



ZERO INCIDENTS THROUGH COLLABORATION

TRANSPARENCY IN SAFETY SHARING INNOVATIONS

November 10th 2020
Member Meeting

November 10, 2020 Member Meeting

Welcome – Mark Jonson

Welcome

Executive Director announcement

Thank you to our sponsor & presenters

2021 SafeBuild Alliance Board Member Vote

Presentation – Transparency in Safety: Sharing Innovations

Sponsor Presentation – Milwaukee Tools

Wrap-Up

Executive Director Announcement

Karen Blythe is retiring!

Thank you, Karen, for your guidance, vision and commitment to the health and wellbeing of all those in our industry over the years.

Enjoy your retirement!



Innovations Member Meeting

Transparency in Safety: Sharing Innovations

November 10th, 2020

A collaborative presentation between
SafeBuild Alliance WA & OR

2021 Board Election

Annual board member election vote:

Mark Jonson – McKinstry

Jeret Garcia – Valley Electric

Dave Johnson – Hoffman

Jason Engelbrecht – McKinstry

Lyle Eiseman – Mortenson

Jamie Stuart – Valley Electric

Mindy Uber – Skanska

Jeff Angeley – Seattle Children's

Jesse Reyer – Pride Electric

Rayce Whitson – ATG

Thank you to our sponsor



Innovations – Contributors

Moderator: Dave Johnson, Hoffman Construction

Howard S Wright • Hilti • CPWR

American Heart Association • PCI

Burns & McDonnell • Milwaukee Tool

OEG • TCM • Skanska • Rosendin

Work Right NW • Foushee • Hoffman

Mortenson • Fred Shearer • Flynn



Burns & McDonnell

Creating the Innovative – and Safe - Mindset

Psychological safety is a belief that one will not be punished or humiliated for speaking up with ideas, questions, concerns or mistakes. — Amy Edmondson, Harvard Business School

- ▶ The most important factor in creating a high performance – and innovative – workplace
 - Google Aristotle Project

- ▶ Best way to show Respect is to genuinely listen – with a willingness to be influenced
- ▶ Move beyond physical safety to create a great work experience

Safety Innovation Requires An Inclusive State of Mind

Diversity

- Bringing people with different values and backgrounds to the workplace
- Today's workforce looks much different than the 1980 workforce
- Construction workforce is becoming much more diverse – by necessity
- Technical complexity is increasing exponentially

Inclusion

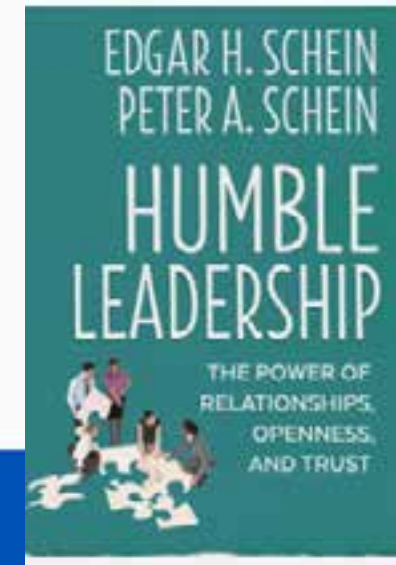
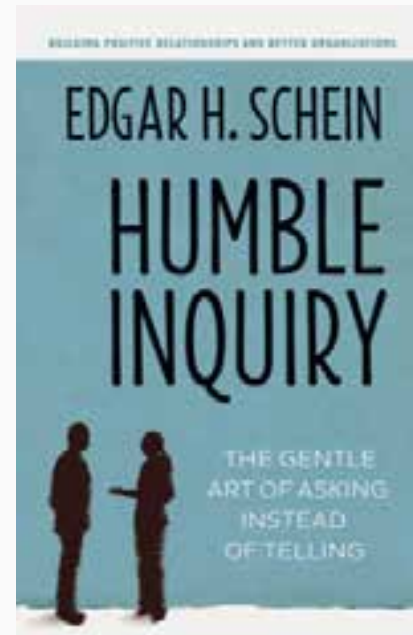
- ▶ Creating a sense of belonging - which is distinctly different from “fitting in”
- ▶ Feeling free to express who you really are
- ▶ Does that sound like large-scale construction to you?

Diversity with a poor degree on Inclusion is counter-productive

Trust Enables Innovation

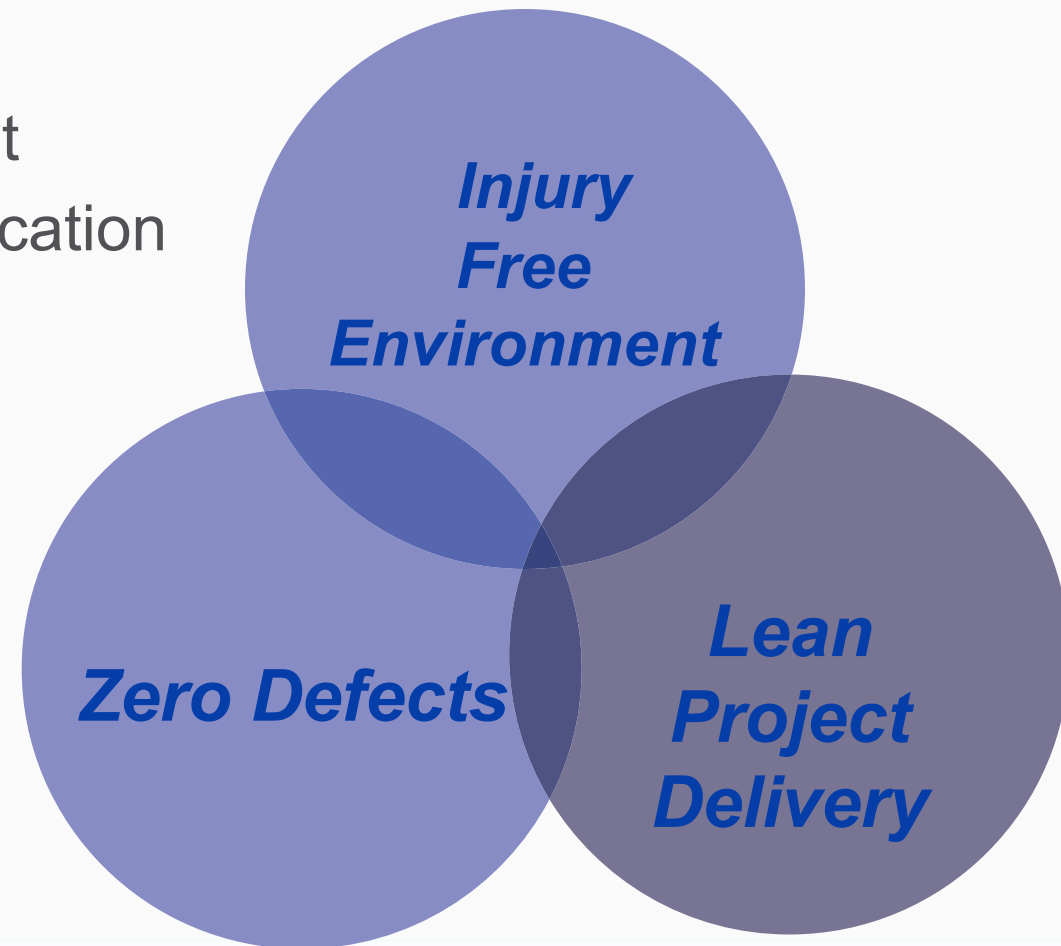
Trust in the context of a conversation is believing that the other person will

