

**OCCUPATIONAL SAFETY  
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**FINAL STATEMENT OF REASONS****CALIFORNIA CODE OF REGULATIONS**

TITLE 8: Division 1, Chapter 4, Subchapter 4, Article 22,  
Sections 1637 and 1646 of the Construction Safety Orders

**Riding on Rolling Scaffolds****MODIFICATIONS AND RESPONSES TO COMMENTS RESULTING FROM  
THE 45-DAY COMMENT PERIOD**

There are no modifications to the information contained in the Initial Statement of Reasons.

**Summary and Response to Oral and Written Comments:****I. Written Comments**

- Mr. Pete Dogger, Excel Acoustics, by letter dated January 28, 2009.  
Mr. Thomas E. Chapleau, President, Preferred Acoustics, Inc. by letter dated January 28, 2009.  
Mr. James Cochran, President, Cochran Interiors Inc., by letter dated January 28, 2009.  
Mr. Mark T. Cobb, President, Preferred Ceilings Inc., by letter dated January 28, 2009.  
Mr. Michael J. Yuchno, President, Ceiling Concepts Inc., by letter dated January 30, 2009.  
Mr. Robert M. Tate, Commercial Interiors Acoustical Contractors, by letter dated January 30, 2009.  
Mr. Greydon Eugster, President, Grey-Co Acoustical, Inc., by letter dated January 30, 2009.  
Mr. Mike McCarron, Executive Secretary-Treasurer, Southwest Regional Council of Carpenters, by letter dated February 3, 2009.  
Mr. Blaine M. Caya, Vice President, Standard Drywall Inc, by letter dated February 3, 2009.  
Mr. Bill Funderburg, Construction Manager, Anning-Johnson Company, by letter dated February 3, 2009.  
Mr. Travis Winsor, CEO, The Raymond Group, by letter dated February 5, 2009.  
Mr. Arthur A. Ortega, Southcoast Acoustical Interiors, by letter dated February 6, 2009.  
Mr. Grant Mitchell, Business Manager, Painters and Allied Trades, District Council 36, by letter dated February 9, 2009.  
Mr. Robert Miller, President, Versatile Coatings, Inc., by letter dated February 9, 2009.  
Mr. Robert Miller, President, Spectra Wall Systems, Inc., by letter dated February 9, 2009.  
Ms. Charlene Leighton, President, CP Interiors, Inc., by letter dated February 9, 2009.  
Mr. Harry Smith, Estimator/Project Manager, Sharpe Interior Systems, by letter dated February 10, 2009.  
Mr. Steve Sharpe, President, Sharpe Interior Systems, by letter dated February 10, 2009.

Mr. Michael J. Potter, Vice President/Area Manager, Raymond Company, by letter dated February 11, 2009.

Mr. Todd Heimerl, Vice President, Mowery-Thomason, Inc., by letter dated February 12, 2009.

Mr. Greg Stedman, Regional Vice President, KHS&S Contractors, by letter dated February 17, 2009.

Mr. Jeffrey R. Gilbert, President, G & S Acoustics, Inc., by letter dated February 17, 2009.

Similar (Grouped) Comments:

Similar letters were received from the above-named commentors expressing support for the proposal as noticed for public comment. These letters from a number of employers and several labor unions note that construction work such as acoustical ceiling installation, drywall trim installation, and gypsum panel finishing is performed from rolling scaffolds and that this type of work extends to heights eight to ten feet above the floor. One letter from Mr. Mike McCarron, Southwest Regional Council of Carpenters, states that his organization represents more than 35,000 carpenters. A letter from Mr. Grant Mitchell, Painters and Allied Trades, District Council 36, indicates their labor organization represents over 10,000 members of which, a substantial number use rolling scaffolds in the course of their work day.

The comments state that the scaffold user may be required to climb up and down the scaffold as many as 100 times in an 8 hour shift. The commentors state that the proposal will enable employees to work safely and reduce their exposure from the hazards of repeatedly climbing up and down the scaffolding.

Response to Similar (Grouped) Comments:

The Board thanks these commentors for their comments supporting the proposal and for participating in the Board's rulemaking process.

Mr. Mike Jackson, Branch Manager, Performance Contracting Inc., by letter dated February 11, 2009.

Comment:

Mr. Jackson stated that Performance Contracting Inc., has approximately 200 rolling scaffolds in Southern California in use on any given day. Employees are at risk every time they climb up or down the scaffold, and he supports the proposal that would permit surfing (self-propelling) the scaffold. He comments that getting the work done safely and without injuries is a primary concern and that the proposal will increase worker safety, not only by minimizing the number of times that an employee climbs the scaffold, but also creating a cleaner work area.

Response:

The Board thanks Mr. Jackson for his comments in support of the proposal and for participating in the Board's rulemaking process.

Mr. J. Robert Harrell, President, Safety Management Services, by letter dated February 13, 2009.

