

ONE SYSTEM MANAGES YOUR  
WHOLE BUILDING'S ENERGY NEEDS.



## CONVIA-ENABLED WIREMOLD: ENERGY MANAGEMENT TAKEN TO THE NEXT LEVEL.

Up until now, employing energy management strategies has meant a complicated, difficult-to-configure collection of technologies hard-wired into a building's infrastructure. Once designed and implemented, making changes was impractical. Adjustments in space use or design required starting practically from scratch. And day-to-day power management was unwieldy and inelegant.

Enter the Convia-enabled Wiremold system, an integrated solution that is highly flexible, highly adaptable and highly intelligent. Never before has energy management been so simple while at the same time infinitely flexible and powerful.

## INTELLIGENT CONTROLS MEETS SMART DESIGN.

The system begins with Convia, a technology platform that allows for the integrated control and monitoring of plug load, lighting, and thermostat set points. Co-developed by one of the most respected technology think tanks in the world (Applied Minds), and refined by usability and ergonomics experts at Herman Miller, Convia represents a solution so simple, flexible and elegant that it can be controlled using a two-button remote wand or a PC.

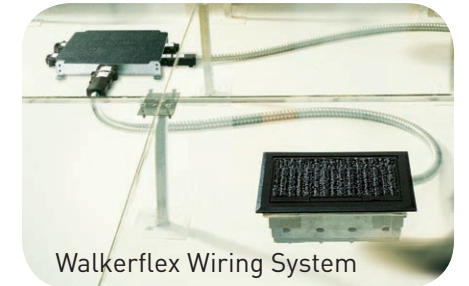
### Another dimension: Walkerflex from Wiremold/Legrand.

Wiremold offers even more flexibility. Convia technology coupled with Walkerflex® flexible wiring from Wiremold/Legrand means systems can be deployed, reconfigured, expanded, or pared down at will. The Walkerflex system, unlike traditional wiring, provides a green, reusable solution now and well into the future. Its plug-and-play design means that installation and configuration is quick and simple. Later upgrades and reconfigurations are — quite literally — a snap.

The Convia-enabled Wiremold offering goes beyond standard lighting controls by addressing key power usage areas beyond lighting like plug loads and HVAC set points. Plus it provides more control at a lower cost than traditional lighting control solutions. But the true genius is in its flexibility. The distributed nature of Convia means no centralized and complicated lighting panels. No proprietary servicing. System additions and subtractions can be done on a daily basis if you should desire it.

### Keeping an eye on power.

Another point of difference: monitoring. In contrast to other systems which provide estimates and averages of energy use, the system provides actual power consumption by zone. It compares actual usage vs. different energy baselines and identifies the zones that are consuming more than expected power. This data allows facility managers to aggressively manage energy and constantly identify trouble spots as well as easily set and meet energy reduction targets.



Walkerflex Wiring System



Floor Boxes



Poke-Thru Devices



Flexibility is at the heart of the Convia-enabled Wiremold offering. The system can easily be configured and reconfigured to manage and control overhead lighting or plug load while taking advantage of innovative, attractive, modular floor boxes and poke-thru devices from Wiremold, pictured above.

# SMART. EFFICIENT. GREEN.

On its own, Wiremold flexible wiring is a smart solution. By adding Convia, the result is what we call “energy-smart.”

## See the savings.

The potential energy savings picture — with its resulting cost savings — is dramatic. Independent research concludes that a Convia-enabled Wiremold system can reduce energy consumption by up to 30% vs. the stringent ASHRAE 90.1 standard. The average building could save more than 50% on lighting and plug load alone. Savings are realized through a combination of energy management in public spaces and at workstations. Changing HVAC set points throughout the day, or in unoccupied areas, can also save 10-15% on HVAC.

In addition, specifying this system in new construction can contribute as many as 23 LEED points toward USGBC LEED CI certification, or up to 20% of the points needed for Platinum LEED status.

