

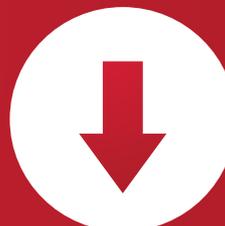
# PREFABRICATED PLANT ROOMS



A PREFABRICATED PLANT ROOM: BUILT OFF SITE FOR PLUG-AND-PLAY INSTALLATION WHERE IT'S NEEDED, WHEN IT'S NEEDED.



**INCREASES**  
Construction efficiency  
Safety and Quality, by working in a controlled environment



**DECREASES**  
Man-hours on construction sites  
Travel and accommodation costs  
Overall construction cost

## WHY IS A PREFABRICATED PLANT ROOM A GOOD IDEA?

Entec has been installing and maintaining mechanical and electrical plant and equipment for 40 years. We've learned that site works bring additional risk, time and cost. Wherever possible, we've steered our clients to allowing us to package plant and equipment into a prefabricated enclosure, which can then be transported to site ready for installation.

Whether the plant room will be relocated in future, or whether it will be on site permanently, a Prefabricated Plant Room is a cost-effective way of housing plant and equipment, while maximising quality and safety.

## TYPICAL APPLICATIONS

- MCC / Switchroom
- Control room
- Portable 11kV Substation
- 11kV Generator controls substation
- 400V Pump supply/controls unit
- Wellhead drill unit integration substation
- Process plant room
- Process skid MCC and Control room



## THE ENTEC ADVANTAGE; TCE CONTROLS



TCE Controls is Entec's in-house switchboard and panel manufacturing division. Since we started this initiative in 2016 TCE Controls has grown substantially, providing its clients with custom-designed, bespoke switchboards, distribution and control panels. TCE Controls is accredited to build Cubic type-tested switchboards.

TCE Controls' design expertise and production sits within Entec, resulting in a seamless coordination with the Prefabricated Plant Room build process. This creates efficiency and allows us to meet tight deadlines, with the involvement of fewer third parties.

