

MRL Freight 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	MRO	MACHINE ROOM DEPTH
OH	OVERHEAD HEIGHT	MRF	MACHINE ROOM HEIGHT
CAR DBG	DISTANCE BETWEEN CAR GUIDE RAILS		
CWT DBG	DISTANCE BETWEEN COUNTERWEIGHT GUIDE RAILS		

Technical Requirement:

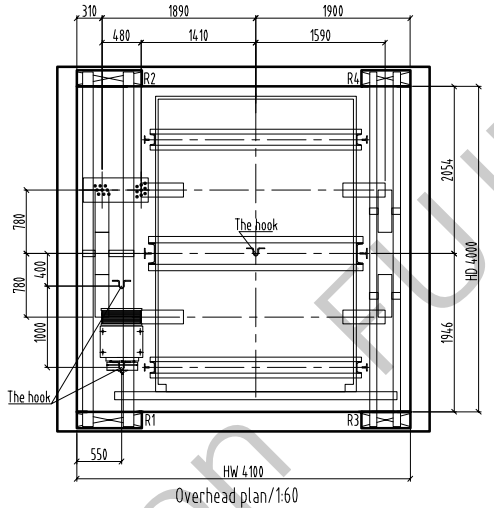
Type	THJW5000 / 0.5 -VF		
F/P/D	4 / 4 / 4	Door type	Center open
load	5000 kg	speed	0.5 m/s
Machine	MONA450	Roping	4:1
T/sheave	φ 480	D/sheave	φ 520
car sheave	φ 520	CW sheave	φ 520
Shaft	HW 4100 mm x HD 4000 mm	Cabin	CW 2400 mm x CD 3600 mm
Door	OP 2200 mm x OPH 2300mm		
Speed	0.5		(m/s)
Power	16.8		(kw)
OH	≥5200		(mm)
Pit	≥1600		(mm)
current			(A)
380V 3phase 5wire, 50Hz, fluctuation ±7%			
252000	125000	152500	pp5000 Force (N) 234000 204000
R1	R2	R3	R4 P1 P2 P3 P4

Technical Requirement

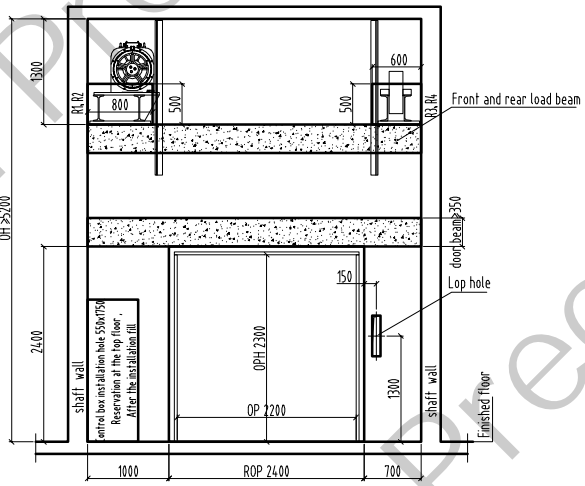
1. Power supply: machine room need equiped with power supply. Power supply box need be locked. Power supply should be 3P5 wires, 380V 50Hz. Voltage tolerance ±7%, input power more than 50% of motor power, also equiped with air switch same capacity with power supply, also allow the supplement leakage 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 min 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 up side 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. If 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 > φ12mm, 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 +5C-40C, surrounding the reserved hole should make the 50mm hole, keep the floor plan, also bear the load 700kg/m². 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 side steel, thickness 2mm, bearing side thickness should over the wall thickness 20mm, total thickness more than 75mm. Standard wall 200mm, recommed 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.

