




**Convia**<sup>™</sup>  
A Herman Miller Company

Convia's next generation infrastructure  
invites you to  
**go reconfigure.**<sup>™</sup>



Convia is programmable electrical infrastructure that rethinks the way power and data are delivered throughout a building. Convia eliminates the barriers created by traditional electric and creates buildings that are smarter, more efficient and that can accommodate massive amounts of change.

Traditional electrical infrastructure delivers little or no flexibility because it is hardwired. Changing associations between lights and switches means rewiring the entire space — something that can be expensive and time consuming. Additionally, electrical switches in a traditional environment have constraints on the number of devices they can control due to the voltage running through the switch. These constraints dramatically limit the type of energy saving strategies that can be implemented. Power delivery is also fixed in a traditional environment. It is determined up-front in the design process and once construction is complete, there is little or no flexibility in moving power.

## Enter Convia.

Convia is a true breakthrough in building infrastructure that represents an entirely new and improved approach to electrical delivery. Imagine being able to rewire a floor at the touch of a button. Or redesigning a whole space and never throwing a switch, wire or bracket into a dumpster. Or moving power anywhere you need it with plug and play simplicity. These are just some of the advantages Convia has to offer.

What's more, Convia is remarkably easy to use and install. The system offers plug and play assembly and modular power delivery components. The system intelligence is delivered via Smart Connectors, which network together with the same plug and play ease. Once networked, programming Smart Connectors is easy. All it takes is a two button Wand and you have complete control.

With Convia, buildings can be more flexible than ever before. Convia's next generation infrastructure invites developers, facility managers, electrical contractors, realtors, architects, interior designers, and tenants to go reconfigure.



## Convia puts the power of virtual rewiring in the palm of your hand

### Convia™ vs. Traditional Electric

Convia eliminates the hardwiring of electrical devices to switches

Traditional electric is composed of hardwired circuits that control fixtures on the system

A switch no longer delivers power on the Convia network — it acts as a fully programmable control unit

Switches and sensors are hardwired

Switches have limited capacity

A switch can control an infinite number of devices

Rewiring is virtual and on-demand

Changes to the system require rewiring, performed by an electrician

Wherever there is a power outlet, there is also a high speed data connection

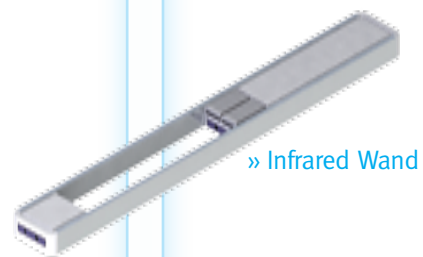
Power can be delivered virtually anywhere it is needed



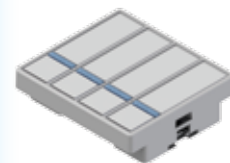
# Convia™ Simplicity

## Point & Click Control

An infrared Wand allows users to easily modify their environment with point and click programmability. You can group and ungroup devices on the system with the touch of a button. The additional consideration of the Scene Controller saves personalized settings and combinations of lighting and other devices, recalling them with one simple touch. Convia simplifies the whole building process — reducing labor and scheduling headaches, as well as easily accommodating and reducing change orders during construction.



» Infrared Wand



» Scene Controller

### Realtors: Put the Dark Days Behind You

The possibilities inherent in being able to turn a department store into a law office, a dry cleaner into a coffee bar, or a foundry into a warehouse present a big benefit to you — a much broader range of potential buyers. The more possibilities there are for a space, the less time that space will spend on the market.

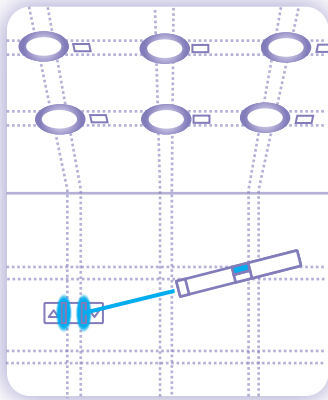
Users

It's a given: change happens. And in today's dynamic business environment some facility managers could spend all day, every day, responding to churn. Convia can help. Convia allows space to be utilized for its maximum benefit at all times, which means a business can spend more time up and running and less time responding to change.

