

The following Good Safety Practices were developed from the Innovation in Safety Award submittals.

2024 Reports

99 Inch Saw Improvement Boise Cascade - Chapman

<u>Distancing Handle</u> <u>Domtar (Resolute) - Larouche</u>

<u>Drone Technology Implementation</u> LP - Clarke County

<u>Dryer Outfeed Offbearing Station</u>
PotlatchDeltic Corporation - St. Maries

<u>Dual Flow Roof System</u> <u>LP - Maniwaki</u>

<u>Leadership Safety Walks</u> <u>Boise Cascade - Thorsby</u>

Mobile Stairs with Guardrail for Trailer Domtar (Resolute) – St. Prime

MOPED Improvements
Boise Cascade - Chester

Origami App Daily Entries
Boise Cascade - Chapman

Rail Site Fall Arrest Improvement Project
Boise Cascade - AllJoist

<u>Safer Conveyor Access</u> <u>Weyerhaeuser - Elkin</u>

<u>Safety Champions – Future Leader Development – Safety Projects</u> LP - Jasper

The In Between RoyOMartin

The Zero Zone RoyOMartin

99 Inch Saw Improvement

Boise Cascade - Chapman

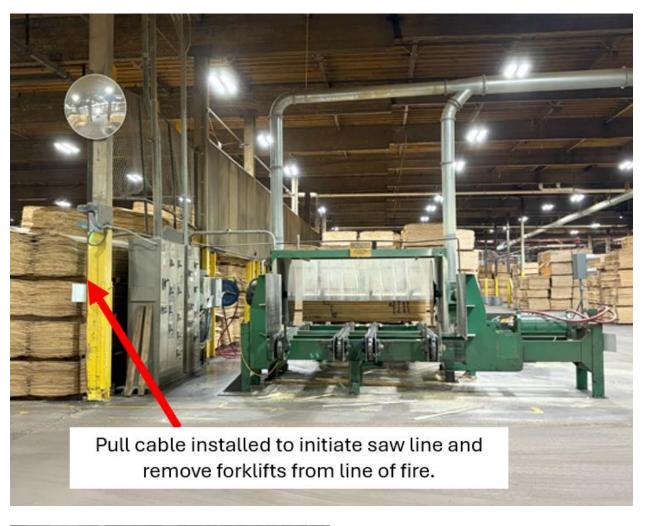
Contact: Tim Stewart, Senior Safety Coordinator

Email: <u>TimStewart@bc.com</u>

1. Describe in detail the innovative/novel solution that was developed and implemented. (For equipment-based innovations, please provide a minimum of 4 different pictures of the safety innovation).

In April 2024, Chapman had a near miss when a saw blade unexpectantly shot out from the 99-inch saw during operation. As a result, modifications were made to the saw line. The saw line no longer runs continuously as before. Instead, a user-friendly cable was installed for the operator to engage the equipment when material needs to be cut. The cable was installed approximately 6-8' to the side of the infeed, removing operators out of the line of fire. When the cable is pulled twice, power is fed to the saw line. Once the saw blades reach maximum RPM (approximately 40 seconds) for cutting, the infeed chain will engage and begin to convey the material through the saw line. As the load passes through the saws to the outfeed area, the load contacts a limit switch causing the power to the saw line to shut off. VFD's and DC injection brakes were added to the line to allow the saw blades to quickly and safely come to a complete stop at approximately 41 seconds. To visually notify pedestrians and mobile equipment of when the line is in operation, traffic lights were installed on each side of the saw line. The traffic lights illuminate green to signify safe passage through the area. In contrast, the traffic lights will illuminate from green to red as soon as the cable is pulled to initiate the equipment signifying the saw is in operation and is considered a "NO-GO" zone. Additional signage was installed to warn pedestrians and mobile equipment not to enter the area when the traffic light is red.







2. How was this innovation developed and implemented? (How was it introduced, process used, people/positions/teams involved, etc.)?

Chapman's leadership team immediately met to review the incident and discuss solutions. The safety coordinator, maintenance superintendent, and electrical supervisor spent time walking around the saw line to discuss in detail options to prevent pedestrians and mobile equipment from entering the work area of the saws while they are in operation. Beginning with the infeed, the team methodically navigated through the process of the equipment to ensure any modifications would not create another hazard but would increase safe operation of the equipment. This process also included the feedback of two production forklift operators who regularly load the saw line. Proactive communication between the team ensured the modifications were installed promptly and are efficient. Once the modifications were complete, supervisors held pre-shift meetings with their department to review the modifications and explain the expectations of Team Members to adhere to the signal lights. The updated SOP for loading the saw line was reviewed with each forklift operator.

3. Describe the improvements that have been achieved by the implementation of this innovation. (Explain how the solution has reduced injuries/illnesses or the risk thereof, improved safety awareness on or off the job, improved safety systems, advanced the safety program, and/or improved the flow/reliability of the production process. Provide supporting facts/data, where available).

Before the modifications, the saws continued running 24/7 even when not in use. In conjunction, mobile equipment and pedestrians were walking or operating around the infeed of the saw line during operation. Modifications made to the line has reduced the amount of time the saws are running unless in use, has removed lift operators out of the line of fire using the pull cable located to the side of the line, removed pedestrians from the area during operation using visuals aids such as the lights, and has allowed the saw blades to quickly and safely come to a complete stop between use. Team Members working around the saw line have communicated their appreciation for the modifications and visual aids installed. For the remainder of 2024, there were no near-misses or hazards reported that involved the saw line.

4. When was this innovation implemented and when were positive results first apparent (provide month and year for each)?

Implementation of the project began in April 2024 and resulted in immediate positive results by reducing the risk of a struck-by hazard. Chapman received positive feedback from Team Members who work around the 99" saw line stating the signal lights immediately allow them to know the line is in operation in times they may not hear it start up.

Distancing Handle Domtar (Resolute) - Larouche

Contact: Jessica Dubois-Martel Manager, Engineering Wood Products

Email: <u>Jessica.dubois-martel@resolutefp.com</u>

1. Describe in detail the innovative/novel solution that was developed and implemented. (For equipment-based innovations, please provide a minimum of 4 different pictures of the safety innovation).

