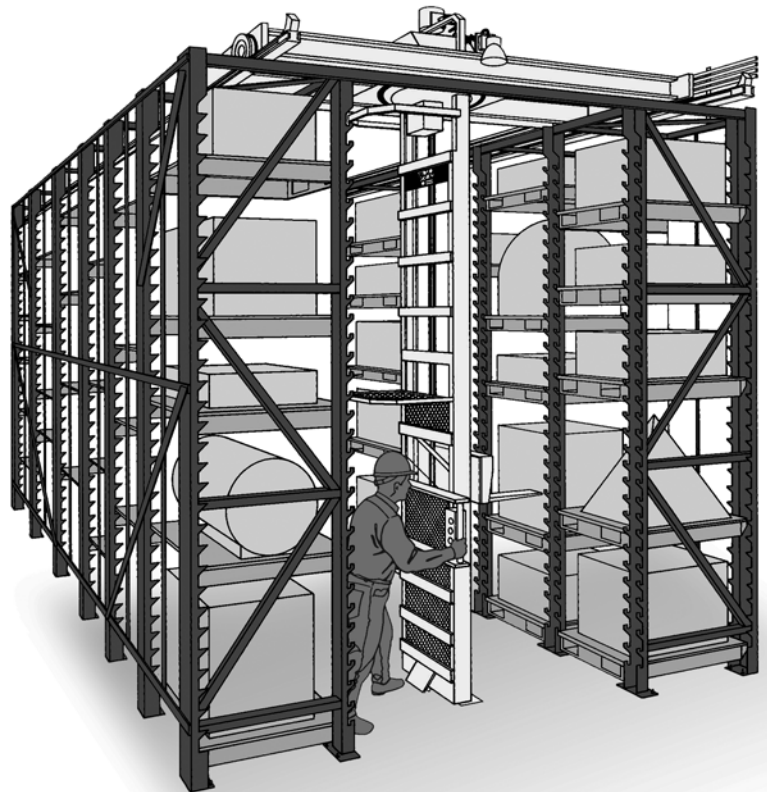


STAK System®

STAK System® Dynamic Pallet-Based Storage and Handling System

ARS Adjustable Racking System

TECHNICAL SPECIFICATIONS AND ORDERING GUIDE



SPECIFICATIONS

The following specifications outline main STAK System® features along with important user benefits. (All specifications are 2K STAK System specs. If you would like 4K STAK System specs, please contact your STAK System representative.)

