



Custom Procurement Report

Control How You Source Building Systems

Directly access suppliers and automate sourcing, procurement, and financing—all from one platform

Key Benefits

Save Time

Automate RFQs and reduce manual work by up to 50%

Cut Costs

Negotiate directly with suppliers for better deals

Streamlined Sourcing

Take BuildVision's structured data and send it to suppliers at BuildVision.io

Customer Information

Customer Name	Norco College
Contact Person	Gerald Stosek
Contact Email	gerry.stosek@clarkconstruction.com
Contact Phone	N/A
Address	Norco, California
Invited Date	5/13/2025
Due Date	5/28/2025

Project Information

Project Name	Center for Human Performance & Kinesiology
Location	Norco College, Norco, California
Start Date	7/22/2025
Completion Date	N/A
Budget	N/A
Scope	HVAC system installation including air handling units, exhaust fans, split system air conditioners, fan coil units, and air terminal units
Project ID	75-21620-00
Project URL	BuildVision Project Link
Project Size	40,741 sq. ft.
Request Type	Proposal
Contract Type	–
RFIs Due	5/9/2025
Job Walk	4/29/2025

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Project Equipment

Air Handling Units

Equipment Tag	Manufacturer	Model
AHU-1	Energy Labs	C661024-C
AHU-2	Energy Labs	C661024-C
AHU-3	Energy Labs	C661364-C
AHU-4	Energy Labs	C661364-C

Notes

Custom indoor central-station air-handling units

HVAC Fans

Equipment Tag	Manufacturer	Model
EF-1	Greenheck	CUE-140-VG
EF-2	Greenheck	CUE-140-VG
EF-3	Greenheck	CUE-140-VG
EF-4	Greenheck	CUE-100B-VG

Notes

Exhaust fans

Split System Air Conditioners

Equipment Tag	Manufacturer	Model
CU-1	Carrier	38MAR925DAA3
CU-2	Carrier	38MAR925DAA3
CU-3	Carrier	38MAR925DAA3
CU-4	Carrier	38MAR925DAA3
CU-5	Carrier	38MAR925DAA3
CU-6	Carrier	38MAR925DAA3
CU-7	Carrier	38MAR925DAA3
CU-8	Carrier	38MAR925DAA3

Notes

Condensing units with matching fan coil units

Fan Coil Units

Equipment Tag	Manufacturer	Model
FCU-1	Carrier	40KAH036026A3
FCU-2	Carrier	40KAH036026A3
FCU-3	Carrier	40KAH036026A3
FCU-4	Carrier	40KAH036026A3
FCU-5	Carrier	40KAH036026A3
FCU-6	Carrier	40KAH036026A3
FCU-7	Carrier	40KAH036026A3

Notes

Indoor units paired with condensing units

Air Terminal Units

Equipment Tag	Manufacturer	Model
CAV-3-10	Titus	DESV
CAV-3-11	Titus	DESV
CAV-3-4	Titus	DESV
CAV-3-9	Titus	DESV
CAV-4-12	Titus	DESV
VAV-3-1	Titus	DESV
VAV-3-12A	Titus	DESV
VAV-3-12B	Titus	DESV
VAV-3-13A	Titus	DESV
VAV-3-13B	Titus	DESV
VAV-3-14	Titus	DESV
VAV-3-15	Titus	DESV
VAV-3-2	Titus	DESV
VAV-3-3	Titus	DESV
VAV-3-5	Titus	DESV
VAV-3-6	Titus	DESV
VAV-3-7	Titus	DESV
VAV-3-8	Titus	DESV
VAV-4-10	Titus	DESV
VAV-4-11	Titus	DESV
VAV-4-13	Titus	DESV
VAV-4-1A	Titus	DESV
VAV-4-1B	Titus	DESV
VAV-4-2	Titus	DESV

VAV-4-3A	Titus	DESV
VAV-4-3B	Titus	DESV
VAV-4-4	Titus	DESV
VAV-4-5	Titus	DESV
VAV-4-6A	Titus	DESV
VAV-4-6B	Titus	DESV
VAV-4-6C	Titus	DESV
VAV-4-7A	Titus	DESV
VAV-4-7B	Titus	DESV
VAV-4-8	Titus	DESV
VAV-4-9	Titus	DESV

