

Company Profile

2024

1. Company Profile

Acoustics Practice

- We have completed extensive acoustic projects throughout South Africa, Botswana, Namibia, Kenya, Sudan, Nigeria, Republic of Congo, Bahrain, Suriname (South America), Zambia, Mali among other countries.
- We have a diverse team of engineers and technicians. The combined acoustics engineering experience of the practice is over 60 years.
- We have worked within most business markets, industries and engineering disciplines including architecture, construction, petroleum, energy sectors, commercial, telecoms, transport, entertainment, defence, environmental and mining upon others.
- We have a professional association with the following international leaders in acoustics engineering:
 - ◆ Marshall Day Acoustics in Australia and New Zealand.
 - ◆ deBAKOM Akustik in Germany who are acknowledged world leaders in environmental acoustics.
 - ◆ Akustik Buch in Austria who are noise and vibration control experts.
 - ◆ Bernstein and Braun in Germany who are the world leaders in noise mapping and modeling and owners of SoundPLAN©, acknowledged industry leading acoustic modeling software.
 - ◆ Norsonic AS in Norway who are world leaders in the design and manufacture of sound measurement instrumentation.
- We are Southern African and African Continent distributors for the noise mapping software, SoundPLAN©. SoundPLAN© is recognised as the industry and world leader in noise mapping software.www.soundplan.co.za

- MACHOY Consulting have been leaders in Noise Monitoring technology and capability development in Africa. We were the first company to run long term noise monitoring programmes and link this via the internet.
- Visit our website **www.machoyrsa.com** for further details.

Benefits

- *Experience*

Mackenzie Hoy Consulting Engineers have completed many projects in all fields of acoustics in most service sectors with great success. The practice has over 40 years combined engineering experience in acoustic engineering and design.

- *Resources*

Mackenzie Hoy Consulting Engineers have 1 engineer and 2 technicians. We have state-of-the-art measurement and monitoring equipment and the most advanced software available for acoustic modelling and calculations. Our human and technical resources allow us to provide engineering services of the highest quality, without project delays and results that can be trusted.

- *Costing Saving*

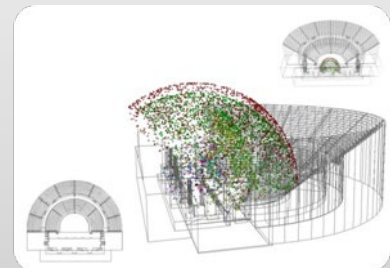
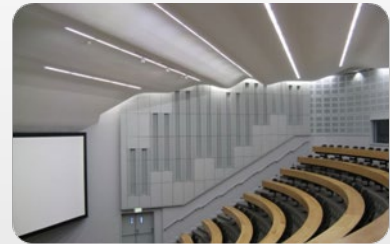
Through our experience and resources, we always provide our clients with engineering solutions that save money, both in infrastructure investment and business development.

2. Services Offered

Architectural Acoustics

Building and Design Sectors

- Auditoriums, Theatres, Chambers
- Conference Halls
- Transport Infrastructure, Airports
- Entertainment Venues
- Sports Arenas
- Commercial Developments
- Public Concourses
- Public Address System Design
- Hotel and Leisure
- Public address evacuation system design.
- Architectural Acoustics Computer Modelling
- Building Noise Control
- Interior Acoustics Design
- Acoustic Building Element Design
- Acoustics Specification
- Green Star Rating Design
- Acoustic Audits and Surveys
- Acoustic Parameter Measurements
- Sound Transmission and Absorption Testing
- Construction Site Noise Monitoring and NMP

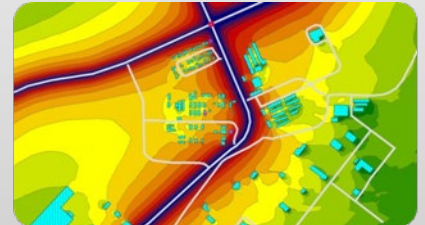


Industrial Acoustics & Noise Control

- Silencer and Attenuator Design
- Industrial Noise Surveys
- Industrial Plant Noise Reduction
- Noise Protection Barrier Design
- Industrial Noise Mapping
- Noise Inventories
- Commissioning Measurements
- Military and Defence

