

COMPANY PROFILE



KAMCO

Innovator In Aluminium

KAMCO ALUMINIUM ENGINEERING SDN BHD
(451368 - W)

Lot 87, Jalan Sungai Lalang Batu 23, Kawasan
Perindustrian Sungai Lalang,
43500 Semenyih, Selangor.

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Company Introduction

The company's humble beginning traces back to 1997, where the founder Mr. Chan Ki Hap started his business by selling aluminium ladders from a rented shop under the name Syarikat KAMCO Supplies. The current managing director is Mr. Lim Tze Chao.

The company was then officially registered as a private limited company under the name KAMCO Powder Coating Sdn Bhd in 1997. In 1998, the company operates under the name KAMCO Aluminium Engineering Sdn Bhd.

Previously located strategically at Jalan Sungai Besi, the industrial hub of Kuala Lumpur (Klang Valley), the 17,000 sq feet state-of-the-art aluminum production site is equipped with top class facilities. Together with a team of highly-skilled and dedicated specialists, only the best quality aluminium products are manufactured everyday. In year 2018, KAMCO Aluminium Sdn Bhd has expand further with expansion factory at Sg. Lalang, Semenyih. Total factory size is about 1 acre (43,560 Sq.ft).

Armed with more than 26 years of experience, KAMCO Aluminium Engineering Sdn Bhd attributes its growth and success to Dexibility. Over the years, the company has successfully embraced the challenges of meeting the high demand of the niche market and excels in it. Since then, the company key strength is on customizing aluminium of single or system based prodles. In year 2023, Kamco Aluminium Engineering Snd Bhd started noise barrier business as authorized manufacture of Japan metal noise barrier panel.



Company name	Kamco Aluminium Engineering Sdn Bhd
CEO	Lim Tze Chao
Board of director	<ol style="list-style-type: none"> 1) Puan Sri Datin Chan Lian Yen 2) Lim Tze Chao 3) Lim Puay Fung
HQ address	No. 3A, Jalan Suria Park 1, Suria Park, Kawasan Perindustrian Kampung Baru Balakong, 43300 Seri Kembangan, Selangor, Malaysia.
Factory address	Kamco Aluminium Engineering Sdn Bhd (Factory) Lot 87, Jalan Sungai Lalang Batu 23, Kawasan Perindustrian Sg. Lalang, 43500 Semenyih, Selangor
contact	TEL: + (603) 8964 9991 FAX: + (603) 8964 5990 E-mail: sales@kamcoaluminium.com
URL	http://www.kamcoaluminium.com
Date of Incorporation	28 October 1997
Natural Of Business	Aluminium Fabrication
Company's Secretary	WANCONNECT CORPORATE SERVICES SDN BHD Unit 23A-02, Level 23A, Q Sentral, 2A, Jalan Stesen 2, Kuala Lumpur Sentral, 50470 Kuala Lumpur Wilayah Persekutuan, Malaysia.
Company's Auditors	CCL & PARTNERS PTL Unit 23A-03, Level 23A, Q Sentral, 2A, Jalan Stesen 2, Kuala Lumpur Sentral, 50470 Kuala Lumpur Wilayah Persekutuan, Malaysia.
Services offered	ALUMINIUM ENGINEERING ALUMINIUM FABRICATION ALUMINIUM EXPORT ALUMINIUM STRUCTURE
Company's Bankers	<ul style="list-style-type: none"> ● MayBank Berhad ● OCBC AI-Almin Berhad

Vision

- To be a renowned global leader and a reliable partner in the aluminium industry pioneering in product innovation and the re-engineering.

Mission

- To listen and understand the requirement and needs of customer is the company's top priority. We believe in fostering long-term relationship with customer to create a win-win situation.
- To continuously pioneer, improve and excel in product re-engineering that meets international standard.
- To encourage and promote the usage of aluminium product as an environmental friendly / recyclable.

