



HBACA Builder Safety Committee Early Power & Lock-out/Tag-out Safety Awareness

Initiative & Stand Down Kit January 2020

Suggested Discussion Materials, Action Items & Event Schedule



To kick off the HBACA Builder Safety Committee New Monthly Safety Awareness Initiative, we are proud to present the second Initiative and Stand Down Kit for January 2020 addressing Early Power & Lock-out / Tag-out Safety Awareness!

Elements of the Kit:

Suggestions for Implementation

A summary of the game plan for January's HBACA Safety Committee Monthly Awareness Initiative and Group Stand Down Event with some "added touches" you may want to consider.

Early Power Tool Box Talk #1 – *What is Early Power?*

The first of three Tool Box Talks planned for January, featuring information on Recognizing Early Power and when its Hazardous in Residential Construction.

Distribution Network:

Committee Member Field Employees and, at each member builder's discretion, their Trade Partners. Builders are encouraged to distribute these accordingly and organize brief safety meetings/discussion sessions throughout their communities.

Distribution/Implementation Dates:

Week of January 13 - 17, 2020

Lock-out / Tag-out Tool Box Talk #2 – *Best Practices*

This Tool Box Talk covers Ideas and Best Practices for your Lock-out / Tag-out Procedures

Distribution Network:

Committee Member Field Employees and, at each member builder's discretion, their Trade Partners. Builders are encouraged to distribute these accordingly and organize brief safety meetings/discussion sessions throughout their communities.

Distribution/Implementation Dates:

Week of January 20 - 24, 2020

Tool Box Talk #3 – *Live Gas Risers at Pre-slab*

This Tool Box Talk covers gas sleeving and lines installed by VW Connect or your local Underground Utility Provider.

Distribution Network:

Committee Member field Employees and, at each member builder's discretion, their Trade Partners. Builders are encouraged to distribute these accordingly and organize brief safety meetings/discussion sessions throughout their communities.

Distribution/Implementation Dates:

Week of January 20 - 31, 2020

Stand Down Event Information Poster

Let's get everyone's attention! Here's a poster our Committee membership can post advertising our event at all our respective communities throughout the month of January 2020.

FREQUENT SAFETY COMMUNICATION = SAFETY AWARENESS = SAFETY RESULTS!

Additional Resources (Optional)



HBACA Builder Safety Committee Early Power, Lock- out / Tag-out Safety Awareness Initiative & Event January 2020



Suggestions for Implementation

Let's Get Started!

As we've discussed in our recent meetings, one goal of the HBACA Builder Safety Committee is to coordinate a monthly safety initiative that heightens awareness of a critical residential construction safety issue. To implement this program member-companies team up and take turns spearheading each monthly initiative. For this second initiative, we take on Early Power, Lock-out / Tag-out Safety and a 3rd on Early Gas Riser Awareness. We hope you are as excited about this as we are!

What We've Planned

For each of three consecutive weeks in January 2020, we've prepared a series of Tool Box Talks for the distribution and implementation of our Committee membership and their field staff. The idea is to set aside approximately 20 to 30 minutes a week to raise awareness of this safety challenge. Include your field staff, make it a series of events at each community, invite your trade partners if you are comfortable doing so, and/or implement the program however you see fit!

For the second monthly initiative we suggest that you coordinate Tool Box Talk #1 as part of either one centralized or a series of "Stand Down Events" in your communities, all taking place member-wide on a coordinated date of January 16, 2020.

Objectives of Tool Box Talks

- Making time to communicate the dangers of Early Power, Lock-out / Tag-out misuse.
- Making time to communicate best practices to avoid injury.
- Making time to recognize and remind all of us that our profession is a potentially dangerous one with real hazards that can cause real injuries, human suffering, and even death!
- Making a united and unequivocal statement: "We care about you and your safety and we want you to come home to your loved ones each and every night healthy and happy!"

Objectives of Stand Down Event

- On January 16, 2020, all Committee Builders will speak with one voice simultaneously in unison sending a consistent message to all our collective employees and trades – Early Power, Lock-out / Tag-out Safety is Important! YOU ARE IMPORTANT!
- Send a message to all who participate: "Arizona Builders care about safety and take action to prevent injuries!"
- Set the tone for upcoming planned Monthly Safety Initiatives.

Additional Suggestions to Consider:

- Distribute and post a Stand Down Event Announcement in all your locations starting January 6, 2020.
- Consider posting copies not only in your Construction Offices but also in key locations throughout your communities where workers will see them – Examples: J-Johns doors, storage sheds, on existing lot or safety signs, etc.
- Have your CMs ask the lunch truck drivers to post them on their trucks.
- LET'S GET THE WORD OUT THERE!
- Prior to distributing Tool Box Talks, print them on card stock or have them laminated so that they're not just a "throw-away item."
- Make food part of the Stand Down Event! Pizzas or a barbecue with burgers and hot dogs goes a long way towards relationship building. Spending \$50 or \$100 per community is money well spent!
- Turn the event into a Safety/Holiday/New Year/Trade Partner Appreciation celebration!

