CASE STUDY ADVENTHEALTH WATERFORD LAKES – ORLANDO, FLORIDA

AdventHealth prides itself in providing leading-edge imaging technology. Trusted in the community for more than 100 years, AdventHealth has been recognized as the best hospital in Greater Orlando by U.S. News & World Report for 2021–22 and is accredited by the American College of Radiology for:

- Computed Tomography (CT-Scan)
- Magnetic Resonance Imaging (MRI)
- Mammography
- Nuclear Medicine
- Positron Emission Tomography (PET-Scan)
- Ultrasound

At the Waterford Lakes facility, staff noticed the noise emanating from the MRI facility was getting louder over time. AdventHealth proactively addressed this by conducting noise measurement studies. As a result of these studies, AdventHealth determined the source of the noise - the existing RF shielded door. They turned to the experts at ETS-Lindgren to replace their existing door with a state-of-the-art EVO Air Acoustic Door. Not only did ETS-Lindgren's new door greatly improve the acoustic performance to reduce the loud noise, but the doctors and technicians appreciated the ease of operation.

EVO Air Acoustic Door

Key Features:

- Pneumatically operated, bladderless, gasketless, fingerless, virtually maintenance-free RF shielded sealing system that ensures greater reliability, yet maintains ease of use
- Operates on a standard 115 VAC service and clean, dry shop air at 60 to 120 psi or equivalent international standards
- Offers superior RF performance with 100 dB attenuation over frequency ranges to 450 MHz
- Standard sizes are .91 m and 1.2 m W x 2.1 m H (3 ft and 4 ft W x 7 ft H); optional sizes are available for specific requirements
- Features attractive hardware and an aesthetically pleasing finish
- Available with a number of optional items such as windows, locking mechanisms, and safe IV port transmission channels

Designed for Safety

EVO Air Acoustic Doors feature a flat threshold that allows for smooth patient transport. Safety is assured with features such as an ADA-compliant latch and lock mechanism, an emergency "Open" button that can be mounted per customers' needs, and a fail-safe logic and controller system that fails in the "Open" position in the event of power or air pressure loss.

Acoustic Performance Results

The EVO Air Acoustic Door has been designed and developed to deliver exceptional Sound Transmission Class (STC) ratings

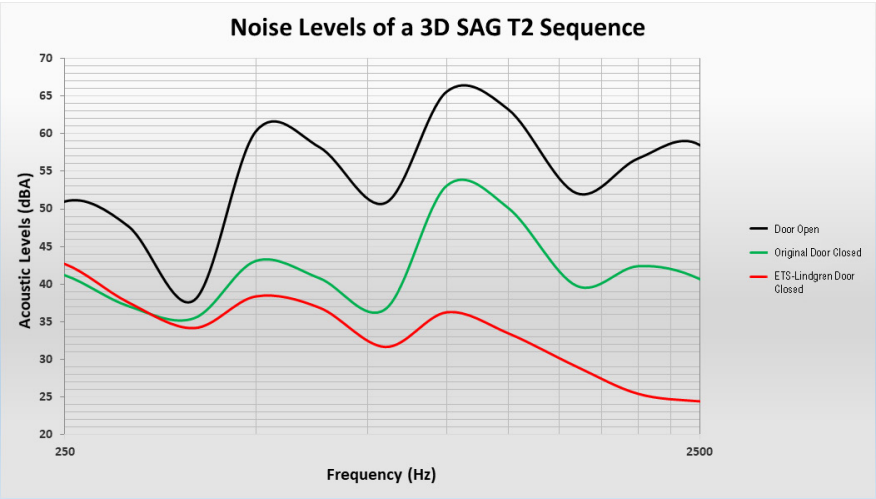
for sound abatement, including STC-32 and STC-44 as standard. Louder gradients can be annoying to rooms surrounding the MRI suite. The specially developed acoustical seal design, core material, and overall weight aid in minimizing sound transmission while providing automatic RF sealing with minimal opening and closing forces.

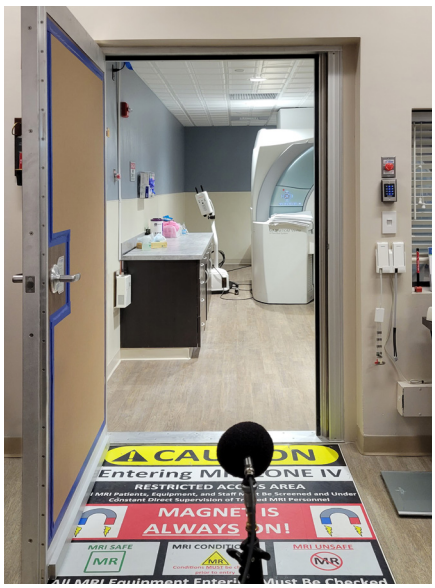
Prior to the door replacement at AdventHealth, ETS-Lindgren conducted a thorough acoustic survey to document the existing STC rating of the MRI exam room. Once the new EVO Air Acoustic Door was installed, ETS-Lindgren conducted a second acoustic survey to document the change in the acoustic performance. The "before" and "after" STC results along with the results with the door in the open position are shown in the graph below.

About ETS-Lindgren

ETS-Lindgren is an international manufacturer of components and systems that measure, shield, and control electromagnetic and acoustic energy. The company's products are used for electromagnetic compatibility (EMC), microwave and wireless testing, electromagnetic field (EMF) measurement, radio frequency (RF) personal safety monitoring, magnetic resonance imaging (MRI), and control of acoustic environments.

Headquartered in Cedar Park, Texas, ETS-Lindgren has manufacturing facilities in North America, Europe, and Asia. Additional information about ETS-Lindgren is available at www.ets-lindgren.com. Additional information about ETS-Lindgren's parent company ESCO and its subsidiaries is available at www.escotechnologies.com.





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