We have developed a distancing tool with a fixed handle that allows the movement of the profile cutter heads; the addition of an aluminum handle that is screwed to a ring that holds two lifting cables. It is attached to the hook of a hoist already in place. This tool allows you to perform a daily task and maintenance in complete safety. What was in place before the addition of this innovation increased the risk of injury to workers, as the hands and body were near the knives of the equipment to be moved. It was more unstable, less precise and the worker's hands were more at risk.









2. How was this innovation developed and implemented? (How was it introduced, process used, people/positions/teams involved, etc.)?

The implementation was done in January 2024. This innovation was not born of an unfortunate event, nor of an incident that would have pushed us to react.

Rather, It is the result of a thoughtful and proactive observation by a mechanical supervisor and his team, who with a careful eye, were able to identify potential risks in the work environment before they caused a problem.

This invention testifies to a real vision, that of improving our practices to prevent situations that could have caused dangers, whether moderate or serious, for the work team.

Their observations of the potential hazards, combined with the expertise of LD Group Inc., made it possible to find a solution quickly. This company specializes in industrial products and expertise in finding value-added solutions. This tool was quickly implemented, a few weeks after the observation of what had been observed.

It is this proactive approach, based on vigilance and commitment to the safety of all, that makes this innovation a real breakthrough. It reflects team spirit and the constant concern to improve for the well-being of everyone.

3. Describe the improvements that have been achieved by the implementation of this innovation. (Explain how the solution has reduced injuries/illnesses or the risk thereof, improved safety awareness on or off the job, improved safety systems, advanced the safety program, and/or improved the flow/reliability of the production process. Provide supporting facts/data, where available).

The improvements achieved through the implementation of this innovation:

1. Risk reduction:

Before the innovation, workers had to manually handle the hoisting cables and were in close proximity to the knives of the profile cutter head. This put their hands and bodies at high risk of lacerations, crushing, or serious

injuries. With the addition of the fixed-handle tool, workers' hands are kept away from the danger zone, eliminating direct contact with moving parts of the equipment.

2. Improved security:

The tool standardizes the method of movement of the workpiece, reducing the chance of human error. It repositions the worker's body at a safe distance, avoiding the risk of shock or body crushing.

3. Increased efficiency:

Equipment movement is now more accurate and stable, reducing downtime and increasing the reliability of the production process.

4. Increased awareness:

Innovation has encouraged a proactive approach to safety and raised awareness of preventive practices.

Available facts or data:

Since the implementation of the tool in January 2024, no incident or accident has been reported in the context of the tasks concerned.

4. When was this innovation implemented and when were positive results first apparent (provide month and year for each)?

Début 2024

This innovation was put in place at the beginning of January 2024. Safer workspaces right from the start keep risks away.

Drone Technology Implementation

LP - Clarke County

Contact: Daniel Heath, Resource Manager

Email: <u>Daniel.heath@lpcorp.com</u>

1. Describe in detail the innovative/novel solution that was developed and implemented. (For equipment-based innovations, please provide a minimum of 4 different pictures of the safety innovation).

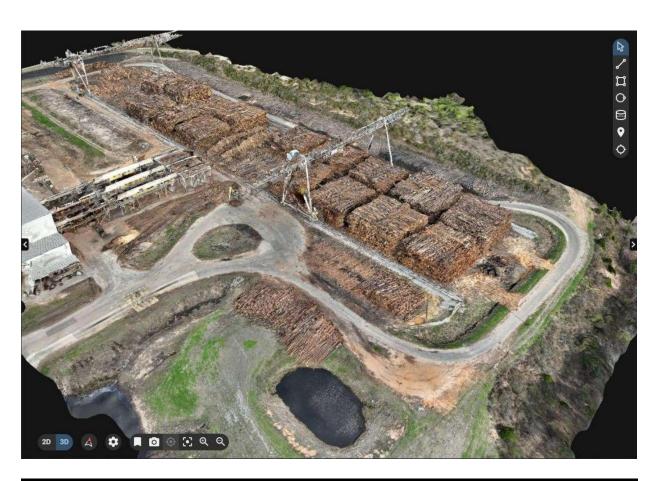
The decision was made to pursue the implementation of drone technology at Clarke County OSB to address a number of potentially unsafe processes at the site. The legacy log inventory process involved multiple employees crossing roadways for truck traffic and climbing both 100ft log cranes before daylight. The implementation of the drone in this process has eliminated all exposure to employees to the hazards of the original process as the pilot can conduct the entire count from a safe distance away from both the cranes themselves and the flow of traffic. After the implementation of log inventory process with the drone, the scope of usage was expanded to also cover in woods SFI audits. The audits used to involve one forester walking the entire work site and potentially coming in contact with active logging equipment while assessing the BMP compliance on site. The process was both hazardous and time consuming. With the drone, the whole site can be flown in a fraction of the time and the problem areas, if present, can be identified and addressed directly.

Another process that was addressed using drone technology was preventative maintenance routes on various pieces of equipment at the plant. Several pieces of equipment involved in the furnace and drying processes require periodic checks to identify possible damage from the heat involved in these processes. Before the implementation of a thermal drone, each piece of equipment would need to be gone over using a handheld thermal gun to search for "hot spots", indicating damage to the insulation or housing of the equipment. Given the location and ambient temperature of this equipment, the employees involved in these PM routes were exposed to hazardous conditions, often times needing to use a man lift and harness to access the areas of concern. As with the log inventory process, the thermal drone can fly the route and survey large sections of the equipment with the pilot being a safe distance away and never being exposed to hazardous conditions. Also, in the event of a smolder or fire at the plant, the thermal drone excels at identifying any small embers or smolders that are not visible by sight and could be potentially missed after the original incident has been addressed.



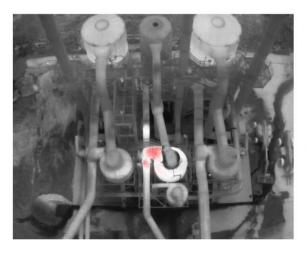














2. How was this innovation developed and implemented? (How was it introduced, process used, people/positions/teams involved, etc.)?

