

Introduction

Team,

Thank you for considering Raymond Handling Concepts for all your material handling needs. Below is a breakdown of the solution that we have selected with you.

Scope: Install used 2012 Kardex VLM little use was for file storage (bankers Boxes)

The 1 unit we are proposing will be 20' tall with a 87-tray capacity. This VLM will come with 32 trays based on an average 11" product height. Each tray is 120" Wide by 34" deep with a lip height of 1.97". The weight capacity for each tray will be 507 lbs. Standard tray weight management system will not allow trays over tray capacity to be loaded for product safety and our Patented height detection system that stores each tray at .98" Spacing is included. External controller mount for easy operator access, an optional TIC pick to light and conformation bar at access opening is available. This keeps the operator engaged with their work until the order is complete (software required) All of this in one machine to help you maximize your Facility's accuracy and throughput.

Since its founding in 1987, Raymond Handling Concepts Corporation has been the most trusted provider of high-density storage, order-picking systems and associated services to companies engaged in warehousing and distribution as well as material handling of all kinds. We are the authorized Raymond Forklift and Kardex Remstar Sales and Service Center covering California, Arizona Nevada, Oregon, Idaho, Washington, Western Montana and Alaska.

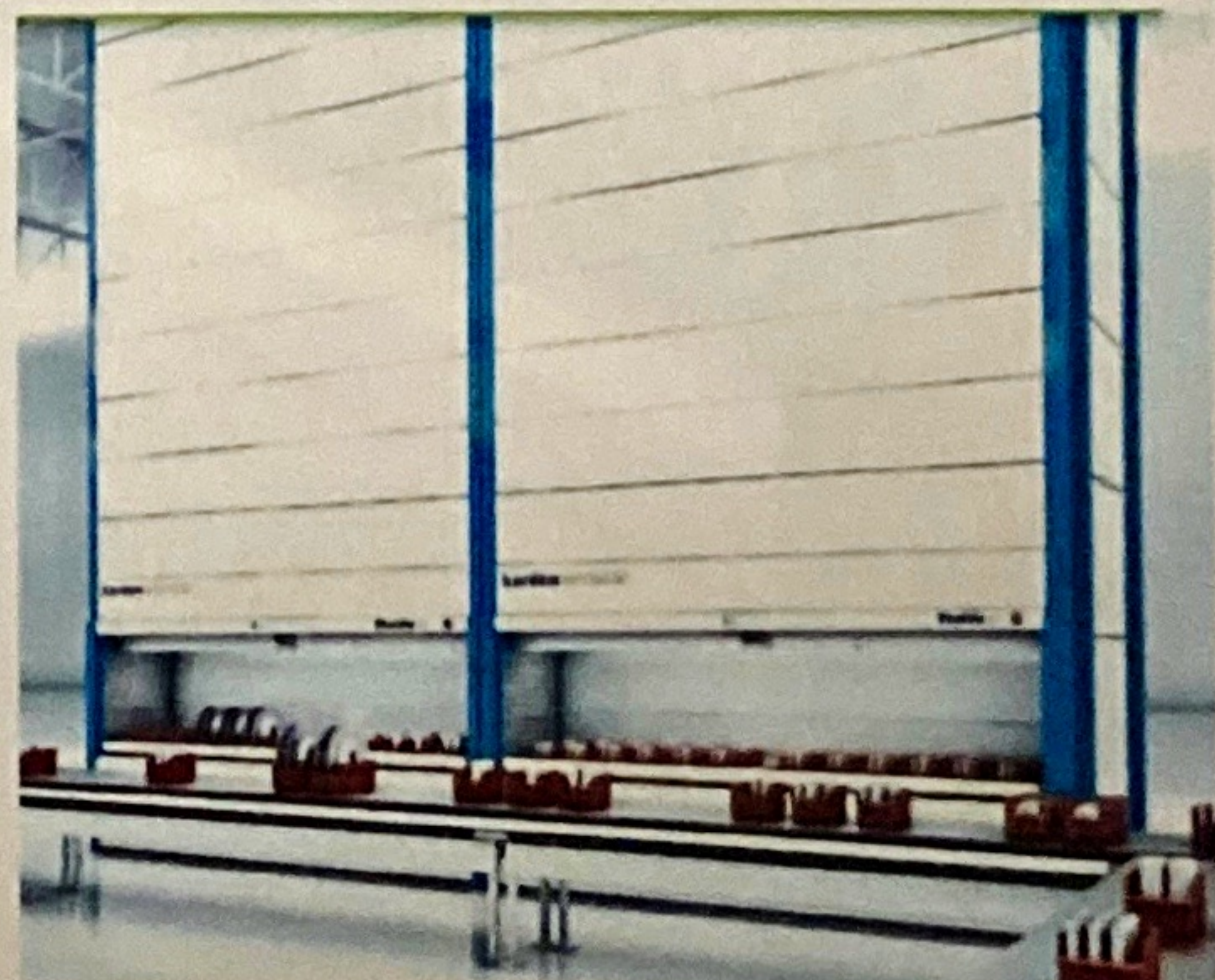
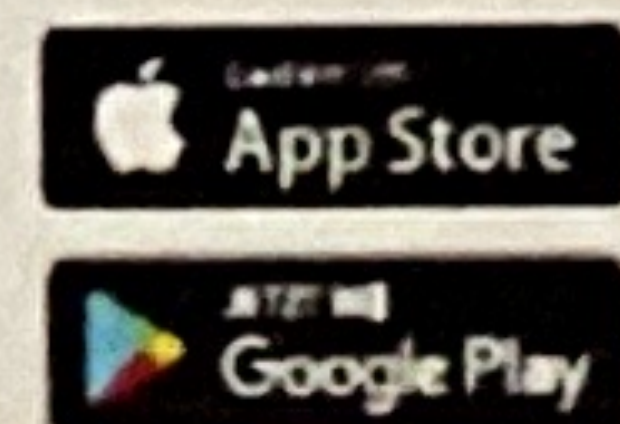
We are known for our material handling expertise, our world class forklifts, industry leading service, and our high level of integrity and fairness in our dealings with customers, suppliers, employees and the community. We are uniquely creative and innovative in our approach to solving any material handling problems for our customers.

