

# Stiffened Series

M9 - M15 (29' - 49')



*Engineered to a Higher Standard*

Innovative designs to improve your bottom line.

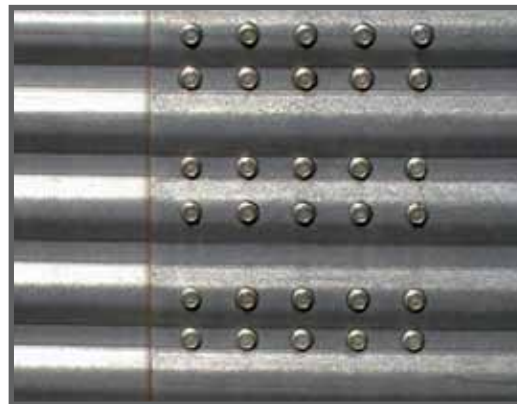
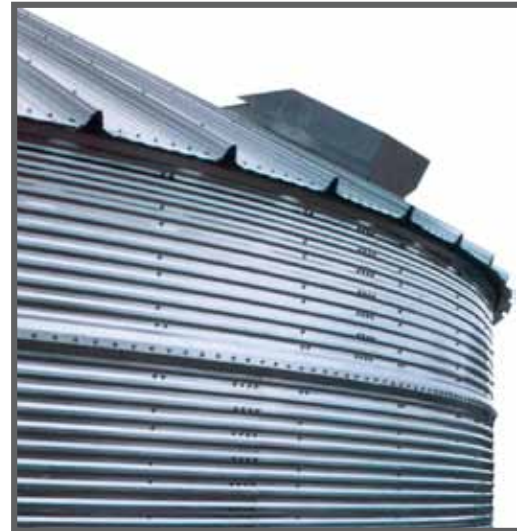
### UNIQUELY DESIGNED WALLS FOR ADDITIONAL STRENGTH

The flat sided (trapezoidal) configuration with “built-in” wind bands, offered as a standard design feature with inside stiffened Behlen bins, provides greater strength and rigidity to resist the forces exerted by side draw and wind loads. This built-in strength eliminates the need to add bolt-on wind pipes.

The vertical seam lines have a large overlap with 4 or 5 rows of bolts. This, combined with our rigid anchor bracket and roll formed base angle, will hold your grain in place and ready for market.

### ROOF DESIGNED WITH UNIQUE FEATURES

The roof panels are rigidized between the extra tall 3½” high ribs and attached at the eave with a continuous angle iron and rib brackets giving added strength against wind.



The stiffened series of bins has broad roof decks with large diameter openings and a variety of peak loads available to meet customer needs.





Behlen offers outstanding features throughout our entire line of grain storage equipment with a long history of excellence in design, quality and service. You can rest assured your grain is safe with Behlen.

The Behlen STIFFENED SERIES offers added strength and adaptability to allow the highest efficiencies in your operation.



Your Quality Choice for Grain Storage



### STIFFENERS WITH EXCEPTIONAL LOAD CARRYING CAPABILITIES

The Behlen hat-shaped stiffeners provide outstanding resistance to grain loads. Each stiffener is formed from a single piece of steel up to 5/16" thick. This use of thick, solid steel eliminates the need to laminate material. Each of our stiffeners supports the next with a load bearing plate to ensure positive load transfer into the concrete foundation.

These heavy duty stiffeners give Behlen bins the ability to be cleaned with a single pass sweeping operation without the use of additional reinforcement.



# Accessories to meet ever increasing demands for safety and convenience.



## LADDERS AND PLATFORMS

➤ Behlen now offers as standard equipment double wide eave and rest platforms, along with hoop and strap safety cage.

➤ Standard outside ladder.



## PLATFORMS AND STAIRS

Behlen offers two options of exterior wall stairs. Our commercial stairs offer sturdy industrial construction with rest platform landings. The light duty version provides an economical alternative, giving our customers the ability to select the option that best fits their needs.



➤ Optional commercial grade wall stairs pictured above.



## SAFETY RAIL AND ROOF STAIRS

The Behlen Big Bin™ series can be supplied with an optional peak safety rail. The rail encloses the flat peak area for added safety protection.

The Behlen hot-dipped galvanized roof stairs come in pre-assembled sections. The mounting brackets and handrails are easily attached and make quick work of installation on the bin roof. The full tread steps and handrails offer safe and secure access from eave to peak.

