



Products are an integral part of any trade publication. As such, **retrofit** is celebrating the 25 products that received the most reader inquiries from our November-December 2019 through September-October 2020 issues.

“We consider **retrofit** a source book for our readers to find innovative solutions and products for their own retrofit projects,” says Publisher John Riester. “The Top 25 Products special in our January-February issue is a great resource to our readers, showcasing

the products readers’ peers thought were most interesting within the pages of **retrofit**.”

In addition, at the prompting of our editorial advisory board, we asked the manufacturers to share case studies about how their top products solved a problem or achieved the desired result within a retrofit. Although many manufacturers’ products are fairly new, a few manufacturers were able to share actual retrofit projects in which their top products were specified.

Enjoy **retrofit**’s eighth-annual Top 25 Products!

1 HOLISTIC ARCHITECTURAL LIGHTING CONTROL

Lutron Electronics has introduced Athena, a flexible, simple, all-in-one solution that combines an advanced light source with intelligent shades and connected apps to deliver a holistic light experience for retrofits and new construction. Any light source, any bulb type, any fixture can be controlled from a single system. Plus, with native Ketra integration, Athena enables you to transform spaces via wireless, easy-to-retrofit Ketra light sources. Wireless controls, sensors, and fixtures install easily and provide control and flexibility at the individual fixture. A new right-sized processor can be tucked away and works for spaces and budgets small and large. In addition, the iOS app allows lighting designers and facility managers to make lighting changes in real time.

www.lutron.com/athena



PHOTO: CONVENE VIA LUTRON ELECTRONICS
The Convene Space in downtown Los Angeles as a conference room.



PHOTO: LUTRON ELECTRONICS
The retrofitted Convene space with the Lutron Athena lighting and shading system.

Athena is suitable for retrofit applications, given its wireless nature and its minimal hardware requirements. For example, at Convene in downtown Los Angeles, Lutron executed its own retrofit project to create an Athena space with minimal renovation required. By combining wireless Ketra light sources, Lutron shades and draperies, as well as the Athena processor, a 500-square-foot conference room was retrofitted to change between a lounge, an art gallery, a meeting place or training room, depending upon which light and shade scenes are selected. Athena’s ability to transform space simply with light and shade changes delivers the ultimate flexibility to create multipurpose environments.

2 RESTORE SERVICE WITHOUT REMOVING VALVES

Belimo Americas has released its optimized UBLK zone valve retrofit solutions. The UBLK retrofit kits are replacement solutions for existing failed actuators on TACO Zone Sentry zone valves, Schneider Electric VBB ball valves or TAC Erie VM zone valves with the Belimo compact CQ actuators. This series of replacement solutions restores the service without removing the valve, saving on installation and downtime while increasing performance and efficiency. The solution is backed with a five-year warranty.

www.belimo.com



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3 ENERGY CORE VENTILATOR OFFERS PERFORMANCE IN SMALL FOOTPRINT

Model ECV-40 is the latest addition to Greenheck's energy core ventilator line. ECV-40's design features a dual-fan arrangement consisting of direct drive mixed-flow plenum fans with variable frequency drives (VFDs), replacing the forward-curved fan typically found in energy core ventilators. The mixed-flow fan, a hybrid between an axial propeller and centrifugal fan, reduces brake horsepower requirements by up to 50 percent. The VFDs facilitate ease of balancing at startup. Sound power levels are reduced and no belts make maintenance easy. ECV-40 is available with AHRI Certified fiber or polymer membrane cores with an airflow capacity up to 5,000 cfm. Optimized to

ensure the best unit performance in the smallest footprint available, ECV-40 features double wall construction and optional hinged access with additional options for frost/economizer and standalone microprocessor controls.