Comment No. 1:

Mr. Harrell stated that he is opposed to the practice of individuals riding on rolling scaffolds, especially narrow width scaffolds. Mr. Harrell stated that Title 8, Construction Safety Orders (CSO), Section 1637(b)(2) requires scaffolds to be constructed using a dead load safety factor that will ensure the scaffold supports, without failure, its own weight and 4 times the intended working (live) load applied or transmitted to it. Mr. Harrell stated that the manufacturers of rolling scaffolds, the Scaffold Industry Association (SIA) and the Scaffold Shoring & Forming Institute (SSFI) are opposed to riding and self-propelling on rolling scaffolds. In addition, it is noted that Section 1637(b)(3) requires that "a scaffold shall not be subjected to loads greater than its maximum intended working load [see Section 1637(b)(2)]."

Mr. Harrell's underlying questions with respect to the above statements ask, "Has there been any testing performed to determine the maximum force applied during self-propelling to the scaffold end frames; to the wheels/casters? Do these forces reduce the allowable loading (live load) on the scaffold?"

Response:

Scaffold manufacturers' literature and instructions in general have discouraged the practice of riding on a rolling scaffold notwithstanding that both federal OSHA and Cal/OSHA standards have long permitted the practice subject to conditions and restrictions. The literature of a number of manufacturers indicates that their recommendations are not intended to conflict with, or supersede any state, local, or federal statute or regulation. These concerns were discussed at the advisory committee for this proposal. Manufacturers' concerns associated with injuries from riding on rolling scaffolds may in part be associated with accidents that could occur in the event that employees do not follow the conditions and requirements of OSHA standards.

Several of the manufacturers at the advisory committee believe that there is merit to proceeding with the proposal. One manufacturer stated at the advisory committee that there is empirical evidence that with the apparent industry acceptance of this practice (self-propelling on rolling scaffolds), scaffolds are not overturning with any relevant frequency. The manufacturer further stated, "The federal standard and their interpretations indicate that, if one follows their provisions for riding a mobile scaffold and finds a way to lock or secure the scaffold, that self-propelling is acceptable." He supported proceeding with a standard that would incorporate any relevant requirements from the federal standard into the proposal. He stated that this would not change his manufacturer recommendations against riding on a rolling scaffold, including the practice of self-

propelling, because there may be individuals that do not follow the restrictions and conditions in the rules/regulations and then go after the manufacturer in litigation.

With respect to the commentor's concern about the forces exerted on rolling scaffold wheels/casters and end frames, Board staff is not aware of any specific testing related to self-propelling. However, low platform height rolling scaffolds are built with a significant safety factor to withstand loads and stresses of 4 times the intended maximum working load. The significant safety factor design of these scaffolds provides a wide structural margin of safety for fluctuations in the loads and forces that may be exerted on the scaffold. These scaffolds are typically used on hard surfaces that must be free of pits, holes and obstructions and are equipped with wheels/casters that are designed for such work and often are equipped with bearings for the wheels/casters that result in reduced friction and improved travel of the scaffold when moved. CSO, Section 1509 and its reference to meet the requirements of the General Industry Safety Orders (GISO), Section 3203, Injury and Illness Prevention Program would also require periodic inspections of any scaffold equipment and removal of any scaffold showing signs of structural weakness.

Further, for well over 20 years, riders have been permitted on rolling scaffolds that are pushed by others below, which is an activity that involves scaffold motion and load factors similar to those that would apply to self-propelling a scaffold. Accidents associated with riding on rolling scaffolds are rare at the 4 foot platform height and most often at greater heights are associated with existing Title 8 standards related to violations of one or more of the provisions in existing Sections 1646(c) and 1646(f). These sections address the locking of wheels/casters when climbing or working on the scaffold and maintaining safe equipment and floor surfaces, respectively.

Comment No. 2:

Mr. Harrell stated that Section 1637(b)(4) requires manufactured scaffolds shall be used in accordance with the manufacturer's recommendations. Manufacturers recommend against self-propelling on rolling scaffolds. If Cal/OSHA allows riding on rolling scaffolds, the Division of Occupational Safety and Health (Division) will be encouraging employers to allow their employees to use rolling scaffolds in a manner that is contrary to the manufacturer's recommendations.

Response:

As discussed in the Response to Mr. Harrell's Comment No. 1, the CSO scaffold provisions already permit, with certain conditions and restrictions, that employees may ride on a rolling scaffold. The proposal to permit self-propelling adds a number of additional restrictions and limitations for additional safety and equivalency with federal OSHA standards. The proposed exception for Section 1637(b)(4) addresses any conflict with manufacturer's recommendations within the CSO. Also see the Response to Mr. Harrell's Comment No. 1 for additional rationale.

Comment No. 3:

Mr. Harrell asked that since the rolling scaffold manufacturers do not recommend self-propelling (surfing) on the rolling scaffolds they manufacture, what legitimate criteria can an employer use to train its employees?

