



Troy Acoustics Corporation

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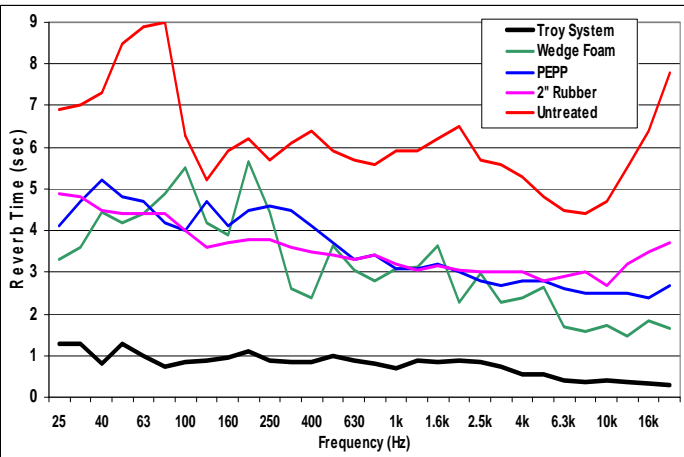
[w] troyacoustics.com

Proposal for Animal Shelter – site-specific design provided by Troy Acoustics Corporation

Thank you for giving us the opportunity to provide you
with your pricing for the Forsyth County Animal Shelter

TROY HAS HIGHEST NRC VALUE ACROSS ALL FREQUENCIES OF .95

The Troy System has an NRC value across ALL FREQUENCIES
of .95, thus resulting in a lower reverb time. Range peak levels
are also reduced.



Shown above are actual test results of the Troy System as compared to non-compliant materials (i.e. wedge foam, polypropylene materials and 2" rubber) removed or scheduled to be removed from facilities which required acoustic solutions.. These facilities were cited by OSHA, or industrial hygiene personnel. The Troy System was then installed or specified to be installed to meet OSHA guidelines for noise exposure limits as set by the 85 dBA action level. This system is installed at several US military, federal and municipal facilities.

We recommend the following minimum coverage to meet the intent of the Forsyth Animal Shelter proposal which requested noise reduction to the office areas.

1. Cover complete ceiling area in the kennel
– Detail enclosed
2. Cover wall areas above 8', finished at the bottom of the system with J channel.

We are providing an estimated per square foot price in absence of site specific drawings. If you have provided site specific drawings a separate detailed cost analysis is provided.

All shipments are FOB Brunswick, GA where we have an office and warehouse facility.

No pricing is considered for installation unless otherwise requested.

No isolation is considered due to the location of the facility relative to neighboring businesses/buildings.

Pricing is based on the following assumptions:

A minimum ceiling square foot area of 7000 sq. ft.

A maximum of 10,000 sq. ft.

Z-channel and J- channel are considered in the per square foot pricing.

If you have further questions, or require more detail, please call me at 800-987-3306 Ext. 400.

Joan Terry Drucker



Troy Acoustics Corporation

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Animal Shelter Noise Attenuation

Technical Data

APPLICABLE STANDARDS

- ASTM C423 Standard Test Method for Sound Absorption and Sound Absorption Coefficients by the Reverberation Room Method
- ASTM E84 Standard Test Method for Surface Burning Characteristic of Building Materials
- ASTM E90 Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and Elements
- ASTM E413 Classification for Rating Sound Insulation

PHYSICAL PROPERTIES

- Waterproof, cementitious wood fiber board to ASTM C612 Type 1A or 1B
Sound transmission class (STC) - 45, ASTM C423
- Reverberation time - 1.25 seconds or less, ASTM C423
- Sound absorption coefficients - Type B and A mountings, to ASTM C423

FIRE PERFORMANCE

- The system is UL classified as noncombustible per ASTM C136 and complies with ASTM C665 Type 1 Surface burn characteristics
- Flame spread - 5 or less, ASTM E84
- Smoke developed - 0, ASTM E84
- Impact resistant and bullet absorptive
- Troy System is comprised of 2 primary components that absorb, trap and muffle sound energy:
 - Troy Board^a : a composite wood fiber cement matrix board composed of dimensionally stable, unfaced rigid cement wood fiber board containing only natural materials.
 - Troy Wool^b, a high density mineral wool. Troy Board is Board density is 3.5 psf minimum per 1" (25.4 mm) section.

- Troy Board and Troy Wool contain no asbestos, urea- formaldehyde or CFC blown agents.
- Troy Board structural acoustical boards are rugged, strong and waterproof. The natural components that make up Troy Board material are impregnable to the elements, thus enabling the system's use for both interior and exterior applications.