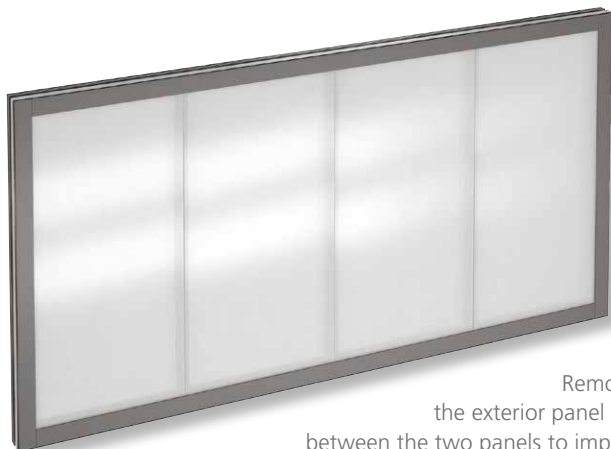
www.greenheck.com

4 SINGLE-MODULE UNITS RELEASED IN LARGER CAPACITIES

Mitsubishi Electric Trane HVAC US LLC has expanded its lineup of CITY MULTI N-Generation single-module outdoor units for R2-Series and Y-Series. The newest single-module units improve energy efficiency, have a smaller footprint and offer more personalized comfort control. The units are available in 16-, 18- and 20-ton capacities. The larger-capacity options limit the need for twinning, allowing for single-module connections and smaller footprints where space is a premium concern. The expanded lineup also allows for twinned connection of R2-Series units up to 36 tons. Available in the N-Generation High Efficiency tier, the units incorporate flash injection technology to heat continuously through defrost and may deliver 78 percent of rated heating capacity in ambient temperatures as cold as -13 F.



www.mitsubishipro.com



5 TRANSLUCENT PANELS NOW AVAILABLE IN WINDOW SIZES

Kingspan Light + Air North America has scaled the size of its two-panel UniQuad system to create the more modular and versatile UniQuad Translucent Windows for smaller envelope openings. Available in heights up to 6 feet, UniQuad Translucent Windows can be built in limitless lengths. With the ability to specify custom window sizes and colors, the two-panel system allows buildings to coordinate with corporate or campus colors. UniQuad Translucent Windows feature the same two-panel composition with

Removeable Skin Technology as the UniQuad system, allowing for the removal of the exterior panel while the interior panel remains in place. Additional insulation can be added between the two panels to improve thermal performance and further increase efficiency.

www.kingspanlightandair.com



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6 NATURAL STONE PRODUCTS ARE EASY TO INSTALL

About one year ago, Polycor launched its Hardscapes & Masonry product line, formed through mergers with Swenson Granite Works, Indiana Limestone Co. and Elliott Stone. This line brings the aesthetics and durability of 100 percent natural stone to the hardscapes market with easy-to-install products, including pavers, pool coping, veneers, steps and treads, walls and caps, edging and outdoor living elements. Suitable for landscaping and outdoor applications that withstand freeze-thaw cycles in northern climates and the scorching heat of southern summers, natural stone products resist cracking, flaking and discoloration. Polycor H&M products are sourced responsibly and are naturally sustainable.

hardscapes.polycor.com

7 THIN STONE PRODUCTS NOW CAN BE SPECIFIED IN SAWN FINISH

Arriscraft has released its Sawn finish for its Thin Building Stone products, including Coastal, Midtown and Stack. The Sawn finish is a smooth alternative to the company's traditional split-face finish. Arriscraft uses only natural materials (plus color pigments) and replicates how stone is created in the earth. This proprietary process creates stone with the natural aesthetics and durability of quarried stone, plus the convenience of standard installation and unlimited supply. All Arriscraft Thin Building Stone products are suited for indoor and outdoor applications in residential and commercial settings.

www.arriscraft.com



8 SLIDING DOOR SAVES SPACE, BLOCKS SOUND

ASSA ABLOY has launched the RITE Slide, an integrated opening assembly where all individual door components are included to create a complete door system. RITE Slide ensures privacy and quiet operation with sound seals, automatic door bottom, and soft-close operation to minimize slamming and wear and tear on the door and hardware. Offering acoustically rated and non-acoustic options, the sliding door has a perimeter seal that blocks out light and sound and operational door hardware for passage or privacy with locking applications. The hardware is available with Micro-

Shield, an inorganic hardware finish coating that continuously suppresses the growth of bacteria, algae, fungus, mold and mildew. The acoustically rated series has been third-party tested.