Notes

DESV model variable-air-volume and constant-air-volume terminal units

Suppliers

Air Terminal Units

Manufacturer	Model	Representative	Compatibility Notes	BoD
Titus	DESV	N/A	Basis of Design	Yes
Krueger	LMHS	Denco	Krueger LMHS offers a similar single-duct, pressure independent VAV terminal unit with comparable performance to the Titus DESV.	Listed
Price Industries	SDV	Toro Aire	Price SDV offers a comparable single-duct VAV terminal unit with similar control options and performance characteristics.	Listed
Nailor	3000 Series	Nailor Industries	SUGGESTED ALTERNATIVE: Nailor 3000 Series provides comparable performance with robust construction and digital controls integration. Direct replacement option with minimal design changes required.	No

Metalaire	5000 Series	Metalaire	SUGGESTED ALTERNATIVE: Metalaire 5000 Series offers competitive pricing with appropriate controls compatibility and similar dimensional requirements. May offer cost advantages compared to Basis of Design.	No
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Split System Air Conditioners

Manufacturer	Model	Representative	Compatibility Notes	BoD
Carrier	38MAR925DAA3/4	N/A	Basis of Design	Yes
Daikin	FTXS Series/RXS Series	Norman S. Wright Climatec Mechanical Equipment	Daikin systems offer high-efficiency operation with comparable capacity and features.	Listed
Mitsubishi Electric	PUZ/PLA Series	FUSE HVAC	Mitsubishi systems feature high-efficiency, low-noise operation with robust control options.	Listed
LG	Multi V S Series	Norman S. Wright Climatec Mechanical Equipment	LG's Multi V S Series offers variable refrigerant flow technology with energy-efficient operation.	Listed
Trane	XR16/TAM8 Series	Trane	SUGGESTED ALTERNATIVE: Trane's split systems provide reliable performance with good parts availability and service network. Similar performance specifications to Carrier with potential cost savings.	No
York	LX Series	Johnson Controls	SUGGESTED ALTERNATIVE: York LX Series offers value-oriented pricing while maintaining required performance specifications. May require additional review of electrical requirements but could provide significant cost savings.	No

Air Handling Units

Manufacturer	Model	Representative	Compatibility Notes	BoD
Energy	Labs C661024-C/C661364-C	N/A	Basis of Design	Yes
Trane	Custom AHU Series	Trane	SUGGESTED ALTERNATIVE: Trane custom AHUs offer comparable quality and performance specifications with an extensive service network. Can match Energy Labs dimensional and performance requirements.	No
York	Solution Custom AHU	Johnson Controls	SUGGESTED ALTERNATIVE: York Solution custom AHUs provide competitive pricing with good quality construction. May offer significant cost savings while meeting performance specifications.	No
Daikin	Vision Custom AHU	Daikin Applied	SUGGESTED ALTERNATIVE: Daikin Vision custom AHUs feature high-quality construction with flexible configuration options. Similar performance to Energy Labs with slight cost advantage.	No

HVAC Fans

Manufacturer	Model	Representative	Compatibility Notes	BoD
Greenheck	CUE Series	N/A	Basis of Design	Yes
Twin City Fan	BSI Series	Twin City Fan Companies	SUGGESTED ALTERNATIVE: Twin City Fan BSI Series offers comparable performance with good acoustic properties. Direct replacement possibility with potential cost savings.	No

Loren Cook	Gemini Series	Loren Cook Company	SUGGESTED ALTERNATIVE: Loren Cook Gemini Series provides similar utility exhaust capability with comparable efficiency ratings. Well-established manufacturer with good reputation for reliability.	No
PennBarry	Domex Series	PennBarry	SUGGESTED ALTERNATIVE: PennBarry Domex Series offers the most competitive pricing while maintaining acceptable performance characteristics. May be worth considering for significant cost savings.	No

BuildVision Recommendations

1. Package Purchase of Terminal Units for Volume Discount

Rationale: The project requires 34 Titus DESV air terminal units. Purchasing these units as a complete package rather than individually can result in significant quantity discounts. Additionally, standardizing on a single manufacturer for all terminal units will simplify maintenance and spare parts inventory.

Estimated Impact: Potential 5-10% cost savings on terminal unit procurement (approximately 34 units), improved delivery coordination, and reduced procurement administrative overhead.

