

Section 1 Materials and equipment for the elderly and health	
Lift (if any)	By ARITCO : S15 or as drawing specified
Air ventilation equipment	PM 2.5 prevention and clean air ventilation equipment by PD Fresh Airflow model Fresh II, wall mounted in the bedrooms and bathrooms except maid room-maid bathroom (if any)
Elder room floor	Shock absorb Safety Floor – PVC type, by KRONOTEX with PVC floor skirt
House entrance ramp	Coarse polished cement, as drawing
Door for elder bathroom	White Wood Plastic Composite (WPC) door, hanging sliding type, 1.00 meter wide. With grove pattern (MN80-P01G05, MN80-P01G05 or MN80-P01G08 to be chose later) and sliding rail, equipment and white rail cover by MOHNE'
Elder Bathroom	"AMERICAN STANDARD" or COTTO" (White color)
Water closet	AMERICAN STANDARD: Cygnet Hygiene Rim 2626SC-WT-0 with toilet seat model Armorlid, 2 function rinsing spray by COTTO: CT980H#WH (HM) and stop valve model CT179N(HM)
Wash basin	Wall hung type by COTTO: For All SC00537
Wash basin mixer faucet	COTTO: CT300A (with hot water pipe)
Wall mounted mixer faucet for shower	AMERICAN STANDARD: Codie FFASB212-7T1500BT0 with shower head
Wall mounted faucet	AMERICAN STANDARD: WINSTON FFAST602-0T0500BT0
Towel bar	AMERICAN STANDARD: Concept RK-2801-46-N chromium color
Soap holder	AMERICAN STANDARD: Concept S K-2501-54-N chromium color
Tissue holder	AMERICAN STANDARD: Concept SK-2501-43-N chromium color
Mirror	COTTO: MZ901#BS with shelf and cloth hook
Bathroom floor drain	COTTO: CT654Z2P (size 100 cm.) and AMERICAN STANDARD: A-8204-N, 1 each per bathroom
Safety equipment for Elder bathroom	Foldable support arm by COTTO: CT0190 L shape handrail (L/R) by COTTO: CT751L/R#SA(HM)
Swimming Pool	
Wall structure	Polypropylene wall with concrete structure depth not exceeds 1.20 m. or as drawing specified.



Floor-wall system	1.1 mm. thick, anti-slip, blue liner, no pattern. Pool edge tile with polished sandstone size 30x60 cm.
Installation equipment	Electrical system, pipe, drainage and filter system size follow the manufacturer recommendation
Pool pavement (if any)	Reinforced concrete with porcelain tile (price not exceed 500 baht/sq.m)
Section	n 2 Materials and equipment for Energy-Efficiency and Heat Insulation
Solar water heater	Capacity 160 litres with hot water piping (Pimaflex) to 2 bathrooms for wash basin, bath tub and shower. (2 points for each bathroom)
Heat prevention beneath the roof	3 inches thick insulator by "STAY COOL": Premium placed on ceiling beneath upper and lower roof level (except garage, upper, lower terrace area external ceiling and Insulated Roof). For the concrete roof or concrete floor, 6 inches thick "STAY COOL": Premium is used.
Roofing materials	Ceramic Metal Roof: Casa Spain – Premium color by PD Insulated, (choose the color later) or Ceramic Metal Roof: Snaplock – Premium color by PD Insulated (choose the color later) with "Dry ridge system", stainless steel valley through#24
Exterior/ interior wall material	10 cm. thick Autoclave concrete with plastering and skim coat.
Decorative wall material	7.5 cm. thick Autoclave concrete with plastering and skim coat.
Sanitary ware (Water saving)	"AMERICAN STANDARD" or COTTO" (White color)
Water closet	For general bathroom AMERICAN STANDARD: Compact Codie 2407SC-WT-0 with rinsing spray set model STD A-4900-ST and stop valve model STD A-4401
	Section 3 Eco-Friendly Materials and Equipment
General first floor and upper floor materials	8 mm. thick laminated floor by "KRONOTEX": Exquisit or equal with PVC floor skirt.
Wooden stair set	A set of Engineered Wood by ACON or MUKU color coated from the factory
Stair tread	Size 300x30 mm.
Riser	Size 200x20 mm.
Handrail	Size 100x50 mm.
Post	Size 125x125 mm.



