

PRODUCT DATA

Tower System Steel Standalone

The automatic tower system optimally utilizes the floor space of an object.

- Elevator for vertical transport
- Optional turn table
- Vehicle height variable
- Different level height possible
- Up to 25 parking levels
- Five cars per parking level
- Floor loads per parking space: 2000 kg / 2500 kg
- Higher loads per parking space possible upon request
- Variable car dimensions upon request

Please refer the separate technical information data sheets given as per configurations.



Cladding

Steel Structure

Foundation

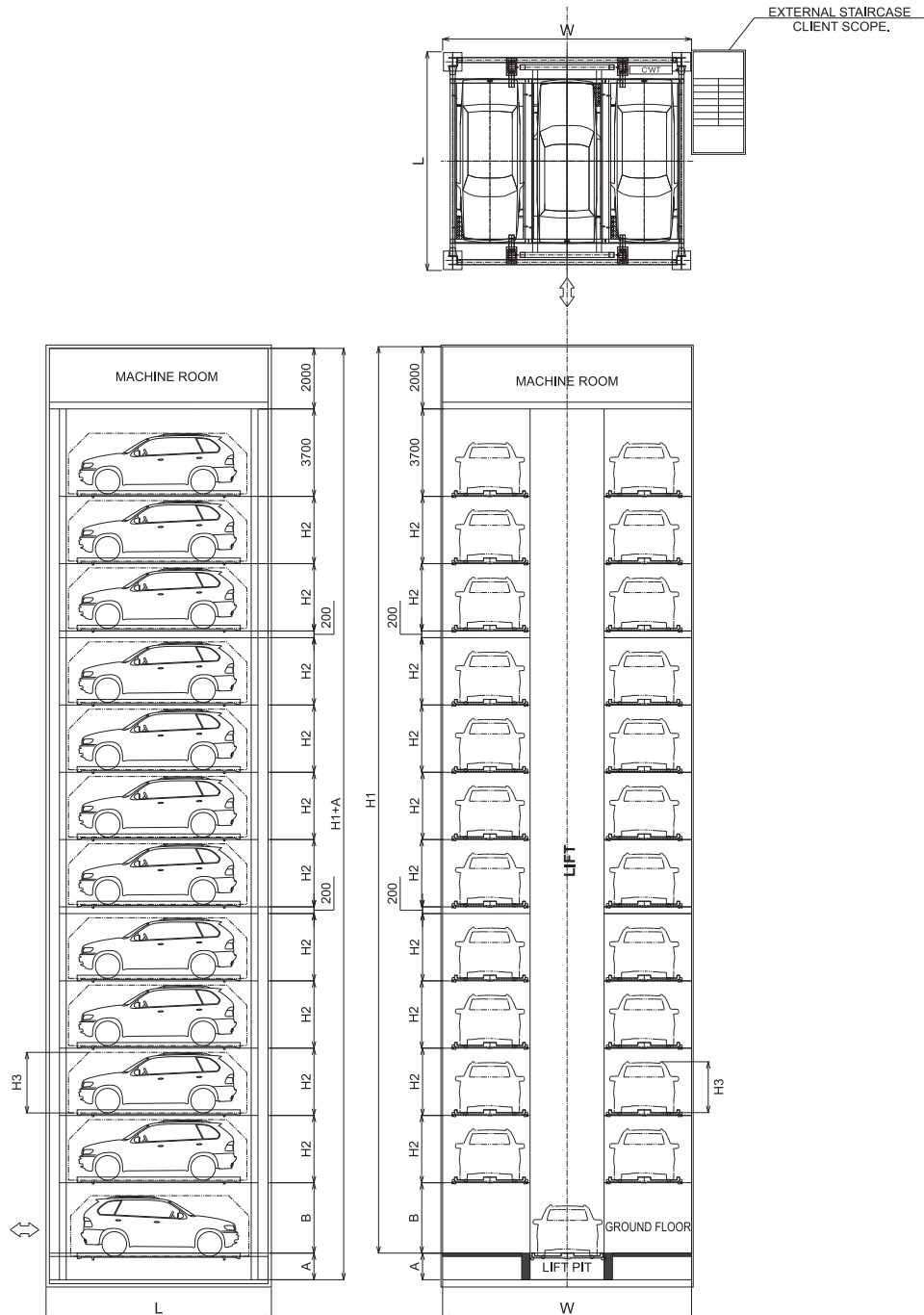
Tower Design - Steel Standalone - 1D-1D

- For 1-25 levels
- Transfer cabin arranged centrally inside the lift
- Parking levels with different heights for variable vehicle heights
- Standalone tower parking above ground
- In case of multi-row arrangement, empty spaces are necessary for moving purposes
- Turning unit optional

Electrical Cabinet

Close to the transfer cabin room for an electrical cabinet is to be provided.
Minimum dimensions:
l: 250 cm, w: 200 cm, h: 300 cm.

