



Square D Integrated Equipment

Maximizing patient care space in healthcare facilities

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SQUARE D[™]
by Schneider Electric

Saving space for saving lives

Space in healthcare facilities is at a premium. With medical equipment, supplies, staff, and patients to accommodate, maximizing space can be crucial. Plus it can have a direct effect on the bottom line, since more room for patients equals more revenue.

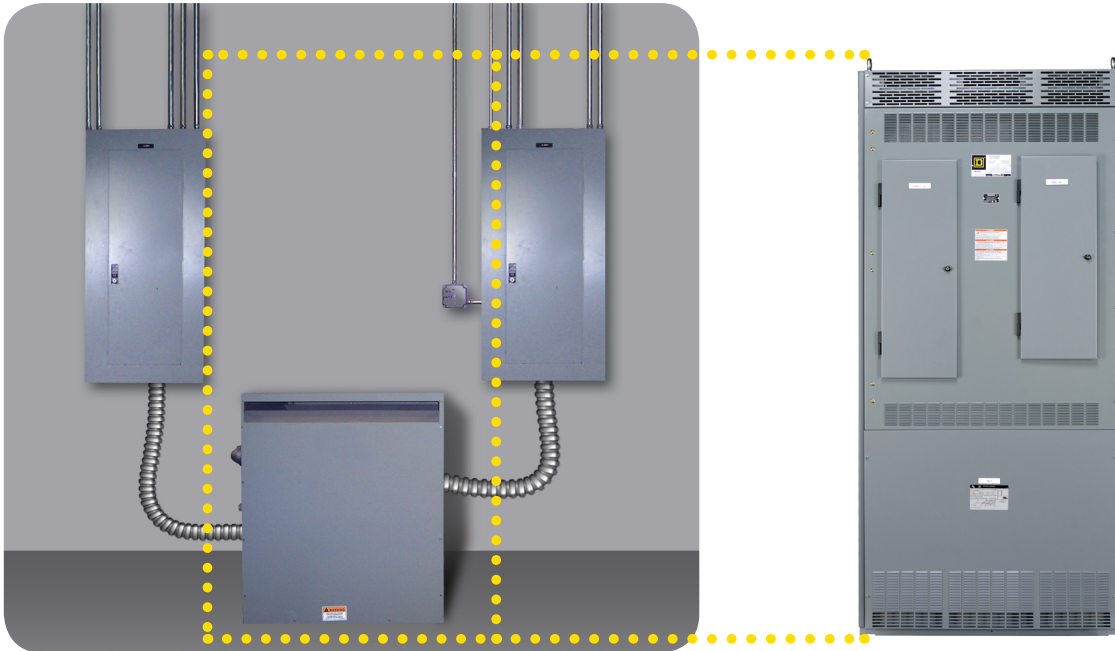
One way to increase valuable floor space is to decrease the size of the electrical room. Square D™ by Schneider Electric™ Integrated Equipment saves up to 40% of the space required for electrical distribution. With panelboards, transformers, and even building controls in a single enclosure, it installs quickly and with less materials and handling. Integrated Equipment features a clean design and easy access, keeping the electrical room neat and space-efficient.

See the difference!

Footprint comparison

Stick-built

Integrated Equipment



Estimated labor hours:

Stick-built: 26 – 32

Integrated equipment: **3 – 6**



Number of pieces handled:

Stick-built: 20 – 21

Integrated equipment: **1**



Materials saved:

Stick-built: Associated pipe, wire, and fittings

Integrated equipment: **n/a**



Lower materials costs

See Dan the Man
prescribe the right solution
at a healthcare facility!



Scan here to watch the video.

Schneider Electric Case Study

Children's Hospital of Orange, California

Hospital increases revenue-generating patient care space with Square D Integrated Equipment

The Challenge

Nothing is more important at a hospital than patient care. Maximizing the amount of hospital space focused on patient treatment and care is crucial. A children's hospital in California discovered that it could increase its revenue-generating patient care areas by decreasing the size of its electrical rooms. To do this, the hospital needed to find a solution that provided all of its electrical power requirements but in a significantly reduced footprint.

