

# **ABEL**

## **Square Storage Bin** Systems



STRENGTH • DURABILITY • FLEXIBLE DESIGN



**With over 50 years of successful design and manufacturing experience, Abel has the proven ability to supply storage systems that will assure the success of your next project.**



- Optimized bin designs are available for almost any application including feed, seed, grain, pet food, fertilizer, plastics, aggregates and many others.
- Three bin designs to choose from including single, double or corrugated bin walls.
- Bin systems can be provided in virtually any square or rectangle arrangement with walls from 2' wide to 12' wide.
- A full line of bin system accessories are available including enclosure siding, safety railing, access ladders, stairways, dust collection, etc.
- Abel's modern manufacturing facilities assure quality equipment at low cost.







## Standard Wall Design

**The Abel single wall bin design has been the standard in the industry for over 50 years. Its ability to be configured for virtually any capacity and bin arrangement make it a popular choice for most storage system requirements.**

- The bins are designed for bolted assembly for efficient shipping and construction.
- For excellent self cleaning characteristics, these bins have 45 degree beveled corners and a 60 degree minimum slope on all material contact surfaces.
- Bins can be constructed out of carbon, galvanized or stainless steel.
- Standard single wall bins can be designed for materials weighing from 40 to 100 pounds per cubic foot. Higher material density designs are available.
- Bins can be designed for almost all seismic and wind load conditions.
- Bin systems can be designed to support heavy structures such as equipment head houses or support towers.
- A wide variety of options and accessories are available including structural steel, bin roof railing, ladder systems, girt systems to allow the application of siding, filtered vent systems, discharge gates and many others.



## Corrugated Wall Design

**Corrugated wall bins are a good choice for storing larger particle type materials such as seed, grain, plastic pellets and beans. This special design provides excellent clean-out by eliminating most places where a particle may be retained.**

- Excellent self cleaning characteristics for larger particle materials.
- The bin walls are shipped as premanufactured assemblies which substantially reduces construction time.
- Corrugated wall bins are not recommended for ground or fibrous materials.



## Double Wall Design

**The Abel double wall bin design provides the best performance for applications that require maximum clean-out when storing materials that bridge or flow poorly. With the bin wall stiffeners placed between two flat panels, all bin wall surfaces are essentially smooth.**

- Excellent self cleaning characteristics for all materials.
- The bin walls are shipped as premanufactured assemblies which substantially reduces construction time.
- Interior stiffeners are perforated to allow for ventilation. This helps to reduce corrosion that may occur due to condensation between the flat wall panels.
- Heavy 45 degree bin wall corners are capable of handling substantial roof loads.



## U.S. UNITS

	Wall Levels	A Width (Feet)	B Length (Feet)	C Height (Ft-In)	D Height (Ft-In)	Volume Usable (Cu-Ft)	Capacity* Usable (US Tons)
6'-0" Square Bins	1	6	6	4'-11"	6'-6"	173	3.5
	2	6	6	8'-8"	6'-6"	306	6.1
	3	6	6	12'-5"	6'-6"	438	8.8
	4	6	6	16'-2"	6'-6"	570	11.4
	5	6	6	19'-11"	6'-6"	702	14.0
	6	6	6	23'-8"	6'-6"	834	16.7
	7	6	6	27'-5"	6'-6"	966	19.3
	8	6	6	31'-2"	6'-6"	1,099	22.0
	9	6	6	34'-11"	6'-6"	1,231	24.6
	10	6	6	38'-8"	6'-6"	1,363	27.3
	11	6	6	42'-5"	6'-6"	1,495	29.9
	12	6	6	46'-2"	6'-6"	1,627	32.5

7'-0" Square Bins	1	7	7	4'-11"	8'-2"	237	4.7
	2	7	7	8'-8"	8'-2"	418	8.4
	3	7	7	12'-5"	8'-2"	599	12.0
	4	7	7	16'-2"	8'-2"	780	15.6
	5	7	7	19'-11"	8'-2"	961	19.2
	6	7	7	23'-8"	8'-2"	1,142	22.8
	7	7	7	27'-5"	8'-2"	1,323	26.5
	8	7	7	31'-2"	8'-2"	1,504	30.1
	9	7	7	34'-11"	8'-2"	1,685	33.7
	10	7	7	38'-8"	8'-2"	1,866	37.3
	11	7	7	42'-5"	8'-2"	2,047	40.9
	12	7	7	46'-2"	8'-2"	2,228	44.6
	13	7	7	49'-11"	8'-2"	2,408	48.2
	14	7	7	53'-8"	8'-2"	2,589	51.8