- *acknowledge me*
- *not take advantage of me*
- *not embarrass or humiliate me*
- *tell me the truth*
- *not cheat me*
- *work on my behalf*
- *support the goals we have agreed to*



Common Themes of Progressive Management Approaches

- ▶ Respect for People
- ▶ Continuous Learning & Improvement
- ▶ Effective and Transparent Communication
- ▶ Focus on Effective Process
- ▶ Continuous Learning
- ▶ Lousy Outcomes Aren't Inevitable





**CPWR – The Center for Construction
Research and Training**



Safety Climate-Safety Management Information System:

Confidence to Implement Scale

Linda M Goldenhar, PhD

Director Research & Evaluation

**Transparency in Safety – Sharing Innovations
Oregon & Washington SafeBuild Alliance Member Meetings
October 2020**



An interactive web-based system that construction companies, particularly those with fewer resources, can use for continuous safety climate, safety management, and safety outcome improvement.



- Schedule a company-wide Safety Climate Assessment (S-CAT)
- Generate reports containing assessment results
- Access large resource repository containing evidence-informed safety climate management resources (guidelines, templates, policies, procedures)
- Create action plans to put selected resources into action
- Access current & completed action plans
- Set reminders for continuous improvement
- **And...**



Confidence to Implement (CtI) Scale

To better *understand* safety climate issues that safety management strategies could improve, I can... (6 Items)

To *develop* safety management strategies to improve jobsite safety climate, I can... (7 items)

To *implement* safety management strategies to improve jobsite safety climate, I can... (5 Items)

To *evaluate* the effectiveness of safety management strategies, I can... (6 Items)



Confidence to Implement (CtI) Scale

To help ensure the CtI is reliable and valid, we need your **help!**

- Already have 104 stakeholder responses but need more
- Please consider taking **5-7 minutes** out of your busy day



All you have to do is:

1. Click or copy and past this URL into your browser --
https://wsu.co1.qualtrics.com/jfe/form/SV_1EQ0a50r2aP53Br
2. Read the informed consent.
3. Complete the short survey by **November 30th**
4. You will not be asked for identifying information and all responses are anonymous.



Thank you very much!

**Please send me an email if you have
any questions**

Lgoldenhar@cpwr.com



Hilti



WELCOME TO A
SNEAK PEAK OF THE LATEST
HILTI INNOVATIONS

HILTI UNVEILS WEARABLE EXOSKELETON TO HELP REDUCE STRAIN AND FATIGUE FROM OVERHEAD APPLICATIONS



- Will help commercial contractors, tradesman and management alike tackle health and safety as well as labor shortage challenges.
- Hilti Group partnered with Ottobock, the global leader in prosthetics, orthotics and exoskeletons that help people increase and retain their physical independence.



HUMAN AUGMENTATION WILL BE AVAILABLE IN EARLY 2021



SMART CONCRETE SENSORS IMPROVE DECISION MAKING AND ACCELERATE CONSTRUCTION SCHEDULES



- Possible through better understanding of the concrete curing process.
- Concrete Sensors provides the commercial construction industry with an easy-to-use platform to predict and monitor concrete behavior.
- An integrated platform combines a wireless concrete sensor, a concrete testing lab and mix design database with cloud software and analytics to provide the most accurate prediction of concrete strength in the industry.

concrete
sensors



THANK YOU!

SEND QUESTIONS TO

SEATTLE/WA: TAMARA.SARG@HILTI.COM
PORTLAND/OR: RYAN.WILSON@HILTI.COM



OEG

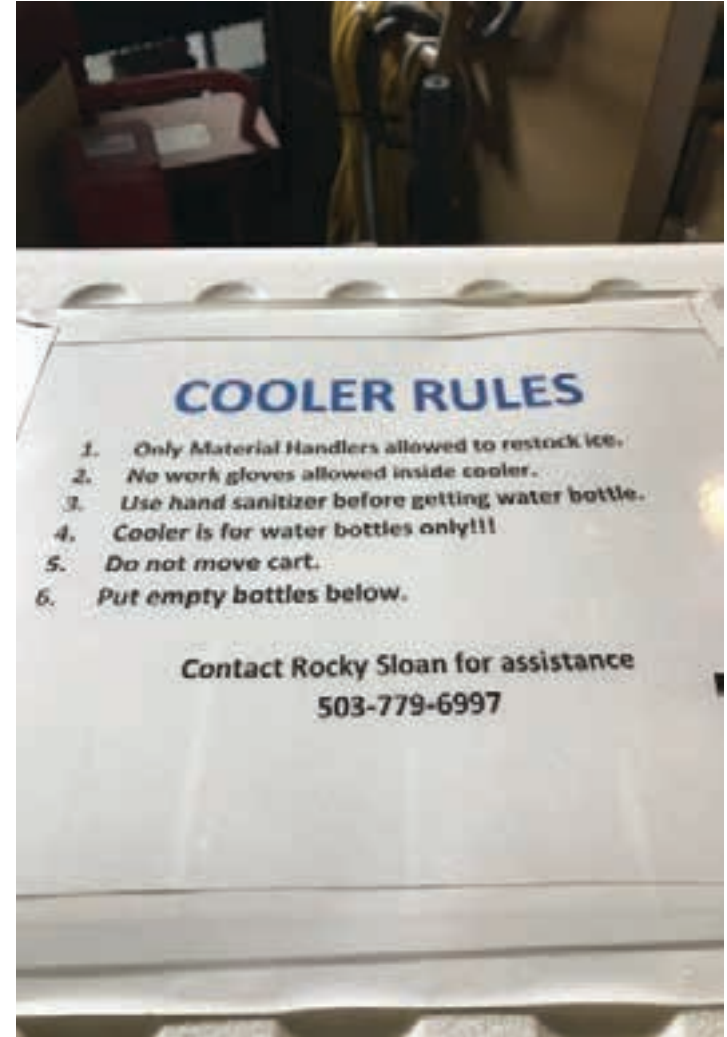
Intel MOD3 Hydration stations

Challenge- Provide crews access to cold drinking water during the warm work days and complying with COVID restrictions.

Solution-

- 8 individual tool carts were setup and outfitted as “mobile hydration stations”.
- Each one of the carts is located at major laydowns throughout site so OEG workers have easy access to them.
- Coolers are stocked in the morning and maintained throughout the day by Material Handlers.
- An Ice Machine was purchased so that ice was readily available to add to coolers. Only select individuals have access to machine and a protocol was created for those accessing the machine
- Each cart has a large cooler capable of holding a case of water up to 2 cases.
- Ice is added to help keep water cool throughout the day.
- Hand sanitizer dispensers are added so workers can clean hands before touching surfaces/ opening cooler
- Pieces of plexiglass were added to the carts so that empty bottles can be disposed of at the spot. Empty bottles are gathered for disposal. (reduces added trash on the project by empty water bottles being left laying around)
- Since initial design, trash bags are fitted to the opening in the plexiglass so that when its time to remove the empties, all the handlers need to is grab the bag, install a new bag and take away the full bag.
- Empty bottles are being recycled and money collected is being used to provide donuts for the crews. Additionally money is now being used to help one of our workers and their family who lost their house in the recent fires.







