

# W45ZHD2

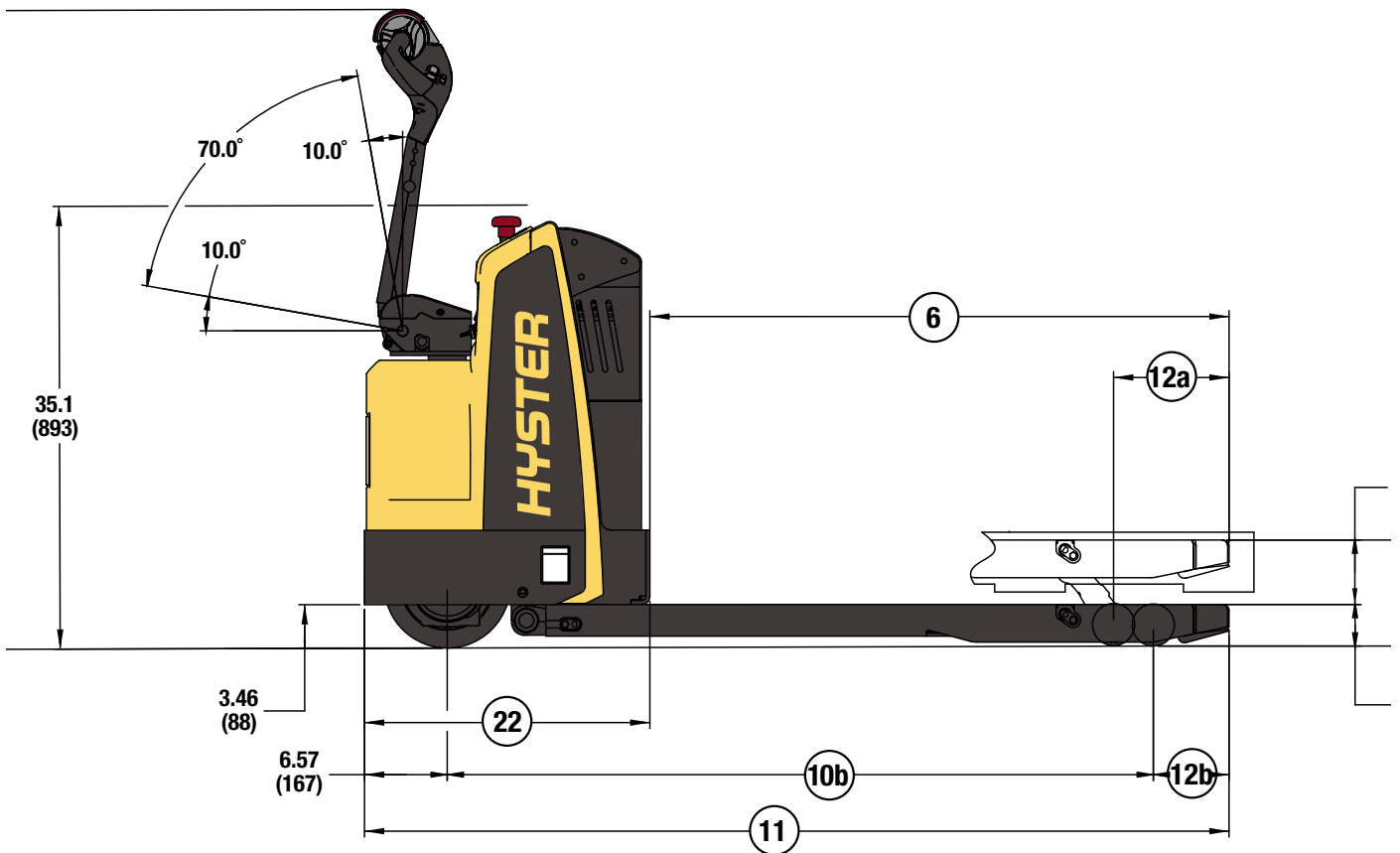
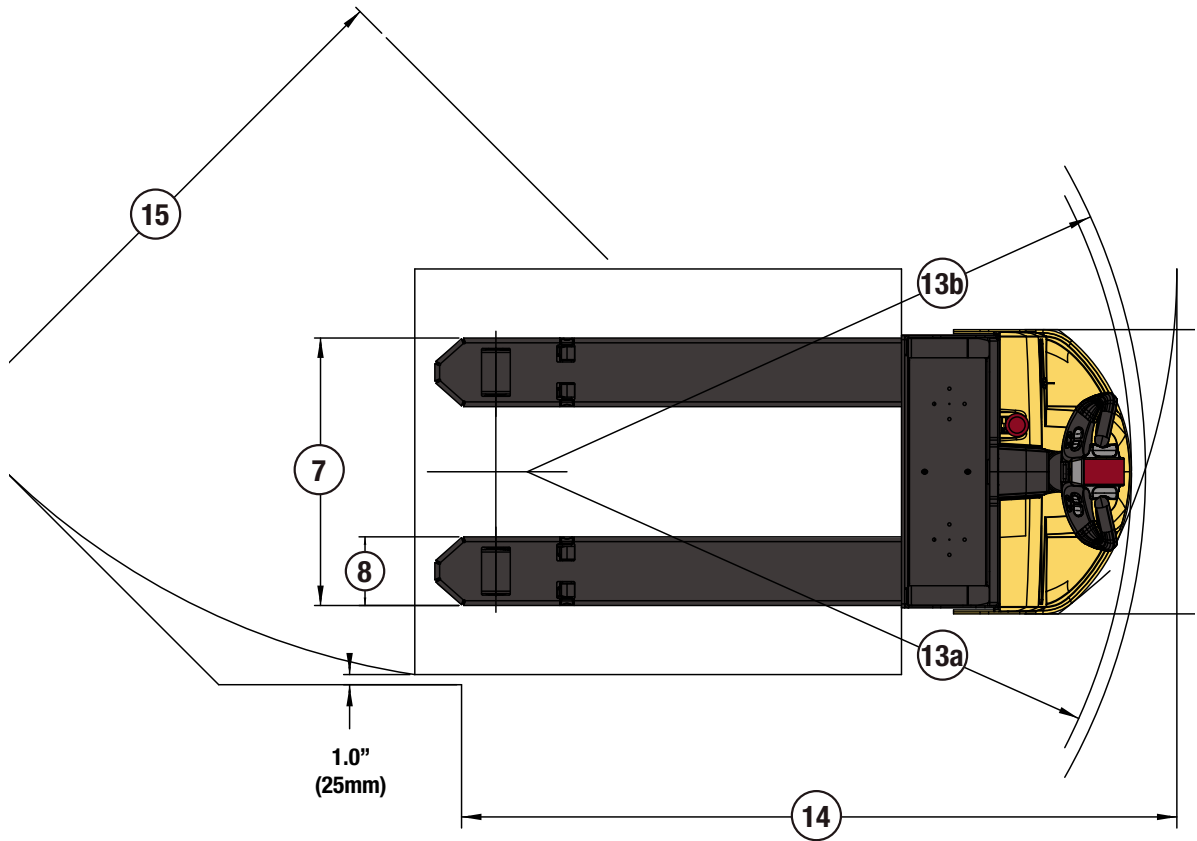
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**WALKIE LOW LIFT PALLET TRUCK**  
**PRODUCT TECHNICAL GUIDE**



