

## STANDARD CONSTRUCTION MATERIAL EXCLUSIVE SERIES 2-2566

Section 1 Material-equipment for elder and health	
Elevator	-
Air ventilation system	<b>PM2.5</b> prevention and clean air ventilation equipment by <b>PD Fresh Airflow model Fresh I</b> , wall mounted in the bedrooms and bathrooms except maid room-maid bathroom (if any)
Elder room floor	<b>Shock absorb Safety Floor – PVC type, by KRONOTEX</b> with PVC floor skirt
Entrance ramp	As specified in drawing (if any)
Elder bathroom door	White <b>Wood Plastic Composite (WPC)</b> door, hanging sliding type, 1.00 meter wide. With grove pattern ( <b>MN80-P01G03, MN80-P01G05</b> or <b>MN80-P01G08</b> to be chose later) and sliding rail, equipment and white rail cover by <b>MOHNE'</b>
<b>Elder Bathroom (If any)</b>	<b>“AMERICAN STANDARD”</b> or equal (as specified by company)
Water closet	Model: <b>CYGNET TF-2626SC-WT-0</b>
Wash basin	Model: <b>CYGNET WP-1511-WT</b>
Mirror	Model: <b>LV- 02</b>
Soap holder	Model: <b>TF-9251</b>
Tissue holder	Model: <b>Standard TF-9253</b>
Towel bar	Model: <b>TF-9254</b>
Wall mounted faucet for shower	Model: <b>STD WINSTON FFAST604-7T1500BT0</b>
Wash basin faucet	Model: <b>STD WINSTON FFAST601-1T1500BT0</b>
Wall mounted faucet	Model: <b>STD WINSTON FFAST602-0T0500BT0</b>
Bathroom floor drain	Model: <b>CT699Z1</b> by <b>COTTO</b> (size 100 cm.)
Safety accessory for Elder bathroom	Handrail model: <b>COTTO HANDICARE CT752#SA</b> Foldable support arm model: <b>COTTO CT0190</b>
Swimming pool	N/A
Section 2 Material-equipment for energy saving and heat insulation	
Solar water heater	N/A

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Heat prevention beneath the roof	<b>3 inches thick insulator by “STAY COOL”:</b> 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, <b>6 inches thick “STAY COOL”:</b> Premium is used.
Roof tile	<b>Ceramic Metal Roof : Casa Spain</b> – standard color by <b>PD Insulated</b> , (choose the color later) or <b>Snaplock</b> – premium color By <b>PD Insulated</b> (choose the color later) with “Dry ridge system”, <b>stainless steel valley</b> through#24
<b>Sanitary ware (water saving)</b>	<b>“AMERICAN STANDARD” or COTTO” (White color)</b> or equal (as specified by company)
Water closet (General Bathroom)	model <b>NEO MODERN TF-2630SCNF-WT-0</b> Cleaning spray model <b>A-4700-WT</b> white color Stop valve model <b>A-4400</b>
Wall material	<b>7.5 cm.</b> thick Autoclaved concrete with plastering and skim coat
<b>Section 3 Environment friendly material-equipment</b>	
Floor material	General first floor and upper floor – 8 mm. Thick laminated floor by <b>“INOVAR”:</b> Exquisite or <b>“KRONOTEX” : Exquisit</b> or equal with PVC floor skirt.
<b>Wooden Stair Set</b>	A set of <b>Engineered Wood</b> by <b>MUKU</b> or <b>ACON</b> color coated from the factory
Stair tread	<b>Size 250x30 mm.</b>
Riser	<b>Size 200x20 mm.</b>
Handrail	<b>Size 75x50 mm.</b>
Post	<b>Size 100x100 mm.</b>
Baluster	<b>Size 50x50 mm.</b>
Landing	<b>30 mm. thick, 2 pieces (V groove connect)</b>
Eave ceiling	<b>Wood Plastic Composite (WPC)</b> by <b>PD WOOD</b> by <b>Maxis Wood</b> model <b>QB-003 Teak color</b> or equal with Zinc galvanized studs#26.
Decorated wall (If any))	In case of fiber cement decorated wall, use “SCG” or “CONWOOD” or <b>Wood Plastic Composite (WPC)</b> - <b>PD WOOD</b> by <b>Maxis Wood</b> model <b>QB-003 teak</b> color or as drawing specified.
<b>Interior Door</b>	

