QUADZERO™ NL

This installation guide provides a recommendation for the application of Quadzero NL to improve noise transmission loss performances through bulkheads, deckheads, partitions and linings, whilst achieving a decorative foil finish.

Quadzero NL

WORKING HEALTH AND SAFETY

- Personal Protection Equipment (PPE), including eye protection, gloves and safety clothing is recommended.
- Always follow, read and understand any information contained within the product technical datasheets and safety data sheets.
- The product is suitable for all users provided the guidelines in this document are followed.
- If unsure, please consult with your local Pyrotek representative.
- Care should be taken when handling, practicing good lifting practices, potentially more than one installer, as rolls of product are heavy.

DESCRIPTION

Quadzero NL barriers are dense, flexible surface coverings that reflect noise. They are:

- effective at improving noise on board, by limiting noise transfer from machinery rooms to adjacent living spaces
- effective at reducing noise transfer between cabin spaces, increasing privacy and/or confidentiality
- more flexible, economical and practical than full height partitions
- easy to install, ideal for new build and retro-fit applications
- proven, with project history and reference lists in multiple vessel types as a safe and effective way of reducing noise

Please to refer our website www.pyroteknc.com to see the latest Information page on the complete range of products.

POINTS TO NOTE WHEN INSTALLING

- Quadzero NL is heavy. Rolls over 25 kg require two persons to lift.
- Providing an 'airtight' assembly achieves best noise reduction.
- Sealing all joins with an overlap of 50 mm is recommended. Use Tape AGC to seal joins and edges. See Page 2 for Joining Options of Quazdero NL.

Quadzero™ NL is a high performance foil faced mass loaded vinyl noise barrier, approved for use in maritime applications as a surface covering or veneer for bulkheads and ceilings, applied on top of marine certified insulation systems.

applications

- Surface covering of approved/certified insulation within marine engine rooms, machinery spaces on bulkheads and deckheads to reduce noise transmission
- Inside of interior fitout panels to improve noise performances
- Outside or inside of metal air ducts, air trunking to reduce noise breakout
- Wrapped around HVAC ducts, exhaust ducts or pipes to reduce noise transfer
- Can be hung as flexible curtains, mobile or permanent – to isolate areas, and reduce the noise between these areas
- Applied on the interior of generator enclosures, to improve the noise attenuation of generator sound enclosures

GENERAL GUIDELINE RECOMMENDATION

TOOLS FOR INSTALLING QUADZERO™ NL

Quadzero NL requires basic tools for installation
(See images for reference)

A. Retractable safety blade / knife

B. Tape measure

C. Large square

D. Straight edge

Other joining and fastening accessories such as Tape AGC or insulation pins may be required when installing Quadzero NL.

INSTALLING QUADZERO™ NL

Marine – Deckheads and Bulkheads

- Ensure insulation, whether it be standard, non-combustible, or structural fire protection (A0, A15,A30, A60) is installed according to the relevant supplier installation guide and/or fire certifications.
- Cut Quadzero NL to manageable lengths and impale the product into the same steel pins used to secure the insulation before it.
- Using a secondary washer/friction clip/speed clip, secure the Quadzero NL in place.
- Ensure all joints are overlapped by ≥50 mm and sealed with marine approved tape, such as Tape AGC from Pyrotek.
- Ensure all corner edges are overlapped and sealed with Tape AGC.
- Penetrations, where applicable, should be treated with insulation according to the fire requirements – follow IMO regulations and certifications. In these circumstances, Quadzero NL can be easily cut-out to allow penetrations, following the methods shown below.
- Review drawing images below.

Product	Roll Width	Roll Length	Roll diameter	Roll Weight
Quadzero NL 2kg/m²	1350 mm	10 m	200 mm	27 kg
Quadzero NL 4kg/m²		5 or 10 m		27 - 54 kg
Quadzero NL 6kg/m²		10 m		81 kg
Quadzero NL 8kg/m²		5 m		54 kg
*Quadzero NL 10kg/m²		5 m		68 kg

** Not IMO certified*

ACOUSTIC PERFORMANCE

Test	2 kg/m²	4 kg/m²	6 kg/m²	8 kg/m²	10 kg/m²
Rw	21	25	28	31	34
STC	21	26	28	31	34

Tested to ISO 15186-1:2003 & 10140-4:2010 at University of Canterbury, New Zealand
Report Numbers: 261d, 262d, 263d, 264d & 265d

SFP WITH 'PYROTEK - QUADZERO NL' MASS LOADED VINYL

INSTALLATION GUIDE 1

INSTALLATION GUIDE 2 WITH CONCEALED AIRSPACE

INSTALLATION GUIDE 2-A

INSTALLATION GUIDE 3 WITH CONCEALED AIRSPACE

BHD/DECK PENETRATION METHOD

Detail 1

Please Note:

- Pyrotek Quadzero NL to have minimum 50 mm overlap on joints.
- All joints sealed with approved tape.
- Quadzero NL foil facing side away from the SFP.
- Pins should protrude 25 mm past Quadzero NL. Dependent on type of washer used.

INSTALLATION AROUND PIPEWORK, DUCTING AND PENETRATIONS

a

cut a slit from edge of sheet to pipework location. cut flange lines to diameter of pipe

b

move pipe or Quadzero NL into location before closing flaps behind the pipe

c

ensure all junctions of ducting and Quadzero NL are securely taped, mechanically fixed or sealed with plasticiser resistant mastic

Please contact Pyrotek® for further information or detailed advice on your specific application.

Caveats: Specifications are subject to change without notice. The data in this document is typical of average values based on tests by independent laboratories or by the manufacturer and are indicative only. Materials must be tested under intended service conditions to determine their suitability for purpose. The conclusions drawn from acoustic test results are as interpreted by qualified independent testing authorities. Nothing here releases the purchaser/user from responsibility to determine the suitability of the product for their project needs. Always seek the opinion of your acoustic, mechanical and fire engineer on data presented by the manufacturer. Due to the wide variety of individual projects, Pyrotek is not responsible for differing outcomes from using their products. Pyrotek disclaims any liability for damages or consequential loss as a result of reliance solely on the information presented. No warranty is made that the use of this information or of the products, processes or equipment to which this Information Page refers will not infringe any third party's patents or rights.
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