Due to consistent issues with variance in the log inventory process as well as the inherent safety concerns with the process, the decision was made to explore alternative options for inventory measurements. After researching several options, drone technology was identified as the most promising option. Upon further research, and with backing and support from Thomas Caskey, plant manager at Clarke County OSB, and Steven Meadows,

Business Manager of Natural Resources OSB, two DJI drones were purchased, one imagery drone and one thermal drone. The imagery drone and supporting software were trialed and implemented in the log inventory process and SFI auditing process by Daniel Heath, Resource Manager at Clarke County OSB. The thermal drone was trialed and implemented in the preventative maintenance route process by Noah Smith, Plant Controls Engineer.

3. Describe the improvements that have been achieved by the implementation of this innovation. (Explain how the solution has reduced injuries/illnesses or the risk thereof, improved safety awareness on or off the job, improved safety systems, advanced the safety program, and/or improved the flow/reliability of the production process. Provide supporting facts/data, where available).

Regarding, the log inventory process, the innovation removed most if not all risk of injury to LP employees as well as greatly improved the accuracy and consistency of log inventory measurements. The same can be said for the SFI auditing process from a safety perspective as well as drastically reducing the amount of time involved in the process and therefore increasing efficiency.

Concerning the thermal drone flights for maintenance routes, the process eliminates the majority of the risk of injury to the employee and drastically reduces the time involved to complete a route, freeing up the employee to address other projects.

4. When was this innovation implemented and when were positive results first apparent (provide month and year for each)?

The drone program at Clarke started testing in late 2023 and went live in February 2024. The increase in accuracy for log inventory was immediate and have been consistently accurate in the months since. Additionally, due to the short amount of time involved in the thermal drone PM routes, the frequency of the routes has been increased, and multiple potential issues have been resolved before ever becoming a major problem. This initiative has been implemented throughout our OSB division.

Dryer Outfeed Offbearing Station

PotlatchDeltic Corporation - St. Maries

Contact: Allen Bucky Shoemaker

Email: Allen.shoemaker@potlatchdeltic.com

1. Describe in detail the innovative/novel solution that was developed and implemented. (For equipment-based innovations, please provide a minimum of 4 different pictures of the safety innovation).

For nearly 60 years, the outfeed of our number one dryer has been manned by two graders. They were required to hand stack veneer off a landing table and into a cart. The method we used required a lot of gripping, pulling, and sliding of dry veneer manually handling the entire sheet from table to cart stacking. In 2024, we averaged well over 12mm 3/8 feet of veneer (1.125million sheets of veneer through number 1 dryer). We felt the need to reduce gripping, pulling, and handling full sheets routinely to reduce sliver exposure, reduce hand and shoulder fatigue and eliminate 2-graders risk exposures to a more simplistic single workstation.

To accomplish this, we worked with Raute over two years to develop a landing table with horizontal moving belts to a set of hurry up belts to pull gaps that travel from the graders left to right. These belts transport the veneer to the end of the table where there is an automatically leveled bin. The grader's new primary duties are to properly position the veneer into the bin as it floats into their stack and to monitor the landing table. This has eliminated all risk mitigation of slivers from pulling veneer into carts, hand strain of gripping veneers to pull, shoulder and back strain of pulling 12mm of veneer annually piece by piece into carts. The new implementation and design requires sheet guidance into a backboard in the bin with little to no efforts.

2. How was this innovation developed and implemented? (How was it introduced, process used, people/positions/teams involved, etc.)?

The innovation vision was developed by plant manager who worked with Raute engineers over the past couple years to bring to life a new manual outfeed design, along with details worked out by our in-house maintenance team to provide the reliability we needed to make it successful. Team members from our grading line were used in the process to help ensure the process was a team effort and able to meet their daily job objectives in a better manner. Our on-site safety team was highly involved in the risk mitigation and deployment of the new outfeed system. They ensured that all the guarding, ergonomics, and proper lockout procedures were in place during design and installation to allow for a successful and safe process.

3. Describe the improvements that have been achieved by the implementation of this innovation. (Explain how the solution has reduced injuries/illnesses or the risk thereof, improved safety awareness on or off the job, improved safety systems, advanced the safety program, and/or improved the flow/reliability of the production process. Provide supporting facts/data, where available).

With our new number one dryer out feed, a single employee can place dry veneer into a bin with the assistance of horizontal moving off-bearing belts. We have produced over 100,000 sheets of veneer on a continued monthly basis through the new system since installation and have had no reported injuries, slivers, soreness, or near misses at this workstation. We received very good rapport and feedback from our graders of the simplicity, ergonomics, reduced exposure of squeezing, lifting, bending, turning and repetition. Overall, the team members who grade are all very pleased with the new design, process, and our team's ability to innovate a manual stacker device that worked so well from startup.

4. When was this innovation implemented and when were positive results first apparent (provide month and year for each)?

Implementation began May of 2024 and proven results of positive safety practices with data to support through December of 2024 into current Feb of 2025 still proving to be a very successful step toward ergonomics and safety innovation.



New Outfeed Design

Dual Flow Roof System LP - Maniwaki

Contact: Yannick Gauvreau, EHS Manager Email: yannick.gauvreau@lpcorp.com

1. Describe in detail the innovative/novel solution that was developed and implemented. (For equipment-based innovations, please provide a minimum of 4 different pictures of the safety innovation).

In order to prevent the random ice falls, which could drop from about 70 feet, posing a serious danger to individuals on-site. This hazard made it critical to find a solution to prevent ice buildup and ensure the safety of everyone around the building. The solution developed involved the installation of roof drains, the creation of a pitched roof, and the addition of gargoyles. Drains were strategically placed to efficiently manage rainwater and melting snow, while the roof was modified to direct water flow toward these drains, reducing the risk of infiltration and ice formation. Gargoyles were integrated to channel water into external drainage systems, preventing overflow. These changes also improved the building's thermal insulation by preventing moisture from reaching the insulation layers. The entire solution was designed to be durable under harsh weather conditions, addressing both safety and structural concerns effectively.

