

Meade Construction, Fredericktown



Employee using ladder to complete project

Intervention key words: Articulating boom lift

Industry: Construction

Risk factor(s): Awkward posture; back deviations; extended arm reach; reaching overhead; shoulder deviations; manual handling; lifting/carrying; slips/trips/falls

Situation

This construction company is primarily a commercial contractor. However, it also does custom construction. Its main source of revenue is from roofing and siding work. The company has roughly 38 employees. Throughout the process of installing and replacing a roof system, the employees work at heights ranging from 10 to 100 feet. Employees can access stair towers, self-retracting fall arrest systems and scaffolding when possible. However, employees must work from a ladder on a daily basis. To complete the job they have to stand/balance on a ladder while being restricted and limited in terms of bodily movements.



Employees using the boom lift

Solution

The construction company purchased an articulating boom lift. The boom lift allows the workers a better range of motion to perform their daily tasks. The boom lift eliminates the need for a ladder. Thus, it dramatically reduces the hazards/injuries in daily work activities, especially from falls. The intervention cost \$65,500 of which BWC provided \$40,000.



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Results

- Employee productivity increased by 25 percent.
- Employee satisfaction increased since they feel safer.
- The cumulative trauma disorder risk assessment score dropped by 84 percent.
- No injuries occurred during the two-year post-intervention follow-up period.
- A lost-time claim could likely cost \$27,000 or more, depending on the severity of the injury. This intervention will likely prevent lost-time injuries in the future.

Cost justification

Cost		Benefit/Saving	
Description	Amount	Improvement	Amount
Intervention cost Maintenance cost	\$65,500 \$5,500	Production savings	\$66,568.32
Total costs	\$71,000	Total Savings	\$66,568.32

Payback period: $\$71,000 / \$66,568.32 = 1.1$ years