

# **CPWR - The Center for Construction Research and Training Fall Hazard Identification and Control Audit of the Mandarin Building**

**City Center Project** 

Las Vegas, Nevada

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Submitted by

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#### **Introduction:**

The fall hazard audit of the Mandarin building included evaluation of 8 of the buildings floors. The rationale for floor selection was to select a sample floor per each phase of construction identified by the auditor. For example, the lower level floors were more complete and were in the process of installing and finishing drywall, where higher level floors still had unprotected edges. See the attached Fall-Safe audit report to review the audit report by location.

The fall hazards identified during the audit included floor holes, ladder use, scissor lift use, stairways, and unprotected sides and edges 6' or more above a lower level. There were 589 inspection points (audit questions) collected on the Mandarin Building audit. Controls selected for the fall hazards were as follows:

- The majority of floor holes were protected with hole covers (73.46%, n=260 audit questions)
- The remaining floor holes were protected with guardrail systems.
- 2 floor holes had no protection.
- The majority of unprotected sides and edges were protected with guardrail systems (82.5%, n=120 questions).
- The remaining unprotected sides and edges were protected with employees using personal fall arrest systems.
- The audit tool considers items such as scissor lifts, ladders, and stairways the hazard and the control. The idea being that the device itself creates a fall hazard and it safe use, setup and condition provides the safe control.

#### Fall-Safe Audit Tool, Report and Scoring Algorithm

The Fall-Safe audit tool was designed as part of a long term intervention study conducted with small to medium sized contractor in the Mid-Atlantic and Mid-West Regions of the US. The audit tool was used as both a data collection tool for research as well as a feedback reporting mechanism for the contractors for continuous improvement. The report is organized by Location (named by the auditor), Exposure category, Intervention category, and the list of related OSHA regulatory questions relating to that specific intervention. Each question has a 0, 1 or NA. The 0 represents the answer no, the 1 represent the answer Yes and the NA means that the question does not apply. The scoring system gives a higher score for the use of engineering control over personal protective equipment as well as administrative controls such as warning lines and safety monitors. The scoring algorithm is as follows:

- Engineering Controls = Questions answered Yes / Total Questions x 100%
- Personal Protective Equipment = Questions answered Yes / Total Questions x 85%
- Administrative Controls = Questions answered Yes / Total Questions x 70%

# Mandarin Building - Summary of Fall Hazards and Controls

# **Hole Covers**

- 18 of 25 hole covers audited were not color coded or labeled (72%, n=25)
- All hole covers audited were designed to support two times the intended load (100%, n=25).

- 1 hole cover was not secured (4.17%, n=24).
- 4 hole covers created tripping hazards. The trip hazard were created from protruding nails (13.79%, n=29)
- All hole covers were free from obvious defects and secured, with the exception of one (3.45%, n=29)
- There were 2 open holes audited with no control (cover, guardrail). In these instances the audit tool allows a "No Intervention" selection and each of the 2 exposures receive a score of 0.

# **Guardrail Systems**

- Wire rope guardrails 3 wire rope guardrails audited were not flagged (33.3%, n=9).
- 2 guardrails could not withstand a 200 pound force (40%, n=5).
- Spacing 2 guardrails upright spacing exceeded 8 feet (25%, n=8).
- The majority of guardrails were smooth and free of defects (80%, n=20).
- 13 guardrails audited did not have toeboards installed or they were not structurally sound. Based on the auditor's notes, the majority of those were not structurally sound (72.2%, n=18).
- All guardrails audited were between 39" and 45"
- All wire rope guardrail audited did not deflect more than 3 inches

#### Ladders

- 8 of 9 ladders audited had adequate access / egress (88.88%, n=9).
- All ladders were being used properly by employees with the exception of one (88.88%, n=9)
- All ladders were the correct size for the job.
- No defective ladders beings used
- 1 step ladder was being used without being fully opened with spreader bars locked (12.5%, n=8)
- All employees on this site used proper climbing procedures (100%, n=9), 3 point contact (100%, n= 9), and no employees used the top 2 steps of step ladders (0%, n=8).
- There was one instance where a drywall bucket was being used upside down as a makeshift ladder. This was audited as a ladder with a "No Intervention" Score of 0.

#### **Personal Fall Arrest**

• The auditor identified three instances where personal fall arrest was being utilized. In all cases, the employees were using a retractable lanyard with a full body harness. All elements of the personal fall arrest systems were correct and being used properly.

# **Scissor Lifts**

- 2 scissor lifts were identified as not being used properly (25%, n=8).
- 2 scissor lifts in use did not have the entrance gate or chain in place (33.33%, n=6).
- No scissor lifts were identified as having obvious defects (100%, n=8).
- There was one instance of an employee not standing firmly on the floor of the basket (12.5%, n=8)

# **Stairways**

• 1 handrail audited was not capable of withstanding 200 pounds. (25%, n=4).

#### Conclusion

The fall hazards identified in the building audit, especially worker behavior created hazards, were starkly different than in the Aria building. Employee use of ladders on the Mandarin site was nearly perfect, and the hazards identified were not as serious. This site also had many more holes than the Aria building, yet the holes were more often properly protected. The exception being the 2 open holes with no protection.

The majority of the fall hazards identified that were not properly controlled in this audit were in the areas of guardrails and hole covers. The majority of the guardrails that required toeboards utilized the screens that meet the 200 pound strength requirement if anchored properly. In most cases, the screens had become loose and were not re-secured properly creating a falling object and falling hazard. Also, some of the wire rope guardrails were not properly flagged, although not as many deficiencies as the Aria site. The low frequency ladder deficiencies included not properly setting up the ladder and one instance of poor access egress. One drywall bucket being used as a ladder and was identified as having no safe intervention. Scissor lift hazards were higher on this site with fall hazards created by not closing the gate / chain, and by not standing firmly on the floor of the basket. Additionally two scissor lifts were identified as not being used properly.

Fall hazards that were well controlled were those that utilized personal fall arrest. Mandarin had 3 instances of personal fall arrest usage with all requirements being met. All stairways audited met the requirements with one exception of a handrail not meeting a 200 pound breaking strength.

This site utilized engineering controls (guardrails, hole covers) over personal fall arrest which is a preferred method. The recommendation would again be to implement an intensive fall hazard control maintenance program that ensured the security. Strength and required identifiers for all guardrails and hole covers. Personnel should be trained in the requirements of hole covers and guardrails as well as user training for all types of ladders and scissor lifts and aerial lifts.

The Site Summary Score of 82.33% would be considered an acceptable score if this contractor were part of the Fall-Safe program. On average the baseline audit scores of the Fall-Safe contractors were much lower that this score (approximately 70%). Although it could be argued that this audit would not be considered a baseline audit due to the recent efforts on site.

# Fall-Safe Program Management and Related Functions

	Company:	Perini			Visits Da	ite:	7/25/200	08	
5,00	Site:	Mand	arin		Workers	s Managed:	Approxi	mately	
	Contact:				Print Da	te:	8/20/200	08	
	Address:								
Loca	ation: F	loor 38			Nun	nber Exposed:	6		
	Exposure:	Ladde	r						
	Interve	ntion:					Possible:	0%	
		0							0
			Raw Score:	0.00%	Adjusted :	Score: 0.	00%		
	Interve	ntion:	<u>Ladder</u>				Possible:	100%	
		1	Correct size for the	he job.					1
		2	Ladder tied or se	cured.					1
		3	Installed at corre	ct angle.					1
		4	Side rails extend	3' above work	ing surface.				1
		5	Extension not over	erextended.					1
		6	Proper climbing p	orocedures be	ing followed.				1
		7	Three point conta	act rule being	followed.				1
		8	Free from obviou	ıs defects.					1
		9	Being used prope	erly and not be	eing bypassed.				0

10 Adequate access/egress.

Raw Score: 80.00% Adjusted Score: 80.00%

Exposure: Unprotected sides and edges 6' or more above lower level.

