

WORK MORE SAFELY
WORK MORE EFFICIENTLY



DECKED

INJURY RISK REDUCTION
3RD PARTY WHITE PAPER

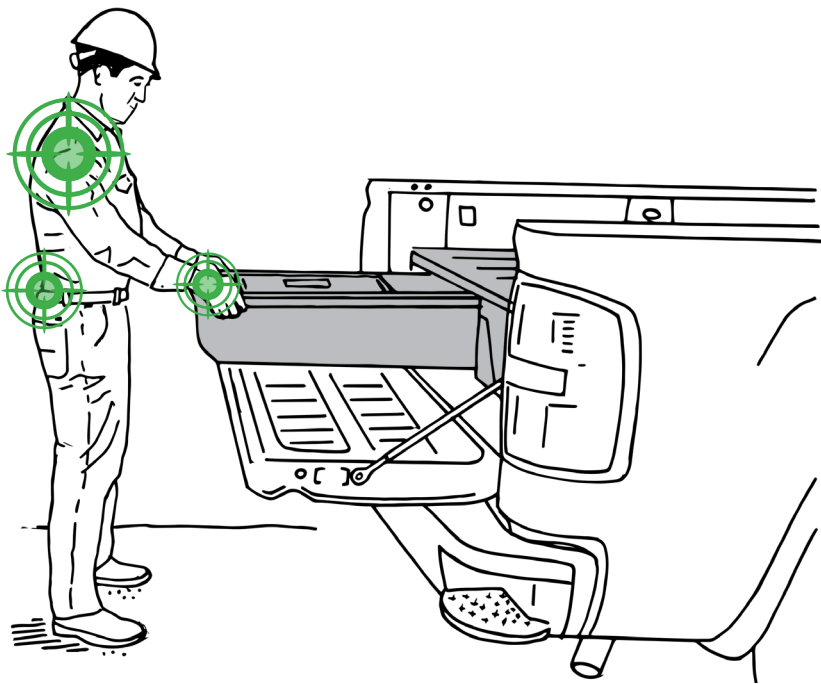
REPORT PREPARED BY:
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Read the entire Safety White Paper: DECKED.COM/SAFETY



BIOMECHANICS & RISK ANALYSIS: DECKED DRAWER SYSTEM

3rd Party Ergonomics & Safety Expert Andrew S. Merryweather, PhD, finds DECKED:

- Increases safe access to storage by **44%**
- Reduces risk of falling by **17%**
- Reduces back compressive forces and increases the population strength capability from **28% to 99%**



- Increases amount of reachable cargo space from the ground
- Eliminates need for truck bed ingress/egress
- Reduces ergonomic risk from awkward movements
- Reduces biomechanical risks and back compressive forces
- Reduces risks of some tasks from 'High Hazard' to 'Low Hazard'
- Increases efficiency of tasks by reducing or eliminating extra movements

REAL NUMBERS ON SAFETY:

SOURCE: INJURYFACTS.NSC.ORG



104 Billion

Annual days of work lost



161.5 Billion

Annual cost of work related injuries

#1 Occupation:

Service (use of a vehicle to go/work at job site)

#1 Event/exposure:

Overexertion & bodily reaction

#1 Primary source:

Bad floors/work surfaces (#3 work movements)

#1 Nature of injuries:

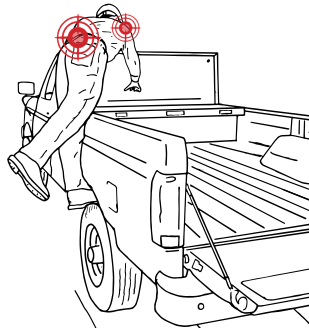
Sprains & strains (#2 soreness/overuse)

EXCERPTS FROM “BIOMECHANICS & RISK ANALYSIS: DECKED DRAWER SYSTEM”

