



PRODUCT DESCRIPTION

Max-Kool is an emulsion of high grade Ceramic Polymer in water, it contains the added advantages of Ceramic particles which are the heat and cold dissipating elements that give the ability to save on Heating and cooling costs. It dries by evaporation to yield a tough, velvety, non-yellowing, watertight Surface with highly abrasion resistance and Ultra Violet stability. Max-Kool when applied directly to Rust will prevent further rusting problem.

PHYSICAL PROPERTIES

- High Solar Reflectivity; reflect sunlight and radiant heat, low Solar absorbance and high Thermal emittance.
- Flexibility and excellent bonding.
- Max-Kool is water-based. For environmental safe with non-toxic and non-flammable.
- Product corrosion from UV.
- Durable against ultra-violet, moisture, acid-base such as atmosphere in Thailand.
- Using Fluid Applied System by brushing or spaying. Perfect for roofing surface of metal Sheet, asbestos cement roof tile, monier roof tile, walls of wood, metal, concrete etc.
- Solar Radiation Reflect method can effectively block the heat before it actuary absorbs to the Building.

THERMAL PROPERTIES

- Max-Kool has passed standard testing of Thermal Properties for ceramic coating in Thailand Which the resolve is showed below.

➤	Solar Reflectance	90.1 %
➤	Solar Absorbance	9.9 %
➤	Thermal Emittance	88.0 %

R-Value = $3.7 \text{ m}^2 \text{ K/W}$ or $21 \text{ hr.ft}^2 \text{ .F/Btu}$ (high value of R means better in heat protection, glasswool insulation Normally R = $1.428 \text{ m}^2 \text{ K/W}$ or $8.11 \text{ hr.ft}^2 \text{ .F/Btu}$)



BENEFITS

○ Insulations

- Temperature reduction in a building; Building gets cooler.
- Conserves energy saving and extremely cost effective.
- Reduction requirements for air conditioning, less maintenance.
- Goods, wire, light and electronic equipment under the roof have longer life.
- Prevent rust and non-yellowing.
- Creates a better work environment, increasing productivity.

○ Watertight Surface

- Watertight membrane.
- Protect roof from leak such as water leaking.

○ Reduce Maintenance Cost

- Protect roof from hairline cracks when the surface moves that cause by moisture and Temperature changing over the time.
- Control heat exchange between the inside and outside of the building
- Flexible, aiding in the prevention of corrosing under insulation and limits migration of Corrosing spores.
- Longer life of your roof and save your money on energy costs, repairs and renovations.
Reducing noise from the outside of building.

○ Application

Surface must be cleaned, dried and free of any oil, grease or dirt by approved method prior to Application. Two coats are recommended for dry film of not less than 300 microns. (0.3 mm.) Allow 30 minute to dry before apply second coat.

TECHNICAL DATA

1. SOLAR REFLECTIVITY	90.1%	JIS R 3106
2. SOLAR ABSORBANCE	9.9%	JIS R 3106
3. THERMAL EMITTANCE	88.0%	JIS R 3106
4. ADHESION	127.63 kg / cm ²	ASTM C 633
5. ELONGATION	403.28%	ASTM D 638
6. UV EXPOSURE	PASS	ASTM G 53
7. CHEMICAL RESISTANCE	PASS	ASTM D 1308 - 87
8. BURNING	PASS	UL 94
9. TOXICITY	PASS	มอก. 1097 - 2535
10. DENSITY	1.15 g / cm ³	ASTM D - 70
11. IMPACT RESISTANCE	PASS	ASTM D - 2794
12. ABRASION RESISTANCE	PASS	ASTM D - 968
13. FLEXIBILITY	PASS	JIS 6909 (1984) 5 : 7
14. WASHABILITY	PASS	JIS 6909 (1995) 6 : 14
15. WATER ENDURANCE	PASS	มอก. 285 - 2525
16. FUNGAL RESISTANCE	NOT DETECTED	มอก. 285 - 2541
17. PBBS / PBDES TESTING	NOT DETECTED	US EPA 3550 C



