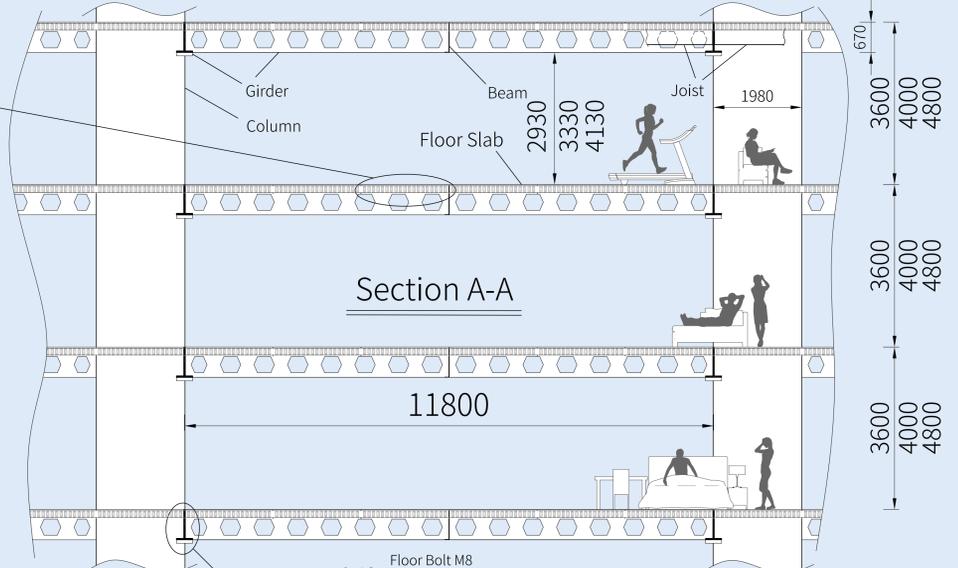
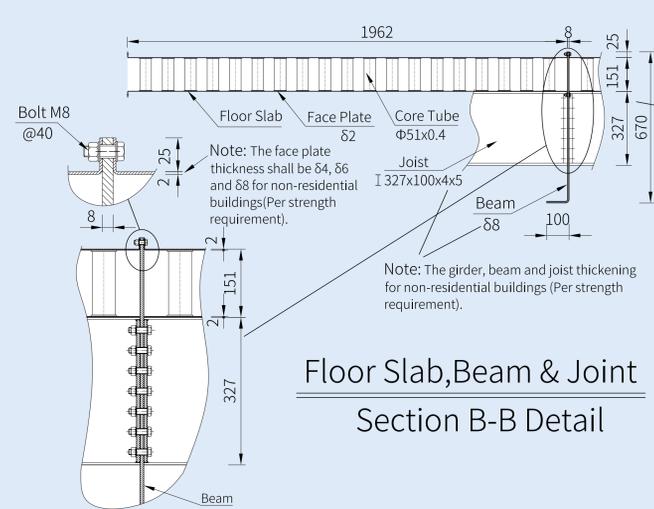