Quality Objectives

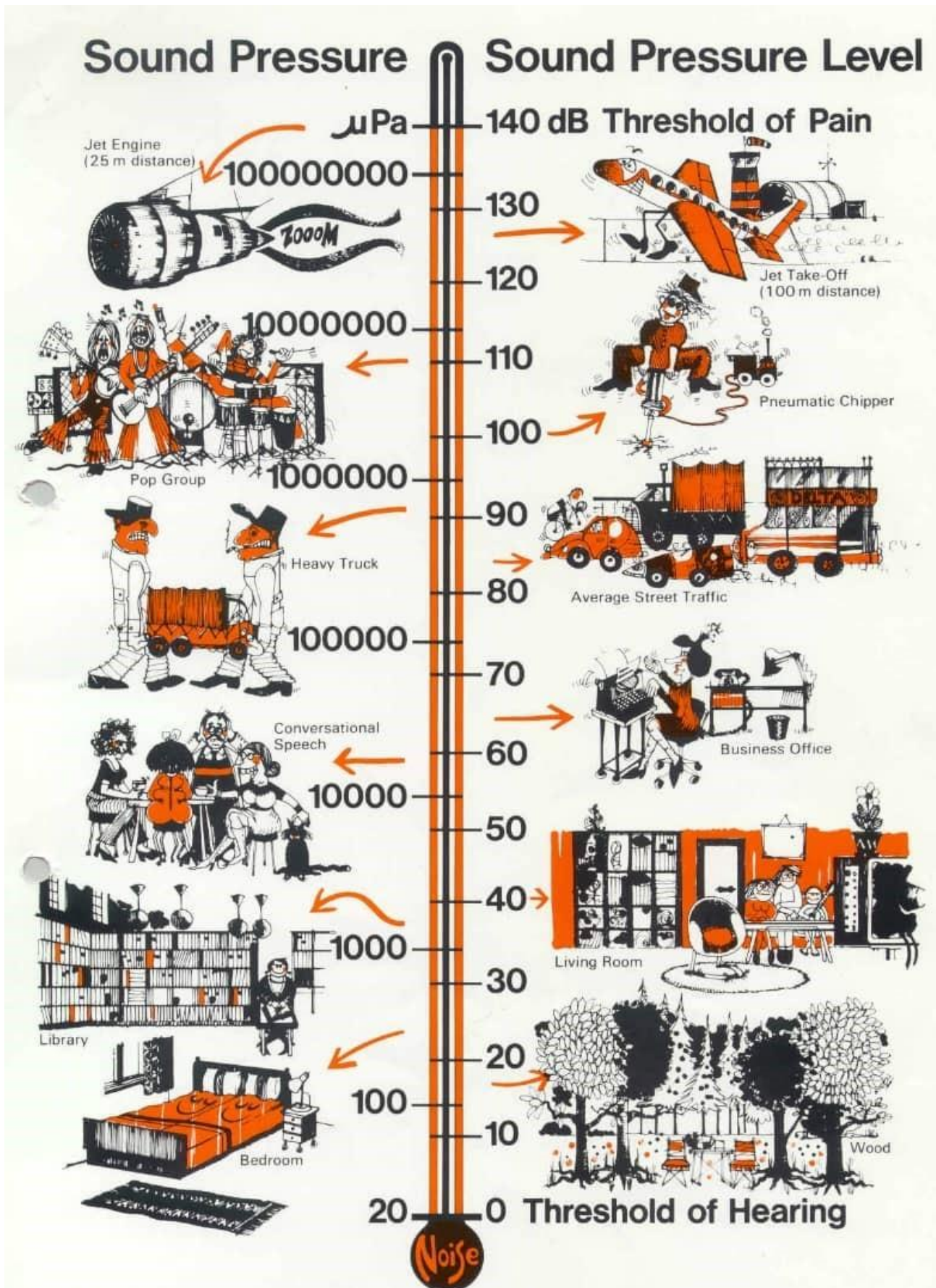
- Sales Target to 3 million
- Reduced Conversion cost



Sound Barrier Product Catalogue



Why Does Noise Affects Us



Aluminum panels are often manufactured into sound barriers for lightweight, excellent corrosive resistance and self-support. **Aluminum sound barriers** are not only used in traffic areas but also factories and workshops where machines make serious noise pollution.

As an absorptive sound barrier, aluminum panel are designed with various hole patterns such as dotted slits or louvers. To maximize sound absorptive performance, fillings are required such as EPDM, fiber glass and aluminum foam.

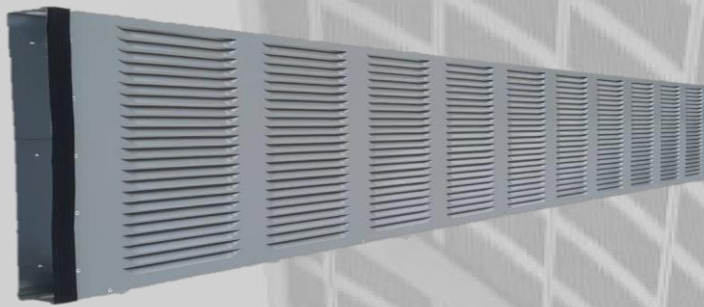
Many sound barriers make full use of advantages of clear noise barrier and aluminum barrier which can absorb noise and also provide support frame to polycarbonate or acrylic sheets. This sound barrier system will not obstruct light transmission while reducing noise level at utmost.