# DIMENSIONS



# SPECIFICATIONS

GENERAL	1	Manufacturer	Hyster					
	2	Model designation	W45ZHD2					
	3	Power type	24 Volt					
	4	Operator type	Pedestrian					
	5	Rated capacity	lb (kg)	4500 (2041)				
	6a	Fork length – nominal	in (mm)	36 (914)	42 (1067)	48 (1219)	48 (1219)	
	6b	Fork length – actual	in (mm)	34 (866)	42.7 (1084)	46 (1169)	48 (1219)	
	7	Fork overall width	in (mm)	26.4 (670)	26.4 (670)	26.4 (670)	26.4 (670)	
	8	Fork width (individual fork)	in (mm)	7 (172)				
DIMENSIONS	9	Load distance – face of forks to center of load wheels-lowered	in (mm)	28 (713)	37 (931)	40 (1016)	40 (1016)	
	10a	Wheelbase – raised	in (mm)	41.0 (1042)	49.6 (1261)	53.0 (1346)	53.0 (1346)	
	10b	Wheelbase – lowered	in (mm)	44.2 (1122)	52.8 (1340)	56.1 (1425)	56.1 (1425)	
	11	Overall length	in (mm)	56.8 (1442)	66.3 (1683)	68.7 (1745)	70.7 (1795)	
	12a	Center of load wheel to tip of forks – raised	in (mm)	9.2 (234)	9.2 (234)	9.2 (234)	11.1 (283)	
	12b	Center of load wheel to tip of forks – lowered	in (mm)	6.0 (153)	6.0 (153)	6.0 (153)	6.0 (153)	
	13a	Outside turning radius (bumper) - raised	in (mm)	47.6 (1208)	57.1 (1449)	59.5 (1511)	59.5 (1511)	
		Outside turning radius (bumper) - lowered	in (mm)	50.8 (1289)	60.3 (1530)	62.7 (1592)	62.7 (1592)	
	13b	Outside turning radius (handle) - raised	in (mm)	48.9 (1242)	57.5 (1460)	60.8 (1545)	60.8 (1545)	
		Outside turning radius (handle) - lowered	in (mm)	52.1 (1324)	61.6 (1565)	64.1 (1627)	64.1 (1627)	
	14	Right angle stack – raised	in (mm)	59.9 (1521)	62.5 (1588)	70.6 (1792)	70.6 (1792)	
	15	Equal intersecting aisle – raised	in (mm)	48.4 (1230)	55.0 (1396)	56.5 (1435)	56.5 (1435)	
	17a	Grade clearance	Chassis	%	67			
	17b		Center of wheelbase	%	45	36	34	34
	17c		Forks	%	74	74	74	59
	18	Overall lift height – top of forks	in (mm)	8.4 (214)				
	19	Lowered height – top of forks	in (mm)	3.3 (84)				
	20	Total lift	in (mm)	5.1 (130)				
	21	Truck overall width	in (mm)	28.0 (712)				
	22	Chassis length	in (mm)	22.7 (576)				
	23	Battery compartment – standard	in (mm)	26.5 x 8.2 x OPEN (672 x 208 x OPEN)				
	PERFORMANCE	24	Maximum travel speed – chassis first – NL/RL	mph (kph)	3.7/3.7 (6.0/6.0)	3.7/3.7 (6.0/6.0)	3.7/3.7 (6.0/6.0)	3.7/3.7 (6.0/6.0)
		25	Maximum travel speed – forks first – NL/RL	mph (kph)	3.7/3.7 (6.0/6.0)	3.7/3.7 (6.0/6.0)	3.7/3.7 (6.0/6.0)	3.7/3.7 (6.0/6.0)
26		Number of speeds	Infinitely Variable					
27		Traction motor control method type	AC Transistor					
28		Service brake type	Electro-Mechanical					
WT.	29	Truck weight (approximate) without battery – NL/RL	lb (kg)	624.0/5124.0 (283.0/2324.0)	650.0/5150.0 (295.0/2336.0)	659.0/5159.0 (299.0/2340.0)	659.0/5159.0 (299.0/2340.0)	
	30	Axle loading, drive, static w/max. wt battery – NL	lb (kg)	767 (348)	783 (355)	783 (355)	783 (355)	
	31	Axle loading, load wheel, static w/max. wt battery – NL	lb (kg)	137 (62)	128 (58)	128 (58)	128 (58)	
WHEELS	32	Drive tire – size/type (number of wheels)	in	10.0 x 4.0/Press-on smooth rubber (1)				
	33	Load wheel – size/type (number of wheels)	in	3.25 x 4.3/ Polyurethane (2)	3.25 x 4.3/Polyurethane (2)			
	34	Caster wheel – size/type (number of wheels)*	in	3.93 x 1.57/Spring Loaded Polyurethane (2)				
BATTERY	35	Battery type	Lead Acid					
	36	Ampere hours – maximum	ah	300	300	300	300	
	37	Ampere hours – minimum	ah	158				
	38	Maximum weight	lb (kg)	377 (171)				
	39	Minimum weight	lb (kg)	309 (140)				

RL = Rated load; NL = No load

\* Optional equipment

NOTE: Above specifications, unless otherwise listed, are for a standard truck without optional equipment. Right angle stack and equal intersecting aisle are calculated using a 40" wide pallet.

<sup>1</sup> Measured using a 42" x 40" pallet

<sup>2</sup> Measured using a 36" x 36" pallet

<sup>3</sup> Measured to the bottom of a GMA approved pallet on the forks while they are in the raised position

<sup>4</sup> With delivery moveable load backrest

CERTIFICATION: These Hyster® lift trucks meet design specifications of Part II ANSI B56.1-1969, as required by OSHA Section 1910.178(a)(2) and also comply with Part III ANSI B56.1-revision in effect at time of manufacture. Certification of compliance with the applicable ANSI standards appears on the lift truck. Performance specifications are for a truck equipped as described under Standard Equipment on this Technical Guide. Performance specifications are affected by the condition of the vehicle and how it is equipped, as well as by the nature, condition of the operating area, proper service and maintenance of the vehicle. If these specifications are critical, the proposed application should be discussed with your dealer.