ITEM	SPECIFICATION	USER BENEFIT
SYSTEM:		
Overall Height:	15' 4-5/16" (4.7m) (standard height).	Fits into most manufacturing areas; other heights are available to fit customer needs.
STORAGE RACK:		
Maximum Design Capacity:	25,000 lbs. per individual storage section; 50,000 lbs. per bay (seismic zones one and two). 12,500 lbs. per individual storage section; 25,000 lbs. per bay (seismic zones three and four).	Excess capacity.
Columns:	13' (4m) long one-piece.	No butt welds; accurate, straight columns.
Front:	Heavy-duty roll-formed 12-gauge (.1046) double-wall construction. 2-1/2" (63.5mm) (front to back) x 3-1/2" (88.9mm) (left to right); 5-1/2" (139.7mm) x 8" (203.2mm) bearing pad producing 44 sq. in. (1.1 sq. m) floor bearing area.	Large floor-bearing surface
Rear:	Formed 11-gauge (.1196). 2-5/8" (66.7mm) (front to back) x 7-7/8" (200mm) (left to right); 5-1/2" (139.7mm) x 8" (203.2mm) bearing pad producing 44 sq. in. (1.1 sq. m) floor bearing area.	Large floor-bearing surface.
Anchoring:	Two 1/2" (12.7mm) dia. expansion anchors per bearing pad.	Twice the anchoring of conventional racks. Increased safety and security.
Leveling:	One 1/2" (12.7mm) dia. hex-head machine screw with 1-5/16" (33.3mm) adjustment.	Faster, more accurate installation.
Pallet Retainer Notches:	37 total, spaced 3-7/8" (98.4mm) apart.	Adjustability for better cube utilization and increased storage density.
Pallet Engagement:	Front Column: Positive engagement in 1/2" (12.7mm) extra-deep hook.	Assures safe engagement of pallets into the system at all load-bearing contact points.
Column Height:	Rear Column: Extra-large safety rest: 13' (4m) (standard).	Maximum storage-to-space ratio.
Column Depth:		
30" (762mm) System/Pallet:	31-1/2" (800.1mm) (front to back)	
36" (914.4mm) System/Pallet:	37-1/2" (952.5mm) (front to back)	
42" (1.1m) System/Pallet:	43-1/2" (1.1m) (front to back)	
48" (1.2m) System/Pallet:	49-1/2" (1.3m) (front to back)	
Opening Between:	Front Columns	Rear Columns
26-1/2" (673.1mm)-Wide Pallet	28" (711.2mm) (left to right)	23-5/8" (600.1mm) (left to right)
36" (914.4mm)-Wide Pallet	37-1/2" (952.5mm) (left to right)	33-1/8" (841.4mm) (left to right)
42" (1.1m)-Wide Pallet	43-1/2" (1.1m) (left to right)	39-1/8" (993.8mm) (left to right)
48" (1.2m)-Wide Pallet	49-1/2" (1.3m) (left to right)	45-1/8" (1.1m) (left to right)
52" (1.3m)-Wide Pallet	53-1/2" (1.4m) (left to right)	49-1/8" (1.2m) (left to right)
Columns Center Line to Center Line:		
26-1/2" (673.1mm)-Wide Pallet	31-1/2" (800.1mm)	
36" (914.4mm)-Wide Pallet	41" (1m)	
42" (1.1m)-Wide Pallet	47" (1.2m)	
48" (1.2m)-Wide Pallet	53" (1.3m)	
52" (1.3m)-Wide Pallet	57" (1.4m)	
BRIDGE:		
Type:	Top running.	No floor contact. Eliminates expensive special floor surfacing and maintenance.
Capacity:	2,000 lb. pallet load.	Optimum capacity for most typical factory loads moved manually.
Construction:	Welded construction; two 6" (152.4mm) x 12 lbs./ft. wide flange beams, two 6" (152.4mm) x 2" (50.8mm) rectangular tube end trucks.	Strong wide flange beams, tubular end trucks.
Wheels:	Four 9" (228.6mm) dia. double-flange wheels, roller-bearing pressure grease fitting.	Provides minimum friction, maximum load stability.
Bridge Derailment Protection:	Rail sweep mounted in front of each wheel.	Sweeps foreign objects off rails.
TROLLEY:		
Type:	Contained.	
Capacity:	2,000 lb. pallet load.	
Construction:	Steel plate with four integral flanges.	Plate construction ensures flatness, easy turning for turntable.
Wheels:	Four 5" (127mm) dia. wheels, ball bearing type with permanent lubrication.	Trolley wheels ride within bridge. No chance of derailment as with other top-riding trolleys.
Trolley Stabilizing Guides:	Four 1-1/4" (31.8mm) dia. bearings.	Aligns trolley within bridge. Assures nearly effortless operation.