Environmental Acoustics

- Noise Impact Assessments
- Environmental Noise Surveys
- Long Term Noise Monitoring
- Noise Management Planning
- Noise Monitoring System Design
- Permanent Noise Monitoring Station Installation and Maintenance
- Noise Propagation Modelling (SoundPLAN)
- Environmental Noise Training
- Forensic Acoustics and Legal Matters



3. Selection of Past Projects

Hotel Developments

- Mount Nelson Hotel – Agapanthus Spa Facility: Acoustic Design (Cape Town)
- Harbour Bridge Hotel Development: Acoustic Design (Cape Town)
- Queen Victoria Hotel (V&A Waterfront): Acoustic Design (Cape Town)
- Inn on the Square Hotel: Acoustic audit and upgrade (Cape Town)
- Victoria Junction Hotel: Acoustic audit and upgrade (Cape Town)
- Park Inn Hotel (Adderly Street): Acoustic Design (Cape Town)
- Cape Grace Hotel: Various Acoustic Investigations (Cape Town)
- Bastion Park Inn, Newlands, Acoustic design
- Tsogo Sun Hotel: Acoustics Design
- Sleep Easy Hotel: Acoustics Design
- Bastion Park Inn Hotel: Acoustic Design
- Vineyard Hotel: Noise Control Designs
- Chelsea Hotel, Ikoyi: Acoustic Design
- Noom Conakry Hotels: Design Review and Assessment
- Protea Hotel: Noise Impact Assessment
- 12 Apostles Hotel: Noise Impact Assessment

Transport Infrastructure Development

- Cape Town International Airport: Upgrade of International and Domestic Departure and Arrival Halls (Cape Town)
- Juba International Airport Upgrade (Sudan)
- IRT Bus Infrastructure: Civic Centre Central Station, all other stations acoustic design (Cape Town)
- Langa Railway Station: Acoustic upgrade design (Cape Town)

Government and Municipal Buildings

- Stellenbosch Municipal Chambers: Acoustic design (Western Cape)
- Eastern Cape Parliament Debating Chamber Upgrade (Bisho, Eastern Cape)
- Windhoek Mayoral Auditorium: Acoustic Design (Namibia)
- Swakopmund Council Chambers: Acoustic Design (Namibia)
- Western Cape Parliament Legislature Debating Chamber: Acoustic upgrade (Cape Town)
- New Bloemhof Electrical Headquarters (Green Star Rated): Acoustic Design (Cape Town)
- Botswana Glen Valley Defence College: Acoustic Design (Gaborone, Botswana)

Commercial Buildings and Office Parks

- Gensec Asset Management Building: Design for 6 conference rooms and 1200m2 of open plan offices. (Durbanville)
- Old Mutual Business Campus West: Presentation and Conference Rooms (Cape Town)
- Old Mutual Asset Management: Meeting Rooms (Cape Town)
- PetroSA Head Office: Conference Room Design (Cape Town)
- Icon Building: Acoustic Design (Cape Town)
- DiData – Black River Parkway Offices: Office and Auditorium Design (Cape Town)
- Cape Town International Convention Centre (CTICC) Extension (Cape Town)
- Boulevard Development: Acoustic Design (Cape Town)
- Millenia Park Office Park: Green Star Assessment (Stellenbosch, Cape Town)
- Estuaries Development: Green Star As Built Assessment (Cape Town)
- Botswana Innovation Hub: Acoustic Design (Gaborone, Botswana)
- Durham Square: Wind Noise Investigation (Cape Town)
- GenRe Office Block (V&A Waterfront): Acoustic upgrade design (Cape Town)
- Medi-Clinic Head Office: Acoustic upgrade design (Stellenbosch, Western Cape)
- Metropolitan Life Head Office (Cap du Pac): Atrium acoustic upgrade (Cape Town)
- Runway Fashion House: Acoustic Design (Cape Town)
- The District Office Building: Acoustic design upgrade (Cape Town)
- The Terraces Building: Acoustic design (Cape Town)
- Vodacom Technocentre: Acoustic design (Bellville, Cape Town)
- Vodacom Foreshore Data Centre: Acoustic design (Cape Town)