PROPERTIES COMPARISION

Glasswool	Max-Kool
R-Value should not below 1.428 m ² K/W	R-Value is higher (3.7 m ² K/W) than glasswool insulation. This mean better in heat protection.
Install under the roof. This can cause interrupted To work areas underneath.	One easy step and install on the top of roof. Provides a Constant, Uninterrupted to underneath or the others areas.
Not easy to see for quality inspection.	Easy and visual inspection.
There is some gap between each glasswool. This Can reduce in quality.	Fully coating cover, no gap. You can ensure in the best Quality.
Glasswool may corrupt and cause dusts which Unsafe to environment.	Max-Kool is water-based. For environmental safe with non-toxic and non-flammable.
High Solar Absorbance can damage the roof.	Low Solar Absorbance makes longer life of roof.
Sunlight and radiant heat from glasswool gap can Cause damaged to goods, wire and electronics Equipment in the long terms.	Protect UV before it gets into roof surface. You can ensure longer life.
Maintenance is difficult and inconvenience to people in the building.	Maintenance is an easy because it is located outside the building.
Problem will occur in 3-4 years. Glasswool may Tear and crack by Harbor Rodents, insects or Airborne Pathogens.	Long last 10 years upward with no problems. This is Compared to grade A painting.



EXAMPLE OF BUILDING THAT COATING WITH MAX-KOOL

BUILDING / OFFICE / FACTORY

- C.P. Seven Eleven Public Co., LTD.
- Union Button Cooperation Public Co., LTD.
- Dept. of Water Resource Engineering
(Faculty of Engineering / Kasetsart University)
- The Family Foundation / Thailand
- Roharpan Factory
- Vatanasin Chemical Factory
- S.C.G Industry Factory
- Dee Savad Industry Factory
- U-Tid Court / Tippy Court / Nakara Mansion
- Warehouse of MGA Co., Ltd.
- Andaman Hill Resort Phuket
- Fank Brother Holding / Thailand Factory
- Sahamit Metal Pack Factory
- C.P. Moulding Co., LTD.
- Inside Out Design Co., LTD.
- Infinity Garment Co., LTD.
- Add in Business Computer Co., LTD.
- Sirirat Transportation Co., LTD.
- The Resident Sweet Hotel
- Silom Basket Hotel
- Mittaparb Mansion
- Monklonvan Kindergarden School
- Karawell House Hotel Chonburi

RESIDENT

- Mr. Suthap Vongkhumheng (Singer)
- Dr. Pipat Sujindar
(Teacher of Kasetsart University)
- Miss Parnid Kantamara
(Talk Show Speaker)
- "Tommayantee" (Writer)
- Mr. Vatcharae Chavakaypong
(Senior Engineer of the Siam Cement Public Co.,Ltd)
- Mr. Akarat Chaichodchon
(Boxing Promoter)
- etc.
- There are also many properties such as ;
- Chaiyapirk Property (Sukarpiban 3)
- Taweasuk Property
- Srinakronpattana Property
- Muantong 1 , 3 Property
- Pataya Rongruan Property
- Summakorn Property
- Muankal Property (BangNa-trad)
- Taweasuk Property
- T. RomChok Property
- Armormpan Property
- etc.



PROCEDURE FOR WORK



Prepare surface to be clean



Apply Max-Kool for coating



Finished work

“Max – Kool “ Ceramic coating installation

Customer : Sharp Manufacturing (Thailand) Co.,Ltd



Sharp part stock & finished goods



Scaffold set up



Area marking



Cleaning & primer coating



Brush on the perimeter area



Max-kool coating by airless spray machine



Spray protection



Finished work



EXAMPLE FOR MONIER ROOF TILE



Before



After



EXAMPLE FOR CONCRETE SLAB



Before



After



Max – Kool *site reference*



7-ELEVEN BRANCH
C.P. 7 ELEVEN Public Company Limited



MGA DISTRIBUTION CENTER
GMM GRAMMY ENTERTAINMENT PCL.



