1. What is Holon Building?

Holon Building is BROAD'S stainless steel factory-made building. Floor slabs are made of BROAD's original "stainless steel B-core slab", which is ultra-light and ultra-strong, while its columns and beams are made of section stainless steel. Concrete is not used in the whole building. Structures, decorations and MEP are 100% factory-made. The only procedure to be conducted on site is bolt connection. 3 floors can be erected per day on site. A prefabricated module is shipped as a standard 40 ft container(actually no container is needed), enabling convenient and low-cost transportation worldwide. The column-free space after installation on site is 12x4.8m, which is extremely flexible. Holon Building has five distinctive advantages: Firstly, stainless steel is of high durability and super strong earthquake resistance, showing great vitality. Secondly, BROAD Fresh Air System improves residents' quality of life by providing 100% fresh air and filtering PM2.5 by 99.9%. Thirdly, thick insulation, 3 or 4-paned windows and fresh air heat recovery reduce Holon Building's CO₂ emissions by 90% compared with that of traditional buildings, creating a better environment for our future generations. Fourthly, Holon Building allows flexible changes to the housing types and floor plans. The building itself can even be disassembled and rebuilt in another location. Fifthly, compared with conventional buildings, Holon building with the global dominating vitality offers the highest quality at a lower cost thanks to the streamlined production and "volume for price" supply chain system. Moreover, it is perfectly suited to a range of buildings, from luxury housing and skyscrapers to

Kev New Tech

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No.	Item	New Technologies	Distinctive advantages
1			Only bolt tightening is required on site, reducing cost and lowering risks in quality
2	Floor slab	BROAD stainless steel B-CORE slab	1000-year building, super strong earthquake resistance, 10 times lighter than reinforced concrete of the same design strength
3	Structure	Extended structure system	Modules are delivered like 40 ft containers, unfolding on site doubles the width
4	Energy efficiency	Highly insulated building energy efficiency system	90% less energy consumption than that of conventional buildings, low-carbon, cost saving and comfortable
5	Sound isolation	Superb sound isolation effect on exterior wall and window system	Superb urban noise isolation, making the indoor space isolated from the outside world
6	Air	BROAD Fresh Air System	Indoor air is 100 times cleaner than that outdoors, creating a healthy indoor environment
7	Fire protection	Outside fire escape ladder	Ensure the safety of fire escape fundamentally

No.	Item	Material	Distinctive advantages
1	Structure	Stainless steel B-CORE slab and section bar	High durability, earthquake resistance (Not one inch of concrete)
_	Water supply pipe	Stainless steel	Durability, quality water
3	Exterior wall	Galvalume slab with rock wool	Thermal and sound insulation, rain-proof, sturdy, fluorocarbon paint stain resistant,uvioresistant
4	Glass	Ultra-clear glass	High transparency and no color reveal clear outdoor views, more heat acquisition while the sun shines in winter
5	Exterior sunshade	Electric blinds inside the glasses	Energy efficiency, light adjustment, gale resistance
	Interior thermal shade	Electric honeycomb blinds (fibre sandwiched with aluminium foil)	Energy efficiency, sound isolation,shading
7	Floor, door,	Bamboo, wood	Renewable resources, sturdy, aesthetic

BROAD Factory-made Building Brief History In 2009, BROAD developed the factory-made steel-structured building, achieving a constructio

- In 2010, BROAD built a 6-storey BROAD Pavilion at Expo Shanghai within one day
 In 2015, BROAD built a 57-storey complex in just 19 days in zulo, skudu built a 37-storey complex in just 17 days
 BROAD built 58 factory-made buildings in 6 years, achieving the sustainable goal of Magnitude 9 earthquake resistance, 5 times higher energy efficiency, and indoor air quality 100 times cleaner
- than outdoor air
 In 2018, BROAD developed the stainless steel B-CORE slab, replacing carbon steel with stainless In 2016, Drobb developed the Stanless Steet Broth State), replacing calbon steet with Stanless steet and halting production of carbon steet structure buildings
 In 2021, BROAD successfully developed the Holon Building, which has triggered the global initiative
 of "1000-year Holon Building benefitting humanity"

2.Holon VS Tradition

No	Items	Traditonal	⊘ Holon
1	Structure	Reinforced concrete Roughly 50-year life span, construction waste put into landfill after disposal. Brittle materials make buildings easily collapse in case of earthquakes	Stainless steel 1000-year life span, recyclable after disposal. Good ductility. Deformed but no collapse in the event of an earthquake
2	Method	Site work Hard to control quality; heavy pollution; heavy use of skilled labor, build 1 F/10 days	Factory made Guaranteed quality; zero pollution; small labor force and short work schedule,build 3 Fs/day
3	Space	Fixed Limited no-column space, no alteration allowed after back wall and door construction	Flexible Large column-free space(12x4.8m), walls, doors and windows can be removed or revised after construction
	Comfort & energy efficiency	Less comfort, higher consumption Low thermal insulation of exterior wall, high A/C energy consumption, very noisy	More comfort, lower consumption 90% energy efficiency (in compliance with EU Passive House and Technical Standard for Nearly zero Energy Buildings)
5	Air quality	Worse than outdoor Air purified by primary ventilation or opening window	100 times cleaner than outdoor BROAD Clean Fresh Air Machine 100% fresh air supplies, filtering PM2.5 by 99.9%
6	Outdoor noise	Transfer into building Poor sound isolation of windows allows outdoor noise to be heard inside buildings	Complete isolation 3-4 paned windows; Fresh air machine isolates noise with window closed

3. Building Rated Parameters (General Standard)

No	Items	Parameters	Notes
1	Room module transport dimensions	L:40ft W:8ft H:10ft	Shipped as a standard 40ft container (actually no container is needed)
2	Room module installation dimensions	L:40ft W:16ft H:10ft	The installation and transport dimensions for stair modules are the same
3	Module transport weight	Room ≤ 15t, stair ≤ 11t	Stowage materials and tools are included
4	Building floor height	10 ft (clear height 9 ft)	Non-standard floor height can be 20 ft, 30 ft, 40 ft
5	Structural material	Stainless steel (30 times more corrosion resistance than carbon steel)	floor slabs are made of BROAD B-CORE slab while columns are composed of section stainless steel
6	Adapted standard	China, EU, US standards	Subject to the official approval from clients' country as the premise
7	Life designed	1000-year structure	Other parts per EU Standards
8	Insulation U-value (Btu/hr ft² °F)	Rock wool in exterior wall 8.7 in 0.035 (Roof U-value=0.0317)	Rock wool insulation thickness will be increased in severe cold areas, U-value=0.0247 Btu/hr ft ² °F
9	Window U-value (Btu/hr ft ² °F)	4-paned large windows: 0.247 3-paned small windows: 0.317	Additional insulation measures: exterior sunshade, interior thermal shade(if the interior thermal shade is used 50%, window U-value will be decreased by about 40%)
10	Energy metering	Each household is seperate	Water, electricity, fresh air system and A/C consumption are calculated independently for each household
11	Indoor temperature	Winter 72 T, Summer 75T	Occupants are able to adjust the temperature in each room
12	Fresh air volume	≥23.5 cfm / person	Or 0.1 cfm/sf (CO ₂ concentration limit 600-1000 ppm)
13	Air freshness	100% fresh air	No mixed return air (fresh air heat recovery rate 80%)
14	Fresh air cleanliness	PM2.5 filtration efficiency 99.9%	Indoor air is 100 times cleaner than outdoor air
15	Building energy consumption	90% less energy consumption than that of traditional building	A/C & Fresh Air annual power consumption kWh/sf yr: Severe cold area 1.11, cold area 1.11, hot summer and cold winter area 1.11, hot summer and warm winter area 1.30, warm area 0.37
16	Standard delivery items	Turnkey project: including building construction, MEP, and decorations	Excluding foundation and other engineering works outside the building