Why select aluminium panel as sound barrier?

- Self-supporting system without requiring additional frames.
- Light weight system makes installation easy.
- High sound absorptive capability.
- Its special corrosive resistance result in durable noise barrier, even in coastal areas.
- Long durability.
- Economic cost.



Aluminium Noise Barrier Panel Specification



Standard type panel

Standard type panel specification 60mm(t)

Part	Material
Front panel	Aluminium A5052, t=1.0mm
Back panel	Highly corrosion resistant coated steel sheet, t=1.2mm
Section panel	Highly corrosion resistant coated steel sheet, t=1.2mm
Infill material	32kg/m3 glass wool board, t=50mm
Protection layer	Protection film bag, t=0.02mm / Glass cloth
Rivet	Aluminium
Cushion tape	EVA foam

Panel Size	Weight
2.0M (1,970x500x60mmT)	20kg +/- 0.5kg
3.0M (2,970x500x60mmT)	27kg +/- 0.5kg

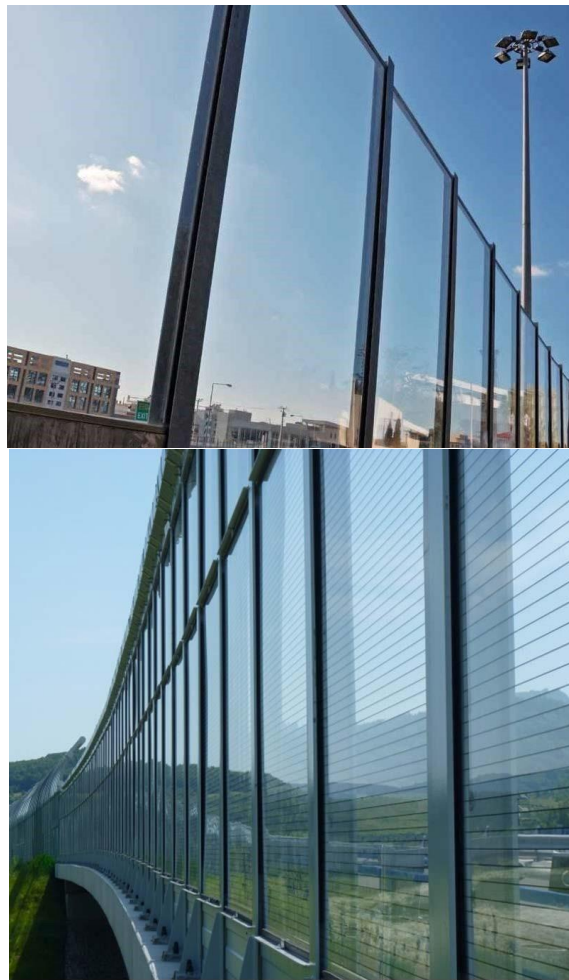
Product features

- **Light weight panel**
Quick and easy installation
- **Excellent sound absorption**
Mineral wool that give high absorption ratio
- **Excellent durability**
Using high quality & high corrosion resistant aluminum front plate and galvanized steel plate for back & section
- **Durable design**
Withstand 150kg/m² of wind load

Transparent sound barrier Transparent sound barrier has been increasingly demanded by highways, railways, overpasses and bridges which cross populated urban areas. This clear sound wall has been proven an optimum alternative for solving visibility and noise abatement problems. Unlike metal or masonry blocks sound wall, clear sound barrier will not break the continuity of scenic landscapes while blocking traffic noises.

Transparent sound barriers are purely reflective acoustic barrier and always cooperate with sound absorbing elements. There are two glass-like sound barrier - acrylic and polycarbonate. Various thicknesses and sizes can be manufactured.

Note: For glass sound barrier, bird protection designs are also needed because bird can't distinct the clear barrier during flying.