FACULTY OF ENGINEERING
KASETSART UNIVERSITY



CENTRAL DEPARTMENT STORE
CHIDLOM BRANCH



ASIAN INSULATOR CO.,LTD



ANDAMAN HILL RESORT PHUKET
KRISANA GROUP



Max – Kool SITE REFERENCE PICTURE

KING MONGKUL'S INSTITUTE OF TECHNOLOGY , THONBURI



BEFORE



INSTALLATION



FINISHED WORK



Max – Kool SITE REFERENCE PICTURE
ISUZU MOTOR (THAILAND) CO.,LTD
SAMUTPRAKARN



BEFORE



AFTER



Max – Kool SITE REFERENCE PICTURE

THAI PRESERVED FOOD FACTORY CO.,LTD (WAI WAI INSTANT ED NOODLE)



BEFORE



AFTER





Max – Kool SITE REFERENCE PICTURE
CHULALONGKORN UNIVERSITY



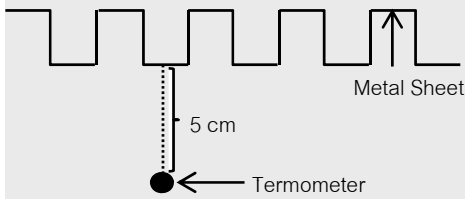
INSTALLATION PROCESS



FINISHED WORK

SHARP MANUFACTURING (THAILAND) CO., LTD.

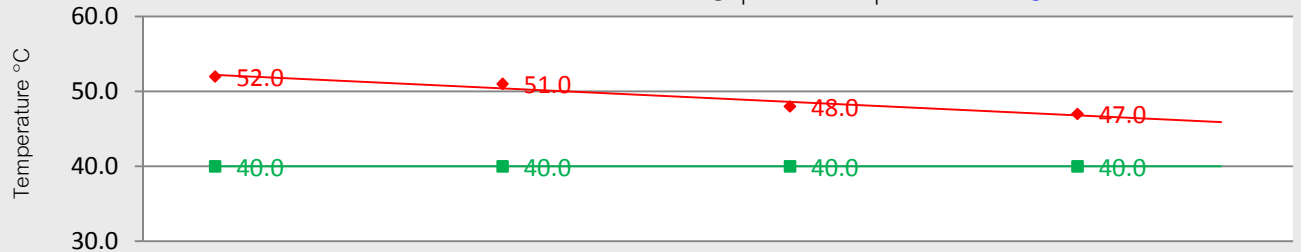
Room Recording Positions :



T1 ◆ Before coating : April 2, 2007

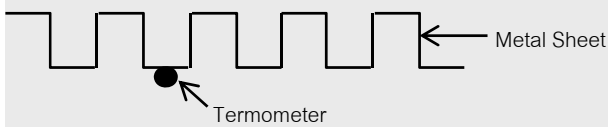
T2 ■ After coating : April 4, 2007

The Maximum Gap Roof Temperature **12 °C**



°C \ Time	14.00	14.30	15.00	15.30
T1	52.0	51.0	48.0	47.0
T2	40.0	40.0	40.0	40.0
Temp. Gap	12.0	11.0	8.0	7.0