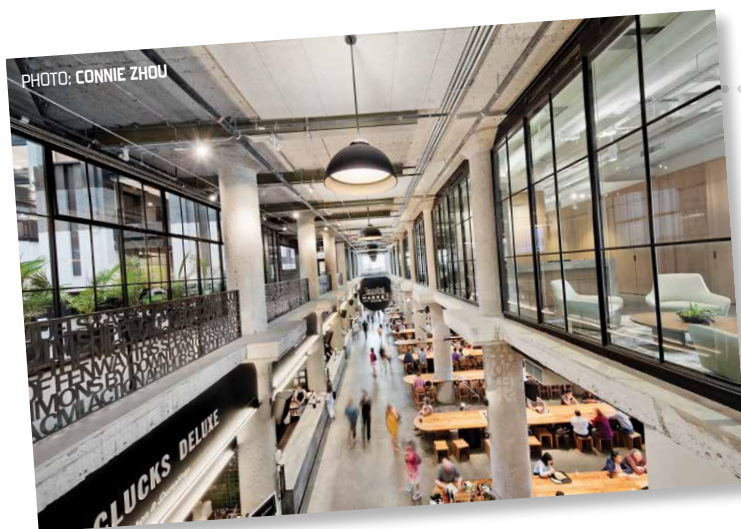
www.riteslide.com



9 SUBWAY TILES FEATURE HANDMADE APPEARANCE

Ege Seramik's Samos and Mirandela Lines add texture and a handmade appearance to 4- by 12-inch porcelain subway tiles. The Mirandela Line is available in 11 modern colors with a glossy finish and can be used as an accent piece or to cover large areas. Colors include Anthracite, Black, Burgundy, Coral, Cream, Deep Blue, Lilac, Olive, Silver, Turquoise and White. The Samos line is available in five neutral colors and includes deco pieces that add a unique aura to any installation.

www.egeseramik-usa.com



10 HISTORIC REPLICA STEEL WINDOWS AND DOORS OFFER ADVANCED THERMAL PERFORMANCE

Hope's Windows Inc. announces the expansion of its One55 Series to include doors and operable windows with Thermal Evolution technology. Hope's One55 Series steel windows and doors replicate historic arrow-shaped steel window profiles and sightlines. Thermal Evolution technology features a thermal isolator that is precision-machined to nest within the solid steel frame profiles and is structurally bonded to the frames, creating

a strong composite construction that delivers thermal efficiency and condensation resistance. Hope's solid hot-rolled steel profiles remain completely intact for the full depth of the window, making them stronger than traditional thermally broken window and door systems.

hopeswindows.com

11 KITS EASE INSTALLATION OF ELECTRIC HEATING IN FLOORS

Danfoss LX Kits for floor warming are designed to make it easier to install electric heating in new or renovated flooring. The kits are a complete solution, including a Danfoss LX floor warming mat, LX205T Touch Thermostat and Little Buzzer continuity alarm. Suitable for installation under tile, stone, marble, and laminate floors in residential and commercial applications, LX floor warming mats feature a pre-applied heating cable and dual-adhesive backing that requires no fastening, reducing installation time by up to 70 percent. LX mats, which are backed by a 20-year warranty, range in size from 10 to 145 square feet (coverage) and are available in 120V and 240V formats.

