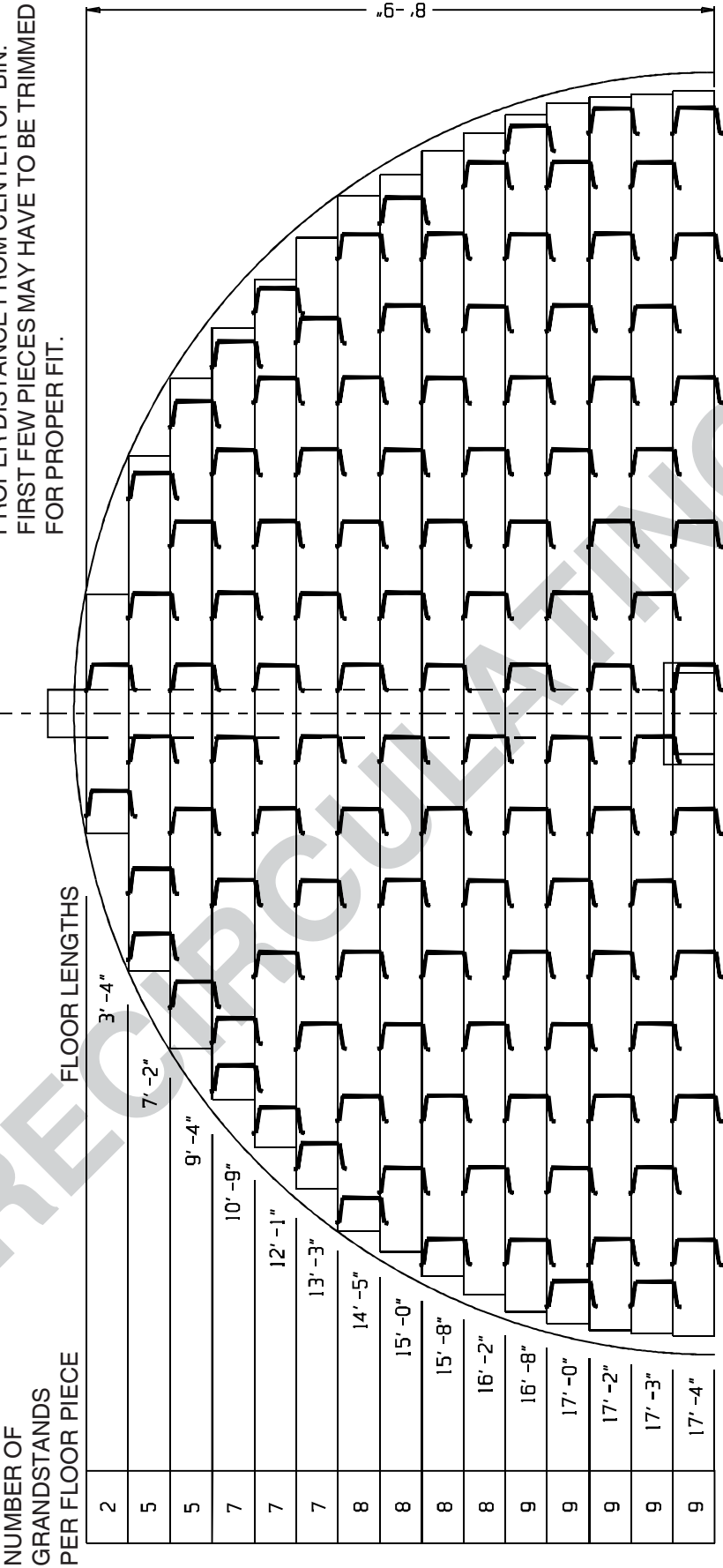
18' CUT-LOK/COR-LOK PLANK ORDER

CAUTION
Support all center
wells to concrete.



18' 20 GAGE GRANDSTAND LAYOUT FOR RECIRCULATING SYSTEM
CUT-LOK OR 18 GA. COR-LOK FLOORS
2.66" CORRUGATED BINS 8 RINGS MAX.
4.00" CORRUGATED BINS 6 RINGS MAX.

IMPORTANT: FIRST PIECE OF FLOORING MUST START THE PROPER DISTANCE FROM CENTER OF BIN.
FIRST FEW PIECES MAY HAVE TO BE TRIMMED FOR PROPER FIT.



240 SUPPORTS PER BIN*

CAUTION
Support all center wells to concrete.

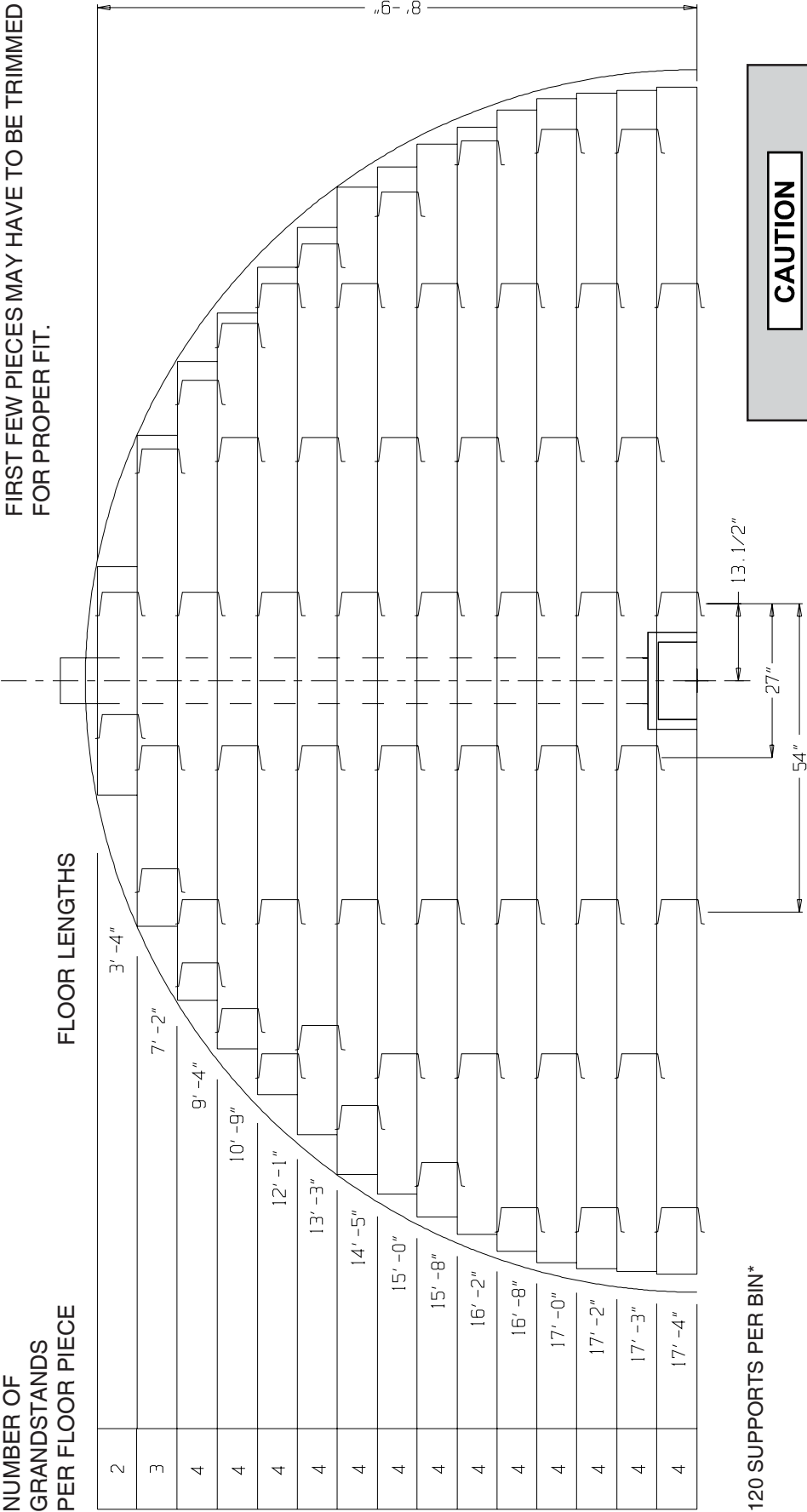
NOTES: EVERY OTHER ROW TO BE STAGGERED.
UNSUPPORTED ENDS OF FLOOR PIECES NOT TO EXCEED 6 INCHES.
* 2 SUPPORTS PER TANK WERE ADDED FOR CENTER WELL (NOT SHOWN ON LAYOUTS)

18' COR/CUT-LOK AND 20 GAGE GRANDSTAND LAYOUT

2.66" CORRUGATED BINS 5 & 6 RINGS

4.00" CORRUGATED BINS 3 & 4 RINGS

IMPORTANT: FIRST PIECE OF FLOORING MUST START THE PROPER DISTANCE FROM CENTER OF BIN. FIRST FEW PIECES MAY HAVE TO BE TRIMMED FOR PROPER FIT.

