

# 8410 END RIDER PALLET TRUCK

SPECIFICATION SHEET



For International Use Only

**RAYMOND**

# ALL-DUTY PALLET TRUCK DESIGNED TO MOVE YOU FORWARD

With the Raymond 8000 Series pallet truck, performance goes beyond just the basic components. With Raymond, performance means greater productivity, efficiency, reliability, ease of maintenance and operator comfort. It means standardizing heavy-duty components that combine optimal strength and durability. It means operator-friendly ergonomics that make your operations run smoother. It even means up to a 6% \* increase in productivity over the competition that lets you move more pallets per day. It means performance without compromise. And it means that with Raymond you get more – way more.

*\* Results based on the 2011 United States Comparative Data Report, using Raymond's Model 8400 end rider pallet truck and competitor's comparative units.*





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# TRUCK SPECIFICATIONS

DIMENSIONS AND GENERAL INFORMATION															
		IN. (MM)	32 (813)	36 (914)	42 (1067)	48 (1219)	60 (1524)	84 (2134)	93 (2362)	96 (2438)	103 (2616)	115 [1] (2921)	144 [1] (3658)	144 [1] (3658)	
<b>A</b>	Actual Fork Length	in. (mm)	32 (813)	36 (914)	42 (1067)	48 (1219)	60 (1524)	84 [2] (2134)	93 [2] (2362)	96 [2] (2438)	103 [2][3] (2616)	115 [4] (2921)	144 [5] (3658)	144 (3658)	
<b>B</b>	Overall Length [4]	in. (mm)	74.4 (1890)	78.4 (1991)	84.4 (2144)	90.4 (2296)	102.4 (2600)	127.8 (3246)	136.8 (3474)	138.8 (3525)	145.8 (3703)	158.8 (4033)	186.8 (4745)	186.8 (4745)	
<b>C</b>	Wheelbase, Lowered	in. (mm)	50.8 (1290)	54.8 (1392)	60.8 (1544)	66.8 (1697)	78.8 (2002)	87.6 (2225)	87.6 (2225)	87.6 (2225)	94.6 (2403)	119.8 (3043)	135.6 (3444)	115.0 (2921)	
<b>C</b>	Wheelbase, Raised	in. (mm)	46.1 (1171)	50.1 (1273)	56.1 (1425)	62.1 (1577)	74.1 (1882)	82.9 (2106)	82.9 (2106)	82.9 (2106)	89.9 (2283)	115.1 (2924)	130.9 (3325)	110.3 (2801)	
<b>D</b>	Load Wheel Location, Lowered	in. (mm)	24.3 (617)	28.3 (719)	34.3 (871)	40.3 (1024)	52.3 (1328)	60.3 (1532)	60.3 (1532)	60.3 (1532)	67.3 (1709)	92.6 (2352)	108.4 (2753)	87.8 (2230)	
<b>D</b>	Load Wheel Location, Raised	in. (mm)	19.3 (490)	23.3 (592)	29.3 (744)	35.3 (897)	47.3 (1201)	55.6 (1412)	55.6 (1412)	55.6 (1412)	62.6 (1590)	87.9 (2233)	103.7 (2634)	83.1 (2110)	
<b>E</b>	Turning Radius, Raised [4]	in. (mm)	61.9 (1572)	65.8 (1671)	71.7 (1821)	77.5 (1969)	89.4 (2271)	98.9 (2512)	98.9 (2512)	98.9 (2512)	105.8 (2687)	130.9 (3325)	146.9 (3731)	126.4 (3210)	
	Truck Weight without Battery 6k	lb. (kg)	1,175 (533)	1,190 (540)	1,212 (550)	1,234 (560)	1,284 (582)	1,360 (617)	1,400 (635)	1,410 (640)	1,440 (653)	-	-	-	
	Truck Weight without Battery 8k	lb. (kg)	-	-	-	-	-	1,570 (712)	1,610 (730)	1,620 (735)	1,650 (748)	1,770 (803)	1,870 (848)	1,870 (848)	
<b>G</b>	Truck OAW [5]	in. (mm)	36 (914)					36 (914)							
<b>H</b>	Power Unit Height	in. (mm)	31.4 (798)					31.4 (798)							
<b>J</b>	Control Handle Height	in. (mm)	56.7 (1440)					56.7 (1440)							
<b>L</b>	Bumper to Drive Tire Center [4]	in. (mm)	16.1 (409)					16.1 (409)							
<b>M</b>	Bumper Underclearance	in. (mm)	4.6 [1] (117)					4.75 [6] (120)							
<b>N</b>	Bumper Height	in. (mm)	9.6 [2] (244)					9.75 [7] (247)							
<b>O</b>	Operator's Platform Height	in. (mm)	9.6 (244)					9.6 (244)							
<b>R</b>	Battery Compartment Width (Nominal)	in. (mm)	13.4 (340)					13.4 (340)							
<b>S</b>	Fork Width (each)	in. (mm)	9.0 (6K)/10.0 (8K) (229)/(254)					10 (254)							
<b>T</b>	Fork OAW	in. (mm)	27.0 (6K)/27.5(8K) (686)/(699)					27.5 (699)							
<b>U</b>	Head Length [4]	in. (mm)	42.8 (1087)					43.3 (1100)							
<b>V1</b>	Fork Down Height at Tip	in. (mm)	3.25 (83)					3.25 (83)							
<b>V2</b>	Fork Down Height at Heel	in. (mm)	3.75 (95)					3.75 (95)							
<b>W1</b>	Elevated Height at Tip	in. (mm)	9.25 (235)					9.25 (235)							
<b>W2</b>	Elevated Height at Heel	in. (mm)	9.5 to 9.75 (241 to 247)					9.5 to 9.75 (241 to 247)							
<b>X</b>	Lift	in. (mm)	6.0 (152)					6.0 (152)							
<b>Y</b>	Handle Length [3][6]	in. (mm)	12.4 (315)					12.4 (315)							
<b>Z</b>	Handle to Floor	in. (mm)	37.7 (958)					37.7 (958)							