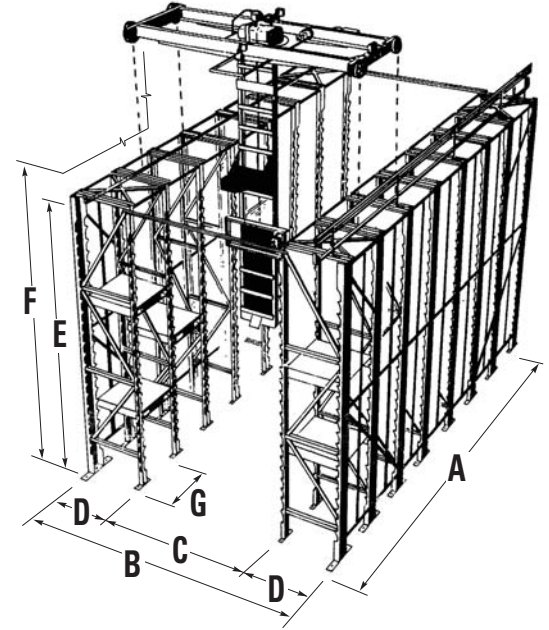
SPECIFICATIONS

ITEM	SPECIFICATION	USER BENEFIT
MAST:		
Capacity:	2,000 lb. pallet load.	
Construction:	Welded construction; two 6" (152.4mm) channels, separated with ladder cross members; each channel contains a steel guide bar welded inside channel.	Maximum strength, minimum torsion and deflection.
Turntable:	360° rotary bearing with pressure grease fitting.	Continuous 360° rotation.
Rollers:	Four 2" (50.8mm) dia. crowned cam rollers with pressure grease fittings.	Ride on inboard high-strength steel guide bars to distribute load.
Stabilizing:	Four 1-1/4" (31.8mm) dia. bearings.	Side-to-side stability; rides inboard on guide bar.
Free Fall Prevention Device:	Positive stop/lock mechanism.	Prevents free fall in case of chain break.
Operator Visibility:	Plexiglass viewing port (16" [406.4mm] x 14-1/2" [383.3mm]).	Clear, unobstructed visibility.
Mast Operating Handles:	Handles mounted outboard of mast unit.	Ensures ease of operation in rotating masting unit.
Protective Canopy:	Enclosed steel angle frame with 45° corners bolted to mast.	Reduced turning radius, no right-angle corners to interfere with pallets to rear of operator.
Mast/Trolley Stop:	Steel angle frame with 45° corners bolted to mast.	Added safety feature for operator protection.
RAIL:		
Size:	20 lb. A.S.C.E.	Smooth riding, accurate runway.
FORKS:		
Mounting:	Shaft type.	Adjustable for pitch and width settings.
Capacity:	2,000 lbs.	
Size:	30" (762mm) System: 30" (762mm) long, 4" (101.6mm) wide, 1-1/4" (31.8mm) deep. 36" (914.4mm) System: 36" (914.4mm) long, 4" (101.6mm) wide, 1-1/4" (31.8mm) deep. 42" (1.1m) System: 42" (1.1m) long, 4" (101.6mm) wide, 1-1/4" (31.8mm) deep. 48" (1.2m) System: 48" (1.2m) long, 4" (101.6mm) wide, 1-1/4" (31.8mm) deep.	
ELECTRICAL:		
Hoist:	2,000 lb. capacity.	
Electrical Characteristics:	Single Speed, 16 ft./min., 1HP 230/460V, 3-phase, 60Hz (460V shipped unless otherwise specified).	AC-powered. Reduces energy costs compared to DC battery-powered or I.C. forklifts.
	5-amp operating load at 230V, 3-amp operating load at 460V. Field-changeable voltage.	Optimum speed for ease of operation.
	208V, 3-phase, 60Hz, 4.2-amp operating load.	
Power Bars:	4-bar insulated conductor system: 3 power, 1 ground, sliding pickup (replaceable shoes).	Continuous trouble-free power supply.
Controls:	Up/down push-button; 115V control circuit; on/off key switch with key removable in "off" position only.	Easy operator controls. Security prevents unauthorized use.
Lights:	Two 90-watt reflector flood lamps controlled by on/off switch; 115V light circuit.	Two lights for illumination only when area is being used (saves energy).
Disconnect Box:	30-amp.	
PALLETS, FLAT:		
Size:	26-1/2" (673.1mm) (left to right) x 30" (762mm) (front to back) 36" (914.4mm) (left to right) x 30" (762mm) (front to back) 36" (914.4mm) (left to right) x 36" (914.4mm) (front to back) 42" (1.1m) (left to right) x 36" (914.4mm) (front to back) 42" (1.1m) (left to right) x 42" (1.1m) (front to back) 48" (1.2m) (left to right) x 48" (1.2m) (front to back) 52" (1.3m) (left to right) x 42" (1.1m) (front to back) 52" (1.3m) (left to right) x 48" (1.2m) (front to back)	Optimal sizes for capital tooling, maintenance items, work-in-process, finished stores and other items.
Capacity:	2,000 lbs. (uniformly distributed load).	
Height:	4-13/16" (122.2mm)	Optimal height for hand truck or pallet jack pickup.
Fork Guides:	Two-way entry with fork guides on front.	Positive engagement prevents accidental tipping.
Add-On Tub Kits:	1-1/4" (31.8mm)-high sidewalls 4-7/8" (123.8mm)-high sidewalls 8-3/4" (222.3mm)-high sidewalls 12-5/8" (320.7mm)-high sidewalls	Maximum flexibility in adapting pallets to changing needs.
Partitions and Dividers:	4-7/8" (123.8mm) high 8-3/4" (222.3mm) high 12-5/8" (320.7mm) high	
Pallet Structural Support:	V-section supports, left to right, right angles to the forks.	Distributes weight over surface of pallets to assure balanced load.
Pallet Resting Ears:	180° self-centering design.	Ears self-centering on racking notches.