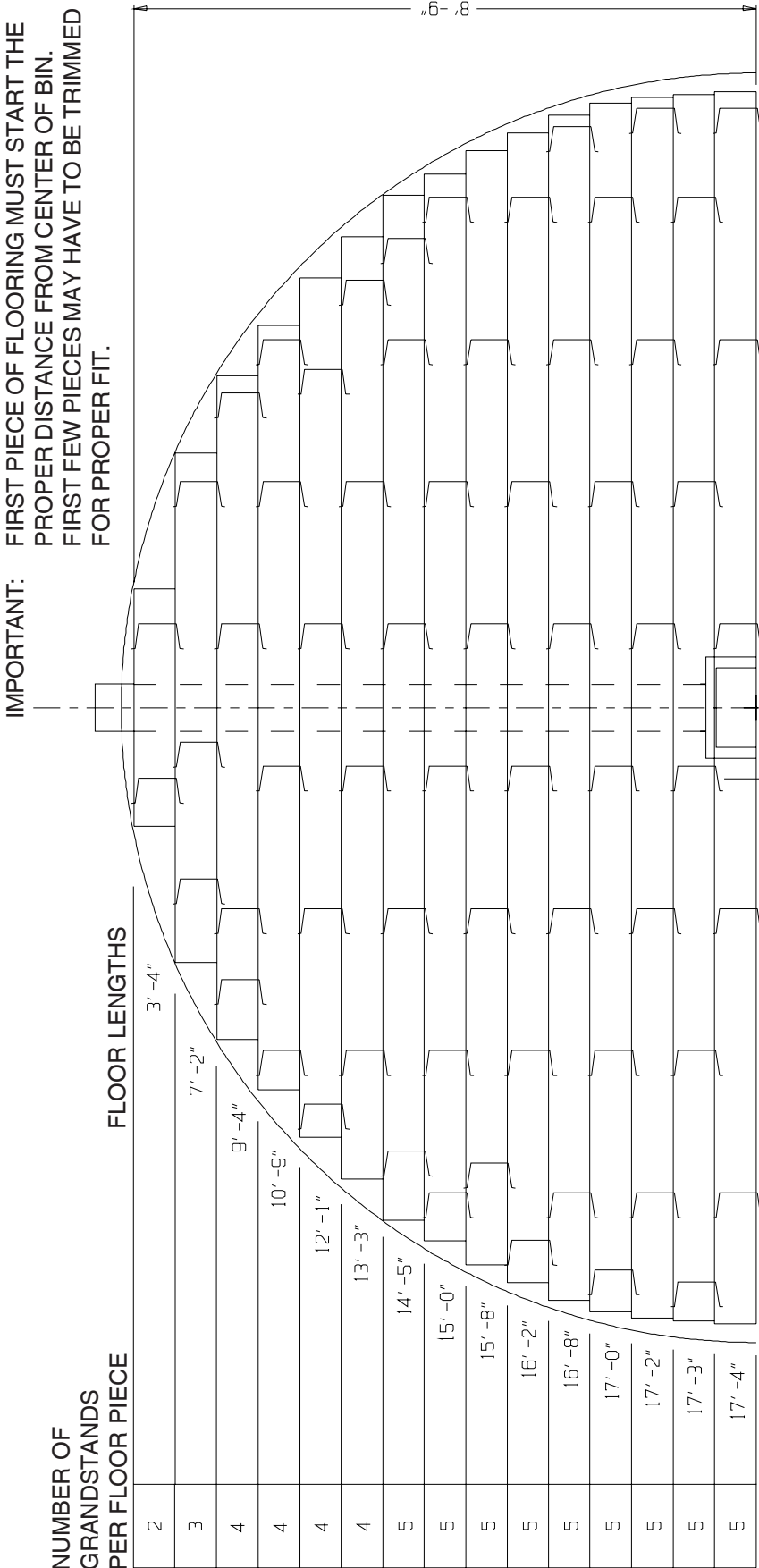


NOTES: EVERY OTHER ROW TO BE STAGGERED.
UNSUPPORTED ENDS OF FLOOR PIECES NOT TO EXCEED 9 INCHES.
* 2 SUPPORTS PER TANK WERE ADDED FOR CENTER WELL (NOT SHOWN ON LAYOUTS)

18' COR/CUT-LOK AND 20 GAGE GRANDSTAND LAYOUT

2.66" CORRUGATED BINS 7 & 8 RINGS

4.00" CORRUGATED BINS 5 & 6 RINGS



CAUTION
Support all center wells to concrete.

140 SUPPORTS PER BIN*

12"
24"
48"

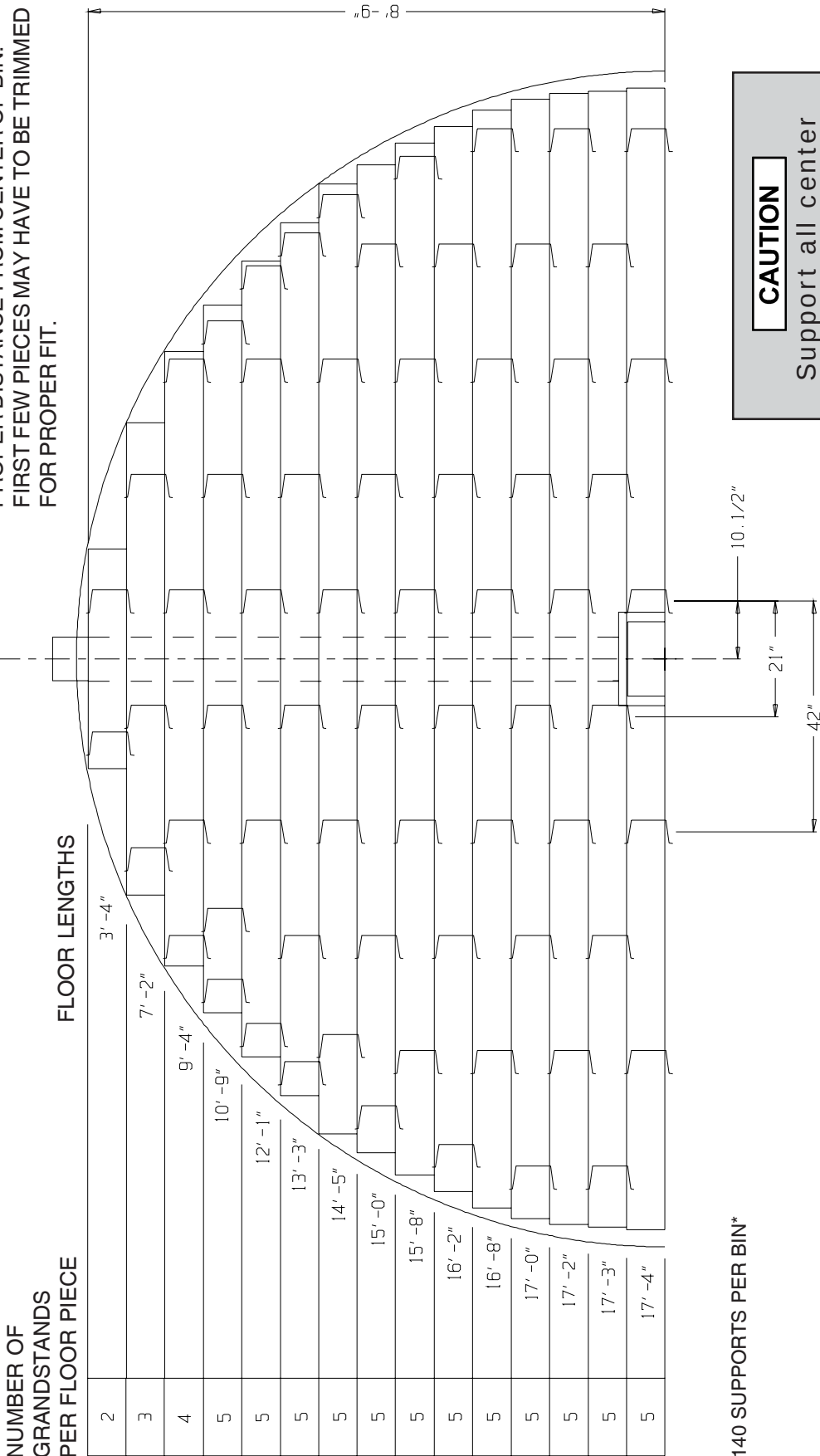
NOTES: EVERY OTHER ROW TO BE STAGGERED.
UNSUPPORTED ENDS OF FLOOR PIECES NOT TO EXCEED 8 INCHES.
* 2 SUPPORTS PER TANK WERE ADDED FOR CENTER WELL (NOT SHOWN ON LAYOUTS)

18' COR/CUT-LOK AND 20 GAGE GRANDSTAND LAYOUT

2.66" CORRUGATED BINS 9-11 RINGS

4.00" CORRUGATED BINS 7 & 8 RINGS

IMPORTANT: FIRST PIECE OF FLOORING MUST START THE PROPER DISTANCE FROM CENTER OF BIN. FIRST FEW PIECES MAY HAVE TO BE TRIMMED FOR PROPER FIT.