bit.ly/36ujzKe





12 COMMERCIAL CEILING FAN USES MINIMAL ENERGY

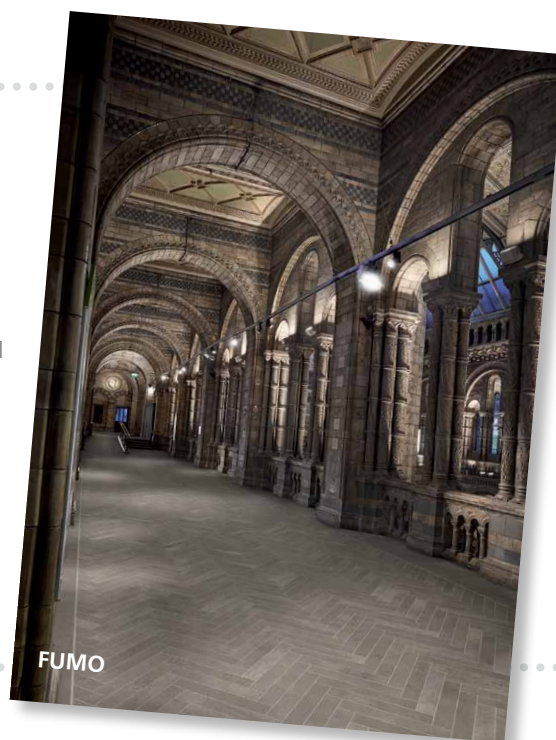
Hunter Industrial Fans has released its commercial fan line known as Trak. The Trak ceiling fan is designed and engineered with a commercial-grade motor and extruded aluminum blades for a long lifespan and optimal airflow. Available in four sizes—60-, 72-, 84- and 96-inch-diameter models—the Trak fan offers three finishes and an LED light option. The fan's two lowest-speed settings, which produce more than enough air to keep a consumer feeling cool, utilize less energy than a cell-phone charger.

www.hunterfan.com/industrial

13 GLUEDOWN LVT NOW AVAILABLE IN STONE LOOKS

Karndean Designflooring has introduced stone looks—Iberian-inspired Tiles and Limestone—to its 20-mil Opus gluedown luxury vinyl tile (LVT) flooring range. The Iberian-inspired Tiles' patterns combine geometric forms in a non-uniform patchwork arrangement that incorporates curves and crests influenced by medieval Spain. Within this collection, Casablanca is a monochromatic palette of grays while Marrakesh possesses a mix of chalky, terra color tones. Meanwhile, Limestone forms what can be interpreted as a stained concrete visual. Limestone is available in two colors: Fumo has smoky brown and gray tones for a concrete-like appearance while Lutum features darker, charcoal tones that allow pearlescent veining to show through.

www.karndean.com/opus2020



14 GLASS-FACED GYPSUM PANELS ARE SUITABLE FOR MOIST INTERIOR LOCATIONS

Whether retrofitting an existing building or starting from scratch, PABCO GLASS Interior Gypsum Panels are suitable for commercial and residential projects. Scoring 10 for mold resistance—the highest rating on the ASTM D3273 test—the product is for areas where moisture is a concern, such as bathrooms, kitchens, basements and laundry rooms. Its mold and water-resistant gypsum core encased in a glass fiber mat provides increased resistance to moisture and greater structural stability than paper-faced gypsum board. The product withstands exposure to the elements for up to a year without affecting product performance so can be installed prior to full building enclosure—appropriate when pre-rock construction is required.

The product is available in 5/8-inch Type X for fire-rated commercial applications and 1/2-inch Regular for non-fire-rated residential projects.

www.pabco gypsum.com/interiorglass



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*L on LIBERTY | Fillat +Architecture
Photo: Sam Oberter Photography*



15 MOUNT ROOFTOP UTILITIES TO METAL ROOFING WITHOUT DAMAGING THE ROOF

S-5!’s universal GripperFix system makes mounting almost anything on standing and exposed-fastener metal roof profiles simple and easy. Roof-mounted utilities, such as split-system condensing units, duct supports, communication equipment and service walkways, can support a building envelope or compromise it. S-5!’s GripperFix technology ensures a secure and dependable attachment solution that preserves the integrity of the roof and avoids destructive corrosion. The system is quick and simple to install, lasts the life of the roof, maintains roof warranties and is less expensive than other mounting methods.

s-5.com/products/utility-solutions/hvacrooftop/gripperfix-us

S-5! authorized distributor LMCurbs provided 20 sets of the GripperFix CF-Tabs and S-5-U Mini clamps for its client’s 20 home-goods wholesale supplier locations. Each site has two commercial air-conditioning condenser units mounted on retrofitted standing-seam metal roofs.

David Hotard, the client’s branch manager, notes: “This was the first time I used the S-5! GripperFix mounting system. One of our managers searched for a solution and found it. It is very easy to attach. I had been getting roofers to come in and build brackets. With the GripperFix, I am able to secure the condenser units to the standing-seam metal roofs without the need for a roofer onsite.”