HEIGHT/PALLET SELECTION GUIDE

To determine the STAK System® that will best fit your building, and the number of pallets per section based on load heights, follow these simple steps:

1. Measure from floor to lowest overhead obstruction. To account for variations in floor level, check this measurement at several locations within your STAK System area.
2. Standard STAK System height is 15' 4-5/16" (4.7m). If your ceiling will not accept the standard height, select the height that will clear all obstructions from the other available heights below.
3. Match the height you selected in Step 2 with your average pallet load height in the table below. The intersection will determine the number of pallets per section. Multiply this number by the number of sections to obtain total pallet quantity. (Two facing sections equal one bay.)



SYSTEM DIMENSIONS GUIDE

System dimensions guide reflects 2K STAK System dimensions. If you need 4K STAK System dimensions, please contact your STAK System® representative.

A. System Length	26-1/2" x 30"	36" x 30"	36" x 36"	42" x 36"
4-Bay	12' 8-1/2" (3.9m)	15' 2" (4.6m)	15' 2" (4.6m)	16' 8" (5.1m)
5-Bay	15' 4" (4.7m)	18' 7" (5.7m)	18' 7" (5.7m)	20' 7" (6.3m)
6-Bay	17' 11-1/2" (5.5m)	22' (6.7m)	22' (6.7m)	24' 6" (7.5m)
7-Bay	20' 7" (6.3m)	25' 5" (7.7m)	25' 5" (7.7m)	28' 5" (8.7m)
8-Bay	23' 2-1/2" (7.1m)	28' 10" (8.8m)	28' 10" (8.8m)	32' 4" (9.9m)
9-Bay	25' 10" (7.9m)	32' 3" (9.8m)	32' 3" (9.8m)	36' 3" (11.0m)
10-Bay	28' 5-1/2" (8.7m)	35' 8" (10.9m)	35' 8" (10.9m)	40' 2" (12.2m)
11-Bay	31' 1" (9.5m)	39' 1" (11.9m)	39' 1" (11.9m)	44' 1" (13.4m)
12-Bay	33' 8-1/2" (10.3m)	42' 6" (13.0m)	42' 6" (13.0m)	48' (14.6m)
13-Bay	36' 4" (11.1m)	45' 11" (14.0m)	45' 11" (14.0m)	51' 11" (15.8m)
14-Bay	38' 11-1/2" (11.9m)	49' 4" (15.0m)	49' 4" (15.0m)	55' 10" (17.0m)
15-Bay	41' 7" (12.7m)	52' 9" (16.1m)	52' 9" (16.1m)	59' 9" (18.2m)
16-Bay	44' 2-1/2" (13.5m)	56' 2" (17.1m)	56' 2" (17.1m)	63' 8" (19.4m)
17-Bay	46' 10" (14.3m)	59' 7" (18.2m)	59' 7" (18.2m)	67' 7" (20.6m)
18-Bay	49' 5-1/2" (15.1m)	63' (19.2m)	63' (19.2m)	71' 6" (21.8m)
19-Bay	52' 1" (15.9m)	66' 5" (20.1m)	66' 5" (20.1m)	75' 5" (22.8m)
20-Bay	54' 8-1/2" (16.7m)	69' 10" (21.3m)	69' 10" (21.3m)	79' 4" (24.2m)
B. Overall System Width	11' 11" (3.6m)	11' 11" (3.6m)	13' 7" (4.1m)	13' 7" (4.1m)
C. Aisle Width	6' 6" (2.0m)	6' 6" (2.0m)	7' 2" (2.2m)	7' 2" (2.2m)
D. Rack Depth	2' 7-1/2" (0.8m)	2' 7-1/2" (0.8m)	3' 1-1/2" (1.0m)	3' 1-1/2" (1.0m)
E. Rack Height	13' (4.0m)	13' (4.0m)	13' (4.0m)	13' (4.0m)
F. Overall Height (before shimming)	15' 4-5/16" (4.7m)	15' 4-5/16" (4.7m)	15' 4-5/16" (4.7m)	15' 4-5/16" (4.7m)
G. Columns: Center to Center	2' 7-1/2" (0.8m)	3' 5" (1.0m)	3' 5" (1.0m)	3' 11" (1.2m)
Add-On Bay Length	2' 7-1/2" (0.8m)	3' 5" (1.0m)	3' 5" (1.0m)	3' 11" (1.2m)

Dimensions include rail extension dimensions and exterior strapping and hardware.