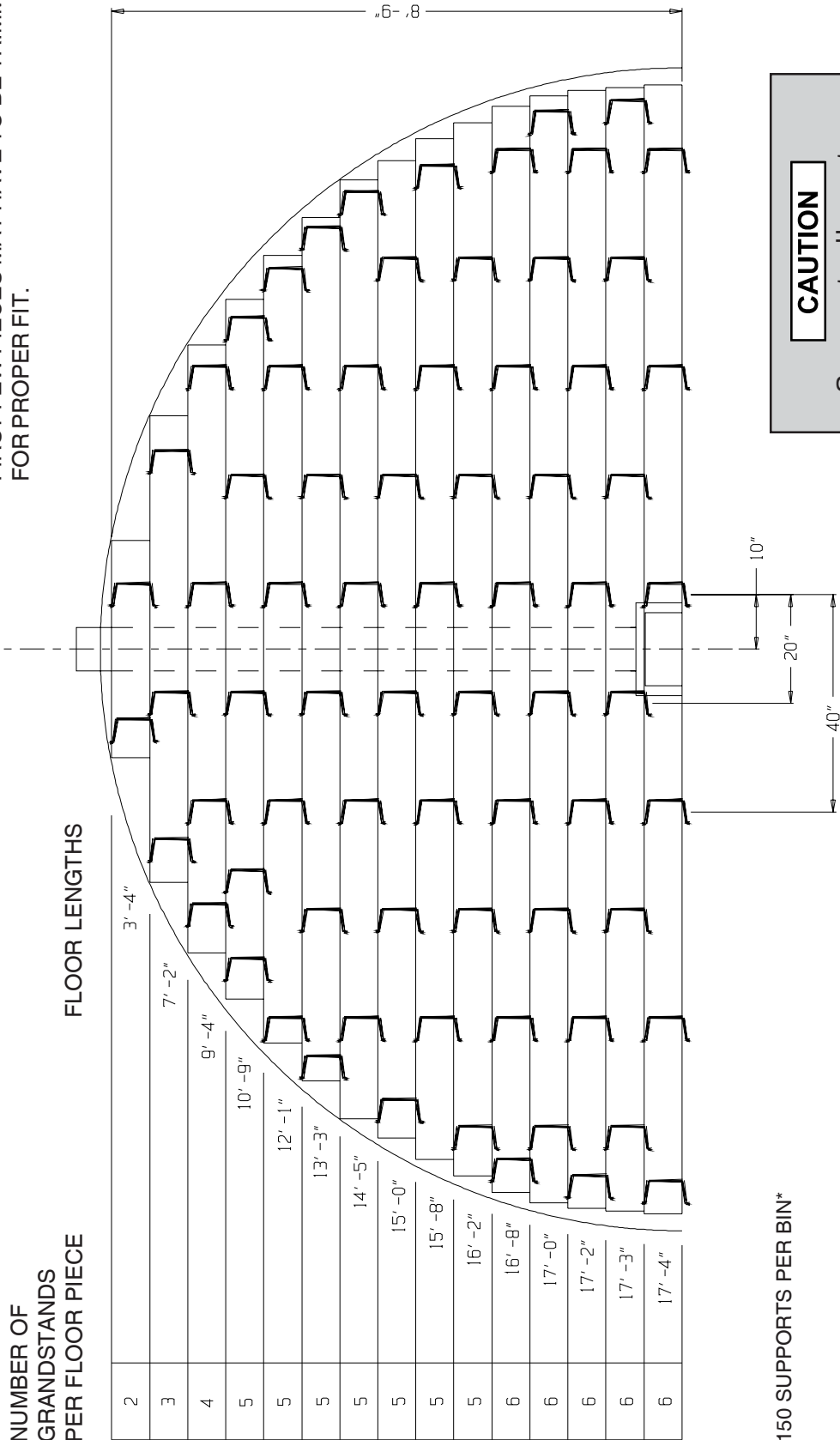


CAUTION
Support all center wells to concrete.

NOTES: EVERY OTHER ROW TO BE STAGGERED.
UNSUPPORTED ENDS OF FLOOR PIECES NOT TO EXCEED 7 INCHES.
* 2 SUPPORTS PER TANK WERE ADDED FOR CENTER WELL (NOT SHOWN ON LAYOUTS)

18' COR/CUT-LOK AND 20 GAGE GRANDSTAND LAYOUT
2.66" CORRUGATED BINS 12 RINGS

IMPORTANT: FIRST PIECE OF FLOORING MUST START THE PROPER DISTANCE FROM CENTER OF BIN.
FIRST FEW PIECES MAY HAVE TO BE TRIMMED FOR PROPER FIT.

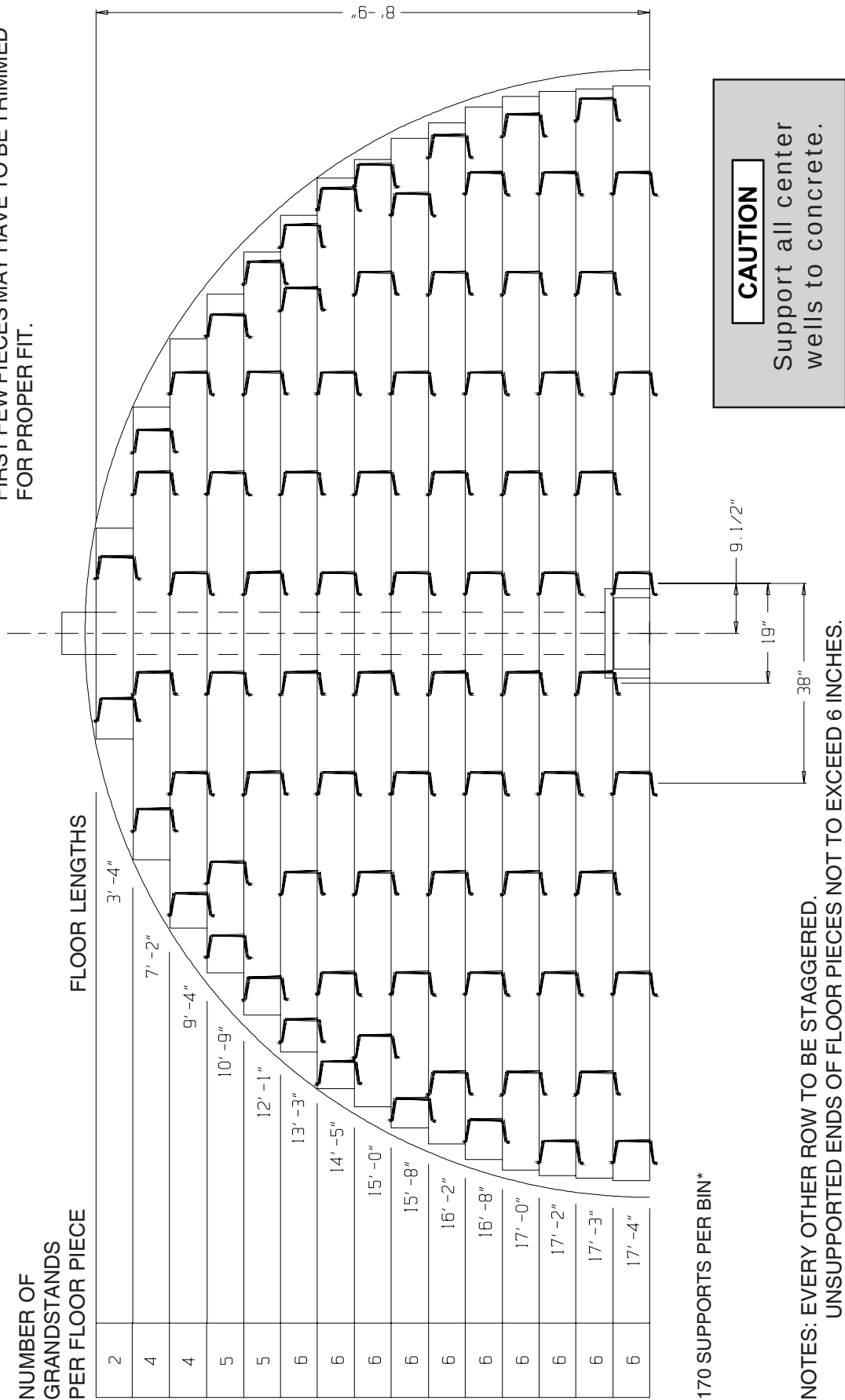


NOTES: EVERY OTHER ROW TO BE STAGGERED.
UNSUPPORTED ENDS OF FLOOR PIECES NOT TO EXCEED 7 INCHES.
* 2 SUPPORTS PER TANK WERE ADDED FOR CENTER WELL (NOT SHOWN ON LAYOUTS)

18' COR/CUT-LOK AND 20 GAGE GRANDSTAND LAYOUT

4.00" CORRUGATED BINS 9 RINGS

IMPORTANT: FIRST PIECE OF FLOORING MUST START THE PROPER DISTANCE FROM CENTER OF BIN.
FIRST FEW PIECES MAY HAVE TO BE TRIMMED FOR PROPER FIT.



