



Appraisal Challenges Around the World

Sopon Pornchokchai, PhD D.FIABCI MRICS



ดร.โสภณ พรโชคชัย

Dr.Sopon Pornchokchai, MRICS

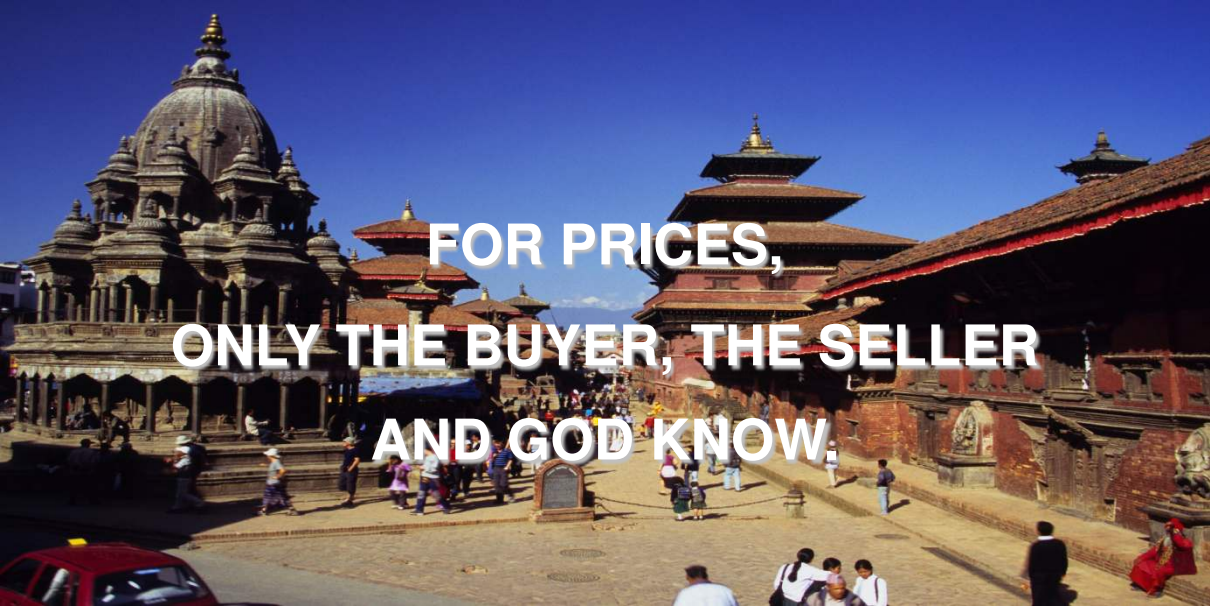
Ph.D. land and housing, Asian Institute of Technology
Cert.Appraisal, ICLPST - Lincoln Institute of Land Policy
Cert. Housing, Katholieke Universiteit Leuven, Belgium

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秋



- International: President, FIABCI Thai, President, World Council of Experts
Member, Royal Institutions of Chartered Surveyors
- Profession: President, Agency for Real Estate Affairs
Director, Thai Real Estate Business School
- Business Board Member, Employers Confederation of Thailand
Board Member, Ethics, Thai Chamber of Commerce
- NGOs Chairman, Home Buyers Association
President, Thai Appraisal & Estate Agents Foundation





**FOR PRICES,
ONLY THE BUYER, THE SELLER
AND GOD KNOW.**









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Serviços

Sistema

Contato

Área Restrita

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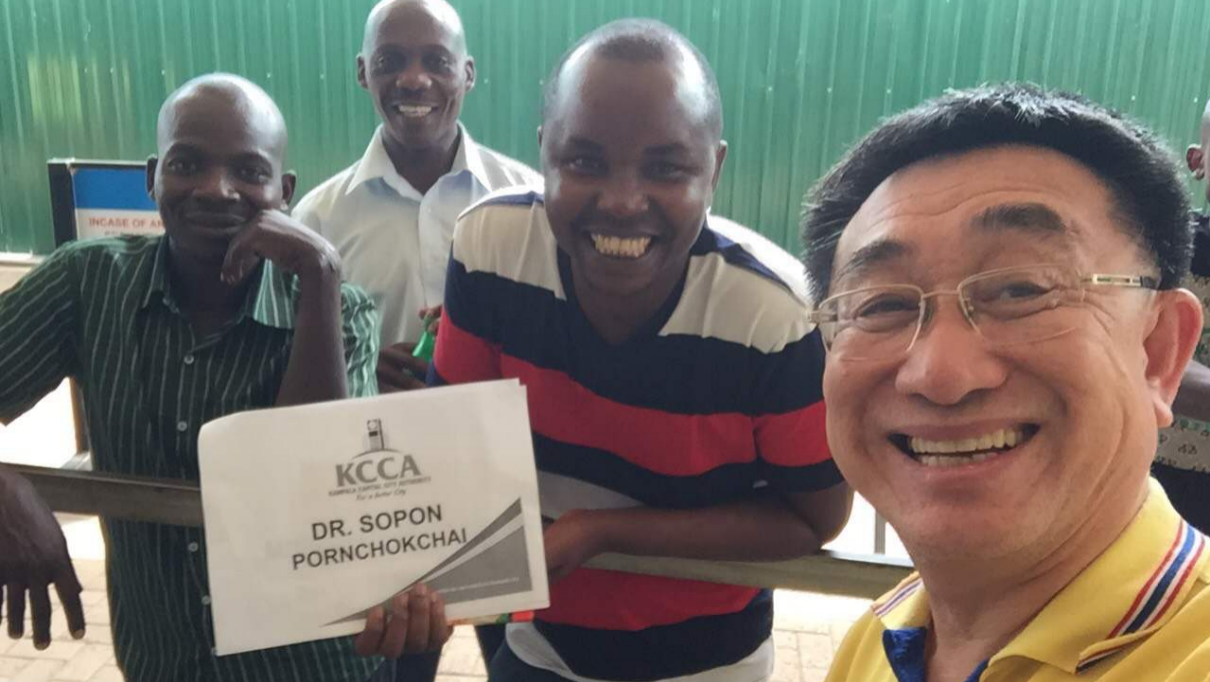
Senha

Experiência e Confiabilidade



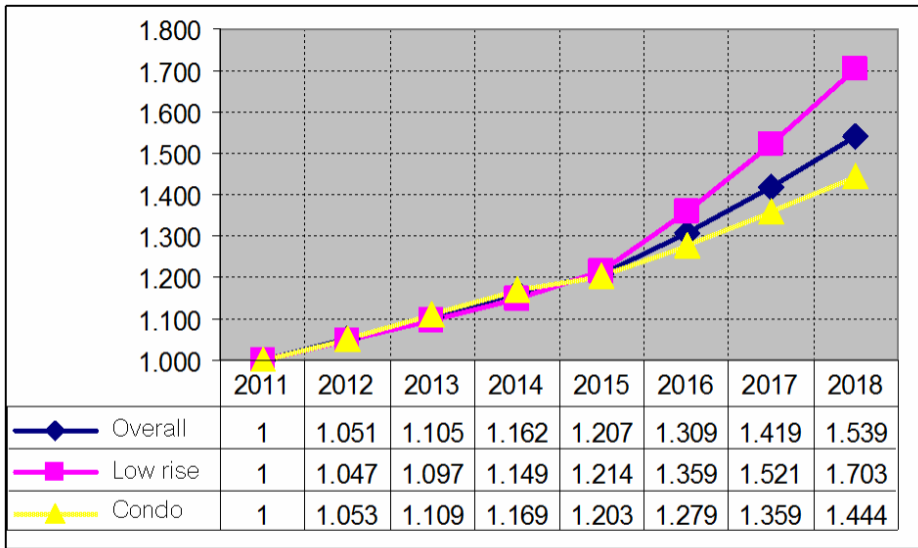
Av. Engº Lais Carlos Berrini, 828 - 12º Andar - CEP 04571-000 - São Paulo - SP - E-mail: comercial@geoimovel.com.br - Fone: (11) 9644-9990

SONY



KCCA
KAMPALA CAPITAL CITY AUTHORITY
For a Better City

**DR. SOPON
PORNCHOKCHAI**



Kathmandu House Price Changes, 2011-2018

Aceh Land Value 12 Years after the Tsunami

Sopon Pornchokchai, PhD D.FIABCI CRS MRICS

The statements made or opinions expressed by authors in Fair & Equitable do not necessarily represent a policy position of the International Association of Assessing Officers. Photo above is of Lake Toba in northern Sumatra. The lake occupies the caldera of a massive supervolcano, site of the largest known explosive eruption on Earth in the last 25 million years.

On December 26, 2004, the Aceh tsunami killed more than 200,000 people and destroyed billions of dollars' worth of properties. The purpose of this article is to examine property prices today in Aceh, 12 years after the tsunami catastrophe (2004 to 2016); it is essentially a case study on natural disasters and land prices.