Response:

As mentioned in the rationale to Mr. Harrell's Comment No. 1, manufacturers in general have recommended against the practice of riding on a rolling scaffold. However, since the practice of riding on a rolling scaffold is permitted not only in federal OSHA standards [29 CFR 1910.452(w)] but also in California's Title 8, CSO, Section 1646, employers engaging in this practice have been required to train employees about safe methods regarding this practice which includes adhering to the applicable existing Title 8 provisions with special emphasis on Section 1646(c) and (f) which outline specific conditions required to permit an employee to ride on a rolling scaffold. The proposal adds a number of new provisions associated with self-propelling a scaffold in proposed Section 1646(i) and (j) that provide ample criteria and necessity for required employee training and instructions.

Comment No. 4:

Mr. Harrell asked if the Petitioners have taken into consideration the ergonomic issues. Standing on a platform, a worker has to shift the body back and forth to cause the rolling scaffold to move. He questions whether this is a safe procedure.

Response:

The Petitioners and a well represented advisory committee consisting of labor representatives and a large cross section of employers who perform work with employees on rolling scaffolds indicate that a primary reason for the Petition is the onerous, repetitive and fatiguing climbing up and down the scaffold required by the existing standard. There were no concerns expressed about ergonomic issues or any awareness of physical problems caused by any body movement while workers are on the scaffold platform, nor is there any relevant history of ergonomic injuries associated with body movement while on the scaffold. However, there was testimony at the advisory committee that repetitive climbing up and down the scaffold increases the potential for climbing falls and has potential negative effects on the lower extremities.

Comment No. 5:

Mr. Harrell asked if the Petitioners' believe that self-propelling on a rolling scaffold is a safe procedure, what testing and ergonomic evaluation have the Petitioners performed to ensure that the safety of the person and the forces created on the scaffold do not reduce the 4 to 1 safety factor. Without proper testing and evaluation by a qualified professional engineer who is competent in scaffold design, loading and use, an effective safety training program cannot be developed.

Response:

See the Responses to Mr. Harrell's Comment Nos. 1, 3 and 4.

Comment No. 6:

Mr. Harrell stated that metal frame scaffolds that are used as rolling scaffolds, when properly set up, will have cross bracing between the end frames and a horizontal diagonal brace between two diagonally opposing legs at the end frames. The cross bracing helps to keep the scaffold frame legs vertical and plumb. The horizontal diagonal brace helps to keep the scaffold squared and plumb when it is being moved.

Narrow width (hallway) rolling scaffolds do not have cross bracing between the end frames to keep the scaffold legs vertical and plumb. The legs of narrow width scaffolds are typically square. On metal frame scaffolds the legs are round. Attaching a diagonal brace to the square scaffold legs of narrow width scaffold would not be effective in Mr. Harrell's opinion.

Response:

Low profile rolling scaffolds sometimes referred to as Perry or Baker scaffolds are designed as rolling scaffolds and are the type of scaffold subject to the provisions of this proposal. They are not designed by the manufacturer to require horizontal diagonal cross bracing of scaffold legs. These scaffolds are braced in accordance with the manufacturer's design on the end frames and the platform of the scaffold provides additional stability for the scaffold. Consequently, since manufacturers do not design the low profile scaffolds for horizontal diagonal bracing, such bracing is not easily compatible nor indicated for these scaffolds. There was significant discussion at the advisory committee to the effect that workers have been self-propelling on low profile/low height rolling scaffolds for many years and that notwithstanding that the practice is currently prohibited, it is a widespread practice within the industries that use these scaffolds. It was also discussed that these scaffolds are not overturning or failing from the practice of self-propelling.

Also, refer to the rationale in the Response to Mr. Harrell's Comment No. 1.

Comment No. 7:

Mr. Harrell states that the maximum height of the work platform of four feet has no relevance to the safety of workers using the rolling scaffolds if the individuals self-propel the scaffold. For example he states, if the platform is two feet above the floor level and an individual is attaching the edge metal for supporting the suspended ceiling at the wall, as the individual hammers or uses a screw gun to attach the metal, the employee is creating a force that can cause the scaffold to roll away from the wall.

Response:

The proposal requires in Section 1646(j)(4) that the wheels or casters of rolling scaffolds be provided with an effective locking device that is used in accordance with subsection (c) of Section 1646 or that rolling scaffolds be provided with an effective device that is used to prevent movement of the scaffold when workers are climbing or working on the scaffold. The proposal, therefore, addresses the concern that a scaffold would roll away while work is being performed.

Comment No. 8:

Mr. Harrell stated that when the ceiling height is 10 to 12 feet above the floor, workers will move the platform above the proposed 4 foot platform height limitation so they can reach the ceiling wires and attach the grid.

Response:

The comment assumes non-compliance with a basic requirement of the proposal, which is an enforcement issue rather than a basis for modifying this proposal.

Comment No. 9:

Mr. Harrell stated that there are times when carpeting is installed before the ceiling grid is tied into the suspended wires. The resistance to rolling created by the carpet can increase the possibility of a person twisting his/her back, pulling a muscle or falling off the rolling scaffold platform.

Response:

Self-propelling a rolling scaffold is not mandated in Section 1646 but rather is an option for the employer. If the floor surface is such that significant resistance is encountered, or makes self-propelling impractical, the employer and workers have the option to move the scaffold in a manner currently provided for in the existing standards.

