

August 2026

THE MOST UNIQUE AND RELIABLE RESOURCE FOR TODAY'S ELECTRICAL CONTRACTOR

THE ELECTRIC CURRENT

The Next Everyday Upgrade

Installing Home
Automation—
Planning Smart,
Living Smarter



THE SECRET TO

UNDERGROUND POWER TRANSMISSION



OUR WUNPEECE TRANSMISSION SPACERS REDEFINE THE INDUSTRY STANDARD
FOR UNDERGROUND POWER TRANSMISSION INSTALLATIONS.
WITH PRECISION ENGINEERING AND UNMATCHED QUALITY,

JOIN THE RANKS OF INDUSTRY LEADERS WHO TRUST
UNDERGROUND DEVICES FOR THEIR POWER TRANSMISSION NEEDS.



VISIT WWW.UDEVICES.COM

AND EXPERIENCE THE FUTURE OF UNDERGROUND POWER INSTALLATION

Made to order precast polymer HOUSEKEEPING PADS



ADVANTAGES OF POXYBASE® PADS

Outperforms

traditional concrete

Quick Installation

no waiting for concrete to cure

Labor Saving

no forms or pouring field materials

Mounting

stainless steel inserts for equipment and floor anchors

Flexible Designs

built to exact size specifications including conduit openings

Built to Last

corrosion resistant and extremely durable (seismic ready)

Quick Delivery

with limited colors available



Proudly
made in the
U.S.A.

basetek.com **877-712-2273** info@basetek.com

BASETEK

Built to last
and outperform. **We guarantee it.**

©2024 BaseTek, LLC., Zanite Plus is a registered trademark of BaseTek LLC.

PG 4	The Next Everyday Upgrade
PG 6	Installing Home Automation—Planning Smart, Living Smarter
PG 18	Buyer's Guide
PG 20	Ad Index



Pg 6



Vol. 26 Issue 8

PRESIDENT

Glen Hobson
205-441-5591
glen@handfmedia.net

ADMINISTRATIVE DIRECTOR

Steven Hobson
steven@handfmedia.net

EDITOR

Brandon Greenhill
brandon@handfmedia.net

CREATIVE/ WEB DIRECTOR

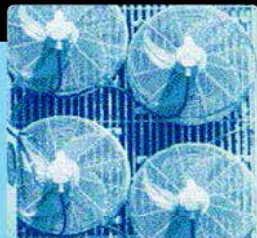
Jacklyn Greenhill
jacklyn@handfmedia.net

Get Cool!

Extend
transformer
life!

Increase
transformer
capacity up
to 166%!

- expert technical assistance
- large inventory
- low sound levels
- one-piece cast aluminum blades
- energy-efficient motors
- galvanized or stainless steel guards



p.o. box 187 germantown, wisconsin 53022

262.255.2310

www.krenzvent.com

P.O. Box 1568 • Pelham, AL 35124
Phone: 205-441-5591 • Fax: 205-624-2181
www.hfgmedia.net



The Electric Current™ is published twelve times a year on a monthly basis by HFG Media. *The Electric Current™* is distributed free to qualified subscribers. Non-qualified subscription rates are \$57.00 per year in the U.S. and Canada and \$84.00 per year for foreign subscribers (surface mail). U.S. Postage paid at Birmingham, Alabama and additional mailing offices.

The Electric Current™ is distributed to qualified owners and managers in the electrical industry. Publisher is not liable for all content (including editorial and illustrations provided by advertisers) of advertisements published and does not accept responsibility for any claims made against the publisher. It is the advertiser's or agency's responsibility to obtain appropriate releases on any item or individuals pictured in an advertisement. Reproduction of this magazine in whole or in part is prohibited without prior written permission from the publisher.

POSTMASTER: Send address changes to
HFG Media, Inc. P.O. Box 1568
Pelham, AL 35124
PRINTED IN THE USA

First there was 4 square...
and now the **REVOLUTIONARY 5 Square® Box!!**

You've struggled with 4 Square boxes for years - you know how small, cramped and time consuming they are. Finally, there is a solution that allows you the space you have always needed.

The **5 Square®** Boxes (5" x 5" x 2-7/8") provide up to 88 in³ of interior volume which more than doubles that of most existing boxes on the market.

Create a robust and unrivaled infrastructure for the life of your facility with the **5 Square®** Products!