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General interior door/ Bedroom/ Maid room/ Storage room (If any)	<b>Laminated engineered wood door model LMD</b> (choose color later) with white wood pattern film coated <b>Wood Plastic Composite (WPC)</b> door frame by “ <b>PD WOOD</b> ”
Bathroom door	White <b>Wood Plastic Composite (WPC)</b> door model <b>C-WPC-001-003</b> and white wood pattern film coated <b>Wood Plastic Composite (WPC)</b> door frame model <b>Ultra series 3</b> by “ <b>PD WOOD</b> ” with stainless steel door stopper model <b>MDH-006</b> by <b>MATURE</b>
Door for maid bathroom	White PVC door by <b>BATHIC</b> : Classic <b>BC-2</b>
Door for storage room under stair (if any) /	White PVC door panel with louver
Door for electric control unit panel	White PVC door panel with louver
Door for kitchen/ Garage (open to exterior)	White <b>Wood Plastic Composite (WPC)</b> door model <b>C1-WPC-008, 011, 012</b> and white wood pattern film coated <b>Wood Plastic Composite (WPC)</b> door frame with steel structure by “ <b>PD WOOD</b> ”
Facia	Fiber - cement board by “ <b>CONWOOD</b> ”: <b>Two in One</b> , primer paint coated type or “ <b>SCG</b> ”: <b>6”</b> , <b>8”</b> primer paint coated type or equal.
Treatment Tank	Fiberglass tank by “ <b>DOS</b> ”: <b>ST-21/GY</b> or “ <b>PP</b> ”: <b>Ecotank</b> or equal (put underground).
Grease trap Tank	Fiberglass tank by “ <b>DOS</b> ”: <b>GT-09/BK-40</b> or “ <b>PP</b> ”: <b>GT-30UG</b> (put underground).
<b>Section 4 Innovation and technology material-equipment</b>	
<b>Concrete structure</b>	
Footing/Column /Beam /Staircase/ bathroom tray	<b>Prefabrication structure with Multi Joint Lock System</b> . Some parts of structure are cast-in-place as engineer specified.
General concrete floor	Prestressed concrete plank by <b>D-CON</b> or <b>PCM</b> or equal Some parts of structure are cast-in-place as engineer specified.
<b>Exterior doors/windows</b>	<b>by TOSTEM</b>
Door to Terrace / Balcony/ main entrance	<b>Anodized</b> color aluminum by “ <b>TOSTEM</b> ” : <b>WE70</b> or as manufacturer specific or equal with 4.5 mm. thick clear green glass.
General Window	<b>Anodized</b> color aluminum by “ <b>TOSTEM</b> ” : <b>WE70</b> or as manufacturer specific or equal with 4.5 mm. thick clear green glass.