HBACA Safety Committee January 2020 Tool Box Talk #1

Early Power

Q: What is Early Power and how do you recognize a Hazard associated with Early Power?

Definition: The industry term "Early Power" refers to when a Homebuilder contracts with an Underground Service Provider to provide Early Power or the means to install the electric lines and meter (along with SRP or APS) at the beginning of the home construction schedule. This power is provided at the pre-slab stage of construction, rather than the end of construction, which usually occurs after electrical clearance or city final inspection. Typically, outlets for workers are provided under each Main Fuse Panel for construction workers use during the build process.

Hazard: Main Fuse Panel is energized (**DANGER - Live Power**) for nearly the entire building process of the home, exposing workers to high voltage electrical lines.

Identify Safe Environment: No meter or riser installed, **NO electrical Hazard exists.**

SAFE!



Recognize the Hazard: Meter and Riser installed, an **Electrical Hazard exists!**



Recognize the Hazard: Meter installed, Lock-out pad lock installed, Lock-out/Tag-out Flyer in place, **Electrical Hazard exists!**



OSHA general industry standard 29 CFR 1910.147

HBACA Safety Committee January 2020 Tool Box Talk #2

Lock-out / Tagout Best Practices

The OSHA Lockout/Tagout standard 29 CFR 1910.147 requires the adoption and implementation of practices and procedures to shut down equipment, isolate it from its energy source(s), and prevent the release of potentially hazardous energy while maintenance and servicing activities are being performed. It contains minimum performance requirements, and definitive criteria for establishing an effective program for the control of hazardous energy. However, employers have the flexibility to develop lockout/tagout programs that are suitable for their respective facilities.

This applies to Residential Construction at the Main Fuse Panel of the home.

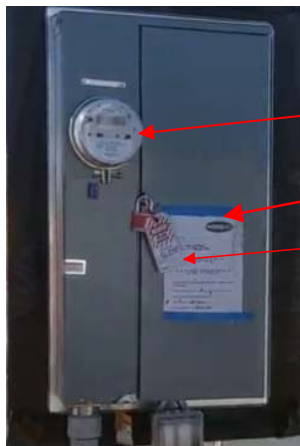


It is extremely important to inform and educate onsite workforces about the hazards of energized Electrical Panels. The panel will be placed in its permanent position long before the house is built. The panel will be supported by 2 metal legs. These legs will remain in place and be out of sight once the house is nearing completion.

After meter is installed the LO/TO Procedure can begin.



All Panel Breakers and Main Breaker will be placed in the off position. (By the electrical provider APS/SRP). Builder to turn on breaker and verify temporary power outlets functioning prior to Lock-out / Tag-out.



Meter Installed – Live Power.

1. Notify all Workers & Employees
2. Install LO/TO Padlock & Tag

There are many choices of locks & tags, and each company should decide what best works for their situation. They should be highly visible and acknowledge electrical Danger or Hazard.



Example Lockout / Tagout Station for the Construction Office.



You have many choices for your Lockout / Tagout needs. A Complete kit like the item above is available or you can also create your own by purchasing items individually.

**Lockout and tagout devices will be singularly identified, used only for this purpose, and will be durable, standardized, substantial, and identify the employee applying the lockout. Storage of the locks will be used only for this purpose. It also will be durable, standardized, substantial, and identify the employee applying the lockout.*

**It is important to periodically check the Lock and outlets for damage and report if necessary, for replacement.*

To restore energy (reset tripped breaker) after notification by worker or inspection:

1. Affected employees must be notified and cleared.
2. Check the panel for damage before opening or removing the LO/TO Lock.
3. Remove lockout and reenergize.
4. Replace Lock
5. Replace the LO/TO Lock to its dedicated location on the board and complete the tag out documents.

Except in emergencies, only the person who attached the lockout device may remove it!

Employers Action with This Program

The above covers the basics of a Lockout/Tagout Program. Your program must be adapted to your business and/or situation. For example, you may wish to designate only certain persons or positions to perform your lockout procedures, i.e., equipment or facility maintenance personnel. Or specify additional steps not included here.

It's your program - make it work for you.

References: 1910.147 and 1910.333(b)

HBACA Safety Committee January 2020 Tool Box Talk #3

Live Gas Risers at Pre-slab

Does the home you are working on have Early Gas Lines?

Here is how to identify if Gas Lines are installed!



No Gas Line installed
(Sleeve Only)



Gas Line &
Sleeve Installed



Gas Clearance
Zone

Use Caution around all Gas Lines

Pay attention to your surroundings

Ensure equipment does not damage the Protective Barrier, Sleeve or Lines

It smells bad for a reason.

In its untouched state, natural gas is actually odorless. For safety reasons, Southwest Gas injects an element called mercaptan, which emits an odor similar to sulfur or rotten eggs. Here's the simple rule...If you smell rotten eggs, leave the area, then call us for help, whether you have natural gas at your home or business or not.

HOW TO IDENTIFY A LEAK



SMELL

Smell a distinct sulfur-like odor, similar to rotten eggs, even if it's faint or momentary.