Intervention:	Guardrail Systen	<u>n</u>		Possible:	100%		
1	Top edge betwe	en 39" and 45" and at	least 2"x4" constructi	on.		1	
2	Midrail centered	l and at least 1"x6" or	2"x4" construction.			1	
3	Guardrail capabl	le of withstanding 200	lb. force.			0	
4	Midrails capable	lidrails capable of withstanding 150 lb. force.					
5	Toeboards insta	oeboards installed and structurally sound.					
6	Posts no more th	Posts no more than 8' apart and at least 2"x4" construction.					
7	Smooth and free	Smooth and free from defects.					
8	Being used prop	Being used properly and not being bypassed.					
	Raw Score:	25.00%	Adjusted Score:	25.00%			
Intervention:	Guardrail Systen	<u>n</u>		Possible:	100%		
1	Top edge betwe	en 39" and 45" and at	least 1/4" diameter.			1	
2	Wire rope does	not deflect below 39"	with 200 lbs. applied.			1	
3	Flagged every 6'					0	
4	Midrail centered	I.				1	
5	Toeboards insta	lled and structurally so	ound.			1	
6	Smooth and free	e from defects.				1	
7	Being used prop	erly and not being by	passed.			1	
	Raw Score:	85.71%	Adjusted Score:	85.71%			
Intervention:	Guardrail Systen	<u>n</u>		Possible:	100%		
1	Top edge betwe	en 39" and 45".				1	
2	Midrail centered	I.				1	
3	Toeboards insta	lled and structurally so	ound.			1	
4	Post spaced not	more than 8' apart.				1	
5	Installed accordi	ng to manufacturer's	specifications.			1	

	6	Smooth and free	e from defects.				1
	7	Being used prop	erly and not bein	g bypassed.			1
		Raw Score:	100.00%	Adjusted Score:	100.00%		
Exposure:	Aerial	lifts.					
Intervent	tion:	Scissor Lifts			Possible:	100%	
	1	Only authorized	person operating	g lift.			1
	2	Employee prote	cted above 10' w	ith toprail and midrail.			1
	3	Entrance gate/c	hain in place.				1
	4	Employee stand	ing firmly on floo	r of basket.			1
5 Not being used on an incline steeper than mfr. Specs.							1
6 Free from obvious defects.							1
	7	Being used prop	erly and not begi	n bypassed.			1
		Raw Score:	100.00%	Adjusted Score:	100.00%		
Exposure: Floor Holes.							
Intervent	tion:				Possible:	0%	
Intervent	tion: 0				Possible:	0%	0
Intervent		Raw Score:	0.00%	Adjusted Score:	Possible:	0%	0
Intervent	0	Raw Score:	0.00%	Adjusted Score:		100%	0
	0	<u>Cover</u>	<b>0.00%</b> port 2 times the i		0.00%		0
	0 tion:	<u>Cover</u>			0.00%		
	0 <b>tion:</b>	Cover  Designed to sup	port 2 times the i		0.00%		1
	0 <b>tion:</b> 1 2	Cover  Designed to sup Secured.  Color coded or I	port 2 times the i	intended load.	0.00%		1
	0 tion: 1 2 3	Cover  Designed to sup Secured.  Color coded or I Installed so as to	port 2 times the i	intended load. ng hazards.	0.00%		1 1 0
	0 tion: 1 2 3 4	Cover  Designed to sup Secured.  Color coded or I Installed so as to System free from	port 2 times the i abeled. o eliminate trippi	intended load. ng hazards.	0.00%		1 1 0
	0 tion: 1 2 3 4 5	Cover  Designed to sup Secured.  Color coded or I Installed so as to System free from	port 2 times the i abeled. o eliminate trippi m obvious defects	intended load. ng hazards.	0.00%		1 1 0 1
	0 tion: 1 2 3 4 5	Cover  Designed to sup Secured.  Color coded or I Installed so as to System free from Being used prop	abeled. Deliminate tripping The obvious defects Derly and not bein	intended load.  Ing hazards.  S.  g bypassed.	0.00% Possible:		1 1 0 1
Intervent	0 tion: 1 2 3 4 5	Cover  Designed to sup Secured.  Color coded or I Installed so as to System free from Being used prop Raw Score:  Guardrail System	abeled. Deliminate trippion obvious defects Derly and not bein 83.33%	intended load.  Ing hazards.  S.  g bypassed.	0.00%  Possible:  83.33%  Possible:	100%	1 1 0 1

3	Flagged every 6'.	1					
4	Midrail centered.	1					
5	Toeboards installed and structurally sound.	0					
6	Smooth and free from defects.	1					
7	Being used properly and not being bypassed.	1					
	Raw Score: 85.71% Adjusted Score: 85.71%						
Intervention:	Guardrail System Possible: 10	0%					
1	Top edge between 39" and 45".	1					
2	idrail centered.						
3	Toeboards installed and structurally sound.	1					
4	Post spaced not more than 8' apart.	1					
5	nstalled according to manufacturer's specifications.						
6	Smooth and free from defects.	1					
7	Being used properly and not being bypassed.	1					
	Raw Score: 100.00% Adjusted Score: 100.00%						
Exposure: Unpr	Raw Score: 100.00% Adjusted Score: 100.00% otected sides and edges 6' or more above lower level.						
Exposure: Unpro	otected sides and edges 6' or more above lower level.	0%					
	otected sides and edges 6' or more above lower level.	<b>00%</b>					
Intervention:	otected sides and edges 6' or more above lower level.  Guardrail System Possible: 10						
Intervention:	otected sides and edges 6' or more above lower level.  Guardrail System Possible: 10  Top edge between 39" and 45" and at least 2"x4" construction.	1					
Intervention:  1 2	otected sides and edges 6' or more above lower level.  Guardrail System Possible: 10  Top edge between 39" and 45" and at least 2"x4" construction.  Midrail centered and at least 1"x6" or 2"x4" construction.	1					
Intervention:  1 2 3	otected sides and edges 6' or more above lower level.  Guardrail System Possible: 10  Top edge between 39" and 45" and at least 2"x4" construction.  Midrail centered and at least 1"x6" or 2"x4" construction.  Guardrail capable of withstanding 200 lb. force.	1 1 0					
Intervention:  1 2 3 4	otected sides and edges 6' or more above lower level.  Guardrail System Possible: 10  Top edge between 39" and 45" and at least 2"x4" construction.  Midrail centered and at least 1"x6" or 2"x4" construction.  Guardrail capable of withstanding 200 lb. force.  Midrails capable of withstanding 150 lb. force.	1 1 0					
Intervention:  1 2 3 4 5	Top edge between 39" and 45" and at least 2"x4" construction.  Midrail centered and at least 1"x6" or 2"x4" construction.  Guardrail capable of withstanding 200 lb. force.  Midrails capable of withstanding 150 lb. force.  Toeboards installed and structurally sound.	1 1 0 0					
Intervention:  1 2 3 4 5	Top edge between 39" and 45" and at least 2"x4" construction.  Midrail centered and at least 1"x6" or 2"x4" construction.  Guardrail capable of withstanding 200 lb. force.  Midrails capable of withstanding 150 lb. force.  Toeboards installed and structurally sound.  Posts no more than 8' apart and at least 2"x4" construction.	1 1 0 0 0					
Intervention:  1 2 3 4 5 6 7	Top edge between 39" and 45" and at least 2"x4" construction.  Midrail centered and at least 1"x6" or 2"x4" construction.  Guardrail capable of withstanding 200 lb. force.  Midrails capable of withstanding 150 lb. force.  Toeboards installed and structurally sound.  Posts no more than 8' apart and at least 2"x4" construction.  Smooth and free from defects.	1 0 0 0 0					
Intervention:  1 2 3 4 5 6 7	Otected sides and edges 6' or more above lower level.  Guardrail System Possible: 10  Top edge between 39" and 45" and at least 2"x4" construction.  Midrail centered and at least 1"x6" or 2"x4" construction.  Guardrail capable of withstanding 200 lb. force.  Midrails capable of withstanding 150 lb. force.  Toeboards installed and structurally sound.  Posts no more than 8' apart and at least 2"x4" construction.  Smooth and free from defects.  Being used properly and not being bypassed.  Raw Score: 37.50% Adjusted Score: 37.50%	1 0 0 0 0					

	2	Wire rope does i	not deflect below 3	9" with 200 lbs. applied.		1
	3	Flagged every 6'				1
	4	Midrail centered	l.			1
	5	Toeboards instal	led and structurally	sound.		0
	6	Smooth and free	e from defects.			1
	7	Being used prop	erly and not being I	oypassed.		1
		Raw Score:	85.71%	Adjusted Score:	85.71%	
Exposure:	Aerial	lifts.				
Intervention:		Scissor Lifts			Possible:	100%
1		Only authorized	person operating li	ft.		1
	2	Employee protec	cted above 10' with	toprail and midrail.		1
	3	Entrance gate/cl	nain in place.			1
	4	Employee standi	ng firmly on floor o		1	
	5	Not being used o	on an incline steepe		1	
	6	Free from obvio	us defects.		1	
	7	Being used prop	erly and not begin I	oypassed.		1
		Raw Score:	100.00%	Adjusted Score:	100.00%	
Exposure:	Floor	Holes.				
Interventi	on:	Cover			Possible:	100%
	1	Designed to supp	port 2 times the int	ended load.		1
	2	Secured.				0
	3	Color coded or la	abeled.			0
	4	Installed so as to	eliminate tripping	hazards.		1
	5	System free fron	n obvious defects.			1
	6	Being used prop	erly and not being l		1	
		Raw Score:	66.67%	Adjusted Score:	66.67%	
Exposure:	Unpro	tected sides and	edges 6' or more at	oove lower level.		
Interventi	on:	Guardrail System	<u>1</u>		Possible:	100%

