

Focus Groups & Industry Interviews: Fall Protection Measures Among B12 Residential Construction Companies

Saskatchewan Workers' Compensation Board

June 2019



Contents

| | |
|--|----------|
| Objectives and methodology | 3 |
| Executive summary | 5 |
| Discussion results | 9 |
| Time pressure | 9 |
| Small tasks | 10 |
| Safer to work without fall protection | 11 |
| Height not significant enough to warrant fall protection | 11 |
| Enforcement | 12 |
| Training and hazard recognition | 12 |
| Responsibility..... | 14 |
| When fall protection is not used | 15 |
| How to encourage use of fall protection | 16 |

Objectives and methodology

The purpose of the discussions was to determine barriers to using fall protection in the workplace, specifically the residential construction industry.

In May and June 2019, Fast Consulting conducted a series of focus group sessions and one-on-one in-depth interviews with supervisors and workers in smaller residential construction companies in Saskatchewan, as well as stakeholders in the construction industry.

The purpose of the discussions was to determine barriers to using fall protection in the workplace, specifically the residential construction industry. We explored whether there is a correlation between fall protection, fall protection plans, supervision and training. These research findings are intended to inform Saskatchewan Workers' Compensation Board (WCB) operational strategies and marketing plans for 2019.

Focus group discussions involved bringing members of a target segment together with an objective moderator to discuss issues in more depth than what can be achieved with quantitative survey market research. In depth one-on-one interviews serve a similar purpose when proponents cannot be brought together into a group discussion.

Feedback from focus groups and in-depth interviews provide insights into the drivers of survey numbers. They enable us to better understand the connection between fall protection and other dynamics occurring in the workplace. Insights around fall protection and working at heights can be used to inform marketing strategies that will continue to position workplace safety in a meaningful way that resonates with supervisors and workers.

The focus groups and one-on-one interviews are designed to take participants through discussion in several key areas of fall protection.

Facilitation guide

The facilitation guide, designed in collaboration with the WCB, covers:

- Are workers receiving proper training on fall protection? (Proper training is defined as a course that has both a theory and practical component.)
- Are workers on a job site recognizing the hazard correctly and do they understand when they are to wear fall protection? (Do they know that they are working at a height where fall protection is required to address the hazard?)
- Is there a specific work environment, situation or task that makes it difficult to wear fall protection?

- What challenges do supervisors have to get their crew to wear fall protection?
- Are supervisors aware of their role as a supervisor when it comes to fall protection/workplace safety? Are supervisors receiving training regarding their role?
- To the best of their knowledge, whose responsibility is it to make sure that fall protection is worn?

Qualitative feedback from focus groups cannot be extrapolated, but discussion results can provide insights into what is behind survey numbers and data analytics.

Failing to wear fall protection is one of the top contraventions in the construction industry. According to WCB data analysis of serious injuries claims, 14 per cent of all claims are due to falls (all rate codes) and 23 per cent of serious injuries are due to falls (all rate codes). Rate code B12 (residential construction) has more injuries that are serious in nature – three per cent of overall claims and five per cent of serious injury claims.

Sample

Focus group participants were randomly recruited, screened and qualified from sample lists of B12 construction companies provided by the WCB as well as from general commercial listings. This ensures a representative cross section of various types of participants working with smaller residential construction companies. Standard industry practice is for participants in focus group discussions to receive an honorarium in appreciation of their participation.

Two focus group sessions were held in Saskatoon to collect input from B12 rate code residential construction companies. One session was held with five supervisors, the other with six workers. Because there were not enough rural residential construction companies in any particular region to convene a discussion, input from this cohort was collected through one-on-one interviews; this was also done to collect input from Regina participants. Ten in-depth interviews were conducted among these sectors. One-on-one interviews were also conducted with five stakeholders, including Saskatchewan Construction Safety Association (SCSA) board members.

Process

Each focus groups or interview began with a general introduction and explanation about the process, including:

- The idea that discussions are exploratory; there are no right or wrong answers, just opinions, perceptions and what each person thinks based on their own experiences.
- The importance of individual opinions and frank discussion, even if it is different than what others in the room are saying.
- Assurance of participant confidentiality; that opinions are aggregated, not attributed to individuals, and names of participants are not shared or attached to a written summary.