Tower Design



- All the standalone tower needs RCC foundation by client
- The foundation bolt insertions at the time of foundation Preparation
- Refer the input sheet from client page No. 13
- Dimensions upto 50 mtrs only, above 50 mtrs please consult KLAUS

Height dimensions

S. No	Type	Car Specification		Civil Specification	
		Length	Width	Length (L)	Width (W)
1	1D:1D	5100	2050	6600	7500
2		5100	2200	6600	8000
3		5300	2050	6800	7500
4		5300	2200	6800	8000

1D:1D - Height dimensions reference sheet

S. NO.	LEVEL	HEIGHT		
1	Pit	1600	A	
2	Ground floor	2800	B	90° With Turn Table
		2600		180° Without Turn Table
		2300		Without Turn Table
3	M/c Room height	2000		
4	Overhead	3700		

S. NO.	AS PER CAR TYPE	H1 (IN MM)			TOTAL CARS
	LEVEL	SEDAN (S)	MUV (M)	SUV (H)	1D-1D
1	7	18700	19900	21100	14
2	8	20400	21800	23200	16
3	9	22300	23900	25500	18
4	10	24000	25800	27600	20
5	11	25700	27700	29700	22
6	12	27400	29600	31800	24
7	13	29300	31700	34100	26
8	14	31000	33600	36200	28
9	15	32700	35500	38300	30
10	16	34400	37400	40400	32
11	17	36300	39500	42700	34
12	18	38000	41400	44800	36
13	19	39700	43300	46900	38
14	20	41400	45200	49000	40
15	21	43300	47300	51300	42
16	22	45000	49200		44
17	23	46700	51100		46
18	24	48400			48
19	25	50300			50

Mix car combination (H1)	Sedan + MUV	$B+(S/2) \times 1700 + ((M-2)/2) \times 1900 + (N/4) \times 200 + 3700 + 2000$
	Sedan + SUV	$B+(S/2) \times 1700 + ((H-2)/2) \times 2100 + (N/4) \times 200 + 3700 + 2000$
	MUV + SUV	$B+((M-2)/2) \times 1900 + (H/2) \times 2100 + (N/4) \times 200 + 3700 + 2000$
	Sedan + MUV + SUV	$B+(S/2) \times 1700 + ((M-2)/2) \times 1900 + (H/2) \times 2100 + (N/4) \times 200 + 3700 + 2000$

Note:

N = No of total car levels	CAR TYPE	HEIGHT (H3)	PITCH (H2)
S = No of Sedan car	SEDAN (S)	1600	1700
M = No of MUV car	MUV (M)	1800	1900
H = No of SUV car	SUV (H)	2000	2100