Baluster	Size 50x50 mm.
Sub-baluster	Size 125x25 mm.
Landing	30 mm. thick, 2 pieces (V groove connect)
Eave ceiling	Wood Plastic Composite (WPC) by PD WOOD by Maxis Wood model QB-003 Teak color or equal with Zinc galvanized studs#26 and insect prevention screen.
Decorated wall (If any)	In case of fiber cement decorated wall, use "SCG" or "CONWOOD" or Wood Plastic Composite (WPC) - PD WOOD by Maxis Wood model CX-002 teak color or as drawing specified
Interior Doors	
General interior door/ Bedroom/ Storage room (if any)	Laminated Wood Plastic Composite (WPC) model L-WPC-001-006 with white wood pattern film coated Wood Plastic Composite (WPC) door frame model Ultra series 3 by "PD WOOD"
Hung type sliding door (if any)	Laminated Wood Plastic Composite (WPC) model L-WPC-001-006 (choose color later) by "PD WOOD" (door width not excess 90 cm.)
	In case the door width is more than 90 cm. use Laminated engineered wood door model LMD -001-006 (choose color later) by "PD WOOD"
	with white colored Parawood door frame by BEAVER WOOD
General bathroom door	White Wood Plastic Composite (WPC) door model C-WPC-001-003, 008, 011, 012 and white wood pattern film coated Wood Plastic Composite (WPC) door frame model Ultra series 3 by "PD WOOD"
Door for maid room/ maid bathroom (interior door)	White Wood Plastic Composite (WPC) door model C-WPC-001-003, 008, 011, 012 and white wood pattern film coated Wood Plastic Composite (WPC) door frame model Ultra series 3 by "PD WOOD"
Door for kitchen/ garage/ maid bathroom/ bathroom (exterior door)	White Wood Plastic Composite (WPC) door with steel structure model C1-WPC-001-003, 008, 011, 012 and white wood pattern film coated Wood Plastic Composite (WPC) door frame model Ultra series 3 by "PD WOOD"
Door for storage room under stair (if any)	White uPVC door panel with louver
Door for electric control unit panel	White uPVC door panel with louver



Facia	Fiber - cement board by "CONWOOD": Two in One, primer paint coated type or "SCG": 6",	
	8" primer paint coated type or equal.	
Treatment Tank	Fiberglass tank by "DOS": ST-21/GY or "PP": Ecotank or equal (put underground).	
Grease trap Tank	Fiberglass tank by "DOS": GT-09/BK-40 or "PP":GT-30UG (put underground).	
Section	Section 4 Construction technology and innovative materials and equipment	
Concrete Structure		
Footing/Column /Beam/ Staircase/ Bathroom tray	Prefabrication structure with Multi Joint Lock System. Some parts of structure are cast-in- place as engineer specified.	
General concrete plank	Prestressed planks by D-CON or PCM or equal. Some parts of structure are cast-in-place as engineer specified.	
Exterior Door/Window	by TOSTEM	
Door to Terrace / Balcony/ main entrance	Anodized aluminum door by "TOSTEM": WE 70 or as manufacturer specific with 5 mm. thick clear green glass.	
General Window	Anodized aluminum window by "TOSTEM": WE 70 or as manufacturer specific with 5 mm. thick clear green glass.	
Bathroom window	Anodized aluminum window by "TOSTEM": WE 70 or as manufacturer specific with 5 mm. thick frosted glass.	
Plastering Material	Mortar cement by "SCG", "INSEE", "TPI", "SINGHA MORTAR" or equal with skim coat. For exterior wall, protective formula mortar "PD Mortar Plus"+ Fiberglass mesh is used.	
Roof Truss	Alu-zinc (AZ-150) or SuperDyma coated high strength steel structure with screw and nut system as engineer specified.	
Handrail	Stainless steel, Steel, Tempered glass handrail or as drawing specified	
Internal Water Pipe	By PIMATEC: Pimaflex Multipipe	
Water pipe	25x2.5 mm. (20 mm.) for main pipe 20x2.25 mm. (15.5 mm.) for branch pipe 16x2.0 mm. (12 mm.) for hot water pipe	
Section 5 General Construction Materials and Equipment		
STRUCTURE		



