

# ROBUST, MODULAR DESIGN

Nexpand is Legrand's premium configure-to-order cabinet platform for the data center market. It offers a highly configurable design with ready-to-ship parts that provide shorter delivery times and faster deployment. The cabinet is constructed with a lightweight solid aluminum frame, a 3,500 lbs static load capacity, and aluminum extrusions, ensuring that it will stand the test of time.

The Nexpand cabinet platform was designed by working closely with our customers for many years. The platform combines flexibility and modularity of installation with infinitely adjustable accessories and components. It's truly the next level of data center rack and cabinet infrastructure.

### **FRAME**

The Nexpand cabinet offers a lightweight, solid frame that delivers extreme flexibility with aluminum extrusions. These extrusions allow T-slot rails to be mounted along with full interior depth and width of the cabinet.

# **Nexpand Frame Features**

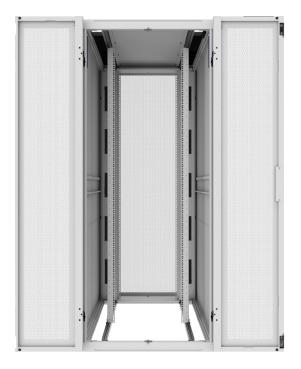
- Lightweight solid aluminum frame with 3,500 lbs static load capacity
- Extruded channels provide mounting along the depth, width, and height of the cabinet, offering an array of mounting positions. Integrated T-slots provide adjustability in the interior depth and width of the cabinet
- Nearly all accessories and components are accessible from inside of the cabinet
- Integrated T-slots provide stepless adjustibility in depth and width direction (for example vertical mounting rail adjustment)
- Nearly all accessories and components accessible from inside of the cabinet
- Slide-in side panels allow separation, even after the cabinets are installed
- Flexibility to add an airflow package to improve airflow, also after installation

# **DOOR**

The Nexpand cabinet door features a unique design that provides a fully integrated handle and locking mechanism, whether the lock is traditional or combination. Locking mechanisms and any associated wiring are contained within the door, preventing damage and tampering.

- Standard position for identification using serial numbers, barcodes, or QR codes
- · Clean, minimalist design
- Easy door installation
- High open-area perforation
- · Full integration of door locks
- Easily reversible, whether left or right hinged
- Door can open 165° in-row or 260° if stand-alone





# **CABLE MANAGEMENT**

Cable organization and management is essential when designing cabinets. The Nexpand platform builds on a legacy of cable management solutions from Legrand. It features a multifunctional O-ring configuration that can be installed without tools and used in conjunction with traditional tie-wraps or Velcro straps. The Nexpand cable management rings can be flexibly mounted to any depth along the cabinet's extruded aluminum rails.

- Tie-wraps and/or Velcro compatible
- 1U plastic cable ring with toolless mount

# **CABINET TOP**

The top-of-cabinet design of the Nexpand platform rethinks power and data cable management by providing features that improve flexibility and ease of use for today's data center. The Nexpand cabinet supports overhead cabling and power distribution not only through the strength of its structural frame, but through a convenient and adjustable roof panel design that includes inserts for airflow containment, integrated cable relief, and cable dividers.

- Solid platform for installing top-of-cabinet infrastructure
- Roof inserts available in 4 in (101.6 mm) increments
- Full-depth cut-outs provide optimal accessibility for cabling
- Optimal support for overhead PDU's Accessories include cable pull relief, cable dividers, and inserts
- Extendable per cabinet to create a cable duct system
- Cover plates and end covers available for dust debris protection and airflow
- Roof panels support both hot and cold aisle containment





# **AIRFLOW MANAGEMENT**

To efficiently guide airflow, the Nexpand cabinet platform comes with a comprehensive set of accessories to support containment in and around the rack. The airflow management package consists of flexible, rail-mounted vertical panels with integrated cable management for the inside of the rack and adjustable angles and seals to redirect airflow from below and between racks.