Note : Any change request in any of the dimensions above please consult KLAUS

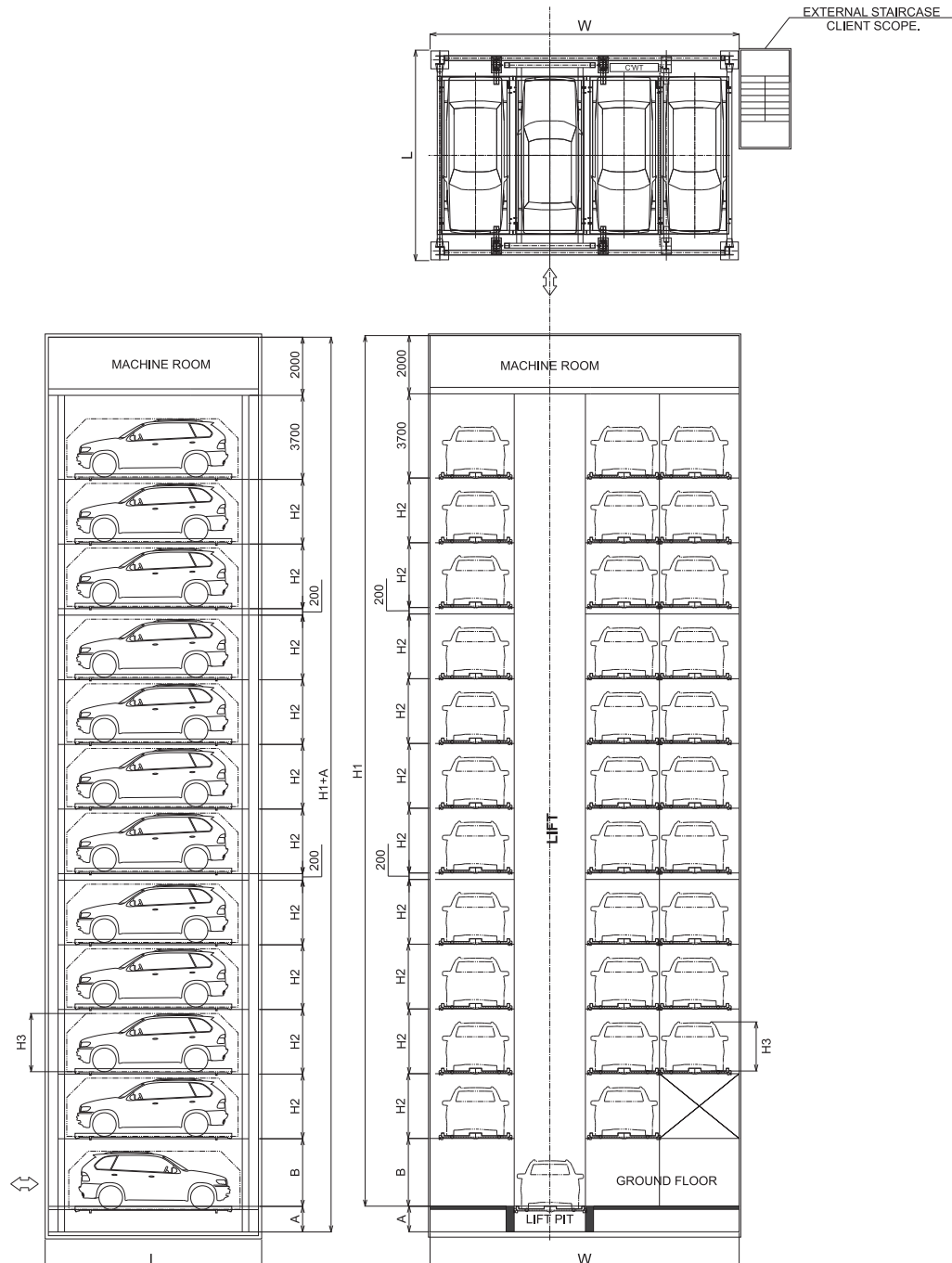
Tower Design - Steel Standalone - 1D-2D

Electrical Cabinet

- For 1-25 levels
- Transfer cabin arranged centrally inside the lift
- Parking levels with different heights for variable vehicle heights
- Standalone tower parking above ground
- In case of multi-row arrangement, empty spaces are necessary for moving purposes
- Turning unit optional

Close to the transfer cabin room for an electrical cabinet is to be provided.
Minimum dimensions:
l: 250 cm, w: 200 cm, h: 300 cm.

Tower Design



- All the standalone tower needs RCC foundation by client
- The foundation bolt insertions at the time of foundation Preparation
- Refer the input sheet from client page No. 13
- Dimensions upto 50 mtrs only, above 50 mtrs please consult KLAUS

Height dimensions

S. No	Type	Car Specification		Civil Specification	
		Length	Width	Length (L)	Width (W)
1	1D:2D	5100	2050	6600	9700
2		5100	2200	6600	10350
3		5300	2050	6800	9700
4		5300	2200	6800	10350

1D:2D - Height dimensions reference sheet

S. NO.	LEVEL	HEIGHT		
1	Pit	1600	A	
2	Ground floor	2800	B	90° With Turn Table
		2600		180° Without Turn Table
		2300		Without Turn Table
3	M/c Room height	2000		
4	Overhead	3700		

S. NO.	AS PER CAR TYPE	H1 (IN MM)			TOTAL CARS
	LEVEL	SEDAN (S)	MUV (M)	SUV (H)	1D-2D
1	7	18700	19900	21100	20
2	8	20400	21800	23200	23
3	9	22300	23900	25500	26
4	10	24000	25800	27600	29
5	11	25700	27700	29700	32
6	12	27400	29600	31800	35
7	13	29300	31700	34100	38
8	14	31000	33600	36200	41
9	15	32700	35500	38300	44
10	16	34400	37400	40400	47
11	17	36300	39500	42700	50
12	18	38000	41400	44800	53
13	19	39700	43300	46900	56
14	20	41400	45200	49000	59
15	21	43300	47300	51300	62
16	22	45000	49200		65
17	23	46700	51100		68
18	24	48400			71
19	25	50300			74