Comment No. 10:

Mr. Harrell states that to get on or off the scaffold, the safe and recommended procedure is to climb the end frames. This allows the rolling scaffold to act like a counterweight. Mr. Harrell notes that climbing over end frames of a narrow width scaffold can increase the potential of the scaffold to tip or turn over. If individuals attempt to climb the rolling scaffold and get on or off the platform on the open side there is a possibility that the scaffold will tip over.

Response:

Manufacturers and users of low profile rolling scaffolds realize that there are risks associated with climbing up and down the scaffolds and accessing these scaffolds. These scaffolds are typically

light weight and a person, especially those large in size and stature, must keep the body close to the scaffold to avoid tipping the scaffold.

Manufacturers' recommendations for climbing the scaffold caution the user while climbing the end frame access ladders to keep your body close to the ladder. They also caution that when it is necessary to step around the access ladder to the outside (open side) to keep your body close to the ladder at all times during this move. Consequently, stakeholders are aware that care and caution must be used when climbing and accessing rolling scaffolds. One of the Petitioner's main points is that they do not want to go through the climbing up and down of rolling scaffolds as many as 100 times per shift. The proposal provides relief from the frequency of onerous and fatiguing climbs often made when following the existing standards.

Comment No. 11:

Mr. Harrell stated that if the worker is at the top of the scaffold frame, there is nothing for the worker to grab to get on or off the work platform. Ladders used to access upper levels are required to extend 3 feet above the landing or deck. Does Cal/OSHA require the same safety requirements (3 foot ladder side rail extension above the landing) for getting on and off of rolling scaffolds? If the answer is "yes", there can be a stability issue when an individual climbs over an end frame that extends 3 feet above the platform.

Response:

General ladder requirements in the CSO, Section 1675(i) in part provide that the side rails shall extend not less than 36 inches above the landing. When this is not practical, grab rails, which provide a secure grip for an employee moving to or from the point of access shall be installed. Low profile/low height rolling scaffolds are not designed by manufacturers with ladder side rails which are typically associated with the use of portable ladder access for work applicable to the CSO. However, low height/low profile, narrow rolling scaffolds are typically designed with end frames that provide sufficient steps with the upper most portion of the end frame exceeding above the platform to provide sufficient access to the scaffold platform. Also, see the Response to Mr. Harrell's Comment No. 10.

Comment No. 12:

Mr. Harrell states that the Petitioner and the companies in favor of allowing self-propelling on rolling scaffolds appear to be more interested in increasing profits at the risk of injury to individuals who are performing the work.

Falls from scaffolding continue to be a leading cause of fatalities in the United States [Scaffold Industry Association (SIA) data]. As safety professionals, Cal/OSHA and the construction industry should be looking for ways to improve safety for the workers. Allowing self-propelling or riding a rolling scaffold is not safe for workers.

Response:

One can reason that if a significant number of climbs up and down the scaffold can be eliminated by following the proposed standards that production would improve while exposure to falls and slips in the process of repetitive climbing up and down scaffold would be reduced. Serious and fatal falls from a broad range of scaffolding construction activities occur throughout the United States and in almost all cases, involve violations of federal OSHA and/or Cal/OHSA standards. Additionally, see the responses to Mr. Harrell's Comment Nos. 4 and 10. The Board does not believe that modification to the proposal is necessary as a result of this comment.

Based on the previous responses to Mr. Harrell's comments, the Board declines to make modifications to this proposal. The Board thanks Mr. Harrell for his comments and participation in the Board's rulemaking process.

Mr. Ken Clark, Willis Insurance Services, by e-mail, dated February 19, 2009.

Comment No. 1:

Mr. Clark stated that the purpose of the proposal provides relief from the mandatory requirements that a (rolling) scaffold be moved by others below in all situations. He stated that the Initial Statement of Reasons, page 3, states that the necessity for the subsection (j)(2) is that an employee self-propelling a rolling scaffold is limited to a relatively low working height that would "mitigate" the possibility of serious injury in the event of a fall. Mr. Clark had concerns about the use of the word "mitigate" as used in the preceding sentence and indicated that with a platform height of 4 feet, the potential for injury exists and while the severity of an injury may be reduced, a height of 4 feet would not minimize the possibility of an injury. He stated that there are many incidences of falls from the same level (floor surface) that have resulted in significant cost. By adding 4 feet to the fall equation plus the weight of a tool belt and one has the potential for a very serious claim. He stated that "frequency breeds severity" so he recommended focusing on the frequency of injuries and noted that there was little history of accidents presented at the Public Hearing.

Response:

The use of the word "reduce" in lieu of "mitigate" may provide more clarity to the information presented in the Initial Statement of Reasons. Board staff agrees with the comment that at heights of 4 feet, there is still a possibility of injuries from falls. Many accidents occur nationwide from slips, trips and falls even while working at the floor level. However, in the construction industry, work must be performed at heights and reasonable triggers for fall protection are established in large part based on the nature of the work. The Petitioner's proposed a maximum height of 4 feet from the floor surface for the working platform of rolling scaffolds for work that would involve self-propelling a scaffold even though the trigger height for required fall protection for general or typical construction work is set at 7 ½ feet from the ground or floor below; see CSO, Section 1670.

