



# STANDARD OPERATING PROCEDURE **FALL PROTECTION** **TRANSFER AT HEIGHTS**

Kiewit Bridge and Marine		
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Revision Summary Change		
Rev	Revision Date	Change Description
A	6-Jun-2024	Issued for Review
B	26-Jul-2024	Issued for Final KBM DSM Review
01	3-Oct-2024	Issued for Use



**NOTE:** Revision history will be an alpha revision Rev. A, B, etc., until “Issued for Use”. At that point it will be issued with a two-digit numeric revision Rev. 01, 02, etc.



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# 1.0 PURPOSE

The purpose of this standard operating procedure (SOP) is to set guidelines for transferring at heights from a mobile elevated work platform (MEWP) to an elevated work surface. This document outlines the best practices for transfer at heights. This SOP assumes the access for this work has been evaluated and a transfer at heights is the best solution and necessary for completing the work.

# 2.0 DEFINITIONS / ACRONYMS

TERMS / ACRONYMS	DEFINITION	REFERENCE
CORPORATE SAFETY GLOSSARY	<a href="#">Glossary</a>	



### 3.0 ROLES AND RESPONSIBILITIES

ROLE	RESPONSIBILITY
DESIGNATED SIGNER	<ul style="list-style-type: none"><li>• Must review and approve <b>every</b> fall protection permit on their project.</li><li>• Designated by district leadership and assigned on the TSCD matrix.</li></ul>
DESIGNATED INSPECTOR	<ul style="list-style-type: none"><li>• Responsible for initial inspection of fall protection systems to ensure correct installation.</li></ul>
PROJECT MANAGER	<ul style="list-style-type: none"><li>• Oversee implementation of fall protection program.</li><li>• Ensure employees are trained and understand the fall protection requirements.</li></ul>
GENERAL SUPERINTENDENT	<ul style="list-style-type: none"><li>• Review, approve fall protection permits.</li><li>• Ensure the fall protection hierarchy of controls is followed.</li><li>• Ensure the fall protection permit is complete with all supporting documents attached.</li></ul>
SUPERINTENDENT	<ul style="list-style-type: none"><li>• Develop the fall protection permit with the goal of eliminating fall risk by following the hierarchy of controls (eliminate, prevent, restrain, arrest, administrative).</li><li>• Verify the craft have appropriate training, understand the plan/permit.</li><li>• Verify the permit is being adhered to in the field.</li><li>• Ensure all approvals are obtained.</li><li>• Ensure the team is trained on the inspection process and it is being tracked.</li><li>• Confirm rescue equipment is available.</li></ul>
FIELD ENGINEER	<ul style="list-style-type: none"><li>• Participate in development of the fall protection permit.</li><li>• Confirm fall distance vs fall clearance required.</li><li>• Verify that the crew has the correct fall protection equipment.</li><li>• Track and document all fall protection equipment and device inspections.</li><li>• Verify the permit is being adhered to in the field.</li><li>• Confirm rescue equipment is available.</li></ul>
FOREMAN	<ul style="list-style-type: none"><li>• Participate in the development of the fall protection permit.</li><li>• Verify the permit is being adhered to in the field.</li><li>• Ensure all craft employees working on the permit are properly trained to utilize their fall protection equipment and devices.</li><li>• Review fall protection permit with crew prior to task and confirm signed off.</li><li>• Confirm rescue equipment is available.</li></ul>
CRAFT	<ul style="list-style-type: none"><li>• Follow the fall protection permit being utilized in the field.</li><li>• Only use fall protection equipment you have been trained to use.</li><li>• Inspect all fall protection equipment and devices prior to every use.</li></ul>