The Solution

Bergelectric Corp., a trusted contractor in the Greater Los Angeles Region area for over 68 years, partnered with the hospital to find the right solution. By installing Square D Integrated Equipment, the contractor was able to deliver significant space savings while still providing reliable power that could be counted on. Sixteen panels and four transformers were put in each electrical room, taking up less than half the space of conventional, stick-built gear.

By using a mix of Integrated Power Center (IPC) and Integrated Power Center 2 (IPC2) products, Bergelectric and the hospital were able to reduce the overall footprint of the electrical room by 50 percent, leaving plenty of room for easy maintenance access. Factory assembled, prewired, and tested, each IPC2 compact unit takes up 3.5 feet of space compared to the traditional 7 feet required by conventional gear. The additional panels for each room fit in the IPC unit, which is also compact in width and a mere 10 inches in depth. Plus, the equipment installs up to 90 percent faster than traditional stick-built.

The use of Square D Integrated Equipment allowed the hospital to increase its patient-focused space while still meeting mission-critical electrical needs. With the use of single-enclosure solutions, the electrical room was clean and spacious, with room for facility maintenance and future electrical system expansion.

Hans Erickson, division manager, Bergelectric Corp., commented, "These were some of the cleanest electrical rooms we have ever installed. Being able to fit that much gear in a compact room and still feel spacious was a huge value to the hospital."

Integrated Power Center



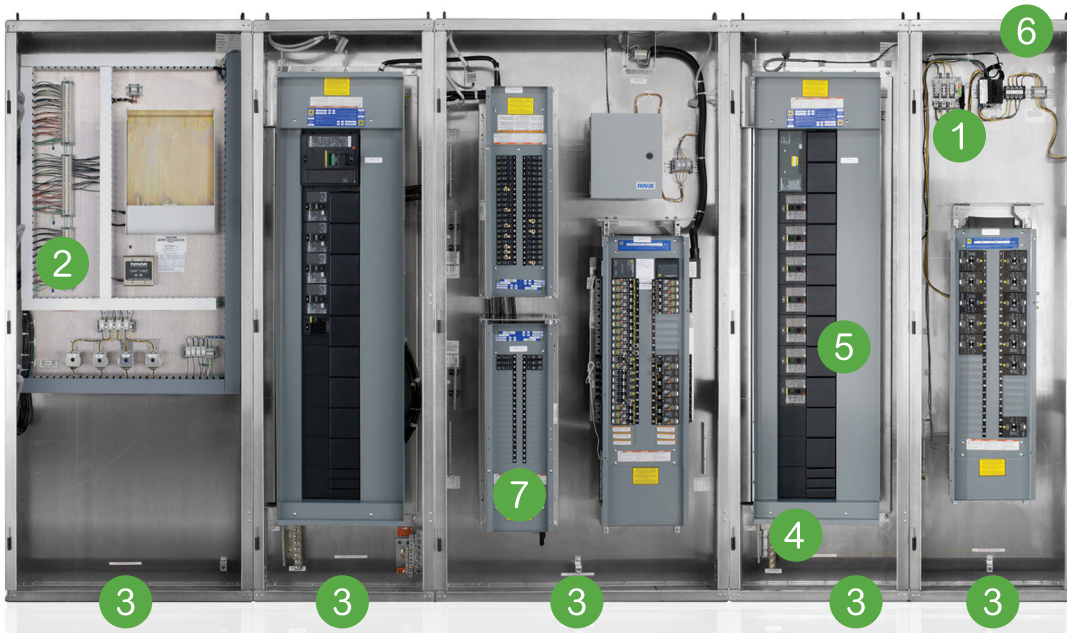
Integrated Power Centers (IPCs) combine electrical distribution equipment and building management controls into a single factory-assembled and prewired integrated system. Enjoy faster installation and reduced space requirements with an IPC that replaces the traditional method of independently mounting each panelboard, lighting control, and building management system.