HEAR

Hear a hissing or roaring coming from the ground, aboveground piping, or a natural gas appliance.



SEE

See dirt or water blowing into the air, unexplained dead or dying plants or grass, or standing water continuously bubbling.



Electrical Safety

While many workers are exposed to electricity as part of their daily responsibilities, electrical hazards present a unique challenge in construction as electricity is an unseen hazard and many workers are unaware of the risks and hazards present in their workplace.

Common Causes of Injury:

- ❑ Contact with overhead or buried power lines and other live parts.
- ❑ Lack of or improper ground fault protection.
- ❑ Grounding path missing or discontinuous.
- ❑ Improper use of extension cords and equipment.
- ❑ Working on energized or hot electrical circuits.
- ❑ Over head or buried power lines are especially dangerous to workers because they contain very high voltage and are typically uninsulated. Contact with these lines are typically fatal.



Safe Work Practices

- It's important as a worker to do a visual survey of the work area and look for any overhead power lines or buried power lines before starting work.
- ❑ Use GFCI protection on 120-volt, 15 and 20-amp receptacles. Use double insulated or properly grounded tools and equipment and follow manufacturers instruction on proper usage.
- ❑ Always inspect all equipment and tools before use and remove from service any tool with frayed, damaged cords, missing ground pins, and damaged or cracked tool casings.
- ❑ Most electrical tools and equipment have safety features built into them by the manufacturer. However, if used in ways not intended by the manufacturer, operators of such equipment can no longer rely on these features.
- Never work on energized or "hot" electrical circuits until all power is shut off or de-energized and a lockout/tagout system is in place, which protect workers from the dangers of the accidental or unexpected startup of electrical equipment.



For more information, visit nahb.org/toolboxtalks.

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Seguridad Eléctrica

Si bien muchos trabajadores están expuestos a la electricidad como parte de sus responsabilidades diarias, los peligros eléctricos presentan un desafío único en la construcción, ya que la electricidad es un peligro invisible y muchos trabajadores desconocen los riesgos y peligros presentes en su lugar de trabajo.

Causas Comunes de Lesión:

- Contacto con líneas eléctricas aéreas o enterradas y otras partes energizadas.
- Protección contra fallas a tierra faltante o incorrecta.
- Conexión a tierra faltante o discontinua.
- Uso inadecuado de los cables de extensión y equipos.
- Trabajo en circuitos eléctricos energizados o calientes.
- Las líneas eléctricas aéreas o enterradas son especialmente peligrosas para los trabajadores porque contienen un voltaje muy alto y, por lo general, no están aisladas. El contacto con estas líneas suele ser fatal.



Prácticas de Trabajo Seguras

- Es importante que, como trabajador, realice una inspección visual del área de trabajo y busque líneas eléctricas aéreas o líneas eléctricas enterradas antes de comenzar a trabajar.
- Use la protección GFCI en receptáculos de 120 voltios, 15 y 20 amperios. Use herramientas y equipos con doble aislamiento o debidamente conectados a tierra y siga las instrucciones del fabricante sobre el uso adecuado.
- Siempre inspeccione todos los equipos y las herramientas antes de usarlos y retire de servicio cualquier herramienta que tenga cables deshilachados o dañados, clavijas de conexión a tierra faltantes y cubiertas de herramientas dañadas o agrietadas.
- La mayoría de las herramientas y los equipos eléctricos tienen características de seguridad incorporadas por el fabricante. Sin embargo, si se usa en formas no previstas por el fabricante, los operadores de dicho equipo ya no pueden confiar en estas características.
- Nunca trabaje en circuitos eléctricos energizados o «calientes» hasta desactivar o apagar todas las fuentes de alimentación o hasta que se disponga de un sistema de bloqueo/etiquetado que proteja a los trabajadores de los peligros de la puesta en marcha accidental o inesperada de equipos eléctricos.



Para obtener más información, visite nahb.org/toolboxtalks.

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Additional Resources (Optional) Related Safety Video Links

- VW Connect & Mattamy Homes Early Power, LO/TO, Gas Line Video
<https://photos.app.goo.gl/fdcTKWg6kb1bayqK6>
- Lock-out / Tag-out Facts sheet
https://www.osha.gov/OshDoc/data_General_Facts/factsheet-lockout-tagout.pdf
- Lock-out / Tagout Facts sheet (Spanish)
https://www.osha.gov/OshDoc/data_General_Facts/lockout-tagout-spanish.pdf
- Checklist for developing your Lock-out / Tag-out program
<https://www.cdc.gov/niosh/docs/2004-101/chklists/r1n441~1.htm>
- Additional Training LO/TO Tutorial
<https://www.osha.gov/dts/osta/lototraining/tutorial/add-train.html>
- NAHB Safety Toolbox Talks: Electrical Safety (English) (5:38)
<https://www.youtube.com/watch?v=fxoYq5sBP4s>
- NAHB Safety Toolbox Talks: Electrical Safety (Spanish) (5:38)
<https://www.nahb.org/research/safety/video-toolbox-talks/electrical-safety.aspx>