Green Star Rating Building Developments

- New Bloemhof Electrical Headquarters (Cape Town)
- Portside II Skyscraper Development (Cape Town)
- Millenia Park Development (Stellenbosch, Cape Town)
- Estuaries Development, Canal Walk (Cape Town)
- City of Cape Town Water and Sanitation Building
- Sanral Offices Port Elizabeth

Call Centres

- Eskom Customer Call Centre: Acoustic Design Upgrade (Bellville, Cape Town)
- SellDirect Call Centre: Acoustic Investigation (Cape Town)
- Teletech Call Centre (now Woolworths Financial Services): Acoustic Design (Cape Town)
- Direct Axis Call Centres: Acoustic Design (Cape Town)
- Full Circle Contact – 11 Adderly Street: Acoustic Design (Cape Town)
- Metropolitan Life Tygervalley Call Centre: Performance Audit (Cape Town)
- Foschini Fashion Group – Liberty Grande Call Centre: Acoustic Design (Cape Town)
- Woolworths Financial Services – Matchfactory call centre: Acoustic Audit (Cape Town)

Religious and Spiritual Buildings

- Kolping Meditation Centre: Acoustics Design (Cape Town)
- Durbanville Family Church: Acoustic Design (Cape Town)
- Old Apostolic Church: Acoustic upgrade design (Cape Town)
- Evangelical Lutheran Church of Botswana: Acoustic upgrade design (Gaborone, Botswana)
- Destiny Changers Church: Acoustic upgrade design for temporary church (Cape Town)
- Christ Embassy Church Cape Town: Acoustic upgrade design (Cape Town)
- Eden Congregation Church: Acoustic Design (George, Western Cape)
- Atlantic Christian Assembly: Acoustic upgrade design (Cape Town)
- Bay Community Church: Acoustic upgrade design (Cape Town)
- His People Church – N1 City: Acoustic upgrade design (Cape Town)

Recreation Facilities

- Mochudi Hall Community Centre: Acoustic Design (Mochudi, Botswana)
- Toro Lodge Conference Centre and Casino: Acoustic Design (Botswana)
- New Africa Theatre: Acoustic Design (Cape Town)
- Milnerton Golf Clubhouse: Acoustic upgrade design (Cape Town)
- Steenberg Golf Estate Clubhouse: Acoustic upgrade design (Cape Town)
- The Greenhouse, 2010 World Cup Information Centre: Acoustic Design (Cape Town)
- Spier Wine Estate: Acoustic Design for Auditorium (Cape Town)
- Bloemvlei Multi-purpose Hall: Acoustic Design (Cape Town)
- Upper Eastside Mall: Acoustic Design for Mall and Piazza (Cape Town)
- Wembley Square I Lifestyle Centre: Acoustic Design (Cape Town)
- Wembley Square II Development: Acoustic Design (Cape Town)
- Brio Jazz Club/Restaurant (ABC Building): Acoustic Design (Cape Town)
- Blue Downs Community Aqua Centre: acoustic Design (Cape Town)
- Trinity Super Club: Acoustic Design (Cape Town)
- V&A Waterfront – Amphitheatre: Acoustic upgrade design (Cape Town)
- Tygervalley Shopping Centre – Arena Atrium: Acoustic upgrade design (Cape Town)

Public Address and Communication

- Cape Town World Cup 2010 Stadium: Audio Integrity Tests (Cape Town)
- Newlands Cricket Ground: Public Address system upgrade (Cape Town)
- Hugenout Tunnel: Emergency PA System Design (Western Cape)
- Arts Cape Opera and Theatre Complex: Upgrade of audio system for Opera House and Theatre (Cape Town)
- University of Botswana - Recreation Centre: PA System Design (Gaborone, Botswana)
- Juba International Airport: PA System Design (Sudan)
- Gauteng Metrorail Station PA System Upgrade Design: Johannesburg Park Station
- Gauteng Metrorail Station PA System Upgrade Design: Pretoria Station
- Gauteng Metrorail Station PA System Upgrade Design: Roodepoort Station
- Gauteng Metrorail Station PA System Upgrade Design: Belle Ombre Station
- Gauteng Metrorail Station PA System Upgrade Design: Kempton Park Station
- Gauteng Metrorail Station PA System Upgrade Design: Mabopane Station