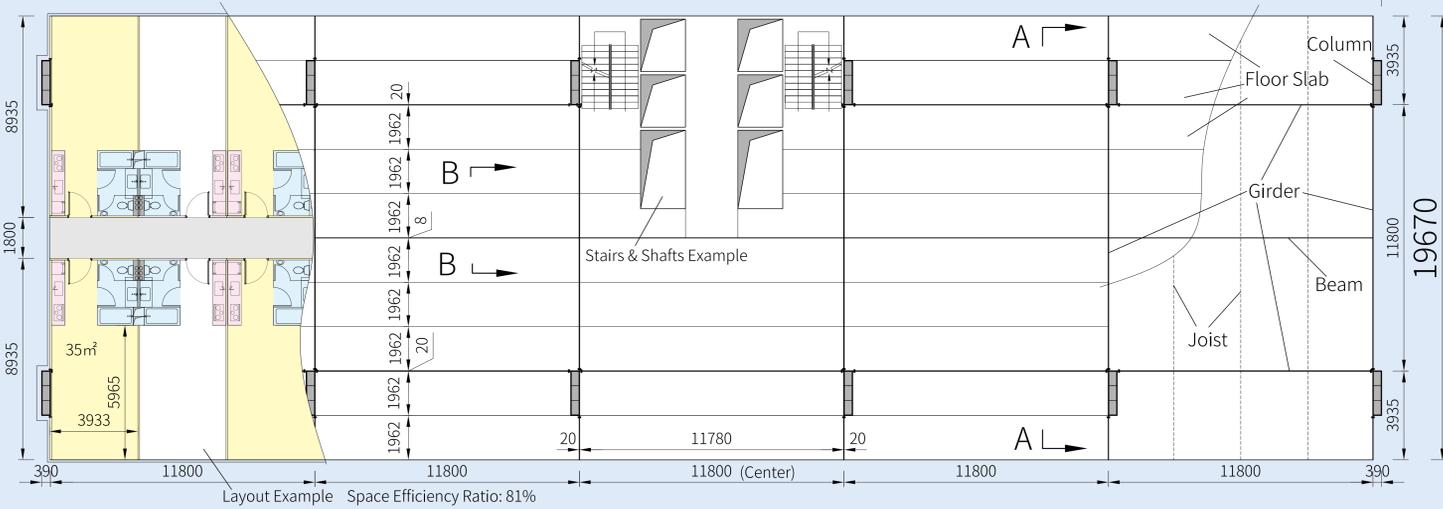
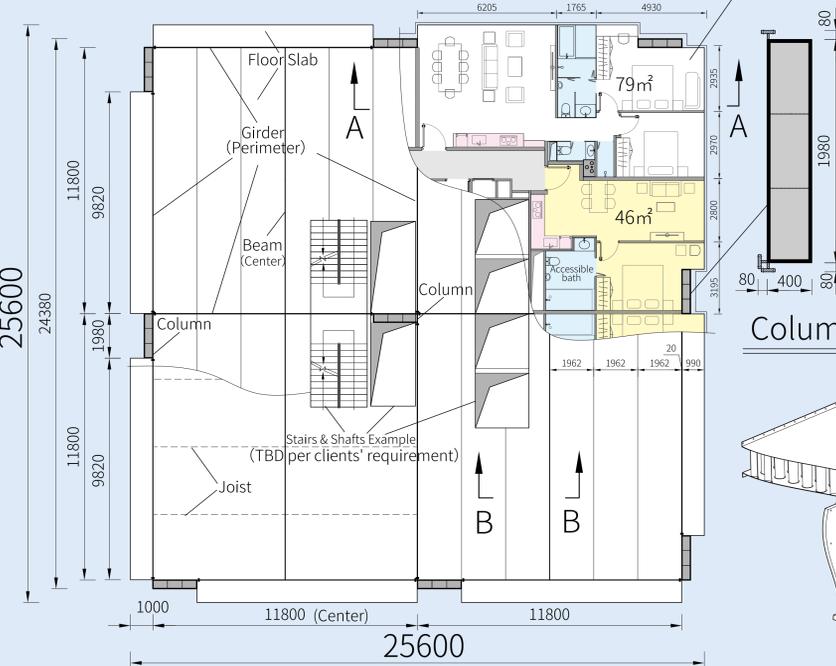