NOTES: EVERY OTHER ROW TO BE STAGGERED.
UNSUPPORTED ENDS OF FLOOR PIECES NOT TO EXCEED 6 INCHES.
* 2 SUPPORTS PER TANK WERE ADDED FOR CENTER WELL (NOT SHOWN ON LAYOUTS)

20 GAGE GRANDSTAND CHART - 2.66" CORR.

Narrow / 2.66" Corrugation - 20 Gage Grandstand Floor Support Chart

FULL FLOOR SUPPORTS REQUIRED FOR PLANK TYPE FLOORING 2.66" CORRUGATION																					
* Based upon 13.5" or taller floor heights																					
Rings	12	15	18	21	24	27	30	33	36	39	42	45	48	54	60	72	75	78	90	105	
								All Floor Styles OK For Bin Sizes in upper shaded area.									Floor styles List In Order of increasing Strength 20 GA. COR-LOK 18 GA. COR-LOK CUT-LOK				
3	57/27 62																				
4	54/27 62	58/29 80	54/27 120	SUPPORT SPACING SUPPORT QUANTITY																	
5	54/27 62	58/29 80	54/27 120	52/26 160	56/28 205	54/27 249	54/27 304	50/25 390	50/25 470	50/25 576											
6	54/27 62	54/27 88	54/27 120	52/26 160	52/26 215	48/24 275	50/25 333	50/25 390	48/24 487	48/24 586	46/23 695	46/23 806	46/23 909	44/22 1196	44/22 1430						
7	54/27 62	52/26 96	48/24 138	50/25 168	48/24 225	48/24 275	46/23 347	46/23 425	44/22 523	46/23 606	44/22 735	44/22 836	44/22 933	42/21 1236	42/21 1477						
8	48/24 70	48/24 100	48/24 144	46/23 182	46/23 230	46/23 300	44/22 363	44/22 435	44/22 523	44/22 624	42/21 750	42/21 866	42/21 977	40/20 1296	40/20 1544						
9	48/24 70	48/24 100	42/21 144	42/21 190	42/21 243	44/22 303	42/21 387	40/20 465	42/21 565	40/20 656	40/20 790	40/20 906	40/20 1019	38/19 1346	36/18 1697						
10	42/21 75	42/21 110	42/21 144	42/21 190	42/21 250	42/21 309	40/20 397	40/20 479	38/19 597	38/19 716	38/19 820	36/18 986	36/18 1109	34/17 1486	34/17 1779						
11	42/21 75	42/21 110	42/21 144	42/21 190	40/20 265	40/20 319	38/19 417	36/18 525	36/18 620	36/18 746	34/17 900	34/17 1036	34/17 1163	32/16 1566	32/16 1883			18 ga. COR-LOK or CUT-LOK if Diameter and No. of Rings are in middle unshaded area.			
12	38/19 80	40/20 115	40/20 154	40/20 202	38/19 280	38/19 345	36/18 441	34/17 550	34/17 659	34/17 786	32/16 950	32/16 1096	32/16 1230	30/15 1660	30/15 1993	26/13 3300	26/13 3580	26/13 3870	24/12 5520	22/11 8110	
13	38/19 80	38/19 120	38/19 166	36/18 220	36/18 290	36/18 360	34/17 470	32/16 600	32/16 710	30/15 880	30/15 1010	30/15 1160	28/14 1390	1660 1760	26/13 2300	24/12 3540	24/12 3840	24/12 4150	22/11 5960	20/10 8820	
14	34/17 90	34/17 130	34/17 180	34/17 230	34/17 300	34/17 380	32/16 500	30/15 630	30/15 750	28/14 930	28/14 1070	26/13 1310	26/13 1480	26/13 1870	24/12 2460	22/11 3820	22/11 4150	22/11 4480	20/10 6480	18/9 9680	
15	32/16 95	32/16 140	32/16 190	32/16 250	32/16 320	32/16 400	30/15 520	28/14 670	28/14 790	26/13 990	26/13 1140	24/12 1400	24/12 1590	24/12 2000	22/11 2650	22/11 3820	20/10 4500	20/10 4870	20/10 7120	18/9 9680	
16	30/15 100	30/15 150	30/15 205	30/15 260	28/14 360	28/14 450	28/14 550	26/13 670	24/12 840	24/12 1060	24/12 1220	22/11 1400	22/11 1710	22/11 2160	20/10 2880	20/10 4150	20/10 4500	18/9 5340	18/9 7120	16/8 10760	
17	28/14 106	28/14 160	28/14 215	26/13 290	26/13 380	26/13 480	26/13 590	24/12 710	24/12 900	22/11 1060	22/11 1320	22/11 1510	20/10 1860	20/10 2350	20/10 2880	18/9 4550	18/9 4950	16/8 5340	16/8 7910	16/8 10760	
18	26/13 110	26/13 170	24/12 240	24/12 310	24/12 400	24/12 510	24/12 630	24/12 760	22/11 900	22/11 1140	22/11 1320	20/10 1640	20/10 1860	18/9 2570	18/9 3170	16/8 5060	16/8 5500	16/8 5940	16/8 7910	14/7 12150	
19		24/12 180	24/12 240	22/11 340	22/11 440	22/11 550	22/11 680	22/11 820	22/11 970	20/10 1140	20/10 1430	18/9 1640	18/9 2040	16/8 2570	16/8 3520	16/8 5060	16/8 5500	16/8 5940	14/7 8920	14/7 12150	
20		22/11 190	22/11 260	22/11 340	22/11 440	22/11 550	20/10 740	20/10 890	20/10 1060	20/10 1240	20/10 1430	18/9 1800	18/9 2040	16/8 2860	16/8 3520	16/8 5710	14/7 6200	14/7 6710	14/7 8920	12/6 13990	
21				20/10 370	20/10 470	20/10 600	20/10 740	20/10 890	20/10 1060	20/10 1240	18/9 1570	18/9 1800	16/8 2270	16/8 2860	16/8 3970	14/7 5710	14/7 6200	14/7 6710	12/6 10280	12/6 13990	
22				18/9 400	18/9 520	16/8 660	16/8 810	16/8 970	16/8 1160	16/8 1360	16/8 1570	16/8 2000	16/8 2270	14/7 2860	14/7 3970	12/6 6580	12/6 7140	12/6 7730	12/6 10280		
23				18/9 400	18/9 520	16/8 730	16/8 900	16/8 1080	16/8 1290	16/8 1510	16/8 1740	16/8 2000	16/8 2270	14/7 3230	14/7 3970	12/6 6580	12/6 7140	12/6 7730			
24	CUT-LOK only if Dia. and No. of Rings are in bottom shaded area.			16/8 450	16/8 580	16/8 730	16/8 900	16/8 1080	16/8 1290	16/8 1510	16/8 1740	16/8 2000	14/7 2560	14/7 3230	12/6 4570	12/6 6580	12/6 7140				
25				14/7 500	14/7 650	14/7 820	14/7 1010	14/7 1220	14/7 1450	14/7 1700	14/7 1960	14/7 2260	14/7 2560	12/6 3230	12/6 4570						
26						14/7 820	14/7 1010	14/7 1220	14/7 1450	14/7 1700	14/7 1960	14/7 2260	14/7 2560	12/6 3720	12/6 4570						
27						12/6 950	12/6 1160	12/6 1410	12/6 1670	12/6 1960	12/6 2260	12/6 2600	12/6 2950	12/6 3720	12/6 4570						
28					12/6 950	12/6 1160	12/6 1410	12/6 1670	12/6 1960	12/6 2260	12/6 2600	12/6 2950	12/6 3720								
29					12/6 950	12/6 1160	12/6 1410	12/6 1670	12/6 1960	SUPPORT SPACING SUPPORT QUANTITY											
Corrugated floors and Monorail supports are req'd. if Dia. and No. of rings are in bottom unshaded area.																					