Your benefits of choosing transparent sound barriers:

- **Increase road safety**
Light-transmitting property allows sunlight through and prevents shadows being cast onto the roadway.
- **Long life expectancy**
Both excellent resistance to all weathers and strength to damage from hail, wind and storm contribute long service life. It can be used throughout many years in harsh outdoor environment.
- **Adding extra view to landscapes**
In contrast with non-transparent sound barrier, clear barrier is an impressive and charming element to cement buildings.
- **No visual pollution but giving an opening for light and views**
Clarity allows for enjoying beautiful views along the way or bridge.
- **Easy installation**
Adaptable to any ground-mounted noise barrier system.
- **Win-win solution of sound pollution and visibility**
Significantly reducing installation time and project cost.

Transparent Noise Barrier Makes Noisy Area Silent

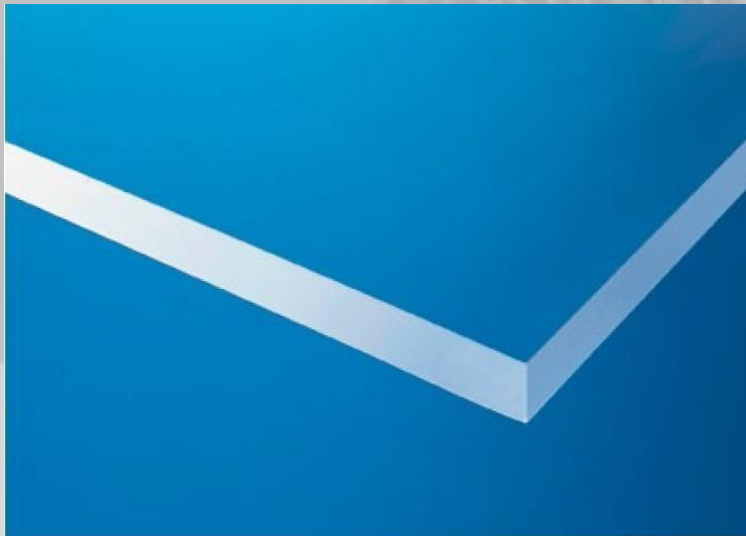
Transparent Panel Specification



Transparent panel specification 60mm(t)

Part	Material	Supplier / Country of origin
Frame	Aluminium A6063S, t=1.7mm	Kamco Aluminium Sdn Bhd, Malaysia
PMMA sheet	Evonik Plexiglas XT, t=10.0mm	Evonik, Germany

Panel Size	Weight
2.0M (1,970x500x60mmT)	19kg +/- 0.5kg



PLEXIGLAS® Soundstop transparent

Large-sized, highly transparent cast (GS) or extruded (XT) sheets. The clear grade offers a light transmission of over 90 percent. PLEXIGLAS® Soundstop is available in clear color and in a series of transparent colors.



PLEXIGLAS® Soundstop GS CC transparent with integrated silver retention

Highly transparent cast acrylic sheets with embedded polyamide threads. These threads restrain any fragments caused due to breakage during an accident, and prevent them from falling onto the road. PLEXIGLAS® Soundstop GS CC is a transparent noise barrier material approved throughout the world for use on bridges without additional restraint systems.

Worksite Noise Barrier (Quieter Construction Work Site)

- Worksite noise barrier specifically developed and designed to cater for construction site usage.
- It helps mitigate construction works and machineries noises effectively and drastically.
- It will create a reduce construction noise and acts as barriers towards the public.
- It also functions to beautify construction sites as to provide a neat and standardized appearance. Available in various colors.



Product Name	Panel Thickness (mm)	Panel Height (mm)	Panel Length (mm)	Panel Weight (kg)
Worksite Noise Barrier Panel	32	500	2970	17.5
Front Panel : G.I Sheet (Thickness 0.5mm) Back Panel : G.I Sheet (Thickness 0.5mm) Sound Absorbing Material : Rockwool 25mm 68kg/m3 Laminated with Black Matt Tissue				

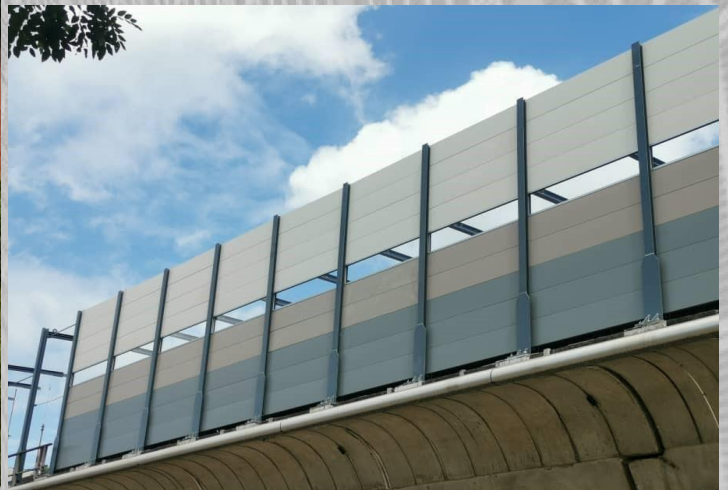
STC = 30
NRC = 0.71



Work Site Noise Barrier Panel

Project Reference

C1363 Implementation of noise barrier on rail viaduct phase 2 (On-going project)