Meets applicable codes and standards

- NEC requirements for circuit breaker handle height
- NEC requirements for wire space
- UL 891 Deadfront Switchboards
- UL 508 Industrial Control Systems
- IPC sections are assembled together at the factory, reducing labor and installation time at the job site
- Close coupling sections eliminate the need for interconnecting conduits and box connectors, and shorten feeder cable runs
- Three large rectangular openings are provided between sections, allowing you to quickly and easily route cables from one shipping split to another
- IPC enclosures are 10.25 in. deep, providing ample space for installing branch conductors at the job site
- Up to 65 kA Short Circuit Current Rating (SCCR); fully tested system at 480 Y/277 V



80 – 90%
Faster
installation
time



1 Power meter module
Offers a variety of cost-effective, pre-installed metering options, including main power monitoring, branch circuit monitoring, and revenue-grade tenant submetering.

2 Control screens, multiple options available
Energy management system (shown), additional options available, including prewired lighting contactors that reduce installation cycle time.

3 Bottom box cutouts
Cutouts in the bottom endwall of each section permit conduit to be stubbed up into the bottom of the enclosure, eliminating the need to cut conduit openings at the job site, saving installation time and labor costs.

4 Ground cable
Factory-installed ground cable terminations are provided to comply with the UL 891 standard.

5 Feeder breakers
Feeder breakers in the power panel can be factory wired to the main breaker or main lugs of each lighting panelboard interior in the line-up, reducing labor and material cost.

6 Control wiring
Control wiring required for metering applications, energy management, or ground fault systems can be factory installed and tested, reducing labor and installation time at the job site.

7 Lug terminations and cables
All lug terminations and cables are marked to indicate phase connections material cost.

Integrated Power Center 2



The Integrated Power Center 2 (IPC2) is a family of Square D products that includes free-standing front- and rear-aligned equipment available in multiple enclosure options. Configurable based on your specific requirements, IPC2 solutions provide options for multiple applications, including retail, commercial, healthcare, education, and industrial. Electrical distribution equipment and building controls are factory installed and prewired, saving valuable material handling and installation time at the job site. Close coupling between sections eliminates additional material, including wire, conduit, and fittings. Because components are stacked, there is a reduced amount of floor and wall space required.

- Prewired and factory assembled for faster installation
- “Panels over Panels” configurations
- “Panels over Transformer” configurations
- Integrated automatic transfer switches
- Freestanding construction that can be close-coupled to QED switchboards
- Front- and rear-aligned sections available in multiple widths
- Available in NEMA 1, NEMA 1 with driphood, and NEMA 3R construction
- Powerlink™ lighting control solutions
- PowerLogic™ power monitoring and control
- Hinged panelboard wire gutter access door
- Factory-installed power cables
- Top and bottom conduit entry/exit space available
- Available as a stand-alone solution or can be close-coupled to Square D:
 - IPC2
 - IPC
 - Modular Panelboard System (MPS)
 - QED switchboards



Earn
LEED
points



NF Panel

Proven reliability, optional configurations available include up to 800 A at 600Y/347 Vac. Subfeed circuit breakers, copper neutrals and grounds.

NQ Panel

Lighting panelboard with 240 Vac maximum rating. Accepts both QO plug-on and QOB bolt-on circuit breakers.

Feeders

Prewired feeders included when selected. Feeders between shipping splits will be rolled back for shipment to be terminated during installation.

Energy-efficient Transformer

Low temperature rise for energy savings and longer life.

Ground Bus

Rated for up to 2,000 A systems, through-bus for entire lineup when multiple IPC2 sections of same depth are used.

Modular Panelboard System



The Square D MPS bundles electrical distribution equipment into a single factory-assembled and wired integrated system. Save valuable installation time and use less space with MPS instead of independently mounting each panelboard and lighting control system.