20 GAGE GRANDSTAND CHART - 4.00" CORR.

Wide / 4.00" Corrugation - 20 Gage Grandstand Floor Support Chart

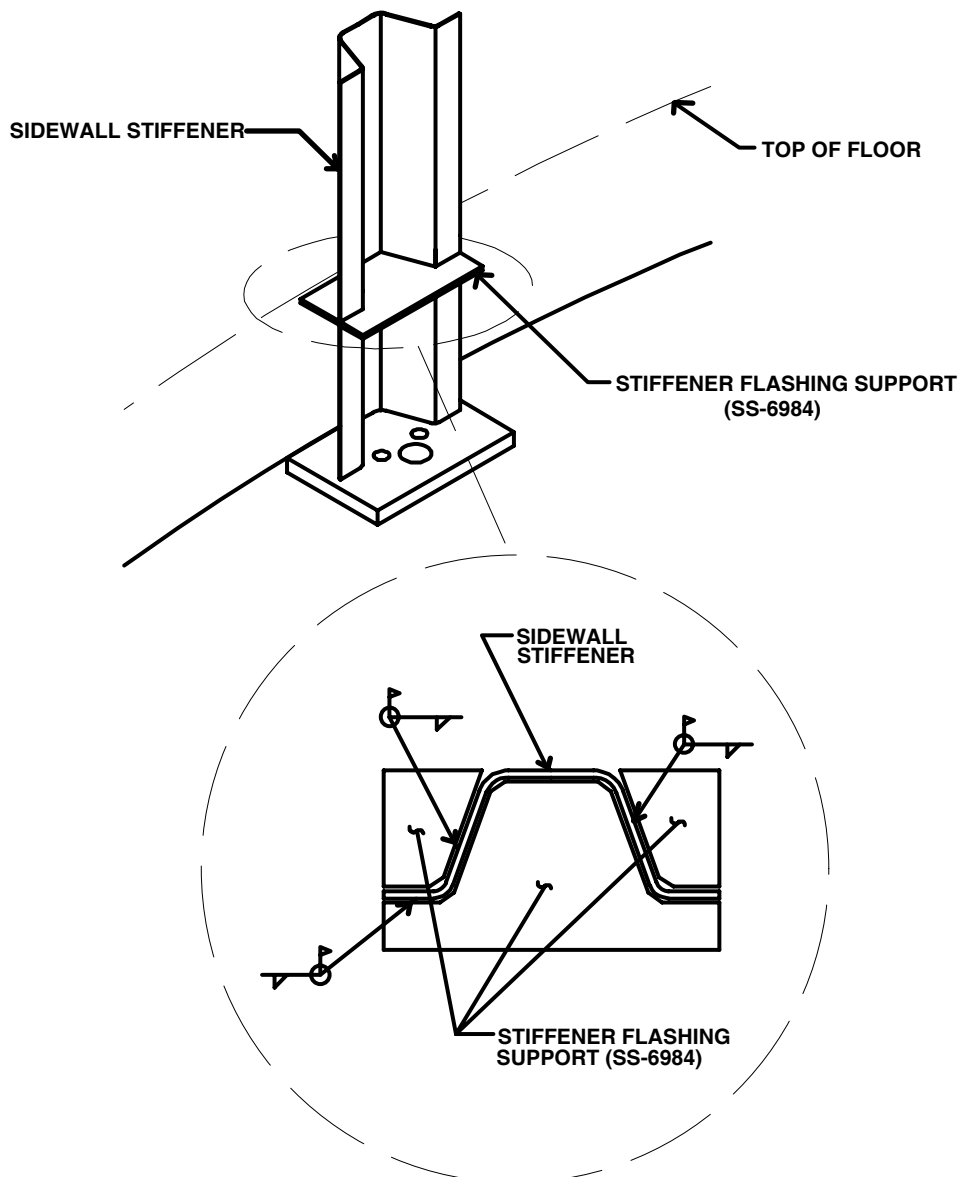
FULL FLOOR SUPPORTS REQUIRED FOR PLANK TYPE FLOORING 4.00" CORRUGATION																					
* Based upon 13.5" or taller floor heights																					
Rings	12	15	18	21	24	27	30	33	36	39	42	45	48	54	60	72	75	78	90	105	
	SUPPORT SPACING															All Floor Styles OK					
	SUPPORT QUANTITY															for Bin Sizes in					
3	54/27 62	58/29 80	54/27 120	52/26 150	56/28 202	54/27 249	50/25 333	50/25 390	50/25 470	50/25 576	46/23 695	52/26 735	48/24 869			upper shaded area.					
4	54/27 62	54/27 88	54/27 120	52/26 160	52/26 214	48/24 275	50/25 333	50/25 390	50/25 470	50/25 576	46/23 695	48/24 775	48/24 869	46/23 1156	44/22 1430						
5	54/27 62	52/26 96	48/24 138	50/25 168	48/24 224	48/24 275	48/24 347	46/23 425	44/22 523	46/23 606	46/23 695	44/22 836	44/22 933	42/21 1236	42/21 1477						
6	48/24 70	48/24 100	48/24 138	46/23 182	46/23 230	44/22 303	44/22 363	44/22 435	44/22 523	42/21 656	42/21 751	42/21 866	42/21 977	40/20 1296	38/19 1650	18 Ga. COR-LOK or CUT-LOK if Dia. and					
7	42/21 75	42/21 110	42/21 144	42/21 190	42/21 249	42/21 309	42/21 387	40/20 480	40/20 565	40/20 686	38/19 821	38/19 946	38/19 1057	36/18 1416	34/17 1779	No.of Rings are in middle unshaded					
8	42/21 75	42/21 110	42/21 144	42/21 190	40/20 265	40/20 319	38/19 417	36/18 525	36/18 620	36/18 746	34/17 900	34/17 1036	34/17 1163	32/16 1566	32/16 1883						
9	38/19 80	40/20 115	38/19 166	38/19 220	38/19 277	36/18 355	34/17 471	34/17 555	32/16 695	32/16 830	32/16 951	30/15 1156	30/15 1303	30/15 1660	28/14 2160	28/15 3550	24/12 3850	24/12 4160	22/11 5970	20/10 8820	
10	36/18 90	34/17 130	34/17 180	34/17 230	34/17 300	34/17 380	32/16 500	32/16 600	30/15 750	28/14 930	30/15 1010	28/14 1230	28/14 1390	26/13 1870	24/12 2460	22/11 3820	22/11 4150	22/11 4480	20/10 6480	18/9 9680	
11	32/16 95	30/15 150	32/16 190	32/16 250	32/16 320	32/16 400	30/15 520	30/15 650	28/14 790	26/13 990	26/13 1140	24/12 1400	24/12 1590	24/12 2000	22/11 2650	20/10 4150	20/10 4500	20/10 4870	18/9 7120	16/8 10760	
12	28/14 100	28/14 160	28/14 210	28/14 280	28/14 360	28/14 450	28/14 550	28/14 670	26/13 840	24/12 1060	24/12 1220	22/11 1510	22/11 1710	20/10 2350	20/10 2880	18/9 4550	18/9 4950	18/9 5340	16/8 7910	16/8 10760	
13	26/13 110	26/13 170	26/13 220	26/13 290	24/12 400	24/12 510	24/12 630	24/12 760	24/12 900	22/11 1140	22/11 1320	20/10 1640	20/10 1860	18/9 2570	18/9 3170	16/8 5060	16/8 5500	16/8 5940	16/8 7910	14/7 12150	
14			22/11 260	22/11 340	22/11 440	22/11 550	22/11 680	22/11 820	20/10 1060	20/10 1240	20/10 1430	18/9 1800	18/9 2040	16/8 2860	16/8 3520	16/8 5060	16/8 5500	16/8 5940	14/7 8920	14/7 12150	
15				20/10 370	20/10 480	20/10 600	20/10 740	20/10 890	20/10 1060	18/9 1360	18/9 1570	18/9 1800	16/8 2270	16/8 2860	16/8 3520	14/7 5710	14/7 6200	14/7 6710	14/7 8920	12/6 13990	
16				18/9 400	18/9 520	18/9 660	18/9 810	18/9 970	18/9 1160	18/9 1360	18/9 1570	16/8 2000	16/8 2270	16/8 2860	14/7 3970	12/6 6580	12/6 7140	12/6 7730	12/6 10280		
17	CUT-LOK only if Dia. & No. of Rings				16/8 580	16/8 730	16/8 900	16/8 1080	16/8 1290	16/8 1510	16/8 1750	16/8 2000	16/8 2270	14/7 3230	14/7 3970	12/6 6580	12/6 7140	12/6 7730			
18	are in bottom shaded area.				16/8 580	16/8 730	16/8 900	16/8 1080	16/8 1290	16/8 1510	16/8 1750	16/8 2000	14/7 2560	14/7 3230	12/6 4570						
19						14/7 820	14/7 1010	14/7 1220	14/7 1450	14/7 1700	14/7 1970	14/7 2260	14/7 2560	12/6 3720	12/6 4570						
20						12/6 950	12/6 1160	12/6 1410	12/6 1670	12/6 1960	12/6 2270	12/6 2600	12/6 2950	12/6 3720							
21						12/6 950	12/6 1160	12/6 1410	12/6 1670	12/6 1960	12/6 2270	12/6 2600	12/6 2950								
22																					
23																					

* For Aeration Systems recessed in the concrete add one ring for proper spacing.

When using FL-3102-3 or FL-3102-6 (3",6") Grandstands, increase the listed quantities by 33% (std. quantity x 1.33)
Quantities of Grandstands are minimum required for installation - Due to varying
conditions and construction techniques at floor and wall penetrations additional
supports may need to be ordered.