Mix car combination (H1)	Sedan + MUV	$B+(S/3) \times 1700 + ((M-3)/3) \times 1900 + (N/4) \times 200 + 3700 + 2000$
	Sedan + SUV	$B+(S/3) \times 1700 + ((H-3)/3) \times 2100 + (N/4) \times 200 + 3700 + 2000$
	MUV + SUV	$B+((M-3)/3) \times 1900 + (H/3) \times 2100 + (N/4) \times 200 + 3700 + 2000$
	Sedan + MUV + SUV	$B+(S/3) \times 1700 + ((M-3)/3) \times 1900 + (H/3) \times 2100 + (N/4) \times 200 + 3700 + 2000$

Note:

N = No of total car levels	CAR TYPE	HEIGHT (H3)	PITCH (H2)
S = No of Sedan car	SEDAN (S)	1600	1700
M = No of MUV car	MUV (M)	1800	1900
H = No of SUV car	SUV (H)	2000	2100
1 empty space to be considered of each car type.			

Note : Any change request in any of the dimensions above please consult KLAUS

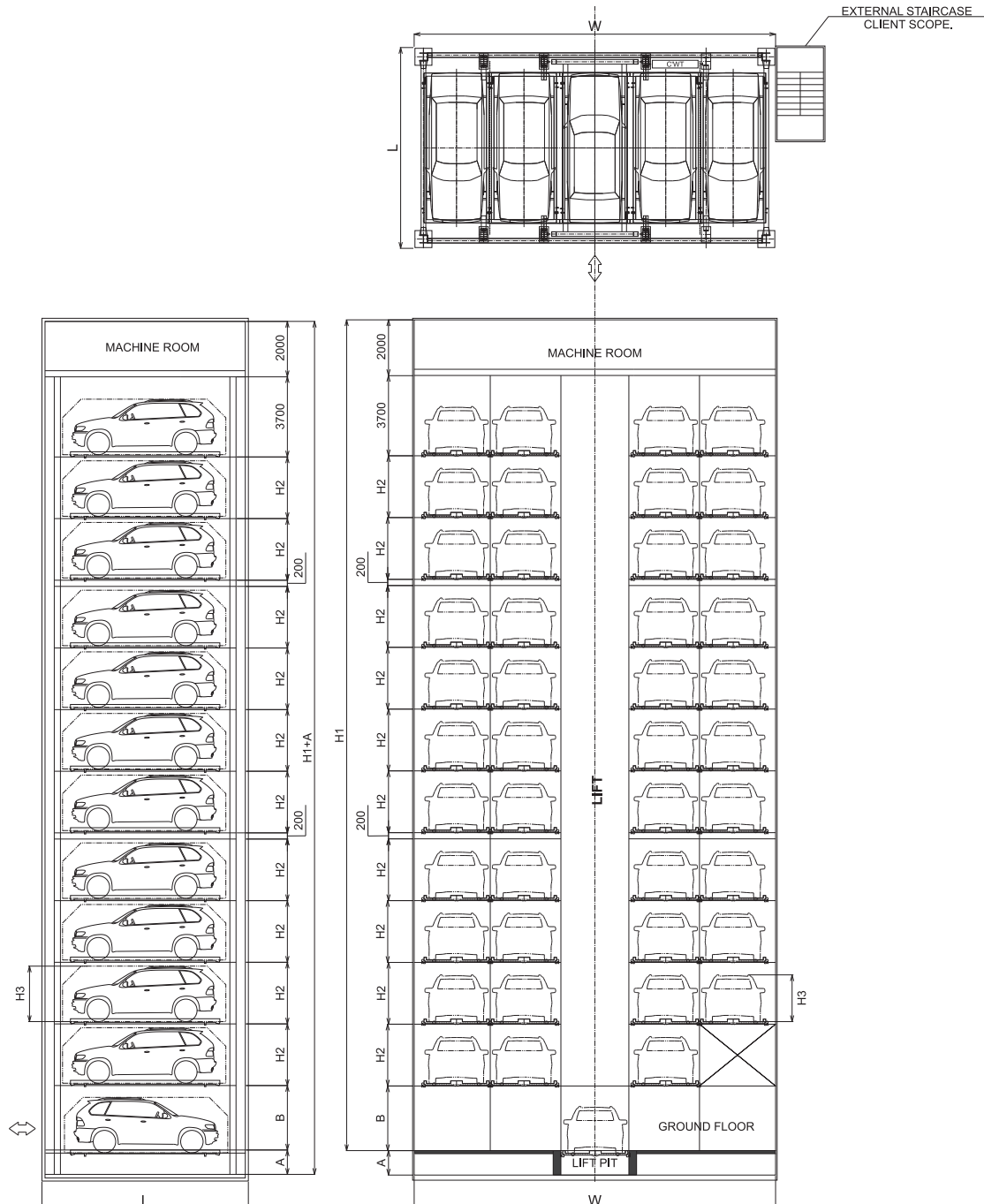
Tower Design - Steel Standalone - 2D-2D

- For 1-25 levels
- Transfer cabin arranged centrally inside the lift
- Parking levels with different heights for variable vehicle heights
- Standalone tower parking above ground
- In case of multi-row arrangement, empty spaces are necessary for moving purposes
- Turning unit optional

Electrical Cabinet

Close to the transfer cabin room for an electrical cabinet is to be provided.
Minimum dimensions:
l: 250 cm, w: 200 cm, h: 300 cm.