Recommended Residential Layout

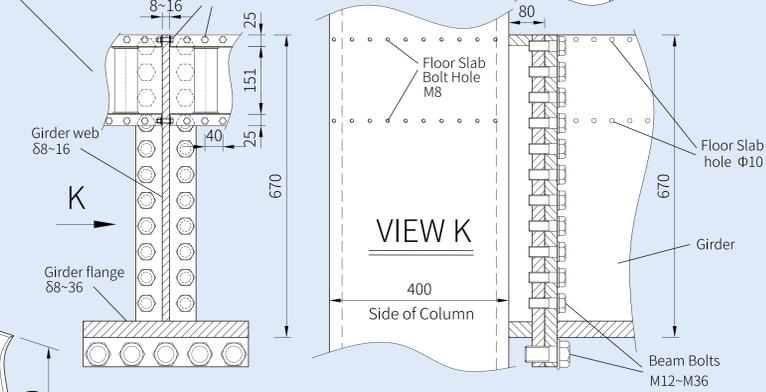
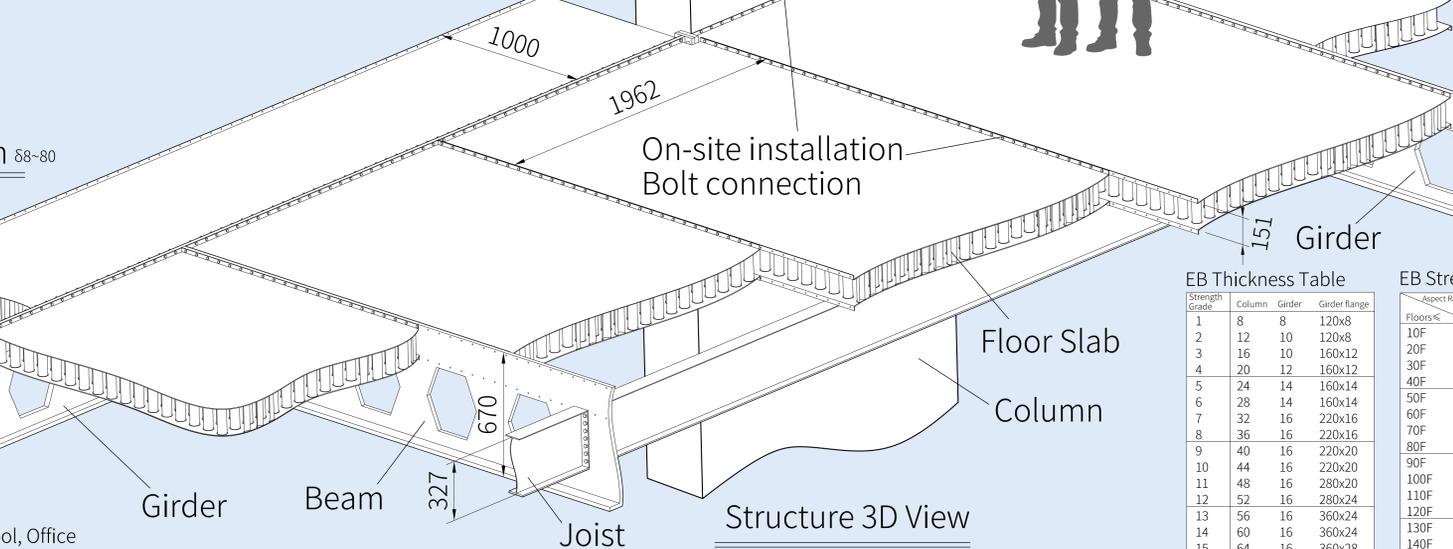


K4 642m²/F Recommended 32F 20,544m²/BLDG



Edison Building Overview

Edison Building (EB) is a unique open-structured system developed by BROAD with its 17 years of experience in prefabricated construction besides Holon Building. It uses standard modules to create building spaces and load capacities per clients' needs, providing various residential, commercial, and industrial applications. The core technologies of EB lie in "BROAD Steel Core Slab", "the Coupled Column-Beam-Slab System" and 100% factory prefabrication. On-site construction only requires bolt fastening, which can be done by ordinary workers. This has completely cut the Gordian knot of 3-highs (high design costs, high construction costs, and high quality risks) that has plagued the global steel structure industry for over a century. Furthermore, EB offers more striking advantages in cost and construction time for high-rise and super high-rise buildings.