## 4.0 PROCEDURE

### 4.1 TRANSFER USING MEWP BASKET ANCHORAGE POINTS

- 4.1.1 Perform pre-operation inspections of fall protection equipment, MEWP, and work platform.
  - 4.1.1.1 Use the DVI app to guide an inspection of the MEWP. Give extra attention to the condition of the basket. Inspect for broken welds, loose bolts, bent structural members, etc. The MEWP must be operated on firm level ground.
  - 4.1.1.2 Use the InEight app to ensure all fall protection equipment up to date with the bi-annual inspection. Employees are to only use Nano-Lok Edge SRL's in MEWP's.
  - 4.1.1.3 Perform visual inspection of work platform for any obvious signs of damage. Ensure TSCD inspections have been performed, if necessary, prior to transferring to working surface.
- 4.1.2 Position the MEWP basket gate to exit onto working surface. The basket must be positioned so there is a minimal gap between the MEWP and working surface (Figure 1).
  - 4.1.2.1 The basket should not be further than 12" from working surface. This operation cannot be performed in high winds (refer to specific MEWP manual for restrictions). Always maintain 100% tie off. Only transfer from basket through gate. Never climb over MEWP rail.
- 4.1.3 Connect SRL snap hook to anchorage point in MEWP that is closest to the MEWP gate. While connected to the MEWP anchor point inside the basket, use second SRL to connect to approved anchorage point outside of the MEWP basket. **Always maintaining 100% tie off.**
  - 4.1.3.1 The approved anchorage point on the working surface must be at or above the employee's D-ring.
- 4.1.4 After connecting to the outside anchorage point, employee can disconnect from anchorage point in MEWP and exit the basket.
- 4.1.5 Follow the fall protection permit for the working off the approved anchorage point.
- 4.1.6 When re-entering the MEWP platform, remain connected to the outside anchorage point until inside the MEWP basket with the gate closed and connected to an anchorage point inside the basket. At this point the employee can disconnect from the outside anchorage point. Follow the [MEWP SOP](#).

### 4.2 TRANSFER USING MEWP MOUNTED EXTERNAL ANCHORAGE

- 4.2.1 Examples:
  - 4.2.1.1 [Genie Fall Arrest Bar](#)
  - 4.2.1.2 [JLG Bolt-On Fall Arrest System](#)
  - 4.2.1.3 [Snorkel Personal Fall Arrest System](#)



- 4.2.2 Perform pre-operation inspections of fall protection equipment, MEWP, external MEWP anchorage, and work platform.
  - 4.2.2.1 Use the DVI app to guide an inspection of the MEWP. Give extra attention to the condition of the basket and external MEWP Anchorage. Inspect the MEWP basket for broken welds, loose bolts, bent structural members, etc. (Figure 3). The MEWP must be operated on firm level ground.
  - 4.2.2.2 Inspect the external MEWP Anchorage for loose hardware, frayed or pitted wire rope, damaged mounting brackets, etc.
  - 4.2.2.3 Use the InEight app to ensure all fall protection equipment is inspected. Employees are to only use Nano-Lok Edge SRL's in MEWP's.
  - 4.2.2.4 Perform visual inspection of work platform for any obvious signs of damage. Ensure TSCD inspections have been performed, if necessary, prior to transferring to working surface.
- 4.2.3 Position the MEWP basket gate to exit onto the working surface. The basket must be positioned so there is a minimal gap between the MEWP and working surface, however the vertical step distance should be such that upon exiting the basket the external MEWP Anchorage is at or above the D-ring (Figure 2).
  - 4.2.3.1 The basket should not be further than 12 inches horizontally from the working surface. This operation cannot be performed in high winds (refer to specific MEWP for restrictions). Always maintain 100% tie off. Only transfer from basket through the gate. Never climb over MEWP rail on to working surface.
  - 4.2.3.2 While connected to anchorage in MEWP basket, connect the second leg of SRL to the external MEWP Anchorage. Disconnect the first leg of the SRL from the anchorage point in the MEWP basket. Always maintain 100% tie off.
- 4.2.4 Exit through the MEWP swing gate and connect SRL to the approved anchorage point on the working surface. The approved anchorage point on the working surface must be at or above the employee's D-ring.
- 4.2.5 After connecting to the outside anchorage point, employee can disconnect from the external MEWP Anchorage on the MEWP.
- 4.2.6 Follow the fall protection permit for the working off the approved anchorage point.
- 4.2.7 When re-entering the MEWP platform, connect SRL snap hook to the external MEWP Anchorage. Disconnect second leg of SRL from the anchorage point on the working surface. Step into the MEWP through the swing gate. Close the swing gate. Follow the [MEWP SOP](#).