Project Reference

Setiawangsa – Pantai Expressway – SPE (On-going project)



Project Reference

ETFE Sound Barrier Project for Subang, LRT 1



Contract 1406 Implementation of noise barrier on rail viaduct phase 3 (On going project)



Temporary Noise Barrier Products

metal temporary noise barrier panel

curtain noise barrier



The Answer To Quieter

Construction Sites.....

Metal Temporary Noise Barrier

temporary noise barrier products designed for construction site which helps effectively reduce construction and machineries noise, It s to create a quieter construction site.

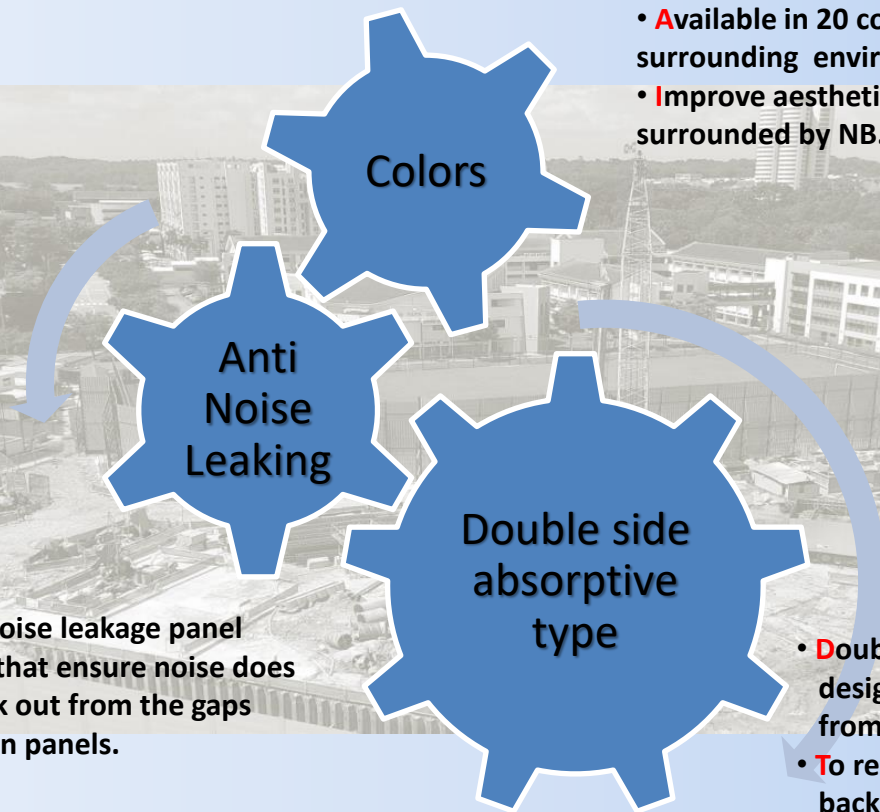
Not only does it help to reduce construction costs, it also serves to beautify building sites and surrounding areas. **TT** noise barrier products are typically installed either along the perimeter or adjacent to the noisy machineries.

For optimum environmental noise impact reduction, the sound barrier walls are positioned as close as possible to the sound source while allowing for access and airflow.

Uses & Benefits of Our Temporary Noise Barrier

- Industrial Enclosures
- Suitable for machine noise
- Suitable for pump noise
- Construction site
- Building Site screening
- Motorway Screening
- Light Weight
- Easy DIY Installation
- Sound Absorbing
- Non Reflective
- Cost Effective
- Easily repair / replace
- No Maintenance
- Wind load Capacity up to 35m/s
- High Sound Reduction
- Portable
- Reduce construction cost
- Durable to weather resistant

Features



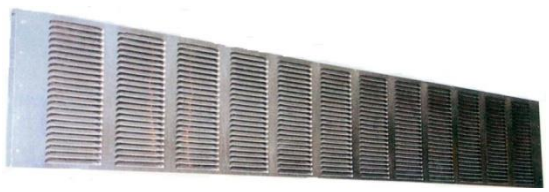
- Available in 20 colors to match the surrounding environment.
- Improve aesthetic view of area surrounded by NB.