Bangkok area and surrounding area
One storey house pre-stressed concrete pile I-22, length does not exceed 10.00 m. (2 piles
welded connection)
Two storey house pre-stressed concrete pile I-22, length does not exceed 18.00 m. (2 piles
welded connection).
Three storey house pre-stressed concrete pile I-22, length does not exceed 21.00 m. (2 piles
welded connection)
In case driven pile cannot be used, bored pile as engineer specified is used (extra cost)
Provincial area (stiff soil),
One storey house pre-stressed concrete solid square pile 22x22 cm., length does not exceed
10.00 m. is used.
Two -3 storey house pre-stressed concrete solid square pile 22x22 cm. length does not
exceed 12.00 m. is used.
In the area where pile cannot be driven, soil bearing foundation as engineer specified is used.
Reinforced concrete slab (on ground) as engineer specified
N/A
Ready mixed concrete by SCG, INSEE, TPI
0.80 meter high from the ground or as specified in the drawing (In case of multilevel floor).
As specified in drawing
Porcelain tile (price does not exceed 600 bath/sq.m.)
Porcelain tile (price does not exceed 400 bath/sq.m.)
Porcelain tile (price does not exceed 400 bath/sq.m.)
Porcelain tile (price does not exceed 400 bath/sq.m.) with PVC floor skirt or equal
Porcelain tile (price does not exceed 400 bath/sq.m.) with PVC floor skirt or equal
Porcelain tile (price does not exceed 300 bath/sq.m.) with PVC floor skirt or equal
Porcelain tile (price does not exceed 300 bath/sq.m.)



General terrace floor	Porcelain tile (price does not exceed 400 bath/sq.m.) with aluminum stair nose (if there's stair)
Waterproofing system for terrace/balcony/toilet floor	the paint type waterproofing system, TOA Cement Waterproof with fiberglass mesh or equal will be applied.
Storage room floor	Porcelain tile (price does not exceed 250 bath/sq.m.)
Waterproofing system for terrace/balcony/toilet floor	Porcelain tile (price does not exceed 300 bath/sq.m.)
Storage room floor	N/A
Waterproofing system for terrace/balcony/toilet floor	Coarse polished cement.
Storage room floor	Porcelain tile (price does not exceed 300 bath/sq.m.) with aluminum stair nose (if there's stair)
Wall Decoration Materials	
Master bathroom wall	Porcelain tile (price does not exceed 600 bath/sq.m.) height does not exceed 2.40 m. with PVC tile trim
General bathroom wall	Porcelain tile (price does not exceed 400 bath/sq.m.) height does not exceed 2.40 m. with PVC tile trim
Elder bathroom wall	Porcelain tile (price does not exceed 400 bath/sq.m.) height does not exceed 2.40 m. with PVC tile trim
Maid bathroom wall	Porcelain tile (price does not exceed 250 bath/sq.m .) height does not exceed 2.40 m. with PVC tile trim
Decorated wall (If any)	Natural color granite "BEZEN" 2"x9" or "KENZAI": Granite tile 2"x8" (price does not exceed 800 baht/sq.m.) or equal, spaced grooves
Ceiling	
General interior ceiling	Beveled edge gypsum board 9 mm. thick by "SCG" or "GYPMANTECH" with galvanized metal studs#26. 1 set of 60x60 cm. instant service access on the second-floor ceiling.
Exterior ceiling (Balcony/Garage)	Beveled edge moisture resistant gypsum 9 mm. thick by "SCG" or "GYPMANTECH". with galvanized metal studs#26
Ceiling for maid room/ storage	Beveled edge gypsum board 9 mm. thick by "SCG" or "GYPMANTECH" with galvanized metal studs #26



Bathroom ceiling	Beveled edge moisture resistant gypsum board 9 mm. thick by "SCG" or "GYPMANTECH" with galvanized metal studs #26
Roof tile	Concrete roof tile model Adamas Tile, chalet shake or smooth tile model with Platinum color (Sunny red, Brightly brown) the color chosen later with "Dry ridge system", stainless #24 for valley rafter. In case of polished concrete roof, the paint type waterproofing system, TOA PU Waterproof with fiberglass mesh or equal will be applied
	In case of Shingle Roof , use the Double layer type (the color chosen later) with equipment from manufacturer
Door and window accessorie	es
General interior door	Stainless steel mortise lock set by "MATURE": MTL-001-C or equal with stainless steel door stopper model MDH-006 or equal.
Hinge for general door/ bedroom/ maid room/ bathroom/ kitchen	Stainless steel butterfly hinge by "MATURE": MH-S4325HS2BB or equal, 4 pieces/door
kitchen/ garage door (open to exterior)	Stainless steel mortise lock set by "MATURE": MTL-001-C or equal with stainless steel door stopper model MDH-006 or equal.
Bathroom door	Stainless steel knob by "MATURE": MT-001 BK SS or equal with stainless steel door stopper model MDH-006 or equal.
Elder bathroom door	As specified by MOHNE'
Maid room door	Stainless steel mortise lock set by "MATURE": MTL-001-C or equal with stainless steel door stopper model MDH-006 or equal.
Maid bathroom door	Stainless steel knob by "MATURE": MK-012-B SS (eco) or equal with stainless steel door stopper model MDH-006 or equal.
Main entrance door, Balcony door	By TOSTEM: WE 70 or as manufacturer specified
General window	By TOSTEM: WE 70 or as manufacturer specified
Hung type sliding door (if any)	By "HAFELE": 499.40.042 (upper rail) and 499.70.052 (wheel) with equipment
SANTARY WARE	"AMERICAN STANDARD" or COTTO" (White color) or equal (as specified by company)



