Since 1985 Gaven Industries Inc. has been designing, manufacturing and installing custom Radio Frequency (R.F.) Shielded Enclosures. Gaven understands that there are no “typical” RF shielded enclosures, that’s why every R.F. Shield or Shielded component is custom made to fulfill our clients’ needs.

Whether it’s the shielding of an outpatient clinic, medical center, or the shielding of a research facility, Gavens’ combination of exceptional quality and personalized service is guaranteed.

As an innovator in the industry, Gaven has been successful in applying its proven applications in installations in North America and abroad.

With our long list of clients as the best compliment to the integrity and performance of our products, Gaven has thousands of shields worldwide servicing the Medical, Research, Government and Military Industries.

The key to Gaven’s longevity is the combination of product quality and customer service. Gaven designs and manufactures its R.F. Shields and Shielded components and every shield installed uses Gaven’s own detailed installation methods and highly trained personnel. This ensures a high level of quality control which in turn allows our customers to receive the best products and service available.

Thank you for taking the time to look into Gaven Industries.
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Panels made of copper sheet laminated to a 1/8" hard board are installed directly on to the walls and ceiling of a parent room framed with non-combustible lumber.
- Overlapping Copper Panels
- Electrically seamless shield
- Performs above specification for the lifetime of the rooms intended use
- Seams not subject to corrosion or fatigue as are mechanically clamped or fastened joints
- Flexibility of material allows for on site custom fit

- Continuously soldered together
- Floor designed to meet site specific magnet specifications
- Lifetime Warranty
SN-Shield® R.F. Shielding offers a high performance R.F. Shield with the same ease of construction as our Soldered Copper R.F. shielding at a more economical price.
- Over lapping SN-Shield®
- Electrically seamless shield
- Performs above specification for the lifetime of the room intended use
- Seams not subject to corrosion or fatigue as mechanically clamped or fastened joints are
- Flexibility of material allows for on site custom fit
- Cost effective

- Continuously soldered together
- Floor designed to meet site specific magnet specifications
Econo Shield

- Free standing and modular
- Ideally suited for rectangular shaped rooms
- Light weight and can be crated and shipped worldwide
- 5 year warranty is standard on the performance of the shield if installed by Gaven Industries personnel

- Prefabricated 2.5” deep fire rated wood frames wrapped with copper sheet
- Panels are screwed together 4” on center
- Ceiling is supported from the structure above
• Fabricated from panels of galvanized steel or aluminum ranging from 16 gauge to 1/8” thickness

• Panels are bolted every 2” on center

• Bolt - Together rooms can be disassembled and re-assembled in a different location

• Sway bracing can be provided for additional structural support in seismic active areas

• A cost effective solution that incorporates R.F. and magnetic Shielding

• 5 year warranty is standard on the performance of the shield
Gaven also has the full capability to manufacture and install equipment specific shielded enclosures.

**IMRIS™ SURGICAL SUITES**

Gaven Industries is one of only two vendors World-Wide contracted to shield IMRIS surgical suites. The unique nature of the multiple two and three room configuration showcases the versatility of Gavens’ continuously soldered copper shield. Gaven is able to shield each magnet railing individually by wrapping soldered copper around the steel support beams. Unlike our competitors design, this allows for useable space from steel beam to ceiling. Each IMRIS room also uses Air Seal and Bi-Parting sliding doors, that are electronically interlocked together to control access to the O.R. when the magnet is in use.

**STEREOTAXIS™ ROOMS**

Used when the Niode System is in place. The Niode System uses computer controlled magnets that are positioned externally to the body, these magnets have the power to programmatically maneuver magnetic tipped catheters and guidewires throughout the endovascular system. Stereotaxis rooms are built from multiple layers of mechanically fastened sheets of M36 silicon steel or sheets of 1008 steel to create a magnetic shielded enclosure to protect the magnets guiding the catheter from any external influence while containing the fringe field to the room.
MAGNETIC SHIELD

In some instances magnetic Shielding is required within an enclosure to contain a strong magnetic field or to protect the imaging equipment from any interference from ferrous material. Layered sheets of .025” thick M36 steel to C1006 fully annealed plate can be installed. Gaven has the full capability to design and provide magnetic shields.

RADIATION/ NEUTRON SHIELDING

Gaven can provide Linear Accelerator swinging doors up to 7,000 lbs for primary and secondary shielding for neutron and gamma radiation, as well as providing and installing lead plate and lead brick walls including structural support design and installation.
**PNEUMATIC (AIR SEAL)**
**R.F. SHIELDED DOORS**

- Easy to operate
- Two (2) door mounted “PRESS and HOLD to OPEN” thumb paddles
- Ultimate Fail-Safe System
- Air Seal is an EPDM rubber tube covered with a tin plated copper wire braid
- Virtually maintenance free
- Fabricated from 304 stainless steel
- Fully welded, corrosion resistant
- Heavy duty Roton hinge
- Stainless steel threshold
- Available in any size and configuration
- Electrical control options available

Air transfer plate with O-Ring stem design.

“PRESS and HOLD to OPEN” thumb paddles.