4. Energy Efficiency Calculations

Climate 2	zone		Severe o	old	Cold		Hot su & cold		Hot summer & warm winter	Warm	
			Harbin, I Moscow Ottawa		Beijing, Lanzhou York, To		Shangha Changsh New Del	a, Rome,	Guangzhou, Taipei, Dubai, Rio	Kunming Guiyang Nairobi	
	Item	Parameter	summer	winter	summer	winter	summer	winter	summer	summer	winter
2	Exterior wall	710 sf U=0.035 Btu/hr ft ² °F	17	1443	92	1074	167	685	277	2	359
ema	Window	387 sf U=0.247 Btu/hr ft² °F	65	622	986	546	1431	244	2443	135	35
Heating & cooling demand	Fresh air	7063 ft ³ 80% heat recovery	70	554	225	319	669	185	355	23	13.6
8	Lighting	100 W LED 0.3 W / sf ²	59	-110	128	-92	200	-62	578	52	-15
ating	Personnel	500 W / 5 people	84	-99	187	-91	296	-68	416	39	-13
£	Electrical	600 W Including kitchen and home appliances	124	-204	271	-191	423	-135	797	74	-29
	Total	kWh /yr	419	2205	1890	1566	3186	851	4867	324	351
leating & demand	cooling	kWh / sf yr	0.29	1.51	1.30	1.08	2.19	0.59	3.34	0.22	0.24
A/C		kWh / yr	1361		1395		1299	•	1568	202	
oower cons.	Annual average	kWh / sf yr	0.94		0.96		0.89		1.08	0.14	
Fresh air		kWh / yr	235		•		•				
power cons.	Annual average	kWh / sf yr	0.16								
Total ann	ual	kWh / yr	1596		1630		1534		1803	437	
Site EUI	HVAC)	kBtu / sf yr	3.74		3.80		3.58		4.22	1.01	
Source E	UI(HVAC)	kBtu / sf yr	9.70		9.92		9.32		10.97	2.63	

Note:
The design is based on "Technical standard for nearly zero energy buildings" GB/T 51350-2019, energy
efficiency rate of Holon Building is 90%. Reduced carbon emission example: one household of 1453 sf (in
areas with hot summers and cold winters) in Holon Building will reduce CO₂ emissions by 11.8t yearly (calculated per 1kWh electricity which emits 0.86kg CO2). Assuming that one tree absorbs 18.3Kg CO2

5.Structure CO₂ Comparison

	Calculated by 3000m² building	g, A4.5-11 as a n example							
	Item	Holon Building	Reinforced Concrete Building						
ı	Material manufacturing	992t	945t × 20 times=18900t						
ı	On-site installation	6.6t	50t × 20 times=1000t						
ı	Total in 1000 years	999t	995t × 20 times=19900t						
ı	Reduced CO ₂ emissions of Holon Building: 18901t Reduced CO ₂ emissions rate: 95%								
	Calculation basis: Life span of the Holon Building is 1000 years, and that of concrete building is about 50 years. Waste and material recycling is not included in								

e table. Recycling rate of stainless steel reaches more than 98% while concrete can hardly be recycled ainless steel/m² Holon Building (CO₂ emission 3.5kg/kg), in which 30kg for B-CORE stab manufacturing (CO₂ emission 1.69kg/kg), production for a 3000m² Holon Building emits 9782 CO₃, in total ainless steel/m² Concrete Building (CO₂ emission 2.05kg/kg) and 1380kg concrete (CO₂ emission 0.154kg/kg). Material production

6.Adopted Standard

No	Name of the standard	Code of the standard	П	No	Name of the standard	Code of the standard
1	Technical standard of stainless steel	T/CSUS 14-2021	71	1	Specification for Structural Steel Buildings	AISC 306-16
_	core plate building structure		լ լ	2	Seismic Provisions for Structural Steel Buildings	ANSI/AISC 341-16
2	Technical specification for stainless steel structures	CECS 410:2015	IJſ	3	Safety standard for fire testing of building structures and materials	ANSI/UL 263-2003
3	Load code for the design of buildings	GB 50009-2012	」 [4	Structural Welding Code-Stainless Steel	AWS D1.6
4	Code for seismic design of buildings	GB 50011-2010	IJľ	5	Fasteners for use in Structural Application	ANSI/ASME B18.2.6-200
5	Technical standard for assembled buildings with steel-structure	GB/T 51232-2016		6	Building Construction and Safety Code	ANSI/NFPA 5000-2006
6	Code for welding of steel structures	GB 50661-2011	- 11	7	Safety Standard for fire resistance test	ANSI/UL 1040-2001
7	Mechanical properties of fasteners-	GB/T 3098.6-2014	П.		in building adiabatic walls	
8	stainless steel bolts, screws & studs High strength stainless structural	GB/T 37430-2019	\dashv	8	Limit States Design of Steel Structures(A National Standard of Canada)	CAN/CSA-S16-09
	steel for constructions		」 ↑	9	Eurocode 3: Design of steel structures. Part 1-2	EN 1993-1-2:2005
9	Code for fire safety of steel structures in buildings	GB 51249-2017][10	Eurocode 8: Design of structures for earthquake resistance, Part 1	EN 1998-1:2004
10	Code of design on building fire protection and prevention	GB 50016-2014 (2018 version)	l	11	Execution of steel structures and aluminum structures. Part 2	EN 1090-2:2018
11	Uniform standard for design of civil buildings	GB 50352-2019	٦t	12	Execution of steel structures and aluminum structures. Part 4	EN 1090-4:2018
12	Standard for electrical design of civil buildings	GB 51348-2019	٦t	13	Fire classification of construction products and building elements. Part 1	EN 13501-1:2018
13	Design code for heating ventilation and air conditioning of civil buildings	GB 50736-2012	٦ľ	14	Fire classification of construction products and building elements. Part 2	EN 13501-2:2016
14	Standard for design of building water supply and drainage	GB 50015-2019	٦ŀ	15	Building hardware-Gasket and weatherstripping for doors, windows, shutters	EN 12365-1-2003
15	Common Specifications of building energy efficiency and renewable energy utilization	GB 55015-2021	٦L		and curtain walling.Part 1	
16	Technical standard for nearly zero energy buildings	GB/T 51350-2019	11	16	Glass in building- Glazing and airborne sound insulation- Product descriptions and determination of properties	EN 12758-2002
17	Design Standard for energy efficiency of residential buildings in severe cold and cold zones	JGJ 26-2018	٦ľ	17	Structural use of steelwork in building(British Srandard)	BS 5950
18	Double skin metal faced insulating panels for building	GB/T 23932-2009	٦[Fire precautions in the design, construction and use of buildings. Part 5	BS 5588-5:2004
19		GB 50205-2020	٦ľ	19	Code of practice for fire safety in the design, management and use of buildings	BS 9999-2008
20	Container inspection code	2021 version	⊣	20	German Code for Steel Structures	DIN 18800