Fire Signal



- TWICE THE VOLUME AS MOST BOXES
- SAVE LABOR...INCREASE PROFITS
- ELIMINATES TROUBLESHOOTING TIME AND COST
- FULLY UPGRADEABLE SYSTEM
- SPECIFIED BY ENGINEERING FIRMS, HOSPITALS, UNIVERSITIES & GOVERNMENT AGENCIES
- AVAILABLE IN ZINC OR RED

Telecommunications



- INTEGRAL CABLE MANAGEMENT
- SAVE LABOR...INCREASE PROFITS
- FACILITATES MIN. BEND RADIUS REQUIREMENTS
- SUPPORTS CURRENT AND EVOLVING SYSTEMS
- SUPPORTS PoE PLUS
- SPECIFIED BY ENGINEERING FIRMS, HOSPITALS, UNIVERSITIES & GOVERNMENT AGENCIES

The Next Everyday Upgrade

Home automation is no longer a futuristic fantasy—it's becoming a practical part of daily life. With smart thermostats, lights, locks, and speakers, homeowners are shifting from convenience to control, turning ordinary houses into responsive spaces. But the real question isn't whether we can automate our homes; it's whether we should—and how we can do it responsibly.

- **Convenience That Feels Invisible**

When automation works well, it fades into the background. A thermostat learns your schedule, lights adjust to your habits, and security alerts notify you instantly. Instead of juggling switches, keys, or remotes, you gain smoother routines. Even small features—like smart doorbells or automated morning lighting—can reduce stress and save time.

- **Smarter Energy, Better Living**

One of the biggest wins is efficiency. Smart heating and cooling systems can cut wasted energy by optimizing usage. Many devices also provide usage reports, helping households understand patterns they never noticed before. In an age of rising costs and environmental pressure, this isn't just "tech"—it's a chance to live more sustainably.

- **Security and Privacy: The Trade-Off**

Yet home automation comes with risks. Connected devices can be vulnerable to hacking, and companies may collect data about routines and movement. That's why strong passwords, regular updates, and secure networks matter. Consumers should also choose reputable brands and understand what data is shared.

- **The Future Should Be Human-Centered**

The best smart homes are not those packed with gadgets, but those designed around real needs. Automation should enhance comfort, safety, and accessibility—especially for seniors, people with disabilities, or busy families.

- **Final Thought**

Home automation is a powerful tool. Used wisely, it makes life easier, homes more efficient, and security more proactive. The challenge is to adopt technology with clarity, control, and confidence—because a smart home should serve you, not the other way around.



LONE WORKER PROTECTION
FALL PROTECTION
SUSPENSION TRAUMA PREVENTION

 **SECURE 1/2 MILE**
LINE-OF-SIGHT 



ASSIGNED MONITORING ATTENDANTS



Grace Web Portal Dashboard



Custom Check-In Schedule



TEXT/Email Notification



Receive a GPS Map Link

Check-In System



LEARN MORE



GRACE GATEWAYS

Iridium Satellite/Cellular

Mobile or Portable Worksite Models

SALTTM System Loop Test Indicator

Supports up to 20 Grace Pendants



WORKFORCE[®] LONE WORKER PENDANT

Fall Detection

Manual Panic Button

Motion Detection

GPS Location



Installing Home Automation— Planning Smart, Living Smarter



Home automation has shifted from being a luxury for tech enthusiasts to becoming a practical upgrade for everyday households. Once you decide to “go smart,” the excitement can be overwhelming: smart speakers, video doorbells, smart locks, cameras, thermostats, lighting systems—everything promises convenience, energy savings, and security. But the truth is that the success of a smart home rarely depends on buying the most devices. It depends on how thoughtfully you install, integrate, configure, and maintain them. Installing home automation is less about impressing guests and more about creating a system that works reliably, protects your data, and genuinely fits your lifestyle.

1. Start With a Plan, Not a Shopping List

Before any hardware hits your doorstep, define your goals. Are you primarily trying to increase security? Reduce energy bills? Improve accessibility? Or simplify routines like waking up, leaving the house, and going to bed?

A clear plan prevents expensive mistakes such as purchasing devices that don’t communicate well with each other, or wiring up components that you later regret. Consider making a simple “automation map”:

Security: door locks, cameras, door/window sensors, motion detectors

Comfort: thermostat, smart vents, smart fans, lighting

Convenience: smart plugs, scenes, reminders, voice control

Health & safety: smoke/CO alarms, leak sensors, emergency alerts

Click, click, click and click



9 Year old John can submit an entire **WH347 payroll form**

You Can Do It Too!