Pneumatic door seal
FINGERSTOCK R.F. SHIELDED DOORS

- Beryllium Copper Fingers
- Full-length Roton continuous gear hinge
- Easy to use
- Door frame and leaf are made of 304 stainless steel
- Fully welded
- Easily cleaned
- Available in any size
- Glass lights can be installed ranging in size from 4” x 8” to full glass door

Fingerstock is strong yet flexible and easy to replace with a simple peel and stick system.
PNEUMATIC SLIDING DOORS

- Highest shielding performance available in their class
- Virtually maintenance free
- Total depth of only 7-3/8”, 2-1/4” of which resides within the surrounding wall structure
- Protrudes a total of only 5-1/8” into the room
- Door frame and leaves are made of 304 stainless steel
- Non-magnetic and corrosion resistant
- DC Gear-Motor is sealed, has ground and hardened gears
- Employs roller and needle bearings for many years of quiet and reliable operation

The Communication-Status Board provides the user with a convenient method of monitoring the door remotely via simple RS-232 protocols and it displays the current configuration and status of the door on 13 LED’s.
R.F. Shielded Windows

All of Gaven Industries’ shielded windows meet and exceed all MRI manufacturer shielding specifications.

R.F. SHIELDED VIEW WINDOWS

- Manufactured by Gaven Industries Inc
- Constructed of 304 stainless steel
- Two layers of 1/4” thick safety glass
- Two layers of brass R.F screen are offset and blackened to prevent or reduce the Moiré effect
- Any size available
MATCHED R.F. SHIELDED WINDOWS

- Interior window custom built to match any pre-existing window system from a small single light unit, large multilight units, to ribbon window systems

- 2" wide stainless steel tube frames and mullions matched with store front and commercial window systems

- No visible difference from exterior of the building

- Does not limit choice of finish, class or window performance/certification (i.e. AAMA, Impact, thermal transmittance, window load rating etc.)

- Brings in light from outside without affecting existing exterior finishes

Gaven Industries can also manufacture and install Thermally Broken Exterior Windows for site specific needs.
Gaven Industries Inc. manufactures all of the components needed for its R.F. Shielded enclosures. These range from lab service panels, plumbing penetrations, waveguides, and more, even down to the hinges for custom doors.
All products and components manufactured by Gaven Industries Inc. are designed and rated to perform at the highest level of R.F. Shielding requirements. Below is a list of a few of the components we manufacture.

- HVAC Honeycomb Waveguides
- Lab Service Panels
- Insulated Plumbing Penetrations
- R.F. Filters
- Heavy Duty Hinges
- Fiber Optic Wave Guides (capable of carrying 37-50 fiber cables, good through 10 GHz)
- Precision Mating Flanges with dielectric hardware (304 stainless steel)

. . . everything down to the “nuts and bolts”

Gaven Industries stocks electrical filters for power lines, audio, telecommunication, fire alarms, lighting systems, etc.

For unique requirements, Gaven Industries will work with a filter manufacturer to have a custom filter designed and manufactured.
Using recognized industry standard software, for both shop drawings and CNC programming, Gaven Industries Inc supplies each project with a set of site specific technical drawings. These include structural detailing, room components, product detail and more, all of which are produced in house.

Gaven Industries offers refined knowledge and ability to engineering and develop any mechanical or architectural solution.
Gaven Industries Inc. manufactures all of the components used in its R.F. Shielded enclosures in house, except for the fingerstock and electrical filters.

Our CNC machining area includes a Haas VS-3 which has a 150” x 50” x 50” machining area allowing us to precision machine very large fabrications weighing up to 10,000 lbs.

Our CNC machining area also includes a Wardjet Z813 water jet allowing for a work area of 13’ x 9’.

We also have a variety of CNC machines, Metal Lathes, and other metal working tools. All welding, construction and finishing is also done inhouse.
Gaven Industries Inc. has thousands of installations world wide, servicing the medical, research, Government, and military industries. All of our R.F Shielded Enclosures are rigorously tested for the highest level of performance.

We test to the specifications of any magnet vendor, such as GE, Phillips, Siemens, Hitachi, Toshiba, and Marconi.

Gaven Industries’ in house testing department can also develop a custom service plan for enclosure testing to meet your specific needs.

Testing Services are currently available with the capability of testing from NSA 73-2A, 104-6, 65-6, Mil STD-285, and IEEE-299.
The loyalty of our clients is undoubtably the best testament to the excellence of service given by Gaven Industries Inc. Provided below are just a few names of returning clients whom we have served in recent years.

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Summary

Gaven Industries Inc. is a unique, self-reliant R.F. Shielding supplier. Our name has been built on dependability, flexibility and an independence rarely seen in many other companies in the R.F. Shielding industry. We take pride in our work, not only on the high performance of the materials we use and the enclosures we build, but also the people we employ to engineer, design, fabricate and install our products.

We work closely with architects, contractors and technicians alike, to build a rapport and personal relationships with our clients. We aim to satisfy and exceed each individual site requirements and needs with our unparalleled excellence and expertise.

FOR QUESTIONS, INQUIRIES, QUOTES AND GENERAL INFORMATION ON GAVEN INDUSTRIES INC. AND OUR PRODUCTS PLEASE CONTACT JASONR@GAVENINDUSTRIES.COM

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