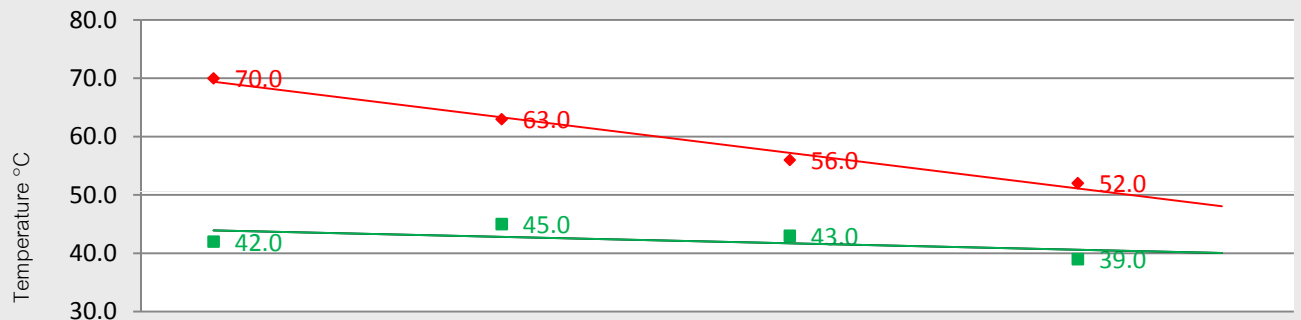
Roof Recording Positions :



T1 ◆ Before coating : April 2, 2007

T2 ■ After coating : April 4, 2007

The Maximum Gap Roof Temperature **28 °C**

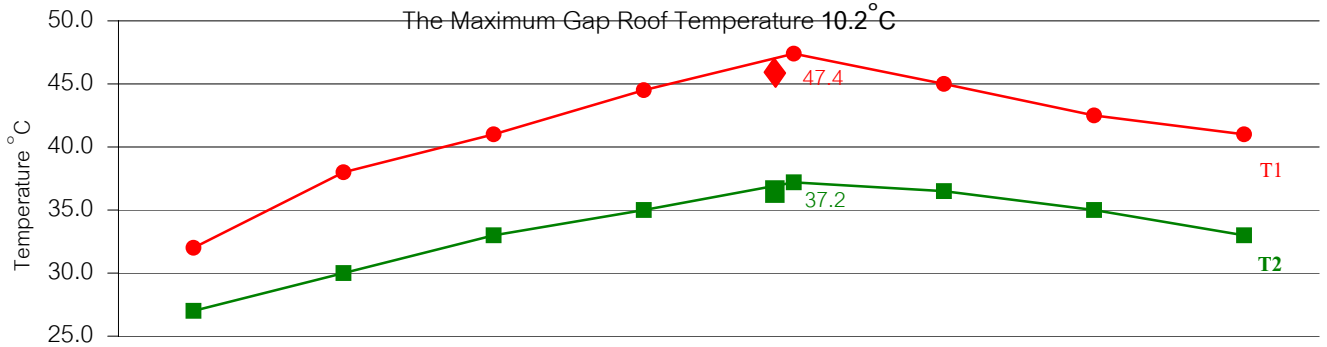
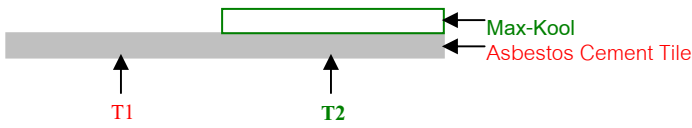


°C \ Time	14.00	14.30	15.00	15.30
T1	70.0	63.0	56.0	52.0
T2	42.0	45.0	43.0	39.0
Temp. Gap	28.0	18.0	13.0	13.0

ISUZU MOTORS CO., (THAILAND) LTD.