## 4.3 TRANSFER AT HEIGHTS DO'S AND DON'TS

DO	DO NOT
Transfer from MEWP to working surface as soon as possible.	Do not remain tied off to both the MEWP basket and working surface anchorage point for more time than necessary to complete the transfer at heights.
Remain 100% tied off at all times.	Do not enter the MEWP basket before being tied off to the external MEWP Anchorage or MEWP basket anchorage point.
Keep anchorage on working surface above D-ring height.	Do not operate the MEWP during the transfer at heights
Inspect the MEWP and external MEWP Anchorage for damage.	Do not operate the MEWP prior to inspection. If there is damage to the MEWP, the MEWP must be tagged out.
Inspect fall protection equipment and hardware prior to use	Do not operate the MEWP outside of manufacturer's recommendations.
Position the MEWP as close as possible to the working surface. Minimize gaps between the MEWP gate and working surface.	Do not attempt to transfer from the MEWP to the working surface if the MEWP is unable to be positioned less than 12" from the working surface.
Have an authorized trainer	Do not use external MEWP Anchorage in conjunction with additional attachments such as, but not limited to, pipe racks, platform lights, etc.
Understand the weight limit restrictions for safe operating conditions in the MEWP as well as for transferring at heights.	Do not transfer using the external MEWP Anchorage or MEWP anchorage points if the weight of the employee, tools, and equipment exiting the basket is greater than 300LB. Refer to specific MEWP manual you are using for restrictions.

## 5.0 IMPORTANT CONSIDERATIONS

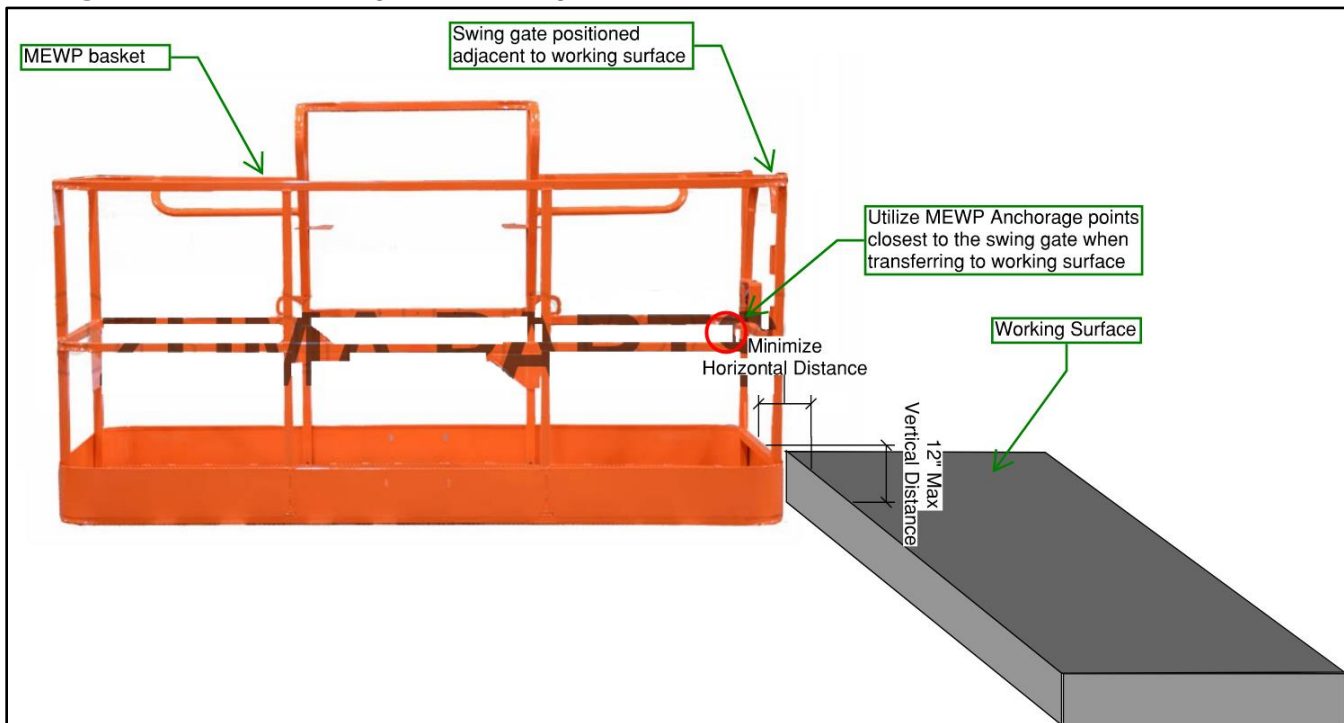
- 5.1 When transferring to a working surface, ensure the fall clearance distances have been determined.
- 5.2 If multiple fall protection systems are required, follow the Fall Protection Permit SOP for all systems. Each fall protection system requires its own fall protection permit.
- 5.3 In the event of a fall, it is critical that a rescue plan is detailed in the fall protection permit.
- 5.4 Wind speed restrictions for the specific MEWP used in the operation must be referenced.