- Gauteng Metrorail Station PA System Upgrade Design: Germiston Station
- Gauteng Metrorail Station PA System Upgrade Design: Bosman Street Station
- Durban Metrorail Station PA System Upgrade Design: Durban Station
- Durban Metrorail Station PA System Upgrade Design: Dalbridge Station
- St. Gabriel's Church Gugulethu: Design and installation of new PA System (Cape Town)
- Panorama NG Kerk: PA system upgrade and acoustic assessment (Cape Town)
- Houghton Mosque: PA system Design (Houghton, Gauteng)

Media Studios (Sound, Broadcast, Visual etc)

- Huis-In-Bos Recording Studio: Acoustic Design (Cape Town)
- Robben Island Sound and Radio Broadcast studio: Acoustic Design and Supply (Cape Town)
- Metropolitan Life Radio Broadcast studio: Acoustic Design (Cape Town)
- DIB Botswana: Kanye Regional TV/Radio Studios: Acoustic Design (Kanye, Botswana)
- DIB Botswana: Francistown Regional TV/Radio Studios: Acoustic Design (Francistown, Botswana)

Transport Infrastructure

- Firgrove Industrial Estate: Traffic Noise Study for Access Road (Macassar, Cape Town)
- Swartland Shopping Mall Development: Access Road Traffic Noise Impact Assessment (Western Cape)
- Transport Management Centre Cape Town: NIA for City of Cape Town (Cape Town)
- SACD Paarden Island Container Depot: Traffic Noise Impact Assessment (Cape Town)

International Projects

- Sintoukola Potash – Mine EIA, Republic of Congo
- SPCS Suriname – 96 MW Diesel Power Plant NIA, Suriname
- Kenya Electricity Generation Company (KenGen) - Environmental Noise Management Training (Navasha, Kenya)
- Rossing Uranium: Environmental Noise Management Training (Swakopmund, Namibia)
- EBS Suriname – 84 MW Diesel Power Plant NIA, Suriname
- Hummingbird Resources Gold Mine Noise Impact Assessment (Mali)
- Kasane Airport STIPA measurements
- Cameroon – Hotel in-site window testing

Energy Infrastructure

- Vodacom Techno Centre: NIA for diesel generator station (Cape Town)
- Paarl Media Montague Gardens: 5 MW diesel generator Station NIA (Cape Town)
- Kenya Electricity Generation Company (KenGen) - Environmental Noise Management Training (Navasha, Kenya)

Solid Waste and Waste Water

- City of Cape Town Solid Waste - Ladies Mile Site NIA (Cape Town)
- City of Cape Town Solid Waste - Tygerdal Site NIA (Cape Town)

Water Treatment

- Chintsa River De-Salination Plant NIA (East London, Eastern Cape)
- Witsand Desalination Plant EIA (Witsand, Western Cape)
- De Kelders Reverse Osmosis Water Treatment Plant NIA (De Kelders, Western Cape)

Process Industry

- Ceres Fruit Processors: Main Process Plant NIA (Ceres, Western Cape)

Oil, Gas and Minerals

- Chevron Cape Town Refinery: Flare Modernisation Project (Cape Town)
- Chevron Cape Town Refinery: Flare Noise Monitoring Project (Cape Town)
- Chevron Cape Town Refinery: Plant NIA (Cape Town)
- Richards Bay Minerals: Main Processing Plant NIA (Richards Bay, KwaZulu-Natal)
- Richards Bay Minerals: Mining Ponds A, B, C, D and E (Richards Bay, KwaZulu-Natal)
- Richards Bay Minerals: Dry Mining Plants A and D
- Richards Bay Minerals: Reservoir 1 and 6
- Cape Town Iron and Steel (CISCO): Community NIA (Cape Town)
- Saldanha Bay Ore Terminal Expansion: Specialist Consultant for Noise EIA (Saldanha Bay, Western Cape)
- Rossing Uranium: Environmental Noise Management Training (Swakopmund, Namibia)
- Saldanha Bay Industrial Development Zone: Off shore oil and gas service: EIA
- Impala Platinum: Personal Training and Environmental Noise Monitoring (Springs, Gauteng)