Please take time to review the proposal and let me know if you have any questions.

Thank you, I look forward to working together

David Zabaldo

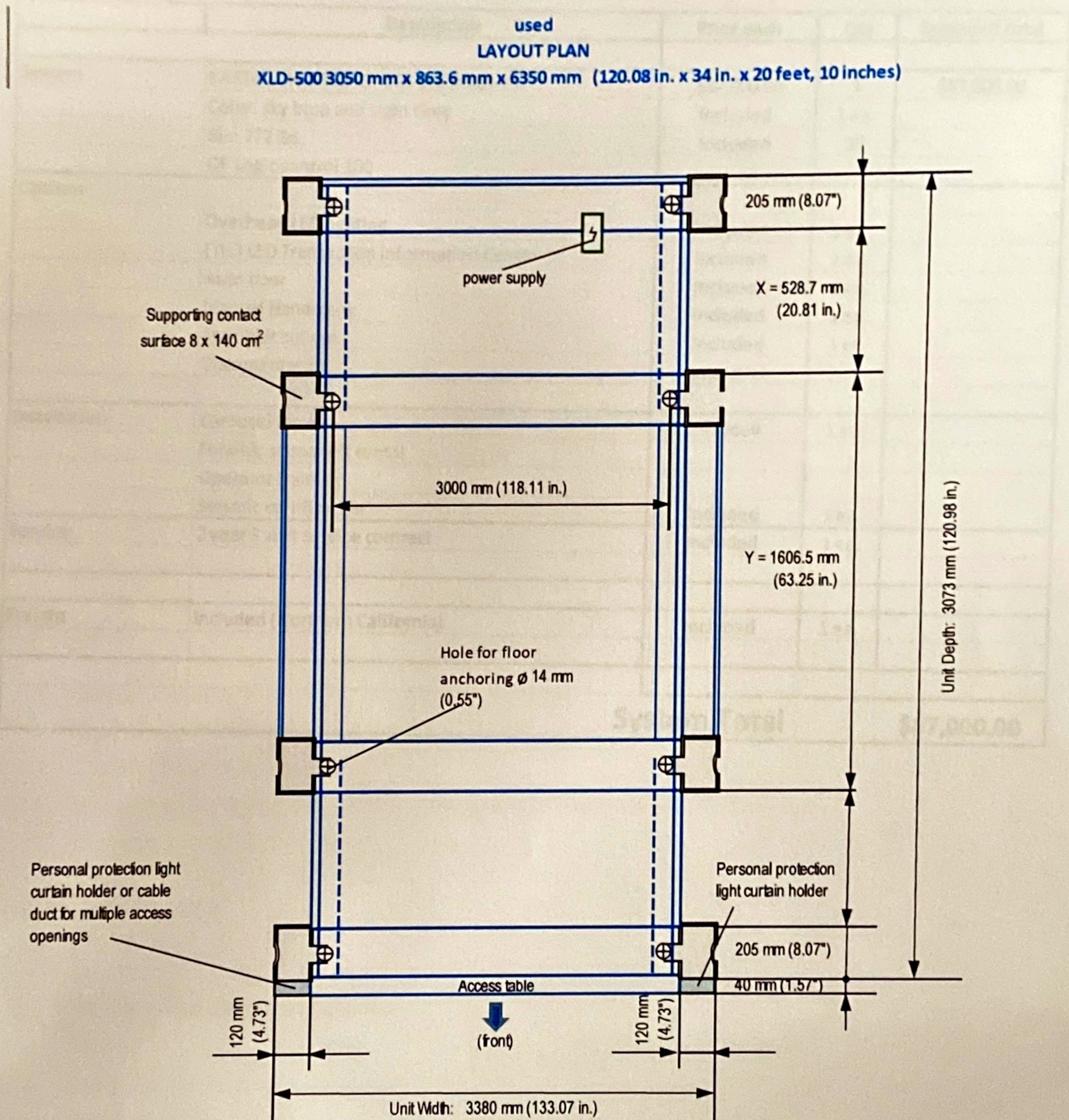
Kardex Remstar Manager (209) 403-4776



Your System Specification

Specifications for Shuttle XP XLD-500 3050 mm x 863.6 mm x 6350 mm (120.08 in. x 34 in. x 20 feet, 10 inches)									
Quantity of Units		1							
Overall Unit Height		20 feet, 10 inches		Required Room Height		20 feet, 10.8 inches			
The required room height (unit height + 20mm / 0.79") is the absolute minimum measure. Possible floor / ceiling unevenness and slope must be considered therein.									
Overall Unit Width		133.07 in.							
Overall Unit Depth		120.98 in.							
Shuttle Weight		6,645		Pounds Empty without Trays, Product, etc.					
Weight of Trays		4,021		Pounds (Average per Unit)					
Approx. Weight Empty w/Trays		10,666		Pounds (Average per Unit)					
Approximate Weight Fully Loaded as Configured		25,128		Pounds (Average per Unit)					
Tray Type		Clear Width	x	Clear Depth	Avg./Unit	Quantity Total/Order	Load Per Tray (lbs.)		
							Maximum	Average/Sq.Ft.	
Light Trays		120.08 in.	x	34 in.	0	0	265	9.4	
Medium Trays		120.08 in.	x	34 in.	32	32	452	15.9	
Heavy Trays		120.08 in.	x	34 in.	0	0	584	20.6	
*Medium X Type 2 Trays		59.55 in. x 2	x	32.27 in.	0	0	1102	41.3	
*Medium Universal S Type 2 Trays		x 2	x	33.72 in.	0	0	-	-	
Medium XL Type 1 Deep Trays		120.08 in.	x	33.6 in.	0	0	-	-	
Medium XXL Universal Trays		120.08 in.	x	33.6 in.	0	0	-	-	
*Medium Universal RS Type 2 Trays		x 2	x	33.72 in.	0	0	-	-	
*Medium XL Type 2 Deep Trays		59.55 in. x 2	x	33.6 in.	0	0	-	-	
Heavy XL Type 1 Deep Trays		120.08 in.	x	33.6 in.	0	0	-	-	
*Heavy XL Type 2 Deep Trays		59.55 in. x 2	x	33.6 in.	0	0	-	-	
Frame R XXL Trays		118.7 in.	x	33.6 in.	0	0	-	-	
Heavy S XXL Trays		119.69 in.	x	34 in.	0	0	-	-	