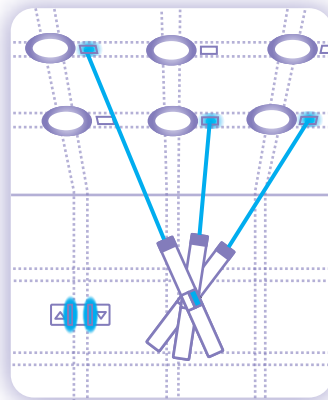
# Convia™ Flexibility

## Plug & Play

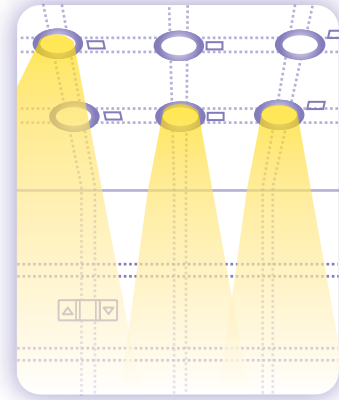
In today's fast-paced marketplace, companies are constantly changing — sizing up and down to meet the market's requirements. Renovating space can be time consuming and expensive. But with Convia, electrical reconfigurations that could take days or even weeks to complete in the old hardwiring model can be performed within minutes and at no additional cost. By eliminating the constraints of traditional electrical systems and their hardwiring, Convia allows for quick, easy and dramatic changes in space.



1 Aim the Wand at the wall switch. Press the link button on the Wand.



2 Aim the Wand at the devices you want to group. Press the link button on the Wand.



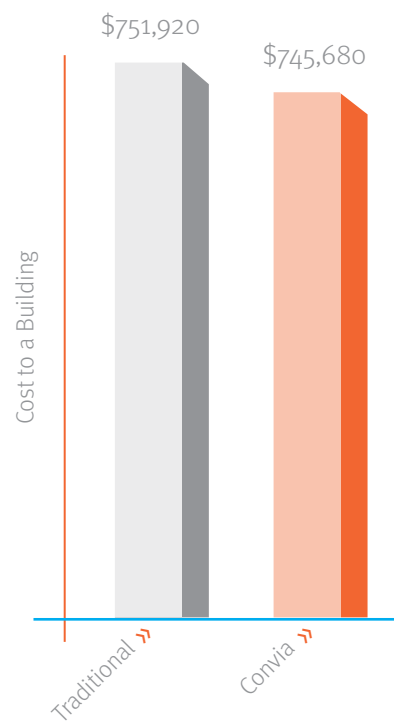
3 Manually press the wall switch. The selected devices turn on or off instantly.

# Convia™ Economy



Installing at costs that are at or below traditional electrical systems, Convia minimizes operating costs by reducing energy use. Convia can also help maximize building occupancy with easy reconfiguration that reduces tenant churn. With 100% reusable components and unlimited reconfigurations, Convia dramatically lowers material and labor costs. Convia may even depreciate faster — in seven years, rather than thirty for a traditional infrastructure.

Total Material, Labor, and Electric Delivery to a Building



## Contractors: Rewire No Longer Means Redo

Convia's quick and simple installation means less time spent getting a facility up and running.

It provides greater flexibility throughout construction, with plug and play responsiveness to the inevitable challenges that arise during the process. Because every Convia component is modular and programmable, it's simple to make changes on the fly — without the headaches of tearing down and starting over.

## Architects and Designers: LEED Tall Buildings with a Single Wand

Convia's modular components are a key part of a design solution that creates endless possibilities for configuration, as well as an innovative reuse potential that keeps the components in play and out of the dumpster. With the Convia system, spatial configurations are limited only by the imagination.

Users

# Convia™ Sustainability

*If Convia were  
in just 2 percent  
of commercial buildings  
nationwide,  
its lighting control could  
reduce greenhouse gas  
emissions by  
8.5 million metric tons.  
That's equal to the emissions  
of 6 million cars.*

By utilizing 100% reusable components, Convia eliminates the substantial landfill material created by traditional electrical. Convia allows companies to implement more sophisticated energy savings strategies (at far less cost than traditional electric). These energy savings mean Convia can contribute LEED points to a building. Furthermore, up to half of the energy conservation benefits available today are never realized because traditional electrical systems cannot accommodate the reconfiguration of energy-efficiency components. Convia creates the opportunity to recapture these lost savings. Utilizing hierarchical switching, zoning control and load shedding, massive amounts of change can be accommodated at no incremental cost.