The Aceh Tsunami

The tsunami that ravaged Aceh was one of the world's deadliest natural disasters. The U.S. Geological Survey found that a total of 227,898 people died; 170,000 of the dead were found in Indonesia, particularly in Aceh. However, the government of Indonesia has estimated total deaths to be as many as 220,000 in Indonesia alone. Based on available evidence, it is





Land Prices Changes in May 2019 after the 2011 Tsunami & Radiation

Area	Name	2011	2019	Changes
Area 1	In front of the Old Kadowaki Elementary School	24,000	31,000	3.25%
Area 2	Momonoura, Miyagi	5,000	3,103	-5.79%
Area 3	Godaido Temple, Matsushima-machi	80,500	75,600	-0.78%
Area 3.1	Shinhamach , Shiogama-shi, Miyagi-ken	11,800	12,300	0.52%
Area 4	Adjacent to A Relocation Site, Soma-shi	10,000	12,900	3.23%
Area 5	Meijidanchi, Iwaki	29,300	46,100	5.83%
Area 6	Namie Town, Fukushima-ken	11,751	17,000	4.72%
Area 7	Futaba Town Fukushima-ken	7,267	5,950	-2.47%



Challenges in Valuation

Lack of Historical Data

01

Uncertainty and Risk

02

Subjectivity in Assumptions

03

Exit Strategy Dilemma

04

Market Sentiment and Hype

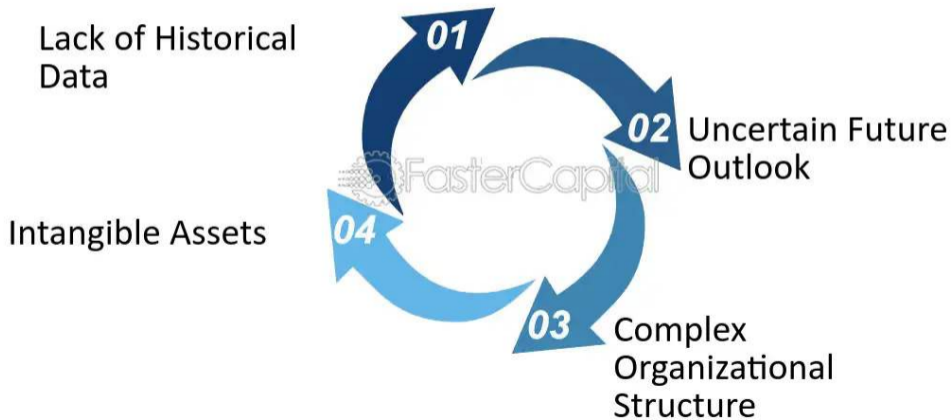
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Challenges in Valuation

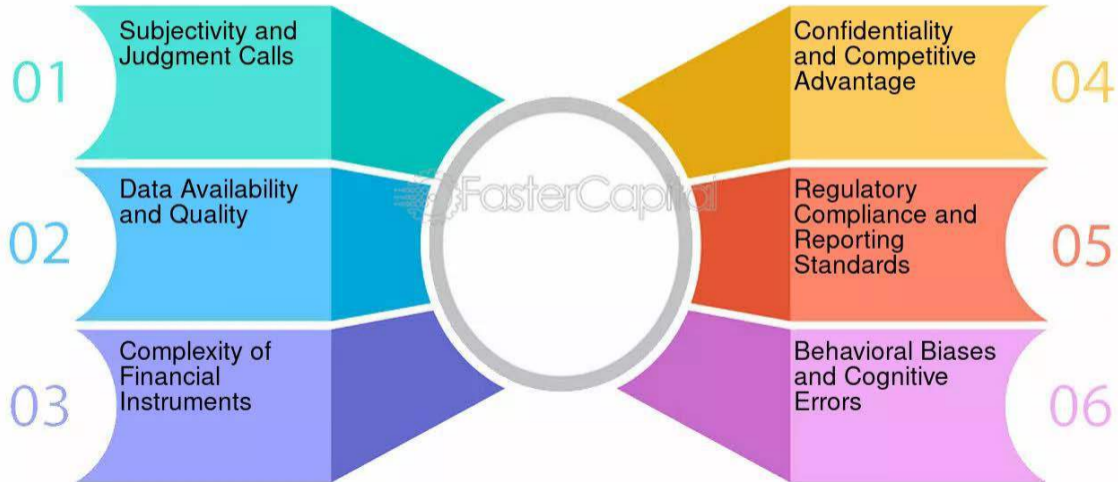
Choosing the right valuation method



Challenges in Valuation



Challenges in Valuation Transparency



Overcoming Challenges in Valuation Simulation for Cost Management

01

Data Availability
and Quality

02

Complexity and
Expertise

03

Resistance to
Change

04

Cost and
Resources

05

Data Security
and Privacy

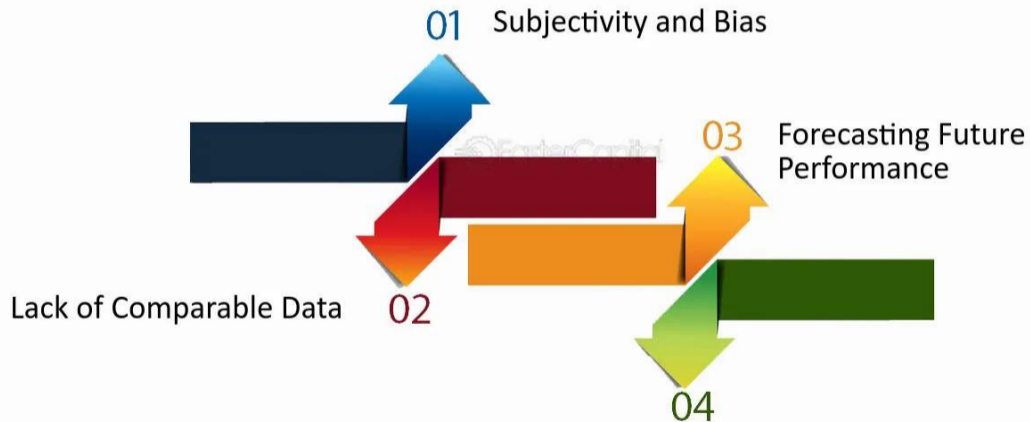
Challenges in Mark-to-Market Valuation of Forward Swaps



Risks and Challenges in Valuation

-
- 01 Overvaluation
 - Underestimation 02
 - 03 Market Volatility
 - Bias 04
 - 05 Lack of Information

Risks and Challenges in Valuation



Challenges in Valuation Modeling



2026 EDITION

2026

USPAP® Guidance and Reference Manual

GUIDANCE FOR THE 2024 *Uniform Standards
of Professional Appraisal Practice* (USPAP®)

Companion volume to 2024 USPAP®

Includes Advisory Opinions,
Frequently Asked Questions,
and the Reference Index.



THAI REAL ESTATE
Under the Supervision of the

INTERNATIONAL VALUATION STANDARDS

EFFECTIVE 31 JANUARY 2025



IVSC

INTERNATIONAL VALUATION
STANDARDS COUNCIL



THAI REAL ESTATE BUSINESS ASSOCIATION
Under the Supervision of the Ministry of Economic and Finance



RICS Valuation – Global Standards

Global, December 2024

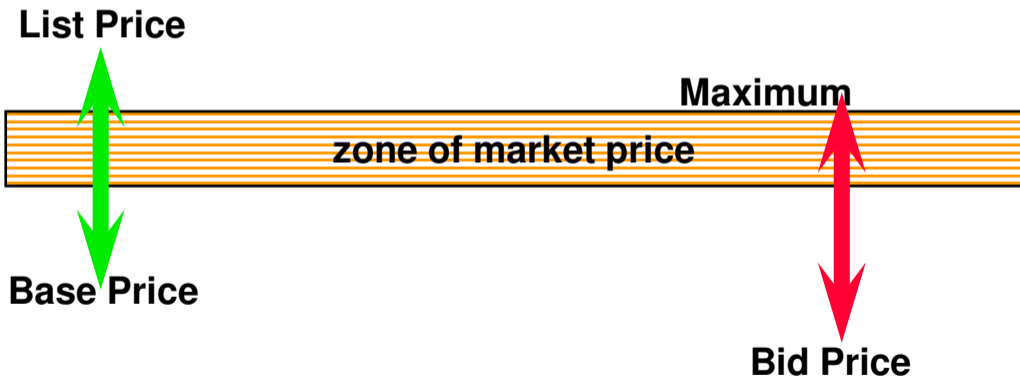
Effective from 31 January 2025



Market Price

A Seller

A Buyer



international property tax institute (www.ipti.org)



NON-MARKET VALUE

Special Purchaser Value = Value to a special purchaser

Investment Value = Value to a particular investor based on his/her anticipation

Value In Use = Value pertaining to specific uses

Insurable Value = Value of improvements for insurance purposes



PRICE: the amount asked, offered, or paid for a property.

Comment: Once stated, price is a fact, whether it is publicly disclosed or retained in private. Because of the financial capabilities, motivations, or special interests of a given buyer or seller, the price paid for a property may or may not have any relation to the value that might be ascribed to that property by others.

VALUE: the monetary relationship between properties and those who buy, sell, or use those properties.