7 Project Documents

No	Name	Submission Deadline	Œ	Cli- ent	No	Name	Submission Deadline	a	ľ	Js€
1	Purchase Order	P/O signing day	4	A	19	Building Modules packing Site Plan	30 days before shipment	0	1	
2	Architectural Drawing	P/O signing day	•	l	20	Installation plan	30 days before shipment]▲	c	
3	Technical Parameters Table	P/O signing day	•	l	21	Foundation Acceptance Report	30 days before installation	٥	ŀ	4
4	Building Standard	P/O signing day	•	l	22	Acceptance Report of Exterior Roads, Water, and Electricity	30 days before installation	٥	ŀ	4
5	Comfort Standard	P/O signing day	•	l	23	Installation Condition Confirmation	30 days before installation	0	ŀ	4
,	Smart Control Specifications	P/O signing day	•	l	24	Production Inspection Report	2 day before shipment	1*	l	
	Scope of After-Sales Responsibilities	P/O signing day	•	l	25	Modules Stowage List	The day of shipment	1*	l	
3	Main materials list	P/O signing day	•	l	26	Packing List	The day of shipment	1	l	
7	Furnishings List	P/O signing day	•	l	27	Delivery Checklist	2 days after arrival	0	ŀ	٨
0	Mechanical & Electrical Devices List	P/0 signing day	•	٥	28	Assembly Inspection Report	7 days after installation	٨	l	
1	Structural Calculation Workbook	20 days after the contract takes effect	1	0	29	Indoor Air Quality Detection Report	7 days after installation	٨	ľ	j
12	Building Appearance Rendering	20 days after the contract takes effect	•	0	30	Construction Supervision Report (third party)	7 days after installation	1	ŀ	1
3	Foundation Plan	20 days after the contract takes effect	•	0	31	As-Built Drawing	7 days after installation	▲	ŀ	j
4	Building Exterior Water and Electricity Supply Plan	20 days after the contract takes effect	l.	0	32	Completion Acceptance Report	7 days after installation	4	ŀ	
5	Foundation Construction Drawing	60 days after the contract takes effect	0	•	33	Building Operation Guide	7 days after installation	•	l	
6	Construction Drawing of Exterior Roads, Water, and Electricity	60 days after the contract takes effect	0	4	34	Building Maintenance Technical Manual	7 days after installation	•	l	
7	Construction Permit (official)	60 days before installation	0	•	35	Supporting Equipment Maintenance Documents	7 days after installation	•	l	
18	Transport Plan	30 days before	A	0	36	Official Approval Documents	30 days after installation	0	ŀ	4

8.Building 5 Basics

No.	Subject	Features	No.	Subject	Features
1	Safety	Domplete stainless steel structure with high ductility. Reinforced concrete elongation is nearly zero, whereas stainless steel ≥ 20%. No matter how strong the earthquake, Holon will only be deformed, but will never collapse? 2) An additional escape ladder is set outside the building in case of fire mergency, guaranteeing absolute safety 3) Bathrooms have anti-slip PVC floors, protecting against slips and falls 4) Balaconies, hadrails and windows are designed to prevent children from climbing 5) Stainless steel is a good conductor. If a lightning strike happens, it goes directly from the column to the ground without hurting people of the electric power supply is fitted with leakage protections to prevent		Easy Mainten- ance	1)The exterior wall uses fluorocarbon paint, and fluorine is non-stick dirt material. The exterior wall will not be dirty without washing the wall for 10 years 2)Fresh Air Machine and A/C can be easily opened and filters inside can be easily cleaned 3)Easy access door for electric equipment and pipeline maintenance 4)Holon Building is 100% factory-made, only bolting installation and seam gluing of the walls are required on site, eliminating maintenance caused by quality defects 5)Maintenance manual is complete, clear and simple, with clear rotes and responsibility.
		electric shocks 7[Double-layer steel slab is used for exterior wall, isolating electromagnetic radiation from the outside steel steel slab is steel slab is steel slab is steel slab is slab i	5	Easy Redecora- tion e si haidh which is a which is a wh	windows can be easily moved if necessary 2)The position and dimension of balcony and bay window can be changed after construction is completed. If necessary, rooms with depth ≤ 4m, large balcony, swimming pool or botanic garden can be inserted into the
2	Endurance	1) Stainless steel building structure, no need for maintenance, provides a 1000-year rife spain (1000-year rife spain) (1000-year rife spain) (1000-year rife spain) (1000-year) (1000-yea	ı	Providing long-term service, buil can be changed in functions, whi basic condition	building(Recalculation should be done by a structural engineer if the added load is over 201) 3)Floor slab is made of BROAD's stainless steel B-CORE slab with no concrete at all. The slabs are easily sliced or drilled for adding kitchen and bath pipelines, stairs and elevators. If necessary, the whole floor slab can be removed for retrofitting to a duplex. (A structural engineer needs to do the stability calculation if if its a high rise) 4)Solar and wind energy generation facilities, swimming pool, water tank and vegetable planting are some of the usages
3	Econom- ical	I)The whole building is composed of stainless steel structure, including column, beam, slab, halcony, window frame, stairs, roof and bannister, retaining a 1000-year life span. The depreciation cost of Holon is extremely low, due to the material longevity and the fact that econstruction materials can be 100% recycled for future use even if the building is scrapped ahead of schedule. Therefore, Holon Building leaves 100% recycled for future use even if the building is scrapped ahead of schedule. Therefore, Holon Building leaves 2) Super energy saving building standard design(Highly insulated walls, 3 or 4 paned windows, exterior sunshade, interior thermal shade walls, said is the same structure of the same shade interior thermal shade walls air heat recovery). A/C consumption reduced by 90%, costs and carbon emissions are extremely reduced, protecting the environment.		Providing b can be cha: basic condi	for the roof space(Reserved load 0.7/m²) Sibetterior and interior wall uses steel slab paint with adhesion strength of ZMpa. Finishings such as walt paper, 40 (Closets, Tw. and furnishings 200 g/m² and can be easily pasted or mounted(by nails) 70 Wood floor, ceramic tile and marble can applied to the floor slab 90 (Story can be added to low-rise buildings (the smallest 91 (Story can be added to low-rise buildings (the smallest 91) (The medded, the whole building can be disassembled and rebuilt in another location without damages