**Tenants: Power to the Person**

The ability to easily reconfigure spaces to serve multiple purposes and respond to almost any environmental issue — churn, traffic, display, presentation, etc. — is put right into the hands of those most immediately impacted.

# Convia™ Control

The system accommodates unlimited change to optimize:

## Personal Environment Control

- Occupancy sensor controls:
  - Task lights
- Individual ambient lights
- VAV boxes, diffusers
- Office plug loads

## Zone Level Control

- Daylighting controls:
  - Dimming
  - Switching
- Strategic daylight switching
- Dual-level switching
- Manual dimming
- Occupancy sensor control (groups)

## Building Energy Management Control

- Adaptation compensation
- Load shedding
- Central EMS sweep after hours

## Give & Take

Offering multiple levels of control to users is inherent to Convia's network-based architecture. Whether you want to give individual employees complete control of their environments or implement building wide control strategies to save energy, Convia will support your needs. Also inherent to Convia's infrastructure is the functionality of expensive lighting control systems. But with Convia, these systems can function without the cost and with infinitely more flexibility. If you're not sure which level of control to provide to users in your space, don't worry. Because change is so easy with Convia, you can implement countless strategies until you find the one right for you.

**Developers: More for Your Moxie**

While Convia installs at costs comparable to traditional construction, it makes buildings infinitely more valuable.

Convia's flexibility provides the opportunity for tenants to reconfigure their space easily, removing the need to move to another location. When a client does move, Convia's easy adaptability translates into much less down time between occupancies. All of its modular components can be reused and reconfigured for subsequent tenants.

And Convia's energy efficiency can help realize energy tax credits.

### The Open Grid System

» With plug and play power distributed every ten inches along the grid, this system delivers the ultimate in flexibility. All devices, which can easily be hung from the grid, are fully programmable, allowing you to perform quick virtual rewires of your space.

### » The Modular System

When the design calls for a closed ceiling and/or a raised floor, Convia responds with a fully programmable, plenum rated system. Power is delivered throughout the space by virtue of Convia Smart Connectors and flexible whips that can be moved in any direction.

### » The Hybrid System

The Convia Modular and Open Grid Systems can be integrated to provide complete control of all electric in a building. With the structural framework of the Open Grid System and the flexible conduit of the Modular System, your design and control possibilities are endless.

## A Power Entry Box

Connects to standard building power panel to power Smartstrut.

## B Smartstrut

Delivers plug and play power every 10 in. and has structural integrity to support 1,200 lbs every 10 ft. Floor level power is accessed via power taps or poles.

## C Smart Connectors

Deliver up to 15 Amps of power to electrical devices that can be daisy-chained to create power/lighting zones. These zones can then be programmed to associate with any switch, motion detector or timer on the system.