		8410-FRE60L	8410-FRE80L
Power Unit		24 Volt Single Drive, AC Drive Motor	24 Volt Single Drive, AC Drive Motor
Max. Capacity	lb. (kg)	6,000 (2722)	8,000 (3629)
Operator's Compartment		Stand-up (End)	Stand-Up (End)
Drive Tire, Rubber, Dia. x W	in. (mm)	12 x 4.75 (305 x 121)	12 x 4.75 (305 x 121)
Load Tire, Poly (2), Dia. x W	in. (mm)	3.25 x 5.91 (83 x 150)	3.25 x 5.91 (83 x 150)
Caster Tire, Poly (2), Dia. x W	in. (mm)	3 x 3.5 (76 x 89)	3 x 3.5 (76 x 89)
Gradability, Unloaded	%	10	10

#### FORK LENGTHS 32-60 NOTES:

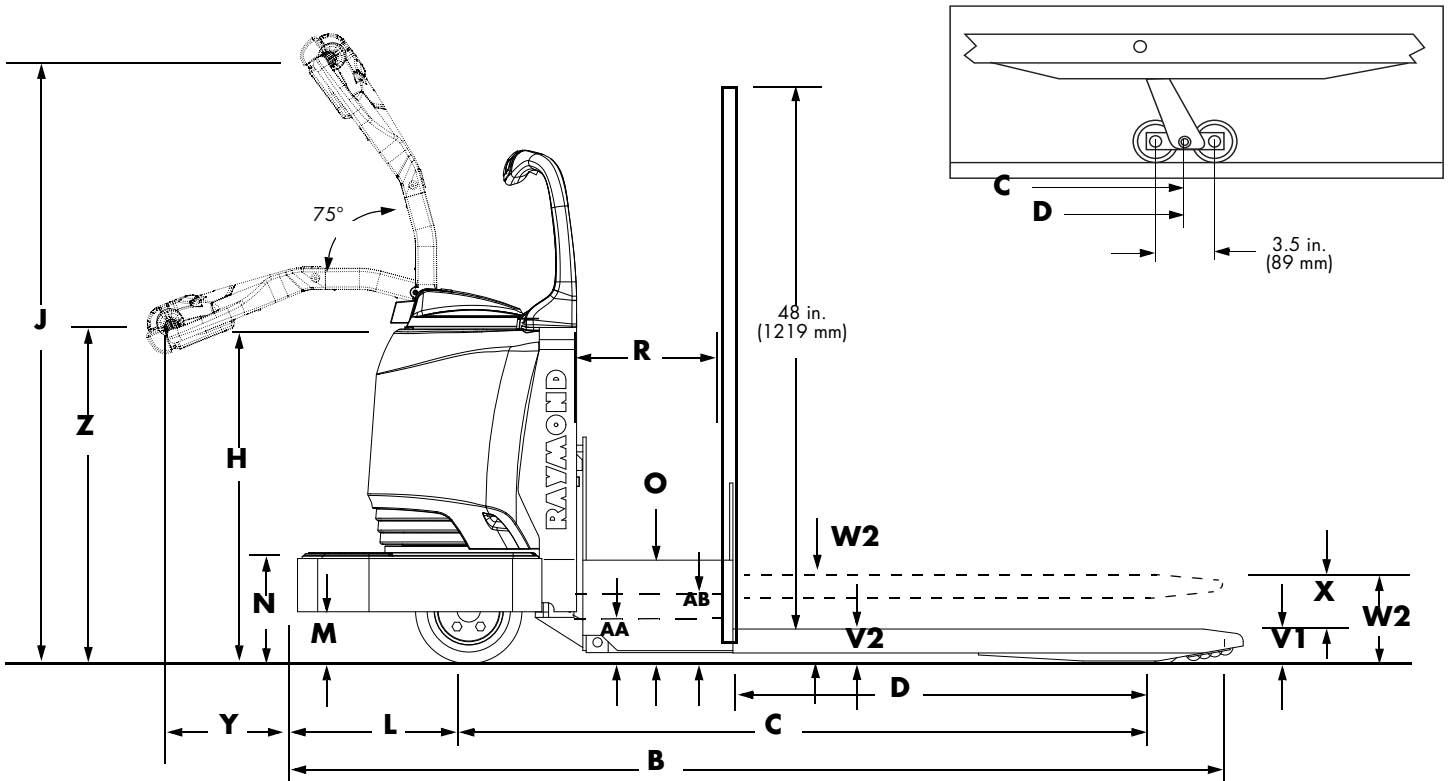