Comment: Value expresses an economic concept. As such, it is never a fact but always an opinion of the worth of a property at a given time in accordance with a specific definition of value. In appraisal practice, value must always be qualified - for example, market value, liquidation value, or investment value. <http://commerce.appraisalfoundation.org/html/2006%20USPAP/DEFINITIONS.htm>

Value, Subjective; Price Objective

Many Prices but One Value

Price is what you pay, value is what you receive



Home Products Marshall & Swift Valuation

Marshall & Swift Valuation

Access accurate, defensible replacement costs

Overview

FAQ

Request a demo

Overview

Clarifying property tax decisions





2006 Costs of Constructions in the Bangkok Metropolitan Region, Valuers Association of Thailand

No.	Types of Properties (Figure in Baht/m ² , metric)	Cost in 1998			Const in 2000			Const in 2001			Cost in 2002			Const in 2003			Const in 2004			Const in 2005			Blog Age (yr)	Depreciation (year)	Note				
		at Feb. Con. Cost Index			at July Con. Cost Index			at July Con. Cost Index			at June Con. Cost Index			at June Con. Cost Index			at June Con. Cost Index			at June Con. Cost Index									
		Low	Medium	High	Low	Medium	High	Low	Medium	High	Low	Medium	High	Low	Medium	High	Low	Medium	High	Low	Medium	High				Low	Medium	High	
1	Detached house, wooden, single-storied	4,200	4,800	5,400	5,200	6,000	6,800	5,450	6,300	7,150	5,700	6,600	7,500	6,000	6,950	7,900	6,550	7,500	8,600	6,900	7,900	8,900	7,100	8,100	9,100	20	5%	a	
2	Detached house, wooden, two-storied	3,600	4,500	5,200	4,500	5,600	6,500	4,750	5,900	6,850	5,000	6,200	7,200	5,250	6,500	7,550	5,700	7,100	8,250	5,900	7,400	8,900	6,500	7,900	9,000	20	5%	a	
3	Detached house, wooden, elevated	5,200	5,500	6,000	6,500	6,900	7,500	6,850	7,250	7,900	7,200	7,600	8,300	7,550	8,000	8,700	8,250	8,700	9,400	8,600	9,400	10,100	9,500	10,300	20	5%	a		
4	Detached house, wood & brick mixed	4,200	5,000	5,700	5,200	6,200	7,000	5,450	6,500	7,350	5,700	6,850	7,700	6,000	7,200	8,100	6,550	7,850	8,850	6,900	8,100	9,100	7,100	8,600	9,700	25	4%	a	
5	Detached house, concrete, single-storied	5,200	6,000	6,800	6,500	7,500	8,500	6,850	7,900	8,950	7,400	8,550	9,650	7,850	9,050	10,250	8,800	10,150	11,550	8,900	10,200	11,800	9,500	10,900	12,300	50	2%	b	
6	Detached house, concrete, 2 to 3-storied	4,800	5,600	6,800	6,000	7,000	8,500	6,300	7,350	8,950	6,800	7,950	9,650	7,200	8,400	10,250	8,050	9,400	11,550	8,000	9,700	11,800	8,600	10,100	12,300	50	2%	b	
7	Duplex house, single-storied	4,400	5,200	6,000	5,500	6,500	7,500	5,800	6,850	7,900	6,300	7,400	8,550	6,700	7,850	9,050	7,500	8,700	10,150	7,700	9,100	10,500	8,000	9,500	10,900	50	2%	b	
8	Duplex house, 2 to 3-storied	4,000	4,600	5,200	5,000	5,600	6,500	5,250	6,100	6,850	5,700	6,600	7,400	6,050	7,000	7,850	6,800	8,000	9,100	7,000	8,100	9,100	7,300	8,400	9,500	50	2%	b	
9	Townhouse (TH), single-storied	3,800	4,700	5,100	4,600	5,700	6,200	4,850	6,000	6,500	5,050	6,250	6,750	5,350	6,600	7,150	5,400	6,400	7,150	5,800	6,800	7,800	6,200	7,200	8,200	50	2%	b	
10	TH, 2 to 3-storied, 4-m wide	3,600	4,400	5,200	4,500	5,500	6,500	4,750	5,800	6,850	4,950	6,050	7,100	5,250	6,400	7,450	5,700	7,150	8,300	6,100	7,400	8,700	6,300	7,700	9,000	50	2%	b	
11	TH, 2 to 3-storied, 5 to 6-m wide*	4,600	5,200	6,000	5,600	6,500	7,500	5,900	6,850	7,900	6,150	7,100	8,200	6,500	7,450	8,550	6,800	7,850	9,050	7,500	8,500	10,000	7,800	9,000	10,400	50	2%	b	
12	TH, 2 to 3-storied, 5 to 6-m wide**	3,800	4,600	5,400	4,800	5,800	6,800	5,050	6,100	7,150	5,250	6,350	7,450	5,400	6,500	7,600	5,700	6,800	8,000	6,400	7,700	9,100	6,700	8,000	9,500	50	2%	b	
13	Rowhouse, wooden 1 to 2-storied	2,400	3,000	3,600	3,000	3,800	4,600	3,150	4,000	4,850	3,300	4,150	5,000	3,400	4,300	5,150	3,600	4,500	5,350	4,000	4,900	5,750	4,200	5,100	6,000	20	5%	a	
14	Shophouse, single-storied	2,800	3,200	3,600	3,500	4,000	4,500	3,700	4,200	4,750	3,850	4,350	4,900	4,100	4,600	5,150	4,800	5,150	5,900	4,700	5,300	6,100	4,900	5,500	6,300	50	2%	b	
15	Shophouse, 2 to 3-storied	3,200	3,800	4,500	4,000	4,700	5,500	4,200	4,950	5,800	4,300	5,050	5,900	4,600	5,350	6,200	5,200	6,100	7,150	5,400	6,300	7,400	5,600	6,600	7,700	50	2%	b	
16	Shophouse, 4 to 5-storied	3,000	3,600	4,200	3,800	4,500	5,200	4,000	4,750	5,450	4,100	4,850	5,650	4,300	5,050	5,850	5,000	5,900	6,700	5,200	6,100	6,900	5,400	6,300	7,200	50	2%	b	
17	Residential building, <6-storied	5,100	6,400	7,200	6,400	8,000	9,000	6,700	8,400	9,500	7,050	8,800	9,950	7,300	9,100	10,500	8,350	10,450	11,750	8,600	10,800	12,100	8,900	11,200	12,600	50	2%	b	
18	Residential building, 6 to 15-storied	6,000	8,000	9,800	7,500	10,000	12,000	8,050	10,500	12,500	8,150	10,600	12,600	8,950	11,950	14,300	10,200	13,600	16,300	10,400	13,900	16,600	10,700	14,300	17,100	50	2%	b	
19	Residential building, 16 to 25-storied	8,000	10,000	12,800	10,000	12,500	16,000	10,500	13,000	17,500	11,250	13,750	18,250	12,050	15,050	19,250	13,750	17,150	22,000	14,000	17,500	22,400	14,400	18,000	23,100	50	2%	b	
20	Residential building, 26 to 35-storied	8,800	11,200	14,400	11,000	14,000	18,000	11,500	15,100	19,400	15,900	20,400	25,100	13,250	16,850	21,600	15,100	19,200	24,600	15,400	19,600	25,100	15,900	20,200	25,900	50	2%	b	
21	Commercial building, <10-storied	6,800	9,000	11,200	7,500	10,000	12,500	8,000	10,500	13,000	9,500	12,000	14,500	10,000	12,500	15,000	11,500	14,000	17,000	12,000	14,500	17,500	14,000	16,700	19,700	50	2%	b	
22	Commercial building, 10 to 25-storied	9,200	11,800	15,000	11,000	14,500	18,000	11,500	15,000	19,000	13,000	16,450	20,450	13,800	17,450	21,450	15,750	19,900	24,100	16,100	20,300	24,500	16,600	20,900	25,000	50	2%	b	
23	Commercial building, 26 to 35-storied	12,000	15,000	19,000	15,000	20,000	25,000	17,000	22,000	27,000	19,000	24,000	29,000	18,000	24,050	29,050	20,500	27,400	33,300	20,900	27,900	33,800	21,500	28,700	34,900	50	2%	b	
24	Shopping plaza, <4-storied	7,000	9,000	11,000	8,500	11,000	13,500	10,250	13,000	15,750	10,800	13,500	16,250	11,450	13,250	16,050	13,050	15,100	18,300	13,300	15,400	18,600	13,700	15,900	19,000	50	2%	b	
25	Shopping plaza, 4-storied and over	7,000	9,000	11,000	8,500	11,000	13,500	10,250	13,000	15,750	10,800	13,500	16,250	11,450	13,250	16,050	13,050	15,100	18,300	13,300	15,400	18,600	13,700	15,900	19,000	50	2%	b	
26	Car park bldg, on-ground	4,000	5,000	6,000	4,500	5,500	6,500	6,050	6,600	7,150	6,350	6,950	7,500	6,800	7,450	7,950	7,900	8,650	9,150	8,000	8,700	9,200	8,100	8,800	9,300	50	2%	b	
27	Car park bldg, underground, 1 to 2-storied	6,000	7,000	8,000	6,500	7,500	8,500	11,050	11,000	12,000	11,550	12,550	13,550	12,350	13,350	14,350	14,350	15,350	16,350	14,500	15,500	16,500	14,700	15,700	16,700	50	2%	b	
28	Car park bldg, underground, 4 to 5-storied	12,000	15,000	18,000	12,000	15,000	18,000	17,600	17,600	18,500	18,500	19,400	19,400	19,800	19,800	20,700	23,000	23,000	23,900	23,900	23,900	23,900	23,900	23,900	23,900	23,900	50	2%	b
29	Warehouse and industrial building	2,900	3,600	4,300	3,600	4,500	5,400	3,800	4,750	5,650	4,000	5,000	5,900	4,300	5,350	6,300	5,000	6,200	7,200	5,100	6,300	7,300	5,200	6,400	7,400	30	3%	b	
30	Tennis court	Baht 800,000/court	Baht 1,000,000/court	Baht 1,070,000/court	Baht 1,140,000/court	Baht 1,200,000/court	Baht 1,300,000/court	Baht 1,370,000/court	Baht 1,470,000/court	Baht 1,570,000/court	Baht 1,670,000/court	Baht 1,770,000/court	Baht 1,870,000/court	Baht 1,970,000/court	Baht 2,070,000/court	Baht 2,170,000/court	Baht 2,270,000/court	Baht 2,370,000/court	Baht 2,470,000/court	Baht 2,570,000/court	Baht 2,670,000/court	Baht 2,770,000/court	Baht 2,870,000/court	Baht 2,970,000/court	Baht 3,070,000/court	Not stipulated			
31	Tennis court (3 consecutive courts)	Baht 640,000/court	Baht 800,000/court	Baht 860,000/court	Baht 912,000/court	Baht 964,000/court	Baht 1,016,000/court	Baht 1,068,000/court	Baht 1,120,000/court	Baht 1,172,000/court	Baht 1,224,000/court	Baht 1,276,000/court	Baht 1,328,000/court	Baht 1,380,000/court	Baht 1,432,000/court	Baht 1,484,000/court	Baht 1,536,000/court	Baht 1,588,000/court	Baht 1,640,000/court	Baht 1,692,000/court	Baht 1,744,000/court	Baht 1,796,000/court	Baht 1,848,000/court	Baht 1,900,000/court	Baht 1,952,000/court	Not stipulated			

* without column inside building ** with column inside building

Note:

a) Deducting the depreciation until 0%. If any building has longer actual age, then estimate the effective age.

b) Calculating the depreciation by flat rate until it reach as 40% of the value left. The maximum depreciation is thus 60% although the actual age is beyond 50 years.