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Bathroom window	<b>Anodized</b> color aluminum by “ <b>TOSTEM</b> ” : <b>WE70</b> or as manufacturer specific or equal with 4.5 mm. thick frosted glass.
Adjustable Louver	<b>Anodized</b> color aluminum by “ <b>TOSTEM</b> ” : <b>WE70</b> or as manufacturer specific or equal with 4.5 mm. thick clear green glass.
Plastering material	Mortar cement by “ <b>SCG</b> ”, “ <b>INSEE</b> ”, “ <b>TPI</b> ”, “ <b>SINGHA MORTAR</b> ” or equal with skim coat. For exterior, wall protective formula mortar “ <b>PD Mortar Plus</b> ” and fiberglass mesh with skim coat is used.
Roof Truss	<b>Alu-zinc (AZ-150)</b> or <b>SuperDyma</b> coated high strength steel structure with screw and nut system as engineer specified.
Roof tile (PD Insulated)	<b>Ceramic Metal Roof : Casa Spain</b> – standard color by <b>PD Insulated</b> , (choose the color later) or <b>Snaplock</b> – premium color By <b>PD Insulated</b> (choose the color later) with “Dry ridge system”, stainless steel valley through#24
Railing	Vinyl railing by “ <b>WINDSOR</b> ” as specified drawing (steel/ stainless).
<b>Section 5 General material – equipment</b>	
Piling	<u>Bangkok area and surrounding area</u> One storey house pre-stressed concrete pile <b>I-22</b> not exceed <b>10.00 m.</b> long (2 piles welded connection) Two storey house pre-stressed concrete pile <b>I-22</b> not exceed <b>18.00 m.</b> long (2 piles welded connection). Three storey house pre-stressed concrete pile <b>I-22</b> not exceed <b>21.00 m.</b> long (2 piles welded connection) In case driven pile cannot be used, drilled pile as engineer specified is used (extra cost) <u>Provincial area (stiff soil),</u> One storey house pre-stressed concrete solid square pile <b>22 X 22 cm.</b> , length not exceed <b>8.00 m.</b> is used. Two -3 storey house pre-stressed concrete solid square pile <b>22x22 cm.</b> length not exceed <b>10.00 m.</b> is used. In the area where pile cannot be driven, soil bearing foundation as engineer specified is used.
Floor of washing area	Reinforced concrete slab (on ground) as engineer specified
Entrance pavement	N/A
Concrete	Ready mixed concrete by <b>SCG, INSEE, TPI</b>

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Floor Level	
First floor level	<b>0.50 meter</b> high from the ground or as specified in the drawing (In case of multilevel floor).
Flooring Material	
Master bathroom floor	Ceramic tile "A" grade (price not exceed <b>400</b> baht/sq.m.).
General bathroom floor	Ceramic tile "A" grade (price not exceed <b>300</b> baht/sq.m.).
Main entrance terrace	Ceramic tile model OSET size 15x60 cm. (price not exceed <b>550</b> baht/sq.m)
Terrace /Balcony floor	Ceramic tile "A" grade (price not exceed 200 baht/sq.m.).
Waterproofing system for terrace/balcony/toilet floor	the paint type waterproofing system, TOA Cement Waterproof with fiberglass mesh or equal will be applied.
Maid Room floor	Ceramic tile "A" grade (price not exceed 200 baht/sq.m.).
Storage room floor	Ceramic tile "A" grade (price not exceed 200 baht/sq.m.).
Laundry floor (If any)	Ceramic tile "A" grade (price not exceed 200 baht/sq.m.).
Kitchen floor	Ceramic tile "A" grade (price not exceed 300 baht/sq.m.)
Maid's toilet floor	Ceramic tile "A" grade (price not exceed 200 baht/sq.m.).
Parking floor / Footpath (if any)	Coarse polished cement.
Entrance pavement	N/A
Washing area	Polished cement
Wall Finishing	
Wall for Master Bathroom	Ceramic tile "A" grade (price not exceed <b>400 baht/sq.m.</b> ) height not exceed 2.40 m.
Wall for General Bathroom	Ceramic tile "A" grade (price not exceed <b>300 baht/sq.m.</b> ) height not exceed 2.40 m.
Maid's bathroom	Ceramic tile "A" grade (price not exceed 200 baht/sq.m.) height not exceed 2.40 m.
Decorated wall (If any)	Natural color granite “ <b>BEZEN</b> ” 2”x9” (price not exceed <b>700 baht/sq.m.</b> ) or equal, spaced grooves.
Ceiling	