Note that nearly half of all LEED-certified buildings don't perform as expected after construction, according to a recent study by the New Buildings Institute. With Convia-enabled Wiremold, energy usage can be modified long after the building has been occupied. This type of “continuous commissioning” is difficult, at best, with traditional controls.

Also, there is potentially a dramatic savings over time. Due to its modular, reusable nature, the system may be classified, for tax purposes, as “equipment” instead of “realty property” (as standard electrical wiring is classified). Savings comes from an accelerated depreciation schedule for equipment which can cut tens of thousands of dollars from life cycle costs.

## Greener, more efficient installations.

In the book Cradle to Cradle by McDonough and Braungart, the authors discuss the benefits — to both the environment and one's bottom line — of products designed to be reused instead of thrown away. Wiremold and Convia take this concept to heart by creating a system with wiring, sensors, controls, and more that can be continuously reused and reconfigured instead of taking up space in a landfill.

This system gives building owners the flexibility to allocate wiring and power management resources anywhere. To expand or scale back. To add features and capabilities as they become available. With traditional wiring and power control systems, programming is difficult or impractical for end users. With this system, programming can be done by anyone, using a simple, two-button wand or a PC. So environments can change daily, or even hourly.

The Convia-enabled Wiremold system also complies with the Energy Policy Act of 2005 (EPACT). This forward-thinking legislation provides tax incentives for energy-efficient building systems. Under EPACT, buildings which achieve a 50% energy savings target are eligible for substantial tax breaks. To that end, the Convia-enabled solution helps reduce the costs of all your subsystems — lighting, plug load, even HVAC.

## CASE STUDY: THE US GREEN BUILDING COUNCIL



The US Green Building Council, an organization which promotes sustainable, healthy, and earth-friendly building, has chosen the Convia-enabled Wiremold system to manage its 75,000-square-foot headquarters in Washington, DC. This system will play a critical role in helping the organization achieve its aggressive energy management goals. The new headquarters, still under construction, is expected to receive a LEED rating of Platinum, the highest level. The Convia-enabled Wiremold system will provide up to 23 points toward LEED CI certification and help the USGBC achieve some very aggressive energy usage goals.

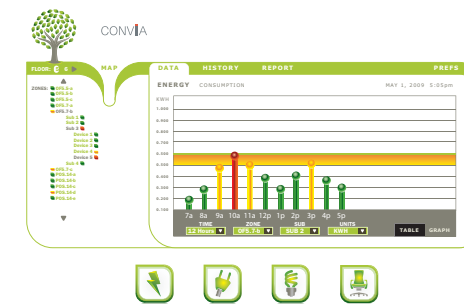


Photographer: Eric Laignel



## HOW THE SYSTEM WORKS.

- 1 First, install it.**  
The system's modular design and connectivity make installation far simpler than using conventional wiring. It's 100% reusable, so it's 100% dumpster-proof.
- 2 Next, program it.**  
The Convia-enabled Wiremold system allows you to set levels for lighting, plug load, and thermostats.
- 3 Then, use it.**  
The system can be set to cater to the needs of anyone within the space, using traditional switches or scene selectors. This provides both facility managers and users with myriad choices on how they wish to interact with the system.
- 4 Finally, measure it.**  
Facility managers can measure how a space is performing by conducting energy performance reviews that measure energy savings. The kinds of technologies the occupants of a space are using as well as how a space is being utilized. Based on these reports, the system can be adapted, reconfigured, and optimized to meet the needs of the whole facility.



Use the Convia Global Gateway Reporting Tool to monitor energy use throughout your entire space, by zone, floor, or individual workstation. In real time.

### Retrofits and Renovations

The Convia-enabled Wiremold system is not just for new construction. It can be installed as a retrofit or renovation application at any point in a building's life cycle. It's ideal for both raised floor and drop-ceiling installations. Because the system takes advantage of Walkerflex flexible wiring, it can be used in a range of ways — with raised floor boxes, poke-thru devices, service poles, surface raceways, wireways, and convenience outlets. Its plug-and-play design provides flexibility and labor savings over traditional pipe and box wiring methods.