2022-2025 Costs of Constructions in the Bangkok Metropolitan Region, Thai Appraisal and Estate Agents Foundation

No	Types of Properties (Figure in Baht/sq.metre)	Const in 2022			Const in 2023			Const in 2024			Const in 2025			Bldg Age (yr)	Depre- ciation /year	Note
		at Dec. Con. Cost Index			at Dec. Con. Cost Index			at Dec. Con. Cost Index			at Dec. Con. Cost Index					
		Low	Medium	High	Low	Medium	High	Low	Medium	High	Low	Medium	High			
1	Detached house, wooden, single-storied	11,100	12,600	14,100	11,300	12,800	14,300	11,400	12,800	14,300	11,300	12,700	14,300	20	5%	n
2	Detached house, wooden, two-storied	9,500	12,000	13,700	9,700	12,200	13,900	9,800	12,300	13,900	9,700	12,200	13,900	20	5%	n
3	Detached house, wooden, elevated	13,700	14,200	16,100	13,900	14,400	16,400	13,900	14,400	16,400	13,900	14,400	16,400	20	5%	n
4	Detached house, wood & brick mixed	9,200	11,200	12,500	9,400	11,400	12,700	9,500	11,500	12,700	9,400	11,400	12,600	25	4%	n
5	Detached house, concrete, single-storeyed	12,200	13,800	16,000	12,400	14,000	16,300	12,400	14,000	16,300	12,300	14,000	16,300	50	2%	ข
6	Detached house, concrete, 2 storeyed (precast)	-	11,500	-	-	11,700	-	-	11,800	-	-	11,700	-	50	2%	ข
7	Detached house, concrete, 2 to 3-storeyed	11,300	13,000	16,000	11,500	13,200	16,300	11,600	13,200	16,300	11,500	13,200	16,300	50	2%	ข
8	Duplex house, single-storeyed	10,400	12,200	13,800	10,600	12,400	14,000	10,700	12,400	14,000	10,600	12,300	14,000	50	2%	ข
9	Duplex house, 2 to 3-storeyed	9,300	11,000	12,200	9,500	11,200	12,400	9,600	11,300	12,400	9,500	11,200	12,300	50	2%	ข
10	Townhouse (TH), single-storeyed	8,500	10,000	11,100	8,600	10,200	11,300	8,600	10,300	11,400	8,500	10,200	11,300	50	2%	ข
11	TH, 2 storeyed, 5 to 6-m wide (precast)	-	10,100	-	-	10,300	-	-	10,400	-	-	10,300	-	50	2%	ข
12	TH, 2 to 3-storeyed, 4-m wide	8,500	9,800	11,700	8,600	10,000	11,900	8,600	10,100	12,000	8,500	10,000	11,900	50	2%	ข
13	TH, 2 to 3-storeyed, 5 to 6-m wide*	9,900	11,700	13,400	10,100	11,900	13,600	10,200	12,000	13,600	10,100	11,900	13,600	50	2%	ข
14	TH, 2 to 3-storeyed, 5 to 6-m wide**	8,800	10,100	12,200	9,000	10,300	12,400	9,100	10,400	12,400	9,000	10,300	12,300	50	2%	ข
15	Rowhouse, wooden 1 to 2-storeyed	6,000	7,900	-	6,100	8,000	-	6,100	8,000	-	6,100	8,000	-	20	5%	n
16	Shophouse, single-storeyed	6,300	7,200	8,500	6,400	7,300	8,600	6,400	7,300	8,600	6,400	7,300	8,500	50	2%	ข
17	Shophouse, 2 to 3-storeyed	7,300	8,700	9,900	7,400	8,900	10,100	7,400	9,000	10,200	7,400	8,900	10,100	50	2%	ข
18	Shophouse, 4 to 5-storeyed	7,100	8,500	9,300	7,200	8,600	9,500	7,200	8,600	9,600	7,200	8,500	9,500	50	2%	ข
19	Residential building, <6-storeyed	11,500	14,100	16,300	11,700	14,300	16,600	11,800	14,300	16,600	11,700	14,300	16,600	50	2%	ข
20	Residential building, 6 to 15-storeyed	13,700	18,300	22,600	13,900	18,600	23,000	13,900	18,600	23,000	13,900	18,600	23,100	50	2%	ข
21	Residential building, 16 to 25-storeyed	18,200	23,300	29,600	18,500	23,600	30,000	18,500	23,600	30,100	18,500	23,700	30,100	50	2%	ข

2022-2025 Costs of Constructions in the Bangkok Metropolitan Region, Thai Appraisal and Estate Agents Foundation

No	Types of Properties (Figure in Baht/sq.metre)	Const in 2022			Const in 2023			Const in 2024			Const in 2025			Bldg Age (yr)	Depre- ciation /year	Note
		at Dec. Con. Cost Index			at Dec. Con. Cost Index			at Dec. Con. Cost Index			at Dec. Con. Cost Index					
		Low	Medium	High	Low	Medium	High	Low	Medium	High	Low	Medium	High			
21	Residential building, 16 to 25-storeyed	18,200	23,300	29,600	18,500	23,600	30,000	18,500	23,600	30,100	18,500	23,700	30,100	50	2%	ช
22	Residential building, 26 to 35-storeyed	20,500	26,200	33,200	20,900	26,600	33,700	20,900	26,700	33,800	21,000	26,700	33,800	50	2%	ช
23	Commercial building <23 meters	-	18,500	22,900	-	18,800	23,200	-	18,800	23,200	-	18,800	23,300	50	2%	ช
24	Commercial building > 23 meters (but not higher than 20-storeyed)	-	21,500	27,300	-	21,900	27,700	-	21,900	27,800	-	22,000	27,800	50	2%	ช
25	Commercial building, 21 to 35-storeyed	-	27,900	37,100	-	28,300	37,600	-	28,400	37,600	-	28,400	37,600	50	2%	ช
26	Shopping plaza <3-storeyed	-	17,900	21,000	-	18,200	21,400	-	18,200	21,400	-	18,200	21,500	50	2%	ช
27	Shopping plaza, 4-storeyed and over	-	24,900	30,300	-	25,200	30,700	-	25,200	30,800	-	25,300	30,800	50	2%	ช
28	Car park bldg, on-ground	10,900	11,600	-	11,100	11,800	-	11,200	11,900	-	11,100	11,800	-	50	2%	ช
29	Car park bldg, underground, 1 to 2-storeyed	-	19,200	-	-	19,500	-	-	19,500	-	-	19,600	-	50	2%	ช
30	Car park bldg, underground, 3 to 4-storeyed	-	30,600	-	-	31,000	-	-	31,100	-	-	31,100	-	50	2%	ช
31	Warehouse and general factory building	6,700	8,500	-	6,800	8,600	-	6,800	8,600	-	6,800	8,500	-	30	3%	ช
32	Industrial cold room (0 to -18degree Celsius) Not including cooling equipment	16,300	21,800	27,300	16,600	22,200	27,700	16,600	22,200	27,800	16,600	22,300	27,800	20	5%	น
33	Club House (Housing Development Project)	14,100	16,300	21,800	14,300	16,600	22,200	14,300	16,600	22,200	14,300	16,600	22,300	50	2%	ช
34	High water tank (champagne bucket 15-20-30 cubic meters) / set, not including pumping equipment	217,900	272,800	382,200	221,100	276,900	387,900	221,400	277,300	388,400	221,600	277,500	388,500	20	5%	น
35	Knock down home/Prefabricated house	11,500	13,000	15,300	11,700	13,200	15,600	11,800	13,200	15,600	11,700	13,200	15,600	50	2%	ช
36	Private hospital (1-8 floors)	24,000	27,300	32,900	24,300	27,700	33,400	24,300	27,800	33,500	24,400	27,800	33,500	50	2%	ช
37	Petrol station	4,800	5,900	7,200	4,900	6,000	7,300	4,900	6,000	7,300	4,900	6,000	7,300	50	3%	ช
38	Car showroom	8,300	10,500	13,000	8,400	10,700	13,200	8,400	10,800	13,200	8,400	10,700	13,200	50	3%	ช

2022-2025 Costs of Constructions in the Bangkok Metropolitan Region, Thai Appraisal and Estate Agents Foundation

