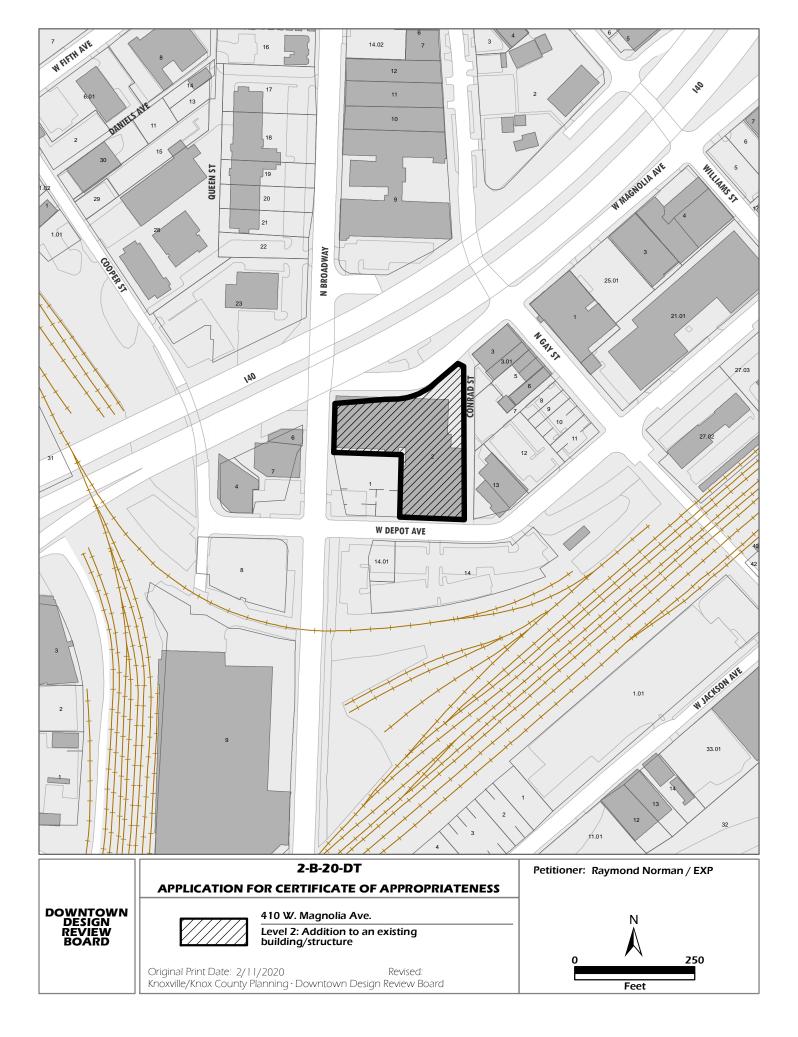
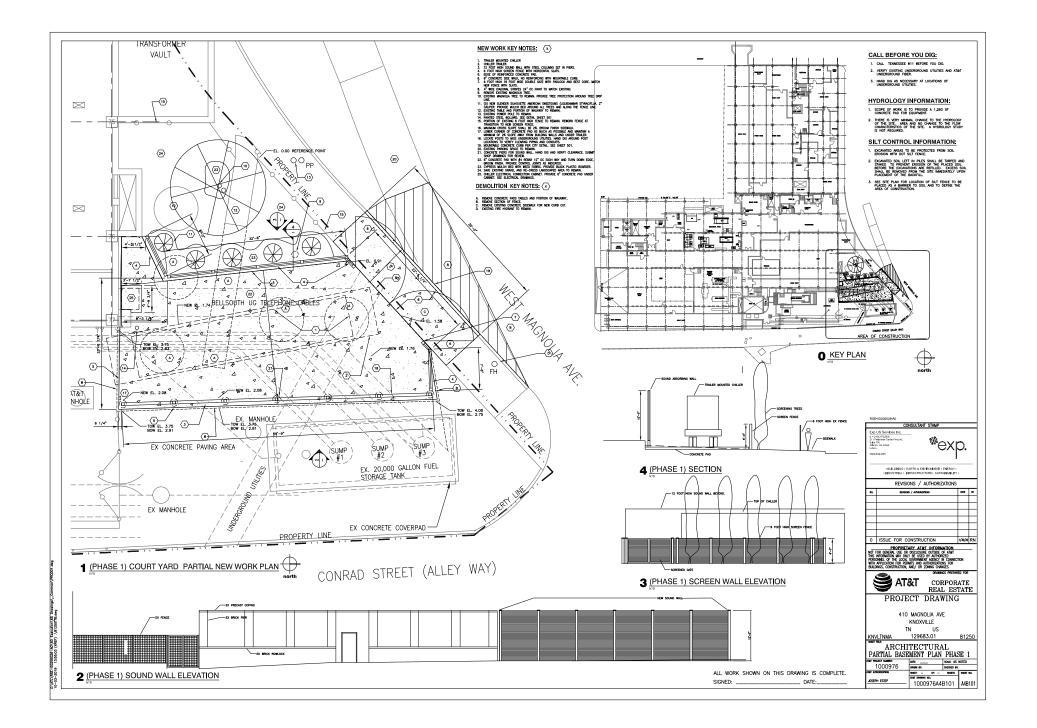
Planning RNOXVILLE I KNOX COUNTY	DESIGN REVIEW REQU	JEST JAN 3 0 2020 Knoxville-Knox County Planning
Applicant Applicant	JOR MAN	
1/30/20	02/19/20 Meeting Date (if applicable)	2-B-20-DT File Number(s)
Owner Contractor En	oplication should be directed to the approved cont gineer PArchitect/Landscape Architect	act listed below.
	<u>CENTE-P- PARKWAY</u> City <u>PAY-NORMAN@EXP</u> Email	· · · · · · · · · · · · · · · · · · ·
	NFO	
	ESTEP cant) Owner Address	507-582-1586 Owner Phone
410 WEST MAG Property Address Bacafacum Neighborhood	ENOLIA AVE - KNOWIL Parce	LETN 094EKOOZ
<u>3</u> Staff Signature	) Michael Reymold Please Print	<u>s 1/30/2020</u> Date
1 Brandal	6	1MM 01/30/20