Implementation: 1. Request package pricing from Titus and authorized distributors
2. Compare with package pricing from alternate manufacturers (Krueger, Price)
3. Evaluate total cost of ownership including maintenance considerations
4. Negotiate improved warranty terms based on volume purchase

Priority: High

2. Consolidate Split System Purchases with Competitive Bidding

Rationale: The project includes 8 identical Carrier condensing units (38MAR925DAA3) and 7 matching fan coil units (40KAH036026A3). Alternative manufacturers (Daikin, Mitsubishi, LG) have been identified. A competitive bid process across all manufacturers with bulk purchasing can yield better pricing and potential performance improvements.

Estimated Impact: Potential 8-15% cost reduction on split system equipment, improved warranty terms, and possibility of enhanced performance specifications or features at the same price point.

Implementation: 1. Develop performance-based specification that allows multiple manufacturers

2. Request bids from all identified alternative manufacturers
 3. Evaluate lifecycle costs including energy efficiency and maintenance
 4. Consider standardizing with manufacturer of other campus equipment
- Priority:** High

3. Pre-purchase Critical Air Handling Units to Mitigate Schedule Risk

Rationale: The four custom Energy Labs air handling units (AHUs) typically have long lead times that could impact the project schedule. Pre-purchasing these units ahead of other equipment can prevent schedule delays, particularly as the project is scheduled to start 7/22/2025.

Estimated Impact: Reduced risk of project delays, potential cost savings by avoiding expedite fees, and better coordination of installation activities. Custom AHUs typically have 16-20 week lead times.

Implementation: 1. Confirm final AHU specifications early in the project
2. Issue purchase orders for AHUs before other equipment
3. Secure storage if units arrive before installation readiness
4. Coordinate delivery timing with construction schedule

Priority: High

4. Evaluate Local Stock Availability for Exhaust Fans

Rationale: The four Greenheck exhaust fans (models CUE-140-VG and CUE-100B-VG) are standard products that may be available from local distributors with shorter lead times than factory orders. Local sourcing could reduce procurement time and shipping costs.

Estimated Impact: Potential 2-4 week reduction in lead time, reduced shipping costs, and increased flexibility for installation scheduling.

Implementation: 1. Contact local Greenheck representatives to check stock availability
2. Compare pricing between stock units and factory orders
3. Verify that stock units meet all project specifications
4. Include local availability as a factor in purchase decisions

Priority: Medium

5. Establish Equipment Procurement Master Schedule

Rationale: With multiple equipment types from different manufacturers, a comprehensive procurement schedule is essential. This should align delivery timing with installation needs, account for varying lead times, and create accountability for timely ordering.

Estimated Impact: Optimized cash flow by preventing premature purchases, reduced storage requirements, minimized risk of equipment damage from extended storage, and better coordination with installation contractors.

Implementation: 1. Document lead times for all major equipment
2. Work backward from construction schedule to determine order dates
3. Track approval submittals to prevent delays
4. Establish regular procurement status reporting

Priority: Medium

Conclusion

Key Findings

- The mixed-system approach using central AHUs and split systems requires careful coordination of equipment procurement and installation timing
- Alternative manufacturers for air terminal units and split systems could offer comparable performance with potential cost advantages
- Integration of control systems across diverse equipment types is critical for optimal system performance
- Energy efficiency improvements through VRF systems or energy recovery components represent significant opportunities
- The extensive number of VAV/CAV terminal units (35+) suggests bulk purchasing opportunities

Highest Priority Actions

- Evaluate cost-benefit of alternative manufacturers, particularly for the numerous terminal units and split systems
- Ensure procurement timeline accommodates long lead items, particularly the custom Energy Labs AHUs
- Coordinate control system compatibility across all equipment components during procurement phase
- Consider upgrading specifications to include energy recovery for AHUs and VRF technology for split systems

Summary

The HVAC system procurement for Norco College's Center for Human Performance & Kinesiology encompasses a comprehensive equipment package including air handling units, exhaust fans, split system air conditioners, fan coil units, and air terminal units. The project requires coordinating multiple system types from manufacturers including Energy Labs, Greenheck, Carrier, and Titus. Several alternatives from manufacturers like Krueger, Price Industries, Daikin, Mitsubishi, and LG have been identified that could provide cost or performance benefits while maintaining system compatibility.



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