No	Types of Properties (Figure in Baht/sq.metre)	Const in 2022			Const in 2023			Const in 2024			Const in 2025			Bldg Age (yr)	Depre- ciation /year	Note
		at Dec. Con. Cost Index			at Dec. Con. Cost Index			at Dec. Con. Cost Index			at Dec. Con. Cost Index					
		Low	Medium	High	Low	Medium	High	Low	Medium	High	Low	Medium	High			
38	Car showroom	8,300	10,500	13,000	8,400	10,700	13,200	8,400	10,800	13,200	8,400	10,700	13,200	50	3%	ข
39	Private School (1-4 floors)	9,300	11,500	13,000	9,500	11,700	13,200	9,600	11,800	13,200	9,500	11,700	13,200	50	2%	ข
40	Restaurant	8,300	10,500	12,000	8,400	10,700	12,200	8,400	10,800	12,300	8,400	10,700	12,200	50	2%	ข
41	Thai house building (Teak wood or equivalent)	27,300	38,100	49,200	27,700	38,700	50,000	27,800	38,700	50,100	27,800	38,800	50,100	50	2%	ข
42	Fresh market	3,700	4,300	4,800	3,800	4,400	4,900	3,800	4,400	4,900	3,800	4,400	4,900	50	3%	ข
43	Garage	4,500	5,900	7,200	4,600	6,000	7,300	4,600	6,000	7,300	4,600	6,000	7,300	50	3%	ข
44	Shared bathroom/Toilet	13,000	16,300	18,300	13,200	16,600	18,600	13,200	16,600	18,600	13,200	16,600	18,600	50	3%	ข
45	Theater	9,300	10,900	13,000	9,500	11,100	13,200	9,600	11,200	13,200	9,500	11,100	13,200	50	3%	ข
46	Tennis court	1,881,000			1,910,000			1,912,000			1,913,000			30	3%	ข
47	Tennis court (3 consecutive courts)	1,561,000			1,585,000			1,588,000			1,589,000			30	3%	ข
48	Concrete road (housing projects)	900			900			900			900			30	3%	ข
49	Asphalt road	500			500			500			500			30	3%	ข
50	Concrete pavement	600			600			600			600			30	3%	ข
51	Brick block fence (None retaining wall)	1,300			1,300			1,300			1,300			30	3%	ข
52	Farmhouse (chickens, pigs; farm evap)	2,900			3,000			3,000			3,000			30	3%	ข
53	Covered area (parking)	1,600			1,600			1,600			1,600			30	3%	ข

* without column inside building ** with column inside building Note:

a: Deducting the depreciation until 0%. If any building has longer actual age, then estimate the effective age.

b: Calculating the depreciation by flat rate until it reach as 40% of the value left. The maximum depreciation is thus 60% altho ugh the actual age is beyond 30 years.



Capitalization rates for different types of commercial properties in Bangkok, Thailand for the year of 2025

Types of real estate	April 2008	May 2009	July 2010	October 2011	October 2012	November 2013	December 2014	December 2015	December 2016	February 2017	December 2018	December 2019	December 2020	December 2021	December 2022	December 2023	December 2024	Trend	
Warehouse /	7-10%	7-10%	7-10%	6-8%	9-12%	8-10%	8-11%	7-10%	6-8%	6-8%	6-9%	6-7%	6-7%	6-7%	6-7%	7-8%	7-8%	↔	
Factory	perimeter	perimeter	perimeter	perimeter	perimeter (unflood)	perimeter													↔
Shopping Mall	8-10%	8-12%	8-12%	8-12%	12-15%	10-12%	8-10%	8-10%	8-10.5%	8-9%	7-8%	6-7%	5-7%	5-7%	6-7%	6-8%	6-8%	↘	
	Bangkok	Bangkok	Bangkok	Bangkok	Bangkok (CBD)													↘	
					10-12%	8-10%	7-9%	7-9%	7-9%	7-8%	6-7%	5-7%	5-7%	5-7%	6-7%	6-7%	6-7%	↘	
					Bangkok (outside CBD)													↘	
Office Building	7-8%	7-10%	7-8%	7-8%	7-8%	6-8%	6-8%	6-8%	6-8%	6-8%	6-9%	6-8%	5-8%	5-7%	5-7%	5-7%	5-7%	↘	
	Bangkok (CBD)																	↘	
	5-6%	5-7%	5-7%	6-7%	6-7%	5-7%	5-7%	5-7%	6-7%	6-7%	6-7%	6-7%	5-7%	5-6%	5-6%	5-6%	5-6%	↘	
	Bangkok (outside CBD)																	↘	
Service	8-9%	7-10%	6-8%	6-8%	7-8%	6-8%	6-8%	6-8%	6-8%	6-8%	6-8%	5-7%	5-7%	5-7%	5-7%	5-7%	5-7%	↔	
Apartment (Bangkok)	Grade A	Grade A	Grade A	Grade A	Grade A	Grade A	Grade A	Grade A	Grade A	Grade A	Grade A	Grade A	Grade A	Grade A	Grade A	Grade A	Grade A	↔	
	7-8%	6-8%	6-8%	5-7%	6-7%	5-7%	5-7%	6-7%	6-7%	6-7%	6-7%	5-6%	4-5%	4-5%	4-5%	4-5%	5-6%	↔	
	Grade B	Grade B	Grade B	Grade B	Grade B	Grade B	Grade B	Grade B	Grade B	Grade B	Grade B	Grade B	Grade B	Grade B	Grade B	Grade B	Grade B	↔	
Apartment	6-7%	6-8%	6-8%	5-7%	6-7%	5-7%	5-7%	5-7%	5-7%	5-6%	4-5%	3-4%	3-4%	4-5%	4-5%	4-5%	4-5%	↔	
Hotel in Bangkok	8-10%	8-12%	7-8%	7-9%	10-12%	8-10%	7-9%	8-10%	8-10%	8-10%	8-10%	6-8%				4-5%	6-8%	↘	
					4-5 Star	4-5 Star	4-5 Star	4-5 Star	4-5 Star	4-5 Star	4-5 Star	4-5 Star	not determined			4-5 Star	4-5 Star	↘	
					8-10%	7-8%	6-8%	7-9%	6-8%	6-8%	6-8%	5-7%				4-5%	6-7%	↘	
					3 Star	3 Star	3 Star	3 Star	3 Star	3 Star	3 Star	3 Star				3 Star	3 Star	↘	

A	B	C	D	E	F	G	H	I
2	Actual Price	Distance to	Pool					Estimated Value by Multiple Regression Analysis
3	Baht/m2	Train (m),	(1=y, 0=no)					Estimated Formula
4	25,000	470	0	Regression Output:			29,672	=G\$5+(C4*\$F\$11)+(D4*\$F\$12)
5	26,000	560	1	Constant		53022.68923	25,204	=G\$5+(C5*\$F\$11)+(D5*\$F\$12)
6	27,000	490	0	Std Err of Y Est		2567.812102	28,678	=G\$5+(C6*\$F\$11)+(D6*\$F\$12)
7	28,000	520	0	R Squared		0.9033896121	27,188	=G\$5+(C7*\$F\$11)+(D7*\$F\$12)
8	29,000	500	0	No. of Observations			28,181	=G\$5+(C8*\$F\$11)+(D8*\$F\$12)
9	30,000	430	1	Degrees of Freedom			31,663	=G\$5+(C9*\$F\$11)+(D9*\$F\$12)
10	31,000	460	0				30,169	=G\$5+(C10*\$F\$11)+(D10*\$F\$12)
11	32,000	440	0	X Coefficient(s)	-49.68257532	1016.26929	31,162	=G\$5+(C11*\$F\$11)+(D11*\$F\$12)
12	33,000	420	0	Std Err of Coef.	3.912858018	1126.462289	32,156	=G\$5+(C12*\$F\$11)+(D12*\$F\$12)
13	34,000	400	0	Y = a + b1*x1 + b2*x2			33,150	=G\$5+(C13*\$F\$11)+(D13*\$F\$12)
14	35,000	380	1	y = Baht / sq.me			34,147	=G\$5+(C14*\$F\$11)+(D14*\$F\$12)
15	36,000	280	0	a = constant (cell G5)			39,112	=G\$5+(C15*\$F\$11)+(D15*\$F\$12)
16	37,000	340	0	b1 = Distance to Train (metre)			36,131	=G\$5+(C16*\$F\$11)+(D16*\$F\$12)
17	38,000	320	0	(column C)			37,124	=G\$5+(C17*\$F\$11)+(D17*\$F\$12)
18	39,000	300	0	x1 = constant of b1 (Cell F11)			38,118	=G\$5+(C18*\$F\$11)+(D18*\$F\$12)
19	40,000	280	1	b2 = swimming pool (dummy			39,115	=G\$5+(C19*\$F\$11)+(D19*\$F\$12)
20	41,000	120	1	variable) (column D)			47,065	=G\$5+(C20*\$F\$11)+(D20*\$F\$12)
21	42,000	240	1	x2 = constant of B2 (Cell F12)			41,103	=G\$5+(C21*\$F\$11)+(D21*\$F\$12)
22	43,000	220	0				42,093	=G\$5+(C22*\$F\$11)+(D22*\$F\$12)
23	44,000	200	1				43,090	=G\$5+(C23*\$F\$11)+(D23*\$F\$12)
24	45,000	300	1				38,122	=G\$5+(C24*\$F\$11)+(D24*\$F\$12)
25	46,000	160	0				45,077	=G\$5+(C25*\$F\$11)+(D25*\$F\$12)
26	47,000	140	1				46,067	=G\$5+(C26*\$F\$11)+(D26*\$F\$12)
27	48,000	120	1				47,065	=G\$5+(C27*\$F\$11)+(D27*\$F\$12)
28	49,000	200	1				43,090	=G\$5+(C28*\$F\$11)+(D28*\$F\$12)
29	50,000	80	1				49,052	=G\$5+(C29*\$F\$11)+(D29*\$F\$12)
30	51,000	60	1				50,046	=G\$5+(C30*\$F\$11)+(D30*\$F\$12)

Multiple Regression Analysis (MRA)



