

Mobile Base Station Housing



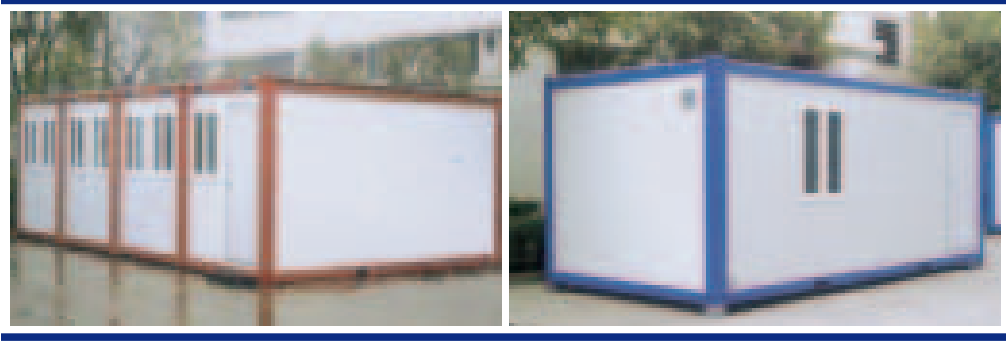
In recent years, along with the constant growth of mobile communication business, the construction of mobile communication base stations has been increasingly promoted in quantity. Thus, the site selection of base station housing and the assurance of the operation environment of base station facilities have been also placed in highlight. As the infrastructure of mobile communication, base stations directly ensure the network coverage and call quality. There has been an increasingly urgent demand for mobile operations to quickly establish base stations, rapidly conduct networking and reduce the cost of the integration, operation and maintenance of base stations. Site selection usually presents the largest problem to the quick buildings of base stations.

Regarding the machinery room holding the facilities of base station, the construction standards have been unspecified yet in the national communication industry.

The construction is mainly conducted in accordance with the traditional construction standards of ordinary machinery rooms.

It's hard to ensure the operation environment of base station facilities in the practical operation. As a result, there is a recurring case that the machinery room itself expels the facilities of base station out of operation. Based on a large quantity of market surveys and investigation, this housing item of base station is a newly launched product, using for reference the standards of and the experience in the construction of base station housing in foreign countries and fully considering the exact conditions of use in our country. The product employs the world-famous polyurethane composite insulated panels, which are specially used for METECNO as the materials for the principal part of housing. Also, the professional manufacturing techniques of insulated door are employed, so are the industrial design and the techniques of the flow-line production and processing. Thereby, a complete solution is available to the communication operators for the construction of base station housing, with full considerations granted for a wide range from the design/manufacture, installation and conveyance of base station housing to the site selection, as well as the mounting and securing of the base station facilities and the operation and maintenance thereafter. Such a solution shall well handle the problems plaguing the operators in the site selection, thus greatly enhancing the construction efficiency, saving the integrated cost and effectively assuring the construction quality. A steady operation environment is hereby regularly provided for the base station facilities.





Features of machinery room

Our machinery room is applicable in various environments such as in the open air in urban area, on the building top and in the field, with features as exhibited in the following:

- The machinery room has the satisfactory air tightness, highly capable of heat preservation and insulation. It employs the world-famous panels (80 mm thick polyurethane composite panel), equipped with the moisture door in profession mode.
In addition, it adopts the techniques of industrial production and treatment;
- Professional design of the housing structure: the housing structures is designed by the professional designing institute, boasting high intensity and reliability;
- Outstanding antiseptic capability and long life service: the world-famous heavy anti-rot paint exclusively for warship is employed to greatly enhance the antiseptic function (especially in the coastal area). The life service of the machinery room well lasts 20-30 years;
- Expediting the establishment of base station: not only can the machinery room be immediately assembled on site out also capable of hoisting.
Thus, the construction period shall be greatly shortened;
- Flexibility of site selection: the machinery room has a light deadweight (approximately 600 kg) and a foundation easily managed, namely, it can be both deployed in the field and mounted on the building top in urban area;
- The wiring of the machinery room and the matching accessories are available;
- The machinery room exhibits features of concision and order inside and outside, boasting the polished technique of manufacture and the artistic feature in good taste;
- The integration of design is employed for the machinery room to overall decrease the operation expenses and maintenance cost and to improve the cost performance of investment.



Technical parameters of polyurethane in contrast with those of polystyrene materials

No.	Index	Unit	Parameters of polyurethane	Parameters of polystyrene
1	Foam density	Kg/m ³	42 ± 2	15 ~ 19
2	Rate of obturator foramen	%	≥ 92	—
3	High and low temperature resistance	°C	-110 ~ +120	-30 ~ +65
4	Coefficient of thermal conductivity	Kcal/mh °C	λ ≤ 0.022	λ ≥ 0.038
5	Pressure intensity	Kg/cm ³	1.7 ~ 2.2	0.5 ~ 0.8
6	Flexural intensity	Kg/cm ²	1.7 ~ 2.2	0.5 ~ 0.8
7	Intensity of tension	Kg/cm ²	≥ 2 ~ 2.8	≤ 0.9
8	Fireproof grade	—	GB8624B1	Non-flame retardant materials, Burn if touching flame doesn't flameout if departing from flame, Burning drop.
9	Live service		Over 50 years	3 ~ 8 years
10	Environmental protection		Environmentally friendly materials	Non-environmentally friendly materials, emitting toxic gas in high temperature