9.Comfort Standard

N	o. Subject	Standards and Experiencing	No.	Subject	Standards and Experiencing
1	Space	1)Room max clearance 38.5 x 15.75 ft, rooms can be configured at random	8	Quietness comfort	
ı	comfort	2)Room clear height 9 ft, bathroom clear height 7.5 ft 3)3-6% clearance higher than that of concrete buildings	l	Comitort	National Standard) a.Double steel plates and 8.7 in rock wool for exterior walls. Sound
2	View	1)Casement window & bay window 8.85 x 8ft,bay window with 180	ł		reduction index 50dB
ľ	comfort	degrees view	ı		b.3-paned windows. 3-layer sealing strips for windows, balcony
ı		2)All windows are of ultra clear glasses, 4-pane glasses are more clear	ı		doors and entrance door. Sound level 40dB,when thermal shade is down,sound level 45dB
ı		than 1-pane glass, colorless, can ensure the original good views outside	ı		c.Ventilation done by fresh air machine, no need to open windows
ı		3)Argon filling rate of the insulating glass≥92%, no fogging	ı		and thus isolate outdoor noise (the side effect of outdoor noise
3	Sunlight	1)Super clear glass for all windows, the sun does not change color or	1		isolation is that people are extremely sensitive to indoor noise) 2)Double steel plates and 3 in rock wool for interior walls. 35dB for
ľ	comfort	weaken when it shines into the room	ı		rooms and 50dB between households(meet Chinese National
ı		 The sun shines into triangular bay window from sunrise to sunset, increasing the sunlight duration significantly. In winter, 	ı		Standard)
ı		the building can absorb a lot of sunlight to save energy.	ı		3)Three-layer steel plate and 20cm rock wool for floor slabs, sound level 55dB(meet Chinese National Standard)
ı		3)Exterior sunshades can be put up and down freely at an adjustable	ı		4)All seams around walls, windows and floor slabs are sealed with
ı		angle 4)The interior shade is able to block more than 99.5 % of light and UV	ı		adhesives at both sides. Photos should be taken for hidden glued
ı		rays, making you feel at night when sleeping during day time	ı		places for the ceiling decoration strips and baseboards to ensure that the installation quality meets the design standard
4		1)Fresh air 100% from outdoor to indoor with no mix of return air	1		5)A/C and fresh air machine are installed away from the bedrooms
ı	fresh-	2)Fresh air volume≥ 2m³/m²·h to ensure an indoor CO2 concentration	ı		to avoid interfering with sleep 6)Minimal A/C load, accounts for 10 - 20% traditional buildings, low
ı	ness	level ≤ 1000ppm 3)Each household can have an option:to buy a CO2 sensor to monitor	ı		noise
ĺ	1	oxygen content in real time	ı		7)Drain pipes are separated by double steel plates and 7.5 cm rock
1	1	4)Fresh air is sent into the rooms with positive pressure, dirty air from	ı		wool partition walls. No noise is heard for bedrooms
ĺ	1	outside and corridors can not get indoors through seams, no mosquito bites.	ı		8)Mute door lock tongue and low elastic door spring, opening and closing sound is minimal
ĺ	1	5)After staying for a period, residents shall realize the beauty of life	9	Bath	1)every household is with independent hot water system, hot water
ĺ	1	without opening windows. In most cases, compared with opening	ı	comfort	supply 24/7
ĺ	1	windows, the indoor air would be fresher when windows are closed, as the fresh air machine supplies fresh air 24/7, ensuring more	ı		2)Hot water comes out within 5 seconds from all hot water faucets 3)The pressure of hot and cold water has the same origin, and the
L		natural ventilation than window opening .			temperature does not fluctuate while turning on a faucet in the
5		1)BROAD fresh air machine is used, which filters PM2.5 by 99.9% (1000	10	Cit-b	neighboring room
ı	clean- ness	times), achieving the following: a.Indoor air is 100 times cleaner than that outdoor, enhancing human	10	Switch comfort	All lights and shade switches are wireless and can be positioned at the convenience of occupants anywhere
ı	ness	health drastically	ı	common	2)When a room is vacant, the light, A/C, and fresh air will be off
l		b.Desks can be dust-free, avoiding cleaning for 1 month, and finishes			automatically
ı		for walls and ceilings look like new for 40 years c.As the fresh air is filtered 1000 times, ensuring clean indoor air and	ı		3)Stair lights, entrance lights and night lights are automatic 4)The A/C and fresh air will be automatically off after opening the
ı		the pipes, A/C and the fresh air machine do not collect dust or breed			window or the balcony door within 30 minutes
ı		bacteria			5)Each room is equipped with WiFi with reliable network signal, and TV set can be set anywhere
ı		2)The fresh air machine is equipped with an electrostatic cleaner for disinfection and sterilization, so that outdoor viruses and pollen will	ı		6)BBA can be optional for visual control and comfort & energy
ı		not enter rooms, while ensuring indoor ozone level lower than	ı		saving related information
ı		outdoors 3)Fresh air is sent into rooms and vented from bathrooms and kitchen.	11	Lamplight	1)Light color temperature 3100±100k (slightly warm and pleasant)
ı		The bathrooms and kitchen will always maintain a negative pressure	ı	comfort	2)3 to 5 lighting switches for each room with room lightness adjustable
ı		so that unpleasant moisture and odors will not drift into the room 4)Each drainage outlet in the bathroom and kitchen is equipped with a	ı		3)The toilet is installed with low-positioned night light
ı		water seal ≥ 3 in. It will not be dry in 10 days, ensuring no air return,	12	Touch	1)All switches and handles are ergonomically designed
ı		no unpleasant odor and no contagious virus.	ı	comfort	2)All parts touched are smooth and will not scratch hands
ĺ	1	5)The joints between bamboo floors are filled with sealant,no filth at all 6)The super insulation performance of the exterior walls and windows	ı		3)The door and window opening/shutting strength is appropriate, not too heavy or too light
ĺ	1	guarantee no condensation and no mildew breeding	13	Humidity	1)The A/C has a dehumidifier function, giving an indoor humidity of
1	1	7)Water and electricity holes between floors and between each	ı	comfort	60% in summer
1	1	household are fully blocked to prevent rats, cockroaches and ants from entering the room	ı		Exterior walls and windows are free of condensation, and room humidity is balanced in winter
ĺ	1	8)Range hood equipped with glass cover, eliminating lampblack to	ı		Note:An optional humidifier (installed inside the fresh air
1	1	spread by 90%	ı		machine) should be ordered to maintain a steady comfortable
ĺ		9)Each household can have an option: to buy a PM2.5 detector which detects indoor and outdoor PM2.5 level within 30 seconds	14	Vibration	indoor humidity level ≥ 30% for dry areas 1)Floor vibration acceleration < 0.05 m/s². No vibration from walking
6		1)High thermal insulation(8.7 in rock wool for exterior wall insulation,	1	isolation	or movement. Each floor is an independent structural module that
ĺ	comfort	which is equivalent to 9m thick concrete wall) Windows are	ı	comfort	does not transfer vibration
ĺ		multi-pane hollow glass windows (4-paned large windows, 3-paned small windows). All exterior walls and windows are broken bridge			2)Wind-induced vibration acceleration < 0.2m/s², no feeling of vibration in the building
1	1	insulated,in summer no heat radiation, no worries of a western	15	Socket	1)Each room is equipped with 2 ~5 power sockets to fully meet the
ĺ	1	sunshine exposure, in winter no cold radiation	ı	conven- ience	needs of electric charging, table lamp, TV and kitchen electricity
1	1	When the sun shines into the room in summer, the sunshade will go down automatically. When there is no one in the room in cold or hot	ı	ence	If rooms are changed,more sockets are needed, wires can be dragged out from the baseboard to add more sockets
l	1	season,or when people are sleeping, the thermal shade will go down	16	Furni-	1)All decorative materials and adhesives meet European E1 standard
1	1	automatically (the thermal shade is equivalent to a concrete wall of	1	shing	and Chinese E0 standard, no formaldehyde or other toxic
1	1	2m thick) 3)The fresh air machine is equipped with a super heat exchanger, which	ı	cleanness	chemicals 2)The surface of decorative materials is dirt resistant and can be
1	1	can recover 80% of exhaust heat. The temp difference between the	ı		washed and wiped
1	1	fresh air and the room temp is around 5.6°F	ı		3)Floor, door and window cover and door page are made of original
l	1	Every household can equip an air conditioner, adjusting temperature at random	17	Finely	bamboo material, beautiful and strong 1)The flatness and color difference of walls, floors, and ceilings are
7	Airflow	1)Outlet of A/C, fresh air need to avoid blowing directly towards the	l"	crafted	not visible with naked eyes
Ľ	comfort	place where people frequently stay	ı	interior	2)All corners and edges are neatly and uniformly connected with an
ı	1	2)Airflow of air con can be cut 70% min thanks to the air con load less	ı		accuracy deviation < 0.04 in. 3)Glue width of all joints 0.16±0.04 in, delicate and beautiful
ᆫ	_	than 90% load and building superb energy efficiency	_		oyotae matri or att joints olio=olo4 in, deticate and beautiful

