



## CONNECT AND PROTECT

INCREASING BUILDING SAFETY & PERFORMANCE  
WITH INVENTIVE ELECTRICAL SOLUTIONS

CADDY ERICO HOFFMAN NUHEAT PYROTENAX RAYCHEM



As buildings become more complex and architects push boundaries of design, it is vital to consider safety and performance solutions at the concept design stages.

Successful design requires understanding of a wide range of issues and considerations. For many years, commercial builders and engineers have trusted nVent CADDY, ERICO, HOFFMAN, NUHEAT, PYROTENAX and RAYCHEM for their electrical connection and protection needs.

## What we offer:



**CADDY**

**ERICO**

**HOFFMAN**

**NUHEAT**

**PYROTENAX**

**RAYCHEM**

### Building Protection

Lightning Protection  
Water & Fuel Leak Detection  
Seismic Protection  
Grounding and Bonding



### Fire Safety

Fire-Rated Wiring  
Sprinkler Freeze Protection



### Wire & Cable Management

Cable Support  
Wire & Cable Management



### Heating

Pipe Freeze Protection  
Snow Melting & De-Icing  
Hot Water Temperature Maintenance (HWAT)  
Floor Heating



### Fasteners, Hangers & Supports

Fastening & Support  
Prefabrication



### Power Distribution

Enclosures  
Surge Protection



# Maximize building safety through nVent solutions



RAYCHEM  
Snow Melting & De-Icing

PYROTENAX  
Fire-Rated Wiring

NUHEAT  
Floor Heating

RAYCHEM  
HWAT

CADDY  
Fastening & Support

HOFFMAN  
Enclosures  
Wire & Cable Management

ERICO  
Grounding & Bonding

# KEEPING BUILDINGS SAFE & PROTECTED

With modern urban development, commercial and residential facilities contain valuable equipment. nVent's smart systems, offer safety and preventive solutions to protect your valuable assets. Our systems are designed and built to the highest standards to compliment your engineering best practices. From lightning protection to water leak detection, nVent offers the most reliable solutions for your building.

## Protection Solutions

Minimize the likelihood of damage from lightning or other electrical disturbances. For more than 75 years, nVent ERICO has provided an engineered systems approach to protecting property.

### Grounding & Bonding



- High-quality, problem-solving products to achieve low-impedance grounding in any soil condition
- Unparalleled technical support for proper specification and installation

### Cadweld Exothermic Welding



- The original - setting the standard for exothermic welding since 1939
- Long-life, below-grade connections

### Lightning Protection



- Captures the lightning strike and conveys energy safely to ground
- Unparalleled engineering support, experience, and technologies for system design



- Power - primary devices at the mains supply service entrance
- Data - secondary devices at branch panels and point-of use applications

## Seismic Solutions & Engineering

### Seismic Protection

#### Cable Bracing



- Superior performance
- Patented designs reduce labor
- Easier handling on job site
- Maximum flexibility for long bracing lengths and confined spaces

#### Rigid Bracing



- Superior performance
- Patented designs reduce labor
- Wide variety of solutions for all brace types – Pipe/Strut/Conduit





## Freeze Protection

### Pipe Freeze Protection



- Inventor of self-regulating heating cables with more than a billion feet installed
- Replacing the heat lost through thermal insulation
- Advanced controls with BMS integration
- Reliable freeze protection of cooling tower pipes and fire sprinkler systems
- Temperature maintenance of greasy waste lines and fuel lines

### Fire Sprinkler Protection



- Designed to freeze protect aboveground and buried supply pipes, fire standpipes, branch lines and branch lines containing sprinklers when run in areas subject to freezing
- Prevents frozen condensate in freezer pendant sprinklers

## Leak Detection

### TraceTek Water Leak Detection



- Protects critical systems
- Made with high performance polymers for maximum durability and long term reliability
- Identifies location of detected water leak for quick clean up

### TraceTek Fuel Leak Detection



- FM7745 approved hydrocarbon leak detection
- Quickly identifies leaks from tanks, pipes, equipment