Commercial Developments

- Walkerbay Regional Retail Facility (Hermanus, Western Cape)
- McDonalds Parklands NIA (Parklands, Cape Town)
- McDonalds Kleinbosch NIA (Cape Town)
- McDonalds Strand NIA (Cape Town)
- V&A Waterfront: Noise Impact Assessment for 'The Lookout' venue (Cape Town)
- Engen Service Station – Meadowridge: NIA (Cape Town)
- Frater Square NIA (Paarl, Western Cape)
- Lifestyle on Kloof: Construction Noise Survey (Cape Town)
- Vodacom Technocentre: NIA (Bellville, Cape Town)

Mixed-use Developments

- Engen Kloof Service Station - NIA for upgrade of service station (Cape Town)
- Ashton Mixed-Use Development: Service Station, Low-cost Housing and Light Industry (Ashton, Western Cape)
- Langeverwacht Mixed-Use Development and Engen Service Station EIA (Langverwacht, Western Cape)
- Bluewater Bay Mixed-use Development Service Station, Apartments, Businesses (Bluewater Bay, Port Elizabeth)

Other

- South African Police Service (SAPS) Faure Shooting Range Development NIA (Faure, Cape Town)
- Stellenbosch Flying Club: Noise Impact Assessment for Runway Aircraft Noise (Stellenbosch, Western Cape)
- Knysna Municipality: Mechanical Plant NIA Investigation (Knysna, Western Cape)
- Knysna Municipality: NIA for retaining wall block manufacturing plant (Knysna, Western Cape)
- City of Cape Town: Advisory Body on Urban Noise Control (Cape Town)
- City Of Cape Town: Noise Modelling Software Training (Cape Town)

Event Noise Management and Monitoring

- Porsche 911 Turbo Launch – V&A Lookout Venue (Cape Town)
- Oktober Bierfest – SAB Sports field (Cape Town)
- Sun International Metropolitan (formerly J and B Met)
- Tamia
- Inncubus

Oil, Gas and Minerals

- Chevron Cape Town Refinery: Plant Noise Survey and Noise Inventory (Cape Town)

- Richards Bay Minerals: Main Processing Plant – Noise Control Design for all Process Areas (Richards Bay, KwaZulu-Natal)
- Richards Bay Minerals: Mining Ponds A, B, C, D and E (Richards Bay, KwaZulu-Natal)
- Cape Town Iron and Steel (CISCO): Noise Control Design (Cape Town)
- Rössing Uranium: Noise Management Training (Swakopmund, Namibia)
- Impala Platinum: Personal Training and Environmental Noise Monitoring (Gauteng)
- Johnson Matthey: Noise Control Design for Germiston Plant (Gauteng)
- Debswana – Jwaneng Mine: Noise Control Design for Miners Camp (Botswana)
- PPC Slurry: Ball Mill Noise Investigation (North West Province)
- PPC Montague Gardens: Silencer Design and Project Implementation (Cape Town)
- De Beers Coral MV: Anchor Chain Noise Control Design (Namibia)

Energy Infrastructure

- Vodacom Techno Centre: Diesel Generator Noise Control Design (Cape Town)
- Paarl Media Montague Gardens: 5 MW diesel generator Station Noise Control Design
- Kenya Electricity Generation Company (KenGen): Olkario II Geothermal Plant (Kenya)
- SA Navy Dockyard Simonstown: Generator Station Noise Control Design (Cape Town)
- Pioneer Foods – Bokomo Weet-Bix: Generator Station Noise Control (Atlantis, WC)
- Boston Substation: Specialised Noise Barrier Design (Cape Town)
- Thibault Substation: Noise Barrier Design (Cape Town)
- Moorgenrood Substation: Noise Barrier Design (Cape Town)
- The Biovac Institute: Backup Diesel Generator Noise Control Design (Cape Town)
- Worcester WWTW: Generator Station Noise Control Design (Worcester, Western Cape)
- Transport Management Centre: Generator Station Noise Control Design (Cape Town)
- Bayside Mall: Backup Diesel Generator Noise Control Design (Cape Town)
- Kaltron: Propriety Generator Noise Control Design (Cape Town)

Water Treatment

- Kraaifontein WWTW : Enclosure Design for Compressors (Kraaifontein, Cape Town)
- De Kelders Reverse Osmosis Water Treatment Plant Noise Control Design (De Kelders, Western Cape)