| S32001 | C360x360/C360x360x4, 6, 10, 16 | wall thickness of columns and beams is determined by structure calculation BXG1000 | panel: QN1804, core tube 304L rock wool 120kg/m³ | Al.5 L37.51 W: 6.5 / 8.5 ft | BROAD B-CORE slab δ 0.06 in, core tube Φ 2x 0.01 in | C360x360x4, 6, 10, 16 | wall thickness of columns and beams is determined by structure calculation BXG1000 | BROAD B-CORE slab δ 0.06 in, core tube Φ 2x 0.01 in | C360x360x4, 6, 10, 16 | wall thickness of columns and beams is determined by structure calculation BXG1000 | BROAD B-CORE slab δ 0.06 in, core tube Φ 2x 0.01 in | C360x360x4, 6, 10, 16 | wall thickness of columns and beams is determined by structure calculation BXG1000 | wall thickness of columns and beams is determined by structure calculation BXG1000 | BROAD B-CORE slab δ 0.06 in, core tube Φ 2x 0.01 in | C360x360x4, 6, 10, 16 | wall thickness of columns and beams is determined by structure calculation BXG1000 | wall thickness of columns and beams is determined by structure calculation BXG1000 | wall thickness of columns and beams is determined by structure calculation BXG1000 | wall thickness of columns and beams is determined by structure calculation BXG1000 | wall thickness of columns and beams is determined by structure calculation BXG1000 | wall thickness of columns and beams is determined by structure calculation BXG1000 | wall thickness of columns and beams is determined by structure calculation BXG1000 | wall thickness of columns and beams is determined by structure calculation BXG1000 | wall thickness of columns and beams is determined by structure calculation BXG1000 | wall thickness of columns and beams is determined by structure calculation BXG1000 | wall thickness of columns and beams is determined by structure calculation BXG1000 | wall thickness of columns and beams is determined by structure calculation BXG1000 | wall thickness of columns and beams is determined by structure calculation BXG1000 | wall thickness of columns and beam is determined by structure calculation BX

10.Main Raw Material Specs

Secretary will be enterior will be interior will be intered will be interior will be interior will be interior will be intered will be int		5	ceiline frame balcony	201 floor : 304/S32001 guardrail:304/S32001 tempered glass	80.02~0.06 in 105.5 x 59 in □ 1.6 x 0.06 in 0.2 + 0.03 PVB + 0.2 in	## CORE Stab Globaty
2	₩ a	6	fire layer	calcium silicate board		for column & beams
Barrier wall	Ĕ		,	rockwool 120kg/m³	δ2 in exterior:δ0.7 in, interior:δ0.4 in	
9		7	exterior wall	rockwool 120kg/m³	δ8.7 in	
		8	interior wall	aluminum-zinc coated steel, magnesium oxide board,rockwool 120kg/m*		hydrophobic
December	D	9	large window	Frame: QN1701	04x2.4x0.12/0.06 0.26±0.354c±0.26±0.354c±0.26in	interior: filling with polyurethane; exterior: extruded board for
12 window package bamboo motion motio	e e			exterior:tempered ultra clear glass	63x85.5x0.25 in	ultra clear glass (63x82x1.4 in)
12 window package bamboo motion motio	82	10	bay window	frame: QN1701		1/
12 window package bamboo motion motio	N.	l		exterior:tempered ultra clear glass	0.24+0.35Ar+0.24+0.35Ar+0.24in 63x70x0.25 in	-
12 window package bamboo motion motio	o o	111	small window	window frame: aluminum alloy frame of broken bridge class: 3-paned tempered insulating class	70 series 0.2+0.35Ar+0.2+0.35Ar+0.2	fluorocarbon powder ultra clear glass
thermal shade centrace door for promise finale with in THC2 in the district of the promotion of the back steel, PE paint street, S	<	12	window package	bamboo		
thermal shade centrace door for promise finale with in THC2 in the district of the promotion of the back steel, PE paint street, S		13	sunshade	aluminum alloy shades	exterior shade width 2 in	wireless & smart control, motor noise
Second Person Second		14	thermal shade	double cellular shades	middle shade width 1 in	3000
1		15		stool PE paint		alana B fina manintant
Part				L i i		I .
Stain door Stell fire-proof door 41,5 ye2 in Class B fire resistant		1		l '		
Processor Pro		1		, , ,		
20 water supply 21 drainage pipes 22 drainage pipes 23 water supply 21 drainage pipes 22 drainage pipes 23 electric cables plastic wrapped copper wires NO.5 - RV6. y JV B WR10 WDNZ 23 electric cables plastic wrapped copper wires RV0.5 - RV6. y JV B WR10 WDNZ 23 electric cables plastic wrapped copper wires RV0.5 - RV6. y JV B WR10 WDNZ 24 electric cables plastic wrapped copper wires RV0.5 - RV6. y JV B WR10 WDNZ 25 controller 27 tights controller 28 socket PVC cover Vireles color TEMP 3100±100k Socket Vireles Vir	_					
Position	jpe	1				1
2 2 electric cables plastic wrapped copper wires RV0.5-RV6, YJV BVR10 WDNZ fire cables are fire resistant	ທັ		pipes			
22 electric cables plastic wrapped copper wires RV0.5-RV6, YJV BWR10 WDNZ fire cables are fire resistant		21	drainage pipes	UPVC		water pressure test 0.1Mpa Incl. sewage, waste & rain water
Second	ш	22	electric cables	plastic wrapped copper wires		
25 optical fiber fiber glass Dutterfly dual-core fiber Set Dowered (no battery is needed) LSHF cable Set Dowered (no battery is needed) Lminous efficiency ≥ 150 lm/W 27 lights ZP LSD Dowered (no battery is needed) Lminous efficiency ≥ 150 lm/W 28 socket PVC cover DoA. 16A Set Dowered (no battery is needed) Lminous efficiency ≥ 150 lm/W 29 light Set LSF Socket Dowered (no battery is needed) Lminous efficiency ≥ 150 lm/W 30 and fresh air Set LSF Soc Socket So	ect			plastic wrapped copper wires	RVS, AWG24×4, AWG24×2	
25 optical fiber fiber glass Dutterfly dual-core fiber Set Dowered (no battery is needed) LSHF cable Set Dowered (no battery is needed) Lminous efficiency ≥ 150 lm/W 27 lights ZP LSD Dowered (no battery is needed) Lminous efficiency ≥ 150 lm/W 28 socket PVC cover DoA. 16A Set Dowered (no battery is needed) Lminous efficiency ≥ 150 lm/W 29 light Set LSF Socket Dowered (no battery is needed) Lminous efficiency ≥ 150 lm/W 30 and fresh air Set LSF Soc Socket So	<u></u>	24	netcables	plastic wrapped copper wires	CAT5e	
Second PVC cover 10A. 16A 5 or 3 hote 150 lm/W	U)	25	optical fiber	fiber glass	butterfly dual-core fiber	LSHF cable
28 socket						
Second S						II
Second S	-					
Second S	휴					
33 coler hood 34 Ro water purifier various materials 50 gallons first-class brand first-cl	•					In the second se
34 Rowater purifier Various materials 50 gallons first-class brand Class E ₀ \ E ₁ 35 35 700m floor 20.5 36 36 36 36 36 36 36 3		32	electric boiler		60L/158	first-class brand
Section Sect						first-class brand
Section Sect	_	_				
Selling of kitchen and bath Serub resistant	₫!					Class E ₀ 、 E ₁
Selling of kitchen and bath Serub resistant	shir			1 . 1		anti-skip grade Ad. Aw same for stairwell floor
Sealing which Sealing Sealing which Sealing	D D		ceiling surface	PVC stripe wallpape		
A		39		aluminous gusset plate	12x12 in, 12x24 in	/
Section Sec	Sa	40	lavatory sink		δ0.4 in	no scratch from hard object
Section Sec	n.				20×15.5 in	
Section Sec	ΛĒ		[class E o.E,
Section Sec	Wa			ultra-clear silver coated mirror	23.5×35.5 in	tempered
42	Sa					class E ₀ ,E ₁
43 shower basin 444 shower head abs chroming 93 in // 315x45.5x9 in 93 in // 315x42.5x9 in 94 in // 315x42.5x9 in 95 in // 315x42.5x9 in // 315x42.5x9 in // 315x42.5x9 in 95 in // 315x42.5x9 in // 315x42.5x9 in // 315x42.5x9 in						
45 shower head 45 shower head 45 faucet 304 with drainage diverter 46 lowel rack 46 lowel rack 47 mirror ultra-clear sliver coaled mirror 90 2 in 700 2 in 700 2 in 700 10 1						
45 faucet 304 with drainage diverter 7 same for toilet paper holder 7						wear-resistant,easy to clean
Section Sec						1/
Section Comparison Compa					/	same for toilet paper holder
B G G G G G G G G G G G G G G G G G G G						/
Solution Sink State	Yar (itc					class E _Q / E ₁ wear-resistant, easy to clean
Stairwell Stairwell Score Stairwell Stairwel	her	50	kitchen Sink	frosted stainless steel	27x18x8.5 in	1/
53 stairs QNI701 50.16 in frame:304/S32001 b1.7x0.08 in. □0.8x0.04 in 2+0.03PVB+0.2 in b2+0.03PVB+0.2 in b2+0.04 in b2+0.0	-	-				
Solution	ubli					B-CORE Slab plateδ0.06 in, tubeΦ2x0.012 in
Solution	c pa					glossy
56 guardrait 304/532001 93×0.12in. \(\phi.1.7x.0.2\) in. \(\phi.0.8=0.06in\) poottop guardrait	डि			laminated glass	0.2+0.03PVB+0.2 in	1
57 Short pier S32001 /				B-CORE slab:304DL filling rock wool 304/S32001	Q1.5	B-CORE Slab plateδ0.06 in, tubeΦ1.26x0.0087 ii
Appendix 1: Adhesive Paint Parameters					Ψ1.7λ0.2 III、Ψ0.6×0.06	roottop guardrail
to Name Material Formaldehyde VOC No Item Steel Corrosion Tensile Yield Elon	\nno				Annond	liv 2. Stainless Steel Parameters
No litem Steel Corrosion Tensile Yoc No litem Steel Corrosion Tensile Yield Elon Itype rate $a/(m^2 h)$ Istrenoth						
	No Na	ame	Material		No Item	Steel Corrosion Tensile Yield Elon- type rate g/(m²-h) strength strength gatio