Height/Pallet Selection Guide for 2K Pallets

OVERALL HEIGHT	STANDARD	OTHER AVAILABLE HEIGHTS										
	15' 4-5/16" 4.7M	15' 7/16" 4.6M	14' 8-9/16" 4.5M	14' 4-11/16" 4.4M	14' 13/16" 4.3M	13' 8-15/16" 4.2M	13' 5-1/16" 4.1M	13' 13/16" 4.0M	12' 9-5/16" 3.9M	12' 5-7/16" 3.8M	12' 1-9/16" 3.7M	
HT. CODE	156	152	148	144	140	136	132	128	125	121	117	
PALLET LOAD HEIGHT	6"	9	9	9	9	8	8	8	8	7	7	6
	10"	7	7	7	7	7	6	6	6	6	6	5
	14"	6	6	6	6	5	5	5	5	5	5	4
	18"	5	5	5	5	5	4	4	4	4	4	4
	22"	4	4	4	4	4	4	4	4	3	3	3
	26"	4	4	4	4	3	3	3	3	3	3	3
	30"	3	3	3	3	3	3	3	3	3	3	2

PALLETS PER SECTION *Based on nominal lifting cle*

Note: Selection guide is based on 2K STAK System pallets. If you need 4K STAK System information, please **contact yo**

	42" x 42"	42" x 48"	48" x 48"	52" x 42"	52" x 48"
	16' 8" (5.1m)	16' 8" (5.1m)	18' 8" (5.7m)	20' (6.1m)	20' (6.1m)
	20' 7" (6.3m)	20' 7" (6.3m)	23' 1" (7.0m)	24' 9" (7.5m)	24' 9" (7.5m)
	24' 6" (7.5m)	24' 6" (7.5m)	27' 6" (8.4m)	29' 6" (9.0m)	29' 6" (9.0m)
	28' 5" (8.7m)	28' 5" (8.7m)	31' 11" (9.7m)	34' 3" (10.4m)	34' 3" (10.4m)
	32' 4" (9.9m)	32' 4" (9.9m)	36' 4" (11.1m)	39' (11.9m)	39' (11.9m)
	36' 3" (11.0m)	36' 3" (11.0m)	40' 9" (12.4m)	43' 9" (13.3m)	43' 9" (13.3m)
	40' 2" (12.2m)	40' 2" (12.2m)	45' 2" (13.8m)	48' 6" (14.8m)	48' 6" (14.8m)
	44' 1" (13.4m)	44' 1" (13.4m)	49' 7" (15.1m)	53' 3" (16.2m)	53' 3" (16.2m)
	48' (14.6m)	48' (14.6m)	54' (16.5m)	58' (17.7m)	58' (17.7m)
	51' 11" (15.8m)	51' 11" (15.8m)	58' 5" (17.8m)	62' 9" (19.1m)	62' 9" (19.1m)
	55' 10" (17.0m)	55' 10" (17.0m)	62' 10" (19.2m)	67' 6" (20.6m)	67' 6" (20.6m)
	59' 9" (18.2m)	59' 9" (18.2m)	67' 3" (20.5m)	72' 3" (22.0m)	72' 3" (22.0m)
	63' 8" (19.4m)	63' 8" (19.4m)	71' 8" (21.8m)	77' (23.5m)	77' (23.5m)
	67' 7" (20.6m)	67' 7" (20.6m)	76' 1" (23.2m)	81' 9" (24.9m)	81' 9" (24.9m)
	71' 6" (21.8m)	71' 6" (21.8m)	80' 6" (24.5m)	86' 6" (26.4m)	86' 6" (26.4m)
	75' 5" (22.8m)	75' 5" (23.0m)	84' 11" (25.6m)	91' 3" (27.7m)	91' 3" (27.7m)
	79' 4" (24.2m)	79' 4" (24.2m)	89' 4" (27.2m)	96' (29.3m)	96' (29.3m)
	15' 3" (4.6m)	16' 3" (5.0m)	16' 3" (5.0m)	15' 3" (4.6m)	16' 3" (5.0m)
	7' 10" (2.4m)	7' 10" (2.4m)	7' 10" (2.4m)	7' 10" (2.4m)	7' 10" (2.4m)
	3' 7-1/2" (1.1m)	4' 1-1/2" (1.3m)	4' 1-1/2" (1.3m)	3' 7-1/2" (1.1m)	4' 1-1/2" (1.3m)
	13' (4.0m)	13' (4.0m)	13' (4.0m)	13' (4.0m)	13' (4.0m)
	15' 4-5/16" (4.7m)	15' 4-5/16" (4.7m)	15' 4-5/16" (4.7m)	15' 4-5/16" (4.7m)	15' 4-5/16" (4.7m)
	3' 11" (1.2m)	3' 11" (1.2m)	4' 5" (1.3m)	4' 9" (1.4m)	4' 9" (1.4m)
	3' 11" (1.2m)	3' 11" (1.2m)	4' 5" (1.3m)	4' 9" (1.4m)	4' 9" (1.4m)