## A RANGE OF APPLICATIONS

There's virtually no limit to how the system can be configured and applied to a range of applications. Here are a few typical applications.



## CASE STUDY: ARIZONA STATE UNIVERSITY

ASU uses the solution to create a more flexible environment for its entrepreneurial ventures program. Thanks to unparalleled flexibility, the system can accommodate changes with very little effort. ASU also has plans to integrate Convia-enabled Wiremold into SkySong, a technology-driven international community of entrepreneurs, artists, educators, and researchers brought together to fuel global economic development.

### Education

Schools and universities require flexibility due to the number of "multipurpose" spaces and heavy technology usage on a given campus. Implementing a Convia-enabled Wiremold system means, for example, that a large event room can accommodate a number of meeting rooms in a matter of moments. Power access can be provided to all students. Teaching staff can use the tools and technologies they favor most. Schools and universities can also benefit greatly from the energy saving attributes of the system — daylight harvesting, occupancy sensors, and control of energy use by zone.

### Retail

Study after study shows that lighting impacts a customer's mood and likelihood to purchase. Retail stores are also under constant pressure to reduce costs. All of which makes retail the ideal environment for Convia-enabled Wiremold. Dramatic changes in environment can be made in minutes. Lighting can be reprogrammed, occupancy sensors relocated, and cash registers or kiosks moved to optimize traffic.

### Commercial Office

The system solves the long-standing problem of energy usage that goes unmonitored and unmanaged. Tying everything together with Wiremold and Convia means that operations and maintenance are simplified, administrators can communicate with all of a building's systems, and, for the first time, monitoring energy use and making substantive, cost-saving changes is easy. Facilities managers can shape the office environment in dramatic ways using occupancy sensors, thermostat controls, and specialized lighting to quickly adapt to people and costs within a given space. And as the use of a space changes, the system can adapt with it.

### Healthcare

Studies indicate the design of a healthcare facility has a significant positive impact on patient satisfaction, staff morale, medical error rates, infection rates, staff turnover, patient length-of-stay, and, ultimately, financial performance. Lighting and temperature are consistently listed as two of a handful of environmental factors that contribute to the overall healthcare environment. The system facilitates comfort, efficiency, and cost savings.



**With the Convia-enabled Wiremold system, one can save energy at the workstation level. The above work space is equipped with both light and occupancy sensors.**

# CONVIA-ENABLED WIREMOLD SOLUTIONS



## Evolution™ Series Recessed Poke-Thru Devices

Poke-thru devices with maximum capacity, recessed power, communications, and A/V beneath floor level, providing optimum protection and device longevity.



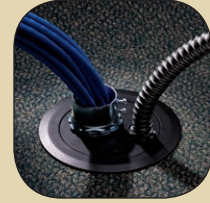
## Raised Floor Boxes

An assortment of floor boxes with a range of capacities to be used with raised floor systems.



## Flush Poke-Thru Devices

A wide range of flush poke-thru devices, offering activations for power, communications, and A/V.



## Furniture Feed Poke-Thru Devices

Poke-thru devices designed to feed power and communications to modular furniture systems in an open space, above grade floor environment.



## Vista™ Architectural Columns

Vista columns provide access to A/V, power, and data where you need it, without compromising the aesthetics of your interior décor.



## Tele-Power Poles

Tele-Power Poles drop power and communications from above — neatly and simply.

[www.wiremold.com/convia](http://www.wiremold.com/convia)

**Wiremold/Legrand**  
60 Woodlawn Street  
West Hartford, CT 06110  
Telephone: 1-800-621-0049  
Fax: 1-860-232-2062

**In Canada**  
570 Applewood Crescent  
Vaughan, Ontario L4K 4B4  
Telephone: 1-800-723-5175  
Fax: 1-905-760-1733

© 2009 Legrand. All Rights Reserved. ED1603R1 709

designed to be better.