Component	No	Code	Sizes	Notes
Room module	1	1A ▲	40X16ft (H10ft)	including exterior walls and windows, interior walls and doors, sanitary wares, fresh air system, A/C, hot water, and electrical fittings
	2	5A ▲		including exterior walls and windows, interior walls and doors and electrical fittings
	3	1B/2B ▲		including exterior walls and windows, interior walls and doors, sanitary wares, fresh air system, A/C, hot water and electrical fittings
	(4)	5B/6B ▲		including exterior walls and windows, interior walls and doors and electrical fittings
Stair module	(5)	a11 ▲ a21a ▲	40X8ft (H10ft)	1 elevator and 1 stair, exterior walls and windows, interior walls and doors and electrical fittings 2 elevators and 1 stair, exterior walls and windows, interior walls and doors and electrical fitting
	7	a21b	1	2 elevators and 1 stair, exterior walls and windows, interior walls and doors and electrical fitting
Triangular bay window	8	QJP	105X50X91 in	4-paned window with electric exterior sunshade, interior thermal shade, and roller shades. total 5 pieces
Balcony window	(9)	QZY	105x91 in	4-paned window with electric exterior sunshade and interior thermal shade
Two windowed wall	(10)	QCC	471X117X9 in	thermal insulating layer 8.7 in, 2 square windows
Three windowed wall	Œ	QCA	471X117X9 in	thermal insulating layer 8.7 in, 1 square window, 1 bay window and 1 Balcony window
Roof package	Œ	RA	478X94 in Roof and top floor are of the same area after installation	including roof, guardrail, hanger rod and rain gutter etc. Residents have access to the roof. Swimming pool, solar energy equipment and garden can be added
Short column pier *	Ű	GY-C	h 35 in	pier height 0.672m, including thermal insulation
High column pier *		GY-H	h 10,15,20,30 ft	3/4-paned glass curtain wall can be added
Sewage system *		GY-W	multiple SPECS	configured per building size and function
Entrance lobby *	(16)	GY-K	32X13X15 ft	located at the entrance of G floor

12.Transport & Erection

	No.	Model	Height (ft)	Area(ft²)	No. of trucks	Lifting Equipment	Fast Installation			Normal Installation		
							Crane	Workers	Days	Crane	Workers	Days
ſ	1	A4.5-11	108	32292	58	Truck crane 120t	2	70	4	2	30	10
-	2	B9-24	236	138855	248	Tower crane 14t	4	200	7	2	60	23
Ī	3	B9-32	315	185139	330	Tower crane 14t	4	200	9	2	60	28
-	4	B9-60-03	590.5	1044099	1820	Tower crane 14t	8	400	25	6	120	80
ſ	5	CR7-16	157.5	82882	130	Tower crane 14t	2	100	6	2	40	15
-	6	CX18.5-48	472.5	570487	980	Tower crane 14t	8	300	18	6	100	53
	7	CH31-48	472.5	957988	1650	Tower crane 14t	12	400	23	8	120	74

2. The installation includes installation, commissioning & acceptance of structure, decoration, MEP, sanitary fittings, kitchen cupboard(kitchen cupboard is optional