## D Perforated Structural Channel (Unistrut®)

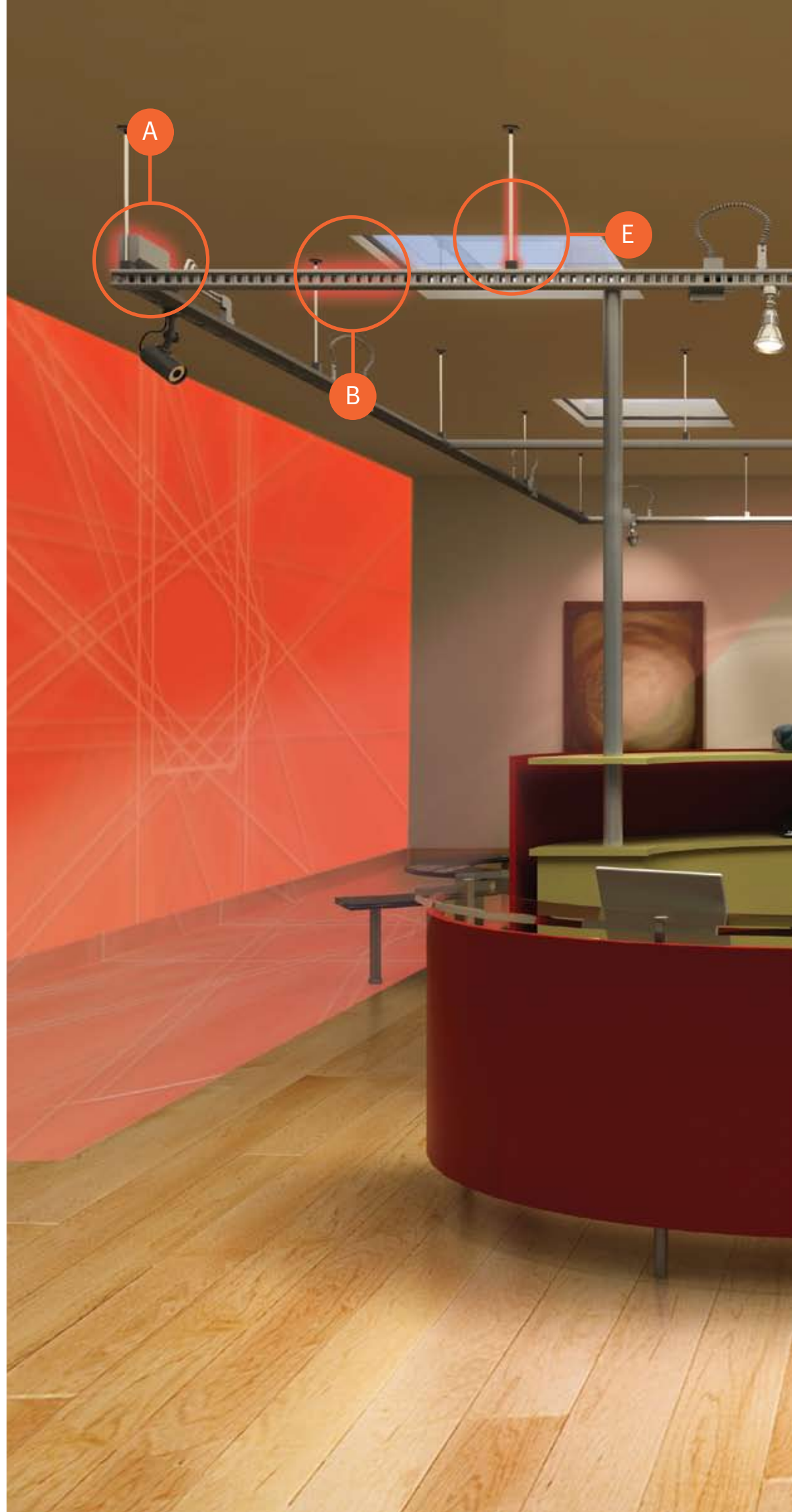
Attaches easily to Smartstrut to hang electrical devices or other applications.

## E Suspension Bracket Assembly

Used with threaded rod to attach Smartstrut to building structure.

## F Scene Controller

Reprogrammable lighting control device that can store up to four scenes at a time. Attaches to any Smart Connector via Category 5E Communications Cable.





C

D

F

# Open Grid System

**A** Power Distribution Module

Connects to power panel and delivers up to 18 circuits of power to a space.

**B** ConviaNET Hub

Establishes communication network between Smart Connectors and switches, motion detectors or timers.

**C** Smart Connectors

Deliver up to 15 Amps of power to electrical devices that can be daisy-chained to create power/lighting zones. These zones can then be programmed to associate with any switch, motion detector or timer on the system.