1. Login 2. Select Project 3. Import Payroll 4. Sign Document



- **Encrypted**
- **2 Minute Paperless Payroll**
- **Works with Prime and all Subcontractors**
- **55,000 + Clients**
- **80% Savings In Time and Money Compared to Manually Prepared Payroll**
- **Call for Free Demo**

eMars
CERTIFIED PAYROLL COMPLIANCE

emarsinc.com
Ph: 480-771-2841

A good smart home strategy begins with your most important everyday problems, not with trends

2. Choose Your Smart Home Platform (Compatibility Matters)

One of the biggest hurdles in installation is device compatibility. Many brands work well together, but not all ecosystems play nicely. Most households benefit from choosing one main hub/platform for command and control—such as a popular home assistant system or a well-supported smart home ecosystem.

When selecting devices, check:

Compatibility: Does it work with your platform (and with your phone)?

Connectivity: WiFi vs. Zigbee/Z-Wave vs. Thread

Stability: Will it keep working when the internet is down?

Local control: Can your automations run without cloud access?

A platform decision affects everything: setup time, reliability, security, and long-term upgrade costs. If you build around compatibility, you avoid frustration later.

3. Prepare Your WiFi and Network Infrastructure

Many installation issues aren't caused by the devices—they're caused by weak WiFi coverage. Smart homes are connected systems, and they need stable signals.

Before mounting devices:

Run a WiFi survey in your home if possible.

Consider upgrading to a stronger router or adding mesh WiFi nodes.

Use separate network names (SSIDs) for IoT devices when your router supports it.

Ensure your network uses secure settings (strong password, WPA2/WPA3).

If you're installing many sensors, locks, or cameras, network planning can save you from constant disconnects and "device offline" notifications.

4. Start Small: The "Pilot Setup" Approach

It's tempting to install everything at once, but smart homes are best built in stages. Begin with a small "pilot" project:

Smart lighting for one area (like entryway or living room)

A smart thermostat or a smart plug system

One set of door/window sensors or a single camera

This pilot phase helps you:

Test your connectivity

Learn how your platform handles automations

Identify workflow problems—like delays, notification overload, or inconvenient schedules

After you confirm stability, expand thoughtfully.

5. Install Smart Lighting and Sensors Strategically

Lighting is one of the easiest and most rewarding systems to automate. Unlike security devices, lighting gives immediate feedback and can improve comfort quickly.

Best practices for installation:

Reduce Back & Knee Injuries with the NEW Ergo Termination Tool.



(641)757-7204

www.linehandschoice.com



- Reduce LTA's (Lost Time Accidents)
- Proven to increase production
- Proven safest/ most ergonomic way to terminate
- Reduce strains/ sprains/ First Aids
- Recommended by Ergonomic Specialists
- 100% USA Made



Place motion sensors where they have predictable paths of movement.
Avoid placing sensors near heat sources or direct sunlight that may trigger false alerts.
Use lighting “scenes” such as Morning, Away, Movie Time, and Good Night.
Ensure switches are compatible with smart bulbs or smart dimmers.
Sensors—like motion detectors, door/window contacts, and leak sensors—are the foundation of real automation. When installed correctly, they transform your system from a collection of gadgets into a living, responsive environment.

6. Security Devices: Where Careful Installation Counts

Security is the area where reliability matters most. Installing cameras, locks, and alarm components requires more than “mounting and pairing.”

Consider:

Camera placement: Aim for coverage of doors, driveways, hallways, and key sightlines. Avoid aiming directly at the sun where possible.

Lighting: Night vision depends on adequate illumination. Consider motion-activated outdoor lights if necessary.

Mounting height and angles: Ensure you capture faces or key activity rather than only ceilings or floors.

Lock placement and door fit: Confirm that the lock is compatible with your door thickness and alignment.

Also, set up notifications carefully. Too many alerts lead to “notification fatigue,” and that defeats the purpose of security automation.

7. Thermostats and Energy Automation: Don’t Guess

Smart thermostats can reduce energy waste, but only if configured properly. Installation isn’t just



Upgrade Your Building Wire with Copper-Clad Aluminum (CCA).



Cost Stable

Reduce your exposure to volatile price fluctuations.



Code Compliant

NEC referenced since 1971, Copperweld is accepted by builders and inspectors.



Easy to Install

A similar metal to copper for electrical connections, CCA is light and easy to bend.