Date of Measurement : February 16, 2004

Roof Recording Positions :

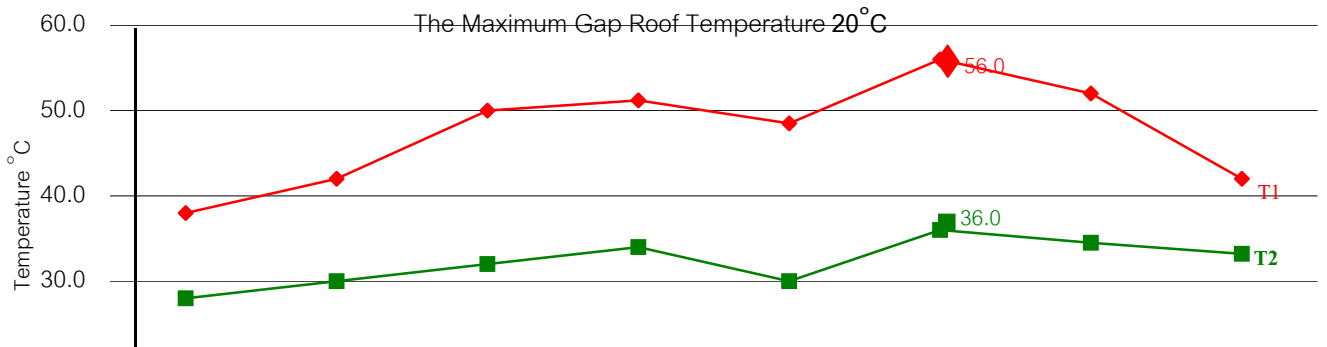
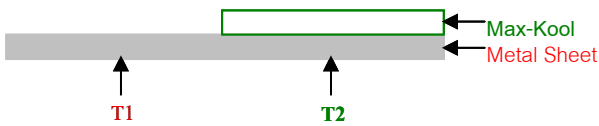


°C \ Time	9.00	10.00	11.00	12.00	13.00	14.00	15.00	16.00
T1	32.0	38.0	41.0	44.5	47.4	45.0	42.5	41.0
T2	27.0	30.0	33.0	35.0	37.2	36.5	35.0	33.0
Temp. Gap	5.0	8.0	8.0	9.5	10.2	8.5	7.5	8.0

GLOBO FOODS LTD.

Date of Measurement : November 27, 2004

Roof Recording Positions :

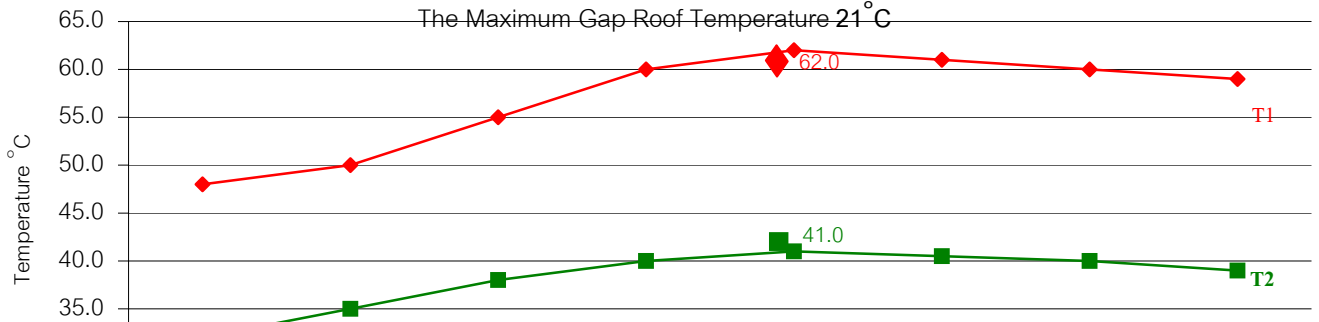
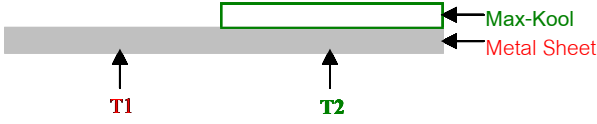


20.0 °C \ Time	9.00	10.00	11.00	12.00	13.00	14.00	15.00	16.00
T1	38.0	42.0	50.0	51.2	48.5	56.0	52.0	42.0
T2	28.0	30.0	32.0	34.0	30.0	36.0	34.5	33.2
Temp. Gap	10.0	12.0	18.0	17.2	18.5	20.0	17.5	8.8

NIDEC PRECISION (THAILAND)CO., LTD.