### Roof & Gutter De-Icing



- Prevents ice dams that create water ingress
- Prevents dangerous icicles-loose cable and architectural panel designs

### Surface Snow Melting



- Maintains temperature of the surface by replacing heat lost to the air
- Prevents slip and fall accidents
- Self-regulating or mineral insulated heating cables
- Energy savings via advanced snow controllers

## Fire-Rated Wiring



- Mineral Insulated 2-hour fire-rated wiring system meets all fire rated wiring requirements in the NEC as well as many "normal power" wiring applications
- Protects critical circuits such as emergency feeders for fire pumps, smoke extraction fans, pressurization fans, and elevators
- Tested to the UL 2196/ ULCS139 meaning it is tested at 1850°F for 2 hours then doused with a firefighters' hose stream
- High Ampacity - ideal for renovations where space is limited and increases in available power are required



RAYCHEM



PYROTENAX

# PROTECTING VITAL ELECTRICAL & ELECTRONIC COMPONENTS

Our enclosures are designed and built to meet the needs of commercial construction, from office buildings and retail facilities, to hospitality, high-rise and health care campuses.

nVent HOFFMAN'S over 12,000 enclosures include versatile screw and hinged cover enclosures that meet the needs for most indoor and outdoor commercial applications. Enclosures are manufactured to the highest UL, CSA, NEMA and IEC standards and engineered with unique features to enable fast installation while providing superior protection for critical electrical components.



## Pull & Junction Boxes



- Versatile screw-cover design for wire pulls and junctions
- Optional easy-to-remove knockouts on all four sides
- Flat, removable covers with unique keyhole slots fastened with plated steel screws
- Optional flush cover and box extender

## Panel Enclosures



- Perforated panel option for easier installation
- Multiple latching options
- Lift-off door option
- Rated for Indoor and outdoor applications
- Wall-mounting provision

## Utility Cabinets



- CT cabinets to house instrument current transformers
- Utility junction cabinets provide sectionalizing and tap-point functionality for underground distribution systems
- Rain and wind protection
- Padlocking provision

## Networking Cabinets



- Provides security, equipment access, cooling and support for network and other equipment
- Double-hinged for easy equipment access
- Self-locking center-to-wall section latches in two locations
- Vented sides provide cross flow ventilation for better heat dissipation



## INCREASING COMFORT & PERFORMANCE

Indulge in the soothing warmth of floor heating in bathrooms, enjoy the comfort of instant sanitary hot water with our maintenance free and energy-efficient solutions.

### Floor Heating

Floor heating and heat loss replacement options



- Installed under tile, marble, granite, laminate and engineered wood
- Room specific heat source for both new construction or renovation
- WiFi enabled thermostats

### HWAT

Efficient hot water design for instant hot water



- Efficient hot water design for instant hot water at tap
- Energy savings and less water waste compared to traditional recirculation systems
- Eliminates the need for return piping
- Total system monitoring with connected controls



# INCREASING INSTALLATION EFFICIENCY

Choosing the right equipment and installation accessories results in lower installed cost while increasing reliability.

## WIRE & CABLE MANAGEMENT

### Fasteners, Hangers & Support

#### In-Wall Electrical Fasteners    Multi-Purpose Hangers



- Broad range of solutions to support electrical boxes, MC cable and conduit between studs
- Innovative designs help control overall project costs and improve schedule attainment
- Tailored solutions for all levels of prefabrication
- Broad range of solutions to support electrical boxes, MC cable, and conduit
- Applications for steel structure, concrete and ceiling grid
- Providing the highest level of corrosion resistance for steel fasteners
- Reducing labor with spring steel

#### Rooftop Support



- Support solutions for electrical and mechanical services for all roof types
- Prevents abrasion/damage to roof membrane via foam interface and even pressure distribution
- HD finish and UV stabilized plastics provide protection against corrosion and deterioration in harsh climates
- Superior load ratings
- Reduce labor by eliminating steps and hardware, as well as providing easier material handling on the job site

