



QUALITY • SERVICE • FLEXIBILITY

GRP COMPOSITE HOUSINGS,
ENCLOSURES, KIOSKS & COVERS



Innovative housing solutions in GRP and Steel.

Morgan Marine Ltd has provided innovative housing solutions in both GRP and Steel to the Utility and Construction Sectors since 1965. We offer a full turnkey service from design through to site installation; please visit our website to view our comprehensive range of housings and services offered.

COMPOSITE HOUSINGS, KIOSKS & COVERS

World leaders in the design, manufacture and installation of GRP Enclosures, cabinets and covers. Offering a diverse range of LPCB accredited security products from housings to doors sets. All of our products are also manufactured in Steel.

Operating from our prestigious sales and manufacturing site in South Wales with over 9 acres and 120,000 sq. ft of purpose built manufacturing space ensures that we can cater for contracts of any size. The company is managed by a team of experienced professionals and has full in-house sales, engineering and design support. As NICEIC electrical contractors we can offer full electrical fit out and with experienced logistical and installation teams gives the complete service anywhere in Europe or the wider world.

Typical uses for our products include:

- MCC Panel Enclosures
- Switchgear and Plant Rooms
- Transformers Enclosures
- Package substations
- Pump Kiosks
- Control Equipment Enclosures
- Gatehouses and Security Lodges
- Welfare and Mess Rooms
- Ticket Booths
- To protect Critical National Infrastructure
- Electrical Feeder Pillars



Morgan Titan
Approved to LPS 1175: Issue 7
Security Rating 2 and 3
Cert. No. 1051a

For full listings please refer to
www.redbooklive.com



MORGAN MULTIFORM



MORGAN PROJECTS



MORGAN TRADITIONAL



MORGAN GATEHOUSES



MORGAN COVERS



SITE INSTALLATION



MORGAN MULTIFORM™

Morgan Marine's extensive, flexible and modern manufacturing facilities at Llandybie allow the Company's engineers to utilise a wide range of materials.

The most effective combination of these materials is used in each product. This flexibility of design enables the company to construct custom built housings and kiosks to individual customer requirement. The housing dimensions, layout of doors, windows, access panels and all other details including the finish are tailor made to meet the customer's exact requirements.

Using glass reinforced polyester composites the tough exterior of each unit protects the various cores, frames, and fittings from the assaults of the environment. Buildings supplied over thirty years ago can still be seen all over the world today.



- External bulkhead with external sensor
- ½ hr, 1 hr and 2 hr Fire ratings
- GRP fan cowl
- Single or double doors available with multiple lock option

- Available in any colour from BS 5252 or RAL range

FEATURES

- FLEXIBILITY OF SIZE
- LOW MAINTENANCE
- NON CORROSIVE
- EXCELLENT THERMAL INSULATION
- MULTIPLE LOCK CHOICES
- NICEIC ELECTRICAL INSTALLATIONS
- INTRUDER AND FIRE ALARMS
- HVAC DESIGN