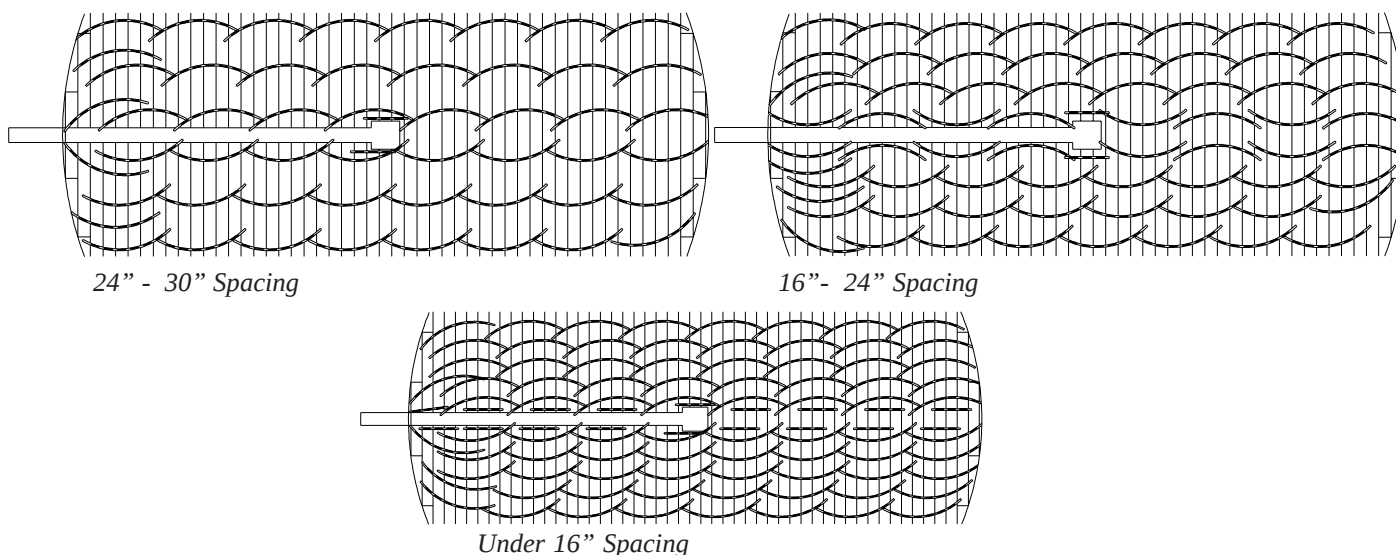
STIFFENER FLASHING SUPPORT INSTRUCTIONS **FOR INTERNAL UNIVERSAL STIFFENERS**

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



INSTALLATION OF AIR FLOW SUPPORTS

1. Determine the spacing and quantity of Air Flow Supports required from the chart on the next page. Make sure that the correct supports have been ordered for use with the proper depth of plank (either 1-1/8" or 1-3/8" deep).
2. Mark location of center of bin.
3. Install discharge auger.
4. Mark spacing lines parallel to discharge auger.
5. Start on the side of the bin opposite from the discharge auger and place the first two rows of supports on the spacing lines. Note that Air Flow Supports are installed at an angle in an overlapping pattern so the ends will overlap. See floor layouts on the next page.
6. Install the channel lock flooring on the first two rows of supports and secure in place with some bin wall flashing.
7. Finish placing supports on the spacing lines and installing floor planks.
 - a. Single supports are used next to the bin wall and at the ends of split floor planks in order to maintain the floor manufacturer's recommended minimum distance from the end of a plank to a support.
 - b. Double supports are used at the sump and along the sides of the discharge auger for spacing of 16" or less and for recirculating bin equipment.
 - c. Full supports may have to be overlapped or angled to provide support at walls and to maintain spacing and flashing requirements.
 - d. The following drawings show methods of support placement to achieve the necessary spacing close to discharge augers and sumps.



*INSTALLATION, SPACING & QUANTITIES OF AIR FLOW SUPPORTS UNDER CHANNEL LOCK FLOORS

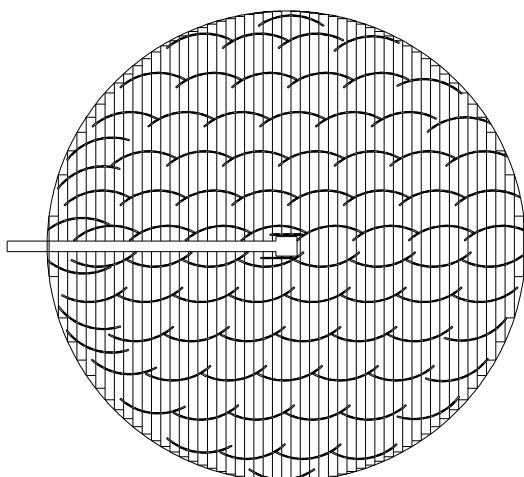
Grain Depth At Bin Wall	Spacing Inches	BIN DIAMETER - NUMBER OF SUPPORTS														
		18 ft Dia			21 ft Dia			24 ft Dia			27 ft Dia			30 ft Dia		
		full	double	single	full	double	single	full	double	single	full	double	single	full	double	single
18 ft	30"	34	2	8	48	2	10	60	2	12	84	2	14	88	2	14
24 ft	26"	36	2	8	56	2	10	74	2	12	92	2	14	104	2	14
27 ft	24"	44	2	8	62	2	10	76	2	12	92	2	14	112	2	14
32 ft	20"	54	2	10	64	2	12	84	2	14	106	2	16	130	2	18
40 ft	16"	58	10	14	80	12	16	104	14	18	128	16	20	160	18	22
48 ft	13"	72	10	16	98	12	20	126	14	22	158	16	24	190	18	28
53 ft	12"	76	10	18	106	12	22	140	14	24	172	16	28	210	18	30
68 ft	10"	86	10	22	116	12	26	156	14	28	212	16	32	250	18	36
16 ft	24"&12"	68	10	8	82	12	10	104	14	12	120	16	14	140	18	14
(for Grain Flow)																

Grain Depth At Bin Wall	Spacing Inches	BIN DIAMETER - NUMBER OF SUPPORTS														
		33 ft Dia			36 ft Dia			42 ft Dia			48 ft Dia			60 ft Dia		
		full	double	single	full	double	single	full	double	single	full	double	single	full	double	single
18 ft	30"	116	2	16	136	2	18	172	2	20	use 24" spacing			use 24" spacing		
24 ft	26"	124	2	16	144	2	18	200	2	20	use 24" spacing			use 24" spacing		
27 ft	24"	136	2	16	154	2	18	212	2	20	274	2	22	422	2	30
32 ft	20"	150	2	20	184	2	22	242	2	26	326	2	28	498	2	36
40 ft	16"	192	20	24	234	22	28	314	24	32	410	28	36	620	34	46
48 ft	13"	238	20	30	278	22	34	368	24	38	488	28	44	762	34	56
53 ft	12"	262	20	34	306	22	36	416	24	42	534	28	48	838	34	60
68 ft	10"	296	20	40	356	22	44	478	24	50	652	28	58	1024	34	72
16 ft	24"&12"	168	20	16	188	20	18	264	24	20	350	28	20	NA	NA	NA
(for Grain Flow)																

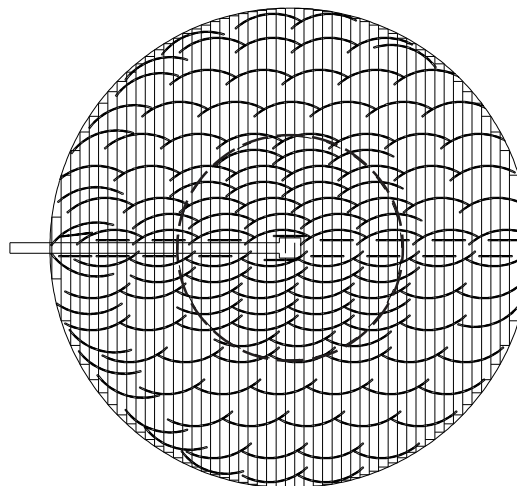
Notes:

1. Use a maximum spacing of 16 inches for perforated corrugated flooring.
2. The number of supports listed is based on the maximum peaked capacity of each bin.
3. Use extra single supports for split floors.
4. Extra supports are required for grain recirculating equipment. Use the manufacturer's recommendation for the number and spacing of extra supports. NOTE: For Grain Flows, Air Flow Supports are doubled in a 14 foot diameter in the center of the floor.
5. Contact a representative for Air Flow Supports required for larger bins and deeper grain depths.
6. *** INCREASE THE NUMBER OF SUPPORTS BY 5%**

WHEN USED WITH 6 3/4" WIDE MFS FLOOR PLANKS



Example showing 30" spacing



Example showing 24" spacing with supports doubled (12" spacing) in the center for recirculating equipment.

INSTALLATION, SPACING & QUANTITIES OF AIR FLOW SUPPORTS UNDER CHANNEL LOCK FLOORS YORK & CHIEF BINS

Grain Depth At Bin Wall	Spacing Inches	BIN DIAMETER - NUMBER OF SUPPORTS														
		15' 6"			18' 7"			21' 8"			24' 9"			27' 10"		
		full	double	single	full	double	single	full	double	single	full	double	single	full	double	single
18 ft	30"	26	2	8	36	2	8	50	2	10	64	2	12	80	2	14
24 ft	26"	30	2	8	42	2	8	56	2	10	74	2	12	92	2	14
27 ft	24"	32	2	8	44	2	8	60	2	10	78	2	12	98	2	14
32 ft	20"	38	2	10	52	2	10	72	2	12	92	2	14	116	2	16
40 ft	16"	46	10	14	64	12	14	86	14	16	114	14	18	142	16	20
48 ft	13"	54	10	16	78	12	16	106	14	20	136	14	22	172	16	24
53 ft	12"	58	10	18	84	12	18	114	14	22	148	14	24	184	16	28
68 ft	10"	70	10	22	98	12	22	134	14	26	174	14	28	220	16	32
16 ft	24" & 12"	60	10	8	72	12	8	88	14	10	106	14	12	126	16	14
(for Grain Flow)																