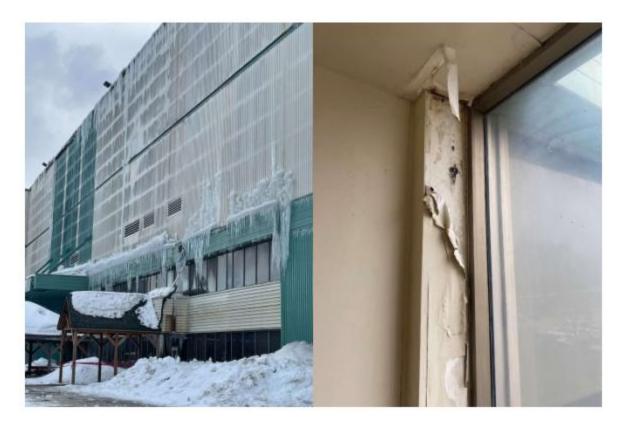


2. How was this innovation developed and implemented? (How was it introduced, process used, people/positions/teams involved, etc.)?

The innovation was developed through a collaborative effort involving engineers, architects, and LP management teams. The process began with a thorough assessment of the building's roof and drainage system to identify areas of water infiltration and ice buildup. The initial problem of snow melting was caused by a thermal bridge created by brackets in the roof. This led to the accumulation of water and ice along the edges. The new system eliminates this issue by modifying the roof structure to prevent heat from the building from reaching the roof, which in turn stops the snow from melting. The roof was redesigned with a pitched slope and equipped with roof drains and gargoyles to direct the water away efficiently, ensuring that snow no longer melts due to internal heat and preventing ice buildup and water infiltration. Experts were consulted to design a solution that included the installation of roof drains, the modification of the roof pitch, and throughout the project the addition of gargoyles to direct water away from the building. The implementation was carried out in phases, starting with planning and design, followed by the installation of the new systems. Throughout, safety and structural integrity were prioritized, with continuous collaboration between internal and external teams to ensure the solution addressed both the ice fall hazard and water infiltration issues effectively.

3. Describe the improvements that have been achieved by the implementation of this innovation. (Explain how the solution has reduced injuries/illnesses or the risk thereof, improved safety awareness on or off the job, improved safety systems, advanced the safety program, and/or improved the flow/reliability of the production process. Provide supporting facts/data, where available).

The implementation of this innovation has led to significant improvements in both safety and building integrity. The primary improvement is the substantial reduction in the risk of injuries, increasing year after year, caused by falling ice, which had previously posed a serious hazard to individuals on-site. Before the solution was implemented, falling ice also caused material damage to the previous solution implemented which were temporary wood roof canopy installed at every entrance. Additionally, water infiltration, caused by the ice buildup, led to mold growth in the office walls, creating potential health risks for employees working in those areas. With the new roof structure and drainage system in place, ice falls are no longer a danger, and water infiltration has been solutioned. The innovation has also contributed to the improved well-being of employees. Overall, the project has advanced the company's safety program by effectively addressing both the ice fall hazard and water infiltration issues, providing a long-term, sustainable solution. It has enhanced the physical safety of the workplace, improved air quality by preventing mold, and ensured the building's structural integrity, contributing to a safer and more productive environment for employees.



4. When was this innovation implemented and when were positive results first apparent (provide month and year for each)?

The work began with demolition in fall 2023 and continued throughout the winter, with the project being completed by summer 2024. The first positive results were visible during the winter of 2023-2024, when a portion of the roof was already finished, and it became clear that the snow was no longer melting, preventing ice buildup. The full results were observed in winter 2024-2025, after the entire project was completed, with no further ice accumulation observed. The workspaces have since become more comfortable for employees, and the risk of injury from falling ice has been entirely eliminated

Leadership Safety Walks

Boise Cascade - Thorsby

Contact: Ronnie Morris, Sr. Safety Coordinator

Email: Ronniemorris@bc.com

1. Describe in detail the innovative/novel solution that was developed and implemented. (For equipment-based innovations, please provide a minimum of 4 different pictures of safety innovations).

Thorsby EWP mill recognizes the importance of leaderships engagement with employee safety. We implemented a weekly safety walk by our leadership team. Each week the leadership team is assigned a department to complete a safety walkthrough. The safety coordinator schedules the date and time for the safety walk and sends a meeting invite. During the safety walk, we observe at-risk behaviors and hazards associated with equipment. Another important aspect of the safety walk is leaders are required to have at least one face-to-face conversation with an hourly associate, the conversation should be about how things are going at work, Safety topics or casual conversations about hobbies they enjoy to how their Families are doing. The point is to have verbal contact with an associate to let them know we care and to build trust. After the safety walk each leader gives their feedback to the department manager including any safety items observed and talk about the face-to-face conversations we had with associates.

2. How was this innovation developed and implemented? (How was it introduced, process used, people/positions/teams involved, etc.)?

It was developed and implemented by the safety coordinator and the plant manager. During our 2024 safety action plan we had an initiative to increase interactions between leaders and our hourly team. We believe it would add value in terms of Safety and employee relations. We introduced this concept during our daily meeting. Currently we have about 8 leaders that do the safety walks each week.

3. Describe the improvements that have been achieved by the implementation of this innovation. (Explain how the solution has reduced injuries/illnesses or the risk thereof, improved safety awareness on or off the job, improved safety systems, advanced the safety program, and/or improved the flow/reliability of the production process. Provide supporting facts/data, where available).

The safety walks have led to an increase in leading indicator reports. Corrective actions are put in place to close gaps and prevent injury or property damage. It improves employee relations; leaders are going to the employee for conversations instead of the employee having to come to the leader. On the job conversations in the employees' environment give them more opportunity to point out any issues they're having or need assistance with.

4. When was this innovation implemented and when were positive results first apparent (provide month and year for each)?

We begin the safety walk process near July of 2024. Once it was fully implemented, we received Immediate Positive results in having conversations with employees in their work environment. It has generated leading indicator reports and in return we've seen housekeeping improvements, and we continue to close gaps for the items that are identified during the safety walks.

Mobile Stairs with Guardrail for Trailer Domtar (Resolute) – St. Prime

Contact: Jessica Dubois-Martel Manager, Engineering Wood Products

Email: Jessica.dubois-martel@resolutefp.com

1. Describe in detail the innovative/novel solution that was developed and implemented. (For equipment-based innovations, please provide a minimum of 4 different pictures of safety innovations).

We have developed a mobile staircase with guardrail that allows the truckers to access their trailer floors safely while eliminating the risk of falling.