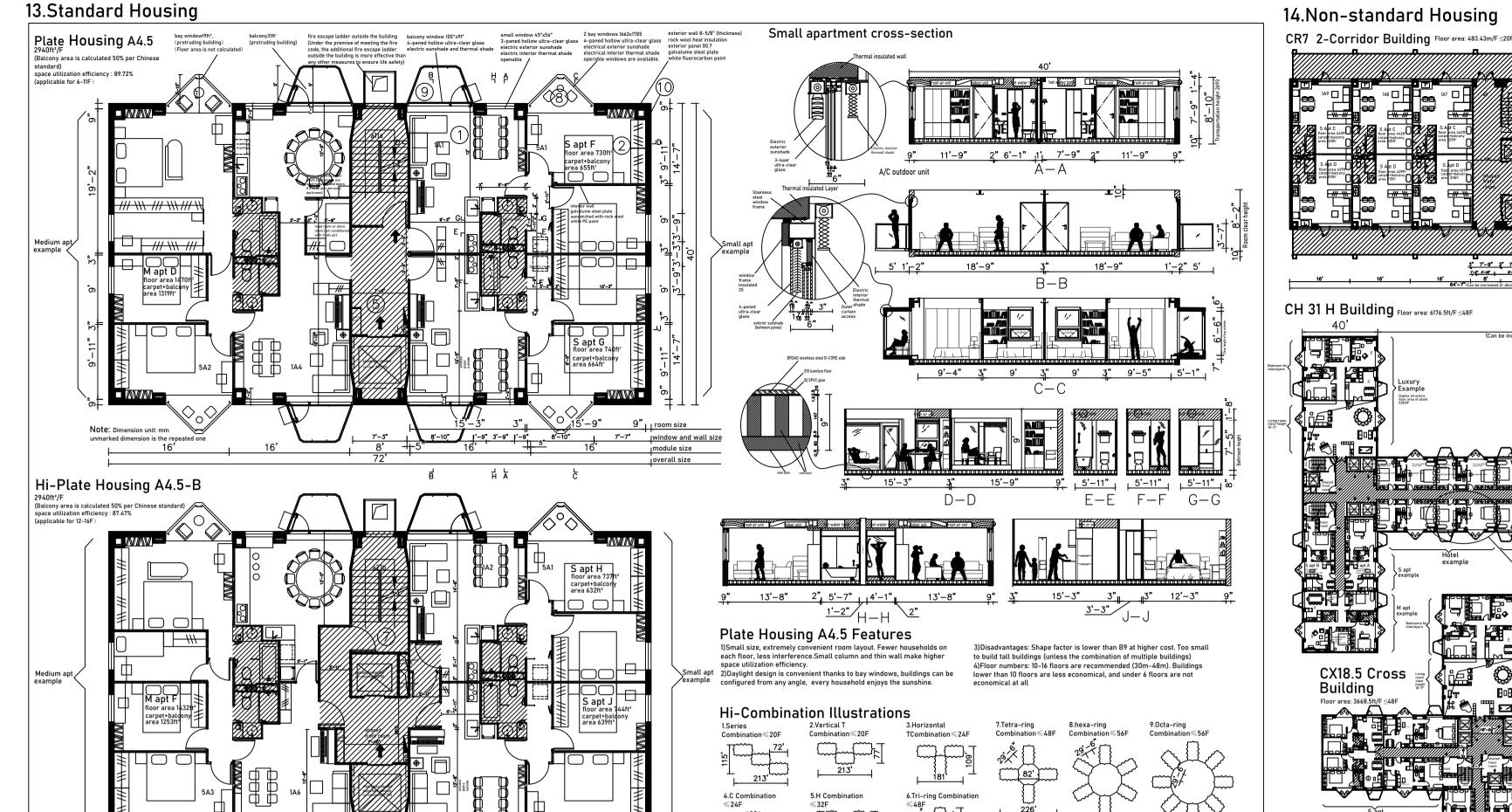
Super-hi

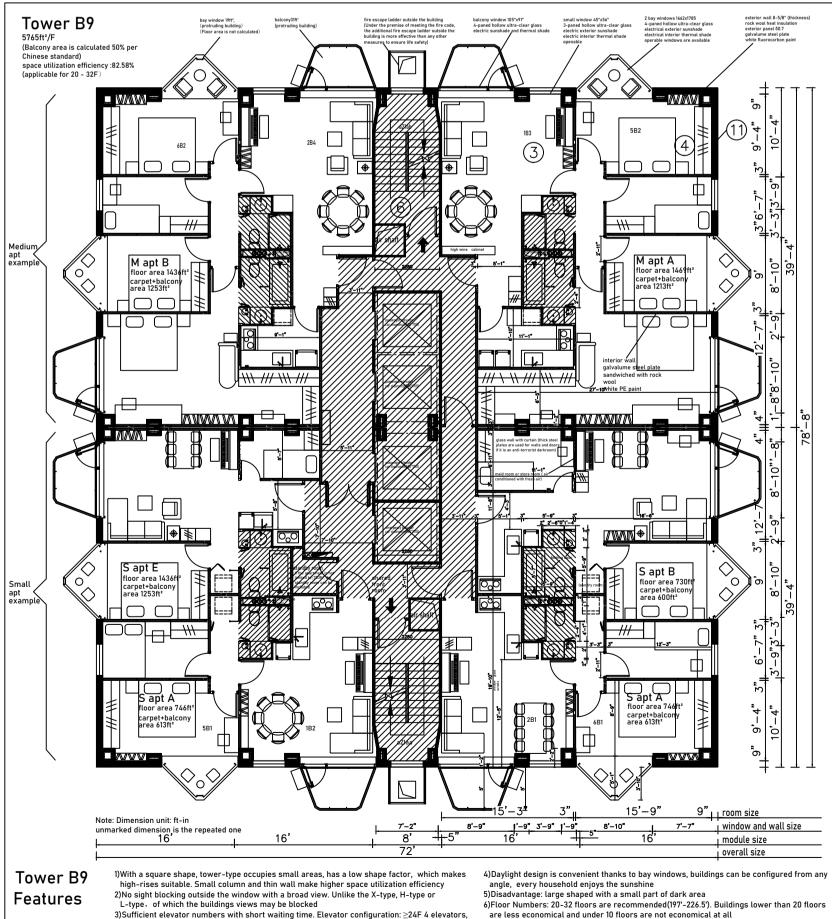
Combination

Illustrations

Note: Combination per

your needs at random





≤48F

15.Standard Housing Selection Keys 16.On Windowless Kitchen & Bath 17.Holon Housing Series

1.Combination:

Standard building models include small, medium and large apartment. One, two or a variety of bathroom in dark areas and leave limited lighting areas for living room and bedroom.

Buil- No Name ding well remains unchanged. See "Residential Holon Building List" for specifications

1)Electromechanical equipment: AC, fresh air and hot water system are ceiling-mounted in every household. Independent billings, and online payment available 2)Kitchen: Lampblack pipe, water supply, hot water and drainage are equipped in each household. Kitchen can be placed anywhere near the bathroom 3)Bathroom: Sanitary fittings, water supply, hot water and drainage are equipped. Toilet