• **Anti noise leakage panel** design that ensure noise does not leak out from the gaps between panels.

- **Double side absorptive panel** designed to capture noise from both end
- **To reduce bouncing noise** back to surrounding.

Metal Temporary Noise Barrier



Product Description & Specification

Singapore Green Building Council certification – Rock wool product

Name	Thickness (mm)	Height (mm)	Length (mm)	Weight (kg)
TT Noise Brrier Panel	32	500	2970	24

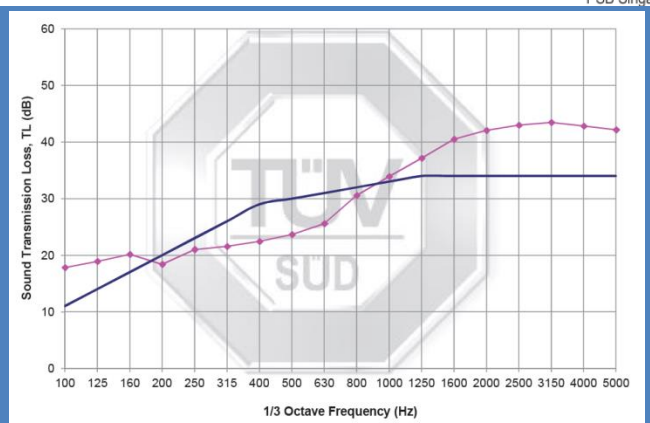
Front panel : G I Sheet (T0.5mm)
 Back Panel : G I Sheet (T1.0mm)
 Sound Absorbing Material : Rock wool T25mm 68kg/m3 laminated with black matt tissue

TUV SUD PSB Singapore Noise Measurement Test Report



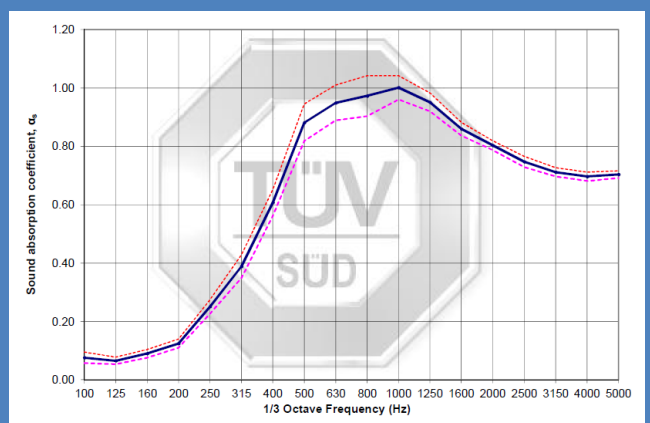
PSB Singapore

1/3 Octave Band Frequency (Hz)	Measured Sound Transmission Loss, TL (dB)	Shifted Reference Curve STC = 30 dB	Deficiency
100	17.8	11	0.0
125	18.9	14	0.0
160	20.1	17	0.0
200	18.4	20	1.6
250	21.0	23	2.0
315	21.6	26	4.4
400	22.4	29	6.6
500	23.7	30	6.3
630	25.6	31	5.4
800	30.6	32	1.4
1000	33.9	33	0.0
1250	37.1	34	0.0
1600	40.5	34	0.0
2000	42.1	34	0.0
2500	43.0	34	0.0
3150	43.5	34	0.0
4000	42.8	34	0.0
5000	42.2	34	0.0
Total deficiency (125Hz – 4000Hz)			28



The tested metal noise barrier panel achieved a sound transmission class, STC = 30.