Executive summary

The focus groups and in-depth interviews reveal continuity in feedback regarding fall protection in residential construction zones and the issues around it. This continuity was evident regardless of whether the views originate with residential construction company supervisors or workers, stakeholders involved with work safety or SCSA representatives.

Fall protection is sometimes (often) not used when fulfilment of a small task at height is required.

- Residential construction company owners and developers, followed by foremen and site supervisors, are considered responsible for ensuring that fall protection measures are part of residential construction job sites. Some indicate responsibility begins with the prime contractor, then sub-trade contractors.
- However, many discussion participants, including most workers, suggest that fall protection measures are a shared responsibility of everyone on the job site, including workers. There are suggestions that fall protection needs to be communicated two ways: from workers to site supervisors and company owners, and from owners to foremen and workers.
- Stakeholders and some supervisors who have worked in both industrial and residential construction suggest that larger commercial or industrial construction companies emphasize stricter adherence to safety procedures and practices than residential construction companies. As a result, fall protection measures for residential companies are not at the same level as for larger commercial construction companies.
- Stakeholders are more likely to suggest that there is a lack of enforcement of safety rules, including fall protection rules, and that this is particularly apparent in rural Saskatchewan (*'out of sight, out of mind'*). Stakeholders also suggest that there is significantly less usage of fall protection measures in rural Saskatchewan and that rural supervisors are also less likely to perceive that they have a role to play and responsibility when it comes to fall protection and workplace safety.
- Fall protection is sometimes (some participants say 'often') not used when fulfilment of a small task at height is required. Rather than ensuring prevention measures are in place through proper planning prior to doing a small, quick or seemingly innocuous task, workers will do it without safety precautions.
- Confidence in abilities, which comes with experience and competence, can in some cases lead to unsafe behaviour.

Confidence in abilities, which comes with experience and competence, can in some cases lead to unsafe behaviour.

Some residential construction companies look at the longer term costs of injury and see the benefits of avoiding time loss workplace injuries.

- There is pressure from price sensitive homeowners on residential construction companies to be extremely competitive with their quotes. There is cost to companies for fall prevention, including purchasing safety equipment, making time to set up control zones and install and maintain fall prevention measures (e.g. netting to catch falling tools, materials from height) and the extra time it takes workers to complete work tasks using fall prevention equipment.
- Residential construction contractors are also under pressure in the compressed building season to finish jobs quickly so they can start others or they may be juggling employees and resources between multiple job sites. Time pressures can also be apparent among sub-contractors on construction sites.
- This points to ‘gaps’ referenced by stakeholders between the priorities of the Ministry of Labour Relations and Workplace Safety – Occupational Health and Safety Division (OHS), the WCB and residential homeowners.
- Some residential construction companies, which some stakeholders describe as ‘best practice’ companies, look at the longer term costs of injury and see the benefits of avoiding time loss workplace injuries, in terms of lower WCB insurance premiums, by ensuring proper fall protection measures are always in place.

Some small residential construction companies do not have supervisors to oversee or enforce compliance with fall protection measures.

- According to discussion participants, fall protection measures are now regularly used at residential construction sites when work is at a significant height or involves working on steeply sloped roofs. However, falls from heights can also happen in ways inexperienced supervisors and workers may not expect, including from ground floors into basements, and these situations are not consistently being assessed properly for fall protection.
- Many suggest that fall protection is being enforced on small residential construction sites by supervisors more than ever before. But, most of participants in the discussions suggest that residential construction companies have fewer eyes on them than the large commercial companies. Participants believe that while visits from OHS serve to increase compliance with fall prevention measures, OHS cannot possibly be visible at all small construction sites all the time.
- Some small residential construction companies do not have supervisors; others have supervisors but not on all construction sites to oversee or enforce compliance with fall protection measures. Supervisors may not have enough training or experience to appreciate situations in which the need for fall protection measures is less obvious; they are therefore less likely to enforce putting measures in place.
- Some participants suggest that planning can address these challenges ahead of time. They also point out that planning ahead, envisioning potential fall hazards and addressing them with preventative measures is often an outcome of safety training.