A	B	C	E
2	Estimating the Risk		
3	Year	Annual Income	Note
4	1	200	
5	2	160	
6	3	170	
7	4	230	
8	5	190	
9	6	170	
10	7	220	
11	8	220	
12	9	160	
13	10	210	
14	Average	193	=AVERAGE(C4:C13)
15	Standard Diviation	25.3	=STDEV(C4:C14)
16	Risk	13%	=C15/C14

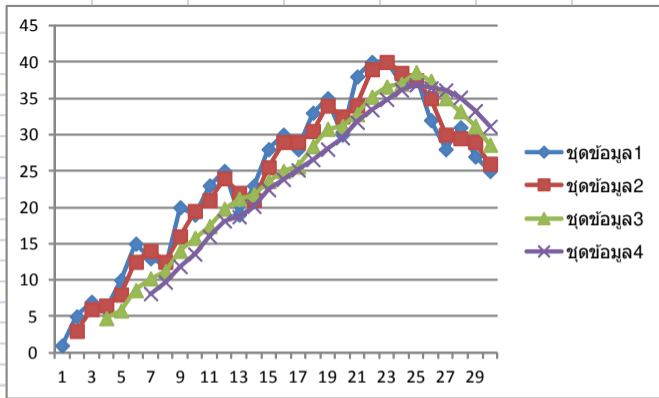
Estimating Risk: Statistics or Mkt Survey

13% = Coefficient of Variation (COV) = Std / x

Moving Average

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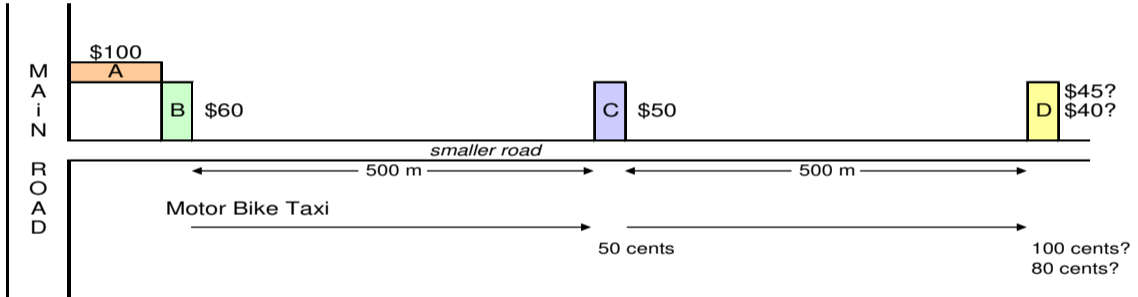
	1	2	4	7
1	1			
2	5	3.0		
3	7	6.0		
4	6	6.5	4.8	
5	10	8.0	5.8	
6	15	12.5	8.6	
7	13	14.0	10.2	8.1
8	12	12.5	11.2	9.7
9	20	16.0	14.0	11.9
10	19	19.5	15.8	13.6
11	23	21.0	17.4	16.0
12	25	24.0	19.8	18.1
13	19	22.0	21.2	18.7
14	23	21.0	21.8	20.1
15	28	25.5	23.6	22.4
16	30	29.0	25.0	23.9
17	28	29.0	25.6	25.1
18	33	30.5	28.4	26.6
19	35	34.0	30.8	28.0
20	30	32.5	31.2	29.6
21	38	34.0	32.8	31.7
22	40	39.0	35.2	33.4
23	40	40.0	36.6	34.9
24	37	38.5	37.0	36.1
25	38	37.5	38.6	36.9
26	32	35.0	37.4	36.4
27	28	30.0	35.0	36.1
28	31	29.5	33.2	35.1
29	27	29.0	31.2	33.3
30	25	26.0	28.6	31.1



Moving Average

https://www.set.or.th/dat/vdoArticle/attachFile/AttachFile_1472117212031.pdf

The Influence of the Depth Factor



Rule of Thumb of 4-3-2-1



4 3 2 1

4 3 2 1

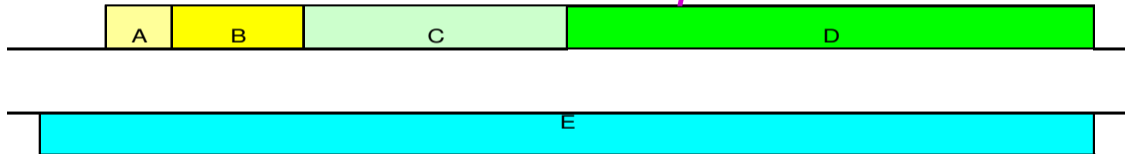
4 3 2 1

The Influence of Corner Lots



The Influence of the Width Factor

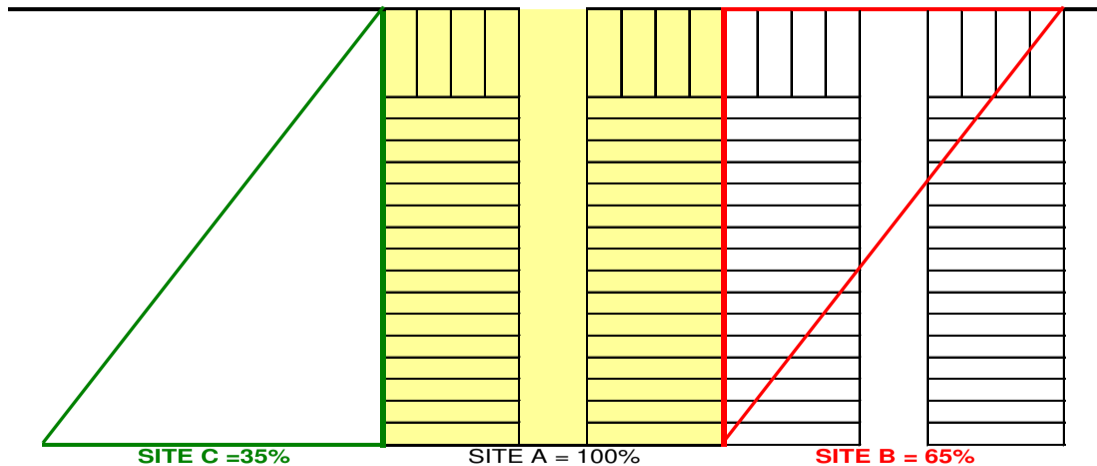
Will E be more expensive?



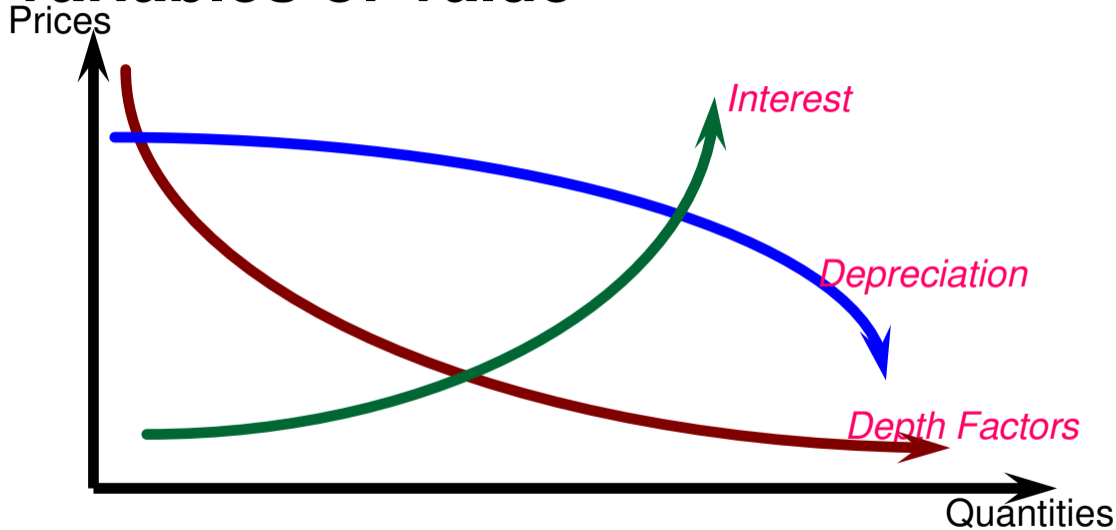
$$\begin{aligned} 2A &= B \\ 2B &= C \\ 2C &= D \\ 2D &= E \end{aligned}$$