Tower Design



- All the standalone tower needs RCC foundation by client
- The foundation bolt insertions at the time of foundation Preparation
- Refer the input sheet from client page No. 13
- Dimensions upto 50 mtrs only, above 50 mtrs please consult KLAUS

Height dimensions

S. No	Type	Car Specification		Civil Specification	
		Length	Width	Length (L)	Width (W)
1	2D:2D	5100	2050	6600	11900
2		5100	2200	6600	12700
3		5300	2050	6800	11900
4		5300	2200	6800	12700

2D:2D - Height dimensions reference sheet

S. NO.	LEVEL	HEIGHT		
1	Pit	1600	A	
2	Ground floor	2800	B	90° With Turn Table
		2600		180° Without Turn Table
		2300		Without Turn Table
3	M/c Room height	2000		
4	Overhead	3700		

S. NO.	AS PER CAR TYPE	H1 (IN MM)			TOTAL CARS
	LEVEL	SEDAN (S)	MUV (M)	SUV (H)	2D-2D
1	7	18700	19900	21100	27
2	8	20400	21800	23200	31
3	9	22300	23900	25500	35
4	10	24000	25800	27600	39
5	11	25700	27700	29700	43
6	12	27400	29600	31800	47
7	13	29300	31700	34100	51
8	14	31000	33600	36200	55
9	15	32700	35500	38300	59
10	16	34400	37400	40400	63
11	17	36300	39500	42700	67
12	18	38000	41400	44800	71
13	19	39700	43300	46900	75
14	20	41400	45200	49000	79
15	21	43300	47300	51300	83
16	22	45000	49200		87

Mix car combination (H1)	Sedan + MUV	$B+(S/4) \times 1700 + ((M-4)/4) \times 1900 + (N/4) \times 200 + 3700 + 2000$
	Sedan + SUV	$B+(S/4) \times 1700 + ((H-4)/4) \times 2100 + (N/4) \times 200 + 3700 + 2000$
	MUV + SUV	$B+((M-4)/4) \times 1900 + (H/4) \times 2100 + (N/4) \times 200 + 3700 + 2000$
	Sedan + MUV + SUV	$B+(S/4) \times 1700 + ((M-4)/4) \times 1900 + (H/4) \times 2100 + (N/4) \times 200 + 3700 + 2000$

Note:

N = No of total car levels	CAR TYPE	HEIGHT (H3)	PITCH (H2)
S = No of Sedan car	SEDAN (S)	1600	1700
M = No of MUV car	MUV (M)	1800	1900
H = No of SUV car	SUV (H)	2000	2100
1 empty space to be considered of each car type.			

S. No	Type	Car Specification		Civil Specification	
		Length	Width	Length (L)	Width (W)
1	2D:3D	5100	2050	6600	14050
2		5100	2200	6600	15050
3		5300	2050	6800	14050
4		5300	2200	6800	15050

2D:3D - Height dimensions reference sheet

S. NO.	LEVEL	HEIGHT		
1	Pit	1600	A	
2	Ground floor	2800	B	90° With Turn Table
		2600		180° Without Turn Table
		2300		Without Turn Table
3	M/c Room height	2000		
4	Overhead	3700		

S. NO.	AS PER CAR TYPE	H1 (IN MM)			TOTAL CARS
	LEVEL	SEDAN (S)	MUV (M)	SUV (H)	2D-3D
1	7	18700	19900	21100	33
2	8	20400	21800	23200	38
3	9	22300	23900	25500	43
4	10	24000	25800	27600	48
5	11	25700	27700	29700	53
6	12	27400	29600	31800	58
7	13	29300	31700	34100	63
8	14	31000	33600	36200	68
9	15	32700	35500	38300	73
10	16	34400	37400	40400	78
11	17	36300	39500	42700	83
12	18	38000	41400	44800	88

Mix car combination (H1)	Sedan + MUV	$B+(S/5) \times 1700 + ((M-5)/5) \times 1900 + (N/4) \times 200 + 3700 + 2000$
	Sedan + SUV	$B+(S/5) \times 1700 + ((H-5)/5) \times 2100 + (N/4) \times 200 + 3700 + 2000$
	MUV + SUV	$B+((M-5)/5) \times 1900 + (H/5) \times 2100 + (N/4) \times 200 + 3700 + 2000$
	Sedan + MUV + SUV	$B+(S/5) \times 1700 + ((M-5)/5) \times 1900 + (H/5) \times 2100 + (N/4) \times 200 + 3700 + 2000$
180° entry with turntable considered.		