	1	Top edge betwe	en 39" and 45" and	d at least 1/4" diameter.			1
	2	Wire rope does	not deflect below	39" with 200 lbs. applied.			1
	3	Flagged every 6'					1
	4	Midrail centered	I.				1
	5	Toeboards insta	lled and structural	ly sound.			0
	6	Smooth and free	e from defects.				1
	7	Being used prop	erly and not being	bypassed.			1
		Raw Score:	85.71%	Adjusted Score:	85.71%		
Exposure:	Aerial	lifts.					
Intervention:		Scissor Lifts			Possible:	100%	
1		Only authorized			1		
2 Employee protected above 10' with toprail and midrail.					1		
	3 Entrance gate/chain in place.						1
	4 Employee standing firmly on floor of basket.						1
	5	Not being used	on an incline steep	er than mfr. Specs.			1
	6	Free from obvio	us defects.				1
	7	Being used prop	erly and not begin	bypassed.			0
		Raw Score:	85.71%	Adjusted Score:	85.71%		
Exposure:	Floor I	Holes.					
Interven	tion:	Cover			Possible:	100%	
	1	Designed to support 2 times the intended load.					1
	2	Secured.					1
	3	Color coded or labeled.					1
	4	Installed so as to	o eliminate tripping	g hazards.			1
	5	System free from	n obvious defects.				1
	6	Being used prop	erly and not being	bypassed.			1
		Raw Score:	100.00%	Adjusted Score:	100.00%		

Exposure:

Floor Holes.

Interventi	on:	Cover			Possible:	100%	
	1	Designed to sup	port 2 times the int	ended load.			1
	2	Secured.					1
	3	Color coded or l	abeled.				1
	4	Installed so as to	o eliminate tripping	hazards.			1
	5	System free from	n obvious defects.				1
	6	Being used prop	erly and not being b	oypassed.			1
		Raw Score:	100.00%	Adjusted Score:	100.00%		
Exposure:	Floor I	Holes.					
Intervention:		Cover			Possible:	100%	
	1 Designed to support 2 times the intended load.				1		
	2	Secured.					1
	3						1
	4 Installed so as to eliminate tripping hazards.					1	
	5 System free from obvious defects.						1
	6	Being used prop	erly and not being b	oypassed.			1
		Raw Score:	100.00%	Adjusted Score:	100.00%		
Exposure:	Floor I	Holes.					
Interventi	on:	Cover			Possible:	100%	
	1	Designed to sup	port 2 times the int	ended load.			1
	2	Secured.					1
	3	Color coded or l	abeled.				1
	4	Installed so as to	o eliminate tripping	hazards.			1
	5	System free from	n obvious defects.				1
	6 Being used properly and not being bypassed.			bypassed.			1
		Raw Score:	100.00%	Adjusted Score:	100.00%		
Exposure:	Floor I	Holes.					
Intervention:		Cover			Possible:	100%	

	1	Designed to supp	oort 2 times the in	tended load.			1
	2	Secured.					1
	3	Color coded or la	beled.				0
	4	Installed so as to	nstalled so as to eliminate tripping hazards.				1
	5	System free from	obvious defects.				1
6 Being used properly and not being bypassed.						1	
	Raw Score: 83.33% Adjusted Score: 83.33%						
Exposure: Floor Holes.							
Exposure:	Floor I	Holes.					
Exposure:		Holes. Cover			Possible:	100%	
•			oort 2 times the in	tended load.	Possible:	100%	1
•	n:	<u>Cover</u>	oort 2 times the in	tended load.	Possible:	100%	1
•	n: 1	Cover  Designed to supp		tended load.	Possible:	100%	
•	n: 1 2	Cover  Designed to supp  Secured.	beled.		Possible:	100%	1

Raw Score: 100.00% Adjusted Score: 100.00%

Location Summary Score: 77.47%

Location: Floor 36 Number Exposed: 0

Being used properly and not being bypassed.

Exposure: Unprotected sides and edges 6' or more above lower level.

6

Intervention:	<u>Guardrail System</u>	Possible:	100%	
1	Top edge between 39" and 45" and at least 1/4" diameter.			1
2	Wire rope does not deflect below 39" with 200 lbs. applied.			1
3	Flagged every 6'.			1
4	Midrail centered.			1
5	Toeboards installed and structurally sound.			0
6	Smooth and free from defects.			1
7	Being used properly and not being bypassed.			1

Raw Score: 85.71% Adjusted Score: 85.71%

Exposure: Floor Holes.

Intervention:	Cover			Possible:	100%	
1	Designed to sup	oport 2 times the inte	ended load.			1
2	Secured.					1
3	Color coded or	labeled.				1
4	Installed so as t	o eliminate tripping l	hazards.			1
5	System free fro	m obvious defects.				1
6	Being used prop	eing used properly and not being bypassed.				1
	Raw Score:	100.00%	Adjusted Score:	100.00%		
Intervention:	Guardrail Syste	<u>m</u>		Possible:	100%	
1	Top edge betwe			1		
2	Wire rope does	Vire rope does not deflect below 39" with 200 lbs. applied.				
3	Flagged every 6	lagged every 6'.				
4	Midrail centere	Midrail centered.				
5	Toeboards insta	alled and structurally	sound.			0
6	Smooth and fre	e from defects.				1
7	Being used prop	perly and not being b	ypassed.			1
	Raw Score:	85.71%	Adjusted Score:	85.71%		
Exposure: Unpro	otected sides and	edges 6' or more ab	ove lower level.			
Intervention:	Guardrail Syste	<u>m</u>		Possible:	100%	
1	Top edge betwe	een 39" and 45" and	at least 1/4" diameter.			1
2	Wire rope does	not deflect below 39	9" with 200 lbs. applied.			1
3	Flagged every 6	'.				1
4	Midrail centere	Midrail centered.  Toeboards installed and structurally sound.				
5	Toeboards insta					
6	Smooth and fre	e from defects.				0
7	Being used prop	perly and not being b	ypassed.			1

Raw Score: 71.43% Adjusted Score: 71.43%

Exposure: Floor Holes.

Exposure.	11001	iloics.					
Intervent	ion:	<u>Cover</u>			Possible:	100%	
	1	Designed to sup	port 2 times the intend	ded load.		1	
	2	Secured.				1	
	3	Color coded or la	abeled.			O	i
	4	Installed so as to	eliminate tripping ha	zards.		1	
	5	System free from	n obvious defects.			1	
	6	Being used prop	erly and not being byp	passed.		1	
		Raw Score:	83.33%	Adjusted Score:	83.33%		
Exposure:	Unpro	tected sides and	edges 6' or more abov	ve lower level.			
Intervention:		Guardrail Systen	<u>1</u>		Possible:	100%	
	1	Top edge betwe	en 39" and 45" and at	least 1/4" diameter.		1	
Wire rope does not deflect below 39" with 200 lbs. appl			with 200 lbs. applied.		1		
	3 Flagged every 6'.				1		
	4	Midrail centered	l.			1	
	5	Toeboards insta	led and structurally so	ound.		0	i
	6	Smooth and free	from defects.			1	
	7	Being used prop	erly and not being byp		1		
		Raw Score:	85.71%	Adjusted Score:	85.71%		
Exposure:	Floor	Holes.					
Intervent	ion:	Cover			Possible:	100%	
	1	Designed to sup	port 2 times the inten		1		
	2	Secured.				1	
	3	Color coded or la	abeled.			1	
	4	Installed so as to eliminate tripping hazards.				1	
	5	System free from	n obvious defects.			1	
	6	Being used prop	erly and not being byp	passed.		1	

Raw Score: 100.00% Adjusted Score: 100.00%

Exposure: Unprotected sides and edges 6' or more above lower level.