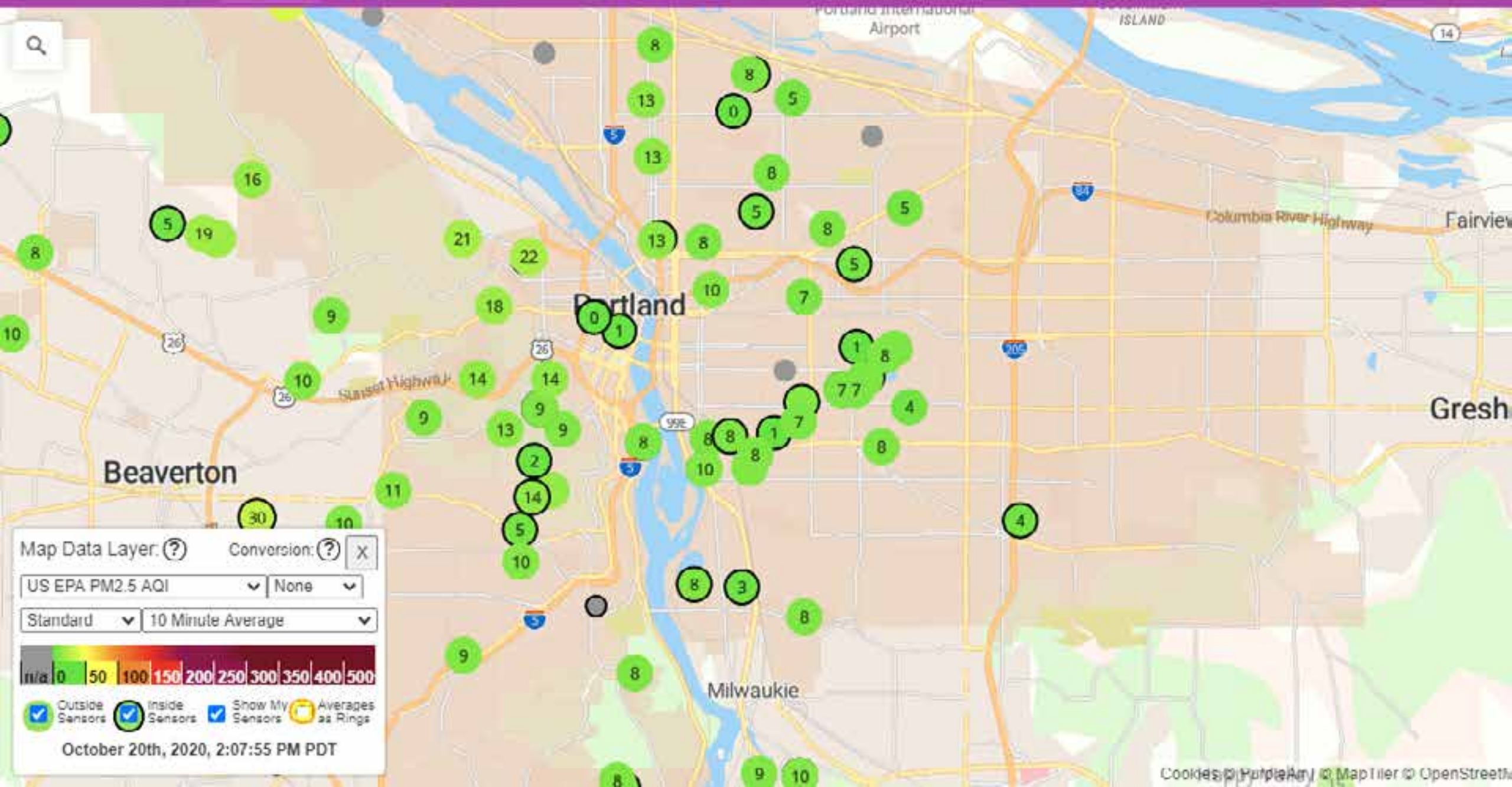
TCM



PurpleAir

Innovations- TCM





Map Data Layer: (?) Conversion: (?) X

US EPA PM2.5 AQI | None

Standard | 10 Minute Average

0 50 100 150 200 250 300 350 400 500

Outside Sensors Inside Sensors Show My Sensors Averages as Rings

October 20th, 2020, 2:07:55 PM PDT



PurpleAir PA-II
\$249.00



PurpleAir PA-II-SD
\$279.00



PurpleAir PA-I-Indoor
\$199.00



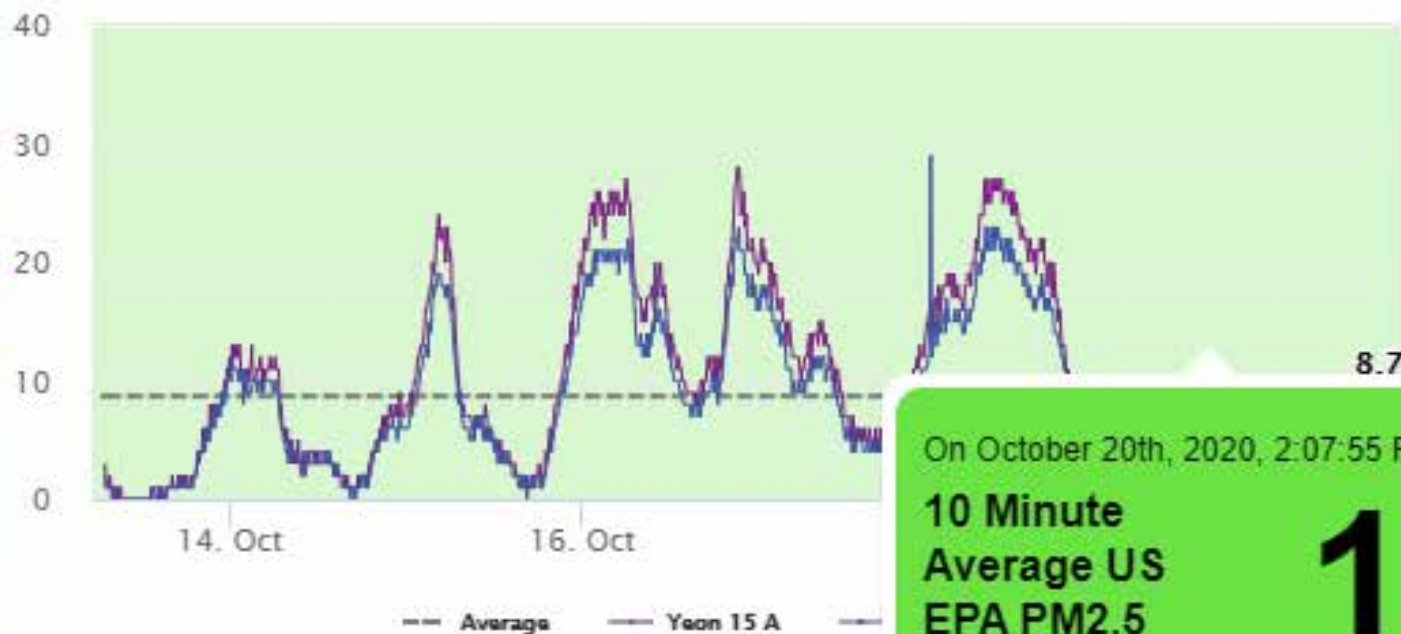
Click and drag to zoom in. Hold down shift key and drag to pan.