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General interior ceiling	Beveled edge gypsum board <b>9 mm. thick</b> by “ <b>SCG</b> ” or “ <b>GYPMANTECH</b> ” 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 <b>9 mm. thick</b> by “ <b>SCG</b> ” or “ <b>GYPMANTECH</b> ”. with galvanized metal studs#26
Ceiling for maid room/ storage	Beveled edge gypsum board <b>9 mm. thick</b> by “ <b>SCG</b> ” or “ <b>GYPMANTECH</b> ” with galvanized metal studs #26
Ceiling for bathroom	Beveled edge moisture resistant gypsum board <b>9 mm. thick</b> by “ <b>SCG</b> ” or “ <b>GYPMANTECH</b> ” with galvanized metal studs #26
Roof tile	<p>In case of Metal sheet roof, <b>0.47 mm. thick</b> metal sheet, Alu-zinc color, <b>with 5 mm. PE Foam insulation</b> will be used.</p> <p>In case of polished concrete roof, the paint type waterproofing system, <b>TOA PU Waterproof</b> with fiberglass mesh or equal will be applied.</p> <p>In case of <b>Shingle Roof</b>, use the <b>Double layer type</b> (the color chosen later) with equipment from manufacturer.</p>
Facia	In case of Metal Sheet roof, the flashing is the same color as the roof.
<b>Door and Window Accessories</b>	
General interior door/ Bedroom/ Maid room	Stainless steel mortise lock set by “ <b>MATURE</b> ”: <b>MTL-001-C</b> or equal with stainless steel door stopper
Hinge for general doors / bedroom doors / maid room doors / bathroom doors / kitchen doors	<b>Stainless steel butterfly</b> hinge” by “ <b>MATURE</b> ”: <b>MH-S4325 HS2BB</b> or equal, 4 pieces/door
kitchen/ garage door (open to exterior)	Stainless steel mortise lock set by “ <b>MATURE</b> ”: <b>MTL-001-C</b> or equal with stainless steel door stopper
bathroom / maid bathroom door	Stainless steel knob by “ <b>MATURE</b> ”: <b>MT-001 BK SS</b> or equal Model <b>MK-012-B SS (eco)</b> for maid bathroom with stainless steel door stopper
Adjustable louver (If any)	By “ <b>TOSTEM</b> ” or equal
<b>Sanitary ware</b>	“ <b>AMERICAN STANDARD</b> ” or <b>COTTO</b> ” (White color) or equal (as specified by company)
Water closet (maid bathroom)	<p>model <b>TF-2697NW-WT-0</b> with accessories.</p> <p>Washing spray model <b>STD AS BASIC F75006-WTADY</b></p> <p>Stop valve model <b>A-4400</b></p>

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Wash basin	For general bathroom, model <b>TF-476</b> , under counter type For maid bathroom, model <b>TF-0947</b> , wall hung type
Bathroom counter	Counter topped with grade "A" ceramic tile same as the wall, not available for maid bathroom.
Urinal	Model <b>TF-6789N-WT-0</b> with flush valve accessories model A-5000-N (1 unit in bathroom downstairs)
Soap holder	For general bathroom, model <b>TF-9251</b> For maid bathroom, model <b>TF-9000</b>
Towel bar	For general bathroom, model <b>Standard TF-9253</b> For maid bathroom, model <b>TF-9011</b>
Bathtub	N/A
Wall mounted faucet for shower	For general bathroom, model <b>STD WINSTON FFAST604-7T1500BT0</b> Shower set, model <b>STD SMART A-6014-HS</b> For maid bathroom, model <b>F46103-CHADYHS</b> Valve model <b>AS BASIC F21033-CHADY ½" dia. or equal</b>
Wash basin faucet	For general and maid bathroom, model <b>STD WINSTON FFAST601-1T1500BT0</b>
Shelf	For maid bathroom, model <b>TF- 9075</b>
Mirror	For general bathroom, model <b>LV- 02</b> For maid bathroom, model <b>GH-805</b>
Towel bar	For general bathroom, model <b>TF-9254</b> For maid bathroom, model <b>TF-9085</b>
Wall mounted faucet	For general and maid bathroom, model <b>STD WINSTON FFAST602-0T0500BT0</b> 1 for each room
Bathroom floor drain	2" diameter odor trap floor drain (square type), 2 for each bathroom.
<b>Water</b>	<b>Comply with Standard of Metropolitan Water Authority or Provincial Water Work Authority. PVC pipes by SCG or THAI PIPE</b>
Clear water pipe	¾" dia. PVC pipe (class 13.5) for main pipe from building to meter, length not exceed <b>16.00 m.</b> with ball valve, metal hand, separating for each floor. ½" dia. PVC (class 13.5) for branch pipe.
Waste water/ Drain	4" dia. PVC pipe (class 8.5) for sewage pipe. 2" dia. PVC (class 8.5) for drainage pipe