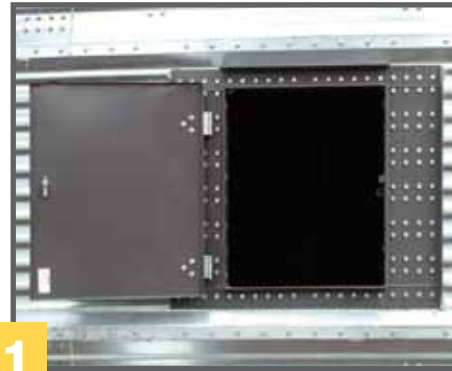




## ACCESS DOORS

Behlen stiffened bins offer ample sized openings for access to the interior.

1. The stiffened series comes standard with a 27" square single ring door.
2. Optional walk through door.



## ROOF VENTS

3. A pre-punched opening in the roof panel has a raised lip for faster assembly.

4. Behlen's 1.56 sq. ft. opening gooseneck vents are available upon request.

5. Behlen exclusive low profile roof vents. These vents set down close to the roof panel to reduce the potential for wind damage. They are an excellent choice in port facilities or high wind locations. This design is available in 3.13 sq. ft. openings reducing the number of vents or the 1.56 sq. ft. model available for small bin applications.



## STIFFENER EXTENSIONS

6. Stiffener extensions are offered to transfer loads from the base of the stiffener columns to the bottom of customer installed aeration tunnels. They are available in heights of 12 1/4", 11 3/4" and 7 3/4". These extensions reduce the time and expense of field fabrication of this critical component.



## Stiffened Series Diameter 9 Meters (29' 6")

Model	Eave Height (ft/in)	Overall Height (ft/in)	Overall Height (meters)	Bushel Capacity*	Metric Tons			Cubic Meters
					Wheat	Corn	Rice	
9x9	29' 8"	38' 2"	11.62	18,845	532	479	385	623
9x10	32' 11"	41' 5"	12.62	20,767	586	527	425	687
9x11	36' 3"	44' 9"	13.62	22,681	640	576	464	750
9x12	39' 6"	48' 0"	14.62	24,594	694	624	503	814
9x13	42' 10"	51' 4"	15.62	26,507	747	673	542	878
9x14	46' 1"	54' 7"	16.62	28,420	801	721	581	941
9x15	49' 4"	57' 10"	17.62	30,333	855	770	620	1,005
9x16	52' 8"	61' 2"	18.62	32,247	909	818	659	1,069
9x17	55' 11"	64' 5"	19.62	34,160	963	867	698	1,132
9x18	59' 3"	67' 9"	20.62	36,073	1,017	915	737	1,196
9x19	62' 6"	71' 0"	21.62	37,986	1,071	964	777	1,259
9x20	65' 9"	74' 3"	22.62	39,899	1,125	1,013	816	1,323
9x21	69' 0"	77' 6"	23.62	41,813	1,179	1,061	855	1,387
9x22	72' 4"	80' 9"	24.62	43,726	1,233	1,110	894	1,450
9x23	75' 8"	84' 1"	25.62	45,639	1,287	1,158	933	1,513
9x24	78' 11"	87' 3"	26.62	47,552	1,341	1,207	972	1,577

Typical Grain Densities: • Wheat approximately 800 kg/m3 (50 lb/ft3) • Corn approximately 720 kg/m3 (45 lb/ft3) • Rice approximately 580 kg/m3 (36 lb/ft3)

\*Capacities based on bin filled to eave with grain peaked in roof area at 28 degree slope. Bushels based on 1.25 cubic ft./bu. Metric ton calculations assume wheat at 800 kg/cubic meter; corn at 720 kg/cubic meter and rice at 580 kg/cubic meters. All maximum capacities include a 6% compaction allowance as determined by the American Society of Agricultural Engineers (ASAE) standard S413

# Stiffened Series

Diameter 10 Meters (32' 10")