Federal OSHA in their its industry standards, 29 CFR 1910.23(c), does not require fall protection unless the fall distance is 4 feet or greater. Similar Title 8 standards in GISO, Section 3210(b) only require fall protection at heights of 4 feet or greater. The proposed maximum platform height of 4 feet for rolling scaffolds used in accordance with the proposal is a reasonable height limitation for a construction activity that would reduce the likelihood of serious or fatal accidents in the event of a fall. With respect to comments about little accident history discussion at the Public Hearing, there is not a relevant frequency of reportable accidents to the Division associated with the use of rolling scaffolds with platform heights of 4 feet and below.

Comment No. 2:

In reference to a demonstration video shown at the Public Hearing, Mr. Clark pointed out that the worker shown in the video did not lock the wheels of the scaffold, although the tool (shown later at the hearing to secure the scaffold from movement) will address this issue. He further stated that the video probably showed what will occur; the wheel lock will not be engaged as it requires one more step, though he stated that the new wheel lock extension device may influence its use.

Response:

The provisions in proposed Section 1646(j)(4) are mandatory and require that a scaffold be secured from movement when climbing or working on the scaffold. The comment assumes potential non-compliance with a basic requirement of the proposal, which is an enforcement issue rather than a basis for modifying this proposal.

Comment No. 3:

Mr. Clark stated that the ergonomic exposure in the video had the worker reaching overhead multiple times and applying force; it was rationalized that the forces are transferred through the feet which would be below the 5 foot requirement [associated with the manual force to move the scaffold specified in proposed subsection (i)(4)]. He asked why there is a 5 foot requirement if the standing platform when self-propelling cannot be greater than 4 feet in height. The application of “force” needs to be defined.

Response:

Federal OSHA standards in 29 CFR 1910.452(w)(3) require the manual force to move a mobile scaffold be no more than 5 feet above the supporting surface. California’s provisions in existing Section 1646(f), proposed to be re-designated as subsection (i), address riding on a rolling scaffold moved by others below. Under the provisions of subsection (i), the height of the scaffold platform may exceed 4 feet provided that the minimum scaffold base dimension is at least ½ the height of the scaffold. Proposed subsection (i)(4) and its associated 5 foot height limit for the application of force to the scaffold is then necessary for equivalency with the federal standard.

Proposed subsection (j) specifically addresses self-propelling a rolling scaffold and requires compliance with the provisions of subsection (i) for the safety of the worker when riding on the scaffold. In that the platform height is limited to no more than 4 feet from the floor level when self-propelling a rolling scaffold, the force as applied to the scaffold at the platform would be in compliance with the 5 foot limit specified in subsection (i). The manual force and physical contact applied to the scaffold is at the foot level when self-propelling a scaffold. Consequently, Board staff does not believe a definition of “force” is necessary.

Comment No. 4:

Mr. Clark stated the side-to-side hip action required to self-propel a scaffold if no overhead structure is available is just a trade-off by replacing the lower-body repetitive motion exposures (during scaffold access) to the middle and upper-body repetitive motion exposures required to initiate movement of the scaffold.

Response:

If an effective means of moving the scaffold (e.g. pulling oneself from a ceiling grid or other suitable structure) is not available, the employer is not mandated to permit employees to self-propel rolling scaffolds. It is an option available when the provisions in the proposal associated with self-propelling can be met and are practical for the employer to implement. The employer and workers using the rolling scaffold can use methods already permitted in the existing regulations to move a scaffold. There is no evidence, nor was there any discussion by stakeholders at the advisory committee, that hip movement during self-propelling is an upper-body ergonomic or repetitive motion concern.

Comment No. 5:

What are the methods of self-propelling? Is one method better than another? Which method will be taught?

Response:

The practice of self-propelling a scaffold includes climbing the rolling scaffold for access to the platform. The worker typically uses an overhead structure such as a ceiling grid to pull the scaffold a short distance to the desired temporary work location moving the scaffold via foot contact with the platform. Scaffold wheels/casters must be locked or the scaffold secured from movement when climbing or working from the scaffold. The Board is not aware of multiple methods for self-propelling and consequently is unable to respond to the question as to what method is best and what method will be taught. However, the procedures and provisions for climbing, moving, and working from the scaffold are outlined in proposed subsections (j) and (k). With respect to training requirements, see the Response to Mr. Harrell’s Comment No. 3.

Comment No. 6:

Mr. Clark pointed out that once the scaffold is moving that several factors could impede or interfere with its travel such as the weight on the wheel and axel and the diameter size of the wheel may be a factor in the potential for contact with an obstacle. He recommended that as part of the pre-use inspection that one should ensure that the wheels are free-wheeling and would not induce more friction than necessary to initiate self-propelling the scaffold.