MORGAN PROJECTS



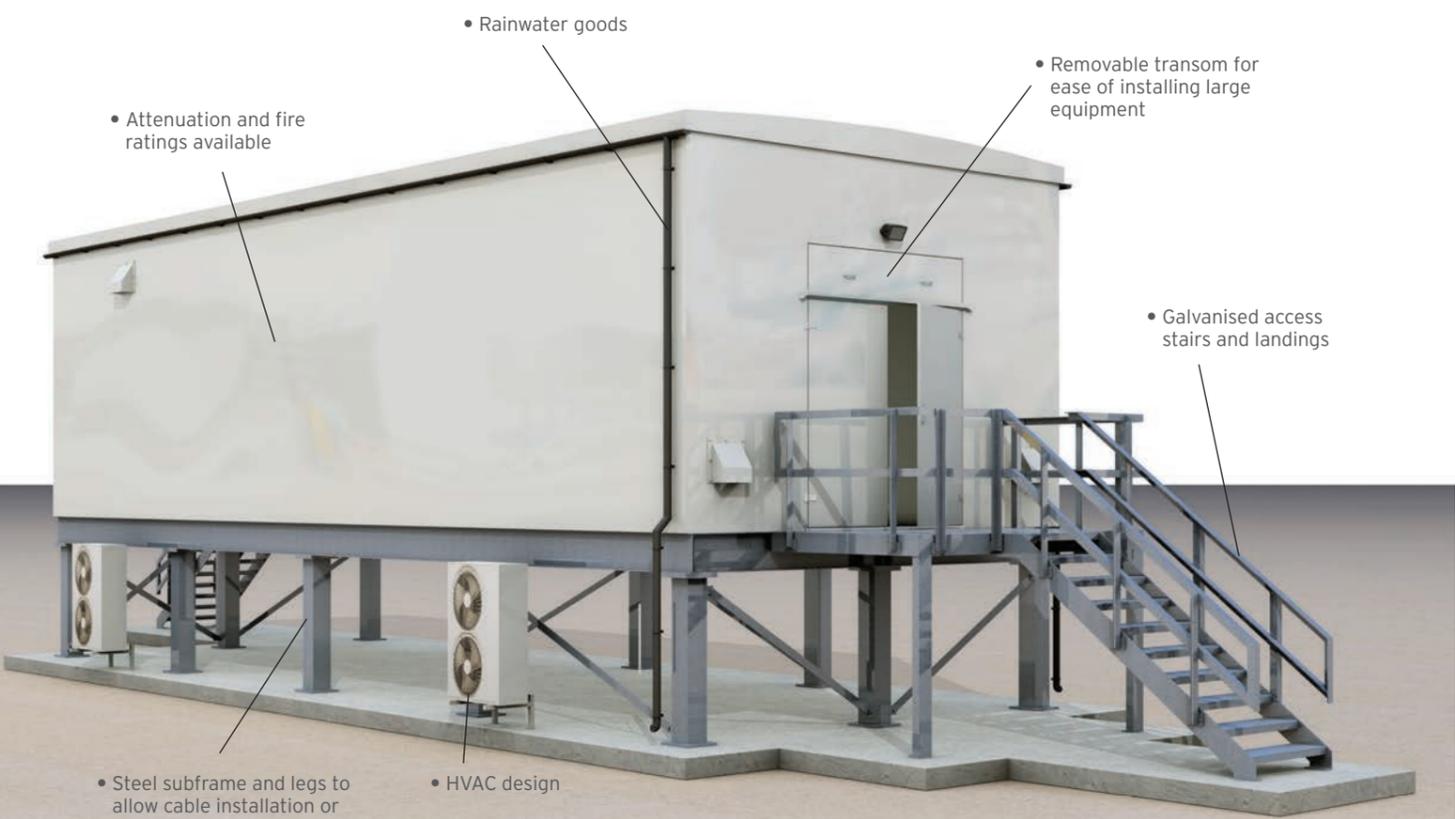
Morgan Marine housings can be supplied with all services including domestic or zoned electrics, air conditioning, thermal and acoustic insulation, vandal resistance, explosion protection and fire control, plus many more features.

In addition to the design and installation of electrical services, the customer equipment can be factory installed by Morgan Marine ready for shipment directly to the site anywhere in the world.

Design

Your housings can be individually designed to suit your requirements by our experienced, innovative and highly skilled in-house engineers. Using the latest CAD software all aspects of the enclosure is incorporated into the design including the layout of the doors, windows, access panels and all other features. Housings are finished to customer's requirements.

Fabricated steel bases can be designed into any of our enclosures and are painted in accordance with BS 5493, 1997 System SK3 and are suitable for exterior use in polluted inland and coastal atmosphere giving 10 to 20 years life to first maintenance. Integral cable ducts and access gland plates can be supplied to customer specifications.



- Attenuation and fire ratings available
- Rainwater goods
- Removable transom for ease of installing large equipment
- Galvanised access stairs and landings
- Steel subframe and legs to allow cable installation or for flood protection
- HVAC design

- Packaged Substations
- UPS Enclosures and Battery Rooms
- Switchgear Enclosures
- Data Rooms
- Roof Top Solutions including structural steel grids to spread loads
- Access Stairways, Platforms and Walkways
- Full Electrical fit out to 17th Edition
- HVAC Systems
- Cable Management
- Housings can be elevated on steel support legs
- Client equipment installation can be carried out on site or at our premises
- Road Closures, Traffic Management and Craneage



MORGAN TRADITIONAL

With in-house design and engineering support, a wide range of materials can be used to suit individual specifications or environmental requirements.