The challenge is the perception that planning, installing and using prevention measures slows workers down, which translates into additional costs for the company and the homeowner customer.

- Training can help take the place of experience, which can be important for smaller companies with higher employee turnover or less experienced individuals in supervisory roles.
- Participants believe that residential construction companies need to understand that safety measures do not take longer once workers and supervisors are familiar with them. Although most companies and their workers routinely have fall prevention measures in place, there are situations where it is not used. The challenge is the perception that planning, installing and using prevention measures slows workers down, which translates into additional costs for the company and the homeowner customer.
- This is sometimes combined with the attitudes, often among more experienced workers, that they are competent enough and comfortable enough working at heights that they do not need fall protection. Wearing fall arrest or travel-limiting systems is relatively new (within the last decade or two) in the residential construction industry. This leads to an 'old school mentality' among some of the more seasoned workers, who consider it cumbersome, uncomfortable and unnecessary if they are working carefully.
- Younger workers are generally more accepting of fall protection measures than veteran builders, and less likely to push back when supervisors insist they use them.
- Participants note that some situations on residential construction sites make it difficult to wear or have fall protection measures in place. These generally involve working in confined spaces (particularly around and between trusses) and narrow spaces between houses where there is no room for a basket or scaffolding. Other situations include long, steep climbs to tie-off anchors, the challenge of tangled lines when several workers are together on the same roof and tying off to unanchored trusses.
- Homes built close together present several challenges for residential construction companies, including preventing them from building protective slopes when digging basement foundations.
- Many discussion participants agree that residential construction companies and most homeowners may be unaware of their legal responsibilities or appreciate their legal liability in the event of an accident of a worker falling from heights when working on their home.

Recommendations to increase use of fall protection measures

Continued training from SCSA is critically important and provides a clear understanding of the requirement for fall prevention measures.

Training is particularly critical for newer, less experienced supervisors and workers who lack the ability to assess unsafe situations or how to mitigate them with fall protection measures.

- Many participants suggest that one of the most effective ways to encourage more workers to regularly use fall protection measures at residential construction sites would be to consistently make it a job requirement with little tolerance for non-compliance and termination of supervisors and workers who do not follow the protocol. Contractors should be vigilant about establishing and maintaining a culture of safety in their residential construction companies, including fall protection, and they should not hesitate to warn workers of safety violations.
- There are also suggestions from stakeholders that there should be more consistency between urban and rural residential construction companies in terms of audits, site safety visits and enforcement of fall protection measures from OHS. The current perception is that rural companies receive less attention and oversight.
- Continued training from SCSA is critically important and provides a clear understanding of the requirement for fall prevention measures. Stakeholders emphasize that safety training should start early at training schools. This would help ensure workers understand the various situations at residential construction sites where fall protection measures are required.
- Training is particularly critical for newer, less experienced supervisors and workers who lack the ability to assess unsafe situations at residential construction sites or how to mitigate them with fall protection measures. The discussions include some proponents of requiring COR certification as a minimum standard for construction companies to receive a license to operate.
- Making sure all fall protection gear is always available on site also serves to encourage workers to use it.
- Significant fines from OHS also serve as effective deterrence for residential companies not in compliance with requirements to have fall protection in place at their sites. On the other side of deterrence, financial incentives from the WCB in the form of rebates for companies with injury free workplaces can also serve to encourage the consistent use of fall protection.
- Small residential construction companies who choose not to invest in safety training or safety certification should not have a competitive cost advantage on bids and contracts. The goal of the SCSA is to make COR certification a pre-bid qualification requirement for buyers of construction in Saskatchewan.
- Stakeholders indicate that provincial legislation for building codes to have designers provide anchor points similar to other provinces would be helpful.
- Stakeholders indicate that there are studies that show that the reality is that wearing restraint and fall arrest systems actually increases productivity because workers don't have to think about protecting themselves from falling.

Discussion results

According to focus group participants, at least some fall prevention measures are adhered to at the majority of residential construction sites most of the time. These measures can take a variety of forms, including setting up control zones, netting, guard rails or having workers wear personal fall arrest or travel-limiting systems.