EB Thickness Table

Strength Grade	Column	Girder	Girder flange
1	8	8	120x8
2	12	10	120x8
3	16	10	160x12
4	20	12	160x12
5	24	14	160x14
6	28	14	160x14
7	32	16	220x16
8	36	16	220x16
9	40	16	220x20
10	44	16	220x20
11	48	16	280x20
12	52	16	280x24
13	56	16	360x24
14	60	16	360x24
15	64	16	360x28
16	68	16	420x32
17	72	16	420x36

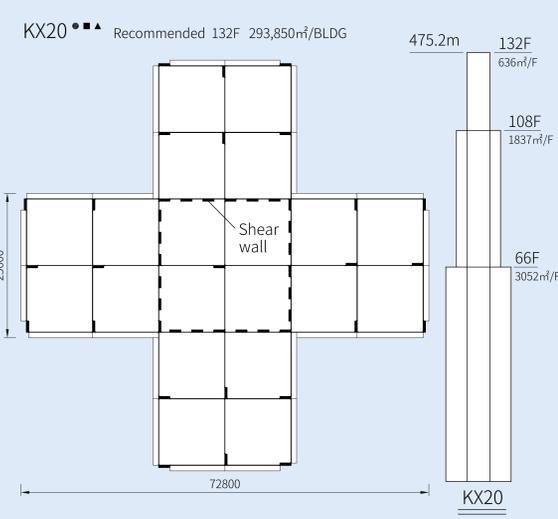
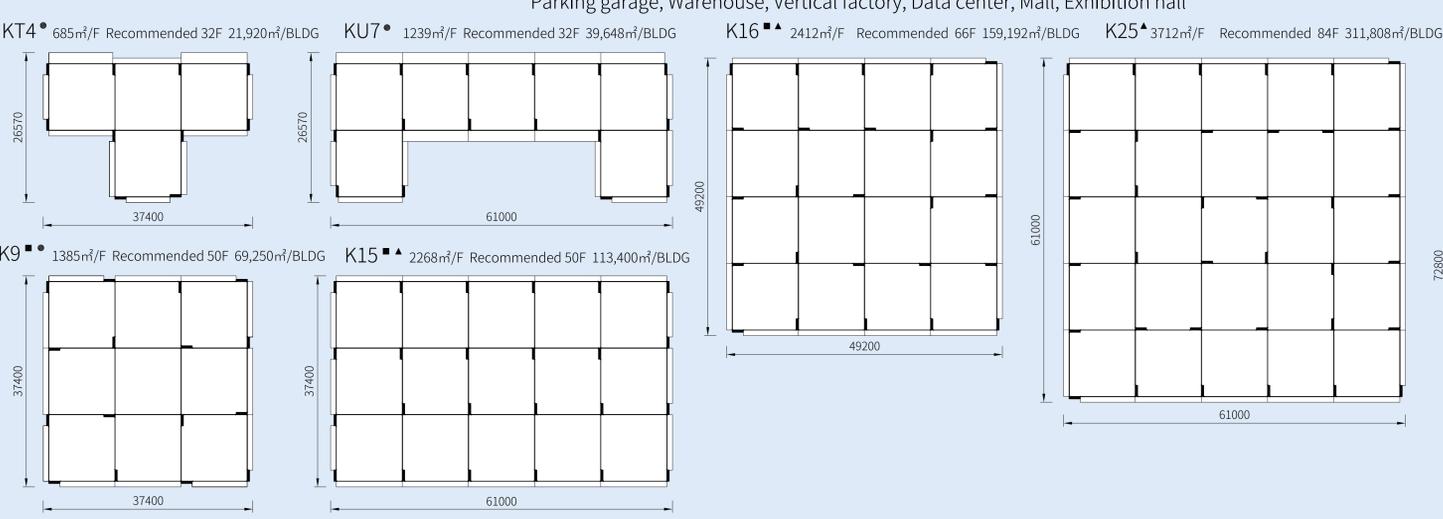
EB Strength Grade Table (RES)