## 6.0 REFERENCES

- OSHA References

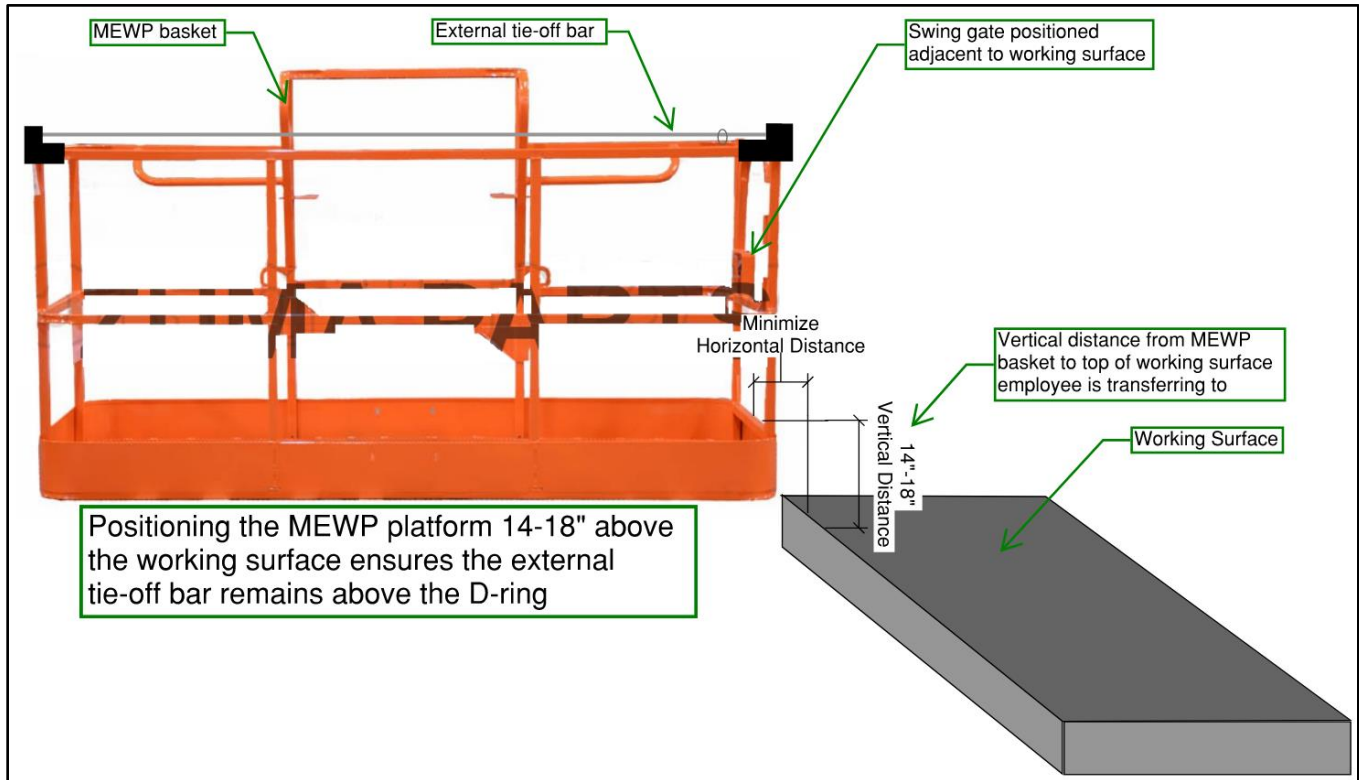
- [1926.501\(b\)\(1\)](#)  
*Unprotected sides and edges.* Each employee on a walking/working surface (horizontal and vertical surface) with an unprotected side or edge which is 6 feet (1.8 m) or more above a lower level shall be protected from falling by the use of guardrail systems, safety net systems, or personal fall arrest systems.
- Kiewit SOPs
  - [Working from MEWPs](#)

**Figure 1:** Transfer at heights to working surface





**Figure 2:** Transfer at heights using external MEWP Anchorage



**Figure 3:** External MEWP Anchorage inspection