## THE PROCESS



**1.**  
Initial concept  
& budget  
estimate



**2.**  
Constructability  
review & GA  
drawing



**3.**  
Detailed  
design



**4.**  
Quotation



**5.**  
Build



**6.**  
Factory  
acceptance  
test



**7.**  
Transport  
to site



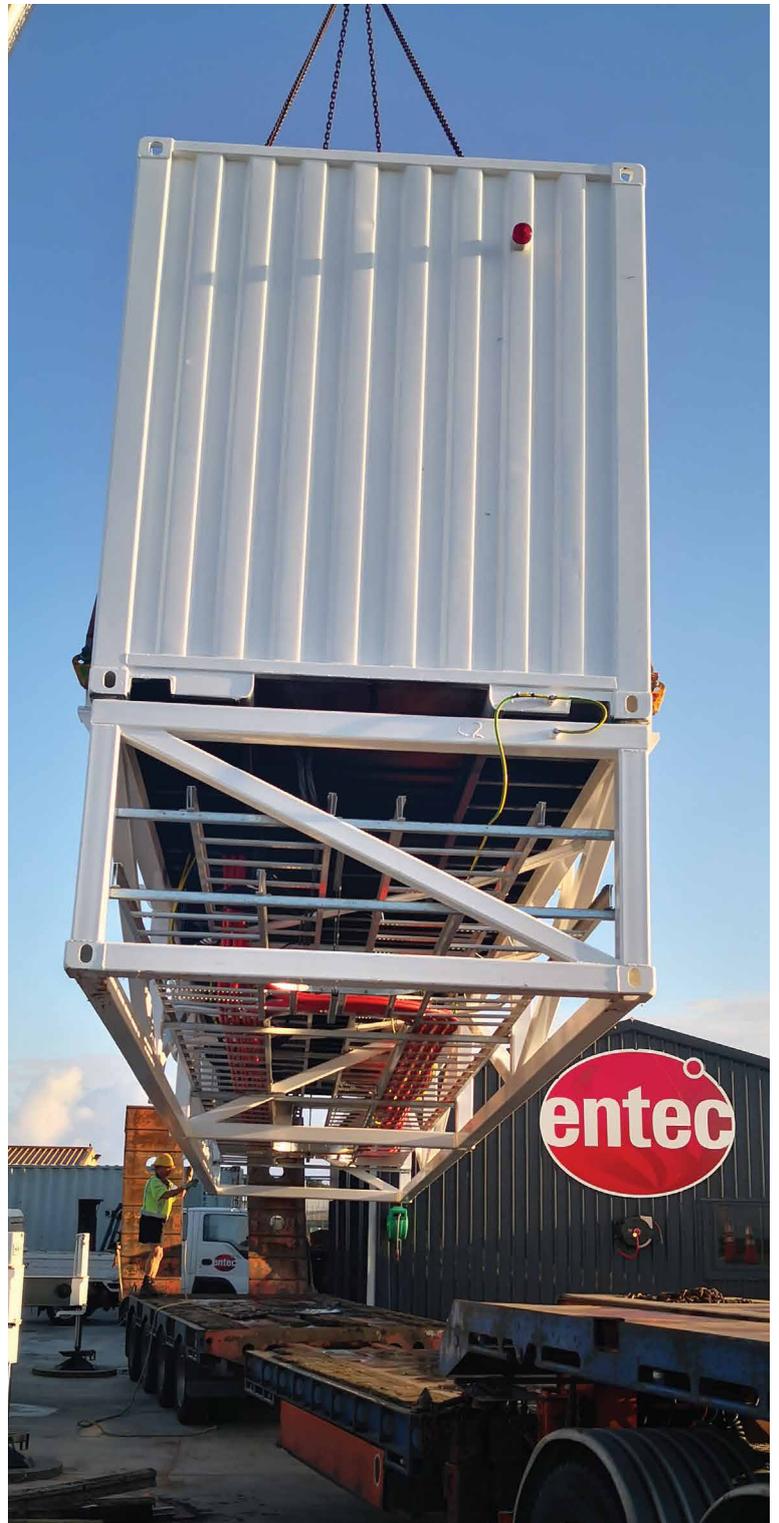
**8.**  
Installation &  
commissioning

## TYPICAL FEATURES

- Integral base frame – incorporating cable support system and providing access for cable terminations on site
- High quality marine grade paint system for longevity
- Multiple personnel access points to comply with emergency egress requirements
- HVAC
- Fire, smoke and gas detection systems
- Polypanel-lined for thermal insulation and clean interior finish
- Commercial grade vinyl flooring
- Complete QA dossier at hand-over, including structural certificates and lifting plans

## BUILDING STYLES

- ISO container, single and double wide, Minicube, 10ft, 20ft and 40ft, standard and high-cube
- Kitset coloursteel curved roof with overhang to minimise water ingress at PA doors and extend paint longevity
- Modular EPS or fire-resistant insulated sandwich panel rooms
- Steel frame and acoustic panels



## CASE STUDY – PACKAGED SUBSTATIONS

This client needed two separate substations to power new electrical plant, delivering around 1,600kW of power to multiple motors together with variable speed drives, UPS and distributed control system panels. Due to the remote nature of the site, and the very high manning level on site, the client elected to have the packaged substations built off site.

This allowed the substations to be constructed independently of civil, structural and mechanical progress on site, to then be rapidly installed when required on site.

Estimated savings with the use of Prefabricated Plant Rooms;

-  1,200 man-hours of time not spent on the busy construction site
-  240 man-hours not spent on the road
-  9,000 kms of mileage saved
-  1,800kg of CO2 emissions saved
-  \$26,000 saving purely in accommodation and meal costs

## PREVIOUS CLIENTS

Entec's client list for the design and build of Prefabricated Plant Rooms includes;

- |                   |                               |
|-------------------|-------------------------------|
| <b>NZ Steel</b>   | <b>Worley</b>                 |
| <b>First Gas</b>  | <b>Wellington Electricity</b> |
| <b>CentrePort</b> | <b>Todd Energy</b>            |
| <b>Nuenergy</b>   | <b>OMV New Zealand</b>        |
| <b>Holcim</b>     | <b>Callaghan Innovation</b>   |

## ENTEC LOCATIONS

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[www.entec.co.nz](http://www.entec.co.nz) | [www.gasdetectors.co.nz](http://www.gasdetectors.co.nz)

## THE ENTEC STORY

Entec has been in business since 1982 and is a leading provider of products, project and service solutions into New Zealand's heavy industrial sector. Our core disciplines are Instrumentation, Electrical, Rotating Equipment and Gas Detection.

Entec has grown over the years through repeat business with many well-established clients. We are especially proud of the calibre and character of our team. We are committed to the health, safety and wellbeing of our people, and all of our stakeholders. Our attention to quality is reflected in our ISO certified management systems, and our IANZ accredited calibration service.

We have facilities in Auckland and New Plymouth, and work with customers nationwide. Our company tag-line is "getting you running, keeping you safe". Please get in touch with us to discuss how we can help your organisation.



GETTING YOU RUNNING  
KEEPING YOU SAFE