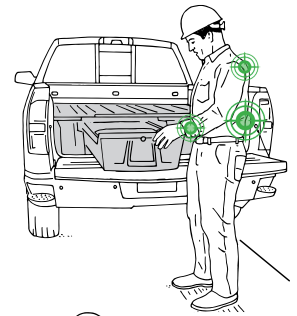
3rd Party White Paper:



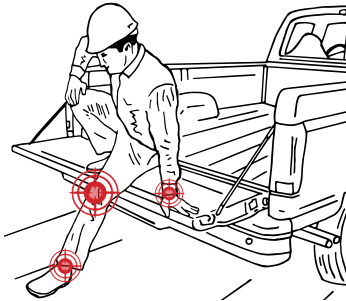
“Over-exertion and falls account for 25% of all costs of disabling injuries. Industries which utilize work vehicles that are mobile and comprise variable tasks account for a majority of these types of workplace injuries.”



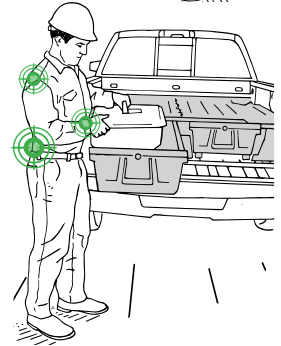
“The DECKED drawer system reduced or eliminated activities such as climbing into the back of the truck or onto the tire reducing or eliminating the need for vehicle ingress/egress and risk of falling from elevated surfaces. The DECKED drawer system increased safe access to truck bed storage space by 44%.”



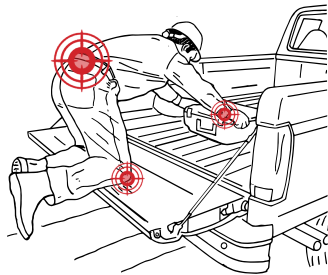
“Improper exit from a vehicle exposes an employee to two major potential injury mechanisms: (1). Potentially injurious levels of impact force during descent to the ground (2). Employee may slip and fall leading to bodily injuries and even fatality.”



“The overall efficiency of many of the tasks increased because of improved access to storage space and elimination of hazardous movements such as jumping down from the vehicle.”



“The force and moment required to pull an object from the truck bed to the tailgate without the DECKED drawer system exceeded the recommended action limit of 770lbs and the percentage of the population capable of safely exerting required forces was 28-45%.”



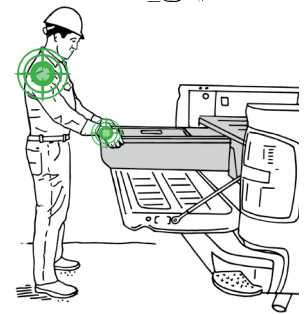
“DECKED reduces the excessive reaching and trunk flexion required to access storage space that is otherwise out of reach or difficult to reach. The reduction in low back and shoulder stresses using the DECKED drawer system was significant, improving the population capable of exerting such forces from 28-45% to 99-100%.”



“The DECKED system reduces unreachable cargo space to only 18.6%. This represents an increase in accessible storage with reduced ergonomic risk by nearly 44% by not requiring unsafe acts and hazardous postures to manually handle objects located in unreachable cargo space.”



“The DECKED drawer system increased safe access to truck bed storage space by 44%, the magnitude of these differences were more often more pronounced with shorter employees. These differences are biomechanically significant and could dramatically reduce the risks leading to acute and chronic injuries.”



THE REAL COST OF NEGLECTING SAFETY:

SOURCE: INJURYFACTS.NSC.ORG

\$40,000

Average per claim

- \$46,592 fall/slip
- \$33,545 strain

2.8%

2.8 incidents per 100 full-time employees:

- Construction 3.1%
- Utilities 2%
- Trade/transportation 3.4%

900,000

Incidents annually (2011-2017)





Read Entire 3rd Party White Paper:
DECKED.COM/SAFETY

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