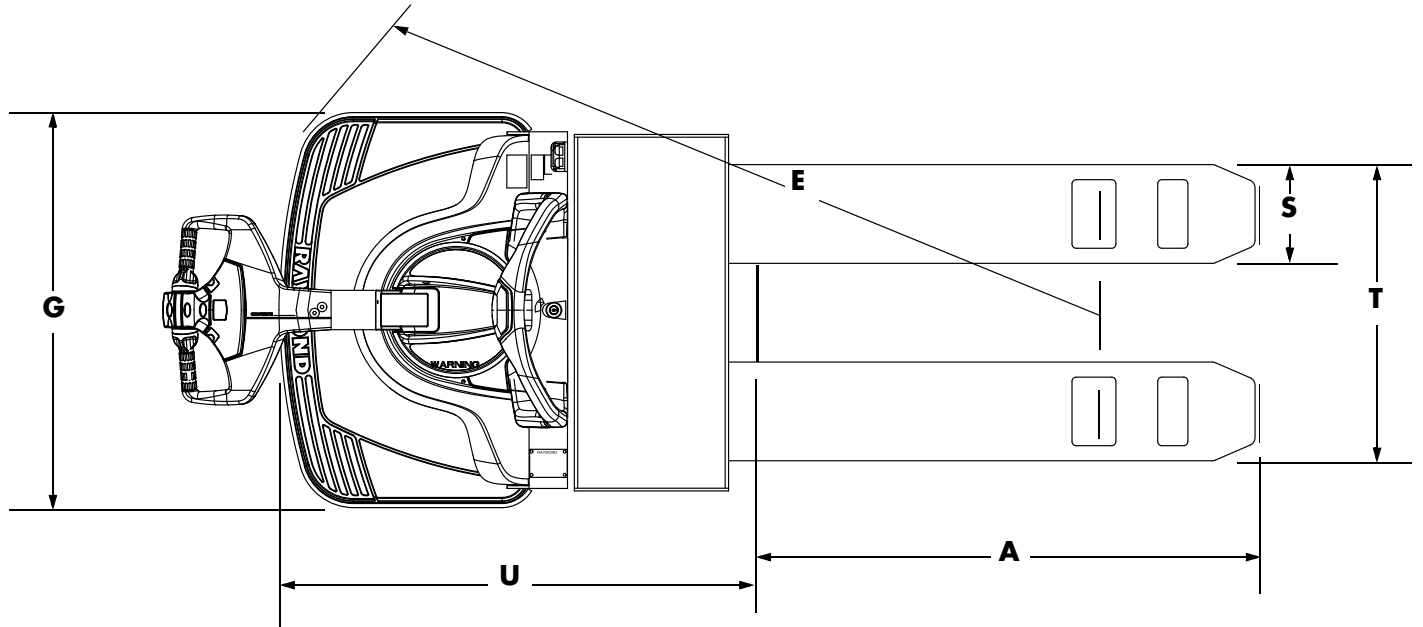
- [1] Not including floor pad. Decrease 0.25 in. (6 mm) with floor pad.
- [2] Not including floor pad. Increase 0.5 in. (13 mm) with floor pad.
- [3] Add 4.1 in. (104 mm) for total distance to handle end.
- [4] Not including heavy duty bumper. Increase 1 in. (25.4 mm) with heavy duty bumper.
- [5] Not including heavy duty bumper. Increase 2 in. (51 mm) with heavy duty bumper.
- [6] Not including heavy duty bumper. Decrease 1 in. (25.4 mm) with heavy duty bumper.