The Influence of the Shape

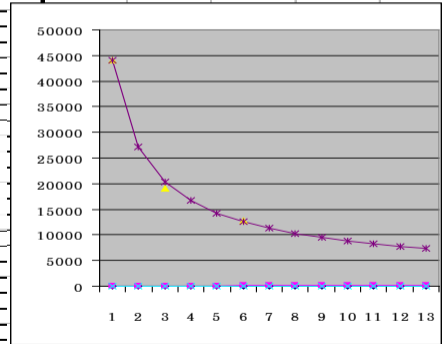


Variables of Value

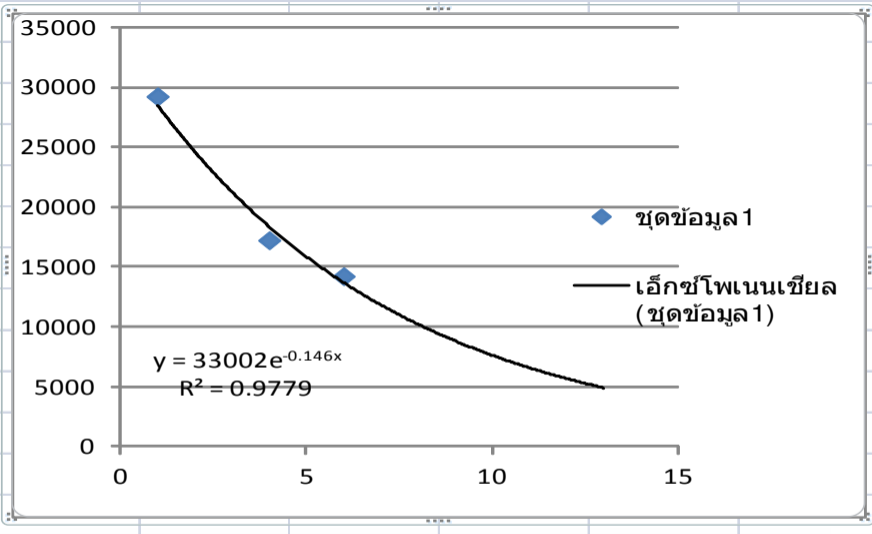


Extracting the Relationship of the Depth Factor

05-kredfah.xls						
Shophouses and Duplex of Kred Fah Estate						
Description	Comparable Properties No.					
Land area (sq. wah)		18.0	35.0	35.0	35.0	35.0
Building area (sq.m)		164.0	84.0	84.0	84.0	84.0
Offered (Mil.Baht)						
Condition		SH, front	Duplex, 250 m		Dplx, 60m	
Sold (Mil.Baht)		2,000	1,300	1,300	1,400	1,500
When sold		1998	1997	2002	1997	1997
Adjusted (%)		-5%	0%	0%	0%	0%
Final Adjustment		1,900	1,300	1,300	1,400	1,500
Final value estimate		1,900	1,300		1,450	
Hard cost of the development		70%	70%		70%	
Estimated hard cost (Mil.Baht)		1.33	0.91		1.015	
Cost of construction/sq.m (Baht)*		4,901	4,901		4,901	
Total cost of construction (Mil.)		0.804	0.412		0.412	
Land value in total (Mil.Baht)		0.526	0.498		0.603	
Land value (Baht/sq.wah)		29,240	14,239		17,239	
*VAT costs = 2002 cost table of the Valuers Association of Thailand						
Exponential function						
times	metres	-0.38	Explain E	Calculated	Explain G	
1	0	29,240	=B26*\$E\$25	29,240	=D\$26*E26	
2	20	0.7684376	=B27*\$E\$25	22,469	=D\$26*E27	
3	40	0.6587095	=B28*\$E\$25	19,261	=D\$26*E28	
4	60	17,239	=B29*\$E\$25	17,266	=D\$26*E29	
5	80	0.5424896	=B30*\$E\$25	15,862	=D\$26*E30	
6	100	0.5061771	=B31*\$E\$25	14,801	=D\$26*E31	
7	120	0.4773784	=B32*\$E\$25	13,958	=D\$26*E32	
8	140	0.4537596	=B33*\$E\$25	13,268	=D\$26*E33	
9	160	0.4338982	=B34*\$E\$25	12,687	=D\$26*E34	
10	180	0.4168694	=B35*\$E\$25	12,189	=D\$26*E35	
11	200	0.4020414	=B36*\$E\$25	11,756	=D\$26*E36	
12	220	0.3889655	=B37*\$E\$25	11,373	=D\$26*E37	
13	240	14,239	0.3773128	=B38*\$E\$25	11,033	=D\$26*E38

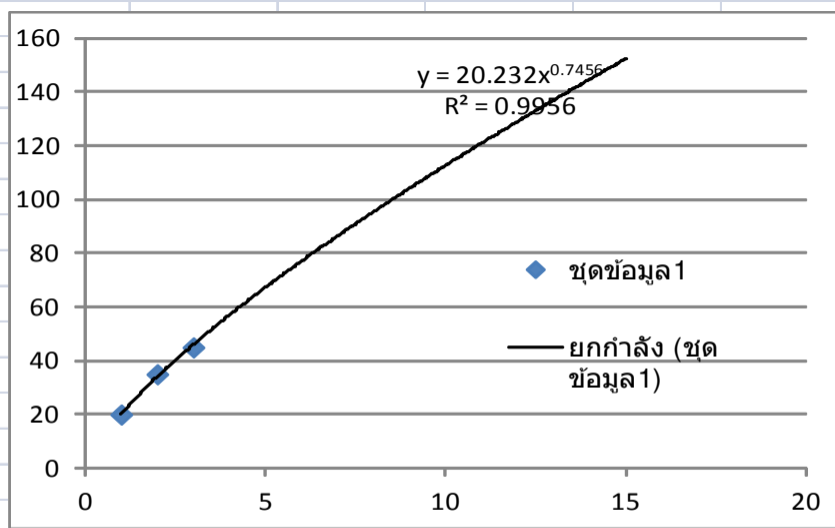


1	29240	28519
2		24645
3		21297
4	17239	18404
5		15904
6	14239	13744
7		11877
8		10263
9		8869
10		7664
11		6623
12		5723
13		4946



Property Prices Decreasing by Depth of the Location

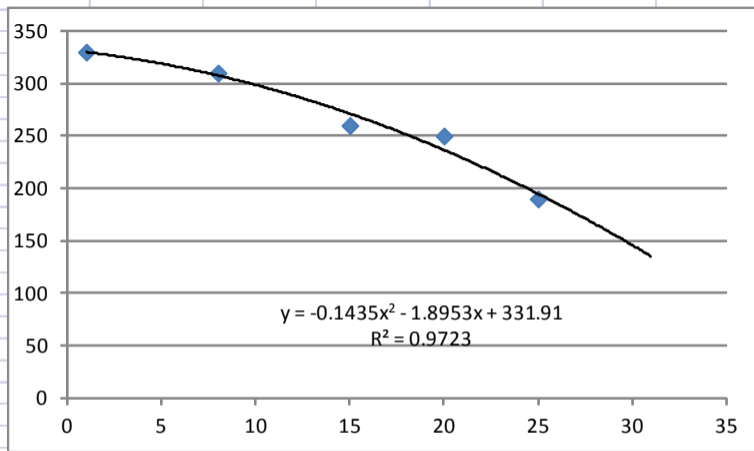
1	20	15	15
2	35	25	10
3	45	33	8
4		41	8
5		48	7
6		55	7
7		61	6
8		67	6
9		73	6
10		79	6
11		85	6
12		90	5
13		95	5
14	101		5
15	106		5



Forecast on When to Complete the Sales of a Housing Project.



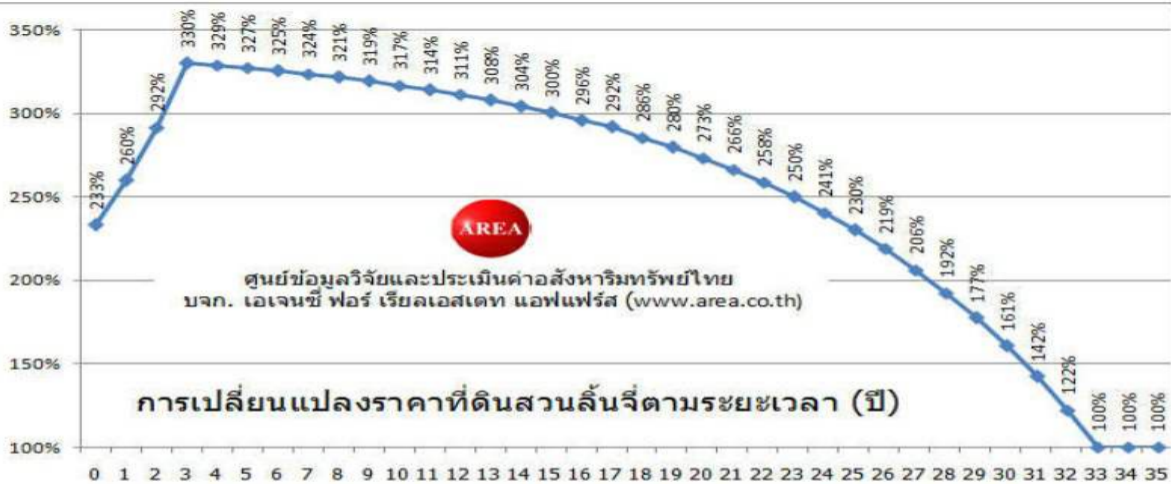
1	330	329.8712
2		327.5454
3		324.9326
4		322.0328
5		318.846
6		315.3722
7		311.6114
8	310	307.5636
9		303.2288
10		298.607
11		293.6982
12		288.5024
13		283.0196
14		277.2498
15	260	271.193
16		264.8492
17		258.2184
18		251.3006
19		244.0958
20	250	236.604
21		228.8252
22		220.7594
23		212.4066
24		203.7668
25	190	194.84
26		185.6262
27		176.1254
28		166.3376
29		156.2628
30		145.901
31		135.2522