The majority of supervisors and workers generally feel safe — many say ‘very safe’ — when working on residential construction sites. Job sites are generally kept clean and assessed for safety issues and assurance that OHS standards are being adhered to prior to jobs getting underway.

Some supervisors who have worked in both industrial and residential construction, however, suggest that larger commercial or industrial construction companies emphasize stricter adherence to safety procedures and practices than do residential construction companies. Although most companies adhere to safety standards, the perception is that it is the smaller residential construction companies who seem less likely to have fall prevention measures in place on their work sites.

About half of the supervisors, workers and stakeholders have seen, or personally been involved in, a workplace accident at a residential construction site that involved falling. These typically lead to some type of injury; in one case, the fall led to a worker fatality.

Workplace accidents that involve falling from height are almost always talked about in terms of a quick task that needed to be completed or workers being distracted, either by losing track of where they are as a result of being immersed in a task or by talking with a homeowner or trades person while working.

Time pressure

Time pressure is one reason that fall prevention measures are not used. There’s the notion that it takes too much time to put measures in place, such as setting up control zones, guard rails or netting, or that wearing personal fall arrest or travel-limiting systems is too constrictive and slows workers down. The motivation for saving time is to save money by working more efficiently. Residential construction contractors are often under pressure in the compressed building season to finish jobs quickly so they can start others. Or, they may be behind on jobs or have multiple projects underway simultaneously, and they are juggling employees and resources between job sites. Time pressures can also be apparent among sub-contractors on construction sites.

The current soft economy in Saskatchewan means it is buyer’s market for construction companies, which leads to pressure on these companies to be extremely competitive with their quotes. There is cost to companies for fall prevention, including purchasing

safety equipment, making time to set up control zones and install and maintain fall prevention measures (e.g. netting to catch falling tools, materials from height) and the extra time it takes workers to complete work tasks using fall prevention equipment.

“The worse the economy, the worse the safety standards among residential construction companies. Bid prices are lower and they are locked in, so they look at cutting corners and working to pressure deadlines.”

There is a sense among participants that commercial clients are more willing or able to absorb the costs of safety accommodations than smaller residential construction companies, who work mostly with more price-sensitive homeowners.

There is a perception that smaller residential construction companies are less likely to always have fall prevention measures in place on their residential work sites, and that they are less likely to have safety training, proper safety gear or experienced supervisors and workers. This is perceived as very different than the operating standards of larger commercial construction companies. Some participants suggest that if small residential construction companies enforced fall protection and other safety standards to the same standards as large commercial companies, the price of housing and home renovations would increase significantly.

Small tasks

A common situation where unsafe behaviour at heights is more likely to occur is when workers are finishing up a small task where using protection measures takes much more time than the actual work.

Fall protection is sometimes (some participants say ‘often’) not used when fulfilment of a small task at height is required. Rather than ensuring prevention measures are in place through proper planning prior to doing a small, quick or seemingly innocuous task, workers will do it without safety precautions.

This behaviour can occur with all workers. Even if they do not do it regularly, and most suggest they do not, most also admit they have done without safety precautions at one time or another. Another contributing factor is confidence in their experience, skills and common sense, which makes them think they can complete a task without risk of injury from falling. So, confidence in abilities, which comes with experience and competence, can actually cut both ways and, in some cases, lead to unsafe behaviour.

A common situation where unsafe behaviour at heights is more likely to occur is when workers are finishing up a small task where using protection measures takes much more time than the actual work. For example, rather than spending the significant time it would take to install fall protection on a roof, a worker who only has to spend a few minutes working on a vent as part of a plumbing job might forgo safety measures.

Safer to work without fall protection

Feedback from supervisors and workers suggests the perception that it is safer to do some jobs at height without putting fall prevention measures in place. This generally refers to wearing personal fall arrest or travel limiting systems. On new homes, there are tie off hooks on trusses for fall arrest systems. On homes being renovated, however, these anchors must be installed by workers who free climb to the anchor point without tie off protection. In some situations, this is considered more of a risk than doing the task or job they need to do on the roof without the fall protection. It is evident in the discussions that supervisors are sometimes challenged with this situation as well.