COPPERWELD®
BUILDING WIRE



Learn More

Copper where it counts™

Contact us for sales and info:

615-622-4662

buildingwire@copperweld.com

copperweld.com

about mounting a device—it's about calibrating settings to your home.

When installing and configuring:

Use occupancy patterns (your real schedule, not idealized ones).

Set temperature ranges that improve comfort while reducing unnecessary heating/cooling.

Consider integrating weather data or home occupancy sensors if supported.

Test heating and cooling response time so your home doesn't lag behind your preferences.

Good energy automation is quiet and consistent. You should barely notice it working—until you see lower bills or steadier comfort.

8. Set Up Automations With Real-Life Logic

Automations should reflect how people actually live. Instead of creating complicated rules that break easily, aim for practical logic:

Examples of effective automations:

When you leave: turn off lights, set thermostat to Eco mode, arm security.

When motion is detected at night: turn on a hallway light at low brightness.

When a door opens while you're away: send a notification and start a camera recording.

When leak sensor triggers: shut off a water valve (if you have one) and alert immediately.

Use "if/then" logic and include safety checks. For instance, "turn on lights when motion is detected" might exclude daylight hours to avoid unnecessary triggering.

9. Account for Power, Mounting, and Maintenance

Many smart devices require power choices: battery, wired power, or adapters. Before installation, evaluate:

Battery devices: Consider how often you'll replace batteries and whether they'll be accessible.

Wired devices: Confirm you have power outlets or wiring locations that won't be hazardous or unsightly.

Mounting surfaces: Ensure the surface can hold the device securely and won't degrade in weather for outdoor gear.

Also think about long-term maintenance:

Update firmware regularly

Review logs for repeated errors or disconnections

Test automations periodically (especially after major software updates)

10. Prioritize Privacy and Cybersecurity

A smart home connected to the internet is a system that must be protected. Even well-known brands can be affected by vulnerabilities, and basic security habits matter.

Security best practices:

Use strong, unique passwords for accounts

Enable two-factor authentication (2FA)

Keep devices updated

Disable features you don't use (for example, unnecessary remote access)

Use encrypted connections when offered

Find. Fix. Fast.



EMSCO

ELECTRIC MOTOR SUPPLY COMPANY

- ✓ Busway & Plugs
- ✓ Circuit Breakers
- ✓ Fuses
- ✓ Motor Control Centers
- ✓ Panelboards
- ✓ Safety Switches
- ✓ Switchgear
- ✓ Transformers

If we don't have what
you're looking for,
we find it.

GET 10% OFF
YOUR FIRST ONLINE ORDER

With code

ELECUR10

**Home of Thousands of Transformers,
Breakers, Switches, Bus Plugs,
Circuit Breakers and Motor Controls.**



250,000st of
inventory



Every product
certified



Quick Ship
Fast lead-time

EMSCO stocks obsolete, reclaimed, and
hard to find electrical components.

www.EMSCOMN.com



**24-HOUR
HOTLINE**

Get what you need, when
you need it.

CONTACT US

800.328.1842

24-Hour Emergency Line

Be cautious with third-party integrations

Privacy is about more than avoiding hackers. It's also about limiting data collection and ensuring your devices only access what they need to function.

11. Embrace Reliability Over Complexity

The biggest editorial takeaway for installing home automation is simple: reliability is more valuable than novelty. A smart home should feel dependable, not experimental.

Avoid:

Overloading your system with dozens of automations at once

Adding devices that introduce instability

Relying on cloud-only features for critical functions (like security alerts)

Aim for a balanced system: enough automation to improve daily life, with enough control to troubleshoot when something goes wrong.

12. Conclusion: The Smart Home You Install Should Work for You

Installing home automation isn't just a weekend project—it's the beginning of an ongoing relationship with your home. The best results come from thoughtful planning, good network setup, careful device placement, realistic automation design, and strong cybersecurity habits.

If you install with purpose, test early, and expand gradually, your smart home can become something more than a gadget showroom. It becomes a responsive, safer, more efficient space—one routine at a time. In the end, home automation should not make you more dependent on technology. It should make life smoother, calmer, and easier to live. •



The Solution

To stak, store, protect, and pull wire!



Stak: Up to five units tall. Easy two handed ergonomic carry from truck or jobsite.

Store: 500' spools of 14, 12 & 10 AWG wire easily for inventory control. Polymer design reduces damage to finished surfaces on the job.

Protect: Reduces wire damage from tools and personnel. Made of non-conductive polymer.