Grain Depth At Bin Wall	Spacing Inches	31'			34'			37' 1"			40' 3"			43' 4"		
		full	double	single	full	double	single	full	double	single	full	double	single	full	double	single
18 ft	30"	98	2	14	116	2	16	136	2	18	160	2	20	182	2	22
24 ft	26"	112	2	14	132	2	16	154	2	18	182	2	20	208	2	22
27 ft	24"	120	2	14	142	2	16	166	2	18	196	2	20	224	2	22
32 ft	20"	140	2	18	168	2	20	198	2	22	232	2	26	260	2	26
40 ft	16"	174	18	22	208	20	24	244	22	28	286	24	32	330	26	32
48 ft	13"	210	18	28	252	20	30	298	22	34	350	24	38	402	26	38
53 ft	12"	228	18	30	272	20	34	316	22	36	378	24	42	434	26	42
68 ft	10"	270	18	36	324	20	40	384	22	44	450	24	50	520	26	50
16 ft	24" & 12"	148	18	14	170	20	16	194	22	18	224	24	20	252	26	22
(for Grain Flow)																

Grain Depth At Bin Wall	Spacing Inches	49' 6"			55' 8"			61' 10"		
		full	double	single	full	double	single	full	double	single
18 ft	24"	288	2	28	362	2	32	444	2	36
24 ft	20"	346	2	28	436	2	32	536	2	36
27 ft	20"	346	2	28	436	2	32	536	2	36
32 ft	20"	346	2	28	436	2	32	536	2	36
40 ft	16"	428	28	36	540	32	42	664	36	46
48 ft	13"	524	28	44	660	32	52	812	36	56
53 ft	12"	566	28	48	714	32	54	878	36	60
68 ft	10"	676	28	58	852	32	68	1050	36	72

**INSTALLATION, SPACING & QUANTITIES OF AIR FLOW SUPPORTS
UNDER CHANNEL LOCK FLOORS
BEHLEN BINS**

Grain Depth At Bin Wall	Spacing Inches	BIN DIAMETER - NUMBER OF SUPPORTS											
		16' 5"			19' 8"			22' 11"			26' 3"		
		full	double	single	full	double	single	full	double	single	full	double	single
18 ft	30"	30	2	8	42	2	10	56	2	12	70	2	14
24 ft	26"	32	2	8	46	2	10	64	2	12	80	2	14
27 ft	24"	36	2	8	50	2	10	68	2	12	86	2	14
32 ft	20"	42	2	10	60	2	12	80	2	14	102	2	16
40 ft	16"	50	10	14	72	12	16	98	14	18	124	16	20
48 ft	13"	60	10	16	88	12	20	118	14	22	152	16	24
53 ft	12"	66	10	18	94	12	22	126	14	24	164	16	28
68 ft	10"	78	10	22	110	12	26	150	14	28	194	16	32
16 ft	24" & 12" (for Grain Flow)	64	10	8	78	12	10	96	14	12	114	16	14

Grain Depth At Bin Wall	Spacing Inches	29' 6"			36' 1"			42' 8"			49' 3"		
		full	double	single	full	double	single	full	double	single	full	double	single
		full	double	single	full	double	single	full	double	single	full	double	single
18 ft	30"	90	2	14	130	2	18	178	2	20	* 286	2	28
24 ft	26"	102	2	14	148	2	18	202	2	20	* 286	2	28
27 ft	24"	108	2	14	160	2	18	218	2	20	**344	2	28
32 ft	20"	128	2	18	188	2	22	260	2	26	344	2	28
40 ft	16"	158	18	22	232	22	28	320	24	32	426	28	36
48 ft	13"	192	18	28	282	22	34	390	24	38	520	28	44
53 ft	12"	206	18	30	306	22	36	422	24	42	562	28	48
68 ft	10"	246	18	36	364	22	44	504	24	50	670	28	58
16 ft	24" & 12" (for Grain Flow)	136	18	14	188	22	18	246	24	20	NA	NA	NA

* Use 24" Spacing

** Use 20" Spacing

IMPORTANT NOTE

An option of using 18 gage grandstand supports vs. the standard 20 gage grandstand is available.

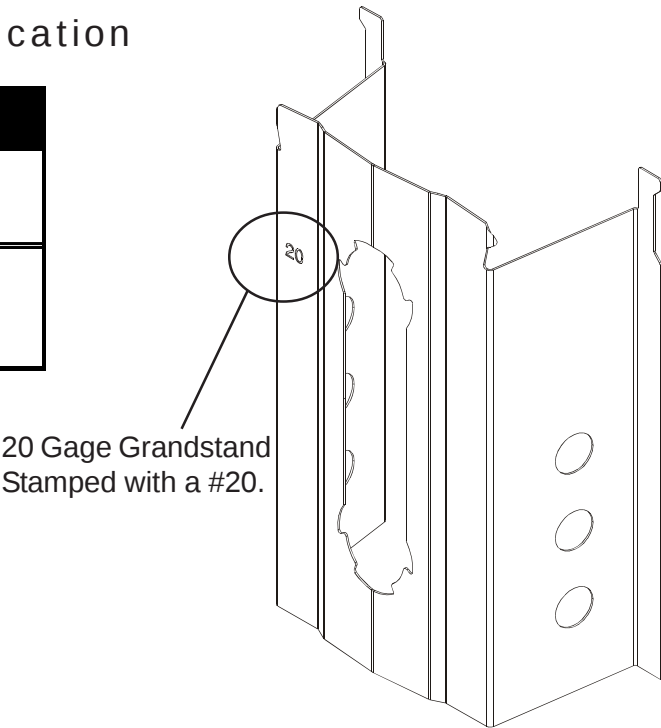
This option is not widely used. The following two pages provide grandstand spacing for 18 gage grandstands only. You MUST NOT use these charts for 20 gage grandstands.

YOU MUST confirm that you have 18 gage grandstands prior to using these charts. See the following page on grandstand identification. 18 gage grandstands will have an 18 stamped into the stand.