Aspect Ratio	Strength Grade						
	2	3	4	5	6	7	
10F	1	1	-	-	-	-	
20F	1	1	1	2	2	-	
30F	1	2	2	3	3	3	
40F	2	2	3	3	4	5	
50F	3	4	5	6	7	8	
60F	3	4	5	6	7	8	
70F	4	5	6	7	8	9	
80F	4	5	6	8	9	10	
90F	5	6	7	9	10	11	
100F	6	7	8	10	11	12	
110F	6	7	8	9	11	13	
120F	7	8	9	10	12	14	
130F	7	9	10	11	13	15	
140F	8	9	11	13	15	17	
150F	9	10	12	14	16	18	

EB Structure Handover Criteria

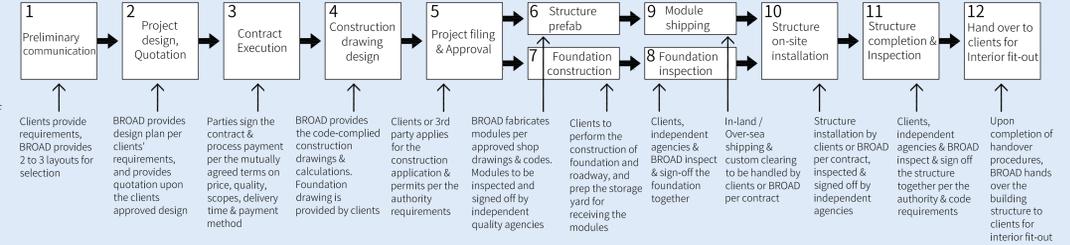
No.	Item	Specs & Notes
1	Technical Standard	"Steel Structure Building Standard" in project countries
2	Structure System	Steel Frame Structure
3	Structural Material	Carbon Steel Q420
4	Core Material	Floor Slab: BROAD Steel Core Slab (1962x151x11780mm)
5	Floor Height Options	3.6m / 4m / 4.8m (CLR HT 2.93m / 3.33m / 4.13m)
6	Column Spans(modulus)	11.8m x 11.8m
7	Recommended Floors	10-120F
8	Structural Corrosion Protection	Cold galvanized coating (factory-applied)
9	Design Service Life	100 years (extendable if routine corrosion protection is applied)
10	Structural Construction Method	Structure components 100% factory-prefab, 40-FT container-mode transportation (200-300 m³/container); Bolt-connection installation on site(no welding is needed)
11	Design Responsibility	Structure by BROAD. Roof, foundation, interior and MEP by clients
12	Construction Responsibility	Structure prefabricated by BROAD. Structure can be installed by BROAD or clients on-site per the Contract. Other work by clients
13	Structure Construction Duration	Structure components prefabricated by factory: 1 to 6 months (subject to project size & complexity). On-site installation: 2 to 5 floors/day
14	Extended Services	BROAD can also provide design, manufacture & installation of the roof, facade, AC & fresh air system if urgently required by clients
15	Applicable Uses	Residential, Hotel, Office, Mall, Hospital, School, Data center, Parking lot, Warehouse, Vertical factory, etc.

Typical Building Layouts



Note:
 1. The thickness table is for residential building's reference only. The thickness of the beam & floor slab face plate is fixed for the residential building regardless of the strength grade. The table data are for design reference only, and the actual thickness shall be determined based on the actual project strength grade.
 2. The thickness of the columns, beams and joists shall be increased per the design codes for non-residential buildings with large live loads like data center, parking lot, warehouse and factory.
 3. The "Normalised Design Axial Force" in the table specifically refers to the ratio of the building's static load to the column's compressive resistance.

EB Project Process (12-step Method)



DNO: KL-XX-260318
 USE: MEG FIT R&D EXT
 SPD: PUB INT SEC CONF
 EB Structure
 PB: SKF, PRC
 CHK: HXT, QC
 APV: DAT, 26.03.18
Edison Building Selections
 V1.0 (MET公制)

NOTE: All dim. are in mm