1	Intervention:	Guardrail Systen	<u>1</u>		Possible:	100%	
2 Wire rope does not deflect below 39" with 200 lbs. applied. 1 3 Flagged every 6'. 1 4 Midrail centered. 1 5 Toeboards installed and structurally sound. 0 6 Smooth and free from defects. 1 7 Being used properly and not being bypassed. 1  Raw Score: 85.71% Adjusted Score: 85.71%  Exposure: Floor Holes. 1 1 Designed to support 2 times the intended load. 1 2 Secured. 1 3 Color coded or labeled. 0 4 Installed so as to eliminate tripping hazards. 1 5 System free from obvious defects. 1 5 System free from obvious defects. 1 6 Being used properly and not being bypassed. 1  Raw Score: 83.33% Adjusted Score: 83.33%  Exposure: Floor Holes. 1  1 Designed to support 2 times the intended load. 1 1 Designed to support 2 times the intended load. 1 1 Designed to support 2 times the intended load. 1 1 Designed to support 2 times the intended load. 1 1 Designed to support 2 times the intended load. 1 1 Designed to support 2 times the intended load. 1 1 Designed to support 2 times the intended load. 1 1 Designed to support 2 times the intended load. 1	1			t least 1/4" diameter.			1
1   1   1   1   1   1   1   1   1   1							
## Midrail centered. 1    Toeboards installed and structurally sound.   0				with 200 ibs. applied.			
5 Toeboards installed and structurally sound. 0 6 Smooth and free from defects. 1 7 Being used properly and not being bypassed. 1  Raw Score: 85.71% Adjusted Score: 85.71%  Exposure: Floor Holes.							
6 Smooth and free from defects. 1 7 Being used properly and not being bypassed. 1  Raw Score: 85.71% Adjusted Score: 85.71%  Exposure: Floor Holes.  Intervention: Cover Possible: 100%  1 Designed to support 2 times the intended load. 1  2 Secured. 1  3 Color coded or labeled. 0  4 Installed so as to eliminate tripping hazards. 1  5 System free from obvious defects. 1  6 Being used properly and not being bypassed. 1  Raw Score: 83.33% Adjusted Score: 83.33%  Exposure: Floor Holes.  Intervention: Cover Possible: 100%  1 Designed to support 2 times the intended load. 1		Midrail centered					1
Raw Score: 85.71% Adjusted Score: 85.71%  Exposure: Floor Holes.  Intervention: Cover Possible: 100%  1 Designed to support 2 times the intended load. 1 2 Secured. 1 3 Color coded or labeled. 0 4 Installed so as to eliminate tripping hazards. 1 5 System free from obvious defects. 1 6 Being used properly and not being bypassed. 1  Raw Score: 83.33% Adjusted Score: 83.33%  Exposure: Floor Holes.  Intervention: Cover Possible: 100%  1 Designed to support 2 times the intended load. 1	5	Toeboards instal	led and structurally s	sound.			0
Exposure: Floor Holes.  Intervention: Cover Possible: 100%  1 Designed to support 2 times the intended load. 1 2 Secured. 1 3 Color coded or labeled. 0 4 Installed so as to eliminate tripping hazards. 1 5 System free from obvious defects. 1 6 Being used properly and not being bypassed. 1  Raw Score: 83.33% Adjusted Score: 83.33%  Exposure: Floor Holes.  Intervention: Cover Possible: 100%  1 Designed to support 2 times the intended load. 1	6	Smooth and free	mooth and free from defects.				1
Intervention: Cover Possible: 100%  1 Designed to support 2 times the intended load. 1 2 Secured. 1 3 Color coded or labeled. 0 4 Installed so as to eliminate tripping hazards. 1 5 System free from obvious defects. 1 6 Being used properly and not being bypassed. 1  Raw Score: 83.33% Adjusted Score: 83.33%  Exposure: Floor Holes.  Intervention: Cover Possible: 100%  1 Designed to support 2 times the intended load. 1	7	Being used properly and not being bypassed.					1
Intervention: Cover Possible: 100%  1 Designed to support 2 times the intended load. 1  2 Secured. 1  3 Color coded or labeled. 0  4 Installed so as to eliminate tripping hazards. 1  5 System free from obvious defects. 1  6 Being used properly and not being bypassed. 1  Raw Score: 83.33% Adjusted Score: 83.33%  Exposure: Floor Holes.  Intervention: Cover Possible: 100%  1 Designed to support 2 times the intended load. 1		Raw Score:	85.71%	Adjusted Score:	85.71%		
Designed to support 2 times the intended load.  1 Designed to support 2 times the intended load.  2 Secured.  3 Color coded or labeled.  4 Installed so as to eliminate tripping hazards.  5 System free from obvious defects.  1 6 Being used properly and not being bypassed.  1 Raw Score: 83.33% Adjusted Score: 83.33%  Exposure: Floor Holes.  Intervention: Cover Possible: 100%  1 Designed to support 2 times the intended load.  1	Exposure: Floor	Holes.					
2 Secured. 1 3 Color coded or labeled. 0 4 Installed so as to eliminate tripping hazards. 1 5 System free from obvious defects. 1 6 Being used properly and not being bypassed. 1  Raw Score: 83.33% Adjusted Score: 83.33%  Exposure: Floor Holes.  Intervention: Cover Possible: 100%  1 Designed to support 2 times the intended load. 1	Intervention:	Cover			Possible:	100%	
3 Color coded or labeled.  4 Installed so as to eliminate tripping hazards.  5 System free from obvious defects.  1 6 Being used properly and not being bypassed.  1 Raw Score: 83.33% Adjusted Score: 83.33%  Exposure: Floor Holes.  Intervention: Cover Possible: 100%  1 Designed to support 2 times the intended load.	1	Designed to sup	port 2 times the inter	nded load.			1
4 Installed so as to eliminate tripping hazards. 1 5 System free from obvious defects. 1 6 Being used properly and not being bypassed. 1  Raw Score: 83.33% Adjusted Score: 83.33%  Exposure: Floor Holes. 100%  1 Designed to support 2 times the intended load. 1	2	Secured.					1
5 System free from obvious defects. 1 6 Being used properly and not being bypassed. 1  Raw Score: 83.33% Adjusted Score: 83.33%  Exposure: Floor Holes.  Intervention: Cover Possible: 100%  1 Designed to support 2 times the intended load. 1	3	Color coded or la	abeled.				0
6 Being used properly and not being bypassed. 1  Raw Score: 83.33% Adjusted Score: 83.33%  Exposure: Floor Holes.  Intervention: Cover Possible: 100%  1 Designed to support 2 times the intended load. 1	4	Installed so as to	eliminate tripping h	azards.			1
Raw Score: 83.33% Adjusted Score: 83.33%  Exposure: Floor Holes.  Intervention: Cover Possible: 100%  1 Designed to support 2 times the intended load. 1	5	System free fron	n obvious defects.				1
Exposure: Floor Holes.  Intervention: Cover Possible: 100%  1 Designed to support 2 times the intended load. 1	6	Being used prop	erly and not being by			1	
Intervention: Cover Possible: 100%  1 Designed to support 2 times the intended load. 1		Raw Score:	83.33%	Adjusted Score:	83.33%		
Designed to support 2 times the intended load. 1	Exposure: Floor	Holes.					
	Intervention:	Cover			Possible:	100%	
2 Secured. 0	1	Designed to sup			1		
	2	Secured.					0
3 Color coded or labeled. 1	3	Color coded or la	abeled.				1
4 Installed so as to eliminate tripping hazards. 1	4	Installed so as to			1		
5 System free from obvious defects. 1	5	System free fron	n obvious defects.				1
	6		erly and not being by	passed.			1
	6	Being used prop	erly and not being by	passed.			1

Raw Score: 83.33% Adjusted Score: 83.33%

Exposure:	Floor	Holes.					
Intervent	tion:	Cover			Possible:	100%	
	1	Designed to supp	oort 2 times the i	intended load.			1
	2	Secured.					1
	3	Color coded or la	abeled.				0
	4	Installed so as to	eliminate trippi	ng hazards.			1
	5	System free fron	n obvious defects	5.			1
	6	Being used prop	ing used properly and not being bypassed.				1
		Raw Score:	83.33%	Adjusted Score:	83.33%		
Exposure:	Floor	Holes.					
Intervent	tion:	<u>Cover</u>			Possible:	100%	
	1	Designed to supp	oort 2 times the i	intended load.			1
	2	Secured.					1
	3	Color coded or la	abeled.				0
	4	Installed so as to	eliminate trippi	ng hazards.			1
	5	System free fron	n obvious defects	5.			1
	6	Being used prop	erly and not bein	g bypassed.			1
		Raw Score:	83.33%	Adjusted Score:	83.33%		
Exposure:	Floor	Holes.					
Intervent	ion:	<u>Cover</u>			Possible:	100%	
	1	Designed to supp	port 2 times the i	intended load.			1
	2	Secured.					1
	3	Color coded or la	abeled.				0
	4	Installed so as to	eliminate trippi	ng hazards.			1
	5	System free fron	n obvious defects	s.			1
	6	Being used prop	erly and not bein	g bypassed.			1

Raw Score:

83.33%

Adjusted Score:

83.33%

Location Summary Score: 85.71%

Location: Floor 33 Number Exposed: 15

Exposure: L	Jnprotected sides a	nd edges 6'	or more a	bove l	lower l	evel	
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Intervent	ion:	Guardrail Systen	<u>1</u>		Possible:	100%	
	1	Top edge betwe	en 39" and 45"	and at least 1/4" diameter.			1
	2	Wire rope does	not deflect belo	ow 39" with 200 lbs. applied.			1
	3	Flagged every 6'					1
	4	Midrail centered	I.				1
	5	Toeboards installed and structurally sound.					0
	6	Smooth and free from defects.					1
	7	Being used prop	erly and not be	ing bypassed.			1
		Raw Score:	85.71%	Adjusted Score:	85.71%		
Intervent	ion:	Personal Fall Arr	<u>est</u>		Possible:	85%	
	1 Anchor point proper and capable of withstanding 5000 lbs. or 2 times the				or 2 times the		1
		intended load.					
	2	Free fall limited	to 6' or less.				1
	3	Sufficient total fa	all clearance.				1
	4	Rigged to avoid	swing fall.				1
	5	Retractable atta	chment point t	o worker in center of back.			1
	6	System free from	n obvious defe	cts.			1
	7	Being used prop	erly and not be	ing bypassed.			1
		Raw Score:	100.00%	Adjusted Score:	85.00%		
Exposure:	Floor	Holes.					
Intervent	ion:				Possible:	0%	
	0						0
		Raw Score:	0.00%	Adjusted Score:	0.00%		
Intervent	ion:	<u>Cover</u>			Possible:	100%	

1	Designed to sup	port 2 times the inte	ended load.			1
2	Secured.					1
3	Color coded or la	abeled.				0
4	Installed so as to	eliminate tripping l	nazards.			1
5	System free from	n obvious defects.				1
6	Being used prop	erly and not being b	ypassed.			1
	Raw Score:	83.33%	Adjusted Score:	83.33%		
Intervention:	Guardrail Systen	<u>1</u>		Possible:	100%	
1	Top edge betwe	en 39" and 45" and	at least 2"x4" constructi	on.		1
2	Midrail centered	drail centered and at least 1"x6" or 2"x4" construction.				
3	Guardrail capab	e of withstanding 20	00 lb. force.			1
4	Midrails capable	of withstanding 150	Olb. force.			1
5	Toeboards insta	lled and structurally	sound.			0
6	Posts no more tl	nan 8' apart and at l	east 2"x4" construction.			1
7	Smooth and free	e from defects.				1
8	Being used prop	erly and not being b	ypassed.			1
	Raw Score:	87.50%	Adjusted Score:	87.50%		
Intervention:	Guardrail Systen	<u>1</u>		Possible:	100%	
1	Top edge betwe	en 39" and 45" and	at least 1/4" diameter.			1
2	Wire rope does	not deflect below 39	" with 200 lbs. applied.			1
3	Flagged every 6'					1
4	Midrail centered	l.				1
5	Toeboards insta	lled and structurally	sound.			0
6	Smooth and free	e from defects.				1
7	Being used prop	erly and not being b	ypassed.			1
	Raw Score:	85.71%	Adjusted Score:	85.71%		
Exposure: Unpr	otected sides and	edges 6' or more ab	ove lower level.			
Intervention:	Guardrail Systen	<u>1</u>		Possible:	100%	

	1	Top edge betwe	edge between 39" and 45" and at least 1/4" diameter.					
	2	Wire rope does	not deflect below 3	9" with 200 lbs. applied.			1	
	3	Flagged every 6'					1	
	4	Midrail centered					1	
	5	Toeboards instal	led and structurall	y sound.			0	
	6	Smooth and free	from defects.				1	
	7	Being used prop	erly and not being	bypassed.			1	
		Raw Score:	85.71%	Adjusted Score:	85.71%			
Exposure:	Floor	Holes.						
Intervent	tion:	<u>Cover</u>			Possible:	100%		
	1	Designed to supp	port 2 times the int	tended load.			1	
	2	Secured.					1	
	3	Color coded or la	abeled.				0	
	4	Installed so as to	eliminate tripping			1		
	5	System free from	n obvious defects.				1	
	6	Being used prop	erly and not being	bypassed.			1	
		Raw Score:	83.33%	Adjusted Score:	83.33%			
Exposure:	Floor	Holes.						
Intervent	tion:	<u>Cover</u>			Possible:	100%		
	1	Designed to sup	oort 2 times the int	tended load.			1	
	2	Secured.					1	
	3	Color coded or la	abeled.				0	
	4	Installed so as to	eliminate tripping	hazards.			1	
	5	System free fron	n obvious defects.				1	
	6	Being used prop	erly and not being	bypassed.			1	
		Raw Score:	83.33%	Adjusted Score:	83.33%			
Exposure:	Floor	Holes.						
Intervention:		Cover			Possible:	100%		

	1	Designed to sup	signed to support 2 times the intended load.				
	2	Secured.					1
	3	Color coded or la	abeled.				0
	4	Installed so as to	o eliminate tripping h	azards.			1
	5	System free from	n obvious defects.				1
	6	Being used prop	erly and not being by	passed.			1
		Raw Score:	83.33%	Adjusted Score:	83.33%		
Exposure:	Floor	Holes.					
Interven	tion:	Cover			Possible:	100%	
	1	Designed to sup	port 2 times the inter	nded load.			1
	2	Secured.					0
	3	Color coded or la	Color coded or labeled.				0
	4	Installed so as to	nstalled so as to eliminate tripping hazards.				1
	5	System free from	n obvious defects.				0
	-	Being used properly and not being bypassed.					0
	6	Being used prop	erly and not being by	passed.			U
	6	Raw Score:	33.33%	Adjusted Score:	33.33%		O
Exposure:					33.33%		Ü
Exposure:	Floor	Raw Score:			33.33% Possible:	100%	O
•	Floor	Raw Score: Holes. <u>Cover</u>		Adjusted Score:		100%	1
•	Floor tion:	Raw Score: Holes. <u>Cover</u>	33.33%	Adjusted Score:		100%	
•	Floor tion:	Raw Score:  Holes.  Cover  Designed to sup	33.33% port 2 times the inter	Adjusted Score:		100%	1
•	Floor tion: 1 2	Raw Score: Holes.  Cover  Designed to sup Secured.  Color coded or la	33.33% port 2 times the inter	Adjusted Score:		100%	1
•	Floor tion: 1 2 3	Raw Score:  Holes.  Cover  Designed to support of the support of t	<b>33.33%</b> port 2 times the interabeled.	Adjusted Score:		100%	1 1 0
•	Floor tion: 1 2 3 4	Raw Score:  Holes.  Cover  Designed to support of the secured.  Color coded or law Installed so as to System free from	33.33%  port 2 times the inter abeled.  p eliminate tripping h	Adjusted Score:  nded load.  azards.		100%	1 1 0
•	Floor tion: 1 2 3 4 5	Raw Score:  Holes.  Cover  Designed to support of the secured.  Color coded or law Installed so as to System free from	33.33%  port 2 times the inter abeled.  D eliminate tripping h m obvious defects.	Adjusted Score:  nded load.  azards.		100%	1 1 0 1
•	Floor tion:  1 2 3 4 5	Raw Score:  Holes.  Cover  Designed to support of the secured.  Color coded or later of the secure o	33.33%  port 2 times the inter abeled. Deliminate tripping homobvious defects. Herly and not being by	Adjusted Score:  nded load.  azards.	Possible:	100%	1 1 0 1
Interven	Floor  Floor	Raw Score:  Holes.  Cover  Designed to support of the support of t	33.33%  port 2 times the inter abeled. Deliminate tripping homobvious defects. Herly and not being by	Adjusted Score:  nded load.  azards.	Possible:	100%	1 1 0 1

	2	Secured.					1
	3	Color coded or	labeled.				1
	4	Installed so as t	o eliminate tripp	oing hazards.			1
	5	System free fro	m obvious defec	ts.			1
	6	Being used pro	perly and not be	ing bypassed.			1
		Raw Score:	100.00%	Adjusted So	core: 100.	00%	
				Loca	tion Summar	ry Score:	75.36%
Location:	Floor 30			Numl	ber Exposed:	9	
Exposure	e: Unpro	tected sides and	edges 6' or mor	e above lower level.			
Inte	ervention:	Personal Fall A	rest			Possible:	85%
	1	Anchor point p	roper and capab	e of withstanding 500	00 lbs. or 2 ti	imes the	1
		intended load.					
	2	Free fall limited	I to 6' or less.				1
	3	Sufficient total	fall clearance.				1
	4	Rigged to avoid	swing fall.				1
	5	Retractable att	achment point to	worker in center of I	back.		1
	6	System free fro	m obvious defec	ts.			1
	7	Being used pro	perly and not be	ing bypassed.			1
		Raw Score:	100.00%	Adjusted So	core: 85.	00%	
Exposure	e: Floor	Holes.					
Inte	ervention:	<u>Cover</u>				Possible:	100%
	1	Designed to sup	oport 2 times the	e intended load.			1
	2	Secured.					1
	3	Color coded or	labeled.				0
	4	Installed so as t	o eliminate tripp	oing hazards.			1
	5	System free fro	m obvious defec	ts.			1
	6	Being used pro	perly and not be	ing bypassed.			1