8'-0" Square Bins	1	8	8	4'-11"	9'-11"	311	6.2
	2	8	8	8'-8"	9'-11"	548	11.0
	3	8	8	12'-5"	9'-11"	785	15.7
	4	8	8	16'-2"	9'-11"	1,023	20.5
	5	8	8	19'-11"	9'-11"	1,260	25.2
	6	8	8	23'-8"	9'-11"	1,497	29.9
	7	8	8	27'-5"	9'-11"	1,734	34.7
	8	8	8	31'-2"	9'-11"	1,971	39.4
	9	8	8	34'-11"	9'-11"	2,208	44.2
	10	8	8	38'-8"	9'-11"	2,446	48.9
	11	8	8	42'-5"	9'-11"	2,683	53.7
	12	8	8	46'-2"	9'-11"	2,920	58.4
	13	8	8	49'-11"	9'-11"	3,157	63.1
	14	8	8	53'-8"	9'-11"	3,394	67.9
	15	8	8	57'-5"	9'-11"	3,632	72.6
	16	8	8	61'-2"	9'-11"	3,869	77.4
	17	8	8	64'-11"	9'-11"	4,106	82.1
	18	8	8	68'-8"	9'-11"	4,343	86.9
	19	8	8	72'-5"	9'-11"	4,580	91.6
	20	8	8	76'-2"	9'-11"	4,818	96.4

10'-0" Square Bins	1	10	10	4'-11"	13'-6"	488	9.8
	2	10	10	8'-8"	13'-6"	860	17.2
	3	10	10	12'-5"	13'-6"	1,232	24.6
	4	10	10	16'-2"	13'-6"	1,605	32.1
	5	10	10	19'-11"	13'-6"	1,977	39.5
	6	10	10	23'-8"	13'-6"	2,349	47.0
	7	10	10	27'-5"	13'-6"	2,721	54.4
	8	10	10	31'-2"	13'-6"	3,093	61.9
	9	10	10	34'-11"	13'-6"	3,465	69.3
	10	10	10	38'-8"	13'-6"	3,838	76.8
	11	10	10	42'-5"	13'-6"	4,210	84.2
	12	10	10	46'-2"	13'-6"	4,582	91.6
	13	10	10	49'-11"	13'-6"	4,954	99.1
	14	10	10	53'-8"	13'-6"	5,326	106.5
	15	10	10	57'-5"	13'-6"	5,699	114.0
	16	10	10	61'-2"	13'-6"	6,071	121.4
	17	10	10	64'-11"	13'-6"	6,443	128.9
	18	10	10	68'-8"	13'-6"	6,815	136.3
	19	10	10	72'-5"	13'-6"	7,187	143.7
	20	10	10	76'-2"	13'-6"	7,560	151.2

\* Capacity base on material weighing 40 lbs/ft<sup>3</sup>

## METRIC UNITS

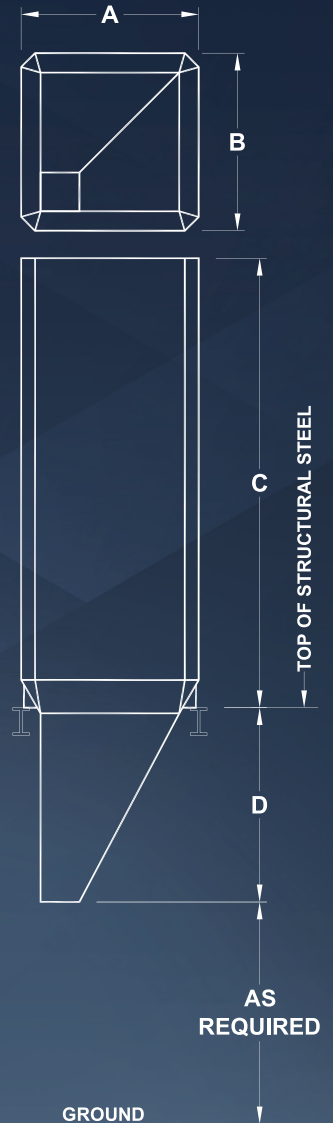
	Wall Levels	A Width (Meters)	B Length (Meters)	C Height (Meters)	D Height (Meters)	Volume Usable (Cu-M)	Capacity* Usable (M Tons)
1.83 Meter Square Bins	1	1.83	1.83	1.50	1.98	4.9	3.1
	2	1.83	1.83	2.64	1.98	8.7	5.5
	3	1.83	1.83	3.78	1.98	12.4	7.9
	4	1.83	1.83	4.93	1.98	16.1	10.3
	5	1.83	1.83	6.07	1.98	19.9	12.7
	6	1.83	1.83	7.21	1.98	23.6	15.1
	7	1.83	1.83	8.36	1.98	27.4	17.5
	8	1.83	1.83	9.50	1.98	31.1	19.9
	9	1.83	1.83	10.64	1.98	34.9	22.3
	10	1.83	1.83	11.79	1.98	38.6	24.7
	11	1.83	1.83	12.93	1.98	42.3	27.1
	12	1.83	1.83	14.07	1.98	46.1	29.5