### J-Hook Cable Support System



- Non-continuous system with excellent bend radius support
- Better distribution of cable bundle loads
- Up to 88% less steel used compared to wire basket tray
- Up to 75% labor installation cost savings compared to basket trays
- Color identification for data, security, fire, fiber, and nurse calls – 8 stock colors

### Wireway and Trough



- Fast-to-install and flexible wireways, troughs, ladders and basket trays for wire distribution, junctions and terminations
- Superior protection and better accessibility for changes and maintenance versus conduit
- Full line of fittings and accessories to fit most indoor and outdoor installations

### Angled Trough



- Award-winning, innovative angled trough cuts total installation time up to 80%
- Eliminates the need for costly 90-degree conduit bends
- Saves up real estate on the wall
- Quick-install cover with half of the fasteners





## PREFABRICATED SOLUTIONS

### Rod Lock Trapeze Solutions



- Patented push-to-install technology
- Prefabricated assemblies easily lift and lock into place thanks to captive hardware, helping to save time and money
- Up to 2/3 installation labor savings
- Out-of-the-box tool-free solutions
- Works with slightly damaged threads on the threaded rod

### Rod Lock Preset Concrete Anchors



- Eliminate overhead drilling into concrete and therefore silica dust
- Preset anchors cast in place
- Install prefabricated trapezes within seconds simply by pushing them up the threaded rods
- Maximize the benefits of prefabrication through the use of Building Information Modeling [BIM]
- Cracked and non-cracked concrete approved

### Prefab Solutions



Prefabricated branch wiring assemblies complete with:

- nVent CADDY preferred fasteners
- Fully wired assemblies
- Patented open-back box design
- Labels for mounting location and cable routing
- Wired panels with homeruns attached
- Ensure quality and reduce direct labor on branch wiring by over 40%
- Solution ships complete direct to jobsite with full instructions
- UL Listing covers full solution

nVent  
CADDY



# WE CAN SUPPORT YOU IN YOUR NEXT PROJECT

## Specialized Engineering



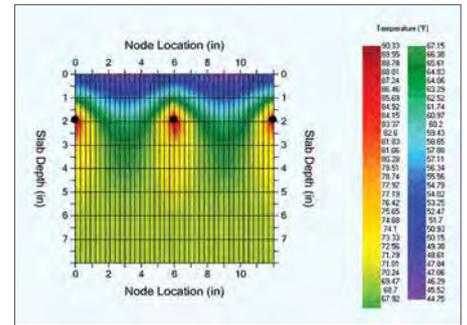
- Isometrics
- Plot plan
- Power cable list
- Calculation list
- Bill-of-materials
- Document control

## BIM Models



- Exchangeable data files to support decision-making for a building
- AutoDesk Revit MEP add-in for pipe heat tracing
- BIM families across the nVent portfolio

## Advanced Design Software



**TraceCalc Pro** - Pipe heat tracing program

**SaveWatt** – HWAT energy and total installed cost calculator

**SnowCalc** – Snow melting automated design tool

**SlabHeat** – Slab temperature distribution finite element

**Pyrosizer** - Pyrotenax fire-rated wiring design tool

## SUPPORT

Architects, engineers, installers and contractors all over the world rely on our proven and innovative solutions and technical support. We make it easy on you to get the right support and enjoy tailor-made professional advice. That's how we keep train platforms, buildings, stadiums and all other infrastructure safe and accessible.



We have the capabilities to make the difference in any building project, from increasing safety to adding comfort while lowering total installed costs.

We are where you need us. With more than 9,000 employees and partnerships with leading wholesalers, we service the globe. We travel the world to support our customers in their most exigent building projects, providing design and installation support where needed.

**400+**  
Patents

**9,000**  
Global  
workforce

**One nVent**



Global  
customers



Positioned to serve  
fast-growing  
economies



Local capabilities,  
and localized  
solutions

**80+**  
Manufacturing,  
service, sales and  
distribution centers

Our powerful portfolio of brands:

**CADDY**

**ERICO**

**HOFFMAN**

**NUHEAT**

**PYROTENAX**

**RAYCHEM**



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