		Raw Score:	83.33%	Adjusted Score:	83.33%		
Intervention:	<u>G</u>	uardrail System	<u>l</u>		Possible:	100%	
1	1 To	op edge betwee	en 39" and 45" and at le	east 1/4" diameter.			1
2	2 W	/ire rope does r	not deflect below 39" w	ith 200 lbs. applied.			1
3	3 FI	agged every 6'.					0
4	4 N	lidrail centered					1
5	5 To	oeboards instal	led and structurally sou	ınd.			0
6	5 Sr	mooth and free	from defects.				0
7	7 B	eing used prope	erly and not being bypa	ssed.			0
		Raw Score:	42.86%	Adjusted Score:	42.86%		
Exposure: Unj	protec	ted sides and e	edges 6' or more above	lower level.			
Intervention:	<u>Pe</u>	ersonal Fall Arre	<u>est</u>		Possible:	85%	
1	1 A	nchor point pro	per and capable of witl	hstanding 5000 lbs. c	or 2 times the		1
	in	tended load.					
2	2 Fr	ree fall limited t	o 6' or less.				1
3	3 Su	ufficient total fa	Il clearance.				1
4	4 Ri	igged to avoid s	wing fall.				1
5	5 R	etractable attac	chment point to worker	in center of back.			1
6	6 Sy	stem free from	obvious defects.				1
7	7 B	eing used prope	erly and not being bypa	ssed.			1
		Raw Score:	100.00%	Adjusted Score:	85.00%		
Exposure: Floo	or Hol	es.					
Intervention:	<u>C</u>	<u>over</u>			Possible:	100%	
1	1 D	esigned to supp	oort 2 times the intende	ed load.			1
2	2 Se	ecured.					1
3	3 C	olor coded or la	beled.				1
4	4 In	stalled so as to	eliminate tripping haza	ards.			1
5	5 Sy	stem free from	obvious defects.				1

	6	Being used prop	perly and not being	bypassed.			1
		Raw Score:	100.00%	Adjusted Score:	100.00%		
Exposure:	Floor	Holes.					
Intervention:		Cover			Possible:	100%	
	1	Designed to sup	port 2 times the int	ended load.			1
	2	Secured.					1
	3	Color coded or l	labeled.				0
	4	Installed so as to	o eliminate tripping	hazards.			1
	5	System free from	m obvious defects.				1
	6	Being used prop	perly and not being	bypassed.			1
		Raw Score:	83.33%	Adjusted Score:	83.33%		
Exposure:	Floor	Holes.					
Interven	tion:	Cover			Possible:	100%	
	1	Designed to sup	port 2 times the int	ended load.			1
	2	Secured.					1
	3	Color coded or l	labeled.				0
	4	Installed so as to	o eliminate tripping	hazards.			0
	5	System free from	m obvious defects.				1
	6	Being used prop	perly and not being	bypassed.			1
		Raw Score:	66.67%	Adjusted Score:	66.67%		
Exposure:	Floor	Holes.					
Interven	tion:	Cover			Possible:	100%	
	1	Designed to sup	port 2 times the int	ended load.			1
	2	Secured.					1
	3	Color coded or l	labeled.				0
	4	Installed so as to	o eliminate tripping	hazards.			0
	5	System free from	m obvious defects.				1

Being used properly and not being bypassed.

Raw Score: 66.67% Adjusted Score: 66.67%

Exposure: Floor Holes.

Intervention:	<u>Cover</u>	Possible:	100%	
1	Designed to support 2 times the intended load.			1
2	Secured.			1
3	Color coded or labeled.			0
4	Installed so as to eliminate tripping hazards.			0
5	System free from obvious defects.			1
6	Being used properly and not being bypassed.			1

Raw Score: 66.67% Adjusted Score: 66.67%

Exposure: Floor Holes.

Intervention:	<u>Cover</u>	Possible:	100%	
1	Designed to support 2 times the intended load.			1
2	Secured.			1
3	Color coded or labeled.			0
4	Installed so as to eliminate tripping hazards.			0
5	System free from obvious defects.			1
6	Being used properly and not being bypassed.			1

Raw Score: 66.67% Adjusted Score: 66.67%

Location Summary Score: 74.62%

Location: Floor 22 Number Exposed: 25

Exposure: Aerial lifts.

Intervention:	Scissor Lifts	Possible:	100%	
1	Only authorized person operating lift.			1
2	Employee protected above 10' with toprail and midrail.			1
3	Entrance gate/chain in place.			0
4	Employee standing firmly on floor of basket.			1

	5	Not being used o	lot being used on an incline steeper than mfr. Specs.				
	6	Free from obviou	ree from obvious defects.				
	7	Being used prop	ing used properly and not begin bypassed.				
		Raw Score:	85.71%	Adjusted Score:	85.71%		
Exposure:	Floor	Holes.					
Intervent	ion:	<u>Cover</u>			Possible:	100%	
	1	Designed to supp	oort 2 times the	intended load.			1
	2	Secured.					1
	3	Color coded or la	abeled.				0
	4	Installed so as to	eliminate trippi	ng hazards.			1
	5	System free fron	n obvious defect	S.			1
	6	Being used prop	erly and not beir	ng bypassed.			1
		Raw Score:	83.33%	Adjusted Score:	83.33%		
Intervent	ion:	Guardrail System	<u>1</u>		Possible:	100%	
	1	Top edge betwee	en 39" and 45" a	ind at least 2"x4" constructi	on.		1
	2	Midrail centered	and at least 1"x	6" or 2"x4" construction.			1
	3	Guardrail capabl	e of withstandin	g 200 lb. force.			1
	4	Midrails capable	of withstanding	150 lb. force.			1
	5	Toeboards instal	led and structur	ally sound.			0
	6	Posts no more th	nan 8' apart and	at least 2"x4" construction.			1
	7	Smooth and free	from defects.				1
	8	Being used prop	erly and not beir	ng bypassed.			1
		Raw Score:	87.50%	Adjusted Score:	87.50%		
Exposure:	Aerial	lifts.					
Intervent	ion:	Scissor Lifts			Possible:	100%	
	1	Only authorized	person operatin	g lift.			1
	_	,		0			
	2			rith toprail and midrail.			1