LOAD WEIGHTS FOR USE IN HARD LID GRID CEILING

- Load weight of 4.25-4.8 psf for typical 1" (25.4 mm) Troy Board with 4-6" Troy Wool for use in ceiling tiles

LOAD WEIGHTS FOR SIDE WALLS ABOVE 8' HEIGHT

- Load weight of 6.5 psf for typical 2" (51 mm) Troy Board with 1.5" Troy Wool sidewall treatment

OTHER INFORMATION

- Installation shall comply with the requirements of all applicable local, state and federal code jurisdictions
- Pricing DOES NOT include a pre-site visit, onsite visit by noise attenuation manufacturer and sound testing.
Additional pricing available upon request
- Troy Acoustics has over 5 years Animal Shelter acoustic design experience
- Troy Acoustics guarantees that the system will perform acoustically for a period of 5 years
- Installation shop drawings are typically included in pricing. See formal proposal for details.
- The Troy System site-specific Troy design offers significant absorptive values to reduce noise exposure limits to meet the US Department of Labor OSHA permissive exposure limits (PEL).
- In order to meet minimum OSHA requirements it is recommended that the patented Troy System cover the entire ceiling area of the kennel and all side walls above 8' high.
- In order to comply with local zoning noise ordinances a copy of the detailed drawings are required. A site-specific design is required to assure compliance.
- Although animal shelters are encouraged to meet the more stringent NIOSH REL, at a minimum, the kennel must meet the US Department of Labor OSHA permissive exposure limit (PEL)



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*An ESTIMATE
consideration of BID ITEMS
for inclusion in greater BID SUBMITTAL
as signed, a CONTRACT
with*

**General Contractor dated December 8, 2009
for Troy System™ Facility Acoustic Enhancements**

*as applied to
Animal Shelter – Forsyth County
Cumming, GA*

ESTIMATE PROPOSAL DETAILS:

Troy Acoustics will provide for consideration, the scope of Work, Services and Materials of this contract:

A. INCLUDING:

1. Materials:

- a. **Troy Acoustical Ceiling System** using Troy Wool and patented Troy System™ to cover an area specified as a minimum of 7000 square feet or a maximum of 10,000 square feet consisting of:
 - i. Troy Board™ acoustical panels: 23-5/8" x 23-5/8"
 - ii. Finish treatment on Troy Board™ acoustical panels: coated 2mil thick, paint primer, color flat white or as specified by plan owner, paint primer finish applied to one(1) exposed side only
 - iii. Mineral Fiber Wool: 4" thick layer of Troy Wool™ delivered in 24" x 48" battens
- b. **Troy Acoustical Wall System** using Troy Wool and patented Troy System™ to cover an area specified as a minimum 1500 sq. ft consisting of:
 - i. Troy Board™ acoustical panels; 2' x 8.5' long; no paint considered, to be painted by contractor
 - ii. J-channel considered in per square foot pricing
 - iii. Mineral Fiber Wool: 1.5" thick layer of Troy Wool™ delivered in 24" x 48" battens



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2. **Transportation** of material is F.O.B Brunswick, GA, prepaid and included in Estimate pricing to delivery site, Forsyth County Animal Shelter, Cumming, GA. All freight is included in this Estimate unless otherwise noted.
3. **Shipping prices are based on** material being delivered on one (1) delivery vessel and one (1) transport trip with one complete and final bill of lading including the full amount of material written in this estimate. If materials are requested to be delivered in multiple shipments, requiring a delayed delivery or a staging area is unavailable to safely and securely store delivered material, this will add to delivery costs, which are not a part of this quote.
4. **Acoustical Performance of Range Facility:** The Troy System provided herein is estimated to provide a NRC value 0.95 across the full spectrum.
5. **System Guarantee:** None applied, this is not a full Troy System™ acoustical treatment

B. EXCLUDING OR PROVIDED BY OTHERS:

1. **Fees:** Taxes, material inventory bonds, performance bonds, permit and permit fees if applicable.
2. **Installation Shop Drawings:** Not included
3. **Preconstruction Site Visits:** Not included
4. **Project Management Visits:** None.
5. **Acoustic Testing:** Not requested.
6. **Acoustical Door:** none specified.
7. **All events, costs and fees related to delivery site unloading, site storage, cartage, site handling and installation.**
8. **Forklift: Lift equipment to be provided by customer to unload material.**

C. TERM OF OFFERING:

1. **This price is guaranteed for the Estimate scope stated until receipt of Work final payment or April 1, 2010, whichever date is latest.** This price includes, material, and shipping costs associated with all work or as specified herein:

\$9 square foot for wall materials ONLY and \$11.00 a square foot for the ceiling materials ONLY.

UNLESS EXPRESSEDLY WRITTEN ABOVE: There is a 40% restocking charge on all cancellations. **Lead-time for manufacturing and shipping is approximately 12 to 14 work-days after acceptance of Estimate and deposit received.** The quoted price also includes delivery of Troy System™ materials to site to or proximate to Cumming, Georgia USA. All costs for taxes, licenses, permits, bonds or other fees (if applicable) are EXCLUDED, and are the responsibility of the customer. Shipping of Troy materials is f.o.b. origin; transport charges are 'pre-paid and included' in the price. The pricing herein shall remain valid for a period of thirty (30) days for shipment within 180 days or specified in writing above. Orders received beyond 30 days or shipments beyond 180 days (or specified in writing above) are subject to possible re-pricing. The foregoing terms will be incorporated by reference into any purchase order or contract resulting from this Estimate and those terms shall take precedence over all other contract documents.



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Accepted By: _____ Date: _____

Print Name: _____

For (General Contractor): _____

Prepared by Joan Terry Drucker and Tim McCarthy