Clint Funderburk of LMCurbs adds his client immediately drove over from Louisiana to pick up the product. “The quick response, quick availability and great tech support provided by S-5! made it an even better experience for the client,” Funderburk says.



16 DECORATIVE COMPOSITE PANELS AVAILABLE IN DIGITAL DESIGNS

Uniboard, a North American manufacturer of decorative composite wood panels (thermally fused laminate), has introduced Studio, a collection of 20 digital designs. Inspired by the arts and creative expression, the panels are suitable for large-scale projects. Studio is offered in the Vellum finish on a particleboard or MDF core. The new colors also are available on high-pressure laminate.

www.uniboard.com



17 BEHAVIORAL HEALTH LIGHTING COLLECTION IS HOME-LIKE

Visa Lighting has introduced six models to its growing behavioral health collection, which includes fixtures with safe and therapeutic designs. The company’s new Symmetry models are tested to IK10+ standards, which means they can withstand more than 100 joules of mechanical impact. They are constructed with an additional 3/16-inch polycarbonate lens, which is fastened behind the minimal frame with tamper-resistant screws. Each model can be installed flush to a drywall/sheetrock ceiling and recessed 5 to 7 inches. In addition, Visa Lighting’s engineers have crafted luminaires that look more home-like and minimalist. For example, the tamper-resistant screws that fasten the frame and lenses to the ceiling structure are barely visible and painted with the same finish as the frame.

www.visalighting.com

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Contact us for a threat level assessment
www.defenselite.com • info@defenselite.com • 888.689.5502



18 RETROFIT GLAZING SYSTEM PROTECTS EXISTING STOREFRONT

Designed to keep intruders out and prevent smash-and-grab burglary, DefenseLite is a patented security glazing system manufactured by Impact Security LLC. This retrofit security shield is designed to mount onto the existing glazing to transform windows and doors into impenetrable openings that are 250 times stronger than glass alone. DefenseLite is not an applied security film but rather a heavy-gauge architectural-grade polycarbonate and extruded framing system. The surface of the polycarbonate is UV-coated to protect against scratching, graffiti and other factors that may result in the degradation of the material. The bullet-resistant version of DefenseLite, BulletShield, is independently tested to provide UL 752 ballistic ratings. BulletShield can be installed over existing glass from the interior or exterior.

www.defenselite.com



19 HIGH BAY FIXTURE IS LIGHTWEIGHT, IMPACT-RESISTANT

The SYLVANIA ValueLED UFO High Bay is a DLC Premium LED fixture that has a lightweight, impact-resistant design and offers up to 78 percent energy savings compared to traditional luminaires. With various wattage, color temperature, mounting, optics and sensor options, it provides the flexibility to meet the specific needs of warehouses, gymnasiums and other industrial applications.

www.sylvania.com

20 METAL PANELS OFFER WOOD APPEARANCE

When the performance of metal is required but the look of wood is desired, Petersen's 16 wood grain colors are available on PAC-CLAD steel and aluminum wall panels. The 70 percent PVDF patterns are nearly indistinguishable from actual wood, and applications are unlimited. The wood grain standard finishes include Beechwood, Charwood, Cherrywood Oak, Copper, Dark Oak, Golden Bamboo, Golden Maple, Light Oak, Long Grain Cherry, Long Grain Oak, Medium Oak, Red Oak, Siamese Bamboo, Sugar Maple, Sycamore and Whitewash Oak. Three wood grain patterns—Beechwood, Copper and Golden Bamboo—will be stocked in 24-gauge steel while the 13 other colors will be available on 24- and 22-gauge steel, plus .032, .040 and .050 aluminum upon request and with extended lead times.

