CLADDING OPTIONS

Lightweight Building Solutions
CLADDING SYSTEMS

- Cladding Options
  - IESF
  - Porcelite
  - Equitone
  - Kalsi Boards
  - ARVAL
  - Marmoran
- LSF & Internal walling systems
IESF
Insulated External Steel Frame
INSULATED EXTERNAL STEEL FRAME

IESF

• Lightweight steel frame - Engineered structure.
• Moulded EPS board with backing grooves – Thermofix.
• Mesh enforced fibre and bonding plaster.
• Final plaster: textured polymeric colour render finish.
• Fire Rated 15mm/30mm Gyproc internal lining T&J finish
LBS WALL SYSTEM COMPONENTS

Lightweight steel frame structure with external IESF and internal firestop

Gypsum 15mm Firestop board
Vapour/Water Membrane
EPS Polystyrene Panel 60mm-90mm
Base Coat plaster layer 1
Base Coat plaster layer 2
Fibre Mesh 160g bi-welded
Surface for **Tile** or **Render**
CLADDING OPTIONS – PORCELITE

• Porçelite
  • Large Format
  • Porcelain tiled Facade with Thermal and Fire Rated layers
  • Non Ventilated System
CLADDING OPTIONS – EQUISTONE
ABOUT EQUITONE

Benefits of Equitone Cladding

- Excellent long-term durability
- Non-combustible
- Through-colour material for resistant to scratching and denting
- Unique architectural appeal and several different finish types
- No onsite finishing required
- Low maintenance
- Easy to fabricate and install using proprietary colour-matched rivets
- Proven performance in harsh environments globally
- Very high strength and impact resistance
- Can be cut to any shape and size
OHLHORST LBS - NOTABLE PROJECTS
CAR SHOWROOM
CLADDING OPTIONS – KALSI BOARDS
ABOUT KALSI BOARD

Benefits of Kalsi Board Cladding

- Fibre cement board
- 9mm, 12mm and 20mm thickness
- Natural cement finish
- Lower cost budget cladding
- Robust
OHLMORST LBS - NOTABLE PROJECTS
HOUSE MASHILOANE
CLADDING OPTIONS – KALSI BOARDS

- 100% ASBESTOS FREE
- Resistant to termites and other insect attacks
- Can be curved for aesthetic solutions
- Impact resistant
- Accepts most aesthetic & architectural finishes

- Moisture and humidity resistant
- Non-combustible
- Dimensionally stable
- Easy to work and simple to install
- Differing board thicknesses available, allowing flexibility in use
CLADDING OPTIONS – ARVAL
Mascaret
Perforation 10 through 15.7%
Perforation 11.4 through 27%

Salle Multi - Activités de Kaltenhouse (F)
Architect: IXO Architecture
CLADDING OPTIONS – ARVAL
CASSETTE SYSTEMS

Coques MD
MARMORAN COATINGS

Ohlhorst - Approved Marmoran Applicator
MARMORAN COATINGS

- Marmoran range has initiated technically advanced solutions created by the Marmoran Research and Development team. In addition, all Marmoran Products are tested to National & International Standards by Three Independent Laboratories.

- This has led to Marmoran winning numerous awards, including the prestigious State Presidents Merit Award for Export Excellence and the Support Programme for Industrial Innovation.

- An ISO 9001:2000 company, Marmoran products and services are guaranteed to conform to international standards.

- Forming the backbone of the organization is the Licensed Applicator concept which is already established in over 40 countries. Supporting these Applicators are strategically situated Production Facilities.

- A Guarantee is issued when the Coating System is applied to full specification by a Licensed Applicator.

- The use of Marmoran products ensures unparalleled versatility in texture and colour whilst reflecting the best in contemporary international design trends.

Ohlhorst offers a **TEN YEAR GUARANTEE** “through the wall”
LIGHTWEIGHT STEEL FRAME WALL SYSTEM
LIGHTWEIGHT STEEL FRAME WALL SYSTEM

STRUCTURAL & SPANNING ELEMENTS

6m height, 60m span
No additional mild steel support required
2 hour fire rated passage with 4x15mm FS boards
LIGHTWEIGHT STEEL FRAME WALL SYSTEM
STRUCTURAL & SPANNING ELEMENTS
LIGHTWEIGHT STEEL FRAME WALL SYSTEM
PRE PUNCHED SERVICE HOLES

- Pre punched service holes at no cost
- Allows for future proofing

Service openings: 25mm
Perfect for electrical and plumbing
Can be taken to 50mm max
LIGHTWEIGHT STEEL FRAME WALL SYSTEM
SOUND PERFORMANCE

110mm Brick+Plaster = 45dB

220mm Brick+Plaster = 49dB
<table>
<thead>
<tr>
<th></th>
<th><strong>Brick Wall</strong></th>
<th><strong>Steel Frame Wall</strong></th>
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<tbody>
<tr>
<td></td>
<td><strong>115mm-230mm</strong></td>
<td><strong>120mm-150mm</strong></td>
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<tr>
<td></td>
<td>Single/Double Brick</td>
<td>Single/Double Board</td>
</tr>
<tr>
<td>Quality</td>
<td>Skills Driven Quality</td>
<td>System Driven Quality</td>
</tr>
<tr>
<td>Fire Protection</td>
<td>1-2 hour</td>
<td>1-2 hour</td>
</tr>
<tr>
<td>Surface Appearance</td>
<td>Skill dependant</td>
<td>Smooth</td>
</tr>
<tr>
<td>Thermal Conductivity</td>
<td>$K = 0.85 \text{ Watt/mC}$</td>
<td>$K = 0.19 \text{ Watt/mC}$</td>
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<tr>
<td>Lower = Better</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weight</td>
<td>270kg-540kg sqm</td>
<td>40kg-58kg sqm</td>
</tr>
<tr>
<td>Sound Insulation</td>
<td>43dB - 49dB</td>
<td>45dB - 57dB</td>
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<tr>
<td>Wastage</td>
<td>Extensive / non-recyclable</td>
<td>Minimal / Recyclable</td>
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<tr>
<td>NO CHASING</td>
<td>Services through pre punched holes - vertical and horizontal</td>
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<tr>
<td>THERMAL</td>
<td>Energy saving for the duration of the building’s life</td>
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<tr>
<td>MORE USABLE AREA</td>
<td>Reduction in wall footprint. Internal 250mm-120mm. External 250mm on slab to 30mm on slab.</td>
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<tr>
<td>WEIGHT</td>
<td>40kg/m²-58kg/m² vs 270 kg/m²-540 kg/m². Structural savings.</td>
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<tr>
<td>TIME SAVING</td>
<td>We have experienced a 30% program reduction versus conventional walling systems.</td>
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<tr>
<td>LESS LABOUR INTENSIVE</td>
<td>Low rubble accumulation due to less waste created and recyclability</td>
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Ohlhorst Group of Companies

- South Africa
- Pretoria
- Johannesburg
- Cape Town
- Durban
- Botswana
- Mozambique
- Namibia

Tile Supply
Tiling & Rendering
Stonework
Lightweight Building Solutions
OHLHO RST LBS - NOTABLE PROJECTS

2012
- Lakeside
- Grosvenor Corner
- Hyde Park Offices

2013
- Summit Place
- Cell C
- Secunda Mall

2014
- Balfour Park
- Fire & Ice Hotel
- The Club
- Sandton Sky
OHLHO RST LBS - NOTABLE PROJECTS

2015
University of Pretoria
Riverwalk Extension

2016
Mall of Africa
Menlyn Mall

2017
Grosvenor Corner
Summit Place
Vantage
OHLHORST AFRICA

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