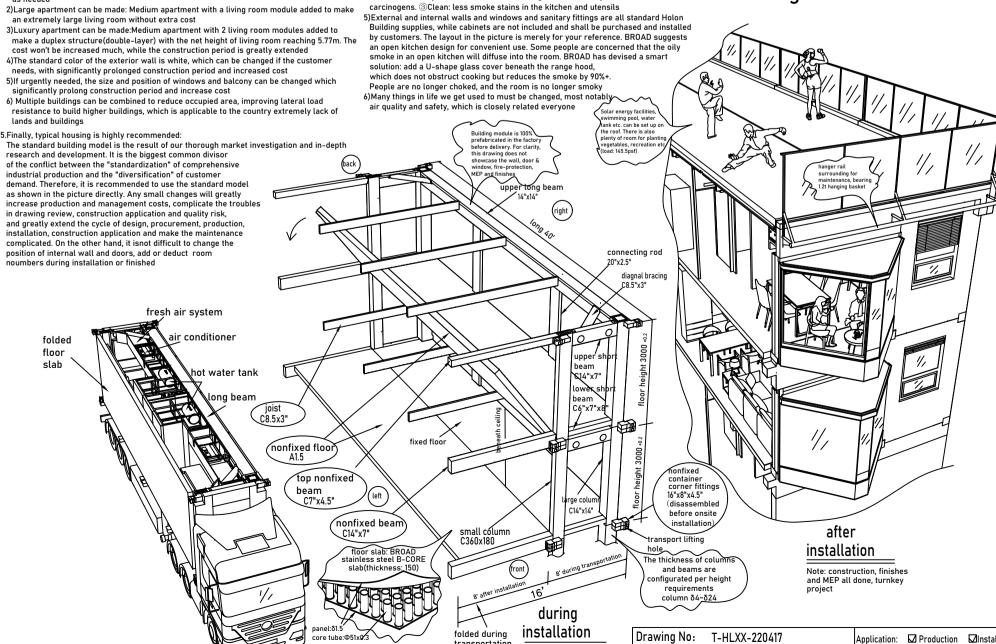
4)Room: Standard configuration of interior walls and doors is shown in the drawing, which can be adjusted per clients' needs (interior walls and doors can be adjusted inside the module of 5)Windows and balconies: Standard configuration is shown in the drawing. If users want to change the balcony into bay window (or on the contrary), needs shall be proposed in advance

To meet the need of factory production, the sizes and positions of the following parts are 1)Wells 2) lampblack well 3) column fire protection layer 4) staircase and fire passage 5) exterior wall, window, balcony Try not to change the bathroom, or it cannot be factory-made. Kitchen is near the bathroom, which is convenient for connecting the lampblack and water pipes

1)Except the walls and doors of the bathroom, other internal walls and doors can be changed 2)Large apartment can be made: Medium apartment with a living room module added to make an extremely large living room without extra cost 3)Luxury apartment can be made:Medium apartment with 2 living room modules added to make a duplex structure(double-layer) with the net height of living room reaching 5.77m. The cost won't be increased much, while the construction period is greatly extended needs, with significantly prolonged construction period and increased cost

4)The standard color of the exterior wall is white, which can be changed if the customer 5)If urgently needed, the size and position of windows and balcony can be changed which 6) Multiple buildings can be combined to reduce occupied area, improving lateral load resistance to build higher buildings, which is applicable to the country extremely lack of lands and buildings 5.Finally, typical housing is highly recommended The standard building model is the result of our thorough market investigation and in-depth research and development. It is the biggest common divisor of the conflict between the "standardization" of comprehensive industrial production and the "diversification" of customer demand. Therefore, it is recommended to use the standard model

during transportation



shipped as a standard 40ft

container (actually no container is needed)

If windows in a kitchen and bathroom are opened for ventilation, its dirty air will blow into the living room and bedroom. It was the unhealthy and outdated method 2)BROAD Fresh Air Machine is used in Holon building with 80% heat recovery and 99.9% filtration of PM2.5, supplying 100% fresh air in living rooms and bedrooms 24/7/365. Dirty air is expelled from kitchens and bathrooms to keep the bathrooms dry 2 Plate-type 1432~1507ft² and make indoor air healthy with a good smell. Fresh air is sent into the bedrooms and living areas while dirty air is vented from bathrooms. This is a standard procedure in all 5-star hotels worldwide. Additionally, 100% fresh air system with windows closed is 4 Tower S apt | 635~753ft² : required by European "Passive House" and China's "Technical Standard for Nearly Zero Energy Building", which is healthy, saves energy and insulates noise, is the trend of 5 Tower M apt 1410~1475ft2 4 3)Holon Building can have a kitchen besides the window to use gas, but we recommend 6 Tower L apt* 2712~3078ft 8 8~14 electricity. It is stipulated in many countries that natural gas should not be used if the kitchen is windowless. China's 14th Five-Year Plan for green buildings mandates the CR7 7 Double- 420~441ft² use of electricity for cooking and household hot water instead of gas. It makes sense, for it is impossible that the gas stoves and pipings never fail with human faults in

Replace: T-HLXX-220404

Inspector

CX18.5 Cross

Building

decades. As people are used to keeping the windows closed in cold days, any tiny gas leakage is prone to an explosion. If an explosion takes place, steel structured buildings may get deformed and reinforced concrete buildings may collapse.This kind of disturbing tragedy in which buildings collapsed and people were killed happens every year 4)In recent years, great progress on the electric stove technology has been made in

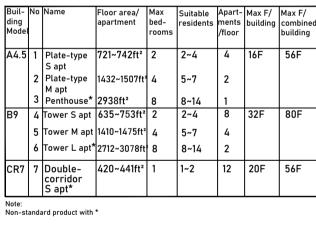
Note: Combination per your needs at random

before mechanical ventilation was invented

many countries. Many 2kW electric stoves can reach the fire intensity of a gas stove. It's not a problem at all even Chinese are used to cooking with a high fire. Some good electric stoves can be recommended. Advantages of replacing gas with electricity

Safe. @Healthy. No carbon monoxide, nitrogen oxides, heavy metals and other

18.Building Structure Illustration



19'-8" high will be calculated as 2 floors) Module numbers of standard floor (nominal 646ft² / module) Building model: "A" for single-row module, "B" fo 2-row modules and "C" for non-standard module 1)The model is determined according to the specific content of the order, and can be gradually supplemented and improved. If the customer's requirement change during construction, the model can be changed accordingly. If the customer needs to increase the number of floors or make other changes after completion, the model number should be modified accordingly. As long as the project code remains unchanged, model changes will be easily

19. Project Code

20.Holon Model

B 9-48-08

__ Serial number (According to the local

project implementation sequence)

Small countries can be exempted)

Country code (international domain code

Implementation sequence refers to the order in which the contract takes effect or the order in which the project scheme drawing is issued after the contract takes effect, or the order in which the scheme drawing is confirmed

2)The number will be vacant if the project serial number has been discharged

and then canceled. If the project is divided into 2 or more buildings in the

0-ring combination

abbreviation in 2 letters)

State code(Country practice in 1-2 letters.

☐ Building numbers of combination

- Combination building: L combination

Floors (Standard floor height 9'-10".

Except for the models below, L Type, T Type and C Type can be made as non-standard building models. The area can be increased or decreased with 16' as the modulus. However, non-standard buildings have a long construction time and high cost which are not highly recommended unless for specific needs

3" 7'-9" 3" 7'-6" 3" 9'-1" 3" 5'-11" 3" 9'-7" 3" 5'-11" 3" 9'-7" 3" 5'-11" 9" room size

Hi-rise Combination

Tri-ring Combination ≤48F

21.Room Module Code

2)The shape of non-standard building is represented by the C word plus letter as H, C, T, L, X. C plus R means that a corridor or special facade can be

— Other features — Kitchen, bathroom, wall, window and other features — Module single and double row features (A for single-row, B for double-row) _ Module structure, tube wells, other irreversible features, etc. Dimension 12190 x 16'

22. Stair Module Code

_ side wall windows, inner doors and other features — Elevator position Stair numbers (default to 0 if unwritten) Elevator numbers (0 if there is no elevator) —Stair module small letter, dimension 40'X8'

Note:

All technical data in the drawing can be a part of the purchase contract

pplication: 🛘 Production և Installation 🗘 Business HOLON HOUSING orporate Security Level:

