

# Model QC (Quilted Fiberglass Absorber)

Model QC Quilted Fiberglass Absorber, as manufactured by NSTI, is a fire safe, high performance noise control product. Model QC is a versatile product that reduces reverberant (reflected) noise energy. QC's versatility provides a low cost solution to many noise problems. Being fire safe, exhibiting low smoke emissions and possessing high mechanical strength make it an excellent alternative to urethane foams. Additionally, QC's wide temperature range make it ideal for systems with low or high temperature patterns. Other characteristics such as easily cleanable, impervious to dust, dirt, oils and most chemicals, and no deterioration give QC a long service life.



## **Benefits:**

- ◆ **High Performance** - NRC up to 0.85 and up to 10 decibel reduction.
- ◆ **Wide Temperature Ranges** - From -20° to 180° F. Optional high temperature facing up to 550° F is available.
- ◆ **Environmentally Safe** - Lead and asbestos free.
- ◆ **Versatile** - A wide variety of architectural and industrial facings available.
- ◆ **Durable** - Offers oil and chemical resistance. Will not rot, shrink or degrade.
- ◆ **Fire Safe** - Meets Class 1 requirements. Low smoke and flame spread.
- ◆ **Cleanable** - Steam cleanable.
- ◆ **Convenient** - Available in rolls, precut panels, die cut parts, bound or unbound edges.
- ◆ **Moisture Resistant**
- ◆ **Maintenance Free**

## **Applications:**

- ◆ *Noise Absorbing Liners for OEM*
- ◆ *Housings & Enclosures*
- ◆ *Engine Compartment Liners*
- ◆ *Absorptive Lining for Factory Walls or Other Reflective Surfaces*
- ◆ *Internal or External Lining for Low to Medium Velocity HVAC Systems*
- ◆ *Operator Lab or Control Rooms*
- ◆ *Attractive suspended Baffles*
- ◆ *Decorative Cloth Facings for Architectural Applications*

*NSTI designs custom noise control solutions for your specific applications.*



**Noise Suppression Technologies, Inc.**  
**Model QC (Quilted Fiberglass Absorber)**  
**Performance Data**

**Model QC's** fundamental component is a low binder, fine fiber acoustically absorptive, fiberglass batting. Two different reinforced, nonporous, fiberglass cloth facing materials are available and are quilted directly to the fiberglass batting using high strength thread and locking stitches. The quilting forms a matrix of 4" diamond stitched patterns which encapsulate the glass fibers. When the facing material on these stable encasements is subjected to airborne sound waves, the individual membrane faces respond diaphragmatically (like a drum head) and transmit sound energy through the nonporous facing into the fiberglass batting core material where it is dissipated as thermal energy.

**NSTI Model QC** Quilted Fiberglass absorbers can be produced in single or double layer thickness (1" or 2"). Double layer thickness increases low frequency absorption and provides significant transmission loss characteristics.

Depending on the application requirements, the quilted absorber can be faced on one or both sides. Available facings include the standard vinyl coated fiberglass cloth, impervious high-temperature silicone coated fiberglass cloth which is quilted using a nylon stitching thread, or non-maintenance, non-woven, porous, scrim fabric. The three facing materials can be used individually or in combination on the same absorber so that special properties or economics can be achieved.

**Product Specifications**

Model	Description
QC10Q F/B	1" Quilt, Standard Facing, SB Scrim Backing, 50 ft. roll length.
QC10Q F/F	1" Quilt, Standard Facing Both Sides, 50 ft. roll length.
QC10Q S/B	1" Quilt, High Temperature Silicone Facing, SB Scrim Backing, 50 ft. roll length.
QC20Q F/B	2" Quilt, Standard Facing, SB Scrim Backing, 25 ft. roll length.
QC20Q F/F	2" Quilt, Standard Facing Both Sides, 25 ft. roll length.

*Note: Other combinations, including decorative fabrics, are available.*

**Standard Width:** 54"

**Standard Facing:** -20° to 180° F  
 Colors: Grey & Tan.  
 Other colors available in quantity.

**Spun Bonded Polyester Scrim (SB):** 100% Nonwoven polyester

**High Temperature Silicone Facing:** -90° to 550° F

**Absorption Coefficients**

Model	Frequency, Hz						NRC
	125	250	500	1000	2000	4000	
QC10Q F/B	.12	.47	.85	.84	.64	.62	.70
QC10Q F/F	.17	.30	.83	.82	.59	.37	.65
QC10Q S/B	.04	.46	.86	.81	.59	.31	.70
QC20Q F/B	.38	.89	.82	.76	.53	.35	.75
QC20Q F/F	.19	.99	.96	.80	.57	.33	.85

*NSTI believes the information contained herein to be accurate as of the publication date. Actual product performance may vary based on specific application conditions.*

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