Feedback from supervisors and workers suggests the perception that it is safer to do some jobs at height without putting fall prevention measures in place.

Some workers and supervisors also express concerns about tripping on the many ropes when travel-limiting systems are used by several workers. Trip hazards from fall arrest systems are particularly challenging for framers working within trusses and can pose a hazard in themselves.

Tangle hazards can be exacerbated by cords from power tools. Some companies use retractable lines to reduce tangle issues, but some workers think the tension they put on the line slows them down. Participants also mention issues with tie-off points that are not properly installed to take the weight of a fall or have rust that is not visible under cladding.

Height not significant enough to warrant fall protection

According to discussion participants, fall protection measures are now regularly used at residential construction sites when work is at significant height or involves working on steeply sloped roofs. However, falls from heights can happen in ways inexperienced supervisors and workers may not expect, including from ground floors into basements.

Falls from heights can happen in ways inexperienced supervisors and workers may not expect.

One participant described a fall from a low stepladder that nonetheless led to a significant injury. There are also frequent descriptions of working on low garage roofs where the low slope is not considered enough to warrant fall protection. Framers and roofers who are already resistant to using fall protection because they think it slows them down may be less likely to use measures in these types of situations.

Some discussion participants suggest that ensuring fall protection measures are in place is part of a company's safety culture. Supervisors talk about seeing roofing or painting employees wearing shorts instead of long pants, and sandals instead of work boots, both of which can lead to injury in the event of a fall or dropping a heavy object on a foot. They are not working to OHS standards, and participants suggest that relaxed attitudes regarding such things can spill over to workers being less vigilant about prevention measures for falling from heights.

Enforcement

Most supervisors and workers suggest that fall protection is enforced at residential construction sites most of time. They typically illustrate with examples of guard rails and travel-limiting systems. Many suggest that supervisors are enforcing fall protection on small residential construction sites more than ever before. Residential construction companies building in new neighbourhoods are easier for OHS officials to spot and are significantly more likely to receive a visit as a result. This is especially true if there is work being done at height, as these sites can be spotted from a distance as inspectors are driving. These companies are also likely to say their employees understand and always use fall prevention measures.

However, prevention measures are not necessarily perceived as being regularly enforced through inspections and audits by safety organizations. Most participants suggest that residential construction companies have fewer eyes on them than the large commercial companies. Participants believe that while visits from OHS serve to increase compliance with fall prevention measures for falling from heights, OHS cannot possibly be visible at all residential construction sites all the time.

Small residential building sites that have high visibility, usually because they involve new builds in new neighbourhoods, are more likely to receive visits from OHS inspectors. Residential contractors building or renovating homes in established neighbourhoods are less visible and much less likely to receive visits from OHS. Renovations occurring indoors are even less visible and, therefore, even less likely to receive safety visits and inspections.

Some small residential construction companies do not have supervisors to oversee compliance with fall protection measures; others have supervisors but not on all construction sites. Some work sites are started by a supervisor in the morning who then moves on to other sites. There is a perception among some of the residential construction companies that painting contractors may be less likely than other contractors to enforce fall protection.

Some supervisors do not have enough training or experience to appreciate the nuance of situations where the need for fall protection measures is less obvious and are therefore less likely to enforce putting measures in place. Some supervisors, particularly less experienced ones, may also receive pushback or resistance from workers who are reluctant to set up or wear personal fall arrest systems.

Training and hazard recognition

Most participants believe that supervisors and workers generally recognize when fall protection measures are required. This is especially true of larger residential construction companies. But it is also clear from the discussions that there are many situations on residential construction sites where it is less clear if, and just as importantly when, fall

There are suggestions that training is often on the job training and that standards vary from company to company.

protection measures are required. In these situations, knowledge about various forms of fall protection is not always apparent, nor is planning evident about the types of fall protection required for different situations. This planning is typically part of walk-arounds done prior to getting a project underway.