GRANDSTAND IDENTIFICATION

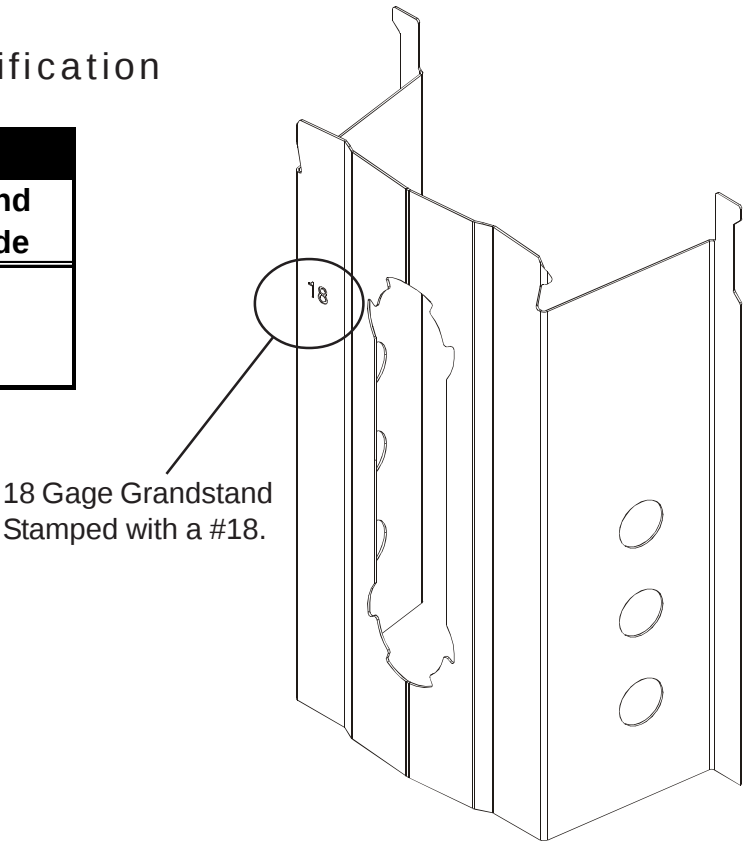
20 Gage Grandstand Identification

20 GAGE		
GAGE	Plenum Clearance	Grandstand Color Code
20	11-7/8"	Blue
20	14-3/8"	White
20	17-3/16"	Yellow



18 Gage Grandstand Identification

18 GAGE		
GAGE	Plenum Clearance	Grandstand Color Code
18	11-7/8"	Green
18	14-3/8"	Black
18	17-3/16"	Purple



18 GA. FLOOR SUPPORT REQUIREMENTS - 2.66"

Narrow / 2.66" Corrugation - 18 Gage Grandstand Floor Support Chart

* Based upon 13.5" or taller floor heights - 18 Gage Support Quantities Only

18 GAGE FULL FLOOR SUPPORTS REQUIRED FOR PLANK TYPE FLOORING 2.66" CORRUGATION																										
Ring Heigh	Dia	12	15	18	21	24	27	30	33	36	39	42	45	48	54	60	72	75	78	90	105	Ring Height				
4					SUPPORT SPACING SUPPORT QUANTITY					All Floor Styles OK for Bin Sizes in upper shaded area.													4			
5																	Floor styles List In Order of increasing Strength 20 GA. COR-LOK 18 GA. COR-LOK CUT-LOK					5				
6																						6				
7																						7				
8																						8				
9																	18 ga. COR-LOK or CUT-LOK if Diameter and No. of Rings are in middle unshaded area.					9				
10	Reference the 20 gage Grandstand Support chart for quantity and spacing if 20 gage supports are being installed.																					10				
11																						11				
12																	30/15 2930	30/15 3180	30/15 3440	28/14 4850	26/13 6600	12				
13															34/17 1170	32/16 1570	32/16 1890	28/14 3110	28/14 3370	28/14 3650	26/13 5170	24/12 7530	13			
14															32/16 1230	30/15 1660	30/15 2000	26/13 3300	26/13 3580	26/13 3870	24/12 5520	22/11 8110	14			
15														30/15 1010	30/15 1160	30/15 1320	28/14 1760	28/14 2160	26/13 3300	24/12 3840	24/12 4150	22/11 5960	22/11 8110	15		
16											30/15 930	28/14 1070	28/14 1230	26/13 1480	26/13 1870	24/12 2460	24/12 3540	24/12 3840	22/11 4480	22/11 5960	20/10 8820	16				
17					32/16 250	32/16 320	32/16 400	32/16 500	30/15 630	30/15 750	28/14 930	26/13 1140	26/13 1310	24/12 1590	24/12 2000	24/12 2460	22/11 3820	22/11 4150	22/11 4480	20/10 6480	18/9 9680	17				
18					30/15 260	30/15 340	30/15 430	30/15 520	30/15 630	30/15 750	26/13 990	26/13 1140	24/12 1400	24/12 1590	22/11 2160	22/11 2650	20/10 4150	20/10 4500	20/10 4870	20/10 6480	18/9 9680	18				
19					26/13 290	26/13 380	26/13 480	26/13 590	26/13 710	26/13 840	24/12 990	24/12 1220	24/12 1400	22/11 1710	22/11 2160	20/10 2880	20/10 4150	20/10 4500	18/9 5340	18/9 7120	16/8 10760	19				
20					26/13 290	26/13 380	26/13 480	24/12 630	24/12 760	24/12 900	24/12 1060	24/12 1220	22/11 1510	22/11 1710	20/10 2350	20/10 2880	18/9 4550	18/9 4950	18/9 5340	18/9 7120	14/7 12150	20				
21					24/12 310	24/12 400	24/12 510	24/12 630	24/12 760	24/12 900	22/11 1140	22/11 1320	22/11 1510	20/10 1860	20/10 2350	18/9 3170	18/9 4550	16/8 5500	16/8 5940	16/8 7910	14/7 12150	21				
22	CUT-LOK only if Dia. and No. of Rings are in bottom shaded area.				22/11 340	22/11 440	22/11 550	22/11 680	22/11 820	22/11 970	22/11 1140	22/11 1320	20/10 1640	20/10 1860	20/10 2350	18/9 3170	18/9 5060	16/8 5500	14/7 6710	14/7 8920		22				
23					20/10 370	20/10 470	20/10 600	20/10 740	20/10 890	20/10 1060	20/10 1240	20/10 1439	20/10 1640	20/10 1860	18/9 2570	18/9 3170	16/8 5060	16/8 5500	14/7 6710				23			
24					20/10 370	20/10 470	20/10 600	20/10 740	20/10 890	20/10 1060	20/10 1240	18/9 1570	18/9 1800	18/9 2040	18/9 2570	16/8 3520	16/8 5710	14/7 6200						24		
25					18/9 400	18/9 520	18/9 660	18/9 810	18/9 970	18/9 1160	18/9 1360	18/9 1570	18/9 1800	18/9 2040	16/8 2570	16/8 3520	Corrugated floors and Monorail supports are req'd. if Dia. and No. of rings are in bottom unshaded area.						25			
26					18/9 400	18/9 520	18/9 660	18/9 810	18/9 970	16/8 1290	16/8 1290	16/8 1740	16/8 2000	16/8 2270	16/8 2860	14/7 3970									26	
27					16/8 450	16/8 580	16/8 730	16/8 900	16/8 1080	14/7 1290	14/7 1700	14/7 1960	14/7 2260	14/7 2560	14/7 3230	14/7 3970									27	
28					14/7 500	14/7 580	14/7 820	14/7 1010	14/7 1220	14/7 1450	14/7 1700	14/7 1960	14/7 2260	14/7 2560	14/7 3230											28
29					14/7 500	14/7 580	14/7 820	14/7 1010	14/7 1220	14/7 1450	14/7 1700															29

* For Aeration Systems recessed in the concrete add one ring for proper spacing.

DO NOT USE the above listed quantities for 3" or 6" 20 ga. Grandstands.

Quantities of Grandstands are minimum required for installation - Due to varying conditions and construction techniques at floor and wall penetrations additional supports may need to be ordered.

WARNING! Installation of 20 ga. Grandstand floor supports at the above 18 ga. quantities and spacings will result in floor damage/failure and will not qualify as a warranty condition.

Contact GSI for 18 gage support spacing recommendations for heights not shown.

18 GA. FLOOR SUPPORT REQUIREMENTS - 4.00"

Wide / 4.00" Corrugation - 18 Gage Grandstand Floor Support Chart

* Based upon 13.5" or taller floor heights - 18 Gage Support Quantities Only

18 GAGE GRANDSTAND FULL FLOOR SUPPORTS REQUIRED FOR PLANK TYPE FLOORING 4.00" CORR.																			
Rings	15	18	21	24	27	30	33	36	39	42	45	48	54	60	72	75	78	90	105
3																			
4																			
5																			
6																			
7	Reference the 20 gage Grandstand Support chart for quantity and spacing if 20 gage supports are being installed.												18 Ga. COR-LOK or CUT-LOK if Dia. and No. of Rings are in middle unshaded area.						
8																			
9									36/18 750	34/17 910	34/17 1050	34/17 1190	32/16 1570	32/16 1930	30/15 2930	28/14 3370	28/14 3650	26/13 5170	24/12 7530
10							34/17 570	34/17 680	32/16 830	32/16 960	30/15 1160	30/15 1320	30/15 1990	30/15 1990	26/13 3310	26/13 3580	26/13 3870	24/12 5520	22/11 8110
11		34/17 180	34/17 240	32/16 320	34/17 390	34/17 470	32/16 600	30/15 750	30/15 870	28/14 1070	28/14 1230	28/14 1390	28/14 1760	28/14 2160	24/12 3550	24/12 3840	24/12 4150	22/11 5960	20/10 8820
12		32/16 190	32/16 250	28/14 360	32/16 400	32/16 500	30/15 630	28/14 790	28/14 930	28/14 1070	26/13 1310	26/13 1480	24/12 2000	24/12 2460	22/11 3820	22/11 4150	20/10 4870	20/10 6480	18/9 9680
13		28/14 220	30/15 260	30/15 340	30/15 430	30/15 520	30/15 630	28/14 790	28/14 930	26/13 1140	24/12 1400	24/12 1590	22/11 2160	22/11 2650	20/10 4150	20/10 4500	20/10 4870	18/9 7120	18/9 9680
14		26/13 230	26/13 290	26/13 380	26/13 480	26/13 590	26/13 710	24/12 900	26/13 990	24/12 1220	22/11 1510	22/11 1710	20/10 2350	20/10 2880	18/9 4550	18/9 4950	18/9 5340	16/8 7910	16/8 10760
15			24/12 310	24/12 410	22/11 550	22/11 680	22/11 820	22/11 980	22/11 1140	22/11 1320	20/10 1640	20/15 1860	18/9 2580	18/9 3170	16/8 5060	16/8 5500	16/8 5940	16/8 7910	16/8 10760
16			22/11 340	22/11 440	20/10 600	20/10 740	20/10 890	20/10 1060	20/10 1240	20/10 1430	20/10 1640	18/9 2040	18/9 2580	16/8 3520	16/8 5060	16/8 5500	16/8 5940	16/8 7910	14/7 12150
17				20/10 470	20/10 600	18/9 810	18/9 970	18/9 1160	18/9 1360	18/9 1570	18/9 1800	16/8 2040	16/8 2870	16/8 3520	16/8 5060	16/8 5500	16/8 5940		
18	CUT-LOK only if Dia. & No. of Rings are in bottom shaded area.			18/9 520	18/9 660	18/9 810	18/9 970	18/9 1160	18/9 1360	18/9 1570	18/9 1800	16/8 2270	16/8 2870	16/8 3520					
19					16/8 730	16/8 900	16/8 1080	16/8 1290	16/8 1510	16/8 1740	16/8 2000	16/8 2270	14/7 3230	14/7 3970					
20					16/8 730	16/8 900	16/8 1080	16/8 1290	16/8 1510	16/8 1740	16/8 2000	14/7 2560	14/7 3230						
21					14/7 820	14/7 1010	14/7 1220	14/7 1450	14/7 1700	14/7 1960	14/7 2260	14/7 2560							
22																			
23																			

* For Aeration Systems recessed in the concrete add one ring for proper spacing.

DO NOT USE the above listed quantities for 3" or 6" 20 ga. Grandstands.

Quantities of Grandstands are minimum required for installation - Due to varying conditions and construction techniques at floor and wall penetrations additional supports may need to be ordered.

WARNING! Installation of 20 ga. Grandstand floor supports at the above 18 ga. quantities and spacings will result in floor damage/failure and will not qualify as a warranty condition.

Contact GSI for 18 gage support spacing recommendations for heights not shown.

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