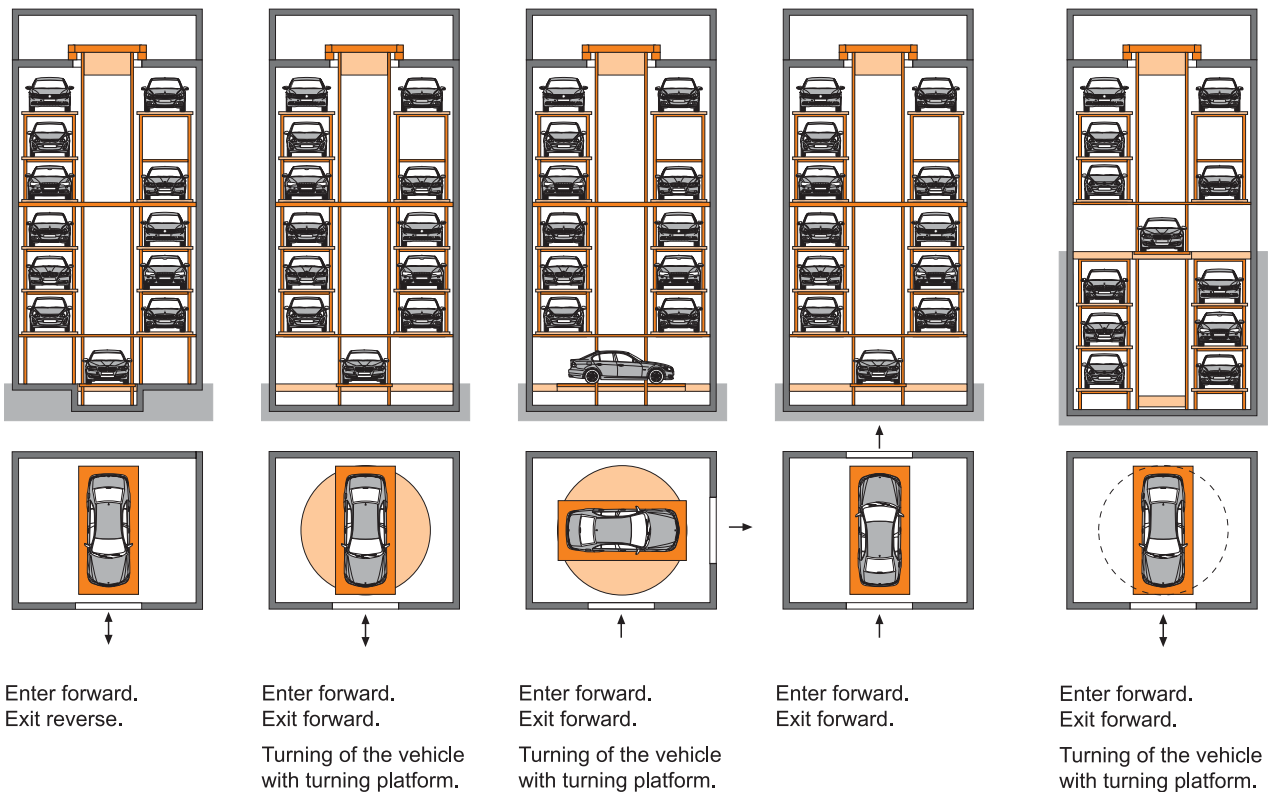
Note:

N = No of total car levels	CAR TYPE	HEIGHT (H3)	PITCH (H2)
S = No of Sedan car	SEDAN (S)	1600	1700
M = No of MUV car	MUV (M)	1800	1900
H = No of SUV car	SUV (H)	2000	2100
2 empty space to be considered of each car type.			

Arrangement options

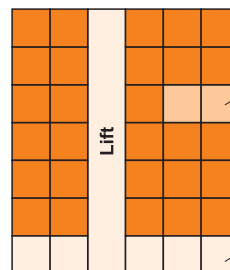
Tower design

Tower/shaft design



Arrangement options

A maximum of three rows
to the left and right of the
lift are possible.