When truckers have to detach the elastic bands holding the tarps of their load, they used the mobile staircase at their disposal. The technique was effective until it was realized that to remove the elastic bands placed in the center of the trailer, they had to board the trailer and were therefore no longer protected by the railing of the stairs. They were then exposed to a risk of falls (4 feet or more). Falls on the same level are one of the main causes of accidents at work that can have serious and even sometimes fatal consequences. The frequency of truckers who have to get on their trailers without fall protection was about thirty times a week, which eliminates about 1100 risks of falls in a year. We had to find a solution to avoid the risk of falling.











2. How was this innovation developed and implemented? (How was it introduced, process used, people/positions/teams involved, etc.)?

The yard supervisor and the superintendent considered a corrective measure to be put in place to avoid the risk of falls when travelling on the trailer. They had the idea of attaching the railing directly to the existing mobile staircase that was at their disposal. The innovation had to be light since it would be moved often. Our mechanical team played an important role in the design by providing ideas and necessary adjustments throughout the project. Finally, we asked Ferdeck (which is a trailer manufacturing and repair company) to carry out the project in aluminum with the assembly and welding.

- 3. Describe the improvements that have been achieved by the implementation of this innovation. (Explain how the solution has reduced injuries/illnesses or the risk thereof, improved safety awareness on or off the job, improved safety systems, advanced the safety program, and/or improved the flow/reliability of the production process. Provide supporting facts/data, where available).
 - Along the way, we encountered several difficulties related to the innovation itself, but also because the trailers are all different (height). So, we decided to involve our factory mechanical team. They added weight to the front (foot) of the stairs for the anti-tip (front and back) and stabilizing legs for the anti-tip (left-right). The mechanical team has also set up an automatic braking system. When the stairs are moved with the handles, the braking is automatically deactivated and when the handles are released, the braking system engages.
- 4. When was this innovation implemented and when were positive results first apparent (provide month and year for each)?

We started using the new mobile staircase with guardrail at the end of March 2024. Positive results were seen immediately, without any employee falls.

Origami App Daily Entries Boise Cascade - Chapman

Contact: Tim Stewart, Senior Safety Coordinator

Email: TimStewart@bc.com

1. Describe in detail the innovative/novel solution that was developed and implemented. (For equipment-based innovations, please provide a minimum of 4 different pictures of safety innovations).

The Origami system was introduced to Chapman in May 2022. Since then, it has allowed Chapman to acquire important data that helps drive our safety program; especially when it comes to leading indicators. With the data collected, we can correct unsafe conditions, unsafe behaviors, and identify focus areas for training or procedural changes. However, opportunities were recognized for Chapman's leadership to effectively collect more data and conduct more Face-time conversations by utilizing the Origami mobile app. Using the mobile app allows leaders to immediately enter information in Origami rather than waiting to get back to their office PC with the possibility of forgetting about the hazard and to address the issue promptly.

2. How was this innovation developed and implemented? (How was it introduced, process used, people/positions/teams involved, etc.)?

In mid-July of 2024, Chapman's leadership was asked to install the Origami mobile app on their phone and challenged to enter a minimum of two (2) entries a day. With Face-time Conversations proving to be the most effective tool when addressing unsafe acts, one of two Origami entries is required to be an FTC. Leadership was asked to not just enter FTC's addressing unsafe acts but encouraged to enter any FTC of positive reinforcement with Team Members. Leadership is reminded of completing two entries during every management meeting and weekly emails are sent summarizing participation by each leader.

3. Describe the improvements that have been achieved by the implementation of this innovation. (Explain how the solution has reduced injuries/illnesses or the risk thereof, improved safety awareness on or off the job, improved safety systems, advanced the safety program, and/or improved the flow/reliability of the production process. Provide supporting facts/data, where available).

Since implementing the requirement of two entries a day, the engagement of leaders has allowed our leading indicators for the year 2024 to almost triple those reported in 2023. Each hazard ID entered is addressed promptly, which has assisted in driving down injuries at Chapman. First Aid incidents at Chapman have decreased since adoption, going from 53 in 2023 to 44 in 2024. Chapman finished the 2024 year with an increased total of 2,432 leading indicators compared to the 924 leading indicators from the 2023 year.



4. When was this innovation implemented and when were positive results first apparent (provide month and year for each)?

Implementation of the project began mid-July 2024. The immediate engagement of leadership with the Origami app resulted in an increase in leading indicators beginning in July 2024 and an even stronger increase in August and September. This included an increase in FTC's of leadership with Team Members.

MOPED Improvements

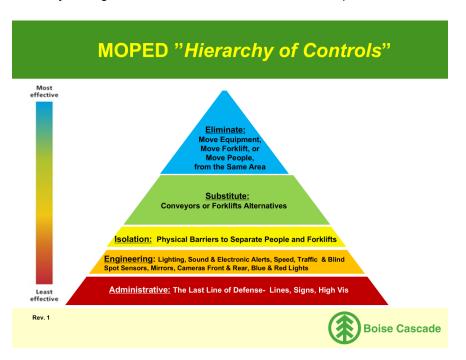
Boise Cascade - Chester

Contact: Arthur Frazier, East Region Safety Manager

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1. Describe in detail the innovative/novel solution that was developed and implemented. (For equipment-based innovations, please provide a minimum of 4 different pictures of the safety innovation).

The Corrective Actions from the MOPED adults, we moved Pedestrian Walks Ways from the Gound Level to Catwalks above Machinery. The new Catwalks separated Forklifts from Pedestrians and resulted in many Walkways being eliminated. This Innovation is in the top Tier of the MOPED Hierarchy of Controls.



Pedestrian Catwalk replaces Pedestrian Walkways







2. How was this innovation developed and implemented? (How was it introduced, process used, people/positions/teams involved, etc.)?

Our Eastern MOPED Assessment Teams visited Chester and completed a MOPED assessment with its Leadership Team. There were 5 top findings and 15 others that resulted from the audit at Chester. The Chester team came together to complete corrective actions for the findings. Four of the Top 5 Findings, the Pedestrian Walkways were eliminated. The Plant based on Risk Assessments is Safer and the Morale of the Team Members has improved as we feel safer in the Plant when we walk and the Forklift Drivers don't feel Rush, as the potential to interface with a Team Member has greatly been reduced.