Process and Manufacture Industry

- Ceres Fruit Processors: Noise Control Design for Processing Factory (Ceres, Western Cape)
- AEL Fuse Factory: Noise Control Design (Gauteng)
- Orion Carbons (Algorax): Noise Control for Process Blowers (Port Elizabeth)
- Orion Carbons (Algorax): AIP Noise Control Design (Port Elizabeth)
- Orion Carbons (Algorax) Process Air Line Silencer Outlet Design (Port Elizabeth)
- Ford Factory : Cooling Plant Noise Control (Port Elizabeth)
- Ubombu Sugar Mill (Illovo) : Commissioning of New Boiler (No.8) (Big Bend, Swaziland)
- Ubombu Sugar Mill (Illovo): Kelburn Separator Project (big bend, Swaziland)
- The Biovac Institute: Noise Control Design for New Mechanical Plant (Cape Town)
- South African Calcium Carbide (SACC): Noise Control Design for Drum Production Plant (Newcastle, KwaZulu-Natal)
- Aveng Infraset Kuilsriver: Noise Control Design for Concrete Pipe Manufacture Plant (Kuilsriver, Western Cape)
- Simba (Pepsico): Design of Specialised Soundproof doors for Compressor Plant (Parow, Cape Town)
- Sylko: Noise Investigation for punch press plant (KwaZulu-Natal)

Commercial

- Cedar Spar: Chiller fan plant – Noise Enclosure Design (Cape Town)
- Checkers Rondebosch: Rooftop Mechanical Plant Noise Control Design (Cape Town)

4. References

Architects



KMH Architects



Blueprint Architects



ARG Design



Jonker + Barnes Architects



Thembela Architects



Leon Barnard Architects (Namibia)



Mackintosh Lautenbach Architects (Namibia)



EBESA Architects



FMA Architects



DHK Architects / DHK Thinkspace



SHOP Architects (New York)



Peerutin Architects



Carl Breytenbach Architects



Brink Stokes Mkhize Architects

Ramani Architects (Botswana)



Lightspace Architects



Bentel Associates International



Tectura International (Bostwana)



Cons-Com/Symbion International (Botswana)



INcline Architects



Magqwaka Associates



Fanus Lewis Architects



Charlotte Chamberlain and Nicola Irving Architects (CCNIA)



Muhammed Maget Architects



Munnik Visser Architects



Stauch Vorster Architects



GAPP Architects



R & L Architects



Jo Nereo

Engineering Consultants / Project Managers



Bornman and Associates



Terramanzi Environmental Consulting



WSP



SIP Project Managers



Aurecon



Triple C

Triple C Management



Triocon Consulting Engineers



BKS Consulting Engineers



Electrical Engineering Solutions (EES)



Betts Townsend



VELAVKE

VelaVKE Consulting Engineers



Arcus Gibb Consulting Engineers



SRK Consulting



ERM Consulting



Resource Management Services



Sillito Environmental Consulting



Lukhozi Consulting Engineers



KV3 Consulting Engineers



Msingi Projects



Arriya Projects



Braunstein and Berndt (Germany)



deBAKOM (Germany)



Norsonic AS (Norway)



Akustik Buch (Austria)



Environmental Control Engineering & Services [Pty] Ltd

Commercial Clients



Drakenstein Municipality



SA Department of Public Works



Old Mutual



Old Mutual Properties



PetroSA



Faircape Property Developers



Victoria & Alfred Waterfront



Medi-Clinic



Metropolitan Life



Vodacom



ERIS Property Group



Eskom



Foschini Group



Woolworths Financial Services



Milnerton Links Gold Course



Steenberg Estate Golf Club



Spier Winery



University of Botswana



University of Cape Town



University of Free State



South Africa National Roads Agency



Artscape



PRASA



Kenya Electricity Generation Company



CISCO



Richards bay Minerals



Paarl media



Engen



Ceres Fruit Processors



Knysna Municipality



Chevron Cape Town Refinery



Rio Tinto Mine Group



South Africa Police Service



City of Cape Town



Western Cape Provincial Administration



AEL



Bokomo Weet-bix (Pioneer Foods)



De Beers Marine



Actom



John Thompson



Biovac



Impala Platinum



Orion Carbons



Ford



Johnson Matthey



Debswana



Pretoria Portland Cement (PPC)



SA Calcium Carbide



Shoprite Checkers



Aveng Infraset



Rössing Uranium



Porsche



Pepsico



HYFLO