

# MR Car elevator

## Hoistway Structure

Concrete  Brick & Concrete  Other

Unstandard  Standard

### NOTE

HW	HOISTWAY WIDTH	CW	CAR INSIDE WIDTH
HD	HOISTWAY DEPTH	CD	CAR INSIDE DEPTH
OP	DOOR OPENING WIDTH	CH	CAR HEIGHT
ROP	WALL OPENING WIDTH	MRW	MACHINE ROOM WIDTH
OPH	DOOR OPENING HEIGHT	MRD	MACHINE ROOM DEPTH
OH	OVERHEAD HEIGHT	MRH	MACHINE ROOM HEIGHT
CAR DBG	DISTANCE BETWEEN CAR GUIDE RAILS		
CWT DBG	DISTANCE BETWEEN COUNTERWEIGHT GUIDE RAILS		

### Technical Requirement:

Type	TQJ 3000 / 0.5 -VF		
F/P/D	/ / /	Door type	Four Panels Centre Opening
load	3000 kg	speed	0.5 m/s
Machine	YJ245D	Roping	2 : 1
T/sheave	φ 650	D/sheave	φ
car sheave	φ 520	CW sheave	φ 520
Shaft	HW 4250 mm x HD 6200 mm		
Cabin	CW 2600 mm x CD 5700 mm		
Door	OP 2600 mm x OPH 2300 mm		
Speed	0.5		(m/s)
Power	18.5		(kw)
OH	≥4500		(mm)
Pit	≥1600		(mm)
current			(A)

380V 3phase 5wire, 50Hz, fluctuation ±7%

### Support Force (N)

R1	R2	R3	R4	P1	P2	P3	P4
226000	117000	36000		180000	150000		

### Technical Requirement

1. Power supply: machine room need equiped with power supply. Power supply box need be locked. Power supply should be 3P.5 wires, 380V 50Hz. Voltage tolerance ±7%, input power more than 50% of motor power, also equiped with air switch same capacity with power supply, also allow the supplement leakage protector. When use VVVF, need use special leakage switch. Ground resistor should be < 4Ω. It should use insulated conductor from floor to machine room. Keep separate for null wire and ground wire.

2. Shaft requirement, it should be only for lift, can not install non-related device (pipe, cable, etc), and should keep the person entrance into. The shaft plan size mean the mm size measured by plumb line, tolerance ±50mm. Basically not allow the protruding beam and column. The proof pressure of shaft side should be ≥ 24MPa. Recommend to use full concrete, can not use the reserved steel. In case use solid brick, it should use reserved steel or make the ring beam on the surface of reserved steel, height ≥ 300mm. If use hollow brick, can choose C25 concrete fill into the wall, also make the ring beam on the surface of reserved steel, height ≥ 300mm. If the shaft front wall is brick construction, it should make the concrete beam upside of door hole to fix the landing door bracket, height ≥ 300mm. If have the requirement in the drawing, it should make the concrete in the entrance of hall door. It should equiped with lamp, brightness ≥ 50lx, install the lamp at 0.5m from the top and the bottom, in the middle, each lamp at ≤ 1m. The buffer block should be made accompany with special person. before that need make the reserved 24-25 joint bar ≥ 12mm, height ≥ 500mm from the pit floor, and should water proof. Keep the space for person entrance. Pit ladder is by user. Should installed it in a suitable place. If there have basement downside of the pit should make the buffer block extend to the solid floor downside. If the floor distance between 2 floor > 1m should set the safe door with the width 350mm, height 1800mm.

3. Machine room requirement (not for MRL). It had the passageway for the traction machine. keep the entrance unblocked. the door opens outward, also can be locked.

Installed the fan, keep the humidity < 85%, temperature +5℃-40℃, surrounding the reserved hole.

should make the 50mm hole, keep the floor plan, also bear the load 700kg/m<sup>2</sup>.

The motor beam should be supported in the concrete block, this concrete block should

extend to the building beam or bearing wall. Bearing side should make the reserved same size steel.

thickness 2mm, bearing side thickness should over the wall thickness 20mm, total thickness more than 75mm.

Standard wall 200mm, recommend the bearing wall thickness ≥ 200mm.

The hook in the machine room should indicate the max. load. It should install the ladder and barrier in case have stair.