1/3 Octave Frequency (Hz)	Metal noise barrier panel (Type A mounting)	
	Sound Absorption Coefficient, α_s	Uncertainty
100	0.08	± 0.02
125	0.07	± 0.01
160	0.09	± 0.01
200	0.12	± 0.02
250	0.25	± 0.03
315	0.39	± 0.05
400	0.61	± 0.08
500	0.88	± 0.13
630	0.95	± 0.14
800	0.97	± 0.15
1000	1.00	± 0.16
1250	0.95	± 0.16
1600	0.86	± 0.12
2000	0.80	± 0.12
2500	0.75	± 0.10
3150	0.71	± 0.09
4000	0.70	± 0.09
5000	0.70	± 0.08
Noise Reduction Coefficient, NRC	0.75	
Sound Absorption Average, SAA (200Hz- 2500Hz)	0.71	



Values in bracket () denotes the values of sound absorption coefficient, α of 1/1 Octave Frequency Bands

Metal Temporary Noise Barrier

Mock up Measurement Report on 31st July 2014

THE OBJECTIVE

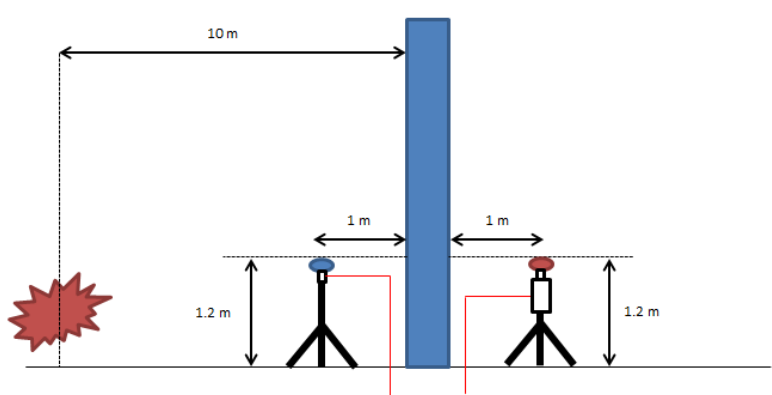
The purpose of the test is to evaluate the effectiveness of Noise Barrier Panels using noise excitation of ± 98 dB(A).

METHODOLOGY

- a) The methodologies for the Temporary Noise Barrier Test are described in the following paragraphs:
- b) For scenario 1 as shown in Appendix B, Sound Level Meter with 2 microphones was being used to capture the difference in dB(A) without any noise barriers.
- c) For scenario 2 as shown in Appendix B, Sound Level Meter with 2 microphone channels was used to observe the difference in dB(A).
- d) Noise source is from a loud speaker with noise excitation that produce around ± 98 dB(A)

Recommended Setup

- *To be done in open space
- **Drawings not drawn to scale



Legend

- Noise Source
- Measuring Point 1
- Measuring Point 2
- Noise Barrier Panel

Scenario 1 (without noise barrier)	1 st Measurement	2 nd Measurement
Point 1 (noise source)	99.5 dB(A)	99.4 dB(A)
Point 2	96.9 dB(A)	96.9 dB(A)
Noise different	2.6 dB(A)	2.5 dB(A)

Scenario 2 (with temporary noise barrier)	1 st Measurement (Using metal noise barrier)	2 nd Measurement (Using curtain noise barrier)
Point 1 (noise source)	97.2 dB(A)	96.8 dB(A)
Point 2	70.0dB(A)	71.0 dB(A)
Noise different	27.2dB(A)	25.8 dB(A)



Temporary metal noise barrier



Curtain noise barrier

CONCLUSION

The site test results have shown that the temporary noise barrier panels are very effective in outdoor environmental noise control. The STC of the tested panel is STC 30; and from the actual site test, it has shown 26.5 dB noise reduction in the field. It is very effective and cover wide noise spectrum range of the noise source from low frequency noise source of 125 Hz to high frequency noise source 20,000 Hz as shown fig 12 and Fig 13. It means the barrier can be effective for almost all the noise sources used in construction site.

Besides the high STC 30 value, the panel is also highly noise absorptive. It has achieved NRC 0.75 (in according to ASTM C423) that would greatly minimized the reflected noise.

The combined effect of high STC30 and high NRC0.75 of " TTM" temporary noise barrier panel , would make the TTM noise barrier system an effective and innovative solution for noise mitigation in construction environment

Metal Temporary Noise Barrier

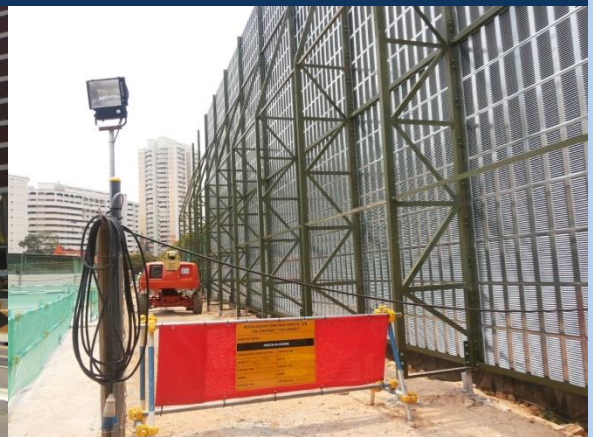
Metal Noise Barrier Job References



▲ Thomson Line – Bright Hill Station at North Shaft



▲ Thomson Line – Bright Hill Station at South Shaft



▲ More than 70% opening area (louvers)