US EPA PM2.5 AQI 10 Minute Average



X



On October 20th, 2020, 2:07:55 PM PDT

10 Minute Average US EPA PM2.5 AQI is now

1

0-50: Air quality is considered satisfactory, and air pollution poses little or no risk.

Now	10 Min	30 Min	1 hr	6 hr	1 Day	Week
1	1	1	2	4	7	48

🏠 Sensor: Yeon 15

📍 A B ✓100% PA-II 6.01

📌 Get This Widget

Map Data Layer: (?) Conversion: (?) X

US EPA PM2.5 AQI None

Standard 10 Minute Average

n/a 0 50 100 150 200 250 300 350 400 500

Outside Sensors Inside Sensors Show My Sensors Averages as Rings

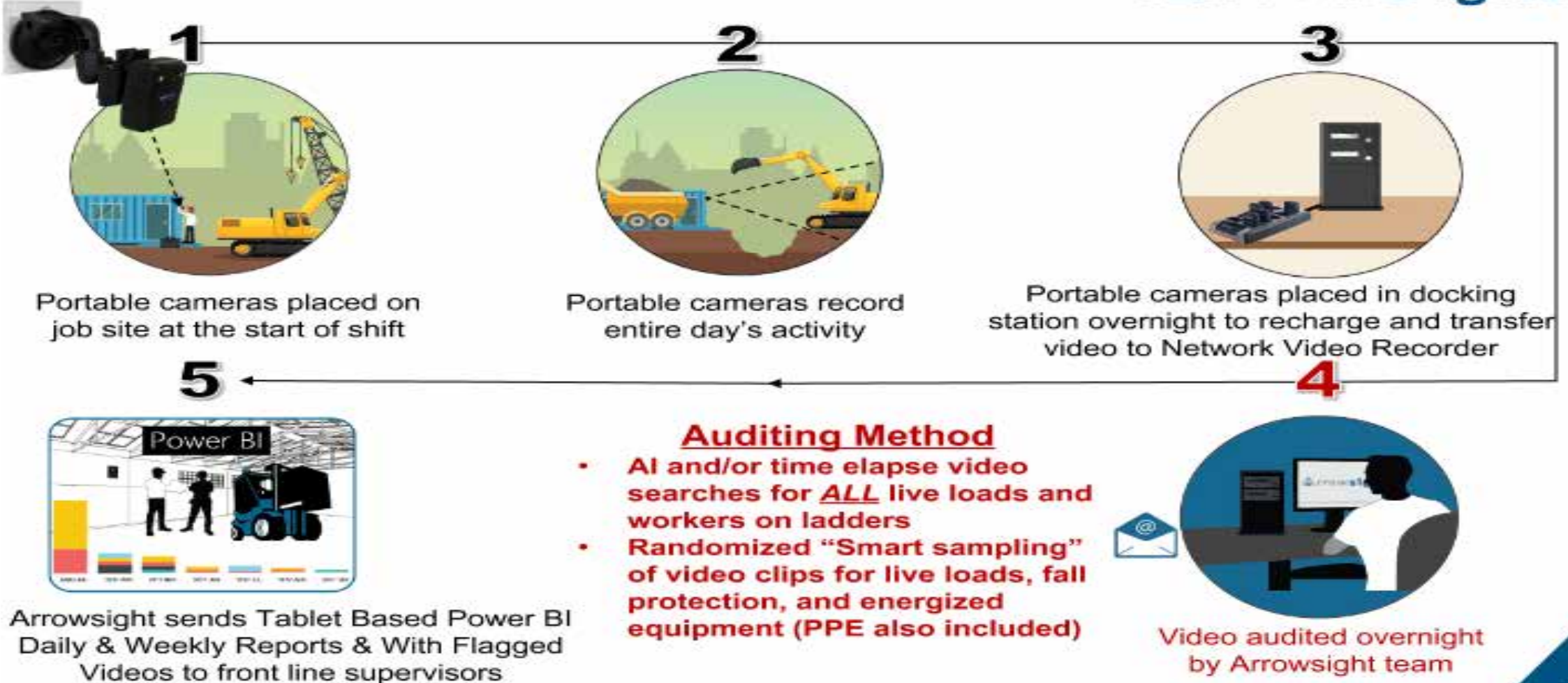
October 20th, 2020, 2:07:55 PM PDT



SKANSKA

Hybrid Remote Video Auditing (RVA) & AI Services

Construction Site Portable Cameras



Portable Camera Brackets/Mounts & Stands for the Construction Industry



Live Load Handling

2020-08-24 14:38:25.000



Flagged Video: Live Load- Handling

Fall Protection

2020-10-12 11:28:00.000



Flagged Video: Fall Protection- Position in Lift



Positive Observations

2020-10-13 12:47:20.000



Proper Safety Example

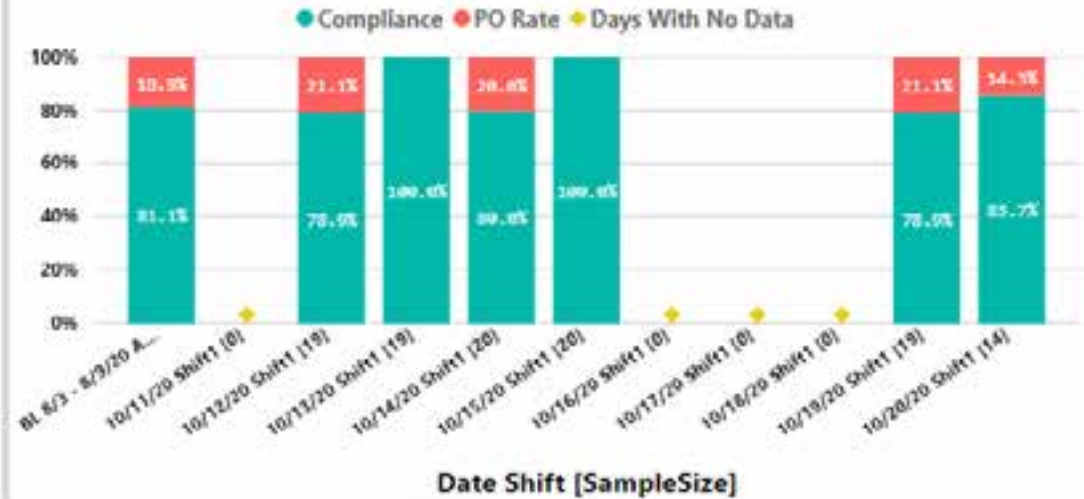
10/13/2020-19:47:21Z 0E00214 CJ0308

Job Site C3 Daily Worker Safety Report (10/20/2020)

PO Rate By Last Weekday

CriteriaGroup	Total POs	Sample Size	PO Rate	Compliance
<input type="checkbox"/> C01-Powered Equipment	2	34	5.88%	94.1 %
Shift1	2	34	5.88%	94.1 %
<input type="checkbox"/> C02-Live Loads	2	14	14.29%	85.7 %
Shift1	2	14	14.29%	85.7 %