Water closet	For master bathroom, 1-piece automatic water closet by AMERICAN STANDARD: E-LITE Smart Toilet TF-2070-WT9 with rinsing spray model A-4900-ST and stop valve model STD-A-4401 For maid bathroom, 2 pieces water closet by AMERICAN STANDARD: New Winplus 2697SCW-WT-0 with white rinsing spray model Basic F75006-WTADY and stop valve model STD-A-4401
Urinal (if any)	AMERICAN STANDARD: Neo Modern A-8014AC-WT with automatic flush valve (1 unit in bathroom downstairs)
Bathtub	For master bathroom AMERICAN STANDARD: Moments 70130-WT with wall mounted mixer faucet model Signature A-1711-200 (with hot water pipe)
Wash basin	For master bathroom, AMERICAN STANDARD: Acacia SupaSleek WP-F420-WT, under the counter type For general bathroom, AMERICAN STANDARD: Signature WP-0420-WT For maid bathroom, AMERICAN STANDARD: NEW CODIE-S 0948-WT-0, wall hung type
Wash basin faucet	For Master bathroom, bathroom with hot water piping, mixer faucet by AMERICAN STANDARD: Acacia Evolution Mono A-1301-100 (2 bathroom) and cold faucet model Acacia Evolution Mono A-1306-10 For general bathroom model Signature A-1706-10-LL or mixer faucet (if any) model Signature A-1701-100-LL For maid bathroom model STD WINSTON FFAST601-1T1500BT0
Bathroom counter	General bathroom counter topped with granite stone (Chinese grey, Chinese black, white tone or equal), counter edge topped with porcelain tile same as the wall.
Wall mounted mixer faucet for shower	AMERICAN STANDARD: STD SIGNATURE A-1712-300 with shower head
Wall mounted faucet for shower	For general bathroom by AMERICAN STANDARD: SIGNATURE A-1726-10-A with shower head For maid bathroom model STD AS BASIC F21033-CHADY
Shower head set	For general bathroom by AMERICAN STANDARD: SIGNATURE A-1726-10-A with shower head For maid bathroom model STD AS BASIC F46103-CHADYHS



Wall mounted faucet	For master bathroom and general bathroom by AMERICAN STANDARD: WINSTON FFAST602-0T0500BT0 (1 for each room)
	For maid bathroom by AMERICAN STANDARD: Basic F22077-CHADY
Towel bar	For master bathroom, general bathroom by AMERICAN STANDARD: CONCEPT S K-2501-
	46-N chromium color For maid bathroom by AMERICAN STANDARD CONCEPT R K-2801-46-N chromium color
Soap holder	For master bathroom, general bathroom by AMERICAN STANDARD: CONCEPT S K-2501-54- N chromium color
	For maid bathroom by RASLAND รุ่น RA-BENZ-9894
Tissue holder	For master bathroom, general bathroom by AMERICAN STANDARD: CONCEPT SK-2501-
	43- chromium color
	For maid bathroom by RASLAND รู่ห RA-822626
Shelf	For maid bathroom by RASLAND รู่ห RA-B30044
Mirror	For master bathroom, general bathroom by AMERICAN STANDARD: SPLASH LQ-03 size
	50x70 cm. square shape
	For maid bathroom by COTTO: MM004#B size 50x70 cm. square shape
Bathroom floor drain	Odor trap chrome plated brass floor drain by AMERICAN STANDARD: A-8204-N , 2 for each bathroom
WATER	PVC pipes by SCG or THAI PIPE
Clear water pipe	1/2" dia. PVC pipe (class 13.5) for main pipe from building to meter, length not exceed 30.00 m. with ball valve, metal hand, separating for each floor.
Waste water/ Drain	4" dia. PVC pipe (class 8.5) for sewage pipe. 2" dia. PVC (class 8.5) for drainage pipe and 3" dia. For main pipe (class 8.5)
Ventilation pipe	1" dia. PVC pipe (class 5.0)
Rain water drainage	2" dia. PVC pipe for branch rain water pipe and 3" dia. for main water pipe (class 8.5). Skull shape stainless steel floor drain for balcony or concrete slap roof.
SANITARY SYSTEM	
Drainage pipe	Asbestos cement pipe dia. 8" to public drain (Not exceed 30.00 m . long from the house).