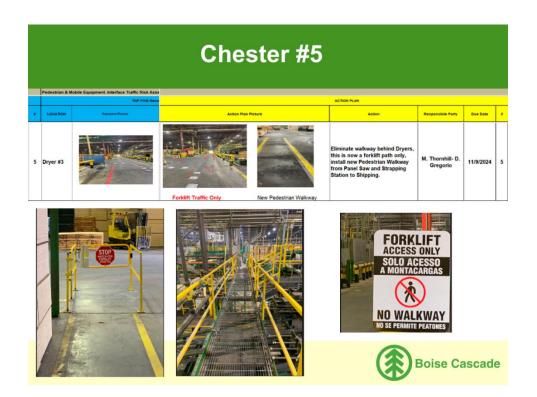
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Before the elimination of Pedestrian Walkways was replaced with overhead Catwalks, the Pedestrians were at risk of potentially struck-by hazards with mobile equipment. The installation of the Pedestrian Catwalks has produced a significant reduction in the risk of pedestrians being struck by mobile equipment with the Hierarchy of Control Elimination. After the implementation in Q4 of 2024, there have not been any near misses reported that involved pedestrians and mobile equipment in the areas where Pedestrian Catwalks were installed, and in the areas where Pedestrian Walkways were eliminated.

4. When was this innovation implemented and when were positive results first apparent (provide month and year for each)?

Two of the Top Five were completed in Q4 of 2024.





Rail Site Fall Arrest Improvement Project

Boise Cascade - AllJoist

Contact: Luc Belanger, Health/Safety & Environmental Coordinator

Email: lucbelanger@bc.com

1. Describe in detail the innovative/novel solution that was developed and implemented. (For equipment-based innovations, please provide a minimum of 4 different pictures of the safety innovation).

We designed and constructed a staircase and platform to facilitate safer access to the top of the railcar when we must climb on top to release cables securing the load.





2. How was this innovation developed and implemented? (How was it introduced, process used, people/positions/teams involved, etc.)?

This innovation was the result of a hazard identification card submitted by an employee that identified the difficulty and risk of climbing the metal ladder on the end of the railcar. The design was developed in collaboration with a local contractor. Our associates working in this area outlined the use-case and requirements to the fabrication contractor and reviewed the design prior to construction.

3. Describe the improvements that have been achieved by the implementation of this innovation. (Explain how the solution has reduced injuries/illnesses or the risk thereof, improved safety awareness on or off the job, improved safety systems, advanced the safety program, and/or improved the flow/reliability of the production process. Provide supporting facts/data, where available).

Previously employees had to climb the exterior metal ladder at the end of the railcar to access the cable releases on the top of the car. Our location in NE Canada experiences extreme cold, snow and ice making the climb hazardous from both slippery conditions and the necessity of wearing bulky clothing in the winter which limits mobility. This innovation has improved the safety of employees who need to climb onto the railcar using the vertical ladder attached to the end of the car by eliminating the use of the ladder. Our employees can now quickly and safely access the top of the car without having to work in an awkward body position at uncomfortable heights.

Original Access Ladder



New Safer Access



4. When was this innovation implemented and when were positive results first apparent (provide month and year for each)?

This innovation was installed in November 2024, and the elimination of risk and increased employee comfort was immediately observed.

Safer Conveyor Access

Weyerhaeuser - Elkin

Contact: Jody Seaver- Safety Manager

Email: jody.seaver@wy.com

1. Describe in detail the innovative/novel solution that was developed and implemented. (For equipment-based innovations, please provide a minimum of 4 different pictures of safety innovations).

Improve safety access for essential tasks on flight conveyor in our wood room. Prior to installation, weekly access to this equipment required confined space entry permit and fall restraint systems to be in place. Currently, access to equipment is gained through small access (no entry) while standing on a caged ladder system. This innovation provides a much safer working surface with less production interruption.

2. How was this innovation developed and implemented? (How was it introduced, process used, people/positions/teams involved, etc.)?

This innovation was designed and implemented by Jarod Wilson, a maintenance team member. This person created the idea because of personal experience working on equipment.

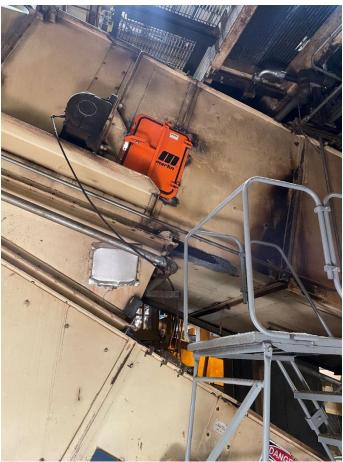
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Access door to conveyor allows for faster access and now does not require the use of fall protection. The equipment is accessed weekly, which resulted in immediate safety improvement.

4. When was this innovation implemented and when were positive results first apparent (provide month and year for each)?

April-2024 Immediate safety impact







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Safety Champions – Future Leader Development – Safety Projects LP – Jasper

Contact: Chirs Messer – Plant Manager

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1. Describe in detail the innovative/novel solution that was developed and implemented. (For equipment-based innovations, please provide a minimum of 4 different pictures of safety innovations).

A desire to decentralize safety throughout the Jasper OSB operational process and find a path to have safety become "organic" gave way to the creation of the Jasper OSB G.O.A.T. Safety Champion program. The vision was to have local leadership identify potential future leaders working in hourly positions. These future leaders would then be formed into teams and would be assigned a "Safety Project" to work on. Each team would be assigned a project sponsor, which would be a leader from our management staff. Safety projects would be selected, budgeted, and completed so the participants could participate in planning, budgeting, project scope, getting contracting quotes, beginning work, and work completion. These hourly employees would benefit from the opportunity to spend time with senior plant leaders, including the plant manager while navigating the many challenges to project completion.



2. How was this innovation developed and implemented? (How was it introduced, process used, people/positions/teams involved, etc.)?