▲ Malaysia KVMRT – Taman Maluri Launch Shaft

Metal Temporary Noise Barrier

Metal Noise Barrier Job References



▲ Malaysia KVMRT Package V3 – Pinggir Zaabar, Taman Tun Dr Ismail



▲ Malaysia KVMRT – Pasar Rakyat Launch Shaft



▲ Malaysia KVMRT – Cochrane Station

▲ Malaysia KVMRT Package V5 - Cheras

Metal Temporary Noise Barrier

Metal Noise Barrier Job References



▲ Malaysia KVMRT – Pudu Launch Shaft



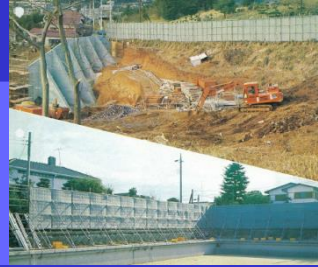
▲ Malaysia KVMRT – Pavilion Ventilation & Escape Shaft



▲ Malaysia KVMRT Package V8 – Kajang

Curtain Temporary Noise Barrier

For construction site and plant



Curtain Noise Barrier

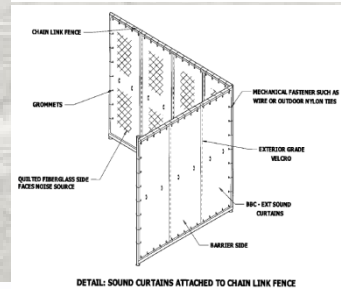
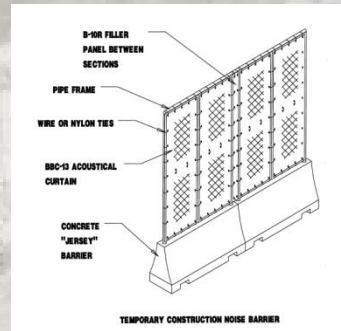
To bring insulation at the construction site as a temporary noise barrier with highly noise absorbing and insulation efficiency.



Noise absorbing side



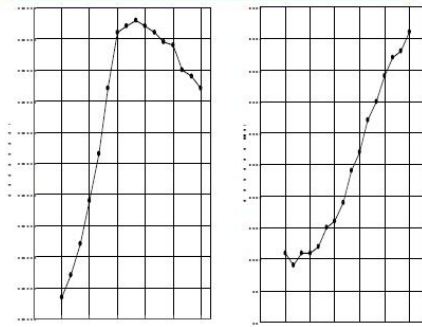
Back side



Proposed Fixing

Characteristics

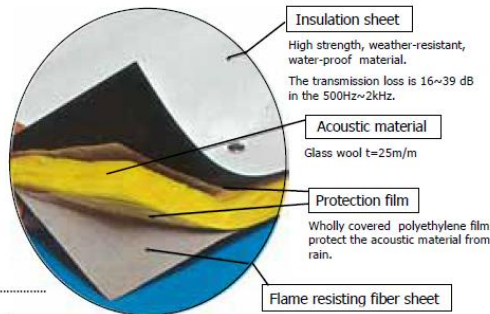
Acoustic efficiency



Absorbing rate
500 ••• 0.92
1000 ••• 0.94

Transmission loss
500 ••• 16 •••
1000 ••• 27 •••

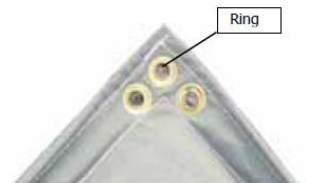
4 layered design



Easy installing

To easy hocking up and taking off by bolt or rope with right weight.

Can install to bending section with its softness.



Name	Thickness (mm)	Height (mm)	Lenght (mm)	Weight (kg)
Isolation Sheet S-1	28	2000	1000	7

Project Reference

Setiawangsa – Pantai Expressway – SPE (On-going project)



Project Reference

ETFE Sound Barrier Project for Subang, LRT 1



Contract 1406 Implementation of noise barrier on rail viaduct phase 3 (On going project)





Innovator In Aluminium

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