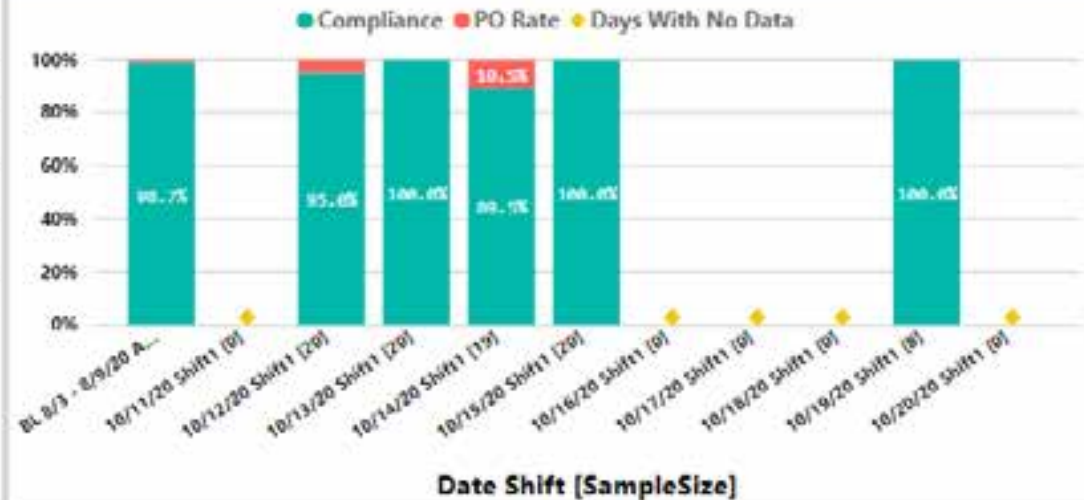
C02-Live Loads



C01-Powered Equipment



C03-Fall Protection





Rosendin

POWER Breezer
COVID-19
Sanitizer

The logo for ROSENDIN features a stylized blue 'R' with a black swoosh underneath, followed by the word 'ROSENDIN' in a bold, black, sans-serif font.

ROSENDIN

Power Breezer

- Purchased (4) of these for Projects across NW
- Started from an Email from Grainger
- Utilized a couple different approved chemicals to sanitize large areas in our prefab shops as well as 2 projects.
- Using this in a couple other areas as well





Before After



Before After



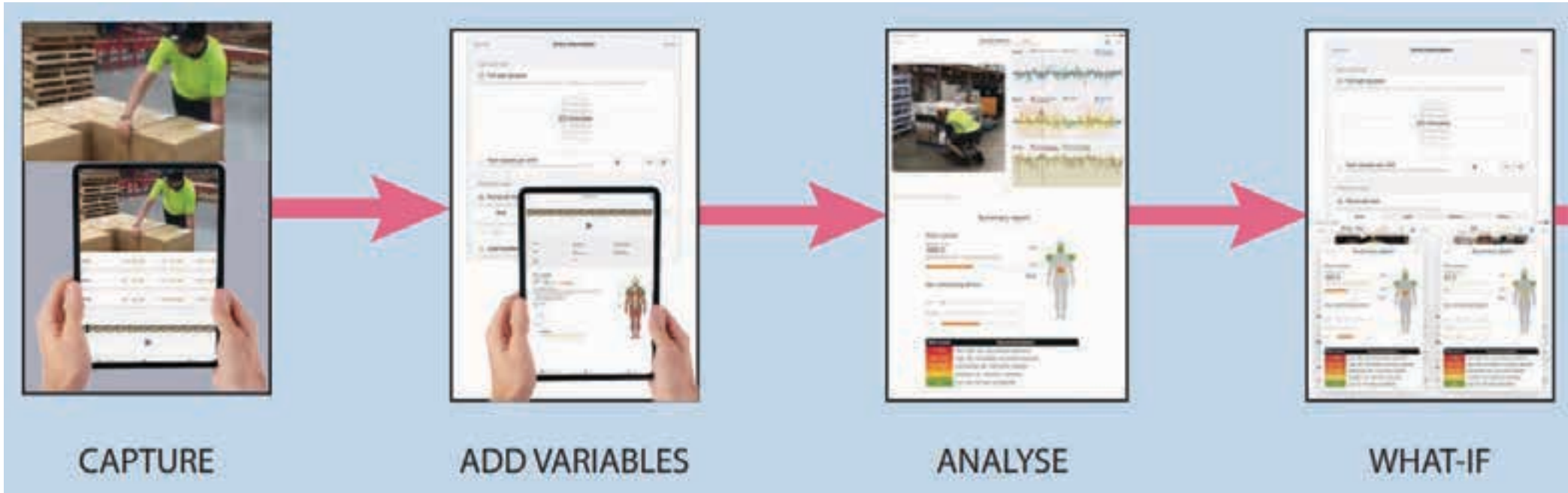


Flynn + Work Right NW

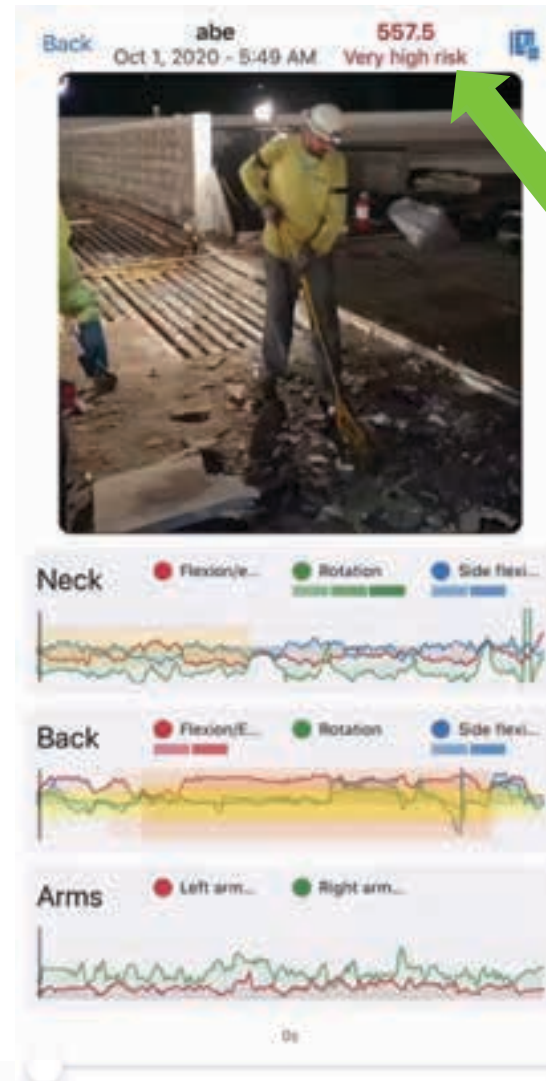
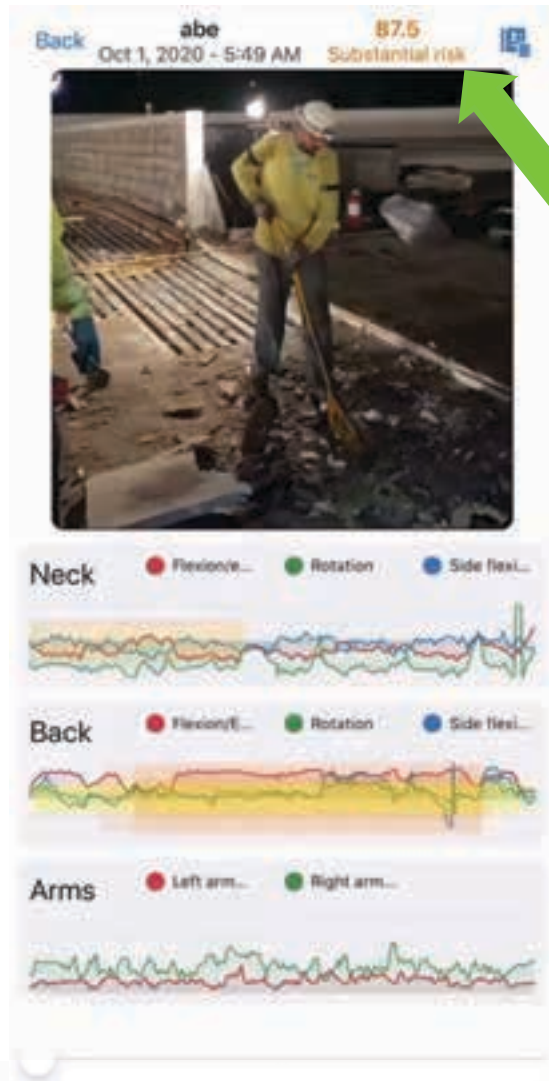