Date of Measurement : September 1, 2005

Roof Recording Positions :

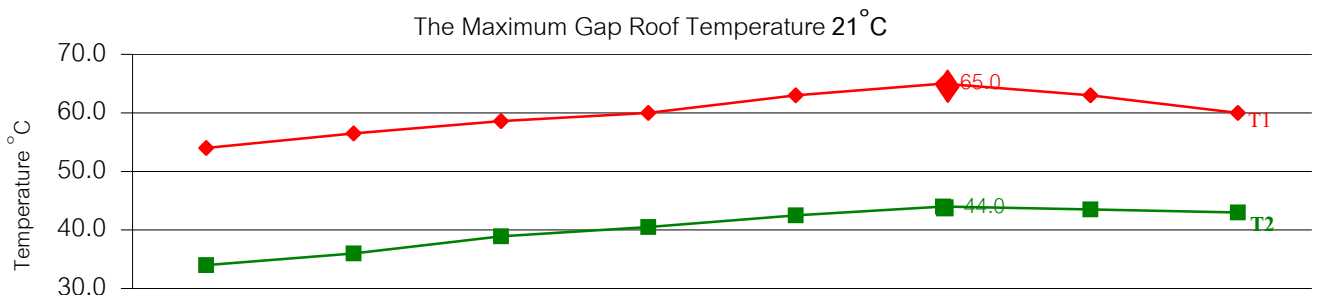
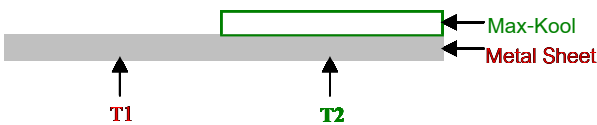


°C \ Time	9.00	10.00	11.00	12.00	13.00	14.00	15.00	16.00
T1	48.0	50.0	55.0	60.0	62.0	61.0	60.0	59.0
T2	32.0	35.0	38.0	40.0	41.0	40.5	40.0	39.0
Temp. Gap	16.0	15.0	17.0	20.0	21.0	20.5	20.0	20.0

SANMINA-SCI SYSTEMS (THAILAND) LTD.

Date of Measurement : April 1, 2006

Roof Recording Positions :

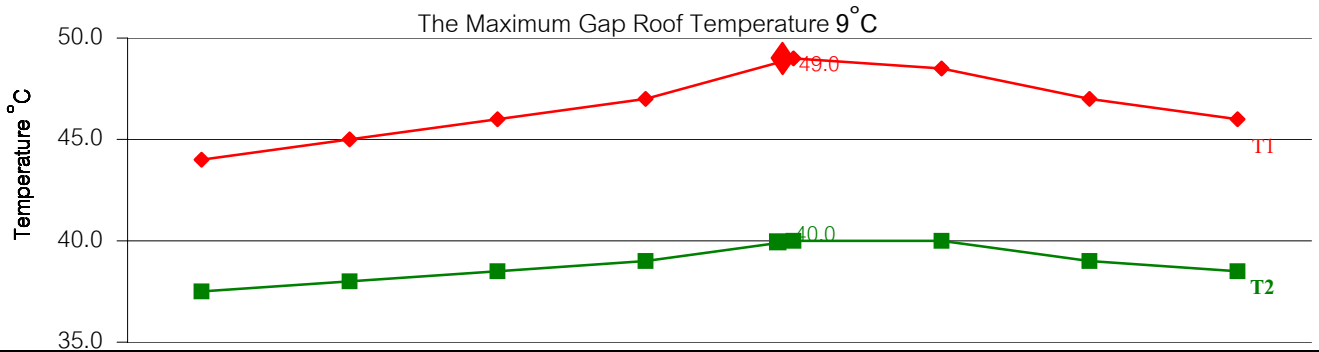
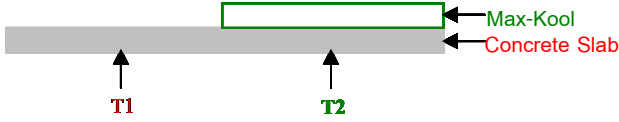