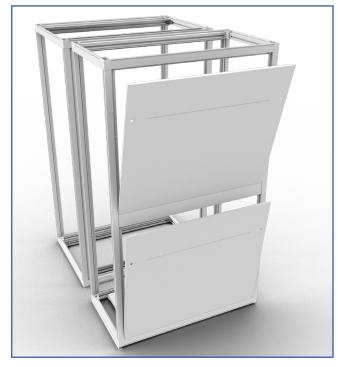
- Improve energy efficiency by retrofitting with an airflow package
- Best-in-class airflow containment
- Maintain flexibility without compromising airflow with adjustable vertical mounting rails
- Options include sealing cabinet-to-floor and cabinet-to-cabinet

# SIDE PANELS

To redirect airflow and provide security, the Nexpand cabinet platform has side panels that can be installed before, during, or after the original installation. The Nexpand side panels are subdivided horizontally, allowing them to be moved or removed easily in the field. They are also designed to slide between two Nexpand frames that are already installed. And to ensure continuity, the panels are designed to provide a ground connection once they are locked into place.

- Ground connection is established when panels are locked
- Horizontally divided panels provide for easy handling
- Panels can be added between racks post-installation





### **SMART - UNLIMITED POSSIBILITIES**

### Freedom of Movement

The cabinet's interior incorporates aluminum extrusions in the frame, to which mounting rails are installed that are adjustable within the full width and depth of the cabinet. All the accessories can be mounted flexibly across the width, depth, and height of the cabinet, allowing for an array of positions. The inside of the cabinet can be customized without being dependent on specific rail or hole spacing or dimensions.

#### Ease of Maintenance

Another unique feature is the ability to mount or remove any accessories and components from the inside of the cabinet. This means that even if a cabinet is installed into a row, it is easy to make changes to its configuration from inside the rack. System administrators and data center managers can benefit tremendously from the flexibility that the interior offers. The interior makes cable management, adding components, and making changes much easier.

# Smart, Top-of-Cabinet Design

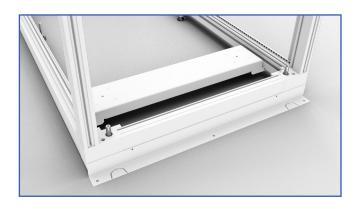
The amount of power and data cabling going to a typical cabinet continues to increase. To meet these changing needs, Legrand has developed a cabinet with a smart, optimized design. For example, the roof panel of the Nexpand cabinet contains more space to guide the cables into the rack and better position them once they are there.

# **SOLID - NEXT-LEVEL RELIABILITY**

### Light and Solid Frame

The Nexpand cabinet features a lightweight, yet solid frame that offers ultimate flexibility with the introduction of new aluminum extrusions. These extrusions allow T-slot rails to be mounted along the full interior depth and width of the cabinet. This means that the frame supports user configurations based on the size and type of equipment being placed in the rack without being dependent on standard rail hole sizes, configurations, or spacing. It is therefore possible to install all the accessories that are required for cabling or supporting IT equipment in exactly the position they can be used most effectively.





# SECURE - KEEP YOUR DATA SAFE

# High-Level Access Security

The Nexpand cabinet was designed to offer not only standard mechanical locks (such as cylinder locks), but also electronic locks. Electronic locks allow for remote access to the cabinet and to monitor access with a timestamp from afar. These locks often use requisite cabling, which can be perfectly integrated into the door using the duct. All the areas of the cabinets can also be locked from the inside using standard key locks to ensure that they cannot be opened from the outside. All these lead to high-level access security.

# SUSTAINABLE - BEST-IN-CLASS ENERGY EFFICIENCY

# Airtight Cabinet Perimeter

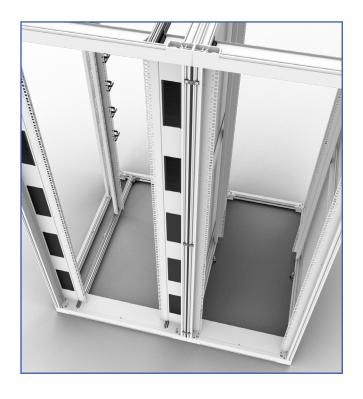
In addition to the interior, there are opportunities to improve containment and reduce airflow through bottom and sides of the rack. The innovative, adjustable steel strips offered with the Nexpand cabinet are used to seal the spaces between the cabinets perfectly. If a cabinet is leveled or placed on castors, the gap created at the bottom of the rack can be sealed as well.