pac-clad.com



21 UNDERLAYMENT RESISTS FIRE AND HIGH TEMPERATURES

Polyglass U.S.A. Inc. has released Polystick XFR, a self-adhered waterproofing underlayment. The product combines Polyglass' ADESO and Burn-Shield technologies to achieve UL Class A fire ratings for combustible decks while providing long-term weathering performance. Utilizing ADESO Dual-Compound Self-Adhered Technology for labor-saving application, Polystick XFR features an SBS (elastomeric) modified bitumen upper compound and an aggressive self-adhesive compound on the bottom. Fiberglass reinforcement provides additional strength and stability. The penetration-resistant underlayment is rated to withstand temperatures up to 265 F. Because Polystick XFR is designed for high-temperature applications, it is suitable for metal roof coverings, like steel, copper and similar materials. It also is approved for use under asphalt shingles, mechanically attached tiles, and any other application where fire resistance is needed or desired.

polyglass.us

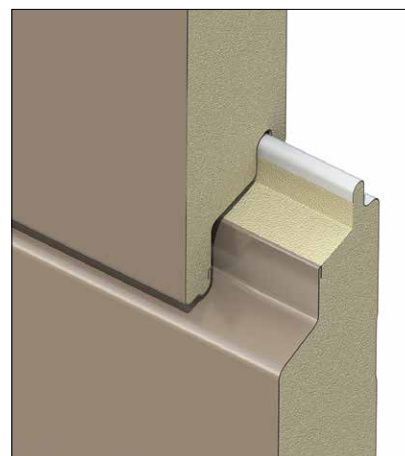


22 PORCELAIN ROOF TILE IS CLASS 4 IMPACT-RATED

Daltile has released its Perennial Porcelain Roofing Tile, which is resistant to frost, impervious to water and walkable. Class 4 impact-rated by Intertek Labs, the tiles also boast a 110-mph wind rating and Class A fire rating. The product offers high breaking strength, low overall weight and a lifetime limited warranty. Perennial Porcelain Roofing Tile is made in the U.S.

daltile.com

23 GALVANIZED PANELS MODERNIZE LOWER, WIDER BUILDING PROFILES



CENTRIA has launched Versawall H+ Insulated Metal Panel, which is comprised of a galvanized steel face and foam insulation. The panel delivers weather resistance and moisture protection. From a design perspective, the panel enables architects to create a modern look for large-scale buildings that have lower, wider profiles, including warehouses, schools and shopping centers. The Versawall H+ is available in modules of 30 and 36 inches and in 2- and 3-inch thicknesses. Panels can be manufactured in a wide variety of finishes and colors.

www.centria.com



24 HEAT-PUMP WATER-HEATER MODELS MEET ENERGY GOALS

Lochinvar has launched 20 commercial heat-pump water-heater models, ranging from 25,000 to 250,000 Btu per hour and with modular installation capabilities up to 2 million Btu per hour. The product line gives specifying engineers, architects and plumbing contractors additional options to meet energy-savings and sustainability goals when bidding on large commercial properties. Heat-pump water heaters transfer heat instead of creating it. Unlike typical HVAC heat-pump systems, heat-pump water heaters provide hot water using atmospheric heat (air source) or geothermal/waste heat (water source). The air-source models cool and dehumidify the surrounding ambient air, cutting down on air-conditioning usage and costs. The water-source units absorb heat from water sources, including return chiller water, process and groundwater. Designed for indoor or outdoor use, heat-pump water heaters work in conjunction with storage tanks and can be tailored to meet specific application requirements.

www.lochinvar.com

25 INTEGRATED SOLAR PANELS PRODUCE MORE ENERGY

GAF Energy has launched a high-efficiency solar panel for use with its roof-integrated solar product. Solaria panels are 16 percent more powerful than GAF Energy's previous offering, allowing owners to fit more roof-integrated solar capacity in a similar amount of space. Designed to provide a low-profile alternative to typical rack-mounted solar panels, GAF Energy solar is part of the primary water-shedding layer. The new solar panels optimize power output and maximize aesthetic appeal, combined with flashing and a black perimeter shield to further reduce the risk of leaks and avoid animal intrusion.

www.gaf.energy



Representatives from Granite Air Center in New Hampshire selected Solaria PowerXT panels largely because of the low glare factor that's imperative for pilots and the Federal Aviation Administration. The facility's owners explored various solar options and found Solaria panels offered the performance and efficiency they were seeking. [\[i\]](#)



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