Our Production Superintendent conducted project management training, teams were formed, project sponsors assigned, (procurement manager, reliability engineer, and production superintendent) and meetings were

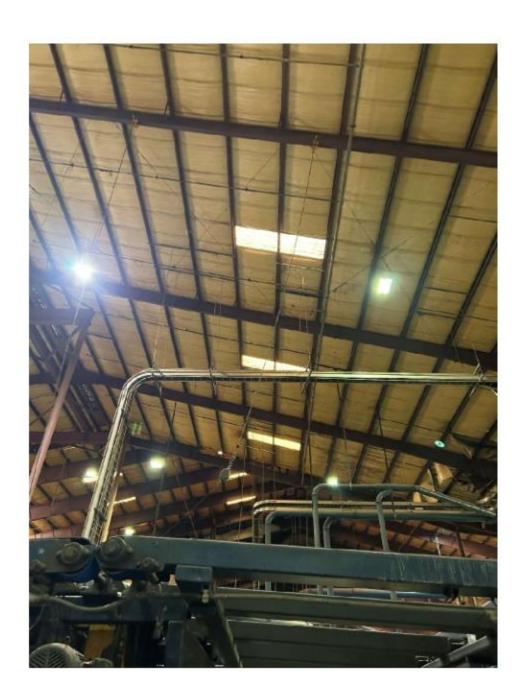
scheduled for twice per month. Much time began to be invested into this group of safety champions. Three initial safety projects were chosen. Projects selected:

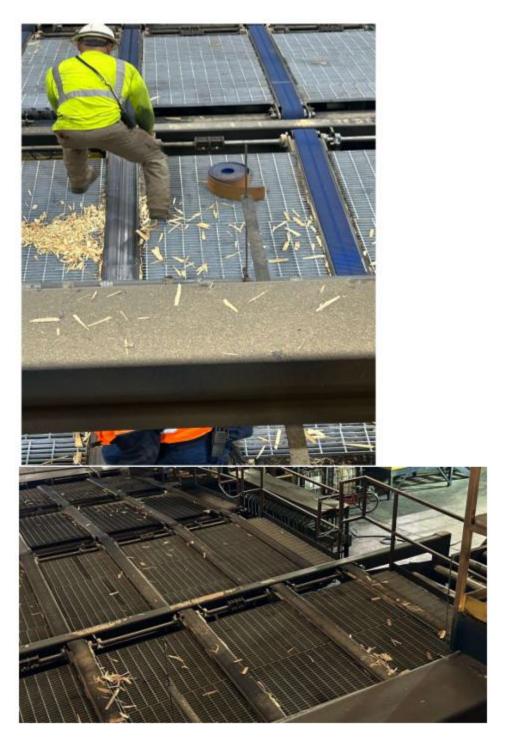
- 1. Saw line fall protection elimination
- 2. Shipping area traffic congestion
- 3. Unit stack shuffler guarding and efficiency



3. Describe the improvements that have been achieved by the implementation of this innovation. (Explain how the solution has reduced injuries/illnesses or the risk thereof, improved safety awareness on or off the job, improved safety systems, advanced the safety program, and/or improved the flow/reliability of the production process. Provide supporting facts/data, where available).

Saw line fall protection elimination: When our maintenance team performed maintenance on the belts and other items on the saw line, they would tie off to SRL's attached to the ceiling. As they traversed the saw line, the angle of the fall protection was ineffective when fall distance was calculated. The project team's solution was to add grating under the saw line along with handrails to eliminate the need for fall protection.





<u>Shipping area traffic congestion:</u> Since the opening of the OSB mill in Jasper, production efficiency has increased, which has subsequently led to the addition of more trucks entering the mill so product can ship. With increased truck traffic, limited space, a tarping station, truck loading area, combined with no traffic signage, and pedestrian traffic, unsafe and vehicle congestion conditions existed. The project team created the following solutions. Form a flatbed only lane coming into the scale house, limit five flatbed trucks into the mill at one time, create a one-way lane into the shipping area, post and paint traffic signage, install speed bumps, and require truck drivers to remain in their trucks while being loaded, to reduce pedestrian traffic.

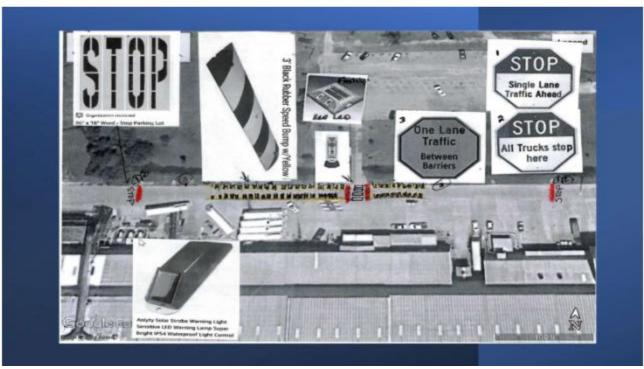


Scope:

To reduce truck congestion in shipping, tarping, and egress areas related to shipping vehicles.

- Truck drivers in shipping area / close proximity with forklifts other trucks.
- Truck drivers in tarping area / trucks waiting to tarp (stacking up)
- Truck exiting and entering shipping area

 only inches between them.





Unit stack shuffler guarding and efficiency: The unit stack shuffler allows employees to take a unit off of the line, tilt the entire unit to its side, remove bad board(s), organize the remaining boards in an organized unit, and send the unit back onto the line. This unit was lacking guarding, had fall hazards on the platform, trip hazards because of discarded boards, and no protection to open holes in grating when the shuffler was tilted. The team's solution was to add multiple handrails around the platform, and place disconnects on the gates that would shut down the hydraulics when opened. The team also asked that a roller table be installed so they could place discarded board on the roller table so the boards could be placed on a cart, thus eliminating having to handle the board multiple times, and increasing efficiency in removing bad boards.

Unit Shuffler before modifications

Pinch points and handrail damage.
Fall Potential from hole in the catwalks



Boards on stair walkway narrow walk area. Hand rail hit by units when pulled off the line



Unit shuffler after modifications.

Widen the area the shuffler pulls unit off the line.

Boards are not stacked in walkway



Handrails to protect from getting to pinch points



Stack Shuffler Project

Before Project



After Project



4. When was this innovation implemented and when were positive results first apparent (provide month and year for each)?

The first Safety Champion meeting was held on 11/8/2023. Project scopes were discussed, and planning began. It was immediately apparent that we were on the right track when the project sponsor for the stack shuffler project met with the team. The team began to suggest improvements that had not been previously considered. The addition of a roller table to remove boards from the platform would reduce manual material handling and having to touch the board multiple times. This improved our ergonomics and improved our efficiency. This also was a key learning for the management team that if we got out of the way, our employees had the solutions. Safety decentralization and organic safety was well on the way in Jasper TX.