#### FORK LENGTHS 84-144 NOTES:

- [1] Only available on 8K trucks. Load wheel drops into first slot of third pallet.
- [2] (2) 48 x 40 in. (1219 x 1016 mm) pallets.
- [3] These forks have 7 in. (178 mm) longer wheelbase to allow for load overhang.
- [4] (3) 40 x 48 in. (1016 x 1219 mm) pallets.
- [5] (3) 48 x 40 in. (1219 x 1016 mm) pallets.
- [6] Not including floor pad. Decrease 0.25 in. (6 mm) with floor pad.

- [7] Not including floor pad. Increase 0.25 in. (6 mm) with floor pad.
- [8] Add 4.1 in. (104 mm) for total distance to handle end.
- [9] Load wheel drops into second slot of second pallet.
- [10] Not including heavy duty bumper. Increase 1 in. (25.4 mm) with heavy duty bumper.
- [11] Not including heavy duty bumper. Increase 2 in. (51 mm) with heavy duty bumper.
- [12] Not including heavy duty bumper. Decrease 1 in. (25.4 mm) with heavy duty bumper.

# DIAGRAM



# TRUCK SPECIFICATIONS

PERFORMANCE SPECIFICATIONS					
MODEL		8410-FRE60L		8410-FRE80L	
		Unloaded	Loaded	Unloaded	Loaded
Travel Speed [1][2][3][4]	mph (km/h)	9.0 (14.5)	6.5 (10.5)	9.0 (14.5)	6.2 (10.0)
Lift Time	sec.	4	5	4	5.4

**Notes:**  
 [1] Maximum speed attainable, after break-in period, varies with truck weight, rolling resistance, options, and battery condition.  
 [2] Maximum speed when using turtle speed is 3.5 mph (5.6 km/h).  
 [3] Rabbit switch must be pressed to attain top travel speeds.  
 [4] Speeds shown are for tractor-first direction.

BATTERY SPECIFICATIONS				
MODEL		8410-FRE60L		8410-FRE80L
Amperes, Max			750	750
Battery Connector Type			SB-175	SB-175
Battery Connector Color			Gray	Gray
Lead Location			B	B
Lead Length	in. (mm)		18 (457)	18 (457)
Maximum Usable Compartment Size (L x W x H)	in. (mm)		31 x 13.25 x 31 (787 x 337 x 787)	31 x 13.25 x 31 (787 x 337 x 787)
Battery Weight, Maximum	lb. (kg)		1,500 (680)	1,500 (680)
Battery Weight, Minimum	lb. (kg)		490 (222)	490 (222)



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# STANDARD EQUIPMENT

The ACR System™

Battery, 24 Volt Power Unit

Battery Discharge Indicator with Lift Interrupt  
and Hour Meter

Brake, Electric Disc

Braking, Regenerative

Deadman Brake and Power Cut-Off

Directional Reversing Switch

Dual Lift Cylinders

Dual Twist Grip w/Thumb Wheels which Control  
Fwd/Rev Direction and Travel Speed

Emergency Power Disconnect

Ergonomically Advanced Control Handle

Ergonomically Advanced Hand Rail with Lift, Lower,  
Rabbit, and Horn Controls

Forks, 6 in. Lift

Guard, Hand Wrap Around

Horn

Lift and Go Programmable Fork Height Travel Speed Limit

Lift Interrupt

OSHA and ANSI/ITSDF Compliance

Owner and Operator Manuals

Poly Torsion Casters, 3 x 3.5 in. Dia.

Programmable Performance

Stainless Steel Pins, Undercarriage

Strip Curtain Feature

UL Type "E" Construction

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# AVAILABLE OPTIONS

Accessory Bar

Power Steer

Battery Rollers With Dual Sidegates

Storage Tote

CoastPro™ Orderpicking System

Cold Storage Conditioning

Floor Mat, Cushioned

Heavy Duty Bumper

Load Wheels, Single Axle Dual Wheel

Rubber Bumper Skirt

# RUN BETTER. MANAGE SMARTER.

At Raymond, our aim is to deliver the utmost quality and to work for continuous improvement every day, in every aspect of our business. We are proud of what we build. We are proud of the level of service we provide to keep our customers' business up and running. We take pride in our commitment to our customers through our end-to-end approach in helping them find smarter, more efficient, and more effective solutions.

We value the trust that Raymond has earned through decades of proven performance and hands-on innovation. Since the patenting of the first hand-pallet truck to the invention of the reach truck to our pioneering work in narrow aisle operations and beyond, Raymond has led the way in providing customers with the tools and expertise to improve their business.

IF YOU'RE LOOKING FOR A PARTNER WITH THE TOOLS AND EXPERIENCE TO HELP YOU RUN BETTER AND MANAGE SMARTER, LET'S TALK.

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Printed in USA  
1240420A 0216

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