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	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). 2" Skull shape stainless steel floor drain for balcony or concrete slap roof.
<b>Sanitary System</b>	
Drainage pipe	Asbestos cement pipe dia. 8" to public drain (Not exceed <b>16.00 m.</b> long from the house).
Manhole	30x40 cm. precast manhole every 6.00 m. interval and every bends or corners.
<b>Electrical System</b>	
<b>Comply with Standard of Metropolitan Electricity or Provincial Electricity Authority</b>	
Main income wiring	Single copper wiring PVC insulated ( <b>THW#35 sq.mm.</b> ) The length from wall to meter not exceed <b>16.00 m.</b>
Internal wiring	Single copper wiring with PVC insulated with yellow PVC conduit in wall or on ceiling.
Control panel	15 Amps. 16 circuit breaker by " <b>HACO</b> ": <b>HD-S116</b> or equal with Residual Current Device (RCBO).
Light switch	Wall mount lighting switch by " <b>HACO</b> " : <b>DECO W2711, W2711A-2</b> (2 way type switch only at stair hall) 1 for bedroom and 2 for master bedroom
Air condition wiring	1 point at Master Bedroom
Receptacle	Wall mounted receptacle by " <b>HACO</b> ": <b>DECO W8416V2</b> , 2 for each room and 3 for reception room (except storage/bathroom).
TV / Telephone outlet	Wall mounted TV/Telephone outlet by " <b>HACO</b> ": <b>DECO W8201 (TV) / W8201TU</b> (telephone) 1 for each.
Luminaire	Provided by the owner
<b>Electricity and Water Meter</b>	
Permanent electric meter	15 Amps, (Excluded fee and deposit for meter and the service area extension fee)
Permanent water meter	¾" diameter, (Excluded fee and deposit for meter and the service area extension fee)
<b>Painting</b>	
<b>By TOA</b>	
External wall	External acrylic paint " <b>TOA</b> ": <b>Shield one</b> or equal, 1 primer and 2 final coated



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Internal wall	Internal acrylic paint <b>"TOA": 4 Season</b> or equal, 1 primer with <b>"TOA": Shield one</b> and 2 final coated
Steel surface/HDF panel	Emulsion paint <b>"TOA": Glipton</b> or equal 1 primer and 2 final coated
Facia/Fiber Cement Board	External acrylic paint <b>"TOA": Shield One</b> or equal, 1 primer and 2 final coated
<b>Other</b>	
Termite protection system	Springer system with <b>"SCG"</b> or <b>"THAI PIPE"</b> PVC pipe. 1/2" class 13.5 is installed beneath the first-floor structure for termite protection chemical from the service provider. <b>The owner responds for termite service provider.</b>
Tile adhesive	Glue cement by <b>Singha, Crocodile, Tiger or Waber</b>
<b>Section 6 Warranty and maintenance</b>	
Structure	<b>20 years</b> warranty for the structure
General work	<b>1 year</b> warranty for general work 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