Model	Eave Height (ft/in)	Overall Height (ft/in)	Overall Height (meters)	Bushel Capacity*	Metric Tons			Cubic Meters
					Wheat	Corn	Rice	
10x9	29' 8"	38' 8"	11.78	23,486	662	596	480	776
10x10	32' 11"	41' 11"	12.78	25,848	729	656	528	855
10x11	36' 3"	45' 2"	13.78	28,210	795	716	577	933
10x12	39' 6"	48' 6"	14.78	30,572	862	776	625	1,012
10x13	42' 10"	51' 9"	15.78	32,934	929	836	673	1,090
10x14	46' 1"	55' 0"	16.78	35,296	995	896	722	1,169
10x15	49' 4"	58' 4"	17.78	37,658	1,062	956	770	1,247
10x16	52' 8"	61' 7"	18.78	40,020	1,129	1,016	818	1,326
10x17	55' 11"	64' 11"	19.78	42,382	1,195	1,076	866	1,404
10x18	59' 3"	68' 9"	20.78	44,744	1,262	1,136	915	1,483
10x19	62' 6"	71' 6"	21.78	47,106	1,328	1,196	963	1,562
10x20	65' 9"	74' 9"	22.78	49,468	1,395	1,255	1,011	1,640
10x21	69' 0"	78' 0"	23.78	51,830	1,461	1,315	1,060	1,719
10x22	72' 4"	81' 4"	24.78	54,192	1,528	1,375	1,108	1,797
10x23	75' 8"	84' 7"	25.78	56,554	1,595	1,435	1,156	1,876
10x24	78' 11"	87' 11"	26.78	58,916	1,661	1,495	1,204	1,954

# Stiffened Series

Diameter 11 Meters (36' 1")

Model	Eave Height (ft/in)	Overall Height (ft/in)	Overall Height (meters)	Bushel Capacity*	Metric Tons			Cubic Meters
					Wheat	Corn	Rice	
11x9	29' 8"	39' 7"	12.07	28,671	809	728	586	948
11x10	32' 11"	42' 10"	13.07	31,529	889	800	645	1,043
11x11	36' 3"	46' 1"	14.07	34,387	970	873	703	1,138
11x12	39' 6"	49' 5"	15.07	37,245	1,050	945	761	1,233
11x13	42' 10"	52' 8"	16.07	40,103	1,131	1,018	820	1,328
11x14	46' 1"	55' 11"	17.07	42,961	1,211	1,090	878	1,423
11x15	49' 4"	59' 3"	18.07	45,819	1,292	1,163	937	1,518
11x16	52' 8"	62' 6"	19.07	48,677	1,373	1,235	995	1,613
11x17	55' 11"	65' 10"	20.07	51,535	1,453	1,308	1,054	1,708
11x18	59' 3"	69' 1"	21.07	54,393	1,534	1,380	1,120	1,803
11x19	62' 6"	72' 4"	22.07	57,251	1,614	1,453	1,170	1,898
11x20	65' 9"	75' 8"	23.07	60,109	1,695	1,525	1,229	1,993
11x21	69' 0"	78' 11"	24.07	62,967	1,776	1,598	1,287	2,088
11x22	72' 4"	82' 2"	25.07	65,825	1,856	1,671	1,346	2,183
11x23	75' 8"	85' 5"	26.07	68,683	1,937	1,743	1,404	2,278
11x24	78' 11"	88' 10"	27.07	71,541	2,017	1,816	1,463	2,373

Typical Grain Densities: • Wheat approximately 800 kg/m3 (50 lb/ft3) • Corn approximately 720 kg/m3 (45 lb/ft3) • Rice approximately 580 kg/m3 (36 lb/ft3)

\*Capacities based on bin filled to eave with grain peaked in roof area at 28 degree slope. Bushels based on 1.25 cubic ft./bu. Metric ton calculations assume wheat at 800 kg/cubic meter; corn at 720 kg/cubic meter and rice at 580 kg/cubic meters. All maximum capacities include a 6% compaction allowance as determined by the American Society of Agricultural Engineers (ASAE) standard S413

# Stiffened Series

Diameter 13 Meters (42' 8")

Model	Eave Height (ft/in)	Overall Height (ft/in)	Overall Height (meters)	Bushel Capacity*	Metric Tons			Cubic Meters
					Wheat	Corn	Rice	
13x9	29' 8"	41' 6"	12.65	40,752	1,149	1,034	833	1,347
13x10	32' 11"	44' 10"	13.65	44,744	1,262	1,136	915	1,480
13x11	36' 3"	48' 1"	14.65	48,736	1,374	1,237	996	1,613
13x12	39' 6"	51' 5"	15.65	52,727	1,487	1,338	1,078	1,746
13x13	42' 10"	54' 7"	16.65	56,719	1,599	1,439	1,160	1,878
13x14	46' 1"	57' 11"	17.65	60,711	1,712	1,541	1,241	2,011
13x15	49' 4"	61' 3"	18.65	64,703	1,825	1,642	1,323	2,144
13x16	52' 8"	64' 6"	19.65	68,694	1,937	1,743	1,404	2,276
13x17	55' 11"	67' 10"	20.65	72,686	2,050	1,845	1,486	2,409
13x18	59' 3"	71' 1"	21.65	76,678	2,162	1,946	1,568	2,542
13x19	62' 6"	74' 4"	22.65	80,670	2,275	2,047	1,649	2,675
13x20	65' 9"	77' 8"	23.65	84,662	2,387	2,149	1,731	2,807
13x21	69' 0"	80' 11"	24.65	88,653	2,500	2,250	1,812	2,940
13x22	72' 4"	84' 2"	25.65	92,645	2,612	2,351	1,894	3,073
13x23	75' 8"	87' 5"	26.65	96,637	2,725	2,452	1,976	3,205
13x24	78' 11"	90' 8"	27.65	100,629	2,837	2,554	2,057	3,338