OH	≥4500
Rise	H
10 F	
9 F	
8 F	
7 F	
6 F	
5 F	
4 F	
3 F	
2 F	
1 F	
G F	
B F	
Pit	≥1600
Floor	Height

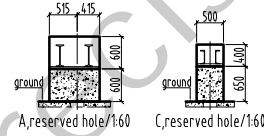
Drawing  approver

Drawing No. FTQ 3000-01-

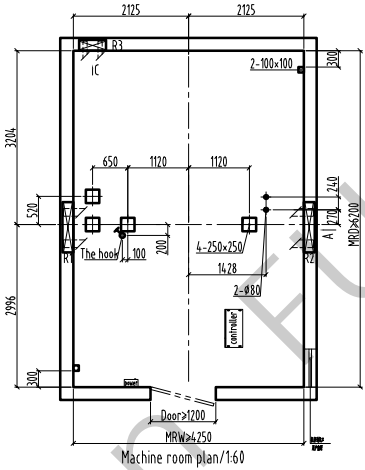
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Project name

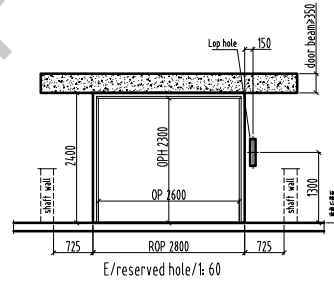
FUJI PRECISION



A reserved hole / 1:60 C reserved hole / 1:60

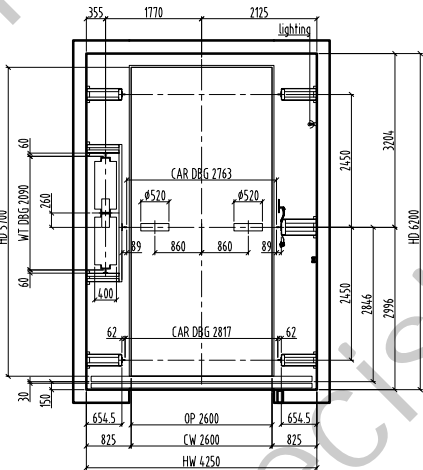


Machine room plan / 1:60

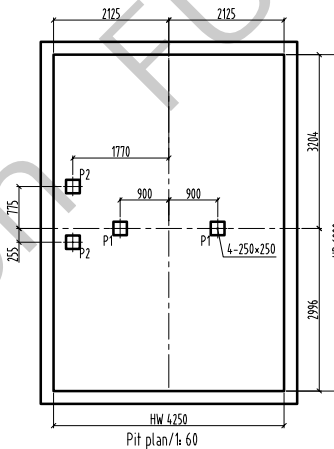


E reserved hole / 1:60

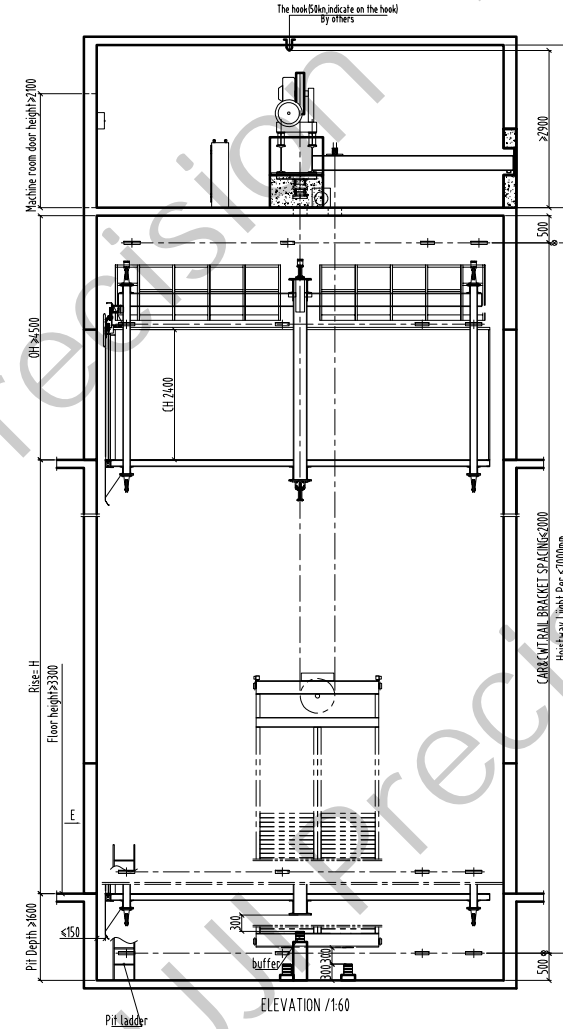
Bottom box Lop: 100x500 (base station) 100x400 (remaining stations)  
No bottom box Lop hole: φ50 hole



Hoistway plan / 1:60



Pit plan / 1:60



ELEVATION / 1:60