JointAction.Solutions[®]
Injury Prevention Redefined.









Hazard management

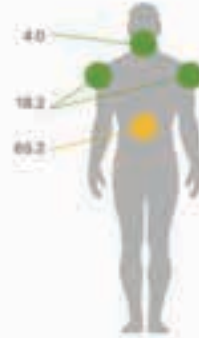
1.5 min

Manual task risk score summary

87.5



Substantial risk



Hazard management

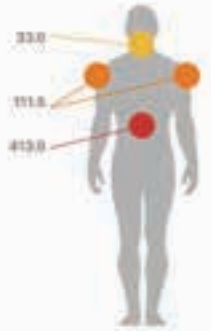
60 min

Manual task risk score summary

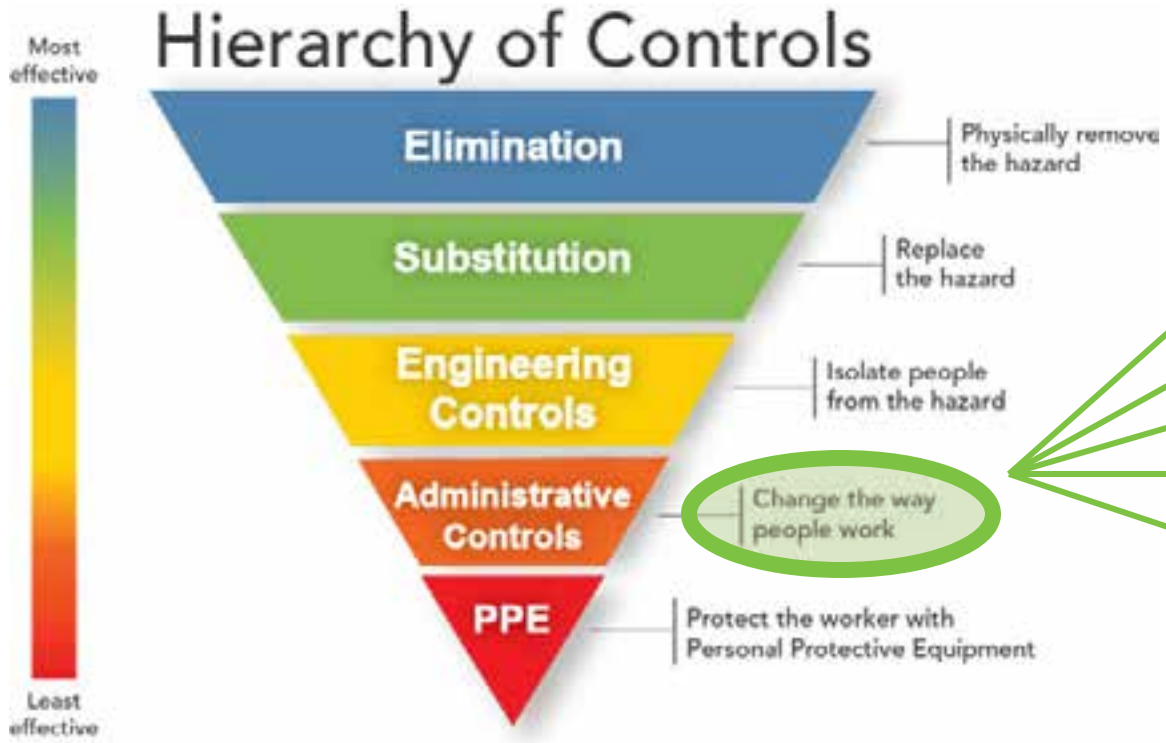
557.5



Very high risk



Greater than 400	Very high risk
200 - 400	High risk
70 - 200	Substantial risk
20 - 70	Possible risk
Less than 20	Low risk



- Task duration max times
- Tool Box Talks
- Industrial Athlete Training
- Pre-shift Prep
- Alternate tasks