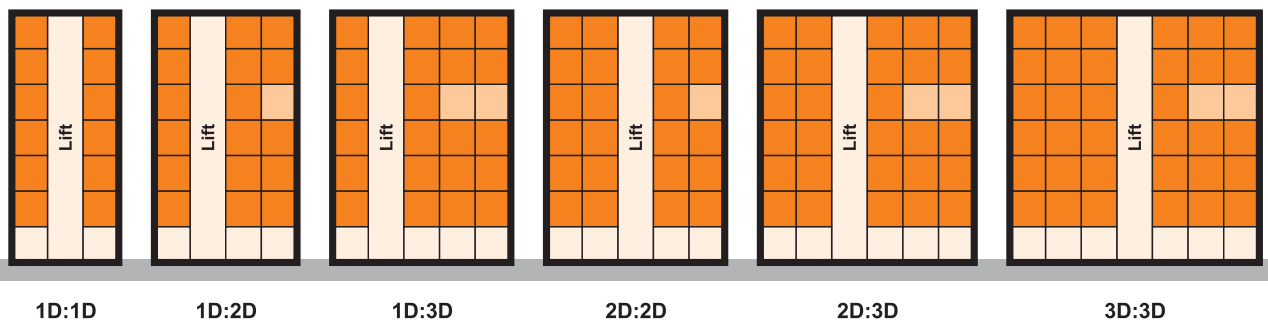
Empty spaces

If all cars are same
In case of two-row arrangement: 1 empty space
In case of three-row arrangement: 2 empty spaces

Free space

In case of tower and tower/shaft design.

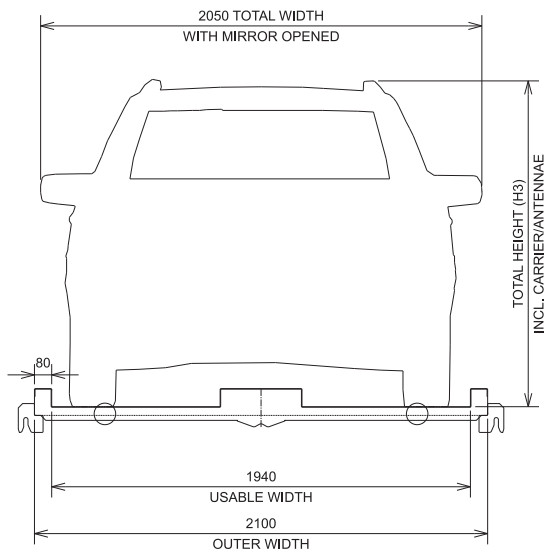
Tower design



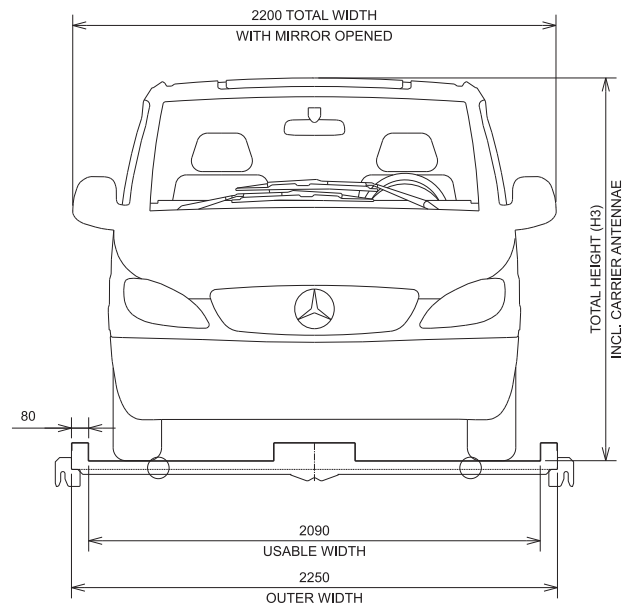
We reserve the right to change this specification without further notice

KLAUS Multiparking reserves the right in the course of technical progress to use newer or other technologies, systems, processes, procedures or standards in the fulfillment of their obligations other than those originally offered provided the customer derives no disadvantage from their so doing.