Medium S XXL Trays		118.7 in.	x	33.6 in.	0	0	-	-	
Medium Universal R Type 2 Trays		x 2	x	33.72 in.	0	0	-	-	
Medium Universal R Type 3 Trays		51.85 in. x 2, 52.16 in. x 1	x	33.72 in.	0	0	-	-	
*divided by a reinforcement bar which is adjustable on 50mm (1.97") centers up to 200mm (7.87") from center of tray, left or right									
Minimum Tray Spacing		\$							
Maximum Tray Spacing		29.53	Inches	Maximum Product Height		28.74 inches (730mm)			
Clearance Required Above Product		0.79	Inches						
Shelf Rails (tray supports)		196							
Storage Locations Possible		392							
Maximum Unit Capacity		147,708	Pounds	Unit Capacity after tray weight deducted:		143687 Pounds			
Lifting Speed		189.00	ft./min.						
Lifting Speed if Extractor is w/o a Tray		295.30	ft./min.						
Extractor Speed		23.62	in./sec.						
Pick Performance (Average Qty.)		110	Trays/hour (does not consider operator picking time)						
Complete Cycle (Storage + Retrieval)				Single Cycle (Tray Retrieval only)					
Average Access Time		32.45	Seconds	15.23		Seconds			
Maximum Access Time		38.80	Seconds	17.40		Seconds			
Calculation of access times is based on: 1) Speed adjustment lift (vertical) at 100%; extractor (horizontal) at 100%. Note: 100% extractor speed is not recommended for some storage goods. All delivered units have a pre-defined setting of 70%. 2) Shutter door is set to closed during lift movement, i.e. tray positioned in access opening is in 'fingerhold.' Note: This setting is only possible with units equipped with 1 access opening. With the setting "always closed," the access times will increase by ~5 seconds. 3) Options chosen on POF, such as automatic extraction will affect times outlined above.									
4) Weight management : Activate weight management to update access times above									
<input type="checkbox"/> ACTIVATE (Adds 5 seconds to access time)									