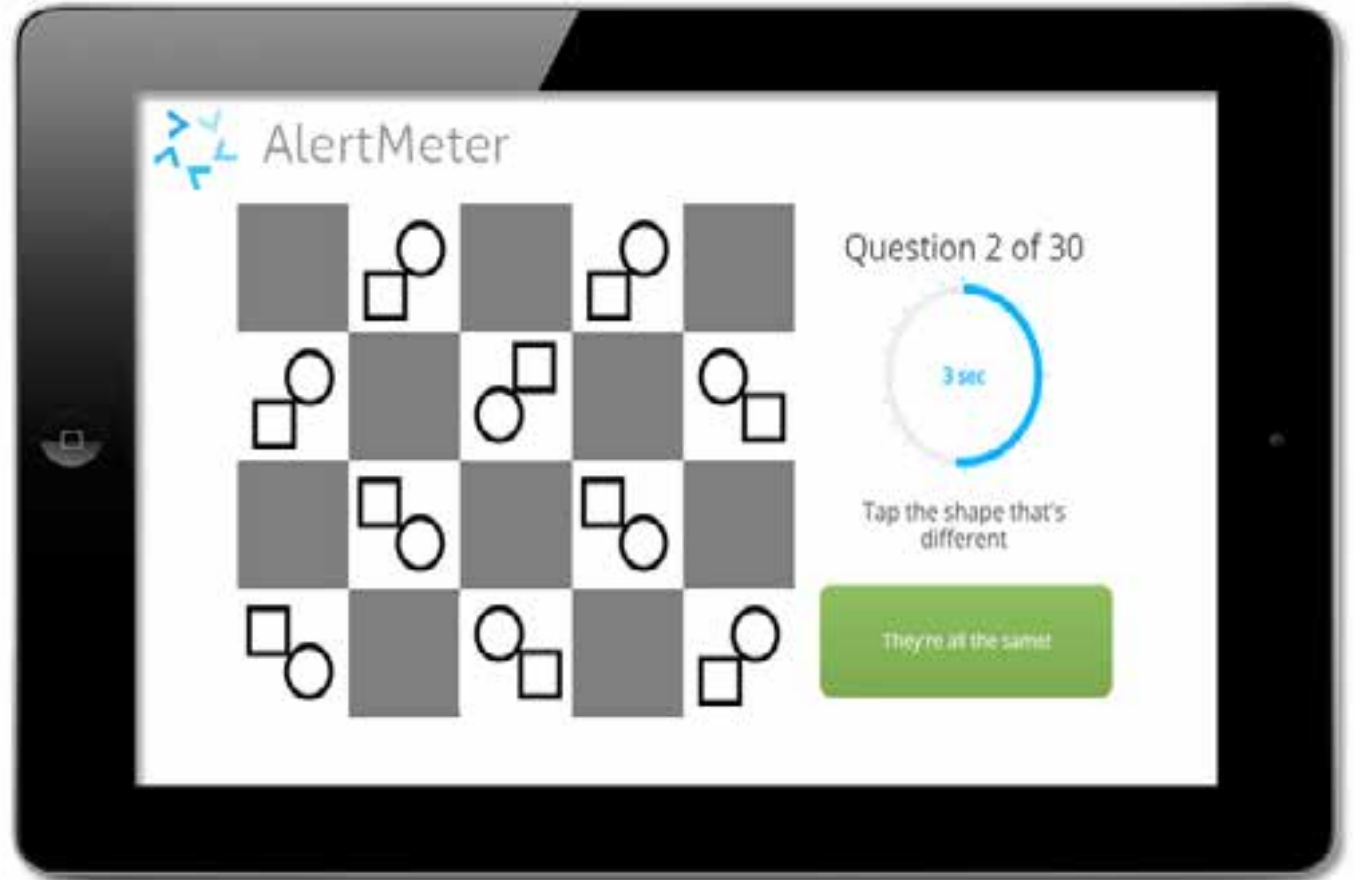
Foushee

Welcome to



- AlertMeter® is a fit-for-duty test designed for the modern workplace
- It's a “game-like” alertness test taken on a smartphone, tablet, laptop, or desktop computer in 60-90 seconds
- The Corporate Safety Leadership Team identified this tool as a way to possibly decrease injuries in the workplace





Determine if all shapes presented are the same, or if one shape is different

BEHIND THE SCENES

- **REPORTING**

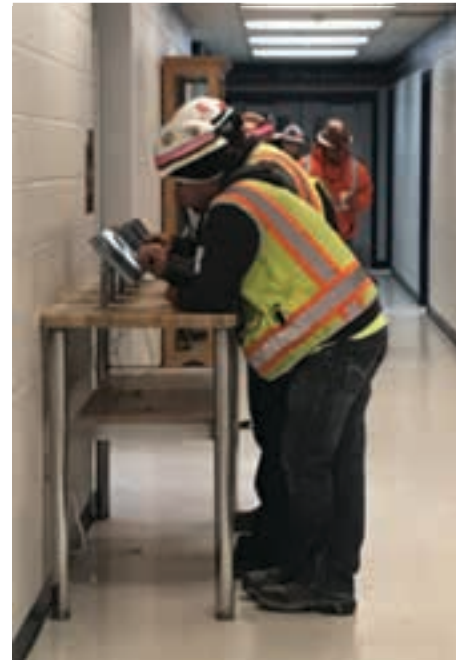
Scores are based on **speed** and **accuracy** and each test score is compared against one's own baseline

- Employees' scores are **not** compared to other employees
- Fatigue is detected when an individual's testing behavior falls outside of one's personal baseline parameters.



HOW DOES IT WORK?

1. Establish a baseline by taking the test 10 times
2. Use the AlertMeter[®] at various times throughout the day to measure one's alertness level



HOW DOES IT WORK?

3. If a worker's alertness level is *below baseline*, they will be asked to take the test again
- A second *below baseline* score will notify a supervisor
 - AlertMeter® is not used for disciplinary purposes, only as a way to measure alertness in the workplace and to **prevent injuries**





Hoffman

Tony Howard

GUTS

Mental Health Campaign



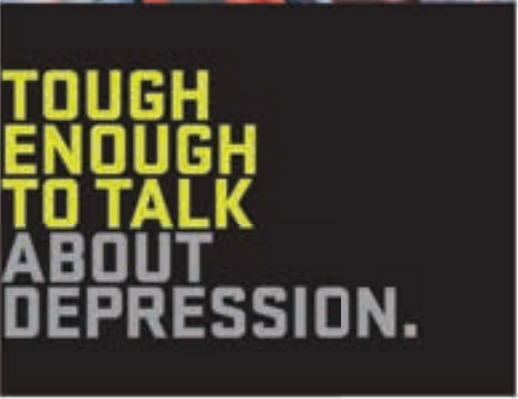
MENTAL HEALTH AWARENESS CAMPAIGN:

**CREATE AWARENESS.
START THE CONVERSATION.
NORMALIZE.
CHANNEL COURAGE.
PREVENT INCIDENTS.
SAVE LIVES.**



**WE ALL FACE PERSONAL STRUGGLES,
BUT ISSUES INVOLVING OUR MENTAL HEALTH
CAN BE REALLY HARD TO TALK ABOUT.
IN OUR INDUSTRY, REACHING OUT CAN BE THE
DIFFERENCE BETWEEN LIFE AND DEATH.
IT TAKES STRENGTH AND COURAGE TO FACE OUR
DEMONS. WE'RE GOING TO HAVE TO GET TOUGH.
OPEN UP AND TALK. ACCEPT SOME HELP.
IT WON'T BE EASY, BUT AS WE LIKE TO SAY,
WE DON'T DO EASY.**

POSTERS & BANNERS



HARD HAT STICKERS



POSTERS & BANNERS





Howard S Wright + AHA

Suicide Prevention & Health Awareness In Construction



Oregon Construction Industry Suicide Prevention Task Force



American Heart Association.
Hard Hats with Heart™





Mortenson

Mortenson Material Handling Innovation

Travis Parks


Mortenson



Mobile Work Bench

This is a Rockler Material Mate Panel Cart and Shop Stand. The project team had the casework manufacturer fabricate the top as well as the storage portion of the cart. This was used for wall protection installation and it functioned as a huge time saver. The crew also utilized it as a mobile workbench for cordless tools. The top of the cart can pivot between horizontal/vertical alignment for moving around within the space. In the coming months, this will be used as a work surface to layout and cut all of the penetrations through the wall protection.



Why Is It Awesome?



Safety

Decreased the potential of a strain/sprain injury.



Quality

Better control in tight spaces and surface to cut wall penetrations



Production

Big time saver for installing wall protection and accessibility of tools



LET'S REDEFINE POSSIBLE™




PCI

Problem Statement:
with OSHA COVID 19
restrictions, we need to
come up with a solution
to enable two workers
to occupy a scissor lift
simultaneously.



Solution: A light weight removable plexiglass/aluminum divider that can be mounted onto the scissor lift rails and deployed when a second worker is required.



A photograph showing a worker in an orange safety vest and blue jeans operating a green industrial lift. The lift has a silver divider panel that is swung open, allowing access to the platform. The worker is standing on the platform, holding onto the green handrails. The background shows a workshop or garage with various tools and equipment.

The primary operator is able to swing the divider into position allowing the second worker to access the lift and be within 6' of the primary operator.

The divider was designed with ease of use in mind to make it user friendly and easy to install and remove from a scissor lift.



The plexi glass divider provides complete separation between the two occupants from the scissor lift platform up 6' - 6".