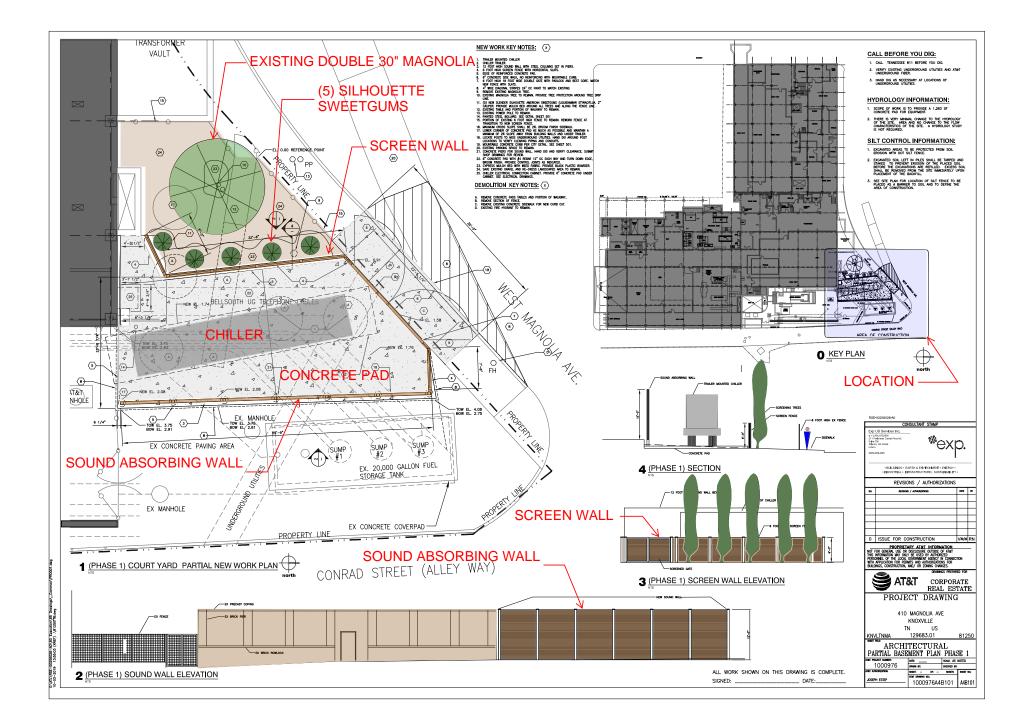
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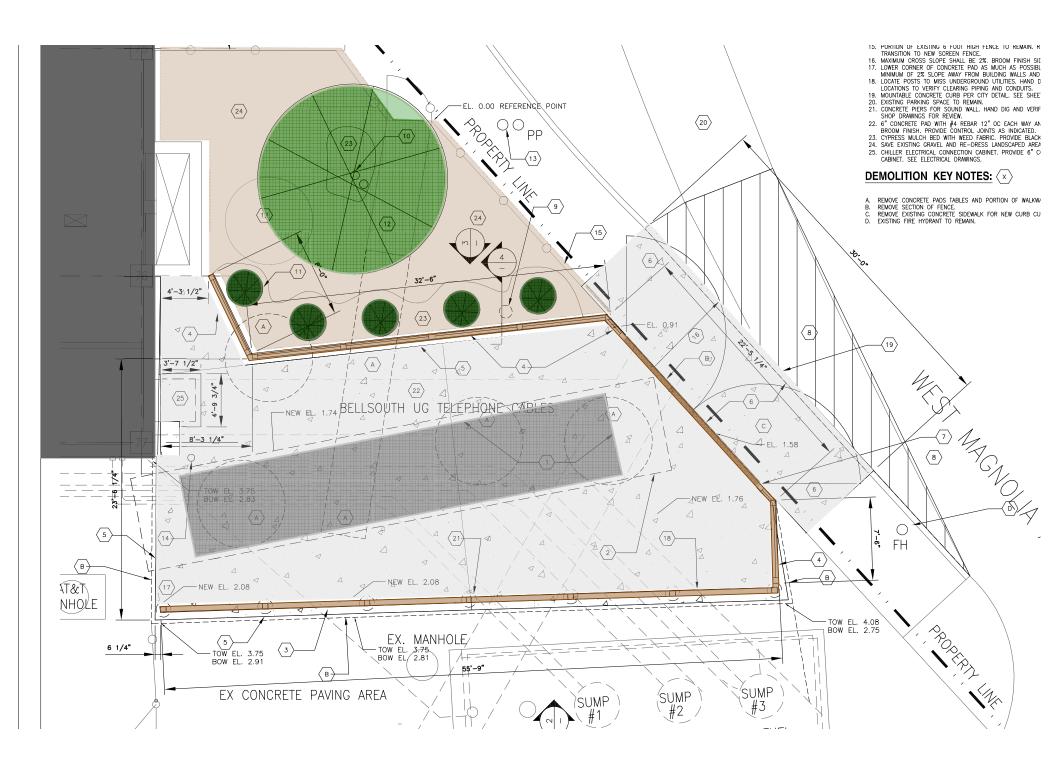
## REQUEST