The shipping area traffic congestion project team had a tremendous amount of initiative. The team came up with a plan that was quoted for almost \$250,000. This was a great opportunity for the team to revisit the scope of their project and replan solutions to match the project scope. Today we have a much safer and efficient traffic flow in our shipping area.

The saw line fall protection team mapped out their solutions on the first day with the help of their project sponsor. Their project would take the most time to complete as it was the costliest and had to be completed over a period of multiple down days and maintenance outages. After the first phase, a redesign of the grating installation had to be modified due to operational issues. This allowed the team to experience a long-term project that combined budgeting aspects, replanning, and seeing it through to completion. Our team eliminated a safety hazard while increasing run time. Our team now has a platform to work from which reduces time to track or replace belts. They can track the belts with more efficiency, which increases productivity.

The Safety champions are now bringing legitimate safety projects to the meetings and to leadership. They are understanding the scope of their projects and are getting quotes for the work to be done and bringing it to the

meetings. They are identifying other team members they need added to their teams for their expertise. We are now ready for the hourly project leads to step into the role of project sponsors and give the opportunity to other safety champions to take the lead on future projects. The leadership team is committed to continuous investment in our safety champions. The safety champions are a great contributor to Jasper OSB having currently worked 790,000 hours OSHA Recordable free. Our employees in Jasper are not the cause of our operational issues, our employees in Jasper, have all the solutions to our operational issues. We have found a way to decentralize safety while focusing on the most important assets we have...OUR PEOPLE!

The In Between

RoyOMartin

Contact: Cole Bryant, Corporate Safety and Environmental Manager

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1. Describe in detail the innovative/novel solution that was developed and implemented. (For equipment-based innovations, please provide a minimum of 4 different pictures of safety innovations).

At RoyOMartin, we believe that *safety is personal*. However, reaching all team members with that message has been a challenge, as many do not have company email. Previously, our safety team sent monthly inspirational messages via email, but these messages failed to reach a large portion of our workforce. To solve this, our IT department developed a system to send messages via text, allowing us to reach everyone directly. To maximize the impact of this new communication channel, we launched *The In Between*, a monthly video series featuring our Vice President of Safety. This initiative provided a more engaging and personal way to reinforce our core safety values, ensuring every team member received a direct, meaningful message from leadership.

2. How was this innovation developed and implemented? (How was it introduced, process used, people/positions/teams involved, etc.)?

Our in-house media team developed the series, creating a branded boilerplate introduction with professional voiceover to establish consistency. Each month, Natalie Monroe wrote her own message, which was then refined and filmed in a live-action format, where she spoke directly to the camera to enhance authenticity and connection. The videos, ranging from two to four minutes, were intentionally simple—featuring Natalie as the primary subject with minimal B-roll—to maintain a personal and direct tone. Each episode's link was distributed via text at the start of every month in 2024, marking the first time a RoyOMartin leader used personal video messages as a recurring communication tool.

3. Describe the improvements that have been achieved by the implementation of this innovation. (Explain how the solution has reduced injuries/illnesses or the risk thereof, improved safety awareness on or off the job, improved safety systems, advanced the safety program, and/or improved the flow/reliability of the production process. Provide supporting facts/data, where available).

While we do not have quantitative data on text open rates, qualitative feedback indicates a positive shift in safety attitudes and engagement. The perception of safety within the company has begun transitioning from a "policing" function to a supportive and personal initiative. *The In Between* has helped humanize our safety leadership, making our safety culture feel more like a personal investment rather than a set of rules to follow.

4. When was this innovation implemented and when were positive results first apparent (provide month and year for each)?

This innovation was implemented in January of 2024 and has continued every month since then. 1 episode is introduced each month. The results and talk about the culture building videos began immediately after the first video was released in January 2024.

The Zero Zone

RoyOMartin

Contact: Cole Bryant, Corporate Safety and Environmental Manager

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1. Describe in detail the innovative/novel solution that was developed and implemented. (For equipment-based innovations, please provide a minimum of 4 different pictures of safety innovations).

Traditional safety training often struggles to balance accuracy with engagement, leading to passive participation and limited retention. At RoyOMartin, we set out to change that with *The Zero Zone*—a series of short, high-impact instructional videos designed to deliver safety training that is both customized and compelling. Each episode focused on a specific safety topic relevant to our work environment, providing informational, accurate, yet engaging content that could be seamlessly integrated into monthly safety meetings and onboarding sessions. The brevity of these videos ensured that safety leaders could reinforce key messages without overshadowing other critical meeting discussions.

2. How was this innovation developed and implemented? (How was it introduced, process used, people/positions/teams involved, etc.)?

Our in-house media team produced 10 episodes in 2024, with most videos averaging five minutes (a few reaching 10 minutes when necessary). The series covered key safety topics, including:

- Hazard Recognition
- Conducting a Safety Audit
- Hand Safety
- Ladder Safety
- Heat Stress
- Mobile Equipment
- Mental Health in the Workplace
- Evacuation Procedures
- Root Cause Analysis (RCA)
- Fire Extinguisher Safety
- 3. Describe the improvements that have been achieved by the implementation of this innovation. (Explain how the solution has reduced injuries/illnesses or the risk thereof, improved safety awareness on or off the job, improved safety systems, advanced the safety program, and/or improved the flow/reliability of the production process. Provide supporting facts/data, where available).

The Zero Zone received overwhelmingly positive feedback from leadership and employees. The short, engaging format allowed safety teams to use the videos effectively without "hoarding" safety meeting time, keeping discussions balanced. Unlike traditional PowerPoint presentations, these videos sparked increased conversation around safety topics, demonstrating stronger engagement and retention.

4. When was this innovation implemented and when were positive results first apparent (provide month and year for each)?

The first episode of the innovation was implemented in February 2024. The topics above were introduced once a month. Positive results in safety meetings happened immediately after releasing the first Zero Zone in February 2024 – December 2024.