Manhole	30x40 cm. precast manhole every 6.00 m. interval and every bends or corners.
Warmole	30x40 cm. precast maintole every 6.00 m. interval and every bends of corners.
ELECTRICITY SYSTEM	Electric cables and equipment comply with the Standard of Metropolitan Electricit Provincial Electricity Authority. Electricity cable by THAI YASAKI or equal.
Main income wiring	PVC insulated single copper wiring (KV-CV#35 sq.mm.) The length from wall to meter does not exceed 30.00 m (put in PE conduit dia. 2" underground).
Main income telephone wiring	Four cores wiring not exceed 30.00 m. from meter to the house put in PE conduit ½" underground.
Internal wiring	Single copper wiring with PVC insulated with yellow PVC conduit in wall or on ceiling.
Air condition wiring	1 point at Master Bedroom
Control panel	16 Amps. 24 circuit breaker by "HACO": HLC-100/24 with main breaker model HM3-100S16 or equal with Residual Current Device (RCBO).
Lighting switch	Flat wall mounted lighting switch by "HACO" switch cover model Deco W1111 / W1112, 1 way switch model W2711 install 1 switch for 1 room and 2 switches for master bedroom, 2 way switch model W2711A-2 only at stair hall
Receptacle	Flat wall mounted receptacle by "HACO" 3 panels cover model Deco W1113 and 3 pin receptable model W8416V2 , install 2 for each room and 3 for living room (none for storage/bathroom).
Exterior receptacle	Flat wall mounted receptacle by "HACO" 3 panels cover model Deco W1113 and 3 pin receptable model W8416V2, with soft rubber waterproof case model IPW553-WH
Telephone outlet	1 set of Flat wall mounted telephone outlet by "HACO" cover model Deco W1111 and 6 core telephone outlet RJ12 model W8201TU
T.V. outlet	1 set of Flat wall mounted T.V. outlet by "HACO" cover model Deco W1111 and 75 ohm T.V. outlet model Deco W8201TV
LAN outlet	3 set of Flat wall mounted LAN outlet by "HACO" cover model Deco W1111 and CAT6 LAN outlet model W8211PC
Luminaire	Total budget not over 40,000 Baht
Emergency light	1 set of twin LED lamp head emergency light at stair hall or as drawing specified.
ELECTRICITY AND WATER	METER



Permanent electric meter	15 Amps 3 phases meter. Fee and meter deposit covered by company. (Exclude the service area extension fee)
Permanent water meter	1/2 " Diameter meter, Fee and meter deposit covered by company. (Exclude the service area extension fee)
PAINTING	BY TOA
External wall	External acrylic paint "TOA": Supershield or equal,1 primer and 2 final coated
Internal wall	Internal acrylic paint "TOA": Shield One or equal,1 primer and 2 final coated
Steel surface/HDF panel	Emulsion paint "TOA": Glipton or equal 1 primer and 2 final coated
Facia/Fiber Cement Board	External acrylic paint "TOA": Supershield or equal,1 primer and 2 final coated
OTHER WORK	
Termite protection system	Springer system with "SCG" or "THAI PIPE" 1/2" PVC pipe. class 13.5 is installed beneath the first-floor structure for termite protection chemical from the service provider. The owner pays for the chemical and service fee.
Tile adhesive	Glue cement by SCG, WEBER, CROCODILE or equal
Section 6 Warranty	
Structure	20-year warranty
General work	2-year warranty exclude natural depreciation of materials due to long used and misused

Remarks: The company reserves the right to change the list if needed but the price of the materials is not less than that stated above. The cost of the construction does not include:

- Old building demolition Interior decoration and garden Air conditioner system.
- Water drainage outside the construction site. Mosquito net, door and window steel bars, rain gutter