Depreciation

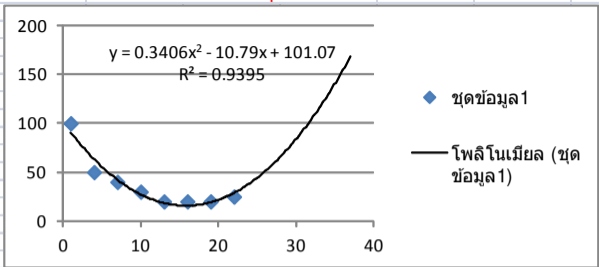


Rubber Plantation

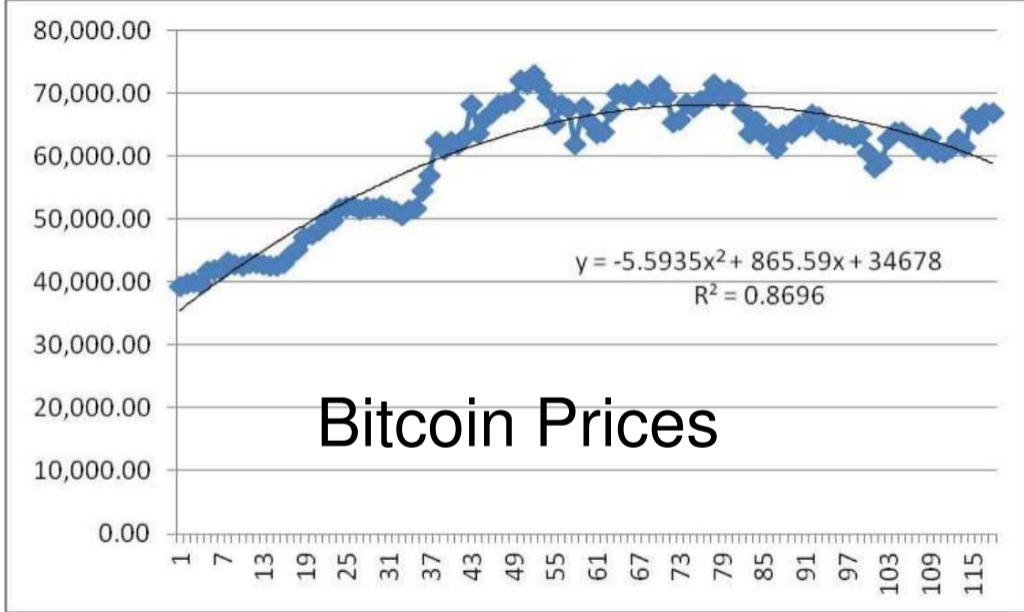


Lichi Plantation

Quarter	Month	Actual	Forecast of the Occupation Rate	Estimated
2019.4	1	100		90.6206
	2			80.8524
	3			71.7654
2020.1	4	50		63.3596
	5			55.635
2020.2	6			48.5916
	7	40		42.2294
2020.3	8			36.5484
	9			31.5486
2020.4	10	30		27.23
	11			23.5926
2020.4	12			20.6364
	13	20		18.3614
2021.1	14			16.7676
	15			15.855
2021.1	16	20		15.6236
	17			16.0734
2021.2	18			17.2044
	19	20	Polynomial Function	19.0166
2021.3	20			21.51
	21			24.6846
2021.3	22	25		28.5404
	23			33.0774
2021.4	24			38.2956
	25			44.195
2022.1	26			50.7756
	27			58.0374
2022.1	28			65.9804
	29			74.6046
2022.2	30			83.91
	31			93.8966
2022.2	32			104.5644
	33			115.9134
2022.3	34			127.9436
	35			140.655
2022.4	36			154.0476
	37			168.1214



Recovery Period



Final Value Estimate (Baht/sq wah) = 2.405

Location of the site ?

- On Phahonyothin Road
 On Hwy.1
 Off Phahonyothin
 Off Phahonyothin-Hwy 1
- Off Hwy.1 (East)
 Off Hwy.1 (West)
 For new road (14m-width)
 For new road (20m-width)

On Smaller Soi ?

- Yes No

Blind Land ?

- Yes No

Plot Width (m)

79

Plot Depth (m)

142

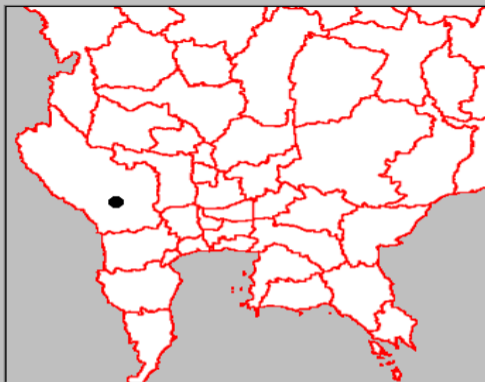
Accessibility

Type A Type B

Example

Type C
 Other Shape %

<input type="checkbox"/> Normal Shape	<input checked="" type="checkbox"/> Shape 2	<input type="checkbox"/> Shape 4	<input type="checkbox"/> Shape 6	<input type="checkbox"/> Shape 8	<input type="checkbox"/> Shape 13-1
<input type="checkbox"/> Shape 1	<input type="checkbox"/> Shape 3	<input type="checkbox"/> Shape 5	<input type="checkbox"/> Shape 7	<input type="checkbox"/> Shape 9	<input type="checkbox"/> Shape 13-2



การปรับลดกรณีติดตามลด

- ที่ตามลด
- ที่ไม่ตามลด

มูลค่าการประเมิน

มูลค่าที่ประเมินได้

	บาท (โดยรวม)
	บาท/ไร่
	บาท/ตารางวา

กำหนดลักษณะพื้นที่

พื้นที่เป้าหมาย

กาญจนบุรี, เมือง, ลาดหญ้า/วังด้ง

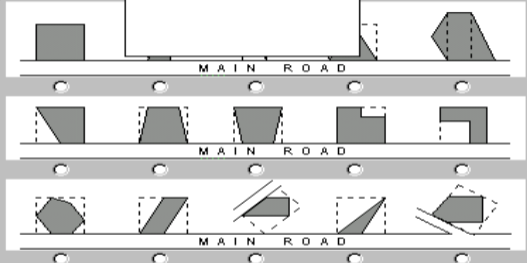
ลักษณะสำคัญ

ขนาดที่ดิน

โฉนด
 น.ส.3 ก.
 น.ส.3
 ภบท.5

ตารางวา

รูปร่างที่ดินตัวอย่าง



รูปร่างที่ดิน

% เมื่อเทียบกับสี่เหลี่ยม (ซึ่งให้ค่า = 100%)

การปรับค่าตัวแปรอื่นตามที่เห็นสมควร

ได้แก่

ค่าเพิ่ม/ลด

+/- %

คำนวณค่าตัวแปร

เคลียร์ค่าตัวแปร

บ้านเดี่ยว

ทาวน์เฮ้าส์

อาคารพาณิชย์

อาคารชุดพักอาศัย

ขนาดที่ดิน (ตรว.)	<input type="text" value="50"/>
ขนาดอาคาร (ตรม.)	<input type="text" value="100"/>
ระดับหมู่บ้าน	<input type="text" value="A"/>
ระดับคุณภาพอาคาร	<input type="text" value="สูง"/>
อายุอาคาร	<input type="text" value="สูง"/> ปี
ถนนซอย	<input type="text" value="บ้านกลาง"/> <input type="text" value="ดี"/> <input type="text" value="กำหนดเอง"/> <input type="text" value="หลัก"/> <input checked="" type="radio"/> ซอยย่อย

ราคาทรัพย์สินโดยรวม	<input type="text" value="2,842,070"/>	บาท
ราคาที่ดินโดยรวมทั้งแปลง	<input type="text" value="2,217,450"/>	บาท
ราคาอาคารโดยรวม	<input type="text" value="772,000"/>	บาท
ราคาที่ดิน/ตรว.	<input type="text" value="44,349"/>	บาท
ราคาอาคาร/ตรม.	<input type="text" value="7,720"/>	บาท

ระดับต่ำ

1. โครงสร้างทั่วไปเป็น คสล.
2. หลังคามุงกระเบื้องลอน
3. พื้นไม่มีวัสดุบุผิว ชัดมันเรียบ
4. ท่อน้ำ บุปื้น/ผนัง ด้วยกระเบื้องขนาดเล็ก
5. ประตูทางเข้าเป็นประตูกระจกกรอบไม้ ส่วนประตูห้องทั่วไปเป็นประตูไม้ฉัตร
6. หน้าต่างกระจกกรอบไม้หรืออลูมิเนียม

ระดับปานกลาง

1. โครงสร้างทั่วไปเป็น คสล.
2. หลังคามุงกระเบื้องโมเนียเป็นส่วนใหญ่
3. ฝ้าเพดานยิบฉิมมอร์ต เกร้าท้อยแขวน หรือวัสดุอื่นในระดับราคาเดียวกัน
4. พื้นปูกระเบื้องเคลือบ หรือวัสดุอื่นในระดับราคาเดียวกัน
5. ท่อน้ำ บุปื้น/ผนังด้วยกระเบื้องเคลือบ และมีสุขภัณฑ์สีวมินิราบ อ่างอาบน้ำ
6. ประตูทางเข้าเป็นประตูกระจกกรอบไม้ ส่วนประตูห้องทั่วไปเป็นประตูไม้ฉัตร
7. หน้าต่างกระจกกรอบไม้หรืออลูมิเนียม

ระดับสูง

1. โครงสร้างทั่วไปเป็น คสล.
2. หลังคามุงกระเบื้องโมเนียเป็นส่วนใหญ่
3. ฝ้าเพดานยิบฉิมมอร์ตฉาบเรียบ
4. พื้นปูพาร์เก้ชนิดเข้าลิ้นร่อง และมีขนาดต่อชิ้นยาวไม่น้อยกว่า 8 นิ้ว หรือวัสดุอื่นในระดับราคาเดียวกัน
5. ท่อน้ำ บุปื้น/ผนังด้วยกระเบื้องจรดเพดาน มีสุขภัณฑ์ครบถ้วน คุณภาพดี มีอ่างอาบน้ำ
6. ประตูทางเข้าเป็นประตูกระจกสีชา กรอบไม้หรืออลูมิเนียม ส่วนประตูห้องทั่วไปเป็นประตูไม้ฉัตร หรือวัสดุอื่นในระดับราคาเดียวกัน
7. หน้าต่างกระจกกรอบไม้หรืออลูมิเนียม
8. ผนังวอลล์เปเปอร์บางส่วน ท้องครัวบุพื้น/ผนังด้วยกระเบื้องเคลือบ





Thank You. +66 8 9922 9899
sopon@area.co.th