With time-critical units (e.g. high performance order picking units or robot handling with cycle times) a prior consultation with the factory is recommended.									
Power		480 Volts / 3 ~ / PE							
Maximum Power Consumption		15 kVA							
Full Load Amp (FLA)		19.0 Amp Per Machine							
Max. Circuit Breaker Rating for Supply (Delayed)		25 Amp Per Machine							

VLM Layout



This layout does not account for extraction table dimensions, if chosen on POF; only the basic access opening.

- The weight load is transferred to the supporting contact surfaces at the base frame via eight load profiles. The supporting surfaces are the contact surface for the complete machine.
- (Total) Supporting Contact Surface: 173.6 in.² (1120 cm²)
- X: Spacing of outer load profiles
- Y: Spacing of inner load profiles
- The evenness of the floor surface, on which quality assured products are installed, must be within the admissible tolerances: Up to 10 meter unit height, distance = 12mm (0.47 in.)
- Unit must be anchored to the foundation
- The front edge of the access table and the personal protection light curtain protrude the access opening by 40 mm (1.57")

Cost Breakdown

	Description	Price each	Qty	Extended total
System	KARDEX SHUTTLE-XP-500-3050X864-US	\$87,000.00	1	\$87,000.00
	Color: sky blue and Light Grey	Included	1 ea.	
	Bin: 772 lbs.	Included	32	
	OP Logic control 100			
Options	Overhead LED lighting	Included	1 ea.	
	(TIC) LED Transaction Information Center	Included	1 ea.	
	Auto door	Included	1 ea.	
	Manual Handcrank	Included	1 ea.	
	Sprinkler cut out	Included	1 ea.	
	Documentation	Included	1 ea.	
Installation	Carousel install	Included	1 ea.	
	Forklift, scissor lift rental			
	Operator training			
	Seismic certification	Included	1 ea.	
Service	2 year 3 visit service contract	Included	1 ea.	
Freight	Included (Northern California)	Included	1 ea.	
System Total				\$87,000.00