**D** Flexible Conduit

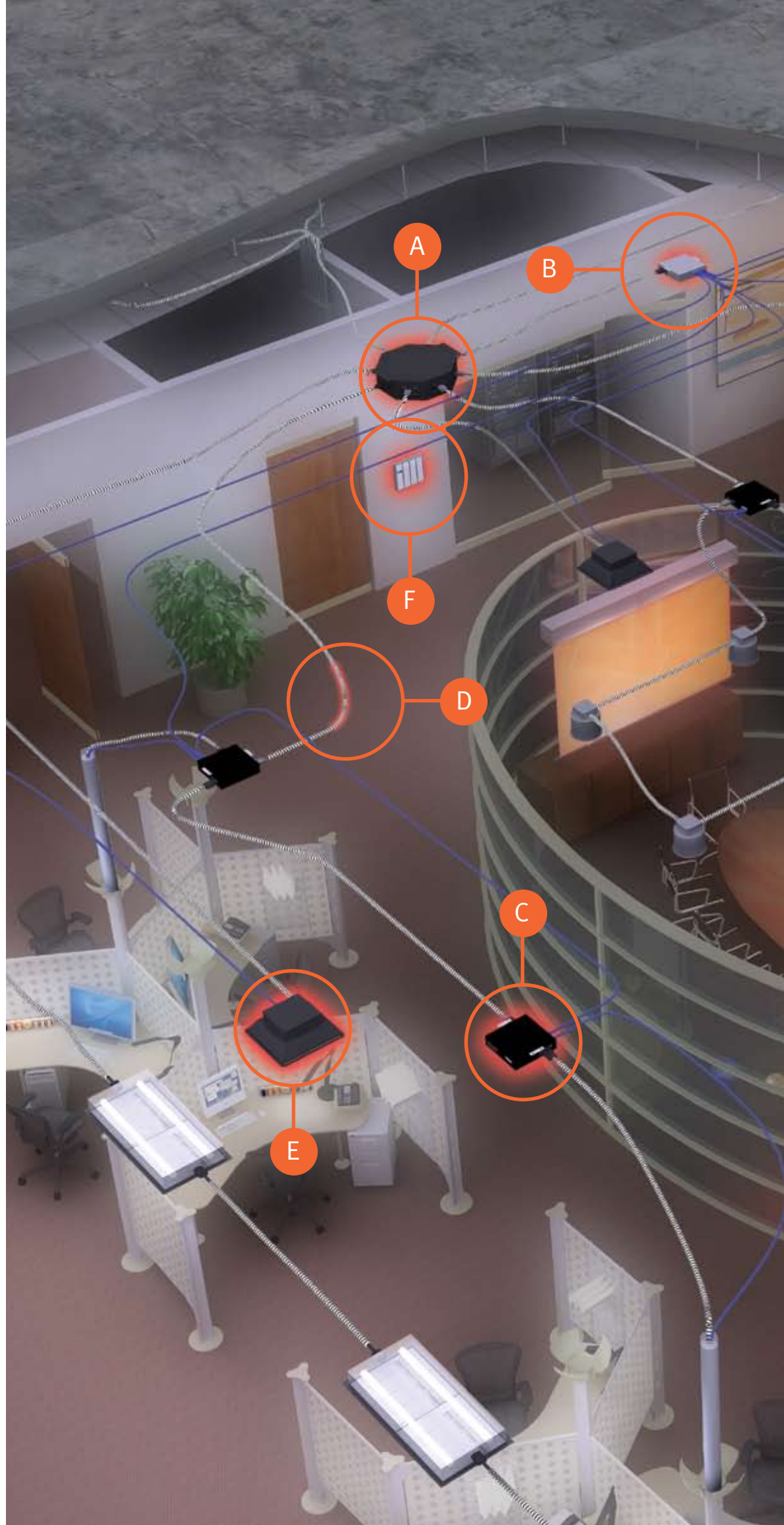
Allows for timely installation of connections between Power Distribution Module and system's Smart Connectors.

**E** York® Diffuser

Convia was built into York Air Fixture Units to deliver a flexible HVAC system that allows for reprogramming of thermostats and modular diffusers.

**F** Scene Controller

Reprogrammable lighting control device can store up to four scenes at a time. Attaches to any Smart Connector via Category 5E Communications Cable.