Most participants indicate that all residential construction company foremen and site supervisors should be trained on when they need to have fall protection measures in place. There are suggestions that training is often on-the-job training and that standards vary from company to company. There is broad agreement, however, that training is necessary to recognize situations where the requirement for fall protection measures is not immediately obvious. Also, as construction progresses, regular planning is required to ensure proper fall prevention measures through all phases of a job.

Most of the supervisors and many of the workers in the discussions have received training on fall protection (including ladder, scissor lift and fall safety) and their role in fall prevention. Much of the training referenced is from OHS or the SCSA. Almost all safety training has both theory and practical components. Some participants in the discussions have been company safety specialists themselves and involved in training workers. Some received safety training when they worked for larger commercial construction companies and now apply that safety knowledge to their work with smaller residential construction companies. Workers who are working toward tickets are more likely to receive safety training.

The goal of the SCSA is to make COR certification a pre-bid qualification for buyers of construction in Saskatchewan.

Several residential construction companies say all their employees receive safety training. Many reference the Certificate of Recognition (COR) designation, which is an occupational health and safety designation verifying that a company has a fully-implemented health and safety management system that meets national standards.¹ The goal of the SCSA is to make COR certification a pre-bid qualification for buyers of construction in Saskatchewan.

The rationale is that qualifying a residential construction company this way gives the company a decided advantage over those not COR certified. But some supervisors are concerned that companies without COR certification can offer lower priced bids, which is attractive to homeowners who are naïve about the implications of a company without COR certification and possibly not as committed to accident prevention. They suggest that these companies may have a competitive cost advantage to win bids and contracts. (One residential construction company with an average of 30 employees indicates they invest upwards of \$35,000 annually in safety training.)

“If your company would not be able to pass a COR audit, then you’re not following the law and you should not be able to bid on construction work.”

¹ COR is nationally trademarked and endorsed by participating members of the Canadian Federation of Construction Safety Associations (CFCSA), including the SCSA. COR’s objective is to provide companies with the knowledge and tools to develop effective health and safety management systems to identify weaknesses that can lead to costly workplace injuries and incidents.

There is a sense that these companies may be resistant to safety training because they see it as too time consuming.

It is also evident that participants are aware that some residential construction companies are not taking safety training, not knowledgeable about when fall protection is required and not putting prevention measures into practice. There is a sense that these companies may be resistant to safety training because they see it as too time consuming. Smaller residential construction companies may also experience higher employee turnover, including supervisors and foremen. In some cases, they may not have them long enough to train them adequately or invest in training.

The cost associated with all safety training is something to which some construction companies, perhaps the smaller ones, appear to be resistant. Participants in the discussions believe that these companies need to understand and realize that safety does not take longer once workers and supervisors get used to it. Training can also help take the place of experience, which can be important for smaller companies experiencing higher employee turnover and having to hire less experienced individuals into supervisory roles.

Responsibility

Fall protection needs to be communicated two ways: from workers to site supervisors and company owners, and from owners to foremen and workers.

Residential construction company owners and developers, followed by foremen and site supervisors, are considered responsible for ensuring that fall protection measures are part of residential construction job sites. Some indicate responsibility begins with the prime contractor, then sub-trade contractors.

Stakeholders are more aware that supervisors are legislated by law with responsibility regarding work site safety.

However, many discussion participants, including most workers, suggest that fall protection measures are a shared responsibility of everyone on the job site, including workers. There are suggestions that fall protection needs to be communicated two ways: from workers to site supervisors and company owners, and from owners to foremen and workers.

It is also apparent that not all residential construction companies have supervisors or foremen, and many of those that do, do not necessarily have a supervisor on site throughout the workday. A supervisor may get a crew of workers started and then move on to other sites, possibly checking in on the crew later in the day, or not. Sometimes smaller residential construction companies may only have one person on a job site. In cases like these, awareness of fall protection may be more limited.

Legal responsibility also rests with contractors, supervisors and foremen according to many of the discussion participants; however, many also suggest that it is also shared with the homeowner contracting the work, especially in the absence of a prime contractor. There is agreement among many of the discussion participants that many residential construction companies and most homeowners may be

unaware of their legal responsibilities or appreciate their legal liability in the event of an accident of a worker falling from heights when working on their home.