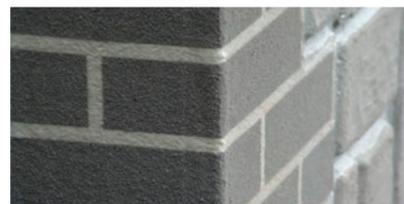
Designed to blend aesthetically with any location and environment, Morgan Marine offer many standard and bespoke finishes.

- Timber Effect
- Brick Effect
- Stone Effect
- Slate Effect Roofs

We offer full support to achieve planning permission, including the supply of sample finishes.

Housings can be mounted onto steel sub frames or have integral floors

- Full Electrical fit out to 17th Edition
- HVAC Systems
- Fire and Intruder Alarms
- Steel Security Doors Available



MORGAN GATEHOUSES

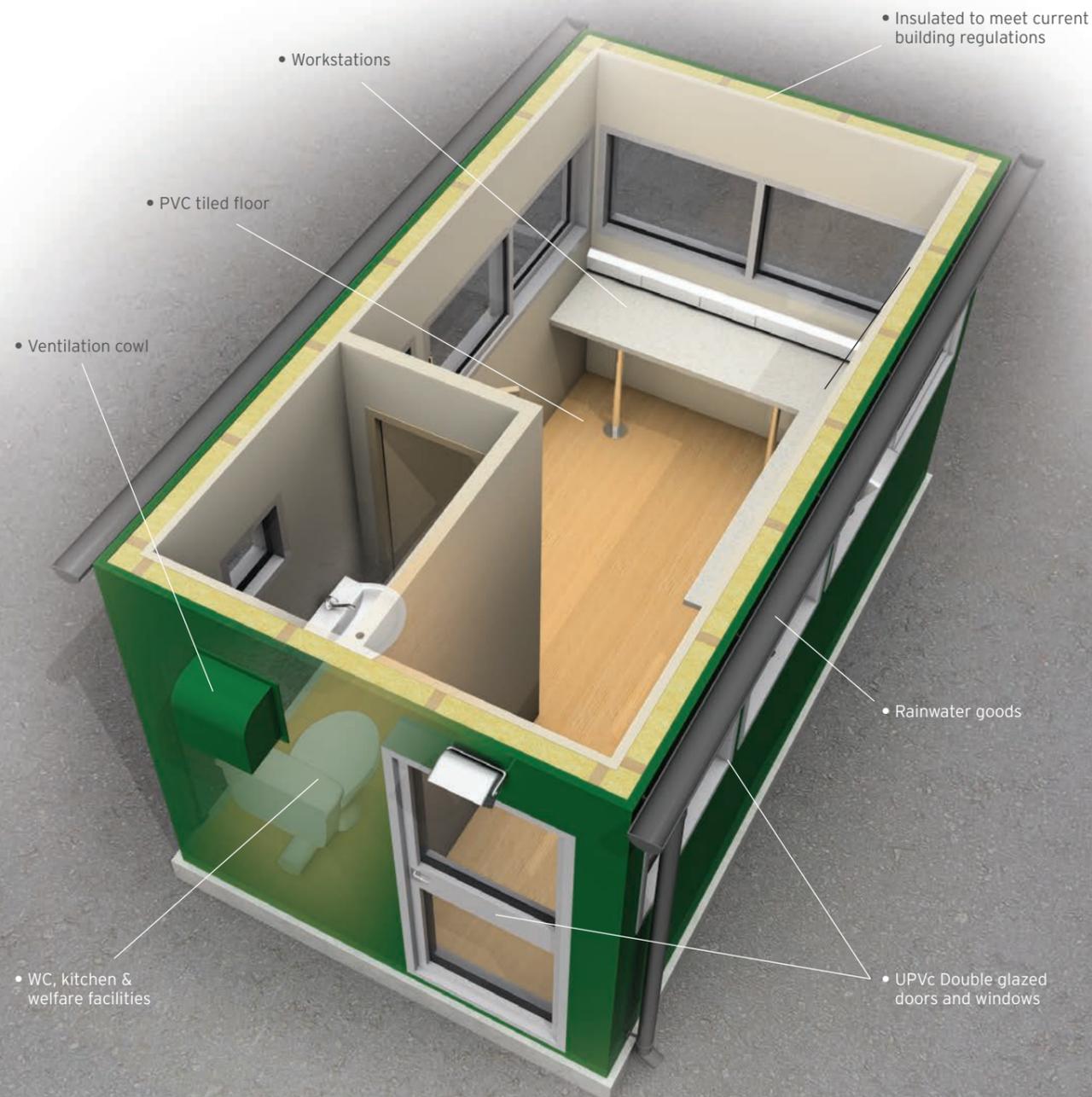
Morgan Marine Gatehouses are designed to suit individual specifications and applications.