# Modular System

*“With Convia,  
we have an extremely fluid  
mix space that is easy to transform  
from day to day if we desire that.”*

— Crit Stuart, Associate Director, Georgia Tech Library

*“It really helps make  
older buildings competitive with  
newer buildings.”*

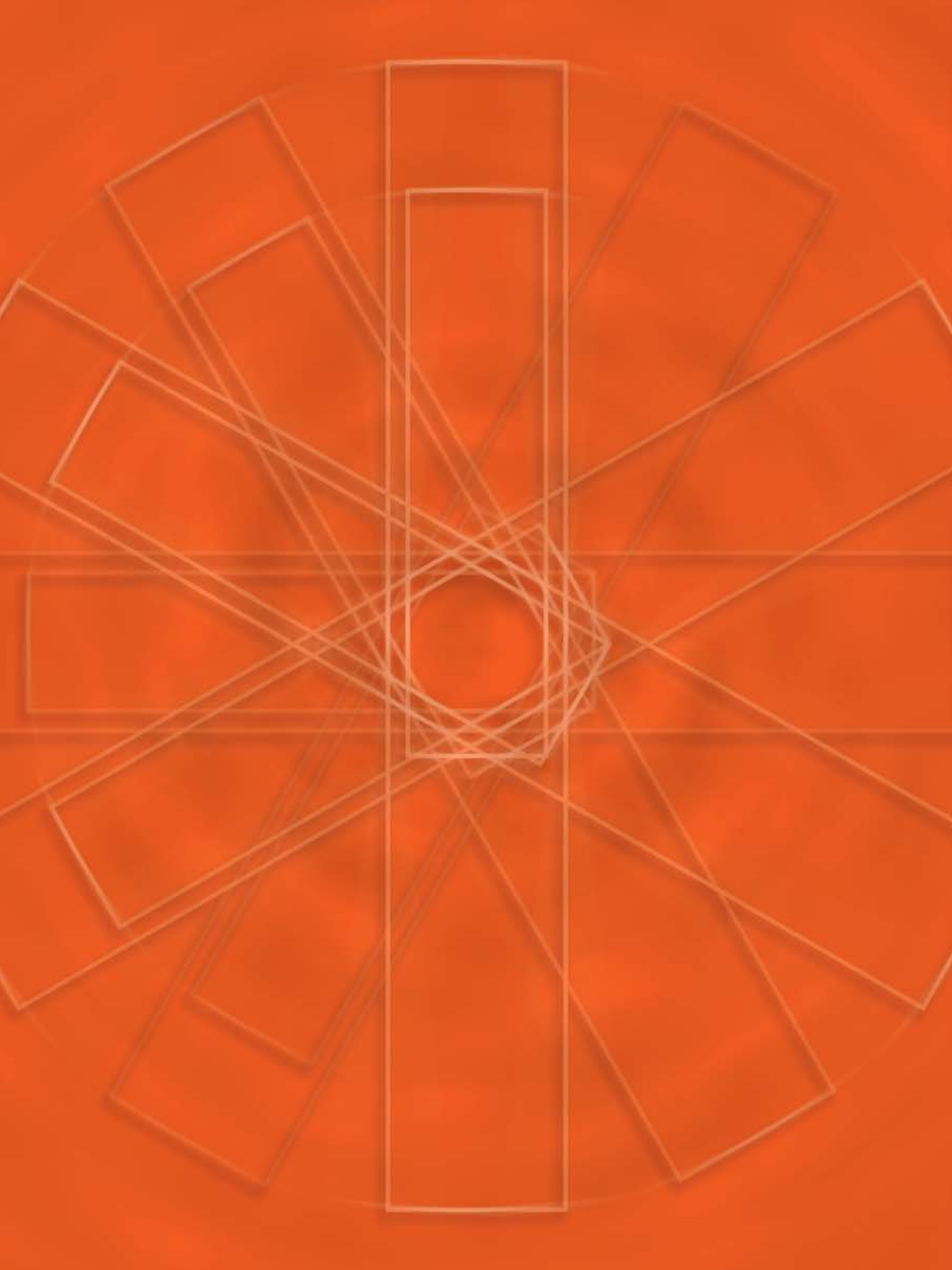
— Roy Abernathy, CEO, Jova Daniels Busby Architecture and Design