°C \ Time	9.00	10.00	11.00	12.00	13.00	14.00	15.00	16.00
T1	54.0	56.5	58.6	60.0	63.0	65.0	63.0	60.0
T2	34.0	36.0	38.9	40.5	42.5	44.0	43.5	43.0
Temp. Gap	20.0	20.5	19.7	19.5	20.5	21.0	19.5	17.0

NEW LAND APARTMENT

Date of Measurement : April 10, 2006

Roof Recording Positions :

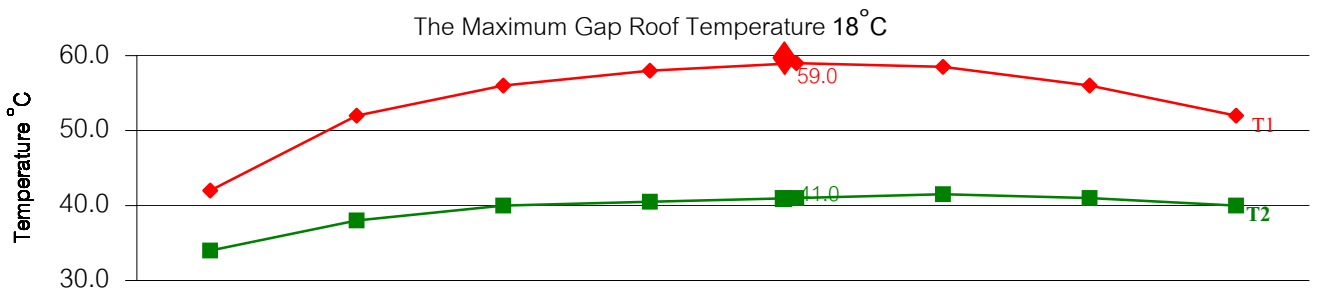
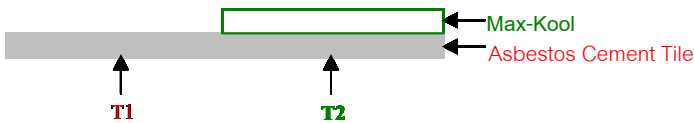


°C \ Time	9.00	10.00	11.00	12.00	13.00	14.00	15.00	16.00
T1	44.0	45.0	46.0	47.0	49.0	48.5	47.0	46.0
T2	37.5	38.0	38.5	39.0	40.0	40.0	39.0	38.5
Temp. Gap	6.5	7.0	7.5	8.0	9.0	8.5	8.0	7.5

ALMOND (THAILAND)LTD.

Date of Measurement : April 3, 2006

Roof Recording Positions :



°C \ Time	9.00	10.00	11.00	12.00	13.00	14.00	15.00	16.00
T1	42.0	52.0	56.0	58.0	59.0	58.5	56.0	52.0
T2	34.0	38.0	40.0	40.5	41.0	41.5	41.0	40.0
Temp. Gap	8.0	14.0	16.0	17.5	18.0	17.0	15.0	12.0



MAX-KOOL
STANDARD PRICE

ITEMS	LIST PRICE (BAHT / SQ.METER)
Max-Kool Including Insulation Services	280

NOTE :

1. Price above does not including VAT 7%.
2. Exact Sq. Meter amount will be measure on the date of installation.
3. Price above applies for Bangkok and Province area only.
4. Service outside Bangkok and Province may charged for travel fee. Please contact customer service for detail.
5. K-mat reserve the right to change prices without prior notice.