	4	Employee stand	nployee standing firmly on floor of basket.					
	5	Not being used	ot being used on an incline steeper than mfr. Specs.					
	6	Free from obvio	ee from obvious defects.					
	7	Being used prop	erly and not begi	n bypassed.			1	
		Raw Score:	100.00%	Adjusted Score:	100.00%			
Exposure:	Floor	Holes.						
Interventio	n:	Cover			Possible:	100%		
	1	Designed to sup	port 2 times the i	ntended load.			1	
	2	Secured.					1	
	3	Color coded or la	abeled.				1	
	4	Installed so as to	eliminate trippir	ng hazards.			1	
	5	System free from	n obvious defects	i.			1	
	6	Being used prop	erly and not bein	g bypassed.			1	
		Raw Score:	100.00%	Adjusted Score:	100.00%			
Interventio	n:	Guardrail Systen	<u>n</u>		Possible:	100%		
Interventio	on: 1			nd at least 2"x4" construct		100%	1	
Interventio		Top edge betwe	en 39" and 45" ar	nd at least 2"x4" construct 5" or 2"x4" construction.		100%	1	
Interventio	1	Top edge betwe	en 39" and 45" ar	5" or 2"x4" construction.		100%		
Interventio	1	Top edge betwe  Midrail centered  Guardrail capabl	en 39" and 45" ar I and at least 1"xé	5" or 2"x4" construction.		100%	1	
Interventio	1 2 3	Top edge between Midrail centered Guardrail capable Midrails capable	en 39" and 45" ar I and at least 1"x6 le of withstanding	5" or 2"x4" construction. 3 200 lb. force. 150 lb. force.		100%	1	
Interventio	1 2 3 4	Top edge betwee Midrail centered Guardrail capable Midrails capable Toeboards insta	en 39" and 45" ard and at least 1"xée le of withstandinger of withstanding	5" or 2"x4" construction. 3 200 lb. force. 150 lb. force.	ion.	100%	1 0 0	
Interventio	1 2 3 4 5	Top edge betwee Midrail centered Guardrail capable Midrails capable Toeboards insta	en 39" and 45" and at least 1"x6 le of withstanding of withstanding lled and structura	5" or 2"x4" construction. g 200 lb. force. 150 lb. force. ally sound.	ion.	100%	1 0 0	
Interventio	1 2 3 4 5	Top edge betwee Midrail centered Guardrail capable Midrails capable Toeboards insta Posts no more the	en 39" and 45" and at least 1"x6 le of withstanding of withstanding lled and structura	5" or 2"x4" construction. g 200 lb. force. 150 lb. force. illy sound. at least 2"x4" construction	ion.	100%	1 0 0 1	
Interventio	1 2 3 4 5 6	Top edge betwee Midrail centered Guardrail capable Midrails capable Toeboards insta Posts no more the	en 39" and 45" and at least 1"x6 le of withstanding led and structuration 8" apart and a le from defects.	5" or 2"x4" construction. g 200 lb. force. 150 lb. force. illy sound. at least 2"x4" construction	ion.	100%	1 0 0 1	
Intervention	1 2 3 4 5 6	Top edge betwee Midrail centered Guardrail capable Midrails capable Toeboards insta Posts no more the Smooth and free Being used prop	en 39" and 45" and at least 1"xé le of withstanding le of withstanding lled and structura han 8' apart and a e from defects. erly and not bein	5" or 2"x4" construction. g 200 lb. force. 150 lb. force. ally sound. at least 2"x4" construction g bypassed.	ion.	100%	1 0 0 1	
	1 2 3 4 5 6 7 8 Aerial	Top edge betwee Midrail centered Guardrail capable Midrails capable Toeboards insta Posts no more the Smooth and free Being used prop	en 39" and 45" and at least 1"xé le of withstanding le of withstanding lled and structura han 8' apart and a e from defects. erly and not bein	5" or 2"x4" construction. g 200 lb. force. 150 lb. force. ally sound. at least 2"x4" construction g bypassed.	ion.	100%	1 0 0 1	
Exposure:	1 2 3 4 5 6 7 8 Aerial	Top edge betwee Midrail centered Guardrail capable Midrails capable Toeboards instate Posts no more the Smooth and free Being used properate Raw Score:  lifts.  Scissor Lifts	en 39" and 45" and at least 1"xé le of withstanding le of withstanding lled and structura han 8' apart and a e from defects. erly and not bein	5" or 2"x4" construction. g 200 lb. force. 150 lb. force. ally sound. at least 2"x4" construction g bypassed.  Adjusted Score:	ion.		1 0 0 1	

	3	Entrance gate/c	intrance gate/chain in place.					
	4	Employee stand	ing firmly on flo	or of basket.		0		
	5	Not being used	t being used on an incline steeper than mfr. Specs.					
	6	Free from obvio	ee from obvious defects.					
	7	Being used prop	erly and not be	gin bypassed.		0		
		Raw Score:	57.14%	Adjusted Score:	57.14%			
Exposure:	Aerial	lifts.						
Interven	tion:	Scissor Lifts			Possible:	100%		
	1	Only authorized	person operation	ng lift.		1		
	2	Employee prote	cted above 10' v	with toprail and midrail.		1		
	3	Entrance gate/c	hain in place.			1		
	4	Employee stand	ing firmly on flo	or of basket.		1		
	5	Not being used	on an incline ste	eeper than mfr. Specs.		1		
	6	Free from obvio	ree from obvious defects.					
	7	Being used prop	erly and not be	gin bypassed.		1		
		Raw Score:	100.00%	Adjusted Score:	100.00%			
Exposure:	Aerial	lifts.						
Interven	tion:	Scissor Lifts			Possible:	100%		
	1	Only authorized	person operation	ng lift.		1		
	2	Employee prote	cted above 10' v	with toprail and midrail.		1		
	3	Entrance gate/c	hain in place.			1		
	4	Employee stand	ing firmly on flo	or of basket.		1		
	5	Not being used	on an incline ste	eeper than mfr. Specs.		1		
	6	Free from obvio	us defects.			1		
	7	Being used prop	erly and not be	gin bypassed.		1		
		Raw Score:	100.00%	Adjusted Score:	100.00%			
				Location Su	ummary Score:	84.85%		

Location: Floor 15 Number Exposed: 11

Exposure: Ladder

Intervention:	<u>Ladder</u>	Possible:	100%
1	Correct size for the job.		1
2	Fully opened and spreader bars locked.		1
3	Firm foundation for ladder feet.		1
4	Proper climbing procedures being used.		1
5	Three point contact rule being followed.		1
6	Free from obvious defects.		1
7	Worker not standing on top 2 steps.		1
8	Being used properly and not being bypassed.		1
9	Adequate access/egress.		1
	Raw Score: 100.00% Adjusted Score:	100.00%	
Exposure: Unpro	tected sides and edges 6' or more above lower level.		
Intervention:	Guardrail System	Possible:	100%
1	Top edge between 39" and 45" and at least 1/4" diameter.		1
2	Wire rope does not deflect below 39" with 200 lbs. applied.		1
3	Flagged every 6'.		1
4	Midrail centered.		1
5	Toeboards installed and structurally sound.		1
6	Smooth and free from defects.		1
7	Being used properly and not being bypassed.		1
	Raw Score: 100.00% Adjusted Score:	100.00%	
Exposure: Stairw	ays		
Intervention:	<u>Stairways</u>	Possible:	100%
1	Installed between 30 and 50 degrees from horizontal.		1
2	Landing is at least 30" in the direction of travel.		1
3	Riser height and tread depth uniform with 1/4"		1

4	Swing of a door shall not reduce the platform to less than 20"		
5	Free from hazardous projections, such as protruding nails.	1	
6	No slippery conditions on stairs.	1	
7	Metal pan landings and tread are secured in place.	1	
8	Stairs with 4 or more risers or rising 30" has at least one handrail.	1	
9	Stairs with 4 or more risers or rising 30" has a stairrail on unprotected sides.	1	
10	Stairrail is not less than 36" in line with the face of riser.	1	
11	Handrail and stairrails capable of withstanding a 200 lb. force.	1	
12	Midrails are half way between stairrail and step.	1	
13	Screen or mesh extends from the steps to the toprail.	1	
14	Vertical members are no more than 19" apart.	1	
15	Being used properly and not being bypassed.	1	
	Raw Score: 100.00% Adjusted Score: 100.00%		
Exposure: Ladder	r		
Intervention:	<u>Ladder</u> Possible: 100%		
Intervention:	Ladder Possible: 100%  Correct size for the job.	1	
		1	
1	Correct size for the job.		
1 2	Correct size for the job.  Fully opened and spreader bars locked.	1	
1 2 3	Correct size for the job.  Fully opened and spreader bars locked.  Firm foundation for ladder feet.	1	
1 2 3 4	Correct size for the job.  Fully opened and spreader bars locked.  Firm foundation for ladder feet.  Proper climbing procedures being used.	1 0 1	
1 2 3 4 5	Correct size for the job.  Fully opened and spreader bars locked.  Firm foundation for ladder feet.  Proper climbing procedures being used.  Three point contact rule being followed.	1 0 1	
1 2 3 4 5 6	Correct size for the job.  Fully opened and spreader bars locked.  Firm foundation for ladder feet.  Proper climbing procedures being used.  Three point contact rule being followed.  Free from obvious defects.	1 0 1 1	
1 2 3 4 5 6 7	Correct size for the job.  Fully opened and spreader bars locked.  Firm foundation for ladder feet.  Proper climbing procedures being used.  Three point contact rule being followed.  Free from obvious defects.  Worker not standing on top 2 steps.	1 0 1 1 1	
1 2 3 4 5 6 7 8	Correct size for the job.  Fully opened and spreader bars locked.  Firm foundation for ladder feet.  Proper climbing procedures being used.  Three point contact rule being followed.  Free from obvious defects.  Worker not standing on top 2 steps.  Being used properly and not being bypassed.	1 0 1 1 1	
1 2 3 4 5 6 7 8	Correct size for the job.  Fully opened and spreader bars locked.  Firm foundation for ladder feet.  Proper climbing procedures being used.  Three point contact rule being followed.  Free from obvious defects.  Worker not standing on top 2 steps.  Being used properly and not being bypassed.  Adequate access/egress.  Raw Score: 88.89% Adjusted Score: 88.89%	1 0 1 1 1	
1 2 3 4 5 6 7 8	Correct size for the job.  Fully opened and spreader bars locked.  Firm foundation for ladder feet.  Proper climbing procedures being used.  Three point contact rule being followed.  Free from obvious defects.  Worker not standing on top 2 steps.  Being used properly and not being bypassed.  Adequate access/egress.  Raw Score: 88.89% Adjusted Score: 88.89%	1 0 1 1 1	