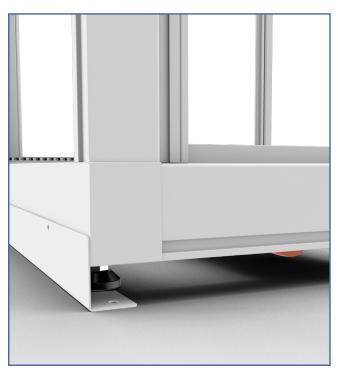
# Manufacturing Process

Our server and network cabinets have been specifically designed to help create data centers that are more environmentally friendly. The impact on the environment was also considered by using the most environmentally friendly materials possible in the manufacturing process and avoiding the use of harmful materials. Additionally, several steps are carried out internally rather than outsourced, which contributes to a more environmentally friendly manufacturing process for the cabinets.

# Design

The Nexpand was designed and engineered to provide more efficient use of energy in the data center, ensuring that the heat generated from IT equipment can be cooled as effectively as possible. The cabinet was also designed for optimal airflow management, with accessories designed to reduce bypass airflow and eliminate recirculation. This optimizes the IT equipment's performance and reliability and ensures that less energy is required for the data center to operate, leading to overall facility cost savings.





| Below the Frame   | NEXPAND   |
|---|---|
| Light Duty Casters  |   |
| Levelers  | $\sqrt{}$   |
| Certification & Testing                                       | NEXPAND   |
| UL2416  | $\sqrt{}$   |
| UL Static Load Capacity                                       | 1587kg (3,500 lbs)                                    |
| Dynamic Load Capacity (w/ Light Duty Casters)                 | 200kg (440 lbs)                                       |
| Functional Dynamic Test                                       | √ ·   |
| ROHS Compliant  | √   |
| Frames  | NEXPAND   |
| Height (RU)   | 42, 47, 52  |
| Height (mm/in) - Levelers + 1mm (.04"), Casters + 23mm (.91") | 1977.9mm, 2199.2mm, 2421.4mm (77.87", 86.58", 95.33") |
| Depth (with Front and Rear Doors)                             | 1000mm, 1200mm, (39.37", 47.24")                      |
| Depth (Frame Only)  | 940mm, 1140mm (37.01", 44.88")                        |
| Width   | 600mm, 800mm (23.62", 31.50")                         |
| Construction  | Welded/Caster Connectors                              |
| Frame Composition   | Aluminum Extrusion                                    |
| Mounting Rails  | NEXPAND   |
| 19" EIA Mounting Rails  | .375" Square Hole or M5 Tapped                        |
| Top Panels  | NEXPAND   |
| Top Panel (Inserts per 100mm)                                 | Modular   |
| Top Panel Entry   | Brush, Solid, Cabling                                 |
| Solid   | $\checkmark$  |
| Air Flow Management   | NEXPAND   |
| Air Dam Kits  | $\checkmark$  |
| Floor Seals (Air Skirts)                                      | $\checkmark$  |
| Side / Divider Panels   | NEXPAND   |
| Side Panels (Horizontally Split) - End of Row                 | $\checkmark$  |
| Locking   | $\checkmark$  |
| Slide-In Side Panels (In Between Cabinets)                    | $\checkmark$  |
| Doors   | NEXPAND   |
| Perforated Door Area (Airflow)                                | 80%   |
| Full Width (Reversible)                                       | Mesh  |
| Split   | Mesh  |
| Standard Swing Handle   | Keyed Alike   |
| Lock Options: Combination                                     | $\checkmark$  |
| Cable Management  | NEXPAND   |
| Power and Cable Management Bracket (PCM)                      | $\checkmark$  |
| PDU Mounting Brackets (Frame and Rail Mount)                  | $\checkmark$  |
| Vertical Wire Tray  | $\checkmark$  |
| Rail Attached Vertical Cable Management                       | $\checkmark$  |
| Frame Attached Cable Management                               | $\checkmark$  |
| Qtr. Turn Accessories   | $\checkmark$  |
| Front to Rear Cable Management                                | $\sqrt{}$   |

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