They have a multitude of uses;

- Toll Booths
- Security Housings
- Gate Houses
- Vending Stalls
- Ticket Offices

Aesthetically designed to your corporate requirements, buildings conform to Building Regulations and can offer the following:

- WC and Shower Facilities
- Work/Desk Space
- Kitchen
- Integral Flooring
- Disabled Facilities
- Electrical Fit Out to 17th Edition
- Air Conditioning
- Fire and Intruder Alarms



- Workstations
- PVC tiled floor
- Ventilation cowl
- Insulated to meet current building regulations
- Rainwater goods
- UPVc Double glazed doors and windows
- WC, kitchen & welfare facilities

MORGAN COVERS

Morgan Marine modular sectional covers are designed to accommodate BS 6399 Part 3 roof loadings, BS CP3 Chapter V Part 2 wind loadings or to other customer specification. Spans of up to 13m can be achieved in heavy duty or light weight (man-handleable) construction.

Weatherproof and chemical resistant, these covers require little maintenance and have a lifetime in excess of 25 years. Lifting points, ventilation, access covers and walkways can be incorporated as required.

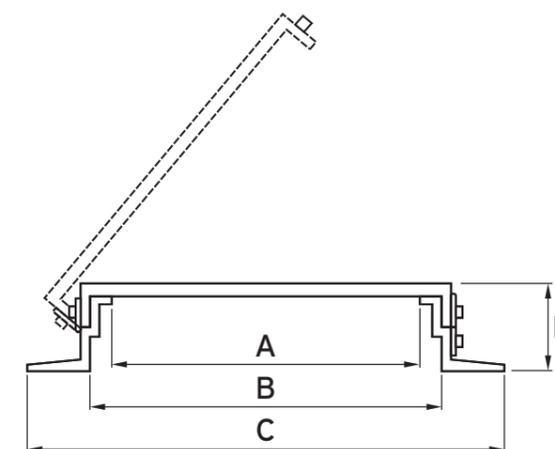
For one man operation heavy duty covers can be fitted with hydraulic lifting and rolling gear. Covers can also have low pressure gas tight seals fitted or be acoustically treated.

Access Covers and Hatches

Morgan Marine offer a range of quality, inexpensive square covers in five sizes (600, 800, 1000, 1200 and 1500mm). Standard colours are green 14.C.39 or grey 10.A.07 (to BS 4800), other colours are available.

The covers are heavy duty, made of chemically resistant GRP composites with non-corroding fittings, including a hasp and staple. Hold open stays can also be fitted.

Clam Hatches				
mm	A	B	C	D
600 x 600	550	640	845	180
700 x 700	650	740	945	180
800 x 800	750	840	1045	180
1000 x 1000	950	1040	1245	180
1200 x 1200	1150	1240	1445	180
1500 x 1000	1450/ 1950	1450/ 1950	1450/ 1950	180



TECHNICAL SPECIFICATION

MULTIFORM CONSTRUCTION

Glass Reinforced Polymer composite using a variety of core materials dependant on clients requirements for insulation, fire ratings, security ratings and attenuation.

Structural reinforcement is included as required due to enclosure size and specific location. Housings are designed with a life expectancy in excess of 30 years.

RELEVANT DESIGN STANDARDS

Eurocode 1:	Actions on structures (relevant sections)
Eurocode 3:	Design of steel structures (relevant sections)
BS 6399, Part 1:	Loadings for buildings. Code of practice for dead and imposed loads
BS 6399, Part 2:	Loadings for buildings. Code of practice for wind loadings
BS 6399, Part 3:	Loadings for buildings. Code of practice for imposed roof loads
BS 476, Part 21:	Fire tests on materials and structures. Methods for determination of the fire resistance of load bearing elements of construction
BS 476, Part 22:	Fire tests on materials and structures. Methods for determination of the fire resistance of non-load bearing elements of construction
BS 476, Part 7:	Fire tests on materials and structures. Methods for classification of the surface spread of flame of products
BS 5395, Part 1:	Stairs, ladders and walkways. Code of practice for the design, construction and maintenance of straight stairs and winders
BS 5395, Part 3:	Stairs, ladders and walkways. Code of practice for the design of industrial type stairs, permanent ladders and walkways
Please Note:	We have worked with a number of standards that aren't listed above, should you have a particular requirement please contact our Design Team who will be able to help.