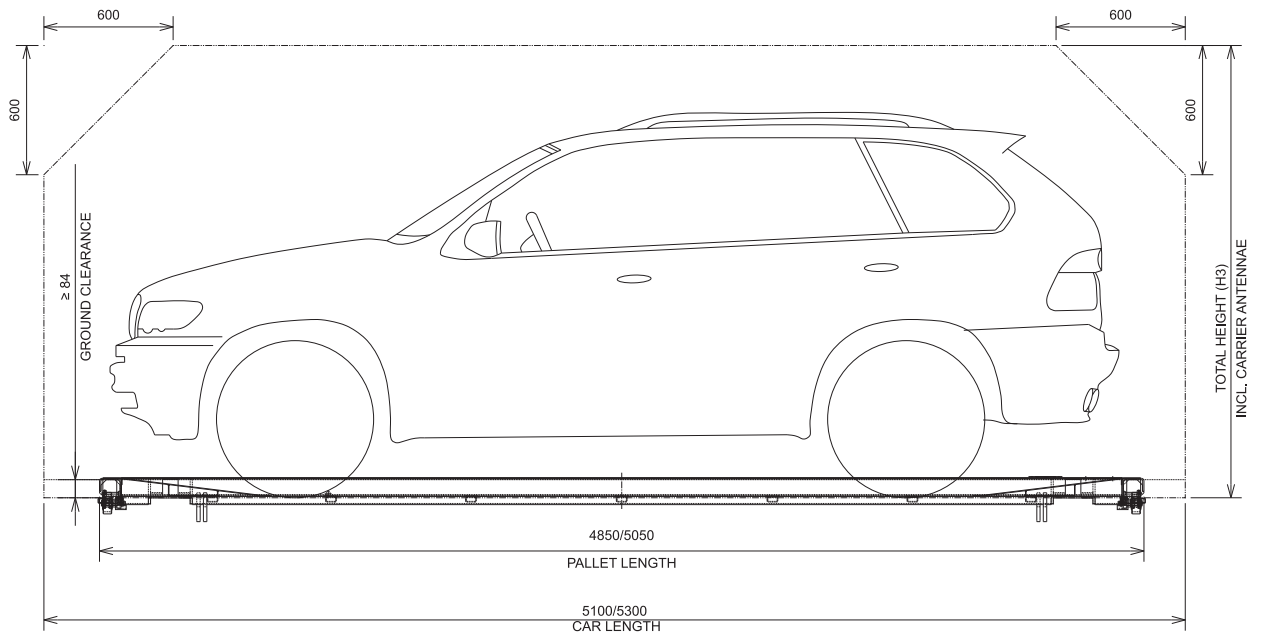
Car Pallet Dimensions



STANDARD PALLET



WIDER PALLET



Customer's Scope & Considerations:

1. Pit foundation as per given load data
2. Water proofing for the pit.
3. Sump pit & drain pit along with the pump, if necessary.
4. External cladding: 10-15% louvered window to be considered in the cladding for cross ventilation.
5. Ventilation & illuminations required for the system.
6. Main door / entry room finishing.
7. Emergency door with keylock from outside for service / maintenance / emergency purpose.
8. Parking & traffic management.
9. External staircase as per CFO norms.
10. All necessary safeguards as per CFO norms & local municipal corporation.
11. Fire extinguisher / fire fighting system.
12. Provide Co2 powder type extinguisher near control panel.
13. Providing of fire alarm signal upto car parking control panel.
14. Earthing for the control panel & structure.
15. Clear drive way to reach the car parking system.
16. High strength non-shrink grout below all car parker base plate.
17. Finishing & white wash required for the inside wall & pit.
18. Lifting hooks of 3 Tons capacity for inbuilt systems.
19. Core cutting - in case of reinforcement bars fouls with anchor bolt.
20. Power cable upto control panel & distribution panel
21. Temporary power supply for installation.
22. Forced cooling fan near control panel
23. 2 nos. exhaust fan for the machine room area.
24. Power plug points at entry level & in machine room.
25. DG power backup & it's phase reversal facility for the system - provide connection upto our panel.
26. Lightning arrester for the system.

Required inputs for Structural Analysis

Project Name and Address : _____

A) Wind Speed

m/s

B) Earthquake Zone

☐ Zone 1

☐ Zone 2

☐ Zone 3

☐ Zone 4

C) Terrain Category

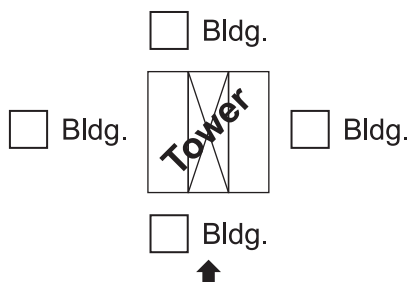
☐ Terrain Category 1

☐ Terrain Category 2

☐ Terrain Category 3

☐ Terrain Category 4

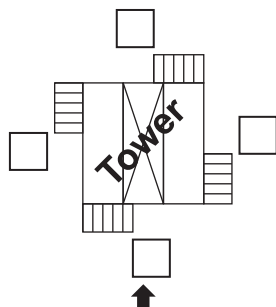
D) Building surrounding the proposed Parking System



E) Cladding Weight

Kg / sqmt

F) External Staircase Location



G) External forces on Tower due to staircase

Kgf

H) Other (if any)

Customer to tick / fill the relevant information