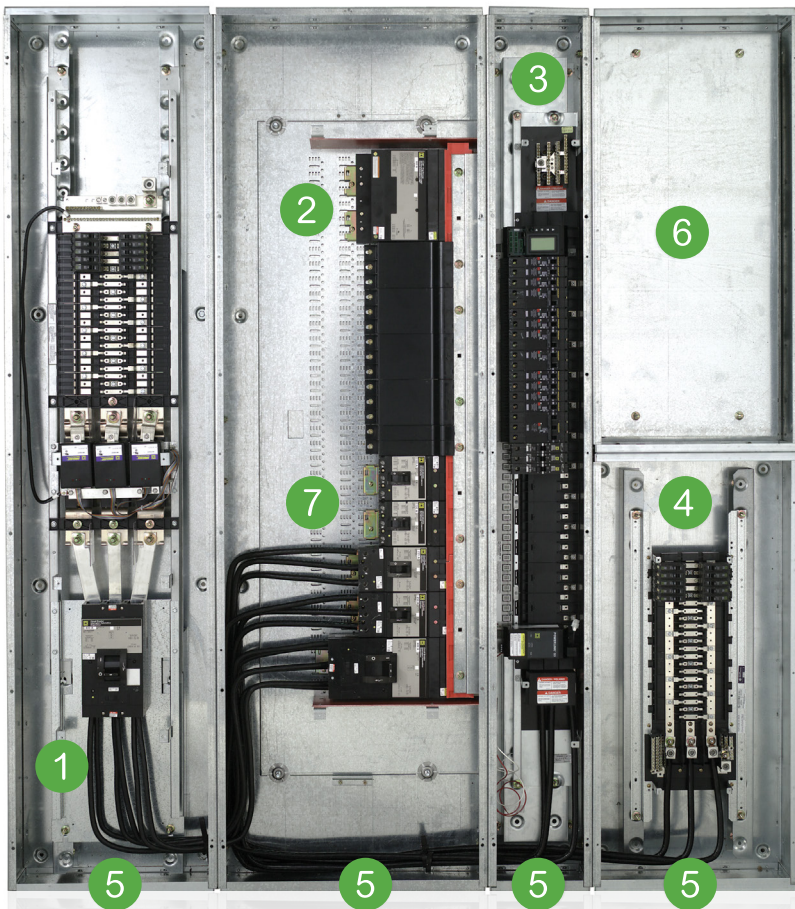
Meets applicable codes and standards

- NEC requirements for circuit breaker handle height
- NEC requirements for wire space
- UL 67 – Panelboards
- UL 50 – Enclosures for Electrical Equipment
- MPS sections can be bolted together at the factory, reducing labor and installation time at the job site
- Close coupling panels eliminate the need for interconnecting conduits and box connectors, and shorten feeder cable runs
- Large 4 in. knockouts with edge guards are provided between sections, allowing you to quickly and easily route cables from one shipping split to another
- Lighting and appliance panelboard enclosure depth has increased from 5¾ in. to 9½ in. to provide additional space for installing branch conductors
- Panelboard interiors can be configured three ways: stacked, column width, or full height to optimize wall space



40%

Electrical
room
space
savings



1 NQ 400 A main breaker with integral surge protection
Broad panelboard offering with configurations suitable for most applications.

2 Single-row I-Line
An 800 A max interior that is only 26 in. wide saves valuable space. Double-row I-Line also available.

3 NF and NQOB column width interiors
Lighting panelboard interiors are available in a 10 in. wide section, which saves wall and floor space. NF Powerlink lighting control systems are also available in this construction.

4 NF or NQ lighting panels
Select panelboard interiors can be stacked to save wall and floor space.

5 Bottom box cutouts
Cutouts in the bottom endwall of each section permit conduit to be stubbed up inside the enclosure, eliminating the need to cut conduit openings and saving installation time.

6 Equipment space
Space where lighting contactors can be factory installed and prewired, reducing labor and significantly reducing installation time.

7 Feeder breakers in the power panel
Feeder breakers can be factory wired to each lighting panelboard in the lineup, reducing labor and material cost.

Learn how to maximize your
facility's space. Email
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