INSULATION

Standard construction has a U-Value of 2.2W/m²/°C.

Higher levels of insulation are offered to meet client specifications and to meet building regulation u-values of **Walls:** 0.35W/m²/°C
Roofs: 0.25W/m²/°C.

FIRE RESISTANCE

Morgan Marine offer half hour, one and two hour fire rated constructions, all have been independently tested. Self extinguishing resins can be used offering both 30 min and 60 min protection on surface spread of flame.

SECURITY

All Security rated products are LPCB approved and tested to LPS 1175 by BRE, they include:
Single and Double Steel Door Sets with multiple lock options to SR 2,3 and 4
Single and Double GRP Door Sets with multiple lock options to SR 2 and 3
Steel Enclosures to SR 2, 3 and 4
GRP Enclosures to SR 2 and 3
Security rated ventilation options.
For full listings on security products please visit both Morgan Marine and PSF Wales at www.redbooklive.com

SOUND ATTENUATION

Standard construction offers a nominal 24dB acoustic performance over centre band frequency range 31.5Hz to 16kHz. Other standard levels of attenuation offered are 30, 32 and 35dB nominal acoustic performance.

ENVIRONMENTAL CONTROL

Ventilation options are offered based on clients individual requirements of either heat to be dissipated or air changes needed. Information required is external ambient temperature, maximum internal allowable temperature and heat to be dissipated. After calculations ventilation will be offered as either natural, forced or as Air Conditioning.

ELECTRICS

As NICEIC electrical contractors all installations are carried out in accordance with current IEE regulations to BS7671: 2011, Zone 0, 1 or 2 installations are also available. We can install customer's equipment if required.

EXPLOSION RELIEF

Explosion relieving roofs and panels are used to safely discharge the effect of the ignition of an inflammable mixture from within an enclosure, notably for British Gas or Regional Electric Companies. Tests have been successfully completed for both types of explosions and these conform to the relevant specifications.

SITE INSTALLATION



Morgan Marine operates permanent experienced installation teams for on site assembly, bolt downs and electrical installations.

All site crews are fully trained and accredited with the latest qualifications to suit all industries.

Site crews can install worldwide.

- RISK ASSESSMENT/METHOD STATEMENTS PROVIDED
- HIAB AND CRANE OFFLOAD
- SITE AND CRANE SURVEYS
- ROUTE SURVEYS AND ESCORTS
- TRAFFIC MANAGEMENT AND ROAD CLOSURES

LPCB Inspection Service

Morgan Marine offers an inspection service to ensure products certified under LPS 1175 continue to meet the required Security Rating. Over time we are aware modifications are made by others which are not necessarily in line with the standard. We can offer site specific inspections, annual and five yearly to suit our clients requirements.

All site crews are fully trained in:

- CSCS
- CCNSG SAFETY PASSPORT
- CPCS/AP/BANKSMAN
- WATER HYGIENE CARD
- MOBILE/ELEVATED PLATFORMS
- GAS NETWORK SAFETY PASSPORT
- PASMA
- EUSR
- BESC
- FIRST AID





Morgan Marine supply to the following:



Water



Gas



Power



Telecommunications



Rail



Petro Chemical



Llandybïe, Ammanford,
Carmarthenshire SA18 3GY UK

Tel: (+44) 01269 850437

Fax: (+44) 01269 850656

www.morgan-marine.com



Morgan Titan
Approved to LPS 1175: Issue 7
Security Rating 2 and 3
Cert. No. 1051a/02



Hercules SAF SR3 & SR4
Doors and Modular Enclosures
Approved to LPS 1175: Issue 6 and 7
Security Ratings 2, 3 and 4
Cert. No. 953a/953b



For full listings please refer to www.redbooklive.com