11' 9-11/16" 3.6M	11' 5-13/16" 3.5M	11' 1-15/16" 3.4M	10' 10-1/16" 3.3M	10' 6-3/16" 3.2M	10' 2-5/16" 3.1M	16' 3-15/16" 4.9M	17' 3-9/16" 5.2M	18' 3-3/16" 5.6M
113	109	105	101	097	094	167	179	190
6	6	6	6	6	5	10	11	12
5	5	5	5	4	4	8	9	9
4	4	4	4	4	3	7	7	8
4	3	3	3	3	3	6	6	6
3	3	3	3	3	2	5	5	6
3	3	2	2	2	2	4	5	5
2	-2	2	2	2	2	4	4	4

e of 4 in.

ystem® representative.

60" x 42"	60" x 48"	72" x 42"	72" x 48"
22' 8" (6.9m)	22' 8" (6.9m)	26' 8" (8.1m)	26' 8" (8.1m)
28' 1" (8.6m)	28' 1" (8.6m)	33' 1" (10.1m)	33' 1" (10.1m)
33' 6" (10.2m)	33' 6" (10.2m)	39' 6" (12.0m)	39' 6" (12.0m)
38' 11" (11.9m)	38' 11" (11.9m)	45' 11" (14.0m)	45' 11" (14.0m)
44' 4" (13.5m)	44' 4" (13.5m)	52' 4" (16.0m)	52' 4" (16.0m)
49' 9" (15.2m)	49' 9" (15.2m)	58' 9" (17.9m)	58' 9" (17.9m)
55' 2" (16.8m)	55' 2" (16.8m)	65' 2" (19.9m)	65' 2" (19.9m)
60' 7" (18.5m)	60' 7" (18.5m)	71' 7" (21.8m)	71' 7" (21.8m)
66' (20.1m)	66' (20.1m)	78' (23.8m)	78' (23.8m)
71' 5" (21.8m)	71' 5" (21.8m)	84' 5" (25.7m)	84' 5" (25.7m)
76' 10" (23.4m)	76' 10" (23.4m)	90' 10" (27.7m)	90' 10" (27.7m)
82' 3" (25.1m)	82' 3" (25.1m)	97' 3" (29.6m)	97' 3" (29.6m)
87' 8" (26.7m)	87' 8" (26.7m)	103' 8" (31.6m)	103' 8" (31.6m)
93' 1" (28.4m)	93' 1" (28.4m)	110' 1" (33.6m)	110' 1" (33.6m)
98' 6" (30.0m)	98' 6" (30.0m)	116' 6" (35.5m)	116' 6" (35.5m)
103' 11" (31.4m)	103' 11" (31.4m)	122' 11" (37.2m)	122' 11" (37.2m)
109' 4" (33.3m)	109' 4" (33.3m)	129' 4" (39.4m)	129' 4" (39.4m)
16' 3" (5.0m)	16' 3" (5.0m)	16' 3" (5.0m)	16' 3" (5.0m)
7' 10" (2.4m)	7' 10" (2.4m)	7' 10" (2.4m)	7' 10" (2.4m)
3' 7-1/2" (1.1m)	4' 1-1/2" (1.3m)	3' 7-1/2" (1.1m)	4' 1-1/2" (1.3m)
13' (4.0m)	13' (4.0m)	13' (4.0m)	13' (4.0m)
15' 4-5/16" (4.7m)	15' 4-5/16" (4.7m)	15' 4-5/16" (4.7m)	15' 4-5/16" (4.7m)
5' 5" (1.7m)	5' 5" (1.7m)	6' 5" (2.0m)	6' 5" (2.0m)
5' 5" (1.7m)	5' 5" (1.7m)	6' 5" (2.0m)	6' 5" (2.0m)