Pull: Pull wire smoothly from the top or the sides when in the Stak. Support large spools with molded V-Grooves.

stakmax.com
Email: Sales@stakmax.com

Scan the QR Code to visit our website.

Stak



Store



Protect



Pull



Work shouldn't hurt.

Save your knees with our ergonomic products!



Soft Knees Knee Pads



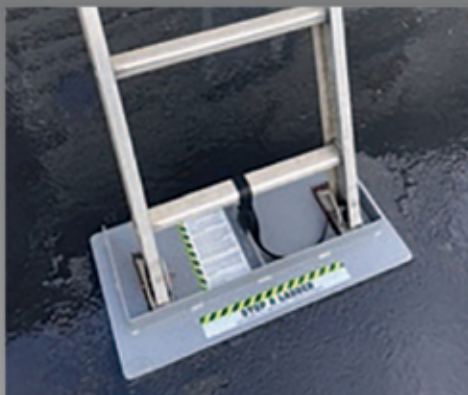
Disposable Knee Pads



Ergokneel Handy Mats



Pak-A-Ladder



Stop-A-Ladder



Extreme Standing Mats



**Ergokneel
Ground Blankets**



Ergokneel Body Mat



**Pocket Kneeler
with Lanyard**

SOFT KNEES®
★ WORK SHOULDN'T HURT®

ergo KNEEL®

888-456-3372 • www.safeworker.com

THE MOST UNIQUE AND RELIABLE RESOURCE FOR TODAY'S ELECTRICAL CONTRACTOR

THE **ELECTRIC** CURRENT BUYER'S GUIDE

Conduit Repair
800-670-1804
www.conduitrepair.com



Conduit Repair Systems, Inc.
The World Leader In Split Conduit Products

Stak Max
815-355-4203
www.stakmax.com



The Solution
To stak, store,
protect, and
pull wire!



Sunbelt Solomon
888-588-5102
www.sunbeltsolomon.com



SUNBELT SOLOMON

Underground Devices
800-800-2116
www.udevices.com



UNDERGROUND DEVICES
INCORPORATED

Working Concepts
888-400-5674
www.safeworker.com



Click, click, click and click



9 Year old John can submit an entire **WH347 payroll form**

You Can Do It Too!

1. Login 2. Select Project 3. Import Payroll 4. Sign Document



- **Encrypted**
- **2 Minute Paperless Payroll**
- **Works with Prime and all Subcontractors**
- **55,000 + Clients**
- **80% Savings In Time and Money Compared to Manually Prepared Payroll**
- **Call for Free Demo**

eMars
CERTIFIED PAYROLL COMPLIANCE

emarsinc.com
Ph: 480-771-2841

Ad Index

Company	Pg.	Website
Base Tek	1	www.basetek.com
Conduit Repair	13	www.conduitrepair.com
Copper Weld	11	www.copperweld.com
eMars Inc	7, 19	www.emarsinc.com
Emsco	15	www.emscomn.com
Grace Industries	5	www.graceconnectedsafety.com
Innisfree Tools	BC	www.innisfreetools.com
Krenz Vent	2	www.krenzvent.com
Linehand's Choice LLC	9	www.linehandschoice.com
Randl Industries	3	www.randl-inc.com
Stak Max	16	www.stakmax.com
Sunbelt Solomon	IBC	www.sunbeltsolomon.com
Underground Devices	IFC	www.uddevices.com
Working Concepts	17, 20	www.safeworker.com

Work shouldn't hurt.

SOFT KNEES® No-Strap Knee Pads

STOP a LADDER®

Another fine **ergoKNEEL** product
www.ergokneel.com





888-456-3372 • www.safeworker.com • info@safeworker.com



SUNBELT SOLOMON

REGULATORS

- 24/7 customer support
- 5 dedicated regulator shops across the US, with factory-trained technicians
- Retrofitting to your preferred control panels
- Comprehensive field service offerings



GET A QUOTE TODAY

Evaluations and estimations provided on all units prior to repair

- 800.830.0251
- info@sunbeltsolomon.com
- sunbeltsolomon.com



SUNBELT
SOLOMON

Keeping your transformers in service.

Repair, Rewind, Recycle.

VISIT US



800.830.0251 | info@sunbeltsolomon.com

TOOLS YOU CAN TAKE TO THE BANK!



3-24 HAMMER

INNISFREE TOOLS, LLC

www.innisfreetools.com

ROLL'ER-ON