Fred Shearer

Menu



On Line
Fall Protection Manual

Home

Fall Protection Planning

Oregon OSHA

Create a plan

Contact

Fall Protection Planning

Oregon OSHA

Create a plan



Fred Shearer and Sons 2018

Menu



On Line
Fall Protection Manual

[Home](#)

[Fall Protection Planning](#)

[Oregon OSHA](#)

[Create a plan](#)

[Contact](#)

Fall Protection Planning

Hierarchy of Fall Protection

Section 1 – Fall Specific Protection

Section 2 – Guardrails

Section 3 – Netting

Section 4 – Scaffolds

Section 5 – Fall Restraint

Section 6 – Fall Arrest

Section 7 – Rescue

Section 8 – Equipment Manuals

Section 9 – Forms

Overview

Part One – Falling

Part Two – Preventing falls

Part Three – Preventing falls

Part Four – Supported access

Part Five – Suspended access

Part Six – Controlling falls

Part Seven – Training workers about fall

Part Eight – Maintaining equipment

Part Nine – Responding to falls

Part Ten - Overview of Subdivision M

Oregon OSHA Services

Menu



Specific Fall Protection Plan

The "Specific Fall Protection Plan" should be utilized any time an employee may be exposed to a fall 6' or greater. This plan is set up to help us evaluate the hazard and perform our work in a safe, efficient manner. Use the "Specific Fall Protection Plan" Worksheet to assist you in selecting the proper fall protection for your work. If you have any questions, please consult your supervisor and/or the FSS Safety team. While completing the worksheet keep a few things in mind:

#1 Fall Arrest should be used as a last resort, exhaust all other options first.

#2 If work can be performed utilizing guard rails as outlined in section (2), this should typically be our first option.

#3 Catch platform nets can be a good option but are not typically used, see information in section (3) if this is an option.

#4 Our next option outlined in section (4) is to complete work utilizing aerial lifts, boom lifts or scaffold.

#5 If none of these options are available or cannot be utilized to perform work safely and effectively then one of the systems in section (5) should be used. In this section personal fall protection equipment will be used in a Fall Restraint mode. The requirement while working in restraint mode is to set up equipment in a manner that it will not allow the user to fall.



Menu



Job Name*

Foreman*

Foreman's Email*

GC's Safety Lead Email (This will send a copy of this plan to the GC's Safety Lead, and is optional)

Area / Task*

Competent Person*



Menu



Are Guardrails available? [If yes see section 2*](#)

Yes No

Are Personnel Nets in place? [If yes see section 3*](#)

Yes No

Can Scaffold or Aerial Lifts be used? If so, is your scaffold user and/or lift card current? [Please see section 4*](#)

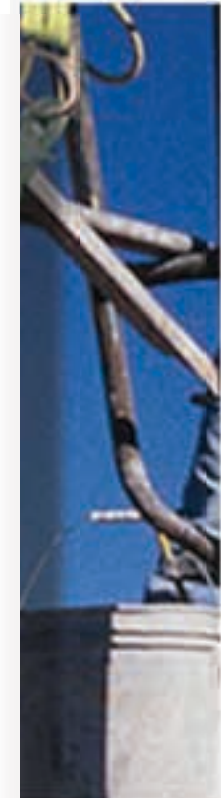
Yes No

Is Fall Restraint an option? [If yes, see section 5*](#)

Yes No

Fall Restraint Policy

Prior to using any fall restraint equipment, the Foreman and Employees should have reviewed the Specific Fall Protection Plan together and signed an acknowledgement. Next, the employee is to inspect and check off on the Specific Fall Restraint Equipment to be used for that task. All Fall Restraint Equipment must be checked out Daily using inspection sheets. And all Fall Restraint Equipment will return to the Job Shack every night or to its designated spot.



Menu



Note: Full Body Harness with Trauma Straps is required

Do you have an approved alternate plan developed for special conditions that has been developed with the help of a competent person?

Yes

No

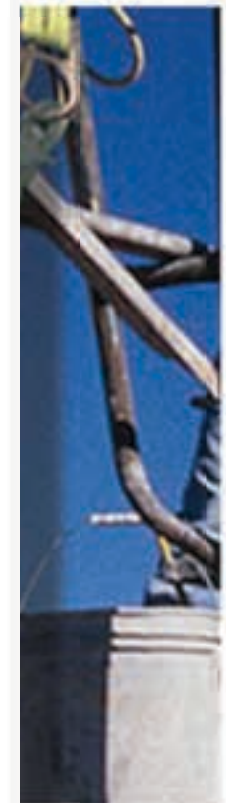
Upload your approved alternate plan here

Choose files or drag here

Signature

Date

MM/DD/YYYY



Innovations

Would you like to learn more about anything you saw here today?

More information, and ways to contact our speakers will be shared through our mailing list and on SafeBuildAlliance.com next week.

Sponsor Presentation





Milwaukee

HEALTH &
SAFETY



HEALTH & SAFETY

MILWAUKEE'S SEVEN PILLARS OF HEALTH & SAFETY

FOCUS ON THE SAFETY DIRECTOR



INDUSTRY LEADERSHIP

HEALTH & SAFETY LEADERSHIP

250+ OSHA 30 EDUCATION & TRAINING

GOAL: BECOME THE INDUSTRY'S TRUSTED HEALTH & SAFETY PARTNER



HEALTH & SAFETY

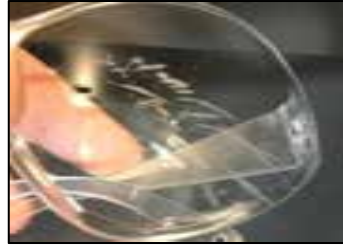
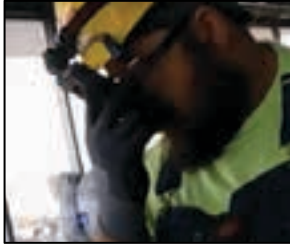
Common Frustrations:

Gloves

Safety Glasses

Hard Hats

Safety Vests



MILWAUKEE SOLUTIONS:

**BETTER FIT.
BETTER PROTECTION.**



**ADVANCED PROTECTION
ULTIMATE PERFORMANCE**



**ADAPT TO
YOUR JOBSITE**



**CARRY MORE
REINFORCED POCKETS**



Innovative Ground-Up Designs to Alleviate Common Frustrations



2021 Banner Advertising Reservations

SafeBuild banner ads average thousands of impressions per month



Advertise your business effectively with SafeBuild Alliance

The SafeBuild Alliance website is an excellent, low-cost way to promote your business or services to a highly concentrated network of your target clients.

Your full-color advertisement will appear on the SafeBuildAlliance.com homepage for one full year.

By advertising with SafeBuild, you are helping to support our vision of zero incidents through collaboration. Banner ad rates are \$400 per year. Standard ad includes your logo and brief tagline (under 10 words). Please provide logos in high-resolution .jpg or .eps format. Contact karen@safesbuildalliance.com for more information.

Example:



ZERO INCIDENTS THROUGH COLLABORATION

2021 Engagement

Are you interested in becoming more involved with SafeBuild?

There are many ways to contribute, including:

SafeBuild Membership

Board of Directors

SafeBuild Committees

Participate in an upcoming member meeting

Sponsorships & Advertising

Contact jason@safebuildalliance.com to learn more!

The next SafeBuild Alliance meeting will be Q1 of 2021