# BATTERY AND COMPARTMENT SPECIFICATIONS

## 6" LITHIUM-ION BATTERY SPECIFICATIONS

GENERAL		Manufacturer		Hyster			
1	Manufacturer					Hyster	
2	Model designation					W45ZHD2	
3	Power type					24-volt	
4	Operator type					Pedestrian	
5	Rated capacity					4500 (2041)	
6	Fork length (nominal)	in (mm)	36 (914)	42 (1067)	48 (1219)	48 (1219)	
	Fork length (actual)	in (mm)	34 (866)	42.7 (1084)	46 (1169)	48 (1219)	
10a	Wheelbase – raised	in (mm)	38.5 (979)	47.2 (1199)	50.6 (1284)	50.6 (1284)	
10b	Wheelbase – lowered	in (mm)	41.7 (1060)	50.3 (1278)	53.7 (1363)	53.7 (1363)	
11	Overall length	in (mm)	54.3 (1380)	62.9 (1598)	66.3 (1683)	68.2 (1733)	
13a	Outside turning radius (bumper) - raised	in (mm)	46.5 (1180)	55.0 (1398)	58.4 (1483)	58.4 (1483)	
	Outside turning radius (bumper) - lowered	in (mm)	49.5 (1258)	59.2 (1503)	61.5 (1561)	61.5 (1561)	
14	Right angle stack – raised	in (mm)	57.4 (1459) <sup>2</sup>	60.4 (1533) <sup>1</sup>	68.3 (1734)	68.3 (1734)	
15	Equal intersecting aisle – raised	in (mm)	47.2 (1198) <sup>2</sup>	53.7 (1364) <sup>1</sup>	55.6 (1411)	55.6 (1411)	
22	Chassis length	in (mm)	20.2 (514)	20.2 (514)	20.2 (514)	20.2 (514)	
23	Battery compartment – standard	in (mm)	26.5 x 6.0 x OPEN (672 x 153 x OPEN)				

<sup>1</sup> Measured using a 42" X 40" pallet

<sup>2</sup> Measured using a 36" X 36" pallet

## FACTORY INSTALLED

### W45ZHD2 BATTERY & COMPARTMENT SPECIFICATIONS

Battery	Compartment dimensions			Battery dimensions - max			Capacity amp-hours	Battery connector	Max capacity	Weight
	Width	Length	Height	X	Y	Z			6 hr rate	
	in (mm)			in (mm)					amp hr (kwh)	
Standard battery pack	26.5 (672 mm)	8.2 (208 mm)	Open	26.0 (660 mm)	7.8 (198 mm)	23.8 (605 mm)	208	None	4.0	353 lb (160 kg)
AGM battery	26.5 (672 mm)	8.2 (208 mm)	Open	26.0 (660 mm)	7.8 (198 mm)	23.8 (605 mm)	224	None	4.4	388 lb (176 kg)
Lithium-ion	26.5 (672 mm)	6.0 (153.0 mm)	Open	6.8 (172 mm)	5.4 (136 mm)	23.1 (586 mm)	57	None	N/A	28.7 lb (13 kg)
							114			57.2 lb (26 kg)
							171			86 lb (39 kg)

## DEALER/CUSTOMER INSTALLED

### W45ZHD2 BATTERY & COMPARTMENT SPECIFICATIONS

Battery	Compartment dimensions			Battery dimensions - max			Capacity Amp-hours	Battery connector	Max capacity	Weight
	Width	Length	Height	X	Y	Z			6 hr rate	
	in (mm)			in (mm)					Amp hr (kwh)	
GNB pallet pro battery	26.5" (672 mm)	8.2" (208 mm)	Open	25.3" (643 mm)	7.6" (193 mm)	24.5" (623 mm)	195	SB-175 Red	4.5	400 lb (181 kg)
Industrial battery	26.5" (672 mm)	9.1" (231 mm)	Open	25.5" (648 mm)	8.7" (221 mm)	23.3" (591 mm)	300	SB-175 Red	5.9	560 lb (254 kg)