Response:

The diameter of the wheels would not extend more than several inches beyond the outer edges of the scaffold platform if at all. A greater wheel diameter would have more surface area on the wheel to make contact with an obstruction. However, the wheel diameter of various models of low profile, low height rolling scaffolds are somewhat uniform and do not vary significantly. Staff agrees with the comment that the weight on the wheels could be a factor and consequently, the rated capacity of the scaffold should not be exceeded. Part of an effective Injury and Illness Prevention Program for construction work would include inspecting equipment prior to use. A rolling scaffold having wheel(s) with excessive friction, stuck, or damaged bearings would likely preclude the ability to effectively self-propel from a rolling scaffold and be readily identified by the user.

Comment No. 7:

Mr. Clark indicated that attention should be given to environments workers are likely to work in that might change the coefficient of friction between the wheel and the surface it is on.

Response:

Stakeholders indicate that typically the floor surface is concrete slab, relatively level and free of holes, pits and obstructions. Wet or oily surfaces may reduce friction while work on certain floor materials or carpet may increase friction. General housekeeping provisions for construction would require that walkways and passageways be safely maintained and free of obstructions and that spills are cleaned. The employer is not mandated to permit self-propelling a scaffold if floor surfaces are not conducive to or practicable for self-propelling a scaffold. The work can be achieved by methods permitted in the existing standards. Also, see the Response to Mr. Harrell's Comment No. 9.

Comment No. 8:

Mr. Clark asked if materials (loose or liquids) are on the scaffold what happens to them in the jerking motions required to initiate movement. Items should be restrained or secured.

Response:

Board staff is not aware of loose materials or liquids presenting any hazard that would need to be stored on the scaffold during movement. Further, glues and/or joint compounds used in the ceiling

or drywall installation are relatively dense compounds that would not easily spill. The comment assumes that significant jerking motions are required to initiate movement and this was not the case in demonstrations of self-propelling shown and discussed by the Petitioner at the Public Hearing and as discussed by stakeholders at the advisory committee.

Comment No. 9:

Mr. Clark stated that the practice of self-propelling a rolling scaffold may be worthy of consideration for a variance specific to the application but he questions whether the practice should be allowed for all applications.

Response:

See the Response to “Similar (Grouped) Comments.” Given the large number of California employers interested in using rolling scaffolds in accordance with the proposed standards, it would not be practicable for the Board to conduct permanent variance hearings on a case by case basis. Further, it was the consensus of stakeholders at the advisory committee to proceed with a rulemaking action.

Based on the previous responses to Mr. Clark’s comments, the Board declines to make modifications to this proposal. The Board thanks Mr. Clark for his comments and participation in the Board’s rulemaking process.

Mr. Bill Taylor, Certified Safety Professional, South Chapter, Legislative Committee Chairperson for the Public Agency Safety Management Association (PASMA), by letter dated February 13, 2009.

Mr. Taylor stated that PASMA-South Chapter represents various public agencies in Southern California including municipal and county government agencies, water districts, and special districts. The proposal will affect their member agencies, though probably less than it would for the acoustical ceiling and drywall industries.

The proposal would reduce the need (frequency) for the worker to climb up and down the scaffold during the shift to unlock the wheels and thereby expose them to potential falls and additional fatigue. The fatigue issue is a real concern, and not only is there an increased risk of falling when an employee has to climb up and down the scaffold to move it, there is additional stress placed on the back, knees, and shoulders when climbing up and down the scaffold. Mr. Taylor states that the proposal will eliminate much of the unnecessary climbing on scaffolds, and with an aging workforce, will improve short and long term health and safety of the workers. Mr. Taylor urged the Board to adopt this proposal.

Response:

The Board thanks Mr. Taylor and PASMA for these comments and participation in the Board's rulemaking process.

Mr. Ken Nishiyama Atha, Regional Administrator-Region IX, Occupational Safety and Health Administration (Federal OSHA), by letter dated January 28, 2009.

Mr. Atha stated that federal OSHA has completed its review of the proposed standards for Title 8, CSO, Sections 1637 and 1647 related to riding on rolling scaffolds. He stated that the proposed standard adds specific requirements consistent with the counterpart federal standard for mobile scaffolds and contains additional requirements not found in the federal standards. Federal OSHA concluded that the standard, as proposed, is at least as effective as the federal standard.

Response:

The Board thanks Mr. Nishiyama Atha and federal OSHA for these comments and participation in the Board's rulemaking process.

II. Oral Comments:

Oral comments received at the February 19, 2009 Public Hearing in Oakland, California.

Mr. Joel Cohen, President, The Cohen Group, representing the Petitioner in the matter of Petition File No. 465 which resulted in the advisory committee and resulting proposed rulemaking.

Comment:

Mr. Cohen stated that the installation or application of wall materials such as drywall and drywall finishing compounds, as well as the installation of metal grid ceilings, is commonly accomplished by employees standing on a scaffold platform. The vast majority of interior ceilings in commercial and residential construction are ten feet or less. Current regulations allow for workers to move while riding on a scaffold as long as someone is pushing the scaffold from below, but the extra manpower to move a scaffold in this manner is rarely available. Therefore, the worker performing the wall or ceiling task is generally required to climb on and off the scaffold repeatedly to perform his work and comply with the statutory requirements.