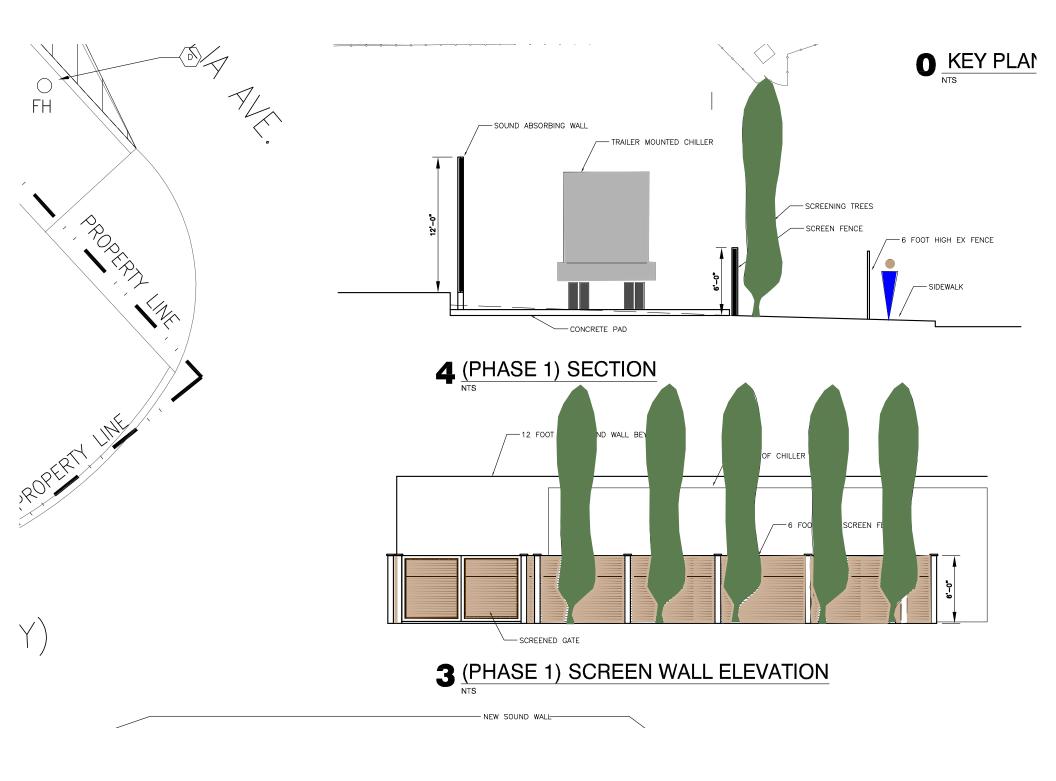
DOWNTOWN DESIGN	Level 1: Signs Alteration of an existing building/structure Level 2: Addition to an existing building/structure Level 3: Construction of new building/structure Site design, parking, p See required Downtown Design attachment for more details. Brief description of work: CONSTRUCT A PARICIN MDUNTED CHILLER W/ A 12 FT SC ACN D LANCE CAPING MUCT WE		FOR AT	NAILER NWAUS
HISTORIC ZONING	Level 1: Signs Routine repair of siding, windows, roof, or other feature Level 2: Major repair, removal, or replacement of architectural elements or n Level 3: Construction of a new primary building Level 4: Relocation of a contributing structure Demolition of a contribu- See required Historic Zoning attachment for more details. Brief description of work:	uting structure	on of gutters, storm ( ditions and accessory	windows/doors
INFILL HOUSING	Level 1: Driveways, parking pads, access point, garages or similar facilities Level 2: Additions visible from the primary street Changes to porches v Level 3: New primary structure Site built Modular Multi-Sectional See required Infill Housing attachment for more details. Brief description of work:	isible from the prin		
STAFF USE ONLY	ATTACHMENTS  ATTACHMENTS  Downtown Design Checklist  Historic Zoning Design Checklist  infill Housing Design Checklist  ADDITIONAL REQUIREMENTS  Property Owners / Option Holders  Level 1: \$50 • Level 2: \$100 • Level 3: \$250 • Level 4: \$500	FEE 1: Level 7 FEE 2: FEE 3:	\$ 75.0 \$ \$ \$	TOTAL:





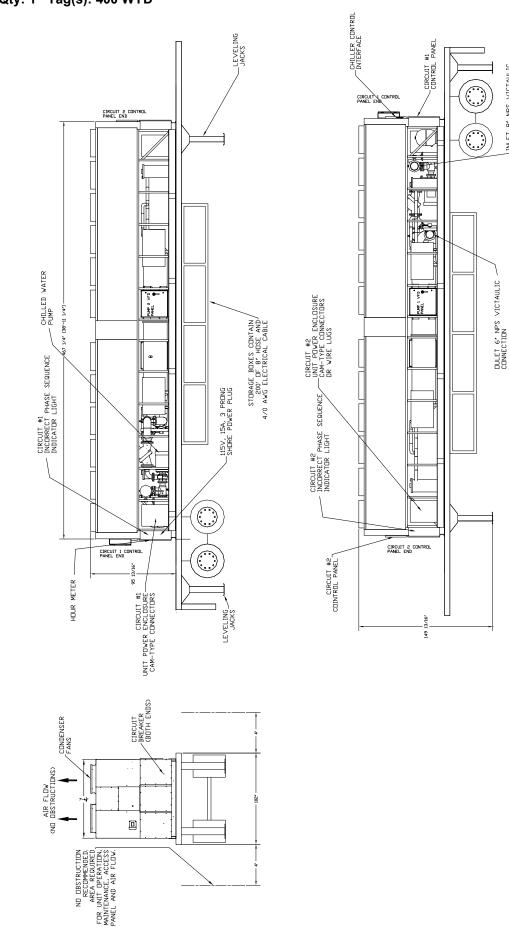


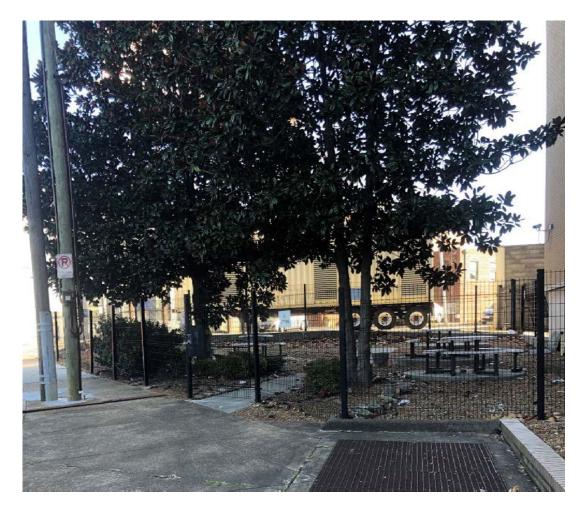




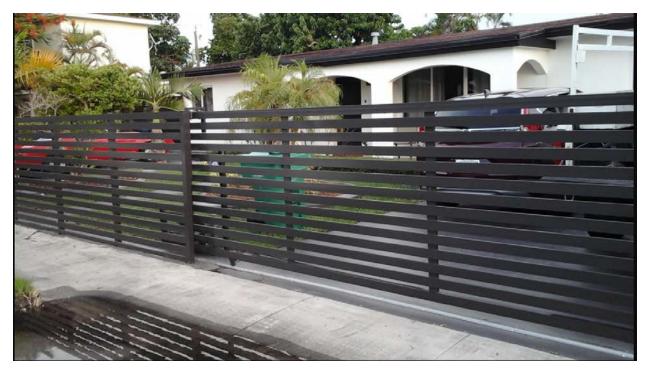


INLET 8' NPS VICTAULIC CONNECTION





Existing fence



Proposed fence (example)

# **A I SOUND WALLS**

TRAIN

ONLY

K

- ► PVC Sound Barrier Wall Systems
- Lightweight and easy-to-install
- ► Lower installed costs
- Sustainable and maintenance-free

Roof Top Mechanical Systems



Commercial

Industrial

Transportation

ailsoundwalls.com 1-866-231-7867



## AIL Sound Walls are made from long-lasting, UV-resistant PVC, with the highest percentage of recycled content available.



## Industrial, Commercial and Institutional

**RECOMMENDED FOR** 

- ► Commercial Developments ► Hospitals ► Schools and Universities
- ► Loading Docks ► Distribution Facilities ► Manufacturing Plants

Noise from large commercial or industrial developments and their associated traffic is one of the most contentious environmental problems for surrounding communities.

Residents are demanding better noise abatement solutions from facilities like shopping centers, manufacturing plants, distribution hubs and utility stations.

AIL Sound Walls provide superior performance for all noise sensitive projects.





## Lightweight AlL Sound Walls are perfect for roof top applications. Man-doors and gates are easily integrated.

## **Roof Top, Equipment and Machinery Enclosures**

**RECOMMENDED FOR** 

- ► HVAC Units ► Generators ► Chillers ► Cooling Towers
- ► Oil & Gas ► Hydro ► Compressors ► Petro Chemical
- ► Sub Stations ► Water/Wastewater

The lighter weight of AIL Sound Walls makes them ideal for roof top applications where sound mitigation is needed. The enclosure support system integrates easily with roof structures of both existing and new buildings to deliver effective sound mitigation.

Excessive noise is one of the most common occupational health hazards in today's heavy industrial or manufacturing environments. AIL Sound Walls are often used to mitigate unwanted noise caused by equipment in these types of applications. Transparent panels, utility ports and man-doors can also be integrated to allow access for routine maintenance or emergency repairs with reduced exposure to noise.

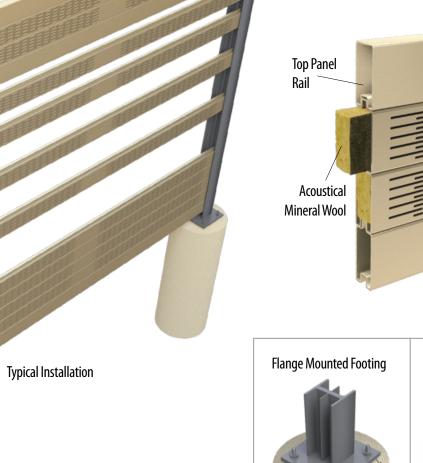


For project planning and assistance call toll-free 1-866-231-7867, or email: info@ailsoundwalls.com

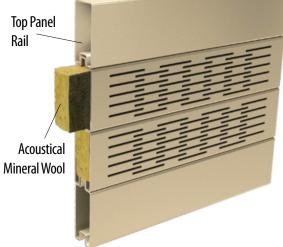
## Easy to install with local crews and reduced need for lifting equipment.