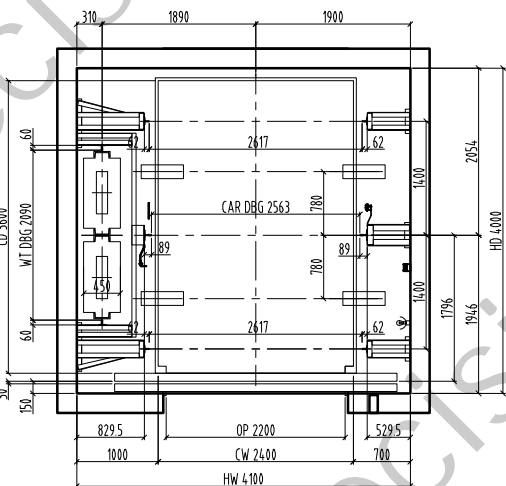


Overhead plan/1:60

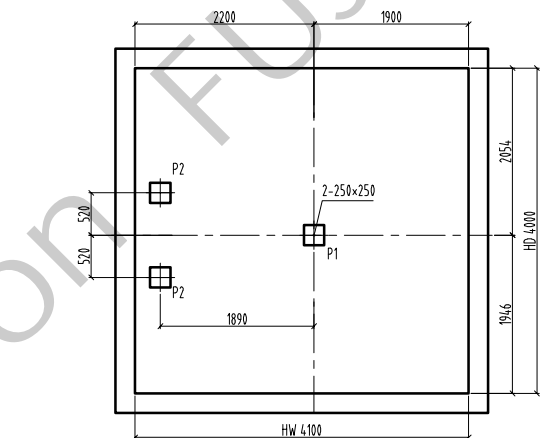


E/reserved hole/1: 60

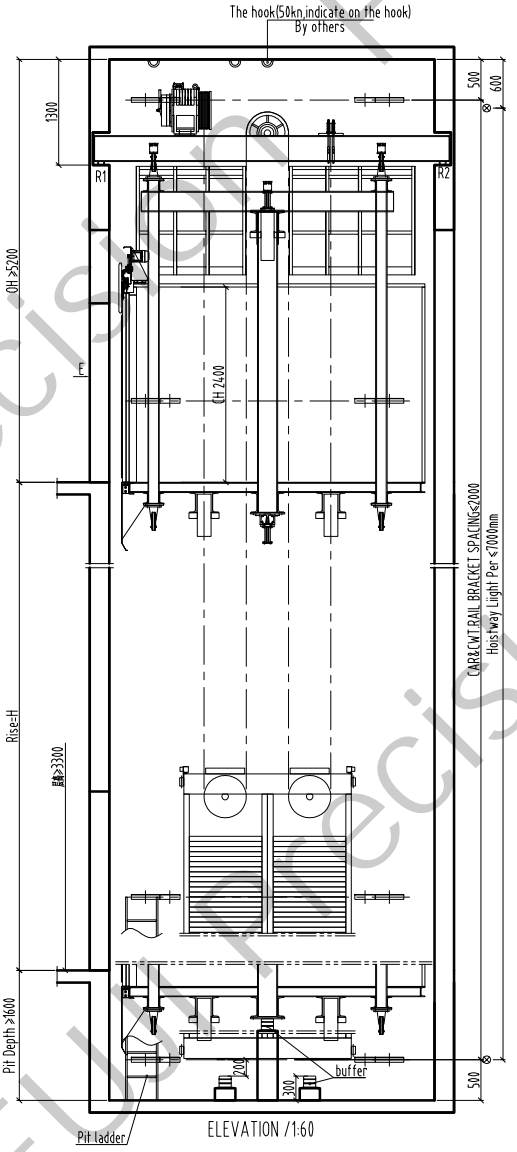
Bottom box Lop: 100x500 (base station) 100x400 (remaining stations)
No bottom box Lop hole: φ50 hole



Hoistway plan/1:60



Pit plan/1: 60



ELEVATION /1:60

OH	≥5200
Rise	H
10 F	
9 F	
8 F	
7 F	
6 F	
5 F	
4 F	
3 F	
2 F	
1 F	
GF	
B F	
Pit	≥1600
Floor	Height

Drawing	approver
Drawing No.	FTHW 5000-01-
manufacturing no.	
Project name	

FUJI PRECISION