- Notes:
- a) Battery size is limited by rounded corners of battery compartment.
  - b) Cable lead position "B"
  - c) 16" cable length
  - d) Maximum cable gauge of 1/0

# FEATURES AND OPTIONS

PERFORMANCE	STD	OPT
<b>24-volt AC traction controlled electrical system</b>		
• Sealed 200A transistor traction controller	x	
• Sealed 240A transistor traction controller		x
• Vertically mounted AC traction motor	x	
• ADS (Auto Deceleration System) w/regenerative braking	x	
Three pre-programmed performance modes	x	
Two operator selectable performance levels	x	
Ramp hold with anti-roll back on grade	x	
Turtle speed mode selection with handle in full upright position	x	
<b>Power alternatives</b>		
• Wet cell battery power pack		x
• Absorbed Glass Mat (AGM)		x
• Maintenance free battery power pack		x
• Lithium-ion advanced performance power system - Three capacity amp hours options available 57, 114, and 171		x
Hyster Intelligent Slow Down™		x
Hyster Intelligent Lift™		x
CONSTRUCTION	STD	OPT
<b>Battery compartment</b>		
• 26.5" x 8.2" x open	x	
• 26.5" x 9.1" x open		x
• 26.5" x 6.0" x open		x
Soft touch keyed ignition switch	x	
IP65 sealed connectors	x	
Standard construction operating temperatures: +32°F to +120°F	x	
Cooler/freezer package - operating temperatures: 0°F to +120°F		x
SubZero freezer package - operating temperatures: -40°F to +120°F		x
Wash down package - operating temperatures: 0°F to +120°F		x
Extreme corrosion /wash down package - operating temperatures: 0°F to +120°F		x
DRIVE	STD	OPT
Heavy duty drive unit	x	
<b>Drive tire</b>		
• 10" x 4" press-on rubber	x	
• 10" x 4" press-on non-marking rubber		x
• 10" x 4" press-on smooth polyurethane		x
• 10" x 4" molded-on smooth polyurethane		x
• 10" x 4" press-on red EZ polyurethane		x
• 10" x 4" molded-on NDIthane		x
<b>Load wheels</b>		
• 3.25" x 4.3" single polyurethane	x	
• 3.25" x 4.3" single NDIthane		x
• Stainless steel greaseable or sealed bearings		x
<b>Stabilizers</b>		
• Bolt-on stability tabs		x
• Heavy duty quick adjust casters or sealed wheel or sealed wheel and pivot bearing		x

LIFT	STD	OPT
Heavy duty lift pump and single hydraulic lift cylinder	x	
Lift time-out at full lift height	x	
HANDLING	STD	OPT
<b>Heavy duty pallet fork design</b>		
• 3.3" lowered/5.1" lift height/8.4" overall raised height		
• Heavy duty torsion bar linkage connection		
• Heavy duty long life lift linkage with lubrication fittings	x	
• "X" groove style greaseable pivot bushings		
• Hardened bolt retained flag linkage pins		
• Flush pallet stop		
<b>Pallet fork lengths</b>		
• 34" short flat tip - no taper		x
• 42" short flat tip - no taper		x
• 46" short flat tip - no taper	x	
• 48" standard tip		x
<b>Fork overall width</b>		
• 26.4" (670 mm)	x	
• 22" (560 mm)		x
<b>Load backrest</b>		
• 48" high bolt-on		x
• 54" high bolt-on		x
• 60" high bolt-on		x
• 72" high bolt-on		x
• 64.8" high moveable		x
ERGONOMICS	STD	OPT
Control handle	x	
Cast aluminum control handle		x
Delivery control handle		x
OPERATION	STD	OPT
Multi-function display with hour meter		
• Battery state of charge		
• Low battery lift interrupt	x	
• Fault indicator		
Cowl mounted power disconnect switch	x	
Electro-mechanical park brake	x	
Brake over-ride	x	
<b>Electronic horn</b>	x	
• Battery charger - 20 amp 110 volt on-board high frequency smart charger		x
Load backrest mounted or magnetic battery mounted convenience tray		x
Brake override drive/tow switch		x
Self-adjusting audible alarm		x
APPEARANCE	STD	OPT
One piece impact resistant power unit cover	x	
SUPPLEMENTAL	STD	OPT
Operating manual	x	
12 months/unlimited hour manufacturer's warranty	x	
36 months/6,000 hour powertrain warranty	x	
Lifetime frame warranty	x	




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