



**NATIONAL  
MRI  
SHIELDING**

*over 50 years  
of combined experience*

# *National MRI Shielding*

## *Shielding Products and Services*

*National MRI Shielding (NMS) is a full service shielding company based in Dallas, Texas.*

*NMS was founded by industry specialists with over 50 years of combined experience in the **MRI** equipment and construction industries.*



### **Consultation | Project Management | RF Testing**

National MRI Shielding's consultative services will assure your project's success.

- **Consultation** : NMS experts help guide architects, engineers, and construction teams through the MRI facility design/build process.
- **RF Testing and Certification** : NMS testing engineers provide complete RF testing services for both new and existing MRI facilities.



**Contact us**

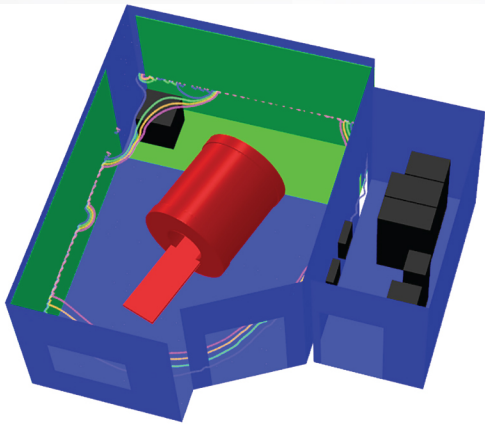
Phone: (888) 400-6674 | Email: [national@mri-shielding.com](mailto:national@mri-shielding.com) | Web: [www.mri-shielding.com](http://www.mri-shielding.com)



## MAGNETIC SHIELD DESIGN SERVICES

Designing a magnetic shield is a critical part of the process of planning a successful **MRI** installation.

Our company also provides the specialized steel needed when building **MRI** magnetic shielding. In addition, our teams of **MRI** shield installers are ready and able to install your magnetic shield anywhere in the world.



3 Tesla (3T) Magnet Fringe Fields

### UNITS

Length	in
Magn Flux Density	T
Magnetic Field	A/m
Magn Scalar Pot	A
Current Density	A/in <sup>2</sup>
Power	W
Force	N

### MODEL DATA

Ozarks6.op3  
Magnetostatic (TOSCA)  
Nonlinear materials  
Simulation No 1 of 1  
197370 elements  
58591 nodes  
4 conductors  
Nodally interpolated fields  
Activated in global coordinates

### Field Point Local Coordinates

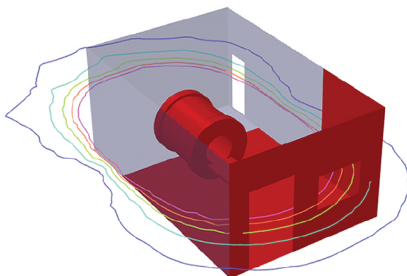
Local = Global

### FIELD EVALUATIONS

Cartesi CARTES 200x20 Cartesian (nodal)  
x=300. y=40.0 z=300.

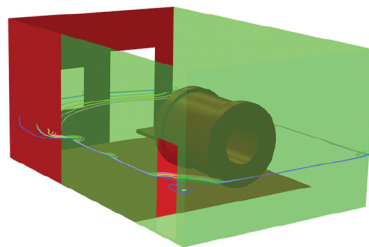
## 3D Room Modeling

### BEFORE MAGNETIC SHIELDING



Model prior to addition of magnetic shielding.

### AFTER MAGNETIC SHIELDING



Room model after addition of magnetic shielding to limit 5 Gauss.

## National MRI Shielding

provides complete magnetic shield design services for all **MRI** systems using the same software program that the OEM uses to design their magnets.

**National MRI Shielding** manufactures and installs top quality RF shielding enclosures for secure government facilities and other applications such as police evidence rooms and crime labs. Our keen attention to detail, coupled with a strong customer service ethic, puts us in the top tier of RF shielding companies worldwide.





**National MRI Shielding** is dedicated to providing highly effective shielding solutions that can be used for a variety of situations and facilities.

We design, manufacture, install, and certify RF shielded enclosures.

All our shielding components are fabricated using the highest quality control in order to deliver a secure reliable product.



## THE RF SHIELDED DOOR BY NATIONAL SHIELDING

The Windsor II is the latest innovation in RF shielded doors by **National Shielding**. Providing an extremely high electromagnetic interference seal combined with excellent acoustic properties the Windsor II is the result of many years of engineering and research.



Nickel plated copper gaskets provide excellent electrical and RF conductivity while an additional layer of elastomer core RF gasket provide acoustical insulation and an extra layer of protection against RF leakage.



Sturdy stainless steel hardware combining ease of use with a modern appearance and design that adds beauty to any decor.

This dual layer of RF and acoustical protection places the Windsor II shielded door by **National** in the top echelons of **RF shielding** enclosures needing high levels of security.

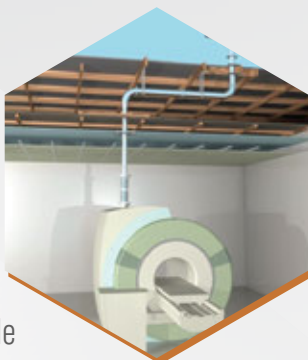




## Helium Quench Pipe Systems

**Custom Quench Pipe Systems** The quench pipe system is a critical component of an **MRI** facility. In the event of a quench, the magnet will expel gaseous helium from the **MRI** system.

This helium gas must be safely vented outside the building to protect both patients and facility personnel. From design and engineering to fabrication and installation, **National MRI Shielding** offers a turn-key solution for quench pipe systems.



**Quench Vent Waveguides** The quench vent waveguide is the component that passes through the RF enclosure, and as such, is included with all RF shielded enclosures. These waveguides can be specially designed and fabricated to overcome spatial limitations or other construction concerns.

**Quench Vent Bellows** The use of bellows may be necessary depending on **MRI** manufacturer specifications, or for design safety and proper installation procedures. **National MRI Shielding** can help determine these specific vent requirements and provide all the parts needed to complete the vent system.



## National MRI Shielding

### Featured Projects

#### **Baylor Scott & White Medical Center at Waxahachie**

Waxahachie, Texas • GE Optima MR450w

#### **Borland Groover Clinic**

Jacksonville, Florida • GE MR750w

#### **Central Peninsula Hospital**

Soldotna, Alaska • Siemens Skyra

#### **Citrus Valley Health**

Covina, California • Siemens Verio

#### **Driscoll Children's Hospital**

Corpus Christi, Texas • Philips Ingenia I.5T

#### **Gateway Diagnostics**

Fort Worth, Texas • Hitachi AIRIS II

#### **Johnston Medical Center**

Clayton, North Carolina • Siemens Espree

#### **Rolling Plains Memorial Hospital**

Sweetwater, Texas • GE Signa I.5T

#### **Seton Medical Center**

Austin, Texas • Siemens Aera

#### **Summit Medical Center**

Edmond, Oklahoma • Toshiba Vantage Titan

#### **SimonMed Paradise Valley**

Phoenix, Arizona • GE Signa 3.0T

#### **Veterans Affairs Medical Center**

Salt Lake City, Utah • Siemens Skyra

#### **Veterans Health Care System of the Ozarks**

Fayetteville, Arkansas • Hitachi OASIS Mark II





## References and Contacts

### MEDCO Construction

#### Aaron Autin

✉ aaron.autin@baylorhealth.edu  
☎ 214-668-3610

### Madison Medical Construction Corp.

#### Sam Socher

✉ samsocher.mmcc@gmail.com  
☎ 818-714-0584

### Custom Redesign

#### Frank Hilson

✉ frank@custom-redesign.com  
☎ 713-530-7891

### Infinity Design Builders

#### Jim Terrel

✉ jct@infinitydesignbuilders.com  
☎ 904-296-5701

### Skiles Group

#### Michael Knapp

✉ mknapp@skilesgroup.com  
☎ 214-753-8336

### Batten & Shaw, Inc.

#### Garner Lee

✉ garnerlee@bsinet.us  
☎ 615-480-3348

### Variware Inc.

#### Mazin Faour

✉ mazin@variware.com  
☎ 714-693-3900

### CHR & Associates, Inc.

#### William Leis

✉ William.Leis@CHRMedical.com  
☎ 210-558-8387

### GAP Imaging

#### Abass Bouniady

✉ Abass Bouniady  
☎ 407-967-0319

### Miken Construction Co.

#### David Graw

✉ dgraw@mikencc.com  
☎ 813-379-8871

### Radiology Oncology Systems

#### Jared Coates

✉ Jared@radiologysystems.com  
☎ 858-225-2369

### JMB Construction

#### Chris Beard

✉ cbeard@jmbconstructioninc.com  
☎ 702-642-3600

### Mattson Construction

#### Mike Mattson

✉ mike@mattsonconstruction.com  
☎ 480-557-0092

**NATIONAL MRI SHIELDING** is dedicated to not only the quality of the services we offer, but our relationships and continued excellence in customer care. Contact us, or call directly at our toll free number.

We look forward to servicing your **MRI Shielding** needs!



## CONTACT US



### NATIONAL MRI SHIELDING

1604 Kestrel Ave Suite 102  
DeSoto, TX 75115



(888) 400-6674



(214) 853-5831



[national@mri-shielding.com](mailto:national@mri-shielding.com)



[www.mri-shielding.com](http://www.mri-shielding.com)