# Stiffened Series

Diameter 15 Meters (49' 3")

Model	Eave Height (ft/in)	Overall Height (ft/in)	Overall Height (meters)	Bushel Capacity*	Metric Tons			Cubic Meters
					Wheat	Corn	Rice	
15x9	29' 8"	42' 6"	12.96	55,190	1,556	1,401	1,128	1,825
15x10	32' 11"	45' 10"	13.96	60,505	1,706	1,535	1,237	2,002
15x11	36' 3"	49' 1"	14.96	65,819	1,856	1,670	1,346	2,179
15x12	39' 6"	52' 4"	15.96	71,134	2,006	1,805	1,454	2,355
15x13	42' 10"	55' 8"	16.96	76,448	2,156	1,940	1,563	2,542
15x14	46' 1"	58' 11"	17.96	81,763	2,305	2,075	1,671	2,718
15x15	49' 4"	62' 2"	18.96	87,077	2,455	2,210	1,780	2,895
15x16	52' 8"	65' 6"	19.96	92,392	2,605	2,345	1,889	3,072
15x17	55' 11"	68' 9"	20.96	97,706	2,755	2,480	1,997	3,248
15x18	59' 3"	72' 0"	21.96	103,021	2,905	2,614	2,106	3,425
15x19	62' 6"	75' 4"	22.96	108,335	3,055	2,749	2,215	3,602
15x20	65' 9"	78' 7"	23.96	113,650	3,205	2,884	2,323	3,779
15x21	69' 0"	81' 11"	24.96	118,964	3,354	3,019	2,432	3,955
15x22	72' 4"	85' 2"	25.96	124,279	3,504	3,154	2,541	4,132
15x23	75' 8"	88' 5"	26.96	129,593	3,654	3,289	2,649	4,309
15x24	78' 11"	91' 9"	27.96	134,908	3,804	3,424	2,758	4,485

Typical Grain Densities: • Wheat approximately 800 kg/m3 (50 lb/ft3) • Corn approximately 720 kg/m3 (45 lb/ft3) • Rice approximately 580 kg/m3 (36 lb/ft3)

\*Capacities based on bin filled to eave with grain peaked in roof area at 28 degree slope. Bushels based on 1.25 cubic ft./bu. Metric ton calculations assume wheat at 800 kg/cubic meter; corn at 720 kg/cubic meter and rice at 580 kg/cubic meters. All maximum capacities include a 6% compaction allowance as determined by the American Society of Agricultural Engineers (ASAE) standard S413

## CURVET

Behlen's Curvet has proven itself as an excellent building system giving long life and outstanding performance. The arch sections provide excellent strength and allow for an economical solution to grain or equipment storage.

## BIG BIN™ SERIES

Behlen offers large capacity bins with diameters up to 157' and capacities exceeding 1,500,000 bu. Our bins are offered in a multitude of sizes to ensure we will have the bin you need to meet your storage requirements. With our years of experience, we know the importance of quality products and dedication to customer service. We are ready to help you with storage solutions that can assist you in gaining a competitive advantage.

## COMMERCIAL HOPPER TANKS

Behlen Hoppers offer flow-through convenience with many of the same features found in our Big Bin™ Series. They're designed with state-of-the-art computer technology to ensure strength, ease of assembly, and trouble-free operation. We invite you to compare the features and benefits of these tanks. We believe you will recognize that Behlen tanks provide exceptional value.



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**Behlen Mfg. Co.**

P.O. Box 569 • Columbus, NE 68602-0569

**PH 402.564.3111 • FAX 402.563.7405**

[www.behlenmfg.com](http://www.behlenmfg.com) • EMAIL [behlen@behlenmfg.com](mailto:behlen@behlenmfg.com)