Although most are, not all discussion participants are confident that all residential construction company supervisors and foremen recognize or are aware of their legal responsibilities when it comes to fall protection and workplace safety. Awareness of responsibility in this respect is generally an outcome of safety training. There is also uncertainty in that there are many instances of residential construction sites that do not have a supervisor or foreman on site.

All discussion participants, including workers, are aware that workers in Saskatchewan are legally free to refuse to do something they consider unsafe at work and most suggest they are likely to do so if they feel unsafe. Some workers suggest, however, that peer pressure also plays a role in whether or not a worker will refuse to do work they consider unsafe. Residential construction companies suggest that it is not unusual for some of the newer, less experienced workers to be uncomfortable working from heights, at least initially. Training helps them to recognize that fall protection plays a critical role in ensuring their safety.

Stakeholders suggest that this also varies by companies, and that those residential construction companies with a longer view and good leadership around establishing a culture of safety, and that empower workers to do the right thing, benefit in the long run.

When fall protection is not used

There is consensus among participants that operating safely with prevention measures in place is more costly for homeowners, and that they will resist higher costs and bids.

Although the majority of residential construction companies and their workers routinely have fall prevention measures in place at their construction sites, there are situations where it is not used. The challenge is the perception that planning, installing and using fall prevention measures slows workers down, which translates into additional costs for the company and homeowner customer. Speed is a primary driver of profits for residential construction companies.

Homeowners are sensitive to both price and time. There is consensus among participants that operating safely with prevention measures in place is more costly for homeowners, and that they will resist higher costs and bids.

This combines with the attitude among some more experienced workers that they are competent enough and comfortable enough working at heights that they do not need fall protection. Wearing fall arrest or travel-limiting systems is relatively new (within the last decade or two) in the residential construction industry. This leads to an 'old school mentality' among some of the more seasoned workers, who consider it cumbersome, uncomfortable and unnecessary if they are working carefully. Younger workers are generally more accepting of fall protection measures than veteran builders and less likely to push back when supervisors insist they use them.

Many participants suggest that one of most effective ways to encourage more workers to regularly use fall protection measures at residential construction sites would be to consistently make it a job requirement with little tolerance for non-compliance.

Participants note some situations on residential construction sites make it difficult to wear or have fall protection measures in place. These generally involve working in confined spaces (particularly around and between trusses) and narrow spaces between houses where there is no room for a basket or scaffolding. Other situations include steep climbs to tie-off anchors, the challenge of tangled lines when several workers are together on the same roof and tying off to unanchored trusses.

Homes built close together present several challenges for residential construction companies, including preventing them from building protective slopes when digging basement foundations.

There are also certain transition stages in home construction where walls or stairs are being built or assembled before guard rails or other forms of fall protection can be safely installed.

Some participants suggest these challenges can be addressed by planning ahead. They also point out that planning ahead, envisioning potential fall hazards and addressing them with preventative measures is often an outcome of safety training.

How to encourage use of fall protection

Many participants suggest that one of most effective ways to encourage more workers to regularly use fall protection measures at residential construction sites would be to consistently make it a job requirement with little tolerance for non-compliance and termination of supervisors and workers who do not follow the protocol. Contractors should be vigilant about establishing and maintaining a culture of safety in their residential construction companies, including fall protection, and they should not hesitate to warn workers of safety violations.

Continued training from SCSA would also provide a clear understanding of the requirement for fall prevention measures. This would help ensure workers understand the various situations at residential construction sites where fall protection measures are required.

Training is particularly critical for newer, less experienced supervisors and workers who lack the ability to assess unsafe situations at residential construction sites or how to mitigate them with fall protection measures. The discussions include some proponents of requiring COR certification as a minimum standard for construction companies to receive a license to operate.

Making sure fall protection gear is always on site would encourage workers to use it.

Significant fines from OHS also serve as effective deterrence for residential companies not in compliance with requirements to have fall protection in place at their sites. On the other side of deterrence, financial incentives from the WCB in the form of rebates for companies with injury-free workplaces can also serve to encourage the consistent use of fall protection.