2	Landing is at least 30" in the direction of travel.	1				
3	Riser height and tread depth uniform with 1/4"	1				
4	Swing of a door shall not reduce the platform to less than 20"	1				
5	Free from hazardous projections, such as protruding nails.	1				
6	No slippery conditions on stairs.	1				
7	Metal pan landings and tread are secured in place.	1				
8	Stairs with 4 or more risers or rising 30" has at least one handrail.	1				
9	Stairs with 4 or more risers or rising 30" has a stairrail on unprotected sides.	1				
10	Stairrail is not less than 36" in line with the face of riser.	1				
11	Handrail and stairrails capable of withstanding a 200 lb. force.	1				
12	Midrails are half way between stairrail and step.	1				
13	Screen or mesh extends from the steps to the toprail.	1				
14	Vertical members are no more than 19" apart.					
15	Being used properly and not being bypassed.	1				
	Raw Score: 100.00% Adjusted Score: 100.00%					

Exposure: Ladder

Intervention:	<u>Ladder</u>	Possible:	100%	
1	Correct size for the job.			1
2	Fully opened and spreader bars locked.			1
3	Firm foundation for ladder feet.			1
4	Proper climbing procedures being used.			1
5	Three point contact rule being followed.			1
6	Free from obvious defects.			1
7	Worker not standing on top 2 steps.			1
8	Being used properly and not being bypassed.			1
9	Adequate access/egress.			1

Raw Score: 100.00%

Location Summary Score: 98.15%

Adjusted Score: 100.00%

Location: Floor 10 Number Exposed: 14

Exposure: Ladder

Intervention:	<u>Ladder</u>	Possible:	100%		
1	Correct size for the job.			1	
2	Fully opened and spreader bars locked.			1	
3	Firm foundation for ladder feet.			1	
4	Proper climbing procedures being used.			1	
5	Three point contact rule being followed.			1	
6	Free from obvious defects.		1		
7	Worker not standing on top 2 steps.		1		
8	Being used properly and not being bypassed.	Being used properly and not being bypassed.			
9	Adequate access/egress.			1	
	Raw Score: 100.00% Adjusted Score: 100.0	0%			

Exposure: Ladder

Intervention:	<u>Ladder</u>	Possible:	100%	
1	Correct size for the job.			1
2	Fully opened and spreader bars locked.			1
3	Firm foundation for ladder feet.			1
4	Proper climbing procedures being used.			1
5	Three point contact rule being followed.			1
6	Free from obvious defects.			1
7	Worker not standing on top 2 steps.			1
8	Being used properly and not being bypassed.			1
9	Adequate access/egress.			1

Raw Score: 100.00% Adjusted Score: 100.00%

Exposure: Ladder

Intervention: Ladder Possible: 100%

3	Firm foundation	n for ladder feet.			1	
4	Proper climbing	g procedures being used	d.		1	
5	Three point cor	Three point contact rule being followed.				
6	Free from obvio	ee from obvious defects.				
7	Worker not sta	nding on top 2 steps.			1	
8	Being used pro	perly and not being byp	assed.		1	
9	Adequate acces	ss/egress.			1	
	Raw Score:	100.00%	Adjusted Score:	100.00%		
Exposure: Ladd	er					
Intervention:	<u>Ladder</u>			Possible:	100%	
1	Correct size for	the job.			1	
2	Fully opened ar	nd spreader bars locked			1	
3	Firm foundation	n for ladder feet.			1	
4	Proper climbing	g procedures being used	d.		1	
5	Three point cor	ntact rule being followe	d.		1	
6	Free from obvio	ous defects.			1	
7	Worker not sta	nding on top 2 steps.			1	
8	Being used pro	perly and not being byp	assed.		1	
9	Adequate acces	ss/egress.			1	
	Raw Score:	100.00%	Adjusted Score:	100.00%		
			Location S	ummary Score:	100.00%	
Location: Floor 5			Number Ex	sposed: 9		
Exposure: Ladd	er					
Intervention:	<u>Ladder</u>			Possible:	100%	
1	Correct size for	the job.			1	

Correct size for the job.

Fully opened and spreader bars locked.

	2	Fully opened and	l spreader bars loc	ked.			0
	3	Firm foundation	irm foundation for ladder feet.				
	4	Proper climbing	Proper climbing procedures being used.				
	5	Three point cont	act rule being follo	owed.			1
	6	Free from obviou	us defects.				1
	7	Worker not stand	ding on top 2 step	S.			1
	8	Being used prope	erly and not being	bypassed.			1
	9	Adequate access	/egress.				1
		Raw Score:	88.89%	Adjusted Score:	88.89%		
Exposure:	Unpro	tected sides and e	edges 6' or more a	bove lower level.			
Interven	tion:	Guardrail System	<u>1</u>		Possible:	100%	
	1	Top edge betwee	en 39" and 45" and	d at least 1/4" diameter.			1
	2	Wire rope does r	Wire rope does not deflect below 39" with 200 lbs. applied.				
	3	Flagged every 6'.					0
	4	Midrail centered					1
	5	Toeboards instal	led and structurall	y sound.			0
	6	Smooth and free	from defects.				1
	7	Being used prope	erly and not being	bypassed.			1
		Raw Score:	71.43%	Adjusted Score:	71.43%		
Exposure:	Stairw	vays					
Interven	tion:	<u>Stairways</u>			Possible:	100%	
	1	Installed betwee	n 30 and 50 degre	es from horizontal.			1
	2	Landing is at leas	t 30" in the direct	ion of travel.			1
	3	Riser height and	tread depth unifo	rm with 1/4"			1
	4	Swing of a door s	shall not reduce th	e platform to less than 20	) <sup>II</sup>		1
	5	Free from hazard	lous projections, s	uch as protruding nails.			1
	6	No slippery cond	itions on stairs.				1
	7	Metal pan landin	gs and tread are s	ecured in place.			1

	8	Stairs with 4 or more risers or rising 30" has at least one handrail.	1
	9	Stairs with 4 or more risers or rising 30" has a stairrail on unprotected sides.	1
	10	Stairrail is not less than 36" in line with the face of riser.	1
	11	Handrail and stairrails capable of withstanding a 200 lb. force.	1
	12	Midrails are half way between stairrail and step.	1
	13	Screen or mesh extends from the steps to the toprail.	1
	14	Vertical members are no more than 19" apart.	1
	15	Being used properly and not being bypassed.	1
		Raw Score: 100.00% Adjusted Score: 100.00%	
Exposure: Floor Holes.			
Interven	tion:	Guardrail System Possible: 100	1%
	1	Top edge between 39" and 45" and at least 2"x4" construction.	1
	2	Midrail centered and at least 1"x6" or 2"x4" construction.	1
	3	Guardrail capable of withstanding 200 lb. force.	1
	4	Midrails capable of withstanding 150 lb. force.	1
	5	Toeboards installed and structurally sound.	1
	6	Posts no more than 8' apart and at least 2"x4" construction.	1
	7	Smooth and free from defects.	1
	8	Being used properly and not being bypassed.	1
		Raw Score: 100.00% Adjusted Score: 100.00%	
Exposure: Stairways			
Interven	tion:	Stairways Possible: 100	1%
	1	Installed between 30 and 50 degrees from horizontal.	1
	2	Landing is at least 30" in the direction of travel.	1
	3	Riser height and tread depth uniform with 1/4"	1
	4	Swing of a door shall not reduce the platform to less than 20"	1
	5	Free from hazardous projections, such as protruding nails.	1
	6	No slippery conditions on stairs.	1

7 Metal pan landings and tread are secured in place. 1 8 Stairs with 4 or more risers or rising 30" has at least one handrail. 1 Stairs with 4 or more risers or rising 30" has a stairrail on unprotected sides. 9 1 Stairrail is not less than 36" in line with the face of riser. 10 1 0 Handrail and stairrails capable of withstanding a 200 lb. force. 11 12 Midrails are half way between stairrail and step. 1 13 Screen or mesh extends from the steps to the toprail. 1 14 Vertical members are no more than 19" apart. 1 15 Being used properly and not being bypassed. 1 Raw Score: 93.33% **Adjusted Score:** 93.33%

**Site Summary Score:** 

90.73%

82.33%

**Location Summary Score:**