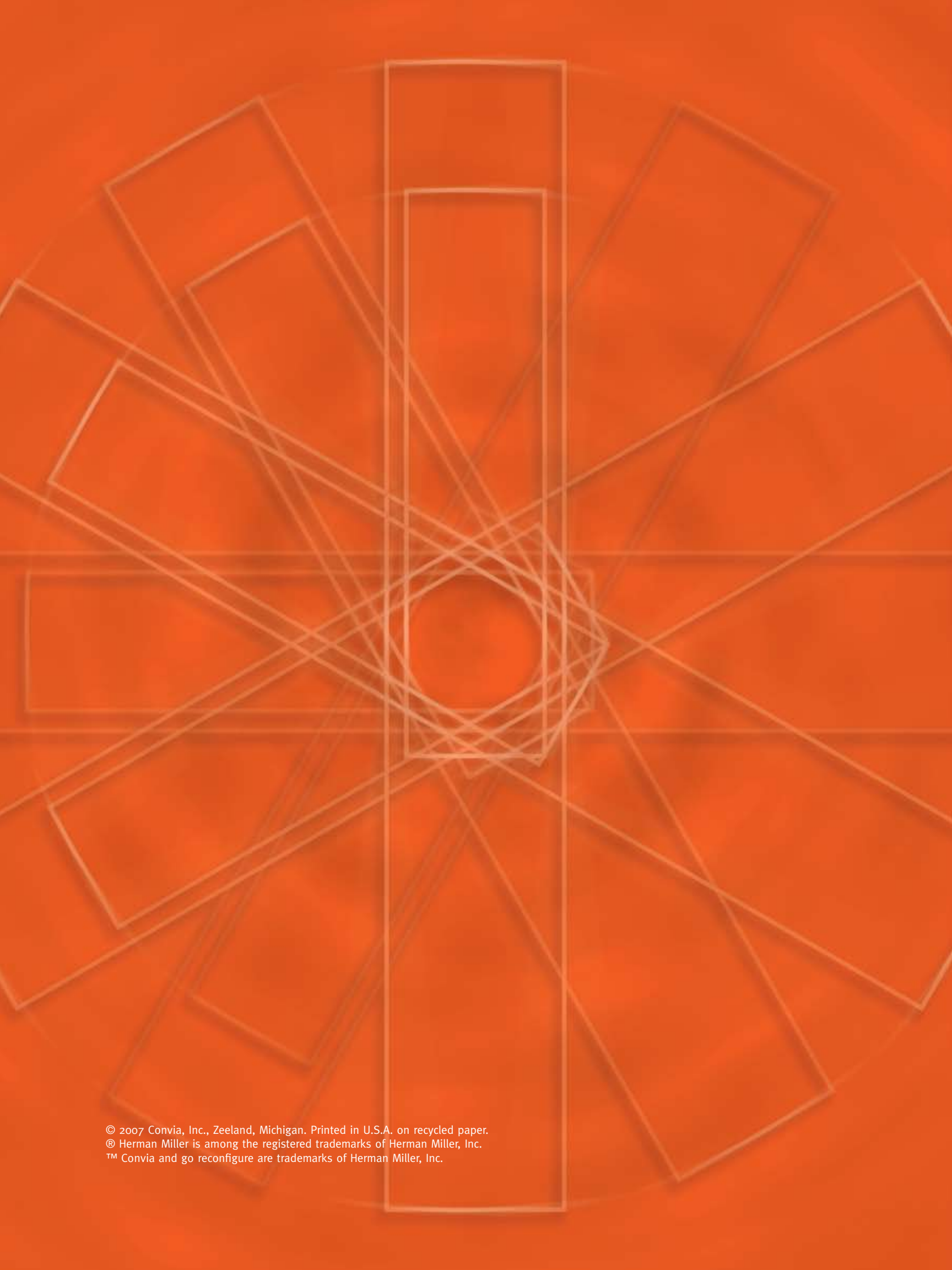
*“With Convia we can change lighting,  
power, data, and other systems very easily.”*

— Harry Gordon, Chairman, Burt Hill

*“You never have to throw  
parts of it away.  
You are interchanging components,  
but it will never end up  
in a dumpster.”*

— Gregory Beck, Principal, Architecture + Experience Design





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