2.13 Meter Square Bins	1	2.13	2.13	1.50	2.49	6.7	4.3
	2	2.13	2.13	2.64	2.49	11.8	7.6
	3	2.13	2.13	3.78	2.49	17.0	10.9
	4	2.13	2.13	4.93	2.49	22.1	14.2
	5	2.13	2.13	6.07	2.49	27.2	17.4
	6	2.13	2.13	7.21	2.49	32.3	20.7
	7	2.13	2.13	8.36	2.49	37.5	24.0
	8	2.13	2.13	9.50	2.49	42.6	27.3
	9	2.13	2.13	10.64	2.49	47.7	30.6
	10	2.13	2.13	11.79	2.49	52.8	33.9
	11	2.13	2.13	12.93	2.49	58.0	37.1
	12	2.13	2.13	14.07	2.49	63.1	40.4
	13	2.13	2.13	15.21	2.49	68.2	43.7
	14	2.13	2.13	16.36	2.49	73.3	47.0

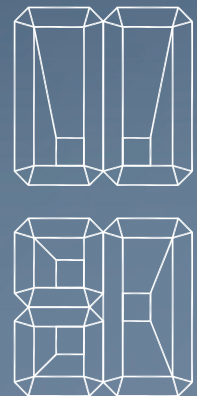
2.44 Meter Square Bins	1	2.44	2.44	1.50	3.02	8.8	5.6
	2	2.44	2.44	2.64	3.02	15.5	9.9
	3	2.44	2.44	3.78	3.02	22.2	14.2
	4	2.44	2.44	4.93	3.02	29.0	18.6
	5	2.44	2.44	6.07	3.02	35.7	22.9
	6	2.44	2.44	7.21	3.02	42.4	27.2
	7	2.44	2.44	8.36	3.02	49.1	31.5
	8	2.44	2.44	9.50	3.02	55.8	35.8
	9	2.44	2.44	10.64	3.02	62.5	40.1
	10	2.44	2.44	11.79	3.02	69.3	44.4
	11	2.44	2.44	12.93	3.02	76.0	48.7
	12	2.44	2.44	14.07	3.02	82.7	53.0
	13	2.44	2.44	15.21	3.02	89.4	57.3
	14	2.44	2.44	16.36	3.02	96.1	61.6
	15	2.44	2.44	17.50	3.02	102.8	65.9
	16	2.44	2.44	18.64	3.02	109.6	70.2
	17	2.44	2.44	19.79	3.02	116.3	74.5
	18	2.44	2.44	20.93	3.02	123.0	78.8
	19	2.44	2.44	22.07	3.02	129.7	83.1
	20	2.44	2.44	23.22	3.02	136.4	87.4

3.05 Meter Square Bins	1	3.05	3.05	1.50	4.11	13.8	8.9
	2	3.05	3.05	2.64	4.11	24.4	15.6
	3	3.05	3.05	3.78	4.11	34.9	22.4
	4	3.05	3.05	4.93	4.11	45.4	29.1
	5	3.05	3.05	6.07	4.11	56.0	35.9
	6	3.05	3.05	7.21	4.11	66.5	42.6
	7	3.05	3.05	8.36	4.11	77.1	49.4
	8	3.05	3.05	9.50	4.11	87.6	56.1
	9	3.05	3.05	10.64	4.11	98.1	62.9
	10	3.05	3.05	11.79	4.11	108.7	69.6
	11	3.05	3.05	12.93	4.11	119.2	76.4
	12	3.05	3.05	14.07	4.11	129.7	83.1
	13	3.05	3.05	15.21	4.11	140.3	89.9
	14	3.05	3.05	16.36	4.11	150.8	96.6
	15	3.05	3.05	17.50	4.11	161.4	103.4
	16	3.05	3.05	18.64	4.11	171.9	110.1
	17	3.05	3.05	19.79	4.11	182.4	116.9
	18	3.05	3.05	20.93	4.11	193.0	123.7
	19	3.05	3.05	22.07	4.11	203.5	130.4
	20	3.05	3.05	23.22	4.11	214.1	137.2

\* Capacity base on material weighing 640 kg/m<sup>3</sup>



STANDARD BINS  
CAN BE DIVIDED  
IN MANY WAYS TO  
MEET CUSTOMER  
REQUIREMENTS



**ABEL MANUFACTURING CO., INC.**

PO Box 757 Appleton, WI 54912 USA  
Phone: 920-734-4443 • Fax: 920-734-1084  
sales@abelusa.com • www.abelusa.com