Mr. Cohen stated that the continual climbing on and off of scaffolds throughout the day poses a far greater hazard than allowing a single employee to self-propel the scaffold on which he or she is working under certain conditions, which have been addressed in the proposed language. He estimated conservatively that an employee performing the tasks previously mentioned is required to climb on and off the scaffold 80 to over 100 times in an eight-hour day. In addition to the increased risk exposure of such repetitive motion, Mr. Cohen believes that it poses a significant ergonomic hazard to the worker as well.

Mr. Cohen also stated that one large employer at the advisory committee meeting showed a significant number of accidents reported just from climbing on and off the scaffold and not from self-propelling the scaffold. Mr. Cohen then presented a video depicting an employee climbing on and off a rolling scaffold platform; the video also depicted the same employee “self-propelling” or riding on the rolling scaffold.

Mr. Cohen also discussed accidents/injuries that he had researched and Cal/OSHA records that had been discussed at the advisory committee noting that in almost all cases, the platform heights were greater than 4 feet from the floor surface. He stated that the proposed language limits the self-propelled platform height to four feet.

Mr. Cohen stated that the advisory committee in this matter was well attended by labor, contractors, and scaffold equipment manufacturers. He concluded his remarks by expressing his belief that the proposal provides safety regulations that are at least as effective as, and in some cases more stringent than, comparable federal OSHA regulations, and it provides for a safe workplace.

Response:

The Board thanks Mr. Cohen for his summary, comments and participation in the Board’s rulemaking process.

Mr. Michael Logue, Technical Director, representing the Western Wall and Ceiling Contractors Association (WWCCA).

Comment:

Mr. Logue spoke in support of the proposal noting that he has received numerous letters from WWCCA member companies and labor groups supporting the proposed amendments. These letters stated that the work being done on rolling scaffolds set 48 inches from the floor or lower is much safer when workers are allowed to self-propel rather than climb up and down, in some cases more than 100 times in an eight-hour workday. He stated that the safe use of rolling scaffolds begins with training and that WWCCA’s union apprenticeship program would be providing training in accordance with the provisions in the proposal. He stated that there was overwhelming support for the proposal from both labor and management and emphasized the need for the proposal.

Response:

The Board thanks Mr. Logue for his comments and participation in the Board’s rulemaking process.

Mr. Jason Fell, Technical Director, representing the Drywall Information Trust Fund (DITF).

Comment:

Mr. Fell stated that in his 30 years of experience, he has not seen self-propelling on rolling scaffolds as an issue. He stated that if the proposal is adopted, DITF's apprenticeship training program would include scaffold training.

Response:

The Board thanks Mr. Fell for his comments and participation in the Board's rulemaking process.

The following attendees also made comments in support of the proposal:

- Steve Johnson, Associated Roofing Contractors of the Bay Area Counties.
- Bruce Wick, Director of Risk Management for the California Professional Association of Specialty Contractors.
- Kevin Bland, representing the Pacific Rim Drywallers Association, California Framing Contractors Association, Residential Contractors Association, and Wendy Holt of the Alliance of Motion Picture and Television Producers.
- David Lanza, Regional Safety Manager for Performance Contracting Group, Inc.
- Pat Connolly, Granite Industries. Mr. Connolly also demonstrated a braking mechanism for rolling scaffolds designed by Granite.

Response:

The Board thanks these individuals for their comments and participation in the Board's rulemaking process.

Mr. Ralph Morales, Jobsite Safety Coordinator, representing Rudolf and Sletten.

Comment No. 1:

Mr. Morales spoke in opposition to the proposal. He asked whether anyone had considered creating a scaffold platform specifically designed for surfing (self-propelling). He stated that in his 25 years of experience, he has seen a number of scaffolds that have been damaged down at the base by the wheels, which might be the result of surfing. Rudolph and Sletten does not allow surfing, and employees are encouraged not to do it if they are seen surfing.

Response:

Board staff is not aware of any manufacturers that have designed a scaffold specifically for self-propelling. However, as demonstrated at the Public Hearing in this matter, manufacturers are developing products that would secure the scaffold from movement while climbing or working

from the scaffold. Self-propelling a rolling scaffold is an option for the employer and is not mandated. The employer can choose to move scaffolds consistent with existing standards that permit riding on a rolling scaffold. With respect to comment that damage to the base of wheels may be caused by self-propelling, see the Response to Mr. Harrell's written Comment No. 1.

Comment No. 2:

Mr. Morales stated that manufacturer's recommendations specifically recommend against self-propelling a scaffold. He expressed concern that if the proposal were adopted, it is directly in conflict with the manufacturers' recommendations.

Response:

See the Response to Mr. Harrell's written Comment No. 2.

Comment No. 3:

Mr. Morales stated that on a construction site, there may be obstructions on the floor that would prevent the scaffold from rolling, causing the employee riding on that scaffold to fall and sustain an injury.

Response:

Existing standards in Section 1646(f), proposed to be re-designated as subsection (i), require that when a rolling scaffold with riders on it is moved by others below, that the floor surface is free from pits, holes or obstructions. Proposed subsection (j)(1) incorporates the same requirements.

Based on the previous responses to Mr. Morales' comments, the Board declines to make modifications to this proposal. The Board thanks Mr. Morales for his comments and participation in the Board's rulemaking process.

Dialogue Among Board Members, Staff and the Public:

Comment No. 1:

During the Public Hearing, Mr. Pat Connolly, Granite Industries, demonstrated a braking mechanism that would secure a rolling scaffold from movement that can be activated from the worker on a scaffold platform. Board Member Jack Kastorff asked Mr. Connolly about the cost of the braking mechanism he demonstrated. Mr. Connolly responded that the retail price for a pair is \$225 to \$229. Board Member Kastorff also asked how long it takes to install the braking device. Mr. Connolly responded that it takes approximately ten minutes to install it to both ends of the scaffold.

Response:

The Board thanks Mr. Connelly for his response.

Comment No. 2:

Board Member Jonathan Frisch asked Mr. Connolly whether the braking mechanism is automatic. Mr. Connolly responded negatively; the employee must engage the brake. Dr. Frisch then asked Mr. Connolly whether it would be obvious to a supervisor or a casual observer that the brake was or was not engaged. Mr. Connolly responded affirmatively that the casual observer would be able to discern visually that the brake was on or off.

Response:

The Board thanks Mr. Connelly for his response.

Comment No. 3:

Board Member Frisch expressed a concern to staff regarding debris on the floor that might obstruct the scaffold's wheels and whether this should be addressed in the proposal.

Response:

This issue was discussed during the advisory committee deliberations. It was felt that only debris that could cause an obstruction and abruptly stop the scaffold would be of concern. The existing provisions in Section 1646(f)(1), proposed to be re-designated as subsection (i), address conditions when employees ride on a scaffold and require floors that are free from pits, holes and obstructions. This language has not been a clarity issue for employers or an enforcement problem for the Division. It was felt that this language adequately addressed floor surface conditions and for consistency with existing standards is incorporated into the proposal for self-propelling scaffolds in subsection (j)(1). Consequently, no further modifications to the proposal are planned as a result of this comment.

Comment No. 4:

With respect to riding on a self-propelled scaffold, proposed subsection (j)(4), requires that the wheels or casters of rolling scaffolds be provided with an effective locking device that is used in accordance with subsection (c) of this section; or rolling scaffolds shall be provided with an effective device that is used to prevent movement of the scaffold when workers are climbing or working on the scaffold. Board Member Frisch expressed a concern that the language requiring "an effective device" used to prevent movement of the scaffold may be unclear.

Response:

Longstanding general requirements for work while on any type of rolling scaffold in Section 1646(c) state that the wheels or casters must be provided with "an effective locking device" and

kept locked when workers are climbing or working on the scaffold. Proposed subsection (j)(4), specific to self-propelling a scaffold, references the requirements of Section 1646(c) and also permits other devices such as that demonstrated at the Public Hearing by Mr. Connolly, to secure the scaffold from movement provided the devices are effective in securing the scaffold. The intent of this subsection is, 1) to ensure that the scaffold is secured from movement during climbing or work on the scaffold and 2) that the device used to achieve immobility does so effectively. Board staff believes that the proposed language, similar to existing subsection (c), is sufficiently clear to achieve the intended conditions that must be present for safe work from the scaffold. Consequently, no further modifications to the proposal are planned as a result of this comment.

Comment No. 5:

With respect to the proposed exception for Section 1637(b)(4), Board Member Frisch asked whether there are other examples in Title 8 in which the regulation specifically states that the regulation takes precedence over manufacturers' recommendations.

Response:

Board staff responded affirmatively, citing avalanche blasting regulations as an example. Board staff further stated that scaffold manufacturers are aware that their recommendations against riding on a rolling scaffold under any circumstances conflict with existing OSHA standards, and a number of manufacturers state that their recommendations are not intended to supersede state, local, or federal standards. No further modifications of the proposal are planned as a result of this comment.

Comment No. 6:

Board Member Jackson asked whether there was any citation history for employees riding on rolling scaffolds.

Response:

Board staff responded that there were citations in which the wheels/casters had been unlocked when an employee was working on the scaffold as opposed to citations resulting from a compliance officer observing an employee in the act of self-propelling the scaffold (moving it without assistance from others below).

In discussions with the Division and from a review of Division citations, it is apparent that most citations are the result of an injury accident. A common cause of accidents is the failure to lock the casters/wheels during climbing or performing work from the scaffold. No further modifications to the proposal are planned as a result of this comment.

ADDITIONAL DOCUMENTS RELIED UPON

None.

ADDITIONAL DOCUMENTS INCORPORATED BY REFERENCE

None.

DETERMINATION OF MANDATE

These standards do not impose a mandate on local agencies or school districts as indicated in the Initial Statement of Reasons.

ALTERNATIVES CONSIDERED

The Board invited interested persons to present statements or arguments with respect to alternatives to the proposed standards. No alternative considered by the Board would be more effective in carrying out the purpose for which the action is proposed or would be as effective and less burdensome to affected private persons than the adopted action.