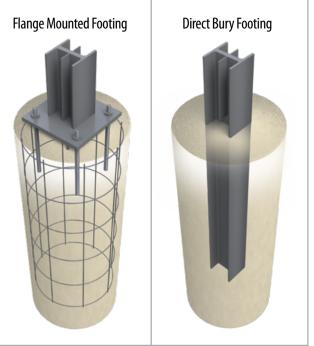
AlL Sound Walls are constructed with tongue and groove PVC panels. Panels are stacked and placed within standard steel posts to the required height and capped with a top panel. A standard panel is 10 ft. (3.0 m) in length and weighs only 21 lbs. (9.5 kg).













Product Specifications	Silent Protector® (Absorptive)	Tuf Barrier® (Reflective)
Span <sup>1</sup>	8 ft -12 ft (2.44 m - 3.66 m)	8 ft -14 ft (2.44 m - 4.27 m)
Panel Width	2.70 in (68.58 mm)	2.70 in (68.58 mm)
Panel Height	5.96 in ± .10 in (151.38 mm ± 0.25 mm)	5.96 in ± .10 in (151.38 mm ± 0.25 mm)
Weight	$4.30  \text{lbs/ft}^2  (21  \text{kg/m}^2)^4$	Min. 4.10 lbs/ft <sup>2</sup> (20 kg/m <sup>2</sup> )
Wall Height	Greater than 30'/9 m	Greater than 30'/ 9 m
STC Rating	up to 39 <sup>2</sup>	up to 31
NRC Rating	0.95 <sup>3</sup>	n/a

For product technical specifications visit ailsoundwalls.com

1. Span is governed by wind loads and varies on code requirements. Contact AIL Sound Walls for recommended panel spans for your project.

2. Standard Silent Protector has an STC rating of 32. Silent Protector Plus can achieve STC of 39.

- 3. Standard Silent Protector NRC 0.95. Silent Protector Plus NRC is 0.90.
- 4. Weight of Silent Protector Plus is 7.30 lbs/ft<sup>2</sup> (36kg/m<sup>2</sup>)

### Sound Transmission Loss ASTM E90 / E413



5 m)	8 ft -14 ft (2.44 m - 4.27 m)
	2.70 in (68.58 mm)
n)	5.96 in ± .10 in (151.38 mm ± 0.25 mm)
4	Min. 4.10 lbs/ft <sup>2</sup> (20 kg/m <sup>2</sup> )
	Greater than 30'/ 9 m

AlL Sound Walls are available in a variety of attractive colors and textured finishes. Custom colors are also available.

Gray	Adobe
Tan	White
NEW	NEW
Green Teak	Honey Maple

#### Add an optional embossed woodgrain texture to any flat color.



Color reproduction in this brochure is subject to limitations of the printing process. Please ask for actual PVC color samples.

Octave Band Number	2	3	4	5	6	7	STC
Center Frequency (Hz)	125	250	500	1000	2000	4000	-
Silent Protector®	23	21	28	42	48	49	SOUND TRANSMISSION
Silent Protector <sup>®</sup> Plus	30	28	34	43	45	49	CLASS RATINGS UP TO
Tuf-Barrier®	23	19	30	45	45	54	WITH SILENT PROTECTOR PLUS

## Sound Absorption Coefficients ASTM C423/E795

Octave Band Number	2	3	4	5	б	7	NRC	
Center Frequency (Hz)	125	250	500	1000	2000	4000	-	
Silent Protector®	0.29	0.80	1.13	1.00	0.96	0.72	0.95	
Silent Protector <sup>®</sup> Plus	0.28	0.71	1.06	0.97	0.94	0.78	0.90	

### STC – Sound Transmission Class

STC is an integer rating used to measure the decibel reduction through a partition. It states the number of decibels lost through that partition in a laboratory environment.

#### NRC – Noise Reduction Coefficient

NRC is a rating between 0 and 1 to index how absorptive a material is. An NRC of 0 means no sound waves are absorbed whereas a rating of 1 means all of the sound waves are absorbed.

NRC	Qualitative
0.4 or less	Poor
0.5 to 0.6	Mediocre
0.6 to 0.7	Good
0.7